



TOWNSHIP of HOPEWELL
MERCER COUNTY

201 WASHINGTON CROSSING – PENNINGTON ROAD
TITUSVILLE, NEW JERSEY 08560-1410

PROJECT / APPLICATION

BLOCK: 93

LOT: 19, 20, 45.01, 46, p/o 60

ADDRESS: 61 NURSERY RD., SCOTCH RD., NURSERY RD., NURSERY RD., 137 NURSERY RD.

PROJECT NAME: MAJOR SUBDIVISION, PRELIMINARY/FINAL AND SITE PLAN,
PRELIMINARY/FINAL (VENUE AT HOPEWELL)

SWM Revised
3.31.25
Pages
4001-5002

Stage-Discharge for Pond B-42: Basin #42 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.12	10.25	185.64	11.23	186.16	20.39	186.68	92.62
185.13	10.27	185.65	11.24	186.17	21.15	186.69	94.39
185.14	10.29	185.66	11.26	186.18	21.93	186.70	96.16
185.15	10.31	185.67	11.28	186.19	22.73	186.71	97.95
185.16	10.33	185.68	11.30	186.20	23.60	186.72	99.75
185.17	10.35	185.69	11.31	186.21	24.49	186.73	101.56
185.18	10.37	185.70	11.33	186.22	25.40	186.74	103.38
185.19	10.39	185.71	11.35	186.23	26.34	186.75	105.22
185.20	10.41	185.72	11.37	186.24	27.30	186.76	107.07
185.21	10.43	185.73	11.39	186.25	28.29	186.77	108.93
185.22	10.45	185.74	11.40	186.26	29.31	186.78	110.80
185.23	10.47	185.75	11.42	186.27	30.35	186.79	112.69
185.24	10.49	185.76	11.44	186.28	31.41	186.80	114.62
185.25	10.51	185.77	11.46	186.29	32.50	186.81	116.57
185.26	10.52	185.78	11.47	186.30	33.61	186.82	118.53
185.27	10.54	185.79	11.49	186.31	34.75	186.83	120.50
185.28	10.56	185.80	11.51	186.32	35.91	186.84	122.49
185.29	10.58	185.81	11.53	186.33	37.10	186.85	124.49
185.30	10.60	185.82	11.54	186.34	38.31	186.86	126.51
185.31	10.62	185.83	11.56	186.35	39.54	186.87	128.53
185.32	10.64	185.84	11.58	186.36	40.80	186.88	130.57
185.33	10.66	185.85	11.59	186.37	42.09	186.89	132.63
185.34	10.68	185.86	11.61	186.38	43.39	186.90	134.69
185.35	10.69	185.87	11.63	186.39	44.72	186.91	136.77
185.36	10.71	185.88	11.65	186.40	46.11	186.92	138.86
185.37	10.73	185.89	11.66	186.41	47.51	186.93	140.97
185.38	10.75	185.90	11.68	186.42	48.95	186.94	143.08
185.39	10.77	185.91	11.70	186.43	50.41	186.95	145.21
185.40	10.79	185.92	11.72	186.44	51.89	186.96	147.35
185.41	10.81	185.93	11.73	186.45	53.41	186.97	149.51
185.42	10.83	185.94	11.75	186.46	54.95	186.98	151.68
185.43	10.84	185.95	11.77	186.47	56.51	186.99	153.86
185.44	10.86	185.96	11.78	186.48	58.10	187.00	155.99
185.45	10.88	185.97	11.80	186.49	59.72		
185.46	10.90	185.98	11.82	186.50	61.36		
185.47	10.92	185.99	11.83	186.51	63.03		
185.48	10.94	186.00	11.97	186.52	64.73		
185.49	10.95	186.01	12.20	186.53	66.45		
185.50	10.97	186.02	12.49	186.54	68.21		
185.51	10.99	186.03	12.84	186.55	69.98		
185.52	11.01	186.04	13.23	186.56	71.79		
185.53	11.03	186.05	13.66	186.57	73.62		
185.54	11.05	186.06	14.13	186.58	75.48		
185.55	11.06	186.07	14.63	186.59	77.36		
185.56	11.08	186.08	15.16	186.60	79.00		
185.57	11.10	186.09	15.72	186.61	80.66		
185.58	11.12	186.10	16.31	186.62	82.33		
185.59	11.14	186.11	16.93	186.63	84.01		
185.60	11.15	186.12	17.57	186.64	85.71		
185.61	11.17	186.13	18.24	186.65	87.42		
185.62	11.19	186.14	18.93	186.66	89.14		
185.63	11.21	186.15	19.65	186.67	90.88		

Stage-Area-Storage for Pond B-42: Basin #42

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
180.96	0	0	181.48	2,368	1,125
180.97	535	3	181.49	2,373	1,149
180.98	1,071	11	181.50	2,378	1,173
180.99	1,607	24	181.51	2,382	1,197
181.00	2,142	43	181.52	2,387	1,220
181.01	2,147	64	181.53	2,392	1,244
181.02	2,151	86	181.54	2,396	1,268
181.03	2,156	107	181.55	2,401	1,292
181.04	2,161	129	181.56	2,406	1,316
181.05	2,166	151	181.57	2,410	1,340
181.06	2,170	172	181.58	2,415	1,364
181.07	2,175	194	181.59	2,420	1,389
181.08	2,180	216	181.60	2,425	1,413
181.09	2,184	238	181.61	2,429	1,437
181.10	2,189	259	181.62	2,434	1,461
181.11	2,194	281	181.63	2,439	1,486
181.12	2,199	303	181.64	2,443	1,510
181.13	2,203	325	181.65	2,448	1,535
181.14	2,208	347	181.66	2,453	1,559
181.15	2,213	369	181.67	2,458	1,584
181.16	2,217	392	181.68	2,462	1,608
181.17	2,222	414	181.69	2,467	1,633
181.18	2,227	436	181.70	2,472	1,658
181.19	2,231	458	181.71	2,476	1,682
181.20	2,236	481	181.72	2,481	1,707
181.21	2,241	503	181.73	2,486	1,732
181.22	2,246	525	181.74	2,491	1,757
181.23	2,250	548	181.75	2,495	1,782
181.24	2,255	570	181.76	2,500	1,807
181.25	2,260	593	181.77	2,505	1,832
181.26	2,264	616	181.78	2,509	1,857
181.27	2,269	638	181.79	2,514	1,882
181.28	2,274	661	181.80	2,519	1,907
181.29	2,279	684	181.81	2,524	1,932
181.30	2,283	707	181.82	2,528	1,958
181.31	2,288	729	181.83	2,533	1,983
181.32	2,293	752	181.84	2,538	2,008
181.33	2,297	775	181.85	2,542	2,034
181.34	2,302	798	181.86	2,547	2,059
181.35	2,307	821	181.87	2,552	2,085
181.36	2,312	844	181.88	2,556	2,110
181.37	2,316	868	181.89	2,561	2,136
181.38	2,321	891	181.90	2,566	2,161
181.39	2,326	914	181.91	2,571	2,187
181.40	2,330	937	181.92	2,575	2,213
181.41	2,335	961	181.93	2,580	2,239
181.42	2,340	984	181.94	2,585	2,264
181.43	2,345	1,007	181.95	2,589	2,290
181.44	2,349	1,031	181.96	2,594	2,316
181.45	2,354	1,054	181.97	2,599	2,342
181.46	2,359	1,078	181.98	2,604	2,368
181.47	2,363	1,102	181.99	2,608	2,394

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
182.00	2,613	2,420	182.52	2,876	3,847
182.01	2,618	2,446	182.53	2,881	3,876
182.02	2,623	2,473	182.54	2,886	3,905
182.03	2,628	2,499	182.55	2,891	3,934
182.04	2,633	2,525	182.56	2,896	3,963
182.05	2,638	2,552	182.57	2,901	3,992
182.06	2,643	2,578	182.58	2,906	4,021
182.07	2,648	2,604	182.59	2,911	4,050
182.08	2,653	2,631	182.60	2,916	4,079
182.09	2,658	2,658	182.61	2,921	4,108
182.10	2,663	2,684	182.62	2,926	4,137
182.11	2,669	2,711	182.63	2,931	4,167
182.12	2,674	2,738	182.64	2,936	4,196
182.13	2,679	2,764	182.65	2,941	4,225
182.14	2,684	2,791	182.66	2,946	4,255
182.15	2,689	2,818	182.67	2,951	4,284
182.16	2,694	2,845	182.68	2,956	4,314
182.17	2,699	2,872	182.69	2,961	4,344
182.18	2,704	2,899	182.70	2,967	4,373
182.19	2,709	2,926	182.71	2,972	4,403
182.20	2,714	2,953	182.72	2,977	4,433
182.21	2,719	2,980	182.73	2,982	4,462
182.22	2,724	3,007	182.74	2,987	4,492
182.23	2,729	3,035	182.75	2,992	4,522
182.24	2,734	3,062	182.76	2,997	4,552
182.25	2,739	3,089	182.77	3,002	4,582
182.26	2,744	3,117	182.78	3,007	4,612
182.27	2,749	3,144	182.79	3,012	4,642
182.28	2,754	3,172	182.80	3,017	4,672
182.29	2,759	3,199	182.81	3,022	4,703
182.30	2,765	3,227	182.82	3,027	4,733
182.31	2,770	3,255	182.83	3,032	4,763
182.32	2,775	3,282	182.84	3,037	4,793
182.33	2,780	3,310	182.85	3,042	4,824
182.34	2,785	3,338	182.86	3,047	4,854
182.35	2,790	3,366	182.87	3,052	4,885
182.36	2,795	3,394	182.88	3,057	4,915
182.37	2,800	3,422	182.89	3,062	4,946
182.38	2,805	3,450	182.90	3,068	4,977
182.39	2,810	3,478	182.91	3,073	5,007
182.40	2,815	3,506	182.92	3,078	5,038
182.41	2,820	3,534	182.93	3,083	5,069
182.42	2,825	3,562	182.94	3,088	5,100
182.43	2,830	3,591	182.95	3,093	5,131
182.44	2,835	3,619	182.96	3,098	5,162
182.45	2,840	3,647	182.97	3,103	5,193
182.46	2,845	3,676	182.98	3,108	5,224
182.47	2,850	3,704	182.99	3,113	5,255
182.48	2,855	3,733	183.00	3,118	5,286
182.49	2,860	3,761	183.01	3,123	5,317
182.50	2,866	3,790	183.02	3,129	5,348
182.51	2,871	3,819	183.03	3,134	5,380

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.04	3,140	5,411	183.56	3,419	7,116
183.05	3,145	5,442	183.57	3,425	7,150
183.06	3,150	5,474	183.58	3,430	7,185
183.07	3,156	5,505	183.59	3,435	7,219
183.08	3,161	5,537	183.60	3,441	7,253
183.09	3,166	5,569	183.61	3,446	7,288
183.10	3,172	5,600	183.62	3,452	7,322
183.11	3,177	5,632	183.63	3,457	7,357
183.12	3,183	5,664	183.64	3,462	7,392
183.13	3,188	5,696	183.65	3,468	7,426
183.14	3,193	5,728	183.66	3,473	7,461
183.15	3,199	5,760	183.67	3,478	7,496
183.16	3,204	5,792	183.68	3,484	7,530
183.17	3,209	5,824	183.69	3,489	7,565
183.18	3,215	5,856	183.70	3,495	7,600
183.19	3,220	5,888	183.71	3,500	7,635
183.20	3,226	5,920	183.72	3,505	7,670
183.21	3,231	5,952	183.73	3,511	7,705
183.22	3,236	5,985	183.74	3,516	7,740
183.23	3,242	6,017	183.75	3,522	7,776
183.24	3,247	6,050	183.76	3,527	7,811
183.25	3,253	6,082	183.77	3,532	7,846
183.26	3,258	6,115	183.78	3,538	7,882
183.27	3,263	6,147	183.79	3,543	7,917
183.28	3,269	6,180	183.80	3,548	7,952
183.29	3,274	6,213	183.81	3,554	7,988
183.30	3,279	6,245	183.82	3,559	8,023
183.31	3,285	6,278	183.83	3,565	8,059
183.32	3,290	6,311	183.84	3,570	8,095
183.33	3,296	6,344	183.85	3,575	8,130
183.34	3,301	6,377	183.86	3,581	8,166
183.35	3,306	6,410	183.87	3,586	8,202
183.36	3,312	6,443	183.88	3,591	8,238
183.37	3,317	6,476	183.89	3,597	8,274
183.38	3,322	6,510	183.90	3,602	8,310
183.39	3,328	6,543	183.91	3,608	8,346
183.40	3,333	6,576	183.92	3,613	8,382
183.41	3,339	6,609	183.93	3,618	8,418
183.42	3,344	6,643	183.94	3,624	8,454
183.43	3,349	6,676	183.95	3,629	8,491
183.44	3,355	6,710	183.96	3,634	8,527
183.45	3,360	6,743	183.97	3,640	8,563
183.46	3,365	6,777	183.98	3,645	8,600
183.47	3,371	6,811	183.99	3,651	8,636
183.48	3,376	6,844	184.00	3,656	8,673
183.49	3,382	6,878	184.01	3,662	8,709
183.50	3,387	6,912	184.02	3,667	8,746
183.51	3,392	6,946	184.03	3,673	8,783
183.52	3,398	6,980	184.04	3,679	8,820
183.53	3,403	7,014	184.05	3,685	8,856
183.54	3,409	7,048	184.06	3,690	8,893
183.55	3,414	7,082	184.07	3,696	8,930

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.08	3,702	8,967	184.60	3,999	10,969
184.09	3,707	9,004	184.61	4,004	11,009
184.10	3,713	9,041	184.62	4,010	11,049
184.11	3,719	9,078	184.63	4,016	11,089
184.12	3,725	9,116	184.64	4,021	11,130
184.13	3,730	9,153	184.65	4,027	11,170
184.14	3,736	9,190	184.66	4,033	11,210
184.15	3,742	9,228	184.67	4,039	11,251
184.16	3,747	9,265	184.68	4,044	11,291
184.17	3,753	9,303	184.69	4,050	11,331
184.18	3,759	9,340	184.70	4,056	11,372
184.19	3,764	9,378	184.71	4,061	11,413
184.20	3,770	9,415	184.72	4,067	11,453
184.21	3,776	9,453	184.73	4,073	11,494
184.22	3,782	9,491	184.74	4,079	11,535
184.23	3,787	9,529	184.75	4,084	11,575
184.24	3,793	9,567	184.76	4,090	11,616
184.25	3,799	9,605	184.77	4,096	11,657
184.26	3,804	9,643	184.78	4,101	11,698
184.27	3,810	9,681	184.79	4,107	11,739
184.28	3,816	9,719	184.80	4,113	11,780
184.29	3,822	9,757	184.81	4,119	11,822
184.30	3,827	9,795	184.82	4,124	11,863
184.31	3,833	9,834	184.83	4,130	11,904
184.32	3,839	9,872	184.84	4,136	11,945
184.33	3,844	9,910	184.85	4,141	11,987
184.34	3,850	9,949	184.86	4,147	12,028
184.35	3,856	9,987	184.87	4,153	12,070
184.36	3,862	10,026	184.88	4,158	12,111
184.37	3,867	10,065	184.89	4,164	12,153
184.38	3,873	10,103	184.90	4,170	12,194
184.39	3,879	10,142	184.91	4,176	12,236
184.40	3,884	10,181	184.92	4,181	12,278
184.41	3,890	10,220	184.93	4,187	12,320
184.42	3,896	10,259	184.94	4,193	12,362
184.43	3,902	10,298	184.95	4,198	12,404
184.44	3,907	10,337	184.96	4,204	12,446
184.45	3,913	10,376	184.97	4,210	12,488
184.46	3,919	10,415	184.98	4,216	12,530
184.47	3,924	10,454	184.99	4,221	12,572
184.48	3,930	10,493	185.00	4,227	12,614
184.49	3,936	10,533	185.01	4,233	12,657
184.50	3,942	10,572	185.02	4,239	12,699
184.51	3,947	10,612	185.03	4,245	12,741
184.52	3,953	10,651	185.04	4,251	12,784
184.53	3,959	10,691	185.05	4,257	12,826
184.54	3,964	10,730	185.06	4,263	12,869
184.55	3,970	10,770	185.07	4,269	12,912
184.56	3,976	10,810	185.08	4,275	12,954
184.57	3,981	10,850	185.09	4,281	12,997
184.58	3,987	10,889	185.10	4,287	13,040
184.59	3,993	10,929	185.11	4,293	13,083

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.12	4,299	13,126	185.64	4,614	15,443
185.13	4,306	13,169	185.65	4,620	15,489
185.14	4,312	13,212	185.66	4,626	15,536
185.15	4,318	13,255	185.67	4,632	15,582
185.16	4,324	13,298	185.68	4,638	15,628
185.17	4,330	13,342	185.69	4,644	15,675
185.18	4,336	13,385	185.70	4,650	15,721
185.19	4,342	13,428	185.71	4,656	15,768
185.20	4,348	13,472	185.72	4,662	15,814
185.21	4,354	13,515	185.73	4,668	15,861
185.22	4,360	13,559	185.74	4,674	15,908
185.23	4,366	13,603	185.75	4,680	15,954
185.24	4,372	13,646	185.76	4,686	16,001
185.25	4,378	13,690	185.77	4,692	16,048
185.26	4,384	13,734	185.78	4,698	16,095
185.27	4,390	13,778	185.79	4,704	16,142
185.28	4,396	13,822	185.80	4,710	16,189
185.29	4,402	13,866	185.81	4,716	16,236
185.30	4,408	13,910	185.82	4,722	16,284
185.31	4,414	13,954	185.83	4,728	16,331
185.32	4,420	13,998	185.84	4,734	16,378
185.33	4,426	14,042	185.85	4,740	16,425
185.34	4,432	14,086	185.86	4,746	16,473
185.35	4,438	14,131	185.87	4,752	16,520
185.36	4,444	14,175	185.88	4,759	16,568
185.37	4,450	14,220	185.89	4,765	16,616
185.38	4,457	14,264	185.90	4,771	16,663
185.39	4,463	14,309	185.91	4,777	16,711
185.40	4,469	14,353	185.92	4,783	16,759
185.41	4,475	14,398	185.93	4,789	16,807
185.42	4,481	14,443	185.94	4,795	16,855
185.43	4,487	14,488	185.95	4,801	16,903
185.44	4,493	14,533	185.96	4,807	16,951
185.45	4,499	14,578	185.97	4,813	16,999
185.46	4,505	14,623	185.98	4,819	17,047
185.47	4,511	14,668	185.99	4,825	17,095
185.48	4,517	14,713	186.00	4,831	17,143
185.49	4,523	14,758	186.01	4,837	17,192
185.50	4,529	14,803	186.02	4,844	17,240
185.51	4,535	14,849	186.03	4,850	17,289
185.52	4,541	14,894	186.04	4,856	17,337
185.53	4,547	14,939	186.05	4,863	17,386
185.54	4,553	14,985	186.06	4,869	17,434
185.55	4,559	15,031	186.07	4,876	17,483
185.56	4,565	15,076	186.08	4,882	17,532
185.57	4,571	15,122	186.09	4,888	17,581
185.58	4,577	15,168	186.10	4,895	17,630
185.59	4,583	15,213	186.11	4,901	17,679
185.60	4,589	15,259	186.12	4,907	17,728
185.61	4,595	15,305	186.13	4,914	17,777
185.62	4,601	15,351	186.14	4,920	17,826
185.63	4,608	15,397	186.15	4,927	17,875

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.16	4,933	17,924	186.68	5,264	20,576
186.17	4,939	17,974	186.69	5,271	20,628
186.18	4,946	18,023	186.70	5,277	20,681
186.19	4,952	18,073	186.71	5,283	20,734
186.20	4,958	18,122	186.72	5,290	20,787
186.21	4,965	18,172	186.73	5,296	20,840
186.22	4,971	18,222	186.74	5,302	20,893
186.23	4,978	18,271	186.75	5,309	20,946
186.24	4,984	18,321	186.76	5,315	20,999
186.25	4,990	18,371	186.77	5,321	21,052
186.26	4,997	18,421	186.78	5,328	21,105
186.27	5,003	18,471	186.79	5,334	21,159
186.28	5,009	18,521	186.80	5,341	21,212
186.29	5,016	18,571	186.81	5,347	21,265
186.30	5,022	18,621	186.82	5,353	21,319
186.31	5,028	18,672	186.83	5,360	21,372
186.32	5,035	18,722	186.84	5,366	21,426
186.33	5,041	18,772	186.85	5,372	21,480
186.34	5,048	18,823	186.86	5,379	21,534
186.35	5,054	18,873	186.87	5,385	21,587
186.36	5,060	18,924	186.88	5,392	21,641
186.37	5,067	18,974	186.89	5,398	21,695
186.38	5,073	19,025	186.90	5,404	21,749
186.39	5,079	19,076	186.91	5,411	21,803
186.40	5,086	19,127	186.92	5,417	21,857
186.41	5,092	19,178	186.93	5,423	21,912
186.42	5,099	19,229	186.94	5,430	21,966
186.43	5,105	19,280	186.95	5,436	22,020
186.44	5,111	19,331	186.96	5,443	22,075
186.45	5,118	19,382	186.97	5,449	22,129
186.46	5,124	19,433	186.98	5,455	22,184
186.47	5,130	19,484	186.99	5,462	22,238
186.48	5,137	19,536	187.00	5,468	22,293
186.49	5,143	19,587			
186.50	5,150	19,638			
186.51	5,156	19,690			
186.52	5,162	19,742			
186.53	5,169	19,793			
186.54	5,175	19,845			
186.55	5,181	19,897			
186.56	5,188	19,949			
186.57	5,194	20,000			
186.58	5,200	20,052			
186.59	5,207	20,104			
186.60	5,213	20,157			
186.61	5,220	20,209			
186.62	5,226	20,261			
186.63	5,232	20,313			
186.64	5,239	20,366			
186.65	5,245	20,418			
186.66	5,251	20,471			
186.67	5,258	20,523			

Summary for Pond B-43: Basin #43

Inflow Area = 2.712 ac, 33.89% Impervious, Inflow Depth = 8.94" for Future 100 yr event
 Inflow = 24.73 cfs @ 12.17 hrs, Volume= 2.021 af
 Outflow = 20.26 cfs @ 12.26 hrs, Volume= 1.909 af, Atten= 18%, Lag= 5.1 min
 Primary = 20.26 cfs @ 12.26 hrs, Volume= 1.909 af
 Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 180.13' @ 12.26 hrs Surf.Area= 7,282 sf Storage= 19,648 cf

Plug-Flow detention time= 137.2 min calculated for 1.909 af (94% of inflow)
 Center-of-Mass det. time= 105.3 min (886.5 - 781.2)

Volume	Invert	Avail.Storage	Storage Description
#1	176.35'	26,392 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
176.35	0	0	0
177.00	4,447	1,445	1,445
178.00	5,292	4,870	6,315
179.00	6,194	5,743	12,058
180.00	7,153	6,674	18,731
181.00	8,168	7,661	26,392

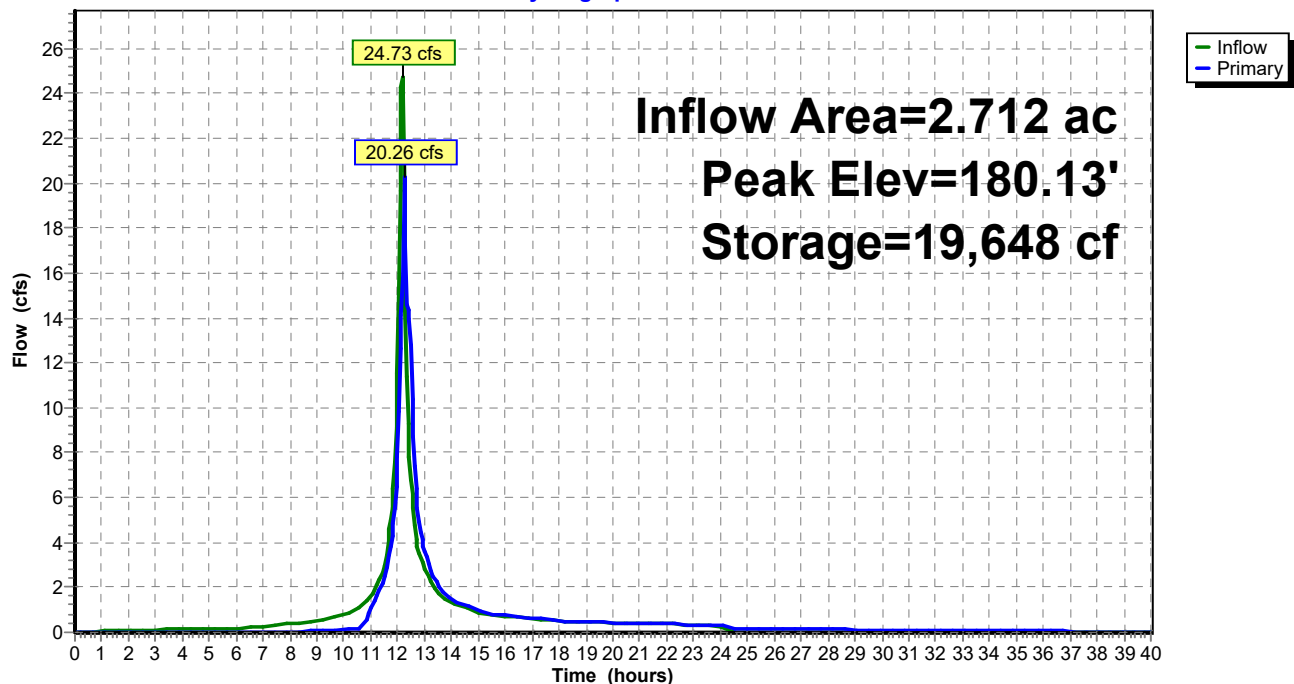
Device	Routing	Invert	Outlet Devices
#1	Primary	176.30'	18.0" Round Culvert L= 200.0' Ke= 0.500 Inlet / Outlet Invert= 176.30' / 166.10' S= 0.0510 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	177.62'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	178.58'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	180.00'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=19.83 cfs @ 12.26 hrs HW=180.12' (Free Discharge)

1=Culvert (Inlet Controls 14.91 cfs @ 8.44 fps)
 2=Orifice/Grate (Passes < 0.25 cfs potential flow)
 3=Sharp-Crested Rectangular Weir (Passes < 23.08 cfs potential flow)
 4=Broad-Crested Rectangular Weir (Weir Controls 4.92 cfs @ 0.81 fps)

Pond B-43: Basin #43

Hydrograph



Stage-Discharge for Pond B-43: Basin #43

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
176.35	0.00	176.87	0.00	177.39	0.00	177.91	0.07
176.36	0.00	176.88	0.00	177.40	0.00	177.92	0.07
176.37	0.00	176.89	0.00	177.41	0.00	177.93	0.07
176.38	0.00	176.90	0.00	177.42	0.00	177.94	0.08
176.39	0.00	176.91	0.00	177.43	0.00	177.95	0.08
176.40	0.00	176.92	0.00	177.44	0.00	177.96	0.08
176.41	0.00	176.93	0.00	177.45	0.00	177.97	0.08
176.42	0.00	176.94	0.00	177.46	0.00	177.98	0.08
176.43	0.00	176.95	0.00	177.47	0.00	177.99	0.08
176.44	0.00	176.96	0.00	177.48	0.00	178.00	0.09
176.45	0.00	176.97	0.00	177.49	0.00	178.01	0.09
176.46	0.00	176.98	0.00	177.50	0.00	178.02	0.09
176.47	0.00	176.99	0.00	177.51	0.00	178.03	0.09
176.48	0.00	177.00	0.00	177.52	0.00	178.04	0.09
176.49	0.00	177.01	0.00	177.53	0.00	178.05	0.09
176.50	0.00	177.02	0.00	177.54	0.00	178.06	0.10
176.51	0.00	177.03	0.00	177.55	0.00	178.07	0.10
176.52	0.00	177.04	0.00	177.56	0.00	178.08	0.10
176.53	0.00	177.05	0.00	177.57	0.00	178.09	0.10
176.54	0.00	177.06	0.00	177.58	0.00	178.10	0.10
176.55	0.00	177.07	0.00	177.59	0.00	178.11	0.10
176.56	0.00	177.08	0.00	177.60	0.00	178.12	0.10
176.57	0.00	177.09	0.00	177.61	0.00	178.13	0.10
176.58	0.00	177.10	0.00	177.62	0.00	178.14	0.11
176.59	0.00	177.11	0.00	177.63	0.00	178.15	0.11
176.60	0.00	177.12	0.00	177.64	0.00	178.16	0.11
176.61	0.00	177.13	0.00	177.65	0.00	178.17	0.11
176.62	0.00	177.14	0.00	177.66	0.00	178.18	0.11
176.63	0.00	177.15	0.00	177.67	0.00	178.19	0.11
176.64	0.00	177.16	0.00	177.68	0.01	178.20	0.11
176.65	0.00	177.17	0.00	177.69	0.01	178.21	0.11
176.66	0.00	177.18	0.00	177.70	0.01	178.22	0.12
176.67	0.00	177.19	0.00	177.71	0.01	178.23	0.12
176.68	0.00	177.20	0.00	177.72	0.02	178.24	0.12
176.69	0.00	177.21	0.00	177.73	0.02	178.25	0.12
176.70	0.00	177.22	0.00	177.74	0.02	178.26	0.12
176.71	0.00	177.23	0.00	177.75	0.03	178.27	0.12
176.72	0.00	177.24	0.00	177.76	0.03	178.28	0.12
176.73	0.00	177.25	0.00	177.77	0.03	178.29	0.12
176.74	0.00	177.26	0.00	177.78	0.04	178.30	0.12
176.75	0.00	177.27	0.00	177.79	0.04	178.31	0.13
176.76	0.00	177.28	0.00	177.80	0.05	178.32	0.13
176.77	0.00	177.29	0.00	177.81	0.05	178.33	0.13
176.78	0.00	177.30	0.00	177.82	0.05	178.34	0.13
176.79	0.00	177.31	0.00	177.83	0.05	178.35	0.13
176.80	0.00	177.32	0.00	177.84	0.06	178.36	0.13
176.81	0.00	177.33	0.00	177.85	0.06	178.37	0.13
176.82	0.00	177.34	0.00	177.86	0.06	178.38	0.13
176.83	0.00	177.35	0.00	177.87	0.06	178.39	0.13
176.84	0.00	177.36	0.00	177.88	0.06	178.40	0.13
176.85	0.00	177.37	0.00	177.89	0.07	178.41	0.14
176.86	0.00	177.38	0.00	177.90	0.07	178.42	0.14

Stage-Discharge for Pond B-43: Basin #43 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
178.43	0.14	178.95	3.07	179.47	10.71	179.99	14.59
178.44	0.14	178.96	3.19	179.48	10.88	180.00	14.61
178.45	0.14	178.97	3.31	179.49	11.06	180.01	14.76
178.46	0.14	178.98	3.43	179.50	11.23	180.02	14.99
178.47	0.14	178.99	3.55	179.51	11.40	180.03	15.30
178.48	0.14	179.00	3.67	179.52	11.58	180.04	15.65
178.49	0.14	179.01	3.79	179.53	11.76	180.05	16.05
178.50	0.14	179.02	3.92	179.54	11.93	180.06	16.49
178.51	0.15	179.03	4.05	179.55	12.11	180.07	16.96
178.52	0.15	179.04	4.18	179.56	12.29	180.08	17.47
178.53	0.15	179.05	4.30	179.57	12.47	180.09	18.01
178.54	0.15	179.06	4.44	179.58	12.65	180.10	18.58
178.55	0.15	179.07	4.57	179.59	12.83	180.11	19.18
178.56	0.15	179.08	4.70	179.60	13.01	180.12	19.80
178.57	0.15	179.09	4.83	179.61	13.19	180.13	20.45
178.58	0.15	179.10	4.97	179.62	13.38	180.14	21.13
178.59	0.17	179.11	5.11	179.63	13.56	180.15	21.83
178.60	0.19	179.12	5.24	179.64	13.69	180.16	22.55
178.61	0.22	179.13	5.38	179.65	13.72	180.17	23.30
178.62	0.26	179.14	5.52	179.66	13.75	180.18	24.07
178.63	0.30	179.15	5.66	179.67	13.77	180.19	24.86
178.64	0.35	179.16	5.81	179.68	13.80	180.20	25.67
178.65	0.40	179.17	5.95	179.69	13.83	180.21	26.54
178.66	0.45	179.18	6.09	179.70	13.85	180.22	27.43
178.67	0.51	179.19	6.24	179.71	13.88	180.23	28.36
178.68	0.57	179.20	6.39	179.72	13.90	180.24	29.30
178.69	0.64	179.21	6.53	179.73	13.93	180.25	30.27
178.70	0.70	179.22	6.68	179.74	13.96	180.26	31.27
178.71	0.77	179.23	6.83	179.75	13.98	180.27	32.29
178.72	0.84	179.24	6.98	179.76	14.01	180.28	33.34
178.73	0.92	179.25	7.14	179.77	14.03	180.29	34.41
178.74	1.00	179.26	7.29	179.78	14.06	180.30	35.51
178.75	1.08	179.27	7.44	179.79	14.08	180.31	36.63
178.76	1.16	179.28	7.60	179.80	14.11	180.32	37.77
178.77	1.24	179.29	7.75	179.81	14.14	180.33	38.94
178.78	1.33	179.30	7.91	179.82	14.16	180.34	40.14
178.79	1.41	179.31	8.07	179.83	14.19	180.35	41.35
178.80	1.51	179.32	8.23	179.84	14.21	180.36	42.60
178.81	1.60	179.33	8.39	179.85	14.24	180.37	43.86
178.82	1.69	179.34	8.55	179.86	14.26	180.38	45.15
178.83	1.79	179.35	8.71	179.87	14.29	180.39	46.47
178.84	1.88	179.36	8.87	179.88	14.31	180.40	47.80
178.85	1.98	179.37	9.03	179.89	14.34	180.41	49.19
178.86	2.09	179.38	9.20	179.90	14.36	180.42	50.61
178.87	2.19	179.39	9.36	179.91	14.39	180.43	52.05
178.88	2.29	179.40	9.53	179.92	14.41	180.44	53.52
178.89	2.40	179.41	9.69	179.93	14.44	180.45	55.01
178.90	2.51	179.42	9.86	179.94	14.46	180.46	56.53
178.91	2.62	179.43	10.03	179.95	14.49	180.47	58.07
178.92	2.73	179.44	10.20	179.96	14.51	180.48	59.65
178.93	2.84	179.45	10.37	179.97	14.54	180.49	61.24
178.94	2.96	179.46	10.54	179.98	14.56	180.50	62.87

Stage-Discharge for Pond B-43: Basin #43 (continued)

Elevation (feet)	Primary (cfs)
180.51	64.52
180.52	66.20
180.53	67.90
180.54	69.63
180.55	71.39
180.56	73.18
180.57	74.99
180.58	76.82
180.59	78.69
180.60	80.58
180.61	82.23
180.62	83.89
180.63	85.57
180.64	87.26
180.65	88.96
180.66	90.68
180.67	92.41
180.68	94.15
180.69	95.91
180.70	97.67
180.71	99.46
180.72	101.25
180.73	103.05
180.74	104.87
180.75	106.70
180.76	108.55
180.77	110.40
180.78	112.27
180.79	114.15
180.80	116.04
180.81	117.98
180.82	119.94
180.83	121.91
180.84	123.89
180.85	125.88
180.86	127.89
180.87	129.91
180.88	131.94
180.89	133.99
180.90	136.05
180.91	138.12
180.92	140.21
180.93	142.30
180.94	144.41
180.95	146.54
180.96	148.67
180.97	150.82
180.98	152.98
180.99	155.16
181.00	157.34

Stage-Area-Storage for Pond B-43: Basin #43

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
176.35	0	0	176.87	3,558	925
176.36	68	0	176.88	3,626	961
176.37	137	1	176.89	3,694	997
176.38	205	3	176.90	3,763	1,035
176.39	274	5	176.91	3,831	1,073
176.40	342	9	176.92	3,900	1,111
176.41	410	12	176.93	3,968	1,151
176.42	479	17	176.94	4,037	1,191
176.43	547	22	176.95	4,105	1,231
176.44	616	28	176.96	4,173	1,273
176.45	684	34	176.97	4,242	1,315
176.46	753	41	176.98	4,310	1,358
176.47	821	49	176.99	4,379	1,401
176.48	889	58	177.00	4,447	1,445
176.49	958	67	177.01	4,455	1,490
176.50	1,026	77	177.02	4,464	1,534
176.51	1,095	88	177.03	4,472	1,579
176.52	1,163	99	177.04	4,481	1,624
176.53	1,231	111	177.05	4,489	1,669
176.54	1,300	123	177.06	4,498	1,714
176.55	1,368	137	177.07	4,506	1,759
176.56	1,437	151	177.08	4,515	1,804
176.57	1,505	166	177.09	4,523	1,849
176.58	1,574	181	177.10	4,531	1,894
176.59	1,642	197	177.11	4,540	1,940
176.60	1,710	214	177.12	4,548	1,985
176.61	1,779	231	177.13	4,557	2,031
176.62	1,847	249	177.14	4,565	2,076
176.63	1,916	268	177.15	4,574	2,122
176.64	1,984	288	177.16	4,582	2,168
176.65	2,052	308	177.17	4,591	2,213
176.66	2,121	329	177.18	4,599	2,259
176.67	2,189	350	177.19	4,608	2,305
176.68	2,258	373	177.20	4,616	2,352
176.69	2,326	395	177.21	4,624	2,398
176.70	2,395	419	177.22	4,633	2,444
176.71	2,463	443	177.23	4,641	2,490
176.72	2,531	468	177.24	4,650	2,537
176.73	2,600	494	177.25	4,658	2,583
176.74	2,668	520	177.26	4,667	2,630
176.75	2,737	547	177.27	4,675	2,677
176.76	2,805	575	177.28	4,684	2,724
176.77	2,873	603	177.29	4,692	2,770
176.78	2,942	633	177.30	4,700	2,817
176.79	3,010	662	177.31	4,709	2,864
176.80	3,079	693	177.32	4,717	2,912
176.81	3,147	724	177.33	4,726	2,959
176.82	3,216	756	177.34	4,734	3,006
176.83	3,284	788	177.35	4,743	3,053
176.84	3,352	821	177.36	4,751	3,101
176.85	3,421	855	177.37	4,760	3,149
176.86	3,489	890	177.38	4,768	3,196

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
177.39	4,777	3,244	177.91	5,216	5,842
177.40	4,785	3,292	177.92	5,224	5,894
177.41	4,793	3,340	177.93	5,233	5,946
177.42	4,802	3,388	177.94	5,241	5,999
177.43	4,810	3,436	177.95	5,250	6,051
177.44	4,819	3,484	177.96	5,258	6,104
177.45	4,827	3,532	177.97	5,267	6,156
177.46	4,836	3,580	177.98	5,275	6,209
177.47	4,844	3,629	177.99	5,284	6,262
177.48	4,853	3,677	178.00	5,292	6,315
177.49	4,861	3,726	178.01	5,301	6,368
177.50	4,870	3,774	178.02	5,310	6,421
177.51	4,878	3,823	178.03	5,319	6,474
177.52	4,886	3,872	178.04	5,328	6,527
177.53	4,895	3,921	178.05	5,337	6,581
177.54	4,903	3,970	178.06	5,346	6,634
177.55	4,912	4,019	178.07	5,355	6,687
177.56	4,920	4,068	178.08	5,364	6,741
177.57	4,929	4,117	178.09	5,373	6,795
177.58	4,937	4,167	178.10	5,382	6,848
177.59	4,946	4,216	178.11	5,391	6,902
177.60	4,954	4,266	178.12	5,400	6,956
177.61	4,962	4,315	178.13	5,409	7,010
177.62	4,971	4,365	178.14	5,418	7,064
177.63	4,979	4,415	178.15	5,427	7,119
177.64	4,988	4,464	178.16	5,436	7,173
177.65	4,996	4,514	178.17	5,445	7,227
177.66	5,005	4,564	178.18	5,454	7,282
177.67	5,013	4,614	178.19	5,463	7,337
177.68	5,022	4,665	178.20	5,472	7,391
177.69	5,030	4,715	178.21	5,481	7,446
177.70	5,038	4,765	178.22	5,490	7,501
177.71	5,047	4,816	178.23	5,499	7,556
177.72	5,055	4,866	178.24	5,508	7,611
177.73	5,064	4,917	178.25	5,518	7,666
177.74	5,072	4,967	178.26	5,527	7,721
177.75	5,081	5,018	178.27	5,536	7,776
177.76	5,089	5,069	178.28	5,545	7,832
177.77	5,098	5,120	178.29	5,554	7,887
177.78	5,106	5,171	178.30	5,563	7,943
177.79	5,115	5,222	178.31	5,572	7,999
177.80	5,123	5,273	178.32	5,581	8,054
177.81	5,131	5,325	178.33	5,590	8,110
177.82	5,140	5,376	178.34	5,599	8,166
177.83	5,148	5,427	178.35	5,608	8,222
177.84	5,157	5,479	178.36	5,617	8,278
177.85	5,165	5,530	178.37	5,626	8,335
177.86	5,174	5,582	178.38	5,635	8,391
177.87	5,182	5,634	178.39	5,644	8,447
177.88	5,191	5,686	178.40	5,653	8,504
177.89	5,199	5,738	178.41	5,662	8,560
177.90	5,208	5,790	178.42	5,671	8,617

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
178.43	5,680	8,674	178.95	6,149	11,749
178.44	5,689	8,731	178.96	6,158	11,811
178.45	5,698	8,788	178.97	6,167	11,872
178.46	5,707	8,845	178.98	6,176	11,934
178.47	5,716	8,902	178.99	6,185	11,996
178.48	5,725	8,959	179.00	6,194	12,058
178.49	5,734	9,016	179.01	6,204	12,120
178.50	5,743	9,074	179.02	6,213	12,182
178.51	5,752	9,131	179.03	6,223	12,244
178.52	5,761	9,189	179.04	6,232	12,306
178.53	5,770	9,246	179.05	6,242	12,369
178.54	5,779	9,304	179.06	6,252	12,431
178.55	5,788	9,362	179.07	6,261	12,494
178.56	5,797	9,420	179.08	6,271	12,556
178.57	5,806	9,478	179.09	6,280	12,619
178.58	5,815	9,536	179.10	6,290	12,682
178.59	5,824	9,594	179.11	6,299	12,745
178.60	5,833	9,652	179.12	6,309	12,808
178.61	5,842	9,711	179.13	6,319	12,871
178.62	5,851	9,769	179.14	6,328	12,934
178.63	5,860	9,828	179.15	6,338	12,998
178.64	5,869	9,886	179.16	6,347	13,061
178.65	5,878	9,945	179.17	6,357	13,125
178.66	5,887	10,004	179.18	6,367	13,188
178.67	5,896	10,063	179.19	6,376	13,252
178.68	5,905	10,122	179.20	6,386	13,316
178.69	5,914	10,181	179.21	6,395	13,380
178.70	5,923	10,240	179.22	6,405	13,444
178.71	5,932	10,299	179.23	6,415	13,508
178.72	5,941	10,359	179.24	6,424	13,572
178.73	5,950	10,418	179.25	6,434	13,636
178.74	5,959	10,478	179.26	6,443	13,701
178.75	5,969	10,537	179.27	6,453	13,765
178.76	5,978	10,597	179.28	6,463	13,830
178.77	5,987	10,657	179.29	6,472	13,894
178.78	5,996	10,717	179.30	6,482	13,959
178.79	6,005	10,777	179.31	6,491	14,024
178.80	6,014	10,837	179.32	6,501	14,089
178.81	6,023	10,897	179.33	6,510	14,154
178.82	6,032	10,957	179.34	6,520	14,219
178.83	6,041	11,018	179.35	6,530	14,284
178.84	6,050	11,078	179.36	6,539	14,350
178.85	6,059	11,139	179.37	6,549	14,415
178.86	6,068	11,199	179.38	6,558	14,481
178.87	6,077	11,260	179.39	6,568	14,546
178.88	6,086	11,321	179.40	6,578	14,612
178.89	6,095	11,382	179.41	6,587	14,678
178.90	6,104	11,443	179.42	6,597	14,744
178.91	6,113	11,504	179.43	6,606	14,810
178.92	6,122	11,565	179.44	6,616	14,876
178.93	6,131	11,626	179.45	6,626	14,942
178.94	6,140	11,688	179.46	6,635	15,008

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
179.47	6,645	15,075	179.99	7,143	18,660
179.48	6,654	15,141	180.00	7,153	18,731
179.49	6,664	15,208	180.01	7,163	18,803
179.50	6,674	15,275	180.02	7,173	18,875
179.51	6,683	15,341	180.03	7,183	18,946
179.52	6,693	15,408	180.04	7,194	19,018
179.53	6,702	15,475	180.05	7,204	19,090
179.54	6,712	15,542	180.06	7,214	19,162
179.55	6,721	15,610	180.07	7,224	19,234
179.56	6,731	15,677	180.08	7,234	19,307
179.57	6,741	15,744	180.09	7,244	19,379
179.58	6,750	15,812	180.10	7,254	19,452
179.59	6,760	15,879	180.11	7,265	19,524
179.60	6,769	15,947	180.12	7,275	19,597
179.61	6,779	16,015	180.13	7,285	19,670
179.62	6,789	16,082	180.14	7,295	19,743
179.63	6,798	16,150	180.15	7,305	19,816
179.64	6,808	16,218	180.16	7,315	19,889
179.65	6,817	16,286	180.17	7,326	19,962
179.66	6,827	16,355	180.18	7,336	20,035
179.67	6,837	16,423	180.19	7,346	20,109
179.68	6,846	16,491	180.20	7,356	20,182
179.69	6,856	16,560	180.21	7,366	20,256
179.70	6,865	16,629	180.22	7,376	20,329
179.71	6,875	16,697	180.23	7,386	20,403
179.72	6,884	16,766	180.24	7,397	20,477
179.73	6,894	16,835	180.25	7,407	20,551
179.74	6,904	16,904	180.26	7,417	20,625
179.75	6,913	16,973	180.27	7,427	20,700
179.76	6,923	17,042	180.28	7,437	20,774
179.77	6,932	17,111	180.29	7,447	20,848
179.78	6,942	17,181	180.30	7,457	20,923
179.79	6,952	17,250	180.31	7,468	20,997
179.80	6,961	17,320	180.32	7,478	21,072
179.81	6,971	17,390	180.33	7,488	21,147
179.82	6,980	17,459	180.34	7,498	21,222
179.83	6,990	17,529	180.35	7,508	21,297
179.84	7,000	17,599	180.36	7,518	21,372
179.85	7,009	17,669	180.37	7,529	21,447
179.86	7,019	17,739	180.38	7,539	21,523
179.87	7,028	17,809	180.39	7,549	21,598
179.88	7,038	17,880	180.40	7,559	21,674
179.89	7,048	17,950	180.41	7,569	21,749
179.90	7,057	18,021	180.42	7,579	21,825
179.91	7,067	18,091	180.43	7,589	21,901
179.92	7,076	18,162	180.44	7,600	21,977
179.93	7,086	18,233	180.45	7,610	22,053
179.94	7,095	18,304	180.46	7,620	22,129
179.95	7,105	18,375	180.47	7,630	22,205
179.96	7,115	18,446	180.48	7,640	22,282
179.97	7,124	18,517	180.49	7,650	22,358
179.98	7,134	18,588	180.50	7,661	22,435

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
180.51	7,671	22,511
180.52	7,681	22,588
180.53	7,691	22,665
180.54	7,701	22,742
180.55	7,711	22,819
180.56	7,721	22,896
180.57	7,732	22,973
180.58	7,742	23,051
180.59	7,752	23,128
180.60	7,762	23,206
180.61	7,772	23,283
180.62	7,782	23,361
180.63	7,792	23,439
180.64	7,803	23,517
180.65	7,813	23,595
180.66	7,823	23,673
180.67	7,833	23,752
180.68	7,843	23,830
180.69	7,853	23,908
180.70	7,863	23,987
180.71	7,874	24,066
180.72	7,884	24,145
180.73	7,894	24,223
180.74	7,904	24,302
180.75	7,914	24,381
180.76	7,924	24,461
180.77	7,935	24,540
180.78	7,945	24,619
180.79	7,955	24,699
180.80	7,965	24,778
180.81	7,975	24,858
180.82	7,985	24,938
180.83	7,995	25,018
180.84	8,006	25,098
180.85	8,016	25,178
180.86	8,026	25,258
180.87	8,036	25,339
180.88	8,046	25,419
180.89	8,056	25,499
180.90	8,067	25,580
180.91	8,077	25,661
180.92	8,087	25,742
180.93	8,097	25,823
180.94	8,107	25,904
180.95	8,117	25,985
180.96	8,127	26,066
180.97	8,138	26,147
180.98	8,148	26,229
180.99	8,158	26,310
181.00	8,168	26,392

Summary for Pond B-44: Basin #44

Inflow Area = 1.184 ac, 34.71% Impervious, Inflow Depth = 8.97" for Future 100 yr event
 Inflow = 10.81 cfs @ 12.17 hrs, Volume= 0.885 af
 Outflow = 6.89 cfs @ 12.29 hrs, Volume= 0.760 af, Atten= 36%, Lag= 7.3 min
 Primary = 6.89 cfs @ 12.29 hrs, Volume= 0.760 af
 Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 168.15' @ 12.29 hrs Surf.Area= 7,553 sf Storage= 16,205 cf

Plug-Flow detention time= 326.1 min calculated for 0.759 af (86% of inflow)
 Center-of-Mass det. time= 261.8 min (1,042.4 - 780.6)

Volume	Invert	Avail.Storage	Storage Description
#1	165.30'	31,812 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
165.30	0	0	0
166.00	5,690	1,991	1,991
167.00	6,518	6,104	8,095
168.00	7,407	6,963	15,058
169.00	8,360	7,884	22,941
170.00	9,381	8,871	31,812

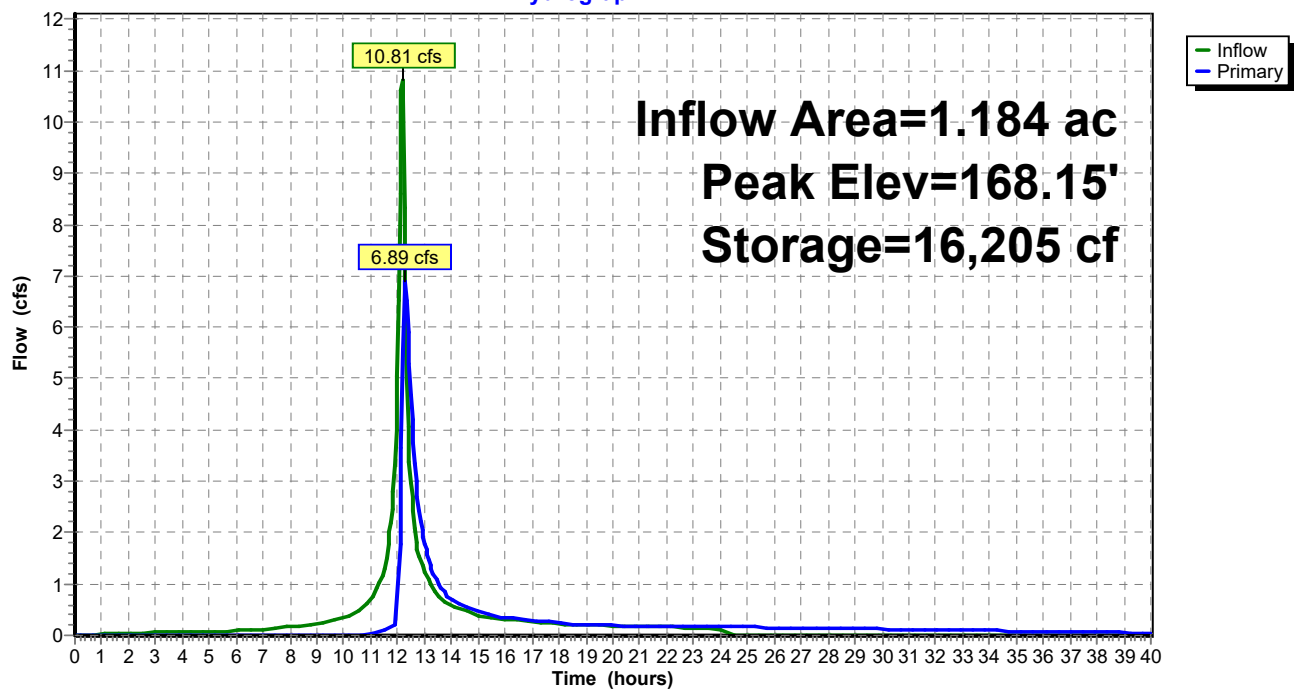
Device	Routing	Invert	Outlet Devices
#1	Primary	165.30'	18.0" Round Culvert L= 44.0' Ke= 0.500 Inlet / Outlet Invert= 165.30' / 164.00' S= 0.0295 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	166.41'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	167.50'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	168.98'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=6.85 cfs @ 12.29 hrs HW=168.15' (Free Discharge)

1=Culvert (Passes 6.85 cfs of 12.33 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.21 cfs @ 6.16 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 6.64 cfs @ 2.64 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-44: Basin #44

Hydrograph



Stage-Discharge for Pond B-44: Basin #44

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
165.30	0.00	165.82	0.00	166.34	0.00	166.86	0.10
165.31	0.00	165.83	0.00	166.35	0.00	166.87	0.10
165.32	0.00	165.84	0.00	166.36	0.00	166.88	0.10
165.33	0.00	165.85	0.00	166.37	0.00	166.89	0.10
165.34	0.00	165.86	0.00	166.38	0.00	166.90	0.10
165.35	0.00	165.87	0.00	166.39	0.00	166.91	0.10
165.36	0.00	165.88	0.00	166.40	0.00	166.92	0.10
165.37	0.00	165.89	0.00	166.41	0.00	166.93	0.11
165.38	0.00	165.90	0.00	166.42	0.00	166.94	0.11
165.39	0.00	165.91	0.00	166.43	0.00	166.95	0.11
165.40	0.00	165.92	0.00	166.44	0.00	166.96	0.11
165.41	0.00	165.93	0.00	166.45	0.00	166.97	0.11
165.42	0.00	165.94	0.00	166.46	0.00	166.98	0.11
165.43	0.00	165.95	0.00	166.47	0.01	166.99	0.11
165.44	0.00	165.96	0.00	166.48	0.01	167.00	0.11
165.45	0.00	165.97	0.00	166.49	0.01	167.01	0.12
165.46	0.00	165.98	0.00	166.50	0.01	167.02	0.12
165.47	0.00	165.99	0.00	166.51	0.02	167.03	0.12
165.48	0.00	166.00	0.00	166.52	0.02	167.04	0.12
165.49	0.00	166.01	0.00	166.53	0.02	167.05	0.12
165.50	0.00	166.02	0.00	166.54	0.03	167.06	0.12
165.51	0.00	166.03	0.00	166.55	0.03	167.07	0.12
165.52	0.00	166.04	0.00	166.56	0.03	167.08	0.12
165.53	0.00	166.05	0.00	166.57	0.04	167.09	0.12
165.54	0.00	166.06	0.00	166.58	0.04	167.10	0.13
165.55	0.00	166.07	0.00	166.59	0.05	167.11	0.13
165.56	0.00	166.08	0.00	166.60	0.05	167.12	0.13
165.57	0.00	166.09	0.00	166.61	0.05	167.13	0.13
165.58	0.00	166.10	0.00	166.62	0.05	167.14	0.13
165.59	0.00	166.11	0.00	166.63	0.06	167.15	0.13
165.60	0.00	166.12	0.00	166.64	0.06	167.16	0.13
165.61	0.00	166.13	0.00	166.65	0.06	167.17	0.13
165.62	0.00	166.14	0.00	166.66	0.06	167.18	0.13
165.63	0.00	166.15	0.00	166.67	0.06	167.19	0.13
165.64	0.00	166.16	0.00	166.68	0.07	167.20	0.14
165.65	0.00	166.17	0.00	166.69	0.07	167.21	0.14
165.66	0.00	166.18	0.00	166.70	0.07	167.22	0.14
165.67	0.00	166.19	0.00	166.71	0.07	167.23	0.14
165.68	0.00	166.20	0.00	166.72	0.07	167.24	0.14
165.69	0.00	166.21	0.00	166.73	0.08	167.25	0.14
165.70	0.00	166.22	0.00	166.74	0.08	167.26	0.14
165.71	0.00	166.23	0.00	166.75	0.08	167.27	0.14
165.72	0.00	166.24	0.00	166.76	0.08	167.28	0.14
165.73	0.00	166.25	0.00	166.77	0.08	167.29	0.14
165.74	0.00	166.26	0.00	166.78	0.08	167.30	0.15
165.75	0.00	166.27	0.00	166.79	0.09	167.31	0.15
165.76	0.00	166.28	0.00	166.80	0.09	167.32	0.15
165.77	0.00	166.29	0.00	166.81	0.09	167.33	0.15
165.78	0.00	166.30	0.00	166.82	0.09	167.34	0.15
165.79	0.00	166.31	0.00	166.83	0.09	167.35	0.15
165.80	0.00	166.32	0.00	166.84	0.09	167.36	0.15
165.81	0.00	166.33	0.00	166.85	0.10	167.37	0.15

Stage-Discharge for Pond B-44: Basin #44 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
167.38	0.15	167.90	3.44	168.42	11.24	168.94	14.46
167.39	0.15	167.91	3.56	168.43	11.41	168.95	14.49
167.40	0.15	167.92	3.68	168.44	11.59	168.96	14.51
167.41	0.16	167.93	3.80	168.45	11.76	168.97	14.54
167.42	0.16	167.94	3.93	168.46	11.94	168.98	14.56
167.43	0.16	167.95	4.06	168.47	12.12	168.99	14.71
167.44	0.16	167.96	4.18	168.48	12.30	169.00	14.95
167.45	0.16	167.97	4.31	168.49	12.48	169.01	15.25
167.46	0.16	167.98	4.44	168.50	12.66	169.02	15.60
167.47	0.16	167.99	4.58	168.51	12.84	169.03	16.00
167.48	0.16	168.00	4.71	168.52	13.02	169.04	16.44
167.49	0.16	168.01	4.84	168.53	13.20	169.05	16.91
167.50	0.16	168.02	4.98	168.54	13.38	169.06	17.42
167.51	0.18	168.03	5.12	168.55	13.45	169.07	17.96
167.52	0.20	168.04	5.25	168.56	13.48	169.08	18.53
167.53	0.23	168.05	5.39	168.57	13.51	169.09	19.13
167.54	0.27	168.06	5.53	168.58	13.53	169.10	19.75
167.55	0.31	168.07	5.67	168.59	13.56	169.11	20.40
167.56	0.36	168.08	5.82	168.60	13.59	169.12	21.08
167.57	0.41	168.09	5.96	168.61	13.61	169.13	21.78
167.58	0.46	168.10	6.10	168.62	13.64	169.14	22.50
167.59	0.52	168.11	6.25	168.63	13.67	169.15	23.25
167.60	0.58	168.12	6.40	168.64	13.69	169.16	24.02
167.61	0.65	168.13	6.54	168.65	13.72	169.17	24.81
167.62	0.71	168.14	6.69	168.66	13.75	169.18	25.62
167.63	0.78	168.15	6.84	168.67	13.77	169.19	26.49
167.64	0.85	168.16	6.99	168.68	13.80	169.20	27.39
167.65	0.93	168.17	7.14	168.69	13.83	169.21	28.31
167.66	1.01	168.18	7.30	168.70	13.85	169.22	29.25
167.67	1.09	168.19	7.45	168.71	13.88	169.23	30.23
167.68	1.17	168.20	7.61	168.72	13.90	169.24	31.22
167.69	1.25	168.21	7.76	168.73	13.93	169.25	32.25
167.70	1.34	168.22	7.92	168.74	13.96	169.26	33.29
167.71	1.43	168.23	8.08	168.75	13.98	169.27	34.36
167.72	1.52	168.24	8.23	168.76	14.01	169.28	35.46
167.73	1.61	168.25	8.39	168.77	14.03	169.29	36.58
167.74	1.70	168.26	8.55	168.78	14.06	169.30	37.73
167.75	1.80	168.27	8.72	168.79	14.08	169.31	38.90
167.76	1.89	168.28	8.88	168.80	14.11	169.32	40.09
167.77	1.99	168.29	9.04	168.81	14.14	169.33	41.31
167.78	2.10	168.30	9.20	168.82	14.16	169.34	42.55
167.79	2.20	168.31	9.37	168.83	14.19	169.35	43.81
167.80	2.30	168.32	9.53	168.84	14.21	169.36	45.10
167.81	2.41	168.33	9.70	168.85	14.24	169.37	46.42
167.82	2.52	168.34	9.87	168.86	14.26	169.38	47.76
167.83	2.63	168.35	10.04	168.87	14.29	169.39	49.15
167.84	2.74	168.36	10.21	168.88	14.31	169.40	50.56
167.85	2.85	168.37	10.38	168.89	14.34	169.41	52.00
167.86	2.96	168.38	10.55	168.90	14.36	169.42	53.47
167.87	3.08	168.39	10.72	168.91	14.39	169.43	54.96
167.88	3.20	168.40	10.89	168.92	14.41	169.44	56.48
167.89	3.32	168.41	11.06	168.93	14.44	169.45	58.03

Stage-Discharge for Pond B-44: Basin #44 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
169.46	59.60	169.98	157.30
169.47	61.20	169.99	159.45
169.48	62.82	170.00	161.60
169.49	64.47		
169.50	66.15		
169.51	67.86		
169.52	69.59		
169.53	71.35		
169.54	73.13		
169.55	74.94		
169.56	76.78		
169.57	78.64		
169.58	80.54		
169.59	82.19		
169.60	83.85		
169.61	85.52		
169.62	87.21		
169.63	88.92		
169.64	90.63		
169.65	92.36		
169.66	94.11		
169.67	95.86		
169.68	97.63		
169.69	99.41		
169.70	101.20		
169.71	103.01		
169.72	104.83		
169.73	106.66		
169.74	108.50		
169.75	110.36		
169.76	112.23		
169.77	114.11		
169.78	116.00		
169.79	117.94		
169.80	119.89		
169.81	121.86		
169.82	123.84		
169.83	125.84		
169.84	127.85		
169.85	129.87		
169.86	131.90		
169.87	133.95		
169.88	136.01		
169.89	138.08		
169.90	140.16		
169.91	142.26		
169.92	144.37		
169.93	146.49		
169.94	148.63		
169.95	150.78		
169.96	152.94		
169.97	155.11		

Stage-Area-Storage for Pond B-44: Basin #44

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
165.30	0	0	165.82	4,227	1,099
165.31	81	0	165.83	4,308	1,142
165.32	163	2	165.84	4,389	1,185
165.33	244	4	165.85	4,471	1,229
165.34	325	7	165.86	4,552	1,275
165.35	406	10	165.87	4,633	1,320
165.36	488	15	165.88	4,715	1,367
165.37	569	20	165.89	4,796	1,415
165.38	650	26	165.90	4,877	1,463
165.39	732	33	165.91	4,958	1,512
165.40	813	41	165.92	5,040	1,562
165.41	894	49	165.93	5,121	1,613
165.42	975	59	165.94	5,202	1,665
165.43	1,057	69	165.95	5,284	1,717
165.44	1,138	80	165.96	5,365	1,770
165.45	1,219	91	165.97	5,446	1,824
165.46	1,301	104	165.98	5,527	1,879
165.47	1,382	117	165.99	5,609	1,935
165.48	1,463	132	166.00	5,690	1,991
165.49	1,544	147	166.01	5,698	2,048
165.50	1,626	163	166.02	5,707	2,105
165.51	1,707	179	166.03	5,715	2,163
165.52	1,788	197	166.04	5,723	2,220
165.53	1,870	215	166.05	5,731	2,277
165.54	1,951	234	166.06	5,740	2,334
165.55	2,032	254	166.07	5,748	2,392
165.56	2,113	275	166.08	5,756	2,449
165.57	2,195	296	166.09	5,765	2,507
165.58	2,276	319	166.10	5,773	2,565
165.59	2,357	342	166.11	5,781	2,622
165.60	2,439	366	166.12	5,789	2,680
165.61	2,520	391	166.13	5,798	2,738
165.62	2,601	416	166.14	5,806	2,796
165.63	2,682	443	166.15	5,814	2,854
165.64	2,764	470	166.16	5,822	2,912
165.65	2,845	498	166.17	5,831	2,971
165.66	2,926	527	166.18	5,839	3,029
165.67	3,008	556	166.19	5,847	3,088
165.68	3,089	587	166.20	5,856	3,146
165.69	3,170	618	166.21	5,864	3,205
165.70	3,251	650	166.22	5,872	3,263
165.71	3,333	683	166.23	5,880	3,322
165.72	3,414	717	166.24	5,889	3,381
165.73	3,495	751	166.25	5,897	3,440
165.74	3,577	787	166.26	5,905	3,499
165.75	3,658	823	166.27	5,914	3,558
165.76	3,739	860	166.28	5,922	3,617
165.77	3,820	898	166.29	5,930	3,676
165.78	3,902	936	166.30	5,938	3,736
165.79	3,983	976	166.31	5,947	3,795
165.80	4,064	1,016	166.32	5,955	3,855
165.81	4,146	1,057	166.33	5,963	3,914

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
166.34	5,972	3,974	166.86	6,402	7,191
166.35	5,980	4,034	166.87	6,410	7,255
166.36	5,988	4,094	166.88	6,419	7,319
166.37	5,996	4,153	166.89	6,427	7,384
166.38	6,005	4,213	166.90	6,435	7,448
166.39	6,013	4,274	166.91	6,443	7,512
166.40	6,021	4,334	166.92	6,452	7,577
166.41	6,029	4,394	166.93	6,460	7,641
166.42	6,038	4,454	166.94	6,468	7,706
166.43	6,046	4,515	166.95	6,477	7,771
166.44	6,054	4,575	166.96	6,485	7,835
166.45	6,063	4,636	166.97	6,493	7,900
166.46	6,071	4,697	166.98	6,501	7,965
166.47	6,079	4,757	166.99	6,510	8,030
166.48	6,087	4,818	167.00	6,518	8,095
166.49	6,096	4,879	167.01	6,527	8,161
166.50	6,104	4,940	167.02	6,536	8,226
166.51	6,112	5,001	167.03	6,545	8,291
166.52	6,121	5,062	167.04	6,554	8,357
166.53	6,129	5,123	167.05	6,562	8,423
166.54	6,137	5,185	167.06	6,571	8,488
166.55	6,145	5,246	167.07	6,580	8,554
166.56	6,154	5,308	167.08	6,589	8,620
166.57	6,162	5,369	167.09	6,598	8,686
166.58	6,170	5,431	167.10	6,607	8,752
166.59	6,179	5,493	167.11	6,616	8,818
166.60	6,187	5,555	167.12	6,625	8,884
166.61	6,195	5,616	167.13	6,634	8,950
166.62	6,203	5,678	167.14	6,642	9,017
166.63	6,212	5,741	167.15	6,651	9,083
166.64	6,220	5,803	167.16	6,660	9,150
166.65	6,228	5,865	167.17	6,669	9,216
166.66	6,236	5,927	167.18	6,678	9,283
166.67	6,245	5,990	167.19	6,687	9,350
166.68	6,253	6,052	167.20	6,696	9,417
166.69	6,261	6,115	167.21	6,705	9,484
166.70	6,270	6,177	167.22	6,714	9,551
166.71	6,278	6,240	167.23	6,722	9,618
166.72	6,286	6,303	167.24	6,731	9,685
166.73	6,294	6,366	167.25	6,740	9,753
166.74	6,303	6,429	167.26	6,749	9,820
166.75	6,311	6,492	167.27	6,758	9,888
166.76	6,319	6,555	167.28	6,767	9,955
166.77	6,328	6,618	167.29	6,776	10,023
166.78	6,336	6,682	167.30	6,785	10,091
166.79	6,344	6,745	167.31	6,794	10,159
166.80	6,352	6,808	167.32	6,802	10,227
166.81	6,361	6,872	167.33	6,811	10,295
166.82	6,369	6,936	167.34	6,820	10,363
166.83	6,377	6,999	167.35	6,829	10,431
166.84	6,386	7,063	167.36	6,838	10,500
166.85	6,394	7,127	167.37	6,847	10,568

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
167.38	6,856	10,637	167.90	7,318	14,322
167.39	6,865	10,705	167.91	7,327	14,395
167.40	6,874	10,774	167.92	7,336	14,468
167.41	6,882	10,843	167.93	7,345	14,542
167.42	6,891	10,911	167.94	7,354	14,615
167.43	6,900	10,980	167.95	7,363	14,689
167.44	6,909	11,049	167.96	7,371	14,762
167.45	6,918	11,119	167.97	7,380	14,836
167.46	6,927	11,188	167.98	7,389	14,910
167.47	6,936	11,257	167.99	7,398	14,984
167.48	6,945	11,327	168.00	7,407	15,058
167.49	6,954	11,396	168.01	7,417	15,132
167.50	6,963	11,466	168.02	7,426	15,206
167.51	6,971	11,535	168.03	7,436	15,281
167.52	6,980	11,605	168.04	7,445	15,355
167.53	6,989	11,675	168.05	7,455	15,430
167.54	6,998	11,745	168.06	7,464	15,504
167.55	7,007	11,815	168.07	7,474	15,579
167.56	7,016	11,885	168.08	7,483	15,654
167.57	7,025	11,955	168.09	7,493	15,728
167.58	7,034	12,025	168.10	7,502	15,803
167.59	7,043	12,096	168.11	7,512	15,879
167.60	7,051	12,166	168.12	7,521	15,954
167.61	7,060	12,237	168.13	7,531	16,029
167.62	7,069	12,308	168.14	7,540	16,104
167.63	7,078	12,378	168.15	7,550	16,180
167.64	7,087	12,449	168.16	7,559	16,255
167.65	7,096	12,520	168.17	7,569	16,331
167.66	7,105	12,591	168.18	7,579	16,407
167.67	7,114	12,662	168.19	7,588	16,483
167.68	7,123	12,733	168.20	7,598	16,558
167.69	7,131	12,805	168.21	7,607	16,634
167.70	7,140	12,876	168.22	7,617	16,711
167.71	7,149	12,947	168.23	7,626	16,787
167.72	7,158	13,019	168.24	7,636	16,863
167.73	7,167	13,091	168.25	7,645	16,940
167.74	7,176	13,162	168.26	7,655	17,016
167.75	7,185	13,234	168.27	7,664	17,093
167.76	7,194	13,306	168.28	7,674	17,169
167.77	7,203	13,378	168.29	7,683	17,246
167.78	7,211	13,450	168.30	7,693	17,323
167.79	7,220	13,522	168.31	7,702	17,400
167.80	7,229	13,594	168.32	7,712	17,477
167.81	7,238	13,667	168.33	7,721	17,554
167.82	7,247	13,739	168.34	7,731	17,631
167.83	7,256	13,812	168.35	7,741	17,709
167.84	7,265	13,884	168.36	7,750	17,786
167.85	7,274	13,957	168.37	7,760	17,864
167.86	7,283	14,030	168.38	7,769	17,941
167.87	7,291	14,103	168.39	7,779	18,019
167.88	7,300	14,176	168.40	7,788	18,097
167.89	7,309	14,249	168.41	7,798	18,175

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
168.42	7,807	18,253	168.94	8,303	22,442
168.43	7,817	18,331	168.95	8,312	22,525
168.44	7,826	18,409	168.96	8,322	22,608
168.45	7,836	18,488	168.97	8,331	22,691
168.46	7,845	18,566	168.98	8,341	22,774
168.47	7,855	18,645	168.99	8,350	22,858
168.48	7,864	18,723	169.00	8,360	22,941
168.49	7,874	18,802	169.01	8,370	23,025
168.50	7,884	18,881	169.02	8,380	23,109
168.51	7,893	18,960	169.03	8,391	23,193
168.52	7,903	19,038	169.04	8,401	23,277
168.53	7,912	19,118	169.05	8,411	23,361
168.54	7,922	19,197	169.06	8,421	23,445
168.55	7,931	19,276	169.07	8,431	23,529
168.56	7,941	19,355	169.08	8,442	23,614
168.57	7,950	19,435	169.09	8,452	23,698
168.58	7,960	19,514	169.10	8,462	23,783
168.59	7,969	19,594	169.11	8,472	23,867
168.60	7,979	19,674	169.12	8,483	23,952
168.61	7,988	19,754	169.13	8,493	24,037
168.62	7,998	19,834	169.14	8,503	24,122
168.63	8,007	19,914	169.15	8,513	24,207
168.64	8,017	19,994	169.16	8,523	24,292
168.65	8,026	20,074	169.17	8,534	24,377
168.66	8,036	20,154	169.18	8,544	24,463
168.67	8,046	20,235	169.19	8,554	24,548
168.68	8,055	20,315	169.20	8,564	24,634
168.69	8,065	20,396	169.21	8,574	24,720
168.70	8,074	20,476	169.22	8,585	24,805
168.71	8,084	20,557	169.23	8,595	24,891
168.72	8,093	20,638	169.24	8,605	24,977
168.73	8,103	20,719	169.25	8,615	25,063
168.74	8,112	20,800	169.26	8,625	25,150
168.75	8,122	20,881	169.27	8,636	25,236
168.76	8,131	20,963	169.28	8,646	25,322
168.77	8,141	21,044	169.29	8,656	25,409
168.78	8,150	21,125	169.30	8,666	25,495
168.79	8,160	21,207	169.31	8,677	25,582
168.80	8,169	21,289	169.32	8,687	25,669
168.81	8,179	21,370	169.33	8,697	25,756
168.82	8,188	21,452	169.34	8,707	25,843
168.83	8,198	21,534	169.35	8,717	25,930
168.84	8,208	21,616	169.36	8,728	26,017
168.85	8,217	21,698	169.37	8,738	26,105
168.86	8,227	21,780	169.38	8,748	26,192
168.87	8,236	21,863	169.39	8,758	26,280
168.88	8,246	21,945	169.40	8,768	26,367
168.89	8,255	22,028	169.41	8,779	26,455
168.90	8,265	22,110	169.42	8,789	26,543
168.91	8,274	22,193	169.43	8,799	26,631
168.92	8,284	22,276	169.44	8,809	26,719
168.93	8,293	22,359	169.45	8,819	26,807

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
169.46	8,830	26,895	169.98	9,361	31,625
169.47	8,840	26,983	169.99	9,371	31,718
169.48	8,850	27,072	170.00	9,381	31,812
169.49	8,860	27,160			
169.50	8,871	27,249			
169.51	8,881	27,338			
169.52	8,891	27,427			
169.53	8,901	27,516			
169.54	8,911	27,605			
169.55	8,922	27,694			
169.56	8,932	27,783			
169.57	8,942	27,873			
169.58	8,952	27,962			
169.59	8,962	28,052			
169.60	8,973	28,141			
169.61	8,983	28,231			
169.62	8,993	28,321			
169.63	9,003	28,411			
169.64	9,013	28,501			
169.65	9,024	28,591			
169.66	9,034	28,681			
169.67	9,044	28,772			
169.68	9,054	28,862			
169.69	9,064	28,953			
169.70	9,075	29,044			
169.71	9,085	29,134			
169.72	9,095	29,225			
169.73	9,105	29,316			
169.74	9,116	29,407			
169.75	9,126	29,499			
169.76	9,136	29,590			
169.77	9,146	29,681			
169.78	9,156	29,773			
169.79	9,167	29,865			
169.80	9,177	29,956			
169.81	9,187	30,048			
169.82	9,197	30,140			
169.83	9,207	30,232			
169.84	9,218	30,324			
169.85	9,228	30,416			
169.86	9,238	30,509			
169.87	9,248	30,601			
169.88	9,258	30,694			
169.89	9,269	30,786			
169.90	9,279	30,879			
169.91	9,289	30,972			
169.92	9,299	31,065			
169.93	9,310	31,158			
169.94	9,320	31,251			
169.95	9,330	31,344			
169.96	9,340	31,438			
169.97	9,350	31,531			

Summary for Pond B-45: Basin #45

Inflow Area = 2.294 ac, 62.82% Impervious, Inflow Depth = 9.84" for Future 100 yr event
 Inflow = 22.08 cfs @ 12.17 hrs, Volume= 1.881 af
 Outflow = 16.84 cfs @ 12.25 hrs, Volume= 1.718 af, Atten= 24%, Lag= 5.0 min
 Primary = 16.84 cfs @ 12.25 hrs, Volume= 1.718 af
 Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 169.97' @ 12.25 hrs Surf.Area= 6,213 sf Storage= 21,061 cf

Plug-Flow detention time= 191.2 min calculated for 1.718 af (91% of inflow)
 Center-of-Mass det. time= 144.4 min (906.3 - 761.9)

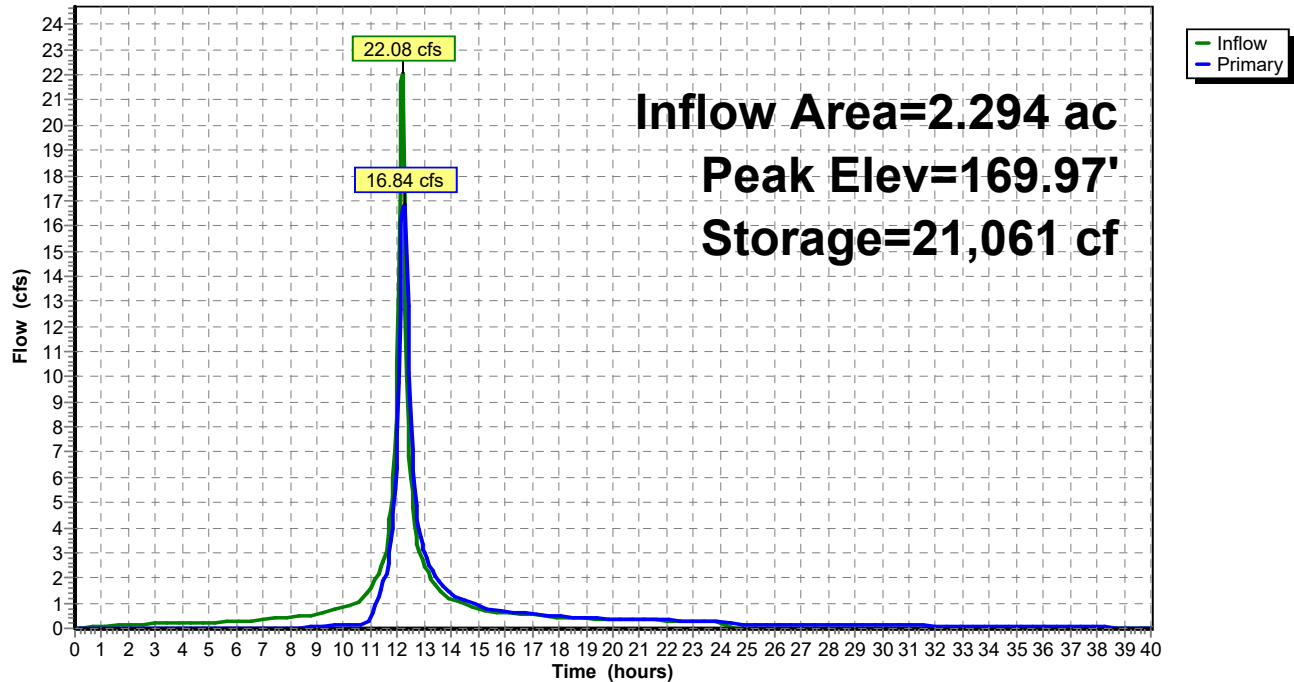
Volume	Invert	Avail.Storage	Storage Description
#1	165.30'	21,270 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
165.30	0	0	0
166.00	3,797	1,329	1,329
167.00	4,370	4,084	5,412
168.00	4,967	4,669	10,081
169.00	5,588	5,278	15,358
170.00	6,235	5,912	21,270

Device	Routing	Invert	Outlet Devices
#1	Primary	165.30'	18.0" Round Culvert L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 165.30' / 164.00' S= 0.0325 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	167.25'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	168.50'	2.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Device 1	169.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#5	Primary	169.97'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=16.83 cfs @ 12.25 hrs HW=169.96' (Free Discharge)

1=Culvert (Inlet Controls 16.83 cfs @ 9.53 fps)
 2=Orifice/Grate (Passes < 0.27 cfs potential flow)
 3=Sharp-Crested Rectangular Weir (Passes < 9.89 cfs potential flow)
 4=Sharp-Crested Rectangular Weir (Passes < 11.78 cfs potential flow)
 5=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-45: Basin #45**Hydrograph**

Stage-Discharge for Pond B-45: Basin #45

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
165.30	0.00	165.82	0.00	166.34	0.00	166.86	0.00
165.31	0.00	165.83	0.00	166.35	0.00	166.87	0.00
165.32	0.00	165.84	0.00	166.36	0.00	166.88	0.00
165.33	0.00	165.85	0.00	166.37	0.00	166.89	0.00
165.34	0.00	165.86	0.00	166.38	0.00	166.90	0.00
165.35	0.00	165.87	0.00	166.39	0.00	166.91	0.00
165.36	0.00	165.88	0.00	166.40	0.00	166.92	0.00
165.37	0.00	165.89	0.00	166.41	0.00	166.93	0.00
165.38	0.00	165.90	0.00	166.42	0.00	166.94	0.00
165.39	0.00	165.91	0.00	166.43	0.00	166.95	0.00
165.40	0.00	165.92	0.00	166.44	0.00	166.96	0.00
165.41	0.00	165.93	0.00	166.45	0.00	166.97	0.00
165.42	0.00	165.94	0.00	166.46	0.00	166.98	0.00
165.43	0.00	165.95	0.00	166.47	0.00	166.99	0.00
165.44	0.00	165.96	0.00	166.48	0.00	167.00	0.00
165.45	0.00	165.97	0.00	166.49	0.00	167.01	0.00
165.46	0.00	165.98	0.00	166.50	0.00	167.02	0.00
165.47	0.00	165.99	0.00	166.51	0.00	167.03	0.00
165.48	0.00	166.00	0.00	166.52	0.00	167.04	0.00
165.49	0.00	166.01	0.00	166.53	0.00	167.05	0.00
165.50	0.00	166.02	0.00	166.54	0.00	167.06	0.00
165.51	0.00	166.03	0.00	166.55	0.00	167.07	0.00
165.52	0.00	166.04	0.00	166.56	0.00	167.08	0.00
165.53	0.00	166.05	0.00	166.57	0.00	167.09	0.00
165.54	0.00	166.06	0.00	166.58	0.00	167.10	0.00
165.55	0.00	166.07	0.00	166.59	0.00	167.11	0.00
165.56	0.00	166.08	0.00	166.60	0.00	167.12	0.00
165.57	0.00	166.09	0.00	166.61	0.00	167.13	0.00
165.58	0.00	166.10	0.00	166.62	0.00	167.14	0.00
165.59	0.00	166.11	0.00	166.63	0.00	167.15	0.00
165.60	0.00	166.12	0.00	166.64	0.00	167.16	0.00
165.61	0.00	166.13	0.00	166.65	0.00	167.17	0.00
165.62	0.00	166.14	0.00	166.66	0.00	167.18	0.00
165.63	0.00	166.15	0.00	166.67	0.00	167.19	0.00
165.64	0.00	166.16	0.00	166.68	0.00	167.20	0.00
165.65	0.00	166.17	0.00	166.69	0.00	167.21	0.00
165.66	0.00	166.18	0.00	166.70	0.00	167.22	0.00
165.67	0.00	166.19	0.00	166.71	0.00	167.23	0.00
165.68	0.00	166.20	0.00	166.72	0.00	167.24	0.00
165.69	0.00	166.21	0.00	166.73	0.00	167.25	0.00
165.70	0.00	166.22	0.00	166.74	0.00	167.26	0.00
165.71	0.00	166.23	0.00	166.75	0.00	167.27	0.00
165.72	0.00	166.24	0.00	166.76	0.00	167.28	0.00
165.73	0.00	166.25	0.00	166.77	0.00	167.29	0.00
165.74	0.00	166.26	0.00	166.78	0.00	167.30	0.00
165.75	0.00	166.27	0.00	166.79	0.00	167.31	0.01
165.76	0.00	166.28	0.00	166.80	0.00	167.32	0.01
165.77	0.00	166.29	0.00	166.81	0.00	167.33	0.01
165.78	0.00	166.30	0.00	166.82	0.00	167.34	0.01
165.79	0.00	166.31	0.00	166.83	0.00	167.35	0.02
165.80	0.00	166.32	0.00	166.84	0.00	167.36	0.02
165.81	0.00	166.33	0.00	166.85	0.00	167.37	0.02

Stage-Discharge for Pond B-45: Basin #45 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
167.38	0.03	167.90	0.12	168.42	0.17	168.94	2.03
167.39	0.03	167.91	0.12	168.43	0.17	168.95	2.09
167.40	0.03	167.92	0.12	168.44	0.17	168.96	2.15
167.41	0.04	167.93	0.12	168.45	0.17	168.97	2.22
167.42	0.04	167.94	0.13	168.46	0.17	168.98	2.28
167.43	0.05	167.95	0.13	168.47	0.17	168.99	2.34
167.44	0.05	167.96	0.13	168.48	0.17	169.00	2.41
167.45	0.05	167.97	0.13	168.49	0.17	169.01	2.48
167.46	0.05	167.98	0.13	168.50	0.18	169.02	2.57
167.47	0.06	167.99	0.13	168.51	0.18	169.03	2.67
167.48	0.06	168.00	0.13	168.52	0.20	169.04	2.77
167.49	0.06	168.01	0.13	168.53	0.21	169.05	2.88
167.50	0.06	168.02	0.13	168.54	0.23	169.06	2.99
167.51	0.06	168.03	0.13	168.55	0.25	169.07	3.11
167.52	0.07	168.04	0.14	168.56	0.28	169.08	3.23
167.53	0.07	168.05	0.14	168.57	0.30	169.09	3.36
167.54	0.07	168.06	0.14	168.58	0.33	169.10	3.49
167.55	0.07	168.07	0.14	168.59	0.36	169.11	3.62
167.56	0.07	168.08	0.14	168.60	0.39	169.12	3.75
167.57	0.08	168.09	0.14	168.61	0.42	169.13	3.89
167.58	0.08	168.10	0.14	168.62	0.45	169.14	4.03
167.59	0.08	168.11	0.14	168.63	0.49	169.15	4.18
167.60	0.08	168.12	0.14	168.64	0.52	169.16	4.33
167.61	0.08	168.13	0.14	168.65	0.56	169.17	4.48
167.62	0.08	168.14	0.15	168.66	0.60	169.18	4.63
167.63	0.09	168.15	0.15	168.67	0.64	169.19	4.79
167.64	0.09	168.16	0.15	168.68	0.68	169.20	4.94
167.65	0.09	168.17	0.15	168.69	0.72	169.21	5.10
167.66	0.09	168.18	0.15	168.70	0.76	169.22	5.27
167.67	0.09	168.19	0.15	168.71	0.81	169.23	5.43
167.68	0.09	168.20	0.15	168.72	0.85	169.24	5.60
167.69	0.10	168.21	0.15	168.73	0.90	169.25	5.77
167.70	0.10	168.22	0.15	168.74	0.94	169.26	5.94
167.71	0.10	168.23	0.15	168.75	0.99	169.27	6.12
167.72	0.10	168.24	0.15	168.76	1.04	169.28	6.29
167.73	0.10	168.25	0.16	168.77	1.09	169.29	6.47
167.74	0.10	168.26	0.16	168.78	1.14	169.30	6.65
167.75	0.10	168.27	0.16	168.79	1.19	169.31	6.83
167.76	0.10	168.28	0.16	168.80	1.24	169.32	7.02
167.77	0.11	168.29	0.16	168.81	1.29	169.33	7.20
167.78	0.11	168.30	0.16	168.82	1.34	169.34	7.39
167.79	0.11	168.31	0.16	168.83	1.40	169.35	7.58
167.80	0.11	168.32	0.16	168.84	1.45	169.36	7.77
167.81	0.11	168.33	0.16	168.85	1.51	169.37	7.97
167.82	0.11	168.34	0.16	168.86	1.56	169.38	8.16
167.83	0.11	168.35	0.16	168.87	1.62	169.39	8.36
167.84	0.11	168.36	0.16	168.88	1.68	169.40	8.56
167.85	0.12	168.37	0.17	168.89	1.73	169.41	8.76
167.86	0.12	168.38	0.17	168.90	1.79	169.42	8.96
167.87	0.12	168.39	0.17	168.91	1.85	169.43	9.17
167.88	0.12	168.40	0.17	168.92	1.91	169.44	9.37
167.89	0.12	168.41	0.17	168.93	1.97	169.45	9.58

Stage-Discharge for Pond B-45: Basin #45 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
169.46	9.79	169.98	16.99
169.47	10.00	169.99	17.22
169.48	10.21	170.00	17.52
169.49	10.42		
169.50	10.64		
169.51	10.85		
169.52	11.07		
169.53	11.29		
169.54	11.51		
169.55	11.73		
169.56	11.95		
169.57	12.18		
169.58	12.40		
169.59	12.63		
169.60	12.86		
169.61	13.09		
169.62	13.32		
169.63	13.55		
169.64	13.78		
169.65	14.02		
169.66	14.25		
169.67	14.49		
169.68	14.73		
169.69	14.97		
169.70	15.21		
169.71	15.45		
169.72	15.69		
169.73	15.94		
169.74	16.18		
169.75	16.37		
169.76	16.39		
169.77	16.41		
169.78	16.43		
169.79	16.46		
169.80	16.48		
169.81	16.50		
169.82	16.52		
169.83	16.54		
169.84	16.56		
169.85	16.59		
169.86	16.61		
169.87	16.63		
169.88	16.65		
169.89	16.67		
169.90	16.70		
169.91	16.72		
169.92	16.74		
169.93	16.76		
169.94	16.78		
169.95	16.80		
169.96	16.82		
169.97	16.85		

Stage-Area-Storage for Pond B-45: Basin #45

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
165.30	0	0	165.82	2,821	733
165.31	54	0	165.83	2,875	762
165.32	108	1	165.84	2,929	791
165.33	163	2	165.85	2,983	820
165.34	217	4	165.86	3,038	851
165.35	271	7	165.87	3,092	881
165.36	325	10	165.88	3,146	912
165.37	380	13	165.89	3,200	944
165.38	434	17	165.90	3,255	976
165.39	488	22	165.91	3,309	1,009
165.40	542	27	165.92	3,363	1,043
165.41	597	33	165.93	3,417	1,076
165.42	651	39	165.94	3,472	1,111
165.43	705	46	165.95	3,526	1,146
165.44	759	53	165.96	3,580	1,181
165.45	814	61	165.97	3,634	1,217
165.46	868	69	165.98	3,689	1,254
165.47	922	78	165.99	3,743	1,291
165.48	976	88	166.00	3,797	1,329
165.49	1,031	98	166.01	3,803	1,367
165.50	1,085	108	166.02	3,808	1,405
165.51	1,139	120	166.03	3,814	1,443
165.52	1,193	131	166.04	3,820	1,481
165.53	1,248	143	166.05	3,826	1,520
165.54	1,302	156	166.06	3,831	1,558
165.55	1,356	170	166.07	3,837	1,596
165.56	1,410	183	166.08	3,843	1,635
165.57	1,465	198	166.09	3,849	1,673
165.58	1,519	213	166.10	3,854	1,712
165.59	1,573	228	166.11	3,860	1,750
165.60	1,627	244	166.12	3,866	1,789
165.61	1,682	261	166.13	3,871	1,827
165.62	1,736	278	166.14	3,877	1,866
165.63	1,790	295	166.15	3,883	1,905
165.64	1,844	314	166.16	3,889	1,944
165.65	1,899	332	166.17	3,894	1,983
165.66	1,953	351	166.18	3,900	2,022
165.67	2,007	371	166.19	3,906	2,061
165.68	2,061	392	166.20	3,912	2,100
165.69	2,115	413	166.21	3,917	2,139
165.70	2,170	434	166.22	3,923	2,178
165.71	2,224	456	166.23	3,929	2,217
165.72	2,278	478	166.24	3,935	2,257
165.73	2,332	501	166.25	3,940	2,296
165.74	2,387	525	166.26	3,946	2,336
165.75	2,441	549	166.27	3,952	2,375
165.76	2,495	574	166.28	3,957	2,415
165.77	2,549	599	166.29	3,963	2,454
165.78	2,604	625	166.30	3,969	2,494
165.79	2,658	651	166.31	3,975	2,534
165.80	2,712	678	166.32	3,980	2,573
165.81	2,766	705	166.33	3,986	2,613

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
166.34	3,992	2,653	166.86	4,290	4,806
166.35	3,998	2,693	166.87	4,296	4,849
166.36	4,003	2,733	166.88	4,301	4,892
166.37	4,009	2,773	166.89	4,307	4,935
166.38	4,015	2,813	166.90	4,313	4,978
166.39	4,020	2,853	166.91	4,318	5,021
166.40	4,026	2,894	166.92	4,324	5,065
166.41	4,032	2,934	166.93	4,330	5,108
166.42	4,038	2,974	166.94	4,336	5,151
166.43	4,043	3,015	166.95	4,341	5,195
166.44	4,049	3,055	166.96	4,347	5,238
166.45	4,055	3,096	166.97	4,353	5,282
166.46	4,061	3,136	166.98	4,359	5,325
166.47	4,066	3,177	166.99	4,364	5,369
166.48	4,072	3,218	167.00	4,370	5,412
166.49	4,078	3,258	167.01	4,376	5,456
166.50	4,084	3,299	167.02	4,382	5,500
166.51	4,089	3,340	167.03	4,388	5,544
166.52	4,095	3,381	167.04	4,394	5,588
166.53	4,101	3,422	167.05	4,400	5,632
166.54	4,106	3,463	167.06	4,406	5,676
166.55	4,112	3,504	167.07	4,412	5,720
166.56	4,118	3,545	167.08	4,418	5,764
166.57	4,124	3,586	167.09	4,424	5,808
166.58	4,129	3,628	167.10	4,430	5,852
166.59	4,135	3,669	167.11	4,436	5,897
166.60	4,141	3,710	167.12	4,442	5,941
166.61	4,147	3,752	167.13	4,448	5,986
166.62	4,152	3,793	167.14	4,454	6,030
166.63	4,158	3,835	167.15	4,460	6,075
166.64	4,164	3,876	167.16	4,466	6,119
166.65	4,169	3,918	167.17	4,471	6,164
166.66	4,175	3,960	167.18	4,477	6,209
166.67	4,181	4,002	167.19	4,483	6,254
166.68	4,187	4,043	167.20	4,489	6,298
166.69	4,192	4,085	167.21	4,495	6,343
166.70	4,198	4,127	167.22	4,501	6,388
166.71	4,204	4,169	167.23	4,507	6,433
166.72	4,210	4,211	167.24	4,513	6,478
166.73	4,215	4,253	167.25	4,519	6,524
166.74	4,221	4,296	167.26	4,525	6,569
166.75	4,227	4,338	167.27	4,531	6,614
166.76	4,232	4,380	167.28	4,537	6,659
166.77	4,238	4,423	167.29	4,543	6,705
166.78	4,244	4,465	167.30	4,549	6,750
166.79	4,250	4,507	167.31	4,555	6,796
166.80	4,255	4,550	167.32	4,561	6,841
166.81	4,261	4,592	167.33	4,567	6,887
166.82	4,267	4,635	167.34	4,573	6,933
166.83	4,273	4,678	167.35	4,579	6,979
166.84	4,278	4,721	167.36	4,585	7,024
166.85	4,284	4,763	167.37	4,591	7,070

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
167.38	4,597	7,116	167.90	4,907	9,587
167.39	4,603	7,162	167.91	4,913	9,636
167.40	4,609	7,208	167.92	4,919	9,686
167.41	4,615	7,254	167.93	4,925	9,735
167.42	4,621	7,301	167.94	4,931	9,784
167.43	4,627	7,347	167.95	4,937	9,833
167.44	4,633	7,393	167.96	4,943	9,883
167.45	4,639	7,439	167.97	4,949	9,932
167.46	4,645	7,486	167.98	4,955	9,982
167.47	4,651	7,532	167.99	4,961	10,031
167.48	4,657	7,579	168.00	4,967	10,081
167.49	4,663	7,625	168.01	4,973	10,131
167.50	4,669	7,672	168.02	4,979	10,180
167.51	4,674	7,719	168.03	4,986	10,230
167.52	4,680	7,766	168.04	4,992	10,280
167.53	4,686	7,812	168.05	4,998	10,330
167.54	4,692	7,859	168.06	5,004	10,380
167.55	4,698	7,906	168.07	5,010	10,430
167.56	4,704	7,953	168.08	5,017	10,480
167.57	4,710	8,000	168.09	5,023	10,530
167.58	4,716	8,047	168.10	5,029	10,581
167.59	4,722	8,095	168.11	5,035	10,631
167.60	4,728	8,142	168.12	5,042	10,681
167.61	4,734	8,189	168.13	5,048	10,732
167.62	4,740	8,237	168.14	5,054	10,782
167.63	4,746	8,284	168.15	5,060	10,833
167.64	4,752	8,332	168.16	5,066	10,884
167.65	4,758	8,379	168.17	5,073	10,934
167.66	4,764	8,427	168.18	5,079	10,985
167.67	4,770	8,474	168.19	5,085	11,036
167.68	4,776	8,522	168.20	5,091	11,087
167.69	4,782	8,570	168.21	5,097	11,138
167.70	4,788	8,618	168.22	5,104	11,189
167.71	4,794	8,666	168.23	5,110	11,240
167.72	4,800	8,714	168.24	5,116	11,291
167.73	4,806	8,762	168.25	5,122	11,342
167.74	4,812	8,810	168.26	5,128	11,393
167.75	4,818	8,858	168.27	5,135	11,445
167.76	4,824	8,906	168.28	5,141	11,496
167.77	4,830	8,954	168.29	5,147	11,547
167.78	4,836	9,003	168.30	5,153	11,599
167.79	4,842	9,051	168.31	5,160	11,651
167.80	4,848	9,099	168.32	5,166	11,702
167.81	4,854	9,148	168.33	5,172	11,754
167.82	4,860	9,197	168.34	5,178	11,806
167.83	4,866	9,245	168.35	5,184	11,857
167.84	4,871	9,294	168.36	5,191	11,909
167.85	4,877	9,343	168.37	5,197	11,961
167.86	4,883	9,391	168.38	5,203	12,013
167.87	4,889	9,440	168.39	5,209	12,065
167.88	4,895	9,489	168.40	5,215	12,117
167.89	4,901	9,538	168.41	5,222	12,170

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
168.42	5,228	12,222	168.94	5,551	15,024
168.43	5,234	12,274	168.95	5,557	15,080
168.44	5,240	12,327	168.96	5,563	15,135
168.45	5,246	12,379	168.97	5,569	15,191
168.46	5,253	12,431	168.98	5,576	15,247
168.47	5,259	12,484	168.99	5,582	15,303
168.48	5,265	12,537	169.00	5,588	15,358
168.49	5,271	12,589	169.01	5,594	15,414
168.50	5,278	12,642	169.02	5,601	15,470
168.51	5,284	12,695	169.03	5,607	15,526
168.52	5,290	12,748	169.04	5,614	15,582
168.53	5,296	12,801	169.05	5,620	15,639
168.54	5,302	12,854	169.06	5,627	15,695
168.55	5,309	12,907	169.07	5,633	15,751
168.56	5,315	12,960	169.08	5,640	15,808
168.57	5,321	13,013	169.09	5,646	15,864
168.58	5,327	13,066	169.10	5,653	15,920
168.59	5,333	13,120	169.11	5,659	15,977
168.60	5,340	13,173	169.12	5,666	16,034
168.61	5,346	13,226	169.13	5,672	16,090
168.62	5,352	13,280	169.14	5,679	16,147
168.63	5,358	13,333	169.15	5,685	16,204
168.64	5,364	13,387	169.16	5,692	16,261
168.65	5,371	13,441	169.17	5,698	16,318
168.66	5,377	13,494	169.18	5,704	16,375
168.67	5,383	13,548	169.19	5,711	16,432
168.68	5,389	13,602	169.20	5,717	16,489
168.69	5,395	13,656	169.21	5,724	16,546
168.70	5,402	13,710	169.22	5,730	16,603
168.71	5,408	13,764	169.23	5,737	16,661
168.72	5,414	13,818	169.24	5,743	16,718
168.73	5,420	13,872	169.25	5,750	16,776
168.74	5,427	13,927	169.26	5,756	16,833
168.75	5,433	13,981	169.27	5,763	16,891
168.76	5,439	14,035	169.28	5,769	16,948
168.77	5,445	14,090	169.29	5,776	17,006
168.78	5,451	14,144	169.30	5,782	17,064
168.79	5,458	14,199	169.31	5,789	17,122
168.80	5,464	14,253	169.32	5,795	17,180
168.81	5,470	14,308	169.33	5,802	17,238
168.82	5,476	14,363	169.34	5,808	17,296
168.83	5,482	14,417	169.35	5,814	17,354
168.84	5,489	14,472	169.36	5,821	17,412
168.85	5,495	14,527	169.37	5,827	17,470
168.86	5,501	14,582	169.38	5,834	17,529
168.87	5,507	14,637	169.39	5,840	17,587
168.88	5,513	14,692	169.40	5,847	17,645
168.89	5,520	14,748	169.41	5,853	17,704
168.90	5,526	14,803	169.42	5,860	17,762
168.91	5,532	14,858	169.43	5,866	17,821
168.92	5,538	14,913	169.44	5,873	17,880
168.93	5,545	14,969	169.45	5,879	17,939

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
169.46	5,886	17,997	169.98	6,222	21,145
169.47	5,892	18,056	169.99	6,229	21,208
169.48	5,899	18,115	170.00	6,235	21,270
169.49	5,905	18,174			
169.50	5,912	18,233			
169.51	5,918	18,292			
169.52	5,924	18,352			
169.53	5,931	18,411			
169.54	5,937	18,470			
169.55	5,944	18,530			
169.56	5,950	18,589			
169.57	5,957	18,649			
169.58	5,963	18,708			
169.59	5,970	18,768			
169.60	5,976	18,828			
169.61	5,983	18,888			
169.62	5,989	18,947			
169.63	5,996	19,007			
169.64	6,002	19,067			
169.65	6,009	19,127			
169.66	6,015	19,187			
169.67	6,021	19,248			
169.68	6,028	19,308			
169.69	6,034	19,368			
169.70	6,041	19,429			
169.71	6,047	19,489			
169.72	6,054	19,550			
169.73	6,060	19,610			
169.74	6,067	19,671			
169.75	6,073	19,731			
169.76	6,080	19,792			
169.77	6,086	19,853			
169.78	6,093	19,914			
169.79	6,099	19,975			
169.80	6,106	20,036			
169.81	6,112	20,097			
169.82	6,119	20,158			
169.83	6,125	20,219			
169.84	6,131	20,281			
169.85	6,138	20,342			
169.86	6,144	20,403			
169.87	6,151	20,465			
169.88	6,157	20,526			
169.89	6,164	20,588			
169.90	6,170	20,650			
169.91	6,177	20,711			
169.92	6,183	20,773			
169.93	6,190	20,835			
169.94	6,196	20,897			
169.95	6,203	20,959			
169.96	6,209	21,021			
169.97	6,216	21,083			

Summary for Pond B-46A: Basin #46A

Inflow Area = 2.480 ac, 46.25% Impervious, Inflow Depth = 9.32" for Future 100 yr event
 Inflow = 23.15 cfs @ 12.17 hrs, Volume= 1.927 af
 Outflow = 0.33 cfs @ 22.09 hrs, Volume= 0.069 af, Atten= 99%, Lag= 595.3 min
 Primary = 0.33 cfs @ 22.09 hrs, Volume= 0.069 af
 Routed to Pond B-46B : Basin #46B

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 187.51' @ 22.09 hrs Surf.Area= 18,441 sf Storage= 81,163 cf

Plug-Flow detention time= 1,140.0 min calculated for 0.069 af (4% of inflow)
 Center-of-Mass det. time= 607.7 min (1,380.2 - 772.5)

Volume	Invert	Avail.Storage	Storage Description
#1	181.00'	90,351 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

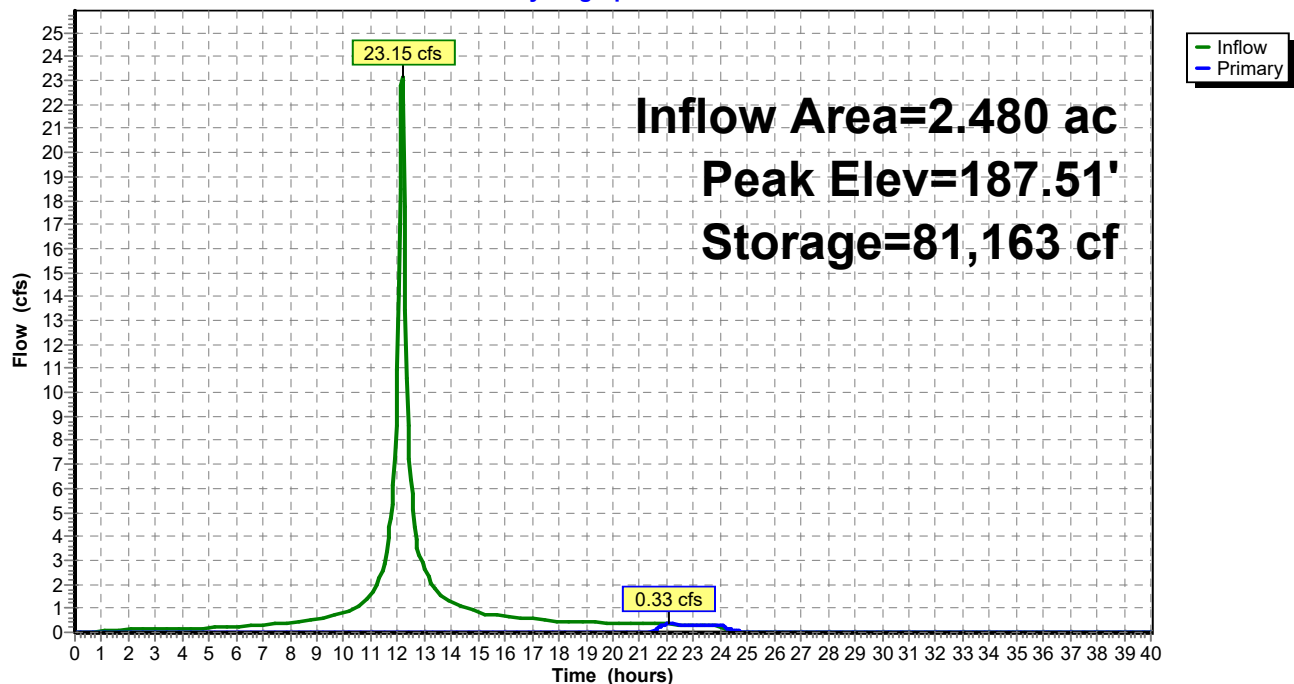
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
181.00	6,639	0	0
182.00	7,998	7,319	7,319
183.00	9,413	8,706	16,024
184.00	12,515	10,964	26,988
185.00	14,128	13,322	40,310
186.00	15,798	14,963	55,273
187.00	17,524	16,661	71,934
188.00	19,310	18,417	90,351

Device	Routing	Invert	Outlet Devices
#1	Primary	187.50'	50.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s) 0.5' Crest Height

Primary OutFlow Max=0.25 cfs @ 22.09 hrs HW=187.51' (Free Discharge)
 ↑ **1=Sharp-Crested Rectangular Weir** (Weir Controls 0.25 cfs @ 0.38 fps)

Pond B-46A: Basin #46A

Hydrograph



Stage-Discharge for Pond B-46A: Basin #46A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
181.00	0.00	181.52	0.00	182.04	0.00	182.56	0.00
181.01	0.00	181.53	0.00	182.05	0.00	182.57	0.00
181.02	0.00	181.54	0.00	182.06	0.00	182.58	0.00
181.03	0.00	181.55	0.00	182.07	0.00	182.59	0.00
181.04	0.00	181.56	0.00	182.08	0.00	182.60	0.00
181.05	0.00	181.57	0.00	182.09	0.00	182.61	0.00
181.06	0.00	181.58	0.00	182.10	0.00	182.62	0.00
181.07	0.00	181.59	0.00	182.11	0.00	182.63	0.00
181.08	0.00	181.60	0.00	182.12	0.00	182.64	0.00
181.09	0.00	181.61	0.00	182.13	0.00	182.65	0.00
181.10	0.00	181.62	0.00	182.14	0.00	182.66	0.00
181.11	0.00	181.63	0.00	182.15	0.00	182.67	0.00
181.12	0.00	181.64	0.00	182.16	0.00	182.68	0.00
181.13	0.00	181.65	0.00	182.17	0.00	182.69	0.00
181.14	0.00	181.66	0.00	182.18	0.00	182.70	0.00
181.15	0.00	181.67	0.00	182.19	0.00	182.71	0.00
181.16	0.00	181.68	0.00	182.20	0.00	182.72	0.00
181.17	0.00	181.69	0.00	182.21	0.00	182.73	0.00
181.18	0.00	181.70	0.00	182.22	0.00	182.74	0.00
181.19	0.00	181.71	0.00	182.23	0.00	182.75	0.00
181.20	0.00	181.72	0.00	182.24	0.00	182.76	0.00
181.21	0.00	181.73	0.00	182.25	0.00	182.77	0.00
181.22	0.00	181.74	0.00	182.26	0.00	182.78	0.00
181.23	0.00	181.75	0.00	182.27	0.00	182.79	0.00
181.24	0.00	181.76	0.00	182.28	0.00	182.80	0.00
181.25	0.00	181.77	0.00	182.29	0.00	182.81	0.00
181.26	0.00	181.78	0.00	182.30	0.00	182.82	0.00
181.27	0.00	181.79	0.00	182.31	0.00	182.83	0.00
181.28	0.00	181.80	0.00	182.32	0.00	182.84	0.00
181.29	0.00	181.81	0.00	182.33	0.00	182.85	0.00
181.30	0.00	181.82	0.00	182.34	0.00	182.86	0.00
181.31	0.00	181.83	0.00	182.35	0.00	182.87	0.00
181.32	0.00	181.84	0.00	182.36	0.00	182.88	0.00
181.33	0.00	181.85	0.00	182.37	0.00	182.89	0.00
181.34	0.00	181.86	0.00	182.38	0.00	182.90	0.00
181.35	0.00	181.87	0.00	182.39	0.00	182.91	0.00
181.36	0.00	181.88	0.00	182.40	0.00	182.92	0.00
181.37	0.00	181.89	0.00	182.41	0.00	182.93	0.00
181.38	0.00	181.90	0.00	182.42	0.00	182.94	0.00
181.39	0.00	181.91	0.00	182.43	0.00	182.95	0.00
181.40	0.00	181.92	0.00	182.44	0.00	182.96	0.00
181.41	0.00	181.93	0.00	182.45	0.00	182.97	0.00
181.42	0.00	181.94	0.00	182.46	0.00	182.98	0.00
181.43	0.00	181.95	0.00	182.47	0.00	182.99	0.00
181.44	0.00	181.96	0.00	182.48	0.00	183.00	0.00
181.45	0.00	181.97	0.00	182.49	0.00	183.01	0.00
181.46	0.00	181.98	0.00	182.50	0.00	183.02	0.00
181.47	0.00	181.99	0.00	182.51	0.00	183.03	0.00
181.48	0.00	182.00	0.00	182.52	0.00	183.04	0.00
181.49	0.00	182.01	0.00	182.53	0.00	183.05	0.00
181.50	0.00	182.02	0.00	182.54	0.00	183.06	0.00
181.51	0.00	182.03	0.00	182.55	0.00	183.07	0.00

Stage-Discharge for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.08	0.00	183.60	0.00	184.12	0.00	184.64	0.00
183.09	0.00	183.61	0.00	184.13	0.00	184.65	0.00
183.10	0.00	183.62	0.00	184.14	0.00	184.66	0.00
183.11	0.00	183.63	0.00	184.15	0.00	184.67	0.00
183.12	0.00	183.64	0.00	184.16	0.00	184.68	0.00
183.13	0.00	183.65	0.00	184.17	0.00	184.69	0.00
183.14	0.00	183.66	0.00	184.18	0.00	184.70	0.00
183.15	0.00	183.67	0.00	184.19	0.00	184.71	0.00
183.16	0.00	183.68	0.00	184.20	0.00	184.72	0.00
183.17	0.00	183.69	0.00	184.21	0.00	184.73	0.00
183.18	0.00	183.70	0.00	184.22	0.00	184.74	0.00
183.19	0.00	183.71	0.00	184.23	0.00	184.75	0.00
183.20	0.00	183.72	0.00	184.24	0.00	184.76	0.00
183.21	0.00	183.73	0.00	184.25	0.00	184.77	0.00
183.22	0.00	183.74	0.00	184.26	0.00	184.78	0.00
183.23	0.00	183.75	0.00	184.27	0.00	184.79	0.00
183.24	0.00	183.76	0.00	184.28	0.00	184.80	0.00
183.25	0.00	183.77	0.00	184.29	0.00	184.81	0.00
183.26	0.00	183.78	0.00	184.30	0.00	184.82	0.00
183.27	0.00	183.79	0.00	184.31	0.00	184.83	0.00
183.28	0.00	183.80	0.00	184.32	0.00	184.84	0.00
183.29	0.00	183.81	0.00	184.33	0.00	184.85	0.00
183.30	0.00	183.82	0.00	184.34	0.00	184.86	0.00
183.31	0.00	183.83	0.00	184.35	0.00	184.87	0.00
183.32	0.00	183.84	0.00	184.36	0.00	184.88	0.00
183.33	0.00	183.85	0.00	184.37	0.00	184.89	0.00
183.34	0.00	183.86	0.00	184.38	0.00	184.90	0.00
183.35	0.00	183.87	0.00	184.39	0.00	184.91	0.00
183.36	0.00	183.88	0.00	184.40	0.00	184.92	0.00
183.37	0.00	183.89	0.00	184.41	0.00	184.93	0.00
183.38	0.00	183.90	0.00	184.42	0.00	184.94	0.00
183.39	0.00	183.91	0.00	184.43	0.00	184.95	0.00
183.40	0.00	183.92	0.00	184.44	0.00	184.96	0.00
183.41	0.00	183.93	0.00	184.45	0.00	184.97	0.00
183.42	0.00	183.94	0.00	184.46	0.00	184.98	0.00
183.43	0.00	183.95	0.00	184.47	0.00	184.99	0.00
183.44	0.00	183.96	0.00	184.48	0.00	185.00	0.00
183.45	0.00	183.97	0.00	184.49	0.00	185.01	0.00
183.46	0.00	183.98	0.00	184.50	0.00	185.02	0.00
183.47	0.00	183.99	0.00	184.51	0.00	185.03	0.00
183.48	0.00	184.00	0.00	184.52	0.00	185.04	0.00
183.49	0.00	184.01	0.00	184.53	0.00	185.05	0.00
183.50	0.00	184.02	0.00	184.54	0.00	185.06	0.00
183.51	0.00	184.03	0.00	184.55	0.00	185.07	0.00
183.52	0.00	184.04	0.00	184.56	0.00	185.08	0.00
183.53	0.00	184.05	0.00	184.57	0.00	185.09	0.00
183.54	0.00	184.06	0.00	184.58	0.00	185.10	0.00
183.55	0.00	184.07	0.00	184.59	0.00	185.11	0.00
183.56	0.00	184.08	0.00	184.60	0.00	185.12	0.00
183.57	0.00	184.09	0.00	184.61	0.00	185.13	0.00
183.58	0.00	184.10	0.00	184.62	0.00	185.14	0.00
183.59	0.00	184.11	0.00	184.63	0.00	185.15	0.00

Stage-Discharge for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.16	0.00	185.68	0.00	186.20	0.00	186.72	0.00
185.17	0.00	185.69	0.00	186.21	0.00	186.73	0.00
185.18	0.00	185.70	0.00	186.22	0.00	186.74	0.00
185.19	0.00	185.71	0.00	186.23	0.00	186.75	0.00
185.20	0.00	185.72	0.00	186.24	0.00	186.76	0.00
185.21	0.00	185.73	0.00	186.25	0.00	186.77	0.00
185.22	0.00	185.74	0.00	186.26	0.00	186.78	0.00
185.23	0.00	185.75	0.00	186.27	0.00	186.79	0.00
185.24	0.00	185.76	0.00	186.28	0.00	186.80	0.00
185.25	0.00	185.77	0.00	186.29	0.00	186.81	0.00
185.26	0.00	185.78	0.00	186.30	0.00	186.82	0.00
185.27	0.00	185.79	0.00	186.31	0.00	186.83	0.00
185.28	0.00	185.80	0.00	186.32	0.00	186.84	0.00
185.29	0.00	185.81	0.00	186.33	0.00	186.85	0.00
185.30	0.00	185.82	0.00	186.34	0.00	186.86	0.00
185.31	0.00	185.83	0.00	186.35	0.00	186.87	0.00
185.32	0.00	185.84	0.00	186.36	0.00	186.88	0.00
185.33	0.00	185.85	0.00	186.37	0.00	186.89	0.00
185.34	0.00	185.86	0.00	186.38	0.00	186.90	0.00
185.35	0.00	185.87	0.00	186.39	0.00	186.91	0.00
185.36	0.00	185.88	0.00	186.40	0.00	186.92	0.00
185.37	0.00	185.89	0.00	186.41	0.00	186.93	0.00
185.38	0.00	185.90	0.00	186.42	0.00	186.94	0.00
185.39	0.00	185.91	0.00	186.43	0.00	186.95	0.00
185.40	0.00	185.92	0.00	186.44	0.00	186.96	0.00
185.41	0.00	185.93	0.00	186.45	0.00	186.97	0.00
185.42	0.00	185.94	0.00	186.46	0.00	186.98	0.00
185.43	0.00	185.95	0.00	186.47	0.00	186.99	0.00
185.44	0.00	185.96	0.00	186.48	0.00	187.00	0.00
185.45	0.00	185.97	0.00	186.49	0.00	187.01	0.00
185.46	0.00	185.98	0.00	186.50	0.00	187.02	0.00
185.47	0.00	185.99	0.00	186.51	0.00	187.03	0.00
185.48	0.00	186.00	0.00	186.52	0.00	187.04	0.00
185.49	0.00	186.01	0.00	186.53	0.00	187.05	0.00
185.50	0.00	186.02	0.00	186.54	0.00	187.06	0.00
185.51	0.00	186.03	0.00	186.55	0.00	187.07	0.00
185.52	0.00	186.04	0.00	186.56	0.00	187.08	0.00
185.53	0.00	186.05	0.00	186.57	0.00	187.09	0.00
185.54	0.00	186.06	0.00	186.58	0.00	187.10	0.00
185.55	0.00	186.07	0.00	186.59	0.00	187.11	0.00
185.56	0.00	186.08	0.00	186.60	0.00	187.12	0.00
185.57	0.00	186.09	0.00	186.61	0.00	187.13	0.00
185.58	0.00	186.10	0.00	186.62	0.00	187.14	0.00
185.59	0.00	186.11	0.00	186.63	0.00	187.15	0.00
185.60	0.00	186.12	0.00	186.64	0.00	187.16	0.00
185.61	0.00	186.13	0.00	186.65	0.00	187.17	0.00
185.62	0.00	186.14	0.00	186.66	0.00	187.18	0.00
185.63	0.00	186.15	0.00	186.67	0.00	187.19	0.00
185.64	0.00	186.16	0.00	186.68	0.00	187.20	0.00
185.65	0.00	186.17	0.00	186.69	0.00	187.21	0.00
185.66	0.00	186.18	0.00	186.70	0.00	187.22	0.00
185.67	0.00	186.19	0.00	186.71	0.00	187.23	0.00

Stage-Discharge for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
187.24	0.00	187.76	23.03
187.25	0.00	187.77	24.43
187.26	0.00	187.78	25.85
187.27	0.00	187.79	27.31
187.28	0.00	187.80	28.80
187.29	0.00	187.81	30.32
187.30	0.00	187.82	31.87
187.31	0.00	187.83	33.45
187.32	0.00	187.84	35.06
187.33	0.00	187.85	36.70
187.34	0.00	187.86	38.37
187.35	0.00	187.87	40.07
187.36	0.00	187.88	41.80
187.37	0.00	187.89	43.55
187.38	0.00	187.90	45.34
187.39	0.00	187.91	47.15
187.40	0.00	187.92	48.99
187.41	0.00	187.93	50.86
187.42	0.00	187.94	52.76
187.43	0.00	187.95	54.69
187.44	0.00	187.96	56.65
187.45	0.00	187.97	58.63
187.46	0.00	187.98	60.64
187.47	0.00	187.99	62.68
187.48	0.00	188.00	64.75
187.49	0.00		
187.50	0.00		
187.51	0.16		
187.52	0.46		
187.53	0.86		
187.54	1.32		
187.55	1.85		
187.56	2.44		
187.57	3.08		
187.58	3.77		
187.59	4.51		
187.60	5.29		
187.61	6.12		
187.62	6.99		
187.63	7.90		
187.64	8.85		
187.65	9.84		
187.66	10.87		
187.67	11.93		
187.68	13.03		
187.69	14.16		
187.70	15.33		
187.71	16.53		
187.72	17.76		
187.73	19.03		
187.74	20.33		
187.75	21.67		

Stage-Area-Storage for Pond B-46A: Basin #46A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
181.00	6,639	0	181.52	7,346	3,636
181.01	6,653	66	181.53	7,359	3,710
181.02	6,666	133	181.54	7,373	3,783
181.03	6,680	200	181.55	7,386	3,857
181.04	6,693	267	181.56	7,400	3,931
181.05	6,707	334	181.57	7,414	4,005
181.06	6,721	401	181.58	7,427	4,079
181.07	6,734	468	181.59	7,441	4,154
181.08	6,748	535	181.60	7,454	4,228
181.09	6,761	603	181.61	7,468	4,303
181.10	6,775	671	181.62	7,482	4,377
181.11	6,788	739	181.63	7,495	4,452
181.12	6,802	806	181.64	7,509	4,527
181.13	6,816	875	181.65	7,522	4,602
181.14	6,829	943	181.66	7,536	4,678
181.15	6,843	1,011	181.67	7,550	4,753
181.16	6,856	1,080	181.68	7,563	4,829
181.17	6,870	1,148	181.69	7,577	4,904
181.18	6,884	1,217	181.70	7,590	4,980
181.19	6,897	1,286	181.71	7,604	5,056
181.20	6,911	1,355	181.72	7,617	5,132
181.21	6,924	1,424	181.73	7,631	5,209
181.22	6,938	1,493	181.74	7,645	5,285
181.23	6,952	1,563	181.75	7,658	5,361
181.24	6,965	1,632	181.76	7,672	5,438
181.25	6,979	1,702	181.77	7,685	5,515
181.26	6,992	1,772	181.78	7,699	5,592
181.27	7,006	1,842	181.79	7,713	5,669
181.28	7,020	1,912	181.80	7,726	5,746
181.29	7,033	1,982	181.81	7,740	5,823
181.30	7,047	2,053	181.82	7,753	5,901
181.31	7,060	2,123	181.83	7,767	5,978
181.32	7,074	2,194	181.84	7,781	6,056
181.33	7,087	2,265	181.85	7,794	6,134
181.34	7,101	2,336	181.86	7,808	6,212
181.35	7,115	2,407	181.87	7,821	6,290
181.36	7,128	2,478	181.88	7,835	6,369
181.37	7,142	2,549	181.89	7,849	6,447
181.38	7,155	2,621	181.90	7,862	6,525
181.39	7,169	2,693	181.91	7,876	6,604
181.40	7,183	2,764	181.92	7,889	6,683
181.41	7,196	2,836	181.93	7,903	6,762
181.42	7,210	2,908	181.94	7,916	6,841
181.43	7,223	2,980	181.95	7,930	6,920
181.44	7,237	3,053	181.96	7,944	7,000
181.45	7,251	3,125	181.97	7,957	7,079
181.46	7,264	3,198	181.98	7,971	7,159
181.47	7,278	3,270	181.99	7,984	7,239
181.48	7,291	3,343	182.00	7,998	7,319
181.49	7,305	3,416	182.01	8,012	7,399
181.50	7,319	3,489	182.02	8,026	7,479
181.51	7,332	3,563	182.03	8,040	7,559

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
182.04	8,055	7,640	182.56	8,790	12,019
182.05	8,069	7,720	182.57	8,805	12,107
182.06	8,083	7,801	182.58	8,819	12,195
182.07	8,097	7,882	182.59	8,833	12,284
182.08	8,111	7,963	182.60	8,847	12,372
182.09	8,125	8,044	182.61	8,861	12,461
182.10	8,139	8,125	182.62	8,875	12,549
182.11	8,154	8,207	182.63	8,889	12,638
182.12	8,168	8,288	182.64	8,904	12,727
182.13	8,182	8,370	182.65	8,918	12,816
182.14	8,196	8,452	182.66	8,932	12,905
182.15	8,210	8,534	182.67	8,946	12,995
182.16	8,224	8,616	182.68	8,960	13,084
182.17	8,239	8,699	182.69	8,974	13,174
182.18	8,253	8,781	182.70	8,988	13,264
182.19	8,267	8,864	182.71	9,003	13,354
182.20	8,281	8,946	182.72	9,017	13,444
182.21	8,295	9,029	182.73	9,031	13,534
182.22	8,309	9,112	182.74	9,045	13,624
182.23	8,323	9,195	182.75	9,059	13,715
182.24	8,338	9,279	182.76	9,073	13,806
182.25	8,352	9,362	182.77	9,088	13,896
182.26	8,366	9,446	182.78	9,102	13,987
182.27	8,380	9,530	182.79	9,116	14,078
182.28	8,394	9,613	182.80	9,130	14,170
182.29	8,408	9,697	182.81	9,144	14,261
182.30	8,423	9,782	182.82	9,158	14,353
182.31	8,437	9,866	182.83	9,172	14,444
182.32	8,451	9,950	182.84	9,187	14,536
182.33	8,465	10,035	182.85	9,201	14,628
182.34	8,479	10,120	182.86	9,215	14,720
182.35	8,493	10,204	182.87	9,229	14,812
182.36	8,507	10,289	182.88	9,243	14,905
182.37	8,522	10,375	182.89	9,257	14,997
182.38	8,536	10,460	182.90	9,272	15,090
182.39	8,550	10,545	182.91	9,286	15,183
182.40	8,564	10,631	182.92	9,300	15,275
182.41	8,578	10,717	182.93	9,314	15,369
182.42	8,592	10,802	182.94	9,328	15,462
182.43	8,606	10,888	182.95	9,342	15,555
182.44	8,621	10,975	182.96	9,356	15,649
182.45	8,635	11,061	182.97	9,371	15,742
182.46	8,649	11,147	182.98	9,385	15,836
182.47	8,663	11,234	182.99	9,399	15,930
182.48	8,677	11,321	183.00	9,413	16,024
182.49	8,691	11,407	183.01	9,444	16,118
182.50	8,706	11,494	183.02	9,475	16,213
182.51	8,720	11,582	183.03	9,506	16,308
182.52	8,734	11,669	183.04	9,537	16,403
182.53	8,748	11,756	183.05	9,568	16,499
182.54	8,762	11,844	183.06	9,599	16,594
182.55	8,776	11,931	183.07	9,630	16,691

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.08	9,661	16,787	183.60	11,274	22,230
183.09	9,692	16,884	183.61	11,305	22,343
183.10	9,723	16,981	183.62	11,336	22,456
183.11	9,754	17,078	183.63	11,367	22,570
183.12	9,785	17,176	183.64	11,398	22,684
183.13	9,816	17,274	183.65	11,429	22,798
183.14	9,847	17,372	183.66	11,460	22,912
183.15	9,878	17,471	183.67	11,491	23,027
183.16	9,909	17,570	183.68	11,522	23,142
183.17	9,940	17,669	183.69	11,553	23,257
183.18	9,971	17,769	183.70	11,584	23,373
183.19	10,002	17,868	183.71	11,615	23,489
183.20	10,033	17,969	183.72	11,646	23,605
183.21	10,064	18,069	183.73	11,677	23,722
183.22	10,095	18,170	183.74	11,708	23,839
183.23	10,126	18,271	183.75	11,740	23,956
183.24	10,157	18,372	183.76	11,771	24,074
183.25	10,189	18,474	183.77	11,802	24,192
183.26	10,220	18,576	183.78	11,833	24,310
183.27	10,251	18,679	183.79	11,864	24,428
183.28	10,282	18,781	183.80	11,895	24,547
183.29	10,313	18,884	183.81	11,926	24,666
183.30	10,344	18,987	183.82	11,957	24,786
183.31	10,375	19,091	183.83	11,988	24,905
183.32	10,406	19,195	183.84	12,019	25,025
183.33	10,437	19,299	183.85	12,050	25,146
183.34	10,468	19,404	183.86	12,081	25,266
183.35	10,499	19,509	183.87	12,112	25,387
183.36	10,530	19,614	183.88	12,143	25,509
183.37	10,561	19,719	183.89	12,174	25,630
183.38	10,592	19,825	183.90	12,205	25,752
183.39	10,623	19,931	183.91	12,236	25,874
183.40	10,654	20,037	183.92	12,267	25,997
183.41	10,685	20,144	183.93	12,298	26,120
183.42	10,716	20,251	183.94	12,329	26,243
183.43	10,747	20,358	183.95	12,360	26,366
183.44	10,778	20,466	183.96	12,391	26,490
183.45	10,809	20,574	183.97	12,422	26,614
183.46	10,840	20,682	183.98	12,453	26,738
183.47	10,871	20,791	183.99	12,484	26,863
183.48	10,902	20,900	184.00	12,515	26,988
183.49	10,933	21,009	184.01	12,531	27,113
183.50	10,964	21,118	184.02	12,547	27,239
183.51	10,995	21,228	184.03	12,563	27,364
183.52	11,026	21,338	184.04	12,580	27,490
183.53	11,057	21,449	184.05	12,596	27,616
183.54	11,088	21,559	184.06	12,612	27,742
183.55	11,119	21,670	184.07	12,628	27,868
183.56	11,150	21,782	184.08	12,644	27,994
183.57	11,181	21,893	184.09	12,660	28,121
183.58	11,212	22,005	184.10	12,676	28,248
183.59	11,243	22,118	184.11	12,692	28,374

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.12	12,709	28,501	184.64	13,547	35,328
184.13	12,725	28,629	184.65	13,563	35,463
184.14	12,741	28,756	184.66	13,580	35,599
184.15	12,757	28,883	184.67	13,596	35,735
184.16	12,773	29,011	184.68	13,612	35,871
184.17	12,789	29,139	184.69	13,628	36,007
184.18	12,805	29,267	184.70	13,644	36,144
184.19	12,821	29,395	184.71	13,660	36,280
184.20	12,838	29,523	184.72	13,676	36,417
184.21	12,854	29,652	184.73	13,692	36,554
184.22	12,870	29,780	184.74	13,709	36,691
184.23	12,886	29,909	184.75	13,725	36,828
184.24	12,902	30,038	184.76	13,741	36,965
184.25	12,918	30,167	184.77	13,757	37,103
184.26	12,934	30,296	184.78	13,773	37,240
184.27	12,951	30,426	184.79	13,789	37,378
184.28	12,967	30,555	184.80	13,805	37,516
184.29	12,983	30,685	184.81	13,822	37,654
184.30	12,999	30,815	184.82	13,838	37,793
184.31	13,015	30,945	184.83	13,854	37,931
184.32	13,031	31,075	184.84	13,870	38,070
184.33	13,047	31,206	184.85	13,886	38,208
184.34	13,063	31,336	184.86	13,902	38,347
184.35	13,080	31,467	184.87	13,918	38,486
184.36	13,096	31,598	184.88	13,934	38,626
184.37	13,112	31,729	184.89	13,951	38,765
184.38	13,128	31,860	184.90	13,967	38,905
184.39	13,144	31,992	184.91	13,983	39,045
184.40	13,160	32,123	184.92	13,999	39,184
184.41	13,176	32,255	184.93	14,015	39,324
184.42	13,192	32,387	184.94	14,031	39,465
184.43	13,209	32,519	184.95	14,047	39,605
184.44	13,225	32,651	184.96	14,063	39,746
184.45	13,241	32,783	184.97	14,080	39,886
184.46	13,257	32,916	184.98	14,096	40,027
184.47	13,273	33,048	184.99	14,112	40,168
184.48	13,289	33,181	185.00	14,128	40,310
184.49	13,305	33,314	185.01	14,145	40,451
184.50	13,322	33,447	185.02	14,161	40,592
184.51	13,338	33,580	185.03	14,178	40,734
184.52	13,354	33,714	185.04	14,195	40,876
184.53	13,370	33,847	185.05	14,212	41,018
184.54	13,386	33,981	185.06	14,228	41,160
184.55	13,402	34,115	185.07	14,245	41,303
184.56	13,418	34,249	185.08	14,262	41,445
184.57	13,434	34,384	185.09	14,278	41,588
184.58	13,451	34,518	185.10	14,295	41,731
184.59	13,467	34,653	185.11	14,312	41,874
184.60	13,483	34,787	185.12	14,328	42,017
184.61	13,499	34,922	185.13	14,345	42,160
184.62	13,515	35,057	185.14	14,362	42,304
184.63	13,531	35,193	185.15	14,379	42,447

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.16	14,395	42,591	185.68	15,264	50,303
185.17	14,412	42,735	185.69	15,280	50,455
185.18	14,429	42,880	185.70	15,297	50,608
185.19	14,445	43,024	185.71	15,314	50,761
185.20	14,462	43,168	185.72	15,330	50,915
185.21	14,479	43,313	185.73	15,347	51,068
185.22	14,495	43,458	185.74	15,364	51,221
185.23	14,512	43,603	185.75	15,381	51,375
185.24	14,529	43,748	185.76	15,397	51,529
185.25	14,546	43,894	185.77	15,414	51,683
185.26	14,562	44,039	185.78	15,431	51,837
185.27	14,579	44,185	185.79	15,447	51,992
185.28	14,596	44,331	185.80	15,464	52,146
185.29	14,612	44,477	185.81	15,481	52,301
185.30	14,629	44,623	185.82	15,497	52,456
185.31	14,646	44,769	185.83	15,514	52,611
185.32	14,662	44,916	185.84	15,531	52,766
185.33	14,679	45,063	185.85	15,547	52,922
185.34	14,696	45,210	185.86	15,564	53,077
185.35	14,712	45,357	185.87	15,581	53,233
185.36	14,729	45,504	185.88	15,598	53,389
185.37	14,746	45,651	185.89	15,614	53,545
185.38	14,763	45,799	185.90	15,631	53,701
185.39	14,779	45,946	185.91	15,648	53,857
185.40	14,796	46,094	185.92	15,664	54,014
185.41	14,813	46,242	185.93	15,681	54,171
185.42	14,829	46,391	185.94	15,698	54,328
185.43	14,846	46,539	185.95	15,714	54,485
185.44	14,863	46,687	185.96	15,731	54,642
185.45	14,879	46,836	185.97	15,748	54,799
185.46	14,896	46,985	185.98	15,765	54,957
185.47	14,913	47,134	185.99	15,781	55,115
185.48	14,930	47,283	186.00	15,798	55,273
185.49	14,946	47,433	186.01	15,815	55,431
185.50	14,963	47,582	186.02	15,833	55,589
185.51	14,980	47,732	186.03	15,850	55,747
185.52	14,996	47,882	186.04	15,867	55,906
185.53	15,013	48,032	186.05	15,884	56,065
185.54	15,030	48,182	186.06	15,902	56,223
185.55	15,047	48,332	186.07	15,919	56,383
185.56	15,063	48,483	186.08	15,936	56,542
185.57	15,080	48,634	186.09	15,953	56,701
185.58	15,097	48,785	186.10	15,971	56,861
185.59	15,113	48,936	186.11	15,988	57,021
185.60	15,130	49,087	186.12	16,005	57,181
185.61	15,147	49,238	186.13	16,022	57,341
185.62	15,163	49,390	186.14	16,040	57,501
185.63	15,180	49,542	186.15	16,057	57,662
185.64	15,197	49,693	186.16	16,074	57,822
185.65	15,214	49,845	186.17	16,091	57,983
185.66	15,230	49,998	186.18	16,109	58,144
185.67	15,247	50,150	186.19	16,126	58,305

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.20	16,143	58,467	186.72	17,041	67,094
186.21	16,160	58,628	186.73	17,058	67,265
186.22	16,178	58,790	186.74	17,075	67,436
186.23	16,195	58,952	186.75	17,093	67,606
186.24	16,212	59,114	186.76	17,110	67,777
186.25	16,230	59,276	186.77	17,127	67,949
186.26	16,247	59,438	186.78	17,144	68,120
186.27	16,264	59,601	186.79	17,162	68,292
186.28	16,281	59,764	186.80	17,179	68,463
186.29	16,299	59,926	186.81	17,196	68,635
186.30	16,316	60,090	186.82	17,213	68,807
186.31	16,333	60,253	186.83	17,231	68,979
186.32	16,350	60,416	186.84	17,248	69,152
186.33	16,368	60,580	186.85	17,265	69,324
186.34	16,385	60,744	186.86	17,282	69,497
186.35	16,402	60,908	186.87	17,300	69,670
186.36	16,419	61,072	186.88	17,317	69,843
186.37	16,437	61,236	186.89	17,334	70,016
186.38	16,454	61,400	186.90	17,351	70,190
186.39	16,471	61,565	186.91	17,369	70,363
186.40	16,488	61,730	186.92	17,386	70,537
186.41	16,506	61,895	186.93	17,403	70,711
186.42	16,523	62,060	186.94	17,420	70,885
186.43	16,540	62,225	186.95	17,438	71,059
186.44	16,557	62,391	186.96	17,455	71,234
186.45	16,575	62,556	186.97	17,472	71,409
186.46	16,592	62,722	186.98	17,489	71,583
186.47	16,609	62,888	186.99	17,507	71,758
186.48	16,626	63,054	187.00	17,524	71,934
186.49	16,644	63,221	187.01	17,542	72,109
186.50	16,661	63,387	187.02	17,560	72,284
186.51	16,678	63,554	187.03	17,578	72,460
186.52	16,696	63,721	187.04	17,595	72,636
186.53	16,713	63,888	187.05	17,613	72,812
186.54	16,730	64,055	187.06	17,631	72,988
186.55	16,747	64,222	187.07	17,649	73,165
186.56	16,765	64,390	187.08	17,667	73,341
186.57	16,782	64,558	187.09	17,685	73,518
186.58	16,799	64,726	187.10	17,703	73,695
186.59	16,816	64,894	187.11	17,720	73,872
186.60	16,834	65,062	187.12	17,738	74,049
186.61	16,851	65,230	187.13	17,756	74,227
186.62	16,868	65,399	187.14	17,774	74,404
186.63	16,885	65,568	187.15	17,792	74,582
186.64	16,903	65,737	187.16	17,810	74,760
186.65	16,920	65,906	187.17	17,828	74,938
186.66	16,937	66,075	187.18	17,845	75,117
186.67	16,954	66,245	187.19	17,863	75,295
186.68	16,972	66,414	187.20	17,881	75,474
186.69	16,989	66,584	187.21	17,899	75,653
186.70	17,006	66,754	187.22	17,917	75,832
186.71	17,023	66,924	187.23	17,935	76,011

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.24	17,953	76,191	187.76	18,881	85,768
187.25	17,971	76,370	187.77	18,899	85,956
187.26	17,988	76,550	187.78	18,917	86,146
187.27	18,006	76,730	187.79	18,935	86,335
187.28	18,024	76,910	187.80	18,953	86,524
187.29	18,042	77,091	187.81	18,971	86,714
187.30	18,060	77,271	187.82	18,989	86,904
187.31	18,078	77,452	187.83	19,006	87,094
187.32	18,096	77,633	187.84	19,024	87,284
187.33	18,113	77,814	187.85	19,042	87,474
187.34	18,131	77,995	187.86	19,060	87,665
187.35	18,149	78,176	187.87	19,078	87,855
187.36	18,167	78,358	187.88	19,096	88,046
187.37	18,185	78,540	187.89	19,114	88,237
187.38	18,203	78,722	187.90	19,131	88,428
187.39	18,221	78,904	187.91	19,149	88,620
187.40	18,238	79,086	187.92	19,167	88,811
187.41	18,256	79,268	187.93	19,185	89,003
187.42	18,274	79,451	187.94	19,203	89,195
187.43	18,292	79,634	187.95	19,221	89,387
187.44	18,310	79,817	187.96	19,239	89,580
187.45	18,328	80,000	187.97	19,256	89,772
187.46	18,346	80,183	187.98	19,274	89,965
187.47	18,363	80,367	187.99	19,292	90,157
187.48	18,381	80,551	188.00	19,310	90,351
187.49	18,399	80,735			
187.50	18,417	80,919			
187.51	18,435	81,103			
187.52	18,453	81,287			
187.53	18,471	81,472			
187.54	18,488	81,657			
187.55	18,506	81,842			
187.56	18,524	82,027			
187.57	18,542	82,212			
187.58	18,560	82,398			
187.59	18,578	82,584			
187.60	18,596	82,769			
187.61	18,613	82,955			
187.62	18,631	83,142			
187.63	18,649	83,328			
187.64	18,667	83,515			
187.65	18,685	83,701			
187.66	18,703	83,888			
187.67	18,721	84,075			
187.68	18,738	84,263			
187.69	18,756	84,450			
187.70	18,774	84,638			
187.71	18,792	84,826			
187.72	18,810	85,014			
187.73	18,828	85,202			
187.74	18,846	85,390			
187.75	18,864	85,579			

Summary for Pond B-46B: Basin #46B

Inflow Area = 2.931 ac, 39.13% Impervious, Inflow Depth = 1.50" for Future 100 yr event
 Inflow = 5.02 cfs @ 12.05 hrs, Volume= 0.366 af
 Outflow = 0.31 cfs @ 24.01 hrs, Volume= 0.266 af, Atten= 94%, Lag= 717.9 min
 Primary = 0.31 cfs @ 24.01 hrs, Volume= 0.266 af
 Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 184.51' @ 24.01 hrs Surf.Area= 11,740 sf Storage= 9,651 cf

Plug-Flow detention time= 717.5 min calculated for 0.266 af (73% of inflow)
 Center-of-Mass det. time= 555.9 min (1,466.2 - 910.3)

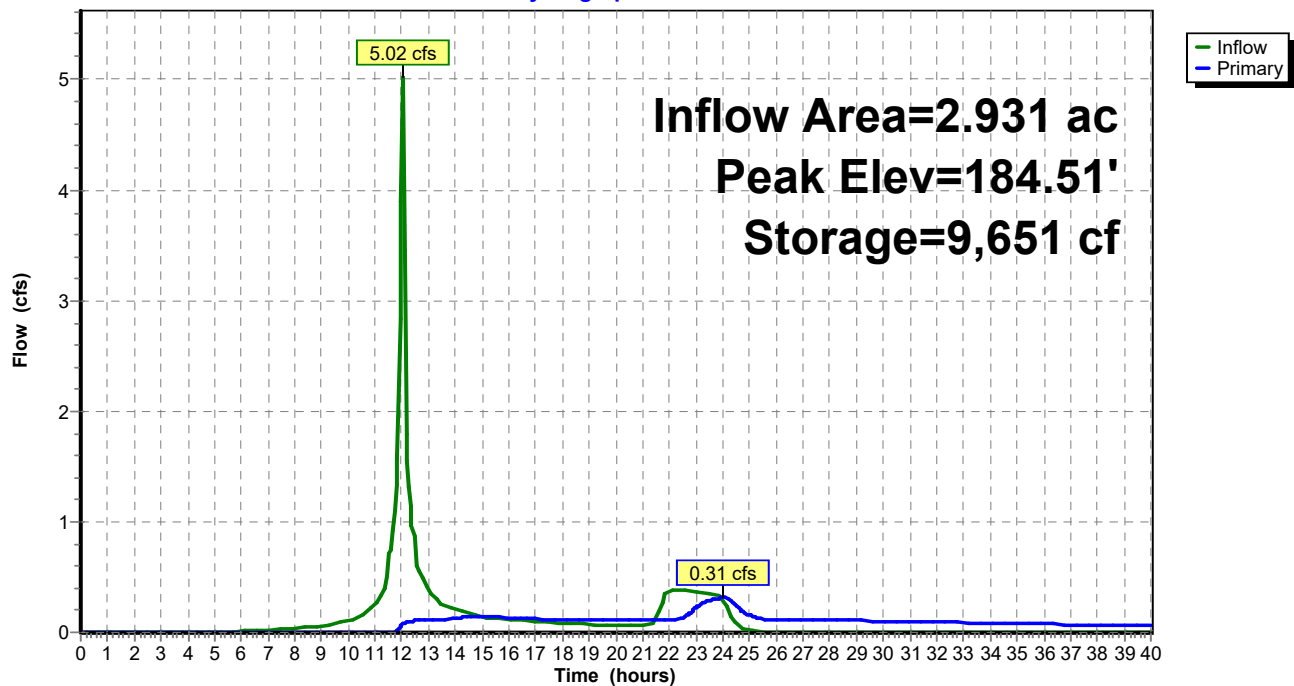
Volume	Invert	Avail.Storage	Storage Description
#1	183.30'	59,250 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.30	0	0	0
184.00	11,059	3,871	3,871
185.00	12,402	11,731	15,601
186.00	13,803	13,103	28,704
187.00	15,259	14,531	43,235
188.00	16,772	16,016	59,250

Device	Routing	Invert	Outlet Devices
#1	Primary	182.65'	18.0" Round Culvert L= 65.0' Ke= 0.500 Inlet / Outlet Invert= 182.65' / 176.00' S= 0.1023 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	183.82'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.45'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	185.75'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.30 cfs @ 24.01 hrs HW=184.51' (Free Discharge)

1=Culvert (Passes 0.30 cfs of 8.95 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.13 cfs @ 3.68 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 0.18 cfs @ 0.78 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-46B: Basin #46B**Hydrograph**

Stage-Discharge for Pond B-46B: Basin #46B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.30	0.00	183.82	0.00	184.34	0.11	184.86	3.52
183.31	0.00	183.83	0.00	184.35	0.11	184.87	3.65
183.32	0.00	183.84	0.00	184.36	0.11	184.88	3.77
183.33	0.00	183.85	0.00	184.37	0.11	184.89	3.89
183.34	0.00	183.86	0.00	184.38	0.11	184.90	4.02
183.35	0.00	183.87	0.00	184.39	0.11	184.91	4.15
183.36	0.00	183.88	0.01	184.40	0.11	184.92	4.28
183.37	0.00	183.89	0.01	184.41	0.11	184.93	4.41
183.38	0.00	183.90	0.01	184.42	0.12	184.94	4.54
183.39	0.00	183.91	0.01	184.43	0.12	184.95	4.68
183.40	0.00	183.92	0.02	184.44	0.12	184.96	4.81
183.41	0.00	183.93	0.02	184.45	0.12	184.97	4.95
183.42	0.00	183.94	0.02	184.46	0.13	184.98	5.08
183.43	0.00	183.95	0.03	184.47	0.16	184.99	5.22
183.44	0.00	183.96	0.03	184.48	0.19	185.00	5.36
183.45	0.00	183.97	0.03	184.49	0.23	185.01	5.50
183.46	0.00	183.98	0.04	184.50	0.27	185.02	5.64
183.47	0.00	183.99	0.04	184.51	0.32	185.03	5.78
183.48	0.00	184.00	0.05	184.52	0.37	185.04	5.93
183.49	0.00	184.01	0.05	184.53	0.42	185.05	6.07
183.50	0.00	184.02	0.05	184.54	0.48	185.06	6.22
183.51	0.00	184.03	0.05	184.55	0.54	185.07	6.36
183.52	0.00	184.04	0.06	184.56	0.61	185.08	6.51
183.53	0.00	184.05	0.06	184.57	0.67	185.09	6.66
183.54	0.00	184.06	0.06	184.58	0.74	185.10	6.81
183.55	0.00	184.07	0.06	184.59	0.81	185.11	6.96
183.56	0.00	184.08	0.06	184.60	0.89	185.12	7.11
183.57	0.00	184.09	0.07	184.61	0.97	185.13	7.27
183.58	0.00	184.10	0.07	184.62	1.05	185.14	7.42
183.59	0.00	184.11	0.07	184.63	1.13	185.15	7.57
183.60	0.00	184.12	0.07	184.64	1.21	185.16	7.73
183.61	0.00	184.13	0.07	184.65	1.30	185.17	7.89
183.62	0.00	184.14	0.08	184.66	1.39	185.18	8.04
183.63	0.00	184.15	0.08	184.67	1.48	185.19	8.20
183.64	0.00	184.16	0.08	184.68	1.57	185.20	8.36
183.65	0.00	184.17	0.08	184.69	1.66	185.21	8.52
183.66	0.00	184.18	0.08	184.70	1.76	185.22	8.68
183.67	0.00	184.19	0.08	184.71	1.86	185.23	8.85
183.68	0.00	184.20	0.09	184.72	1.96	185.24	9.01
183.69	0.00	184.21	0.09	184.73	2.06	185.25	9.17
183.70	0.00	184.22	0.09	184.74	2.16	185.26	9.34
183.71	0.00	184.23	0.09	184.75	2.27	185.27	9.50
183.72	0.00	184.24	0.09	184.76	2.37	185.28	9.67
183.73	0.00	184.25	0.09	184.77	2.48	185.29	9.84
183.74	0.00	184.26	0.10	184.78	2.59	185.30	10.01
183.75	0.00	184.27	0.10	184.79	2.70	185.31	10.18
183.76	0.00	184.28	0.10	184.80	2.81	185.32	10.35
183.77	0.00	184.29	0.10	184.81	2.93	185.33	10.52
183.78	0.00	184.30	0.10	184.82	3.04	185.34	10.69
183.79	0.00	184.31	0.10	184.83	3.16	185.35	10.86
183.80	0.00	184.32	0.10	184.84	3.28	185.36	11.03
183.81	0.00	184.33	0.10	184.85	3.40	185.37	11.21

Stage-Discharge for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.38	11.38	185.90	20.30	186.42	91.01	186.94	198.59
185.39	11.56	185.91	21.03	186.43	92.75	186.95	200.94
185.40	11.74	185.92	21.78	186.44	94.51	186.96	203.32
185.41	11.91	185.93	22.55	186.45	96.28	186.97	205.72
185.42	12.09	185.94	23.34	186.46	98.06	186.98	208.13
185.43	12.12	185.95	24.15	186.47	99.86	186.99	210.55
185.44	12.15	185.96	25.03	186.48	101.66	187.00	212.98
185.45	12.18	185.97	25.92	186.49	103.49	187.01	215.43
185.46	12.21	185.98	26.85	186.50	105.32	187.02	217.88
185.47	12.24	185.99	27.80	186.51	107.16	187.03	220.34
185.48	12.27	186.00	28.77	186.52	109.02	187.04	222.82
185.49	12.30	186.01	29.77	186.53	110.89	187.05	225.30
185.50	12.33	186.02	30.80	186.54	112.77	187.06	227.79
185.51	12.36	186.03	31.85	186.55	114.67	187.07	230.30
185.52	12.39	186.04	32.92	186.56	116.61	187.08	232.82
185.53	12.42	186.05	34.02	186.57	118.57	187.09	235.34
185.54	12.45	186.06	35.14	186.58	120.54	187.10	237.88
185.55	12.48	186.07	36.29	186.59	122.52	187.11	240.42
185.56	12.51	186.08	37.46	186.60	124.52	187.12	242.98
185.57	12.53	186.09	38.66	186.61	126.53	187.13	245.55
185.58	12.56	186.10	39.88	186.62	128.55	187.14	248.13
185.59	12.59	186.11	41.12	186.63	130.58	187.15	250.71
185.60	12.62	186.12	42.39	186.64	132.63	187.16	253.36
185.61	12.65	186.13	43.68	186.65	134.69	187.17	256.01
185.62	12.68	186.14	45.00	186.66	136.77	187.18	258.67
185.63	12.71	186.15	46.34	186.67	138.85	187.19	261.35
185.64	12.73	186.16	47.73	186.68	140.95	187.20	264.04
185.65	12.76	186.17	49.15	186.69	143.07	187.21	266.74
185.66	12.79	186.18	50.59	186.70	145.19	187.22	269.45
185.67	12.82	186.19	52.06	186.71	147.33	187.23	272.17
185.68	12.85	186.20	53.56	186.72	149.48	187.24	274.90
185.69	12.88	186.21	55.08	186.73	151.64	187.25	277.64
185.70	12.90	186.22	56.63	186.74	153.82	187.26	280.39
185.71	12.93	186.23	58.20	186.75	156.01	187.27	283.16
185.72	12.96	186.24	59.80	186.76	158.15	187.28	285.93
185.73	12.99	186.25	61.43	186.77	160.31	187.29	288.72
185.74	13.02	186.26	63.08	186.78	162.48	187.30	291.52
185.75	13.04	186.27	64.76	186.79	164.66	187.31	294.32
185.76	13.19	186.28	66.47	186.80	166.85	187.32	297.14
185.77	13.43	186.29	68.20	186.81	169.05	187.33	299.97
185.78	13.74	186.30	69.96	186.82	171.26	187.34	302.81
185.79	14.09	186.31	71.75	186.83	173.48	187.35	305.67
185.80	14.49	186.32	73.56	186.84	175.71	187.36	308.53
185.81	14.93	186.33	75.40	186.85	177.95	187.37	311.40
185.82	15.41	186.34	77.27	186.86	180.21	187.38	314.29
185.83	15.92	186.35	79.16	186.87	182.47	187.39	317.18
185.84	16.46	186.36	80.82	186.88	184.74	187.40	320.09
185.85	17.04	186.37	82.48	186.89	187.03	187.41	323.00
185.86	17.64	186.38	84.16	186.90	189.32	187.42	325.93
185.87	18.26	186.39	85.85	186.91	191.62	187.43	328.87
185.88	18.92	186.40	87.56	186.92	193.94	187.44	331.82
185.89	19.60	186.41	89.27	186.93	196.26	187.45	334.78

Stage-Discharge for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
187.46	337.75	187.98	508.37
187.47	340.73	187.99	511.98
187.48	343.72	188.00	515.60
187.49	346.72		
187.50	349.74		
187.51	352.76		
187.52	355.79		
187.53	358.84		
187.54	361.90		
187.55	364.96		
187.56	368.04		
187.57	371.13		
187.58	374.22		
187.59	377.33		
187.60	380.45		
187.61	383.58		
187.62	386.72		
187.63	389.87		
187.64	393.03		
187.65	396.20		
187.66	399.38		
187.67	402.58		
187.68	405.78		
187.69	408.99		
187.70	412.22		
187.71	415.45		
187.72	418.69		
187.73	421.95		
187.74	425.21		
187.75	428.49		
187.76	431.84		
187.77	435.20		
187.78	438.57		
187.79	441.95		
187.80	445.35		
187.81	448.75		
187.82	452.17		
187.83	455.60		
187.84	459.04		
187.85	462.49		
187.86	465.95		
187.87	469.42		
187.88	472.91		
187.89	476.40		
187.90	479.91		
187.91	483.43		
187.92	486.96		
187.93	490.50		
187.94	494.05		
187.95	497.61		
187.96	501.19		
187.97	504.78		

Stage-Area-Storage for Pond B-46B: Basin #46B

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.30	0	0	183.82	8,215	2,136
183.31	158	1	183.83	8,373	2,219
183.32	316	3	183.84	8,531	2,303
183.33	474	7	183.85	8,689	2,390
183.34	632	13	183.86	8,847	2,477
183.35	790	20	183.87	9,005	2,566
183.36	948	28	183.88	9,163	2,657
183.37	1,106	39	183.89	9,321	2,750
183.38	1,264	51	183.90	9,479	2,844
183.39	1,422	64	183.91	9,637	2,939
183.40	1,580	79	183.92	9,795	3,036
183.41	1,738	96	183.93	9,953	3,135
183.42	1,896	114	183.94	10,111	3,236
183.43	2,054	133	183.95	10,269	3,337
183.44	2,212	155	183.96	10,427	3,441
183.45	2,370	178	183.97	10,585	3,546
183.46	2,528	202	183.98	10,743	3,653
183.47	2,686	228	183.99	10,901	3,761
183.48	2,844	256	184.00	11,059	3,871
183.49	3,002	285	184.01	11,072	3,981
183.50	3,160	316	184.02	11,086	4,092
183.51	3,318	348	184.03	11,099	4,203
183.52	3,476	382	184.04	11,113	4,314
183.53	3,634	418	184.05	11,126	4,425
183.54	3,792	455	184.06	11,140	4,537
183.55	3,950	494	184.07	11,153	4,648
183.56	4,108	534	184.08	11,166	4,760
183.57	4,266	576	184.09	11,180	4,871
183.58	4,424	619	184.10	11,193	4,983
183.59	4,582	664	184.11	11,207	5,095
183.60	4,740	711	184.12	11,220	5,207
183.61	4,898	759	184.13	11,234	5,320
183.62	5,056	809	184.14	11,247	5,432
183.63	5,214	860	184.15	11,260	5,545
183.64	5,372	913	184.16	11,274	5,657
183.65	5,530	968	184.17	11,287	5,770
183.66	5,687	1,024	184.18	11,301	5,883
183.67	5,845	1,081	184.19	11,314	5,996
183.68	6,003	1,141	184.20	11,328	6,109
183.69	6,161	1,201	184.21	11,341	6,223
183.70	6,319	1,264	184.22	11,354	6,336
183.71	6,477	1,328	184.23	11,368	6,450
183.72	6,635	1,393	184.24	11,381	6,563
183.73	6,793	1,461	184.25	11,395	6,677
183.74	6,951	1,529	184.26	11,408	6,791
183.75	7,109	1,600	184.27	11,422	6,906
183.76	7,267	1,671	184.28	11,435	7,020
183.77	7,425	1,745	184.29	11,448	7,134
183.78	7,583	1,820	184.30	11,462	7,249
183.79	7,741	1,897	184.31	11,475	7,363
183.80	7,899	1,975	184.32	11,489	7,478
183.81	8,057	2,055	184.33	11,502	7,593

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.34	11,516	7,708	184.86	12,214	13,878
184.35	11,529	7,824	184.87	12,227	14,000
184.36	11,542	7,939	184.88	12,241	14,123
184.37	11,556	8,054	184.89	12,254	14,245
184.38	11,569	8,170	184.90	12,268	14,368
184.39	11,583	8,286	184.91	12,281	14,490
184.40	11,596	8,402	184.92	12,295	14,613
184.41	11,610	8,518	184.93	12,308	14,736
184.42	11,623	8,634	184.94	12,321	14,859
184.43	11,636	8,750	184.95	12,335	14,983
184.44	11,650	8,867	184.96	12,348	15,106
184.45	11,663	8,983	184.97	12,362	15,230
184.46	11,677	9,100	184.98	12,375	15,353
184.47	11,690	9,217	184.99	12,389	15,477
184.48	11,704	9,334	185.00	12,402	15,601
184.49	11,717	9,451	185.01	12,416	15,725
184.50	11,731	9,568	185.02	12,430	15,849
184.51	11,744	9,685	185.03	12,444	15,974
184.52	11,757	9,803	185.04	12,458	16,098
184.53	11,771	9,921	185.05	12,472	16,223
184.54	11,784	10,038	185.06	12,486	16,348
184.55	11,798	10,156	185.07	12,500	16,473
184.56	11,811	10,274	185.08	12,514	16,598
184.57	11,825	10,392	185.09	12,528	16,723
184.58	11,838	10,511	185.10	12,542	16,848
184.59	11,851	10,629	185.11	12,556	16,974
184.60	11,865	10,748	185.12	12,570	17,099
184.61	11,878	10,867	185.13	12,584	17,225
184.62	11,892	10,985	185.14	12,598	17,351
184.63	11,905	11,104	185.15	12,612	17,477
184.64	11,919	11,223	185.16	12,626	17,603
184.65	11,932	11,343	185.17	12,640	17,730
184.66	11,945	11,462	185.18	12,654	17,856
184.67	11,959	11,582	185.19	12,668	17,983
184.68	11,972	11,701	185.20	12,682	18,110
184.69	11,986	11,821	185.21	12,696	18,236
184.70	11,999	11,941	185.22	12,710	18,363
184.71	12,013	12,061	185.23	12,724	18,491
184.72	12,026	12,181	185.24	12,738	18,618
184.73	12,039	12,302	185.25	12,752	18,745
184.74	12,053	12,422	185.26	12,766	18,873
184.75	12,066	12,543	185.27	12,780	19,001
184.76	12,080	12,663	185.28	12,794	19,129
184.77	12,093	12,784	185.29	12,808	19,257
184.78	12,107	12,905	185.30	12,822	19,385
184.79	12,120	13,026	185.31	12,836	19,513
184.80	12,133	13,148	185.32	12,850	19,642
184.81	12,147	13,269	185.33	12,864	19,770
184.82	12,160	13,391	185.34	12,878	19,899
184.83	12,174	13,512	185.35	12,892	20,028
184.84	12,187	13,634	185.36	12,906	20,157
184.85	12,201	13,756	185.37	12,920	20,286

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.38	12,934	20,415	185.90	13,663	27,330
185.39	12,948	20,544	185.91	13,677	27,467
185.40	12,962	20,674	185.92	13,691	27,604
185.41	12,976	20,804	185.93	13,705	27,741
185.42	12,990	20,934	185.94	13,719	27,878
185.43	13,004	21,064	185.95	13,733	28,015
185.44	13,018	21,194	185.96	13,747	28,153
185.45	13,032	21,324	185.97	13,761	28,290
185.46	13,046	21,454	185.98	13,775	28,428
185.47	13,060	21,585	185.99	13,789	28,566
185.48	13,074	21,716	186.00	13,803	28,704
185.49	13,088	21,846	186.01	13,818	28,842
185.50	13,103	21,977	186.02	13,832	28,980
185.51	13,117	22,108	186.03	13,847	29,118
185.52	13,131	22,240	186.04	13,861	29,257
185.53	13,145	22,371	186.05	13,876	29,396
185.54	13,159	22,502	186.06	13,890	29,534
185.55	13,173	22,634	186.07	13,905	29,673
185.56	13,187	22,766	186.08	13,919	29,813
185.57	13,201	22,898	186.09	13,934	29,952
185.58	13,215	23,030	186.10	13,949	30,091
185.59	13,229	23,162	186.11	13,963	30,231
185.60	13,243	23,295	186.12	13,978	30,370
185.61	13,257	23,427	186.13	13,992	30,510
185.62	13,271	23,560	186.14	14,007	30,650
185.63	13,285	23,692	186.15	14,021	30,790
185.64	13,299	23,825	186.16	14,036	30,931
185.65	13,313	23,958	186.17	14,051	31,071
185.66	13,327	24,092	186.18	14,065	31,212
185.67	13,341	24,225	186.19	14,080	31,353
185.68	13,355	24,358	186.20	14,094	31,493
185.69	13,369	24,492	186.21	14,109	31,634
185.70	13,383	24,626	186.22	14,123	31,776
185.71	13,397	24,760	186.23	14,138	31,917
185.72	13,411	24,894	186.24	14,152	32,058
185.73	13,425	25,028	186.25	14,167	32,200
185.74	13,439	25,162	186.26	14,182	32,342
185.75	13,453	25,297	186.27	14,196	32,484
185.76	13,467	25,431	186.28	14,211	32,626
185.77	13,481	25,566	186.29	14,225	32,768
185.78	13,495	25,701	186.30	14,240	32,910
185.79	13,509	25,836	186.31	14,254	33,053
185.80	13,523	25,971	186.32	14,269	33,195
185.81	13,537	26,106	186.33	14,283	33,338
185.82	13,551	26,242	186.34	14,298	33,481
185.83	13,565	26,377	186.35	14,313	33,624
185.84	13,579	26,513	186.36	14,327	33,767
185.85	13,593	26,649	186.37	14,342	33,910
185.86	13,607	26,785	186.38	14,356	34,054
185.87	13,621	26,921	186.39	14,371	34,198
185.88	13,635	27,057	186.40	14,385	34,341
185.89	13,649	27,194	186.41	14,400	34,485

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.42	14,415	34,629	186.94	15,172	42,322
186.43	14,429	34,774	186.95	15,186	42,474
186.44	14,444	34,918	186.96	15,201	42,625
186.45	14,458	35,062	186.97	15,215	42,778
186.46	14,473	35,207	186.98	15,230	42,930
186.47	14,487	35,352	186.99	15,244	43,082
186.48	14,502	35,497	187.00	15,259	43,235
186.49	14,516	35,642	187.01	15,274	43,387
186.50	14,531	35,787	187.02	15,289	43,540
186.51	14,546	35,933	187.03	15,304	43,693
186.52	14,560	36,078	187.04	15,320	43,846
186.53	14,575	36,224	187.05	15,335	43,999
186.54	14,589	36,370	187.06	15,350	44,153
186.55	14,604	36,516	187.07	15,365	44,306
186.56	14,618	36,662	187.08	15,380	44,460
186.57	14,633	36,808	187.09	15,395	44,614
186.58	14,647	36,954	187.10	15,410	44,768
186.59	14,662	37,101	187.11	15,425	44,922
186.60	14,677	37,248	187.12	15,441	45,077
186.61	14,691	37,394	187.13	15,456	45,231
186.62	14,706	37,541	187.14	15,471	45,386
186.63	14,720	37,688	187.15	15,486	45,541
186.64	14,735	37,836	187.16	15,501	45,695
186.65	14,749	37,983	187.17	15,516	45,851
186.66	14,764	38,131	187.18	15,531	46,006
186.67	14,779	38,278	187.19	15,546	46,161
186.68	14,793	38,426	187.20	15,562	46,317
186.69	14,808	38,574	187.21	15,577	46,472
186.70	14,822	38,722	187.22	15,592	46,628
186.71	14,837	38,871	187.23	15,607	46,784
186.72	14,851	39,019	187.24	15,622	46,940
186.73	14,866	39,168	187.25	15,637	47,097
186.74	14,880	39,317	187.26	15,652	47,253
186.75	14,895	39,465	187.27	15,668	47,410
186.76	14,910	39,614	187.28	15,683	47,566
186.77	14,924	39,764	187.29	15,698	47,723
186.78	14,939	39,913	187.30	15,713	47,880
186.79	14,953	40,062	187.31	15,728	48,038
186.80	14,968	40,212	187.32	15,743	48,195
186.81	14,982	40,362	187.33	15,758	48,353
186.82	14,997	40,512	187.34	15,773	48,510
186.83	15,011	40,662	187.35	15,789	48,668
186.84	15,026	40,812	187.36	15,804	48,826
186.85	15,041	40,962	187.37	15,819	48,984
186.86	15,055	41,113	187.38	15,834	49,142
186.87	15,070	41,263	187.39	15,849	49,301
186.88	15,084	41,414	187.40	15,864	49,459
186.89	15,099	41,565	187.41	15,879	49,618
186.90	15,113	41,716	187.42	15,894	49,777
186.91	15,128	41,867	187.43	15,910	49,936
186.92	15,143	42,019	187.44	15,925	50,095
186.93	15,157	42,170	187.45	15,940	50,254

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.46	15,955	50,414	187.98	16,742	58,915
187.47	15,970	50,573	187.99	16,757	59,083
187.48	15,985	50,733	188.00	16,772	59,250
187.49	16,000	50,893			
187.50	16,016	51,053			
187.51	16,031	51,214			
187.52	16,046	51,374			
187.53	16,061	51,534			
187.54	16,076	51,695			
187.55	16,091	51,856			
187.56	16,106	52,017			
187.57	16,121	52,178			
187.58	16,137	52,339			
187.59	16,152	52,501			
187.60	16,167	52,662			
187.61	16,182	52,824			
187.62	16,197	52,986			
187.63	16,212	53,148			
187.64	16,227	53,310			
187.65	16,242	53,473			
187.66	16,258	53,635			
187.67	16,273	53,798			
187.68	16,288	53,961			
187.69	16,303	54,124			
187.70	16,318	54,287			
187.71	16,333	54,450			
187.72	16,348	54,613			
187.73	16,363	54,777			
187.74	16,379	54,941			
187.75	16,394	55,104			
187.76	16,409	55,268			
187.77	16,424	55,433			
187.78	16,439	55,597			
187.79	16,454	55,761			
187.80	16,469	55,926			
187.81	16,485	56,091			
187.82	16,500	56,256			
187.83	16,515	56,421			
187.84	16,530	56,586			
187.85	16,545	56,751			
187.86	16,560	56,917			
187.87	16,575	57,083			
187.88	16,590	57,248			
187.89	16,606	57,414			
187.90	16,621	57,581			
187.91	16,636	57,747			
187.92	16,651	57,913			
187.93	16,666	58,080			
187.94	16,681	58,247			
187.95	16,696	58,413			
187.96	16,711	58,580			
187.97	16,727	58,748			

Summary for Pond B-47: Basin #47

Inflow Area = 2.436 ac, 30.62% Impervious, Inflow Depth = 8.84" for Future 100 yr event
 Inflow = 22.08 cfs @ 12.17 hrs, Volume= 1.795 af
 Outflow = 8.62 cfs @ 12.40 hrs, Volume= 1.490 af, Atten= 61%, Lag= 13.5 min
 Primary = 8.62 cfs @ 12.40 hrs, Volume= 1.490 af
 Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 190.29' @ 12.40 hrs Surf.Area= 23,820 sf Storage= 36,470 cf

Plug-Flow detention time= 273.0 min calculated for 1.488 af (83% of inflow)
 Center-of-Mass det. time= 201.0 min (984.7 - 783.6)

Volume	Invert	Avail.Storage	Storage Description
#1	188.30'	80,305 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
188.30	0	0	0
189.00	21,318	7,461	7,461
190.00	23,252	22,285	29,746
191.00	25,242	24,247	53,993
192.00	27,382	26,312	80,305

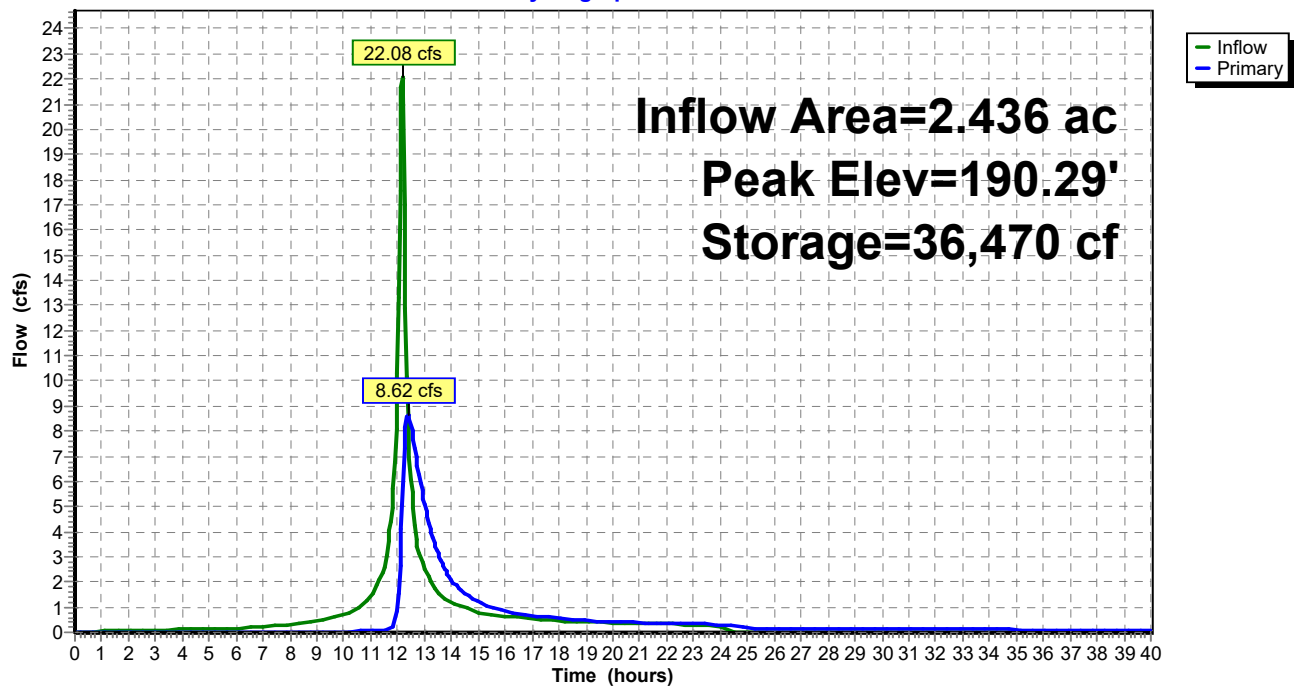
Device	Routing	Invert	Outlet Devices
#1	Primary	187.65'	18.0" Round Culvert L= 62.0' Ke= 0.500 Inlet / Outlet Invert= 187.65' / 184.00' S= 0.0589 ' / Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	188.84'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	189.52'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	190.51'	50.0' long + 3.0 ' / SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=8.61 cfs @ 12.40 hrs HW=190.29' (Free Discharge)

1=Culvert (Passes 8.61 cfs of 11.68 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.19 cfs @ 5.58 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 8.42 cfs @ 2.86 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-47: Basin #47

Hydrograph



Stage-Discharge for Pond B-47: Basin #47

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
188.30	0.00	188.82	0.00	189.34	0.10	189.86	2.71
188.31	0.00	188.83	0.00	189.35	0.10	189.87	2.82
188.32	0.00	188.84	0.00	189.36	0.11	189.88	2.93
188.33	0.00	188.85	0.00	189.37	0.11	189.89	3.05
188.34	0.00	188.86	0.00	189.38	0.11	189.90	3.17
188.35	0.00	188.87	0.00	189.39	0.11	189.91	3.28
188.36	0.00	188.88	0.00	189.40	0.11	189.92	3.40
188.37	0.00	188.89	0.00	189.41	0.11	189.93	3.53
188.38	0.00	188.90	0.01	189.42	0.11	189.94	3.65
188.39	0.00	188.91	0.01	189.43	0.11	189.95	3.77
188.40	0.00	188.92	0.01	189.44	0.12	189.96	3.90
188.41	0.00	188.93	0.01	189.45	0.12	189.97	4.03
188.42	0.00	188.94	0.02	189.46	0.12	189.98	4.15
188.43	0.00	188.95	0.02	189.47	0.12	189.99	4.28
188.44	0.00	188.96	0.02	189.48	0.12	190.00	4.41
188.45	0.00	188.97	0.03	189.49	0.12	190.01	4.55
188.46	0.00	188.98	0.03	189.50	0.12	190.02	4.68
188.47	0.00	188.99	0.03	189.51	0.12	190.03	4.81
188.48	0.00	189.00	0.04	189.52	0.12	190.04	4.95
188.49	0.00	189.01	0.04	189.53	0.14	190.05	5.09
188.50	0.00	189.02	0.05	189.54	0.16	190.06	5.22
188.51	0.00	189.03	0.05	189.55	0.20	190.07	5.36
188.52	0.00	189.04	0.05	189.56	0.23	190.08	5.50
188.53	0.00	189.05	0.05	189.57	0.28	190.09	5.64
188.54	0.00	189.06	0.06	189.58	0.32	190.10	5.79
188.55	0.00	189.07	0.06	189.59	0.37	190.11	5.93
188.56	0.00	189.08	0.06	189.60	0.43	190.12	6.07
188.57	0.00	189.09	0.06	189.61	0.49	190.13	6.22
188.58	0.00	189.10	0.06	189.62	0.55	190.14	6.37
188.59	0.00	189.11	0.07	189.63	0.61	190.15	6.51
188.60	0.00	189.12	0.07	189.64	0.68	190.16	6.66
188.61	0.00	189.13	0.07	189.65	0.75	190.17	6.81
188.62	0.00	189.14	0.07	189.66	0.82	190.18	6.96
188.63	0.00	189.15	0.07	189.67	0.89	190.19	7.12
188.64	0.00	189.16	0.08	189.68	0.97	190.20	7.27
188.65	0.00	189.17	0.08	189.69	1.05	190.21	7.42
188.66	0.00	189.18	0.08	189.70	1.13	190.22	7.58
188.67	0.00	189.19	0.08	189.71	1.22	190.23	7.73
188.68	0.00	189.20	0.08	189.72	1.30	190.24	7.89
188.69	0.00	189.21	0.08	189.73	1.39	190.25	8.05
188.70	0.00	189.22	0.09	189.74	1.48	190.26	8.21
188.71	0.00	189.23	0.09	189.75	1.57	190.27	8.37
188.72	0.00	189.24	0.09	189.76	1.67	190.28	8.53
188.73	0.00	189.25	0.09	189.77	1.76	190.29	8.69
188.74	0.00	189.26	0.09	189.78	1.86	190.30	8.85
188.75	0.00	189.27	0.09	189.79	1.96	190.31	9.01
188.76	0.00	189.28	0.10	189.80	2.06	190.32	9.18
188.77	0.00	189.29	0.10	189.81	2.17	190.33	9.34
188.78	0.00	189.30	0.10	189.82	2.27	190.34	9.51
188.79	0.00	189.31	0.10	189.83	2.38	190.35	9.67
188.80	0.00	189.32	0.10	189.84	2.49	190.36	9.84
188.81	0.00	189.33	0.10	189.85	2.59	190.37	10.01

Stage-Discharge for Pond B-47: Basin #47 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
190.38	10.18	190.90	44.37	191.42	136.19	191.94	258.14
190.39	10.35	190.91	45.71	191.43	138.28	191.95	260.82
190.40	10.52	190.92	47.10	191.44	140.38	191.96	263.51
190.41	10.69	190.93	48.52	191.45	142.49	191.97	266.20
190.42	10.86	190.94	49.97	191.46	144.62	191.98	268.91
190.43	11.04	190.95	51.44	191.47	146.76	191.99	271.64
190.44	11.21	190.96	52.93	191.48	148.91	192.00	274.37
190.45	11.39	190.97	54.46	191.49	151.07		
190.46	11.56	190.98	56.01	191.50	153.25		
190.47	11.74	190.99	57.58	191.51	155.44		
190.48	11.92	191.00	59.18	191.52	157.59		
190.49	12.09	191.01	60.81	191.53	159.74		
190.50	12.27	191.02	62.47	191.54	161.91		
190.51	12.36	191.03	64.15	191.55	164.09		
190.52	12.51	191.04	65.85	191.56	166.28		
190.53	12.75	191.05	67.59	191.57	168.49		
190.54	13.06	191.06	69.35	191.58	170.70		
190.55	13.41	191.07	71.14	191.59	172.92		
190.56	13.82	191.08	72.95	191.60	175.15		
190.57	14.26	191.09	74.79	191.61	177.39		
190.58	14.74	191.10	76.66	191.62	179.65		
190.59	15.25	191.11	78.56	191.63	181.91		
190.60	15.79	191.12	80.21	191.64	184.18		
190.61	16.37	191.13	81.88	191.65	186.47		
190.62	16.97	191.14	83.55	191.66	188.76		
190.63	17.60	191.15	85.25	191.67	191.07		
190.64	18.25	191.16	86.95	191.68	193.38		
190.65	18.93	191.17	88.67	191.69	195.71		
190.66	19.64	191.18	90.41	191.70	198.04		
190.67	20.37	191.19	92.15	191.71	200.38		
190.68	21.12	191.20	93.91	191.72	202.77		
190.69	21.89	191.21	95.68	191.73	205.17		
190.70	22.68	191.22	97.47	191.74	207.58		
190.71	23.50	191.23	99.26	191.75	210.01		
190.72	24.37	191.24	101.07	191.76	212.44		
190.73	25.27	191.25	102.89	191.77	214.88		
190.74	26.20	191.26	104.73	191.78	217.33		
190.75	27.15	191.27	106.57	191.79	219.80		
190.76	28.12	191.28	108.43	191.80	222.27		
190.77	29.13	191.29	110.30	191.81	224.76		
190.78	30.15	191.30	112.18	191.82	227.25		
190.79	31.20	191.31	114.08	191.83	229.76		
190.80	32.28	191.32	116.02	191.84	232.27		
190.81	33.38	191.33	117.98	191.85	234.80		
190.82	34.50	191.34	119.95	191.86	237.34		
190.83	35.65	191.35	121.94	191.87	239.88		
190.84	36.82	191.36	123.93	191.88	242.44		
190.85	38.02	191.37	125.94	191.89	245.01		
190.86	39.24	191.38	127.97	191.90	247.59		
190.87	40.49	191.39	130.00	191.91	250.18		
190.88	41.76	191.40	132.05	191.92	252.82		
190.89	43.05	191.41	134.12	191.93	255.48		

Stage-Area-Storage for Pond B-47: Basin #47

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.30	0	0	188.82	15,836	4,117
188.31	305	2	188.83	16,141	4,277
188.32	609	6	188.84	16,445	4,440
188.33	914	14	188.85	16,750	4,606
188.34	1,218	24	188.86	17,054	4,775
188.35	1,523	38	188.87	17,359	4,947
188.36	1,827	55	188.88	17,663	5,122
188.37	2,132	75	188.89	17,968	5,301
188.38	2,436	97	188.90	18,273	5,482
188.39	2,741	123	188.91	18,577	5,666
188.40	3,045	152	188.92	18,882	5,853
188.41	3,350	184	188.93	19,186	6,044
188.42	3,655	219	188.94	19,491	6,237
188.43	3,959	257	188.95	19,795	6,433
188.44	4,264	298	188.96	20,100	6,633
188.45	4,568	343	188.97	20,404	6,835
188.46	4,873	390	188.98	20,709	7,041
188.47	5,177	440	188.99	21,013	7,250
188.48	5,482	493	189.00	21,318	7,461
188.49	5,786	550	189.01	21,337	7,675
188.50	6,091	609	189.02	21,357	7,888
188.51	6,395	672	189.03	21,376	8,102
188.52	6,700	737	189.04	21,395	8,316
188.53	7,004	806	189.05	21,415	8,530
188.54	7,309	877	189.06	21,434	8,744
188.55	7,614	952	189.07	21,453	8,958
188.56	7,918	1,029	189.08	21,473	9,173
188.57	8,223	1,110	189.09	21,492	9,388
188.58	8,527	1,194	189.10	21,511	9,603
188.59	8,832	1,281	189.11	21,531	9,818
188.60	9,136	1,370	189.12	21,550	10,033
188.61	9,441	1,463	189.13	21,569	10,249
188.62	9,745	1,559	189.14	21,589	10,465
188.63	10,050	1,658	189.15	21,608	10,681
188.64	10,354	1,760	189.16	21,627	10,897
188.65	10,659	1,865	189.17	21,647	11,113
188.66	10,964	1,973	189.18	21,666	11,330
188.67	11,268	2,085	189.19	21,685	11,547
188.68	11,573	2,199	189.20	21,705	11,764
188.69	11,877	2,316	189.21	21,724	11,981
188.70	12,182	2,436	189.22	21,743	12,198
188.71	12,486	2,560	189.23	21,763	12,416
188.72	12,791	2,686	189.24	21,782	12,633
188.73	13,095	2,815	189.25	21,802	12,851
188.74	13,400	2,948	189.26	21,821	13,069
188.75	13,704	3,083	189.27	21,840	13,288
188.76	14,009	3,222	189.28	21,860	13,506
188.77	14,314	3,364	189.29	21,879	13,725
188.78	14,618	3,508	189.30	21,898	13,944
188.79	14,923	3,656	189.31	21,918	14,163
188.80	15,227	3,807	189.32	21,937	14,382
188.81	15,532	3,961	189.33	21,956	14,602

Stage-Area-Storage for Pond B-47: Basin #47 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.34	21,976	14,821	189.86	22,981	26,510
189.35	21,995	15,041	189.87	23,001	26,740
189.36	22,014	15,261	189.88	23,020	26,970
189.37	22,034	15,481	189.89	23,039	27,200
189.38	22,053	15,702	189.90	23,059	27,431
189.39	22,072	15,922	189.91	23,078	27,661
189.40	22,092	16,143	189.92	23,097	27,892
189.41	22,111	16,364	189.93	23,117	28,123
189.42	22,130	16,585	189.94	23,136	28,355
189.43	22,150	16,807	189.95	23,155	28,586
189.44	22,169	17,028	189.96	23,175	28,818
189.45	22,188	17,250	189.97	23,194	29,050
189.46	22,208	17,472	189.98	23,213	29,282
189.47	22,227	17,694	189.99	23,233	29,514
189.48	22,246	17,917	190.00	23,252	29,746
189.49	22,266	18,139	190.01	23,272	29,979
189.50	22,285	18,362	190.02	23,292	30,212
189.51	22,304	18,585	190.03	23,312	30,445
189.52	22,324	18,808	190.04	23,332	30,678
189.53	22,343	19,031	190.05	23,352	30,911
189.54	22,362	19,255	190.06	23,371	31,145
189.55	22,382	19,479	190.07	23,391	31,379
189.56	22,401	19,703	190.08	23,411	31,613
189.57	22,420	19,927	190.09	23,431	31,847
189.58	22,440	20,151	190.10	23,451	32,081
189.59	22,459	20,376	190.11	23,471	32,316
189.60	22,478	20,600	190.12	23,491	32,551
189.61	22,498	20,825	190.13	23,511	32,786
189.62	22,517	21,050	190.14	23,531	33,021
189.63	22,536	21,275	190.15	23,551	33,256
189.64	22,556	21,501	190.16	23,570	33,492
189.65	22,575	21,727	190.17	23,590	33,728
189.66	22,594	21,952	190.18	23,610	33,964
189.67	22,614	22,178	190.19	23,630	34,200
189.68	22,633	22,405	190.20	23,650	34,437
189.69	22,652	22,631	190.21	23,670	34,673
189.70	22,672	22,858	190.22	23,690	34,910
189.71	22,691	23,085	190.23	23,710	35,147
189.72	22,710	23,312	190.24	23,730	35,384
189.73	22,730	23,539	190.25	23,750	35,621
189.74	22,749	23,766	190.26	23,769	35,859
189.75	22,769	23,994	190.27	23,789	36,097
189.76	22,788	24,222	190.28	23,809	36,335
189.77	22,807	24,449	190.29	23,829	36,573
189.78	22,827	24,678	190.30	23,849	36,811
189.79	22,846	24,906	190.31	23,869	37,050
189.80	22,865	25,135	190.32	23,889	37,289
189.81	22,885	25,363	190.33	23,909	37,528
189.82	22,904	25,592	190.34	23,929	37,767
189.83	22,923	25,821	190.35	23,949	38,006
189.84	22,943	26,051	190.36	23,968	38,246
189.85	22,962	26,280	190.37	23,988	38,486

Stage-Area-Storage for Pond B-47: Basin #47 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.38	24,008	38,726	190.90	25,043	51,479
190.39	24,028	38,966	190.91	25,063	51,730
190.40	24,048	39,206	190.92	25,083	51,980
190.41	24,068	39,447	190.93	25,103	52,231
190.42	24,088	39,688	190.94	25,123	52,482
190.43	24,108	39,929	190.95	25,143	52,734
190.44	24,128	40,170	190.96	25,162	52,985
190.45	24,148	40,411	190.97	25,182	53,237
190.46	24,167	40,653	190.98	25,202	53,489
190.47	24,187	40,895	190.99	25,222	53,741
190.48	24,207	41,137	191.00	25,242	53,993
190.49	24,227	41,379	191.01	25,263	54,246
190.50	24,247	41,621	191.02	25,285	54,499
190.51	24,267	41,864	191.03	25,306	54,752
190.52	24,287	42,106	191.04	25,328	55,005
190.53	24,307	42,349	191.05	25,349	55,258
190.54	24,327	42,593	191.06	25,370	55,512
190.55	24,347	42,836	191.07	25,392	55,765
190.56	24,366	43,079	191.08	25,413	56,020
190.57	24,386	43,323	191.09	25,435	56,274
190.58	24,406	43,567	191.10	25,456	56,528
190.59	24,426	43,811	191.11	25,477	56,783
190.60	24,446	44,056	191.12	25,499	57,038
190.61	24,466	44,300	191.13	25,520	57,293
190.62	24,486	44,545	191.14	25,542	57,548
190.63	24,506	44,790	191.15	25,563	57,804
190.64	24,526	45,035	191.16	25,584	58,059
190.65	24,546	45,280	191.17	25,606	58,315
190.66	24,565	45,526	191.18	25,627	58,572
190.67	24,585	45,772	191.19	25,649	58,828
190.68	24,605	46,018	191.20	25,670	59,085
190.69	24,625	46,264	191.21	25,691	59,341
190.70	24,645	46,510	191.22	25,713	59,598
190.71	24,665	46,757	191.23	25,734	59,856
190.72	24,685	47,004	191.24	25,756	60,113
190.73	24,705	47,250	191.25	25,777	60,371
190.74	24,725	47,498	191.26	25,798	60,629
190.75	24,745	47,745	191.27	25,820	60,887
190.76	24,764	47,993	191.28	25,841	61,145
190.77	24,784	48,240	191.29	25,863	61,403
190.78	24,804	48,488	191.30	25,884	61,662
190.79	24,824	48,736	191.31	25,905	61,921
190.80	24,844	48,985	191.32	25,927	62,180
190.81	24,864	49,233	191.33	25,948	62,440
190.82	24,884	49,482	191.34	25,970	62,699
190.83	24,904	49,731	191.35	25,991	62,959
190.84	24,924	49,980	191.36	26,012	63,219
190.85	24,944	50,229	191.37	26,034	63,479
190.86	24,963	50,479	191.38	26,055	63,740
190.87	24,983	50,729	191.39	26,077	64,000
190.88	25,003	50,979	191.40	26,098	64,261
190.89	25,023	51,229	191.41	26,119	64,522

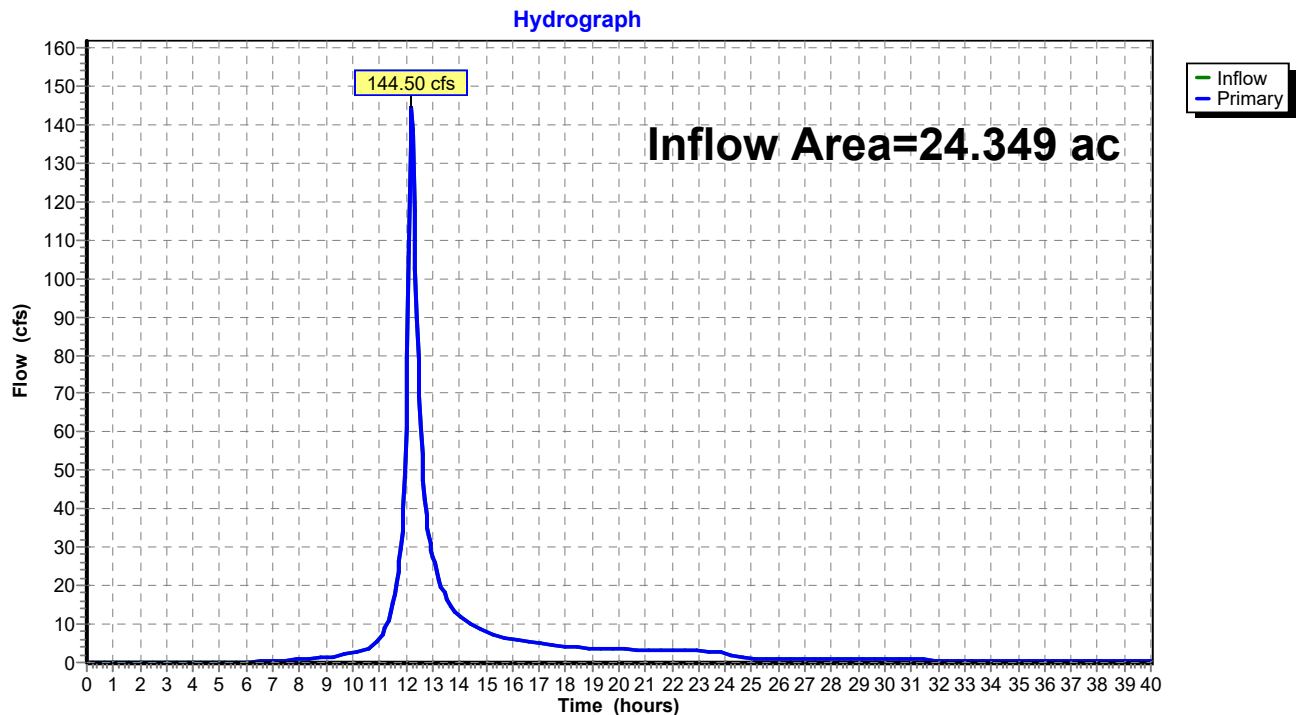
Stage-Area-Storage for Pond B-47: Basin #47 (continued)

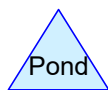
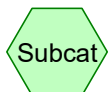
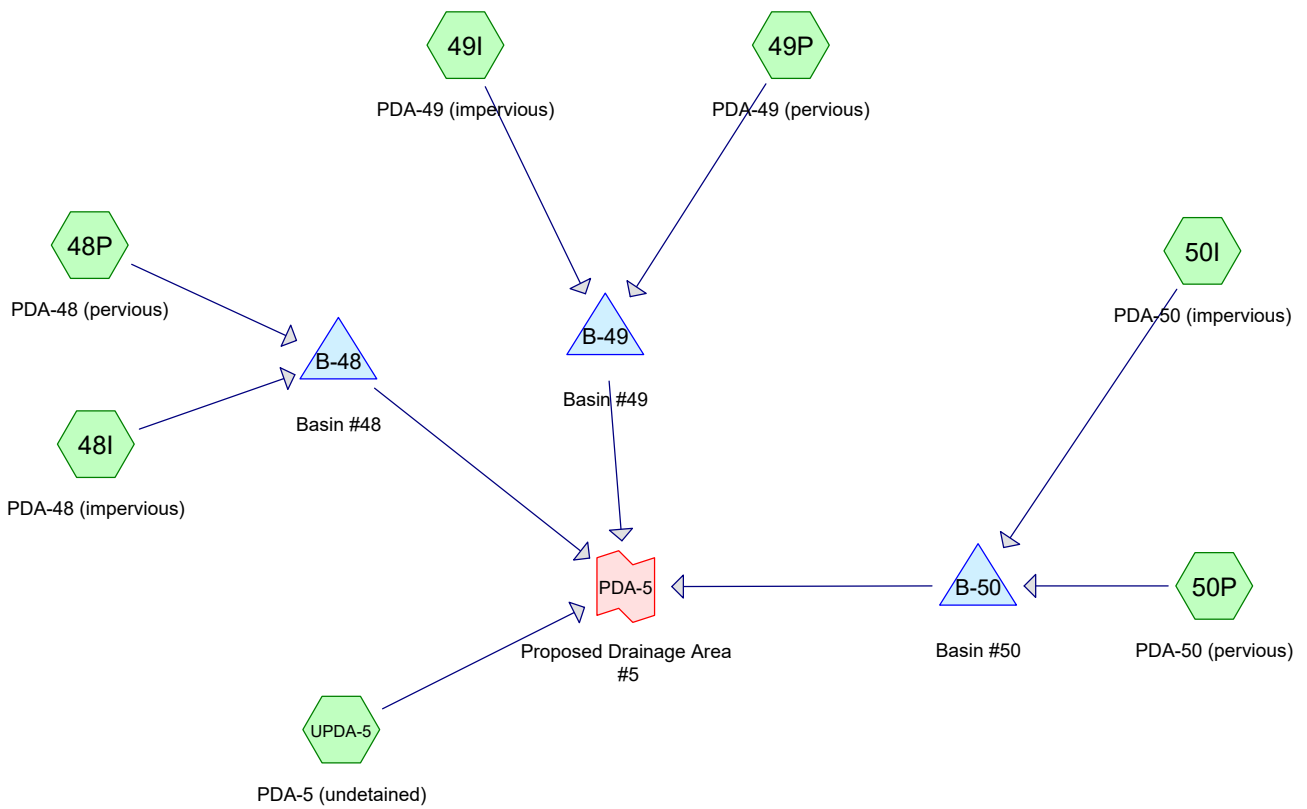
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.42	26,141	64,784	191.94	27,254	78,666
191.43	26,162	65,045	191.95	27,275	78,939
191.44	26,184	65,307	191.96	27,296	79,212
191.45	26,205	65,569	191.97	27,318	79,485
191.46	26,226	65,831	191.98	27,339	79,758
191.47	26,248	66,093	191.99	27,361	80,032
191.48	26,269	66,356	192.00	27,382	80,305
191.49	26,291	66,619			
191.50	26,312	66,882			
191.51	26,333	67,145			
191.52	26,355	67,408			
191.53	26,376	67,672			
191.54	26,398	67,936			
191.55	26,419	68,200			
191.56	26,440	68,464			
191.57	26,462	68,729			
191.58	26,483	68,994			
191.59	26,505	69,259			
191.60	26,526	69,524			
191.61	26,547	69,789			
191.62	26,569	70,055			
191.63	26,590	70,320			
191.64	26,612	70,586			
191.65	26,633	70,853			
191.66	26,654	71,119			
191.67	26,676	71,386			
191.68	26,697	71,653			
191.69	26,719	71,920			
191.70	26,740	72,187			
191.71	26,761	72,455			
191.72	26,783	72,722			
191.73	26,804	72,990			
191.74	26,826	73,258			
191.75	26,847	73,527			
191.76	26,868	73,795			
191.77	26,890	74,064			
191.78	26,911	74,333			
191.79	26,933	74,602			
191.80	26,954	74,872			
191.81	26,975	75,141			
191.82	26,997	75,411			
191.83	27,018	75,681			
191.84	27,040	75,952			
191.85	27,061	76,222			
191.86	27,082	76,493			
191.87	27,104	76,764			
191.88	27,125	77,035			
191.89	27,147	77,306			
191.90	27,168	77,578			
191.91	27,189	77,850			
191.92	27,211	78,122			
191.93	27,232	78,394			

Summary for Link PDA-4: Proposed Drainage Area #4

Inflow Area = 24.349 ac, 23.20% Impervious, Inflow Depth > 7.22" for Future 100 yr event
Inflow = 144.50 cfs @ 12.21 hrs, Volume= 14.652 af
Primary = 144.50 cfs @ 12.21 hrs, Volume= 14.652 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-2

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-4: Proposed Drainage Area #4



Routing Diagram for 2025-04-04 Proposed- 081391_5
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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
4.922	74	>75% Grass cover, Good, HSG C (48P, 49P, 50P, UPDA-5)
0.126	98	Concrete, HSG C (48I, 49I, 50I)
0.960	98	Pavement, HSG C (48I, 49I, 50I)
1.265	98	Roof, HSG C (48I, 49I, 50I)
7.273	82	TOTAL AREA

Summary for Subcatchment 48I: PDA-48 (impervious)

Runoff = 2.35 cfs @ 12.17 hrs, Volume= 0.202 af, Depth= 3.12"
 Routed to Pond B-48 : Basin #48

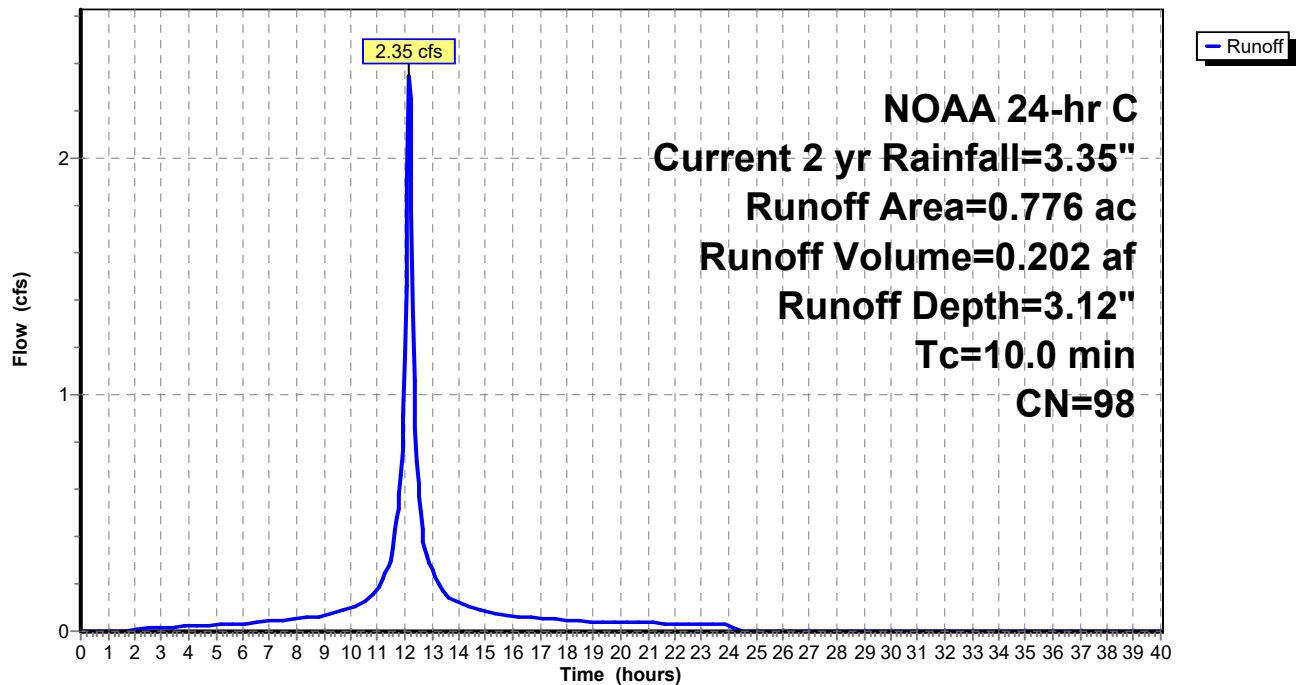
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
* 0.235	98	Pavement, HSG C
* 0.522	98	Roof, HSG C
* 0.019	98	Concrete, HSG C
0.776	98	Weighted Average
0.776		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 48I: PDA-48 (impervious)

Hydrograph



Summary for Subcatchment 48P: PDA-48 (pervious)

Runoff = 1.82 cfs @ 12.18 hrs, Volume= 0.141 af, Depth= 1.14"
 Routed to Pond B-48 : Basin #48

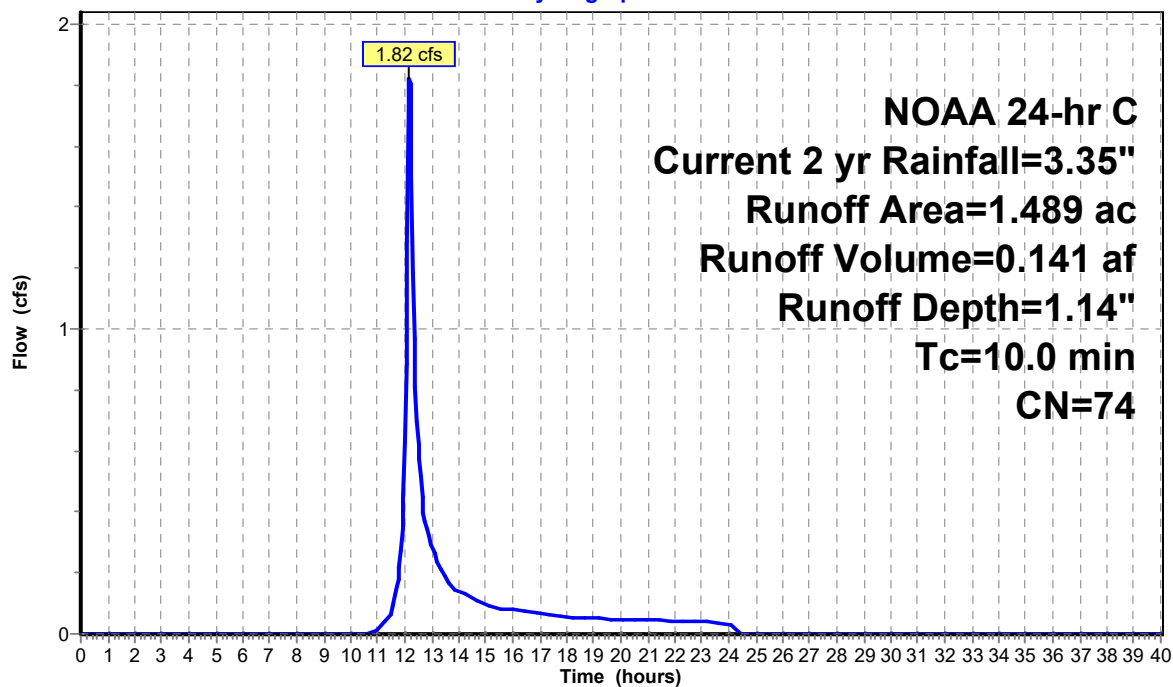
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.489	74	>75% Grass cover, Good, HSG C
1.489		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 48P: PDA-48 (pervious)

Hydrograph



Summary for Subcatchment 49I: PDA-49 (impervious)

Runoff = 2.77 cfs @ 12.17 hrs, Volume= 0.237 af, Depth= 3.12"
 Routed to Pond B-49 : Basin #49

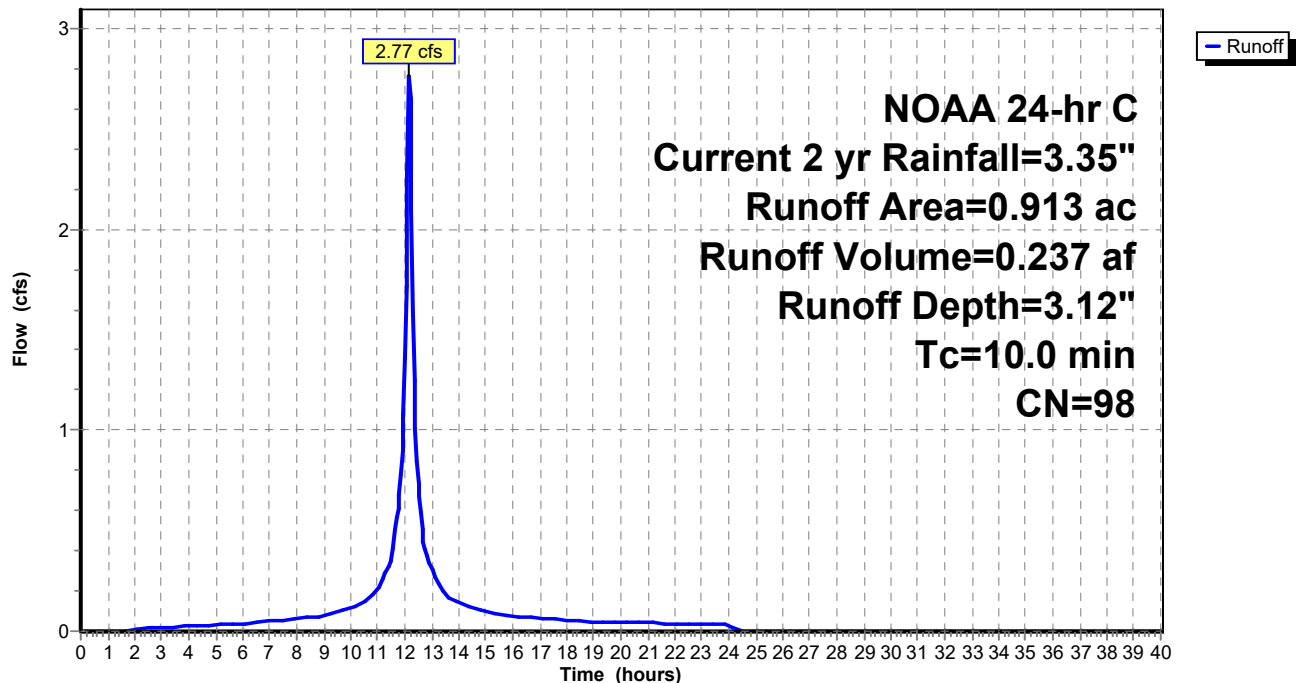
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
* 0.434	98	Pavement, HSG C
* 0.418	98	Roof, HSG C
* 0.061	98	Concrete, HSG C
0.913	98	Weighted Average
0.913		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 49I: PDA-49 (impervious)

Hydrograph



Summary for Subcatchment 49P: PDA-49 (pervious)

Runoff = 1.44 cfs @ 12.18 hrs, Volume= 0.112 af, Depth= 1.14"
 Routed to Pond B-49 : Basin #49

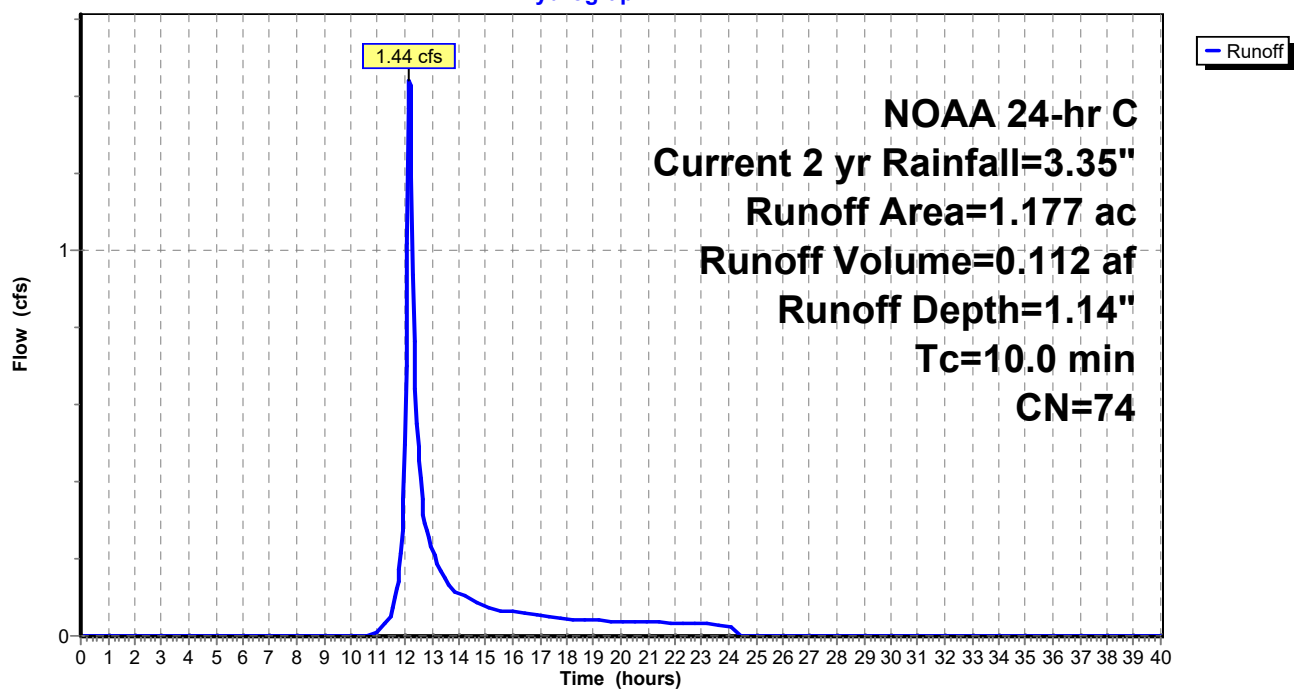
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.177	74	>75% Grass cover, Good, HSG C
1.177		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 49P: PDA-49 (pervious)

Hydrograph



Summary for Subcatchment 50I: PDA-50 (impervious)

Runoff = 2.01 cfs @ 12.17 hrs, Volume= 0.172 af, Depth= 3.12"
 Routed to Pond B-50 : Basin #50

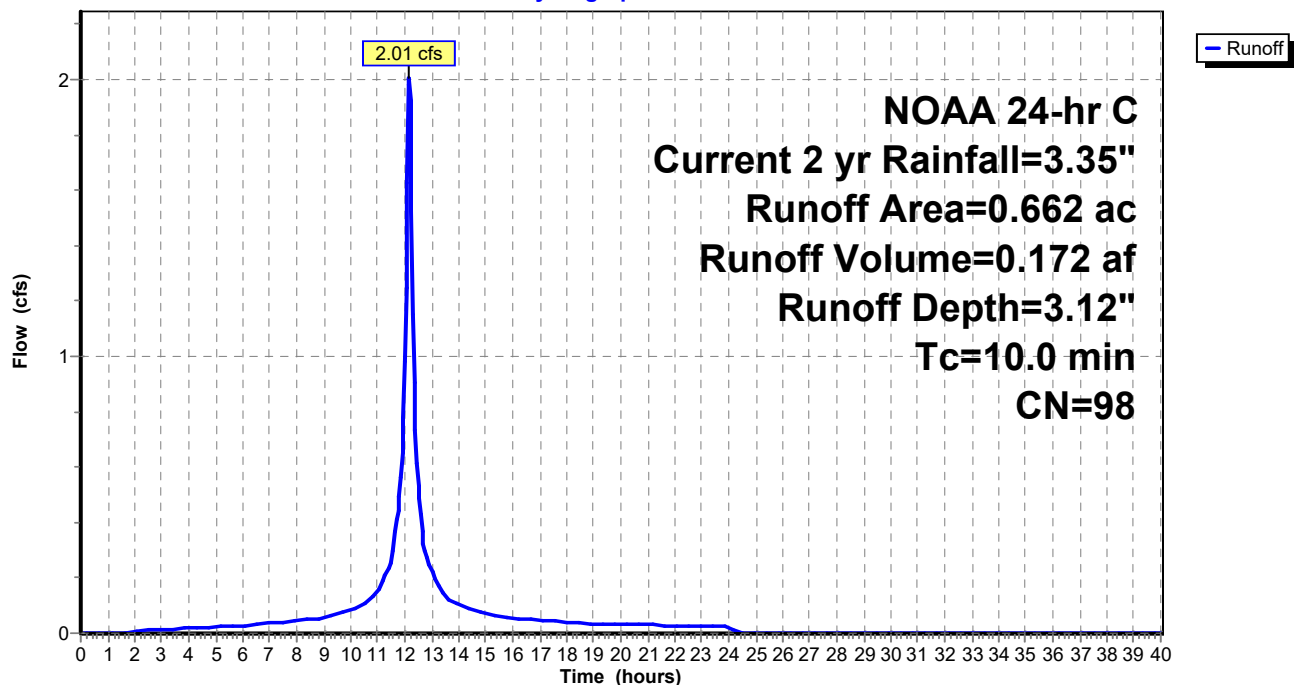
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
* 0.291	98	Pavement, HSG C
* 0.325	98	Roof, HSG C
* 0.046	98	Concrete, HSG C
0.662	98	Weighted Average
0.662		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 50I: PDA-50 (impervious)

Hydrograph



Summary for Subcatchment 50P: PDA-50 (pervious)

Runoff = 1.96 cfs @ 12.18 hrs, Volume= 0.152 af, Depth= 1.14"
 Routed to Pond B-50 : Basin #50

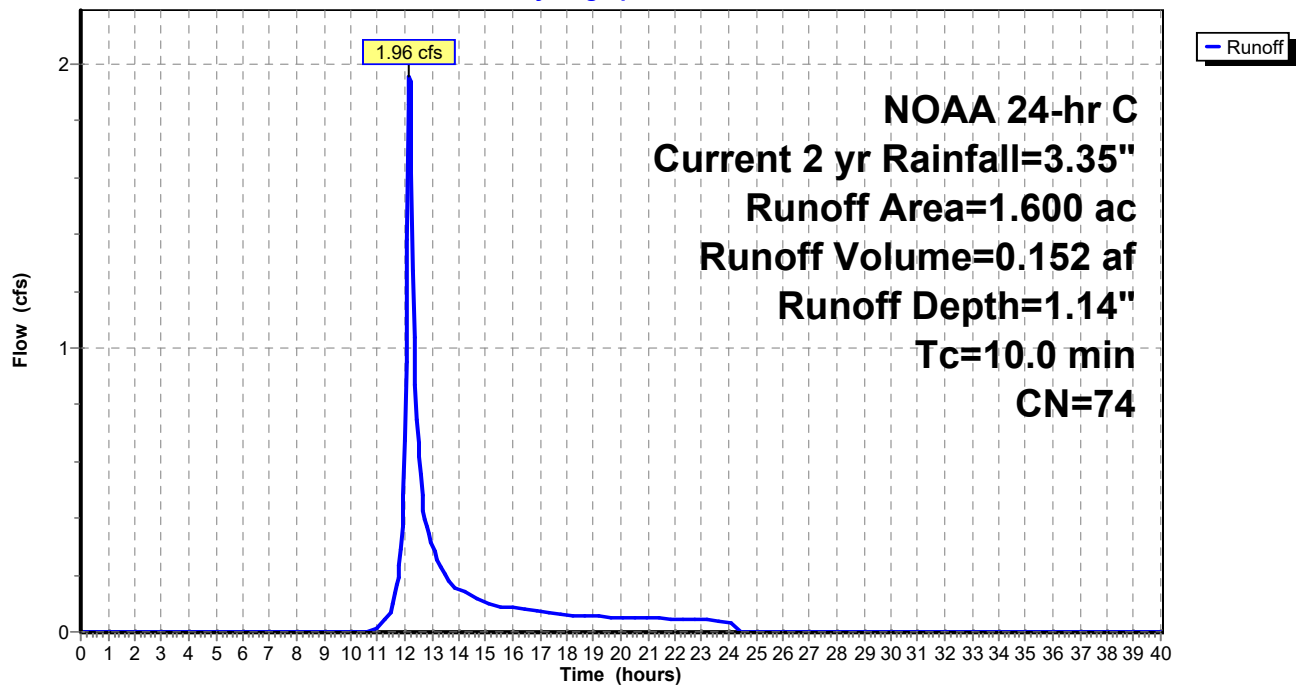
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.600	74	>75% Grass cover, Good, HSG C
1.600		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 50P: PDA-50 (pervious)

Hydrograph



Summary for Subcatchment UPDA-5: PDA-5 (undetained)

Runoff = 0.80 cfs @ 12.18 hrs, Volume= 0.062 af, Depth= 1.14"
 Routed to Link PDA-5 : Proposed Drainage Area #5

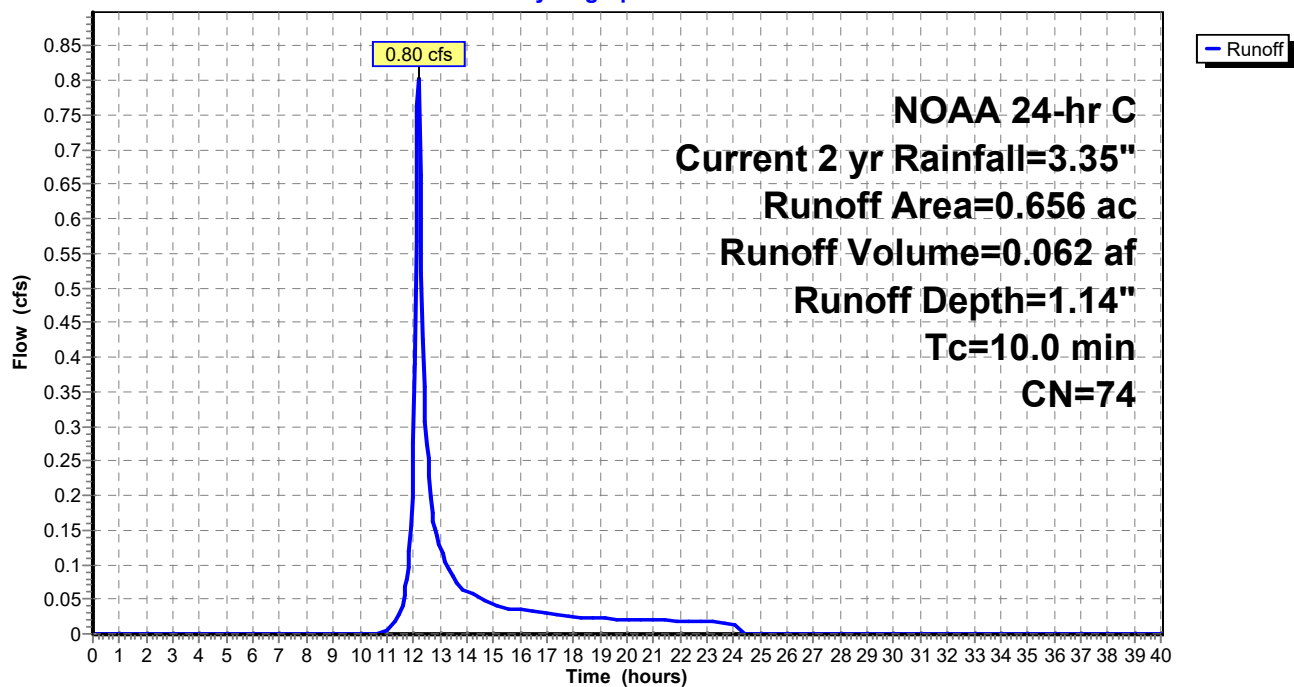
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.656	74	>75% Grass cover, Good, HSG C
0.656		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment UPDA-5: PDA-5 (undetained)

Hydrograph



Summary for Pond B-48: Basin #48

Inflow Area = 2.265 ac, 34.26% Impervious, Inflow Depth = 1.82" for Current 2 yr event
 Inflow = 4.15 cfs @ 12.18 hrs, Volume= 0.343 af
 Outflow = 0.13 cfs @ 16.68 hrs, Volume= 0.224 af, Atten= 97%, Lag= 270.1 min
 Primary = 0.13 cfs @ 16.68 hrs, Volume= 0.224 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 192.12' @ 16.68 hrs Surf.Area= 10,251 sf Storage= 10,682 cf

Plug-Flow detention time= 744.5 min calculated for 0.224 af (65% of inflow)
 Center-of-Mass det. time= 633.0 min (1,437.1 - 804.0)

Volume	Invert	Avail.Storage	Storage Description
#1	191.00'	32,287 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.00	8,869	0	0
192.00	10,100	9,485	9,485
193.00	11,387	10,744	20,228
194.00	12,731	12,059	32,287

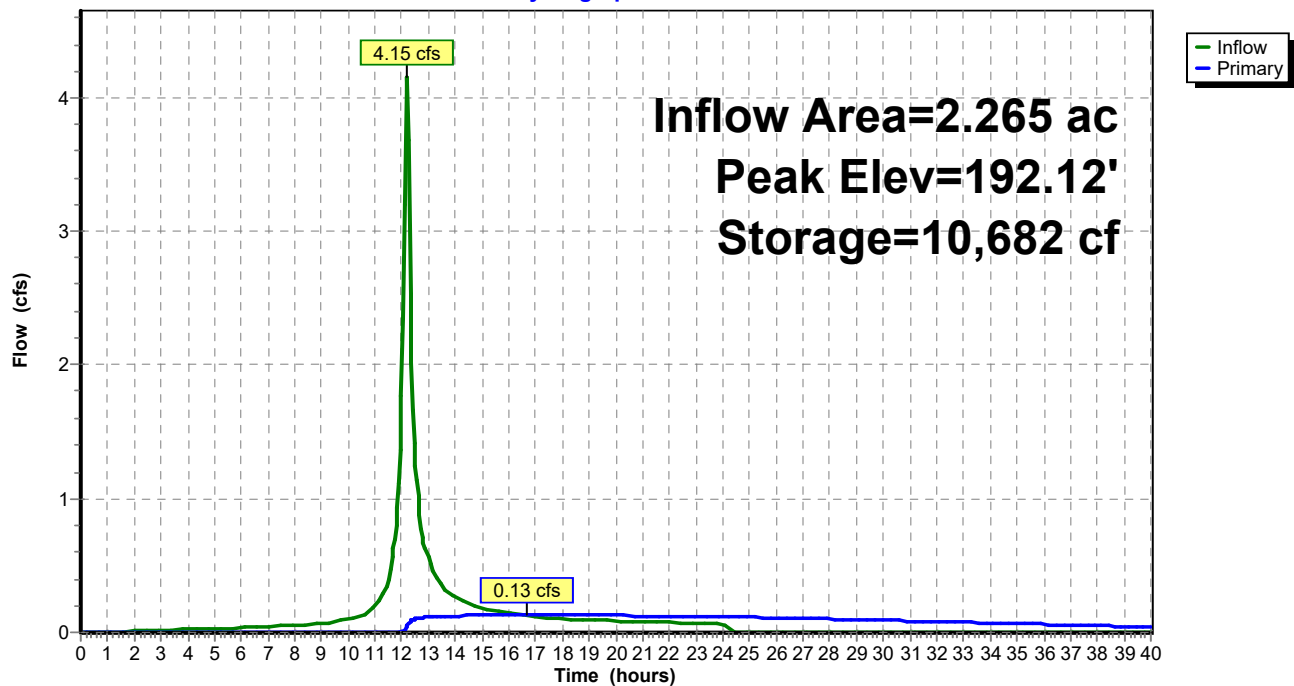
Device	Routing	Invert	Outlet Devices
#1	Primary	191.00'	18.0" Round Culvert L= 185.0' Ke= 0.500 Inlet / Outlet Invert= 191.00' / 188.45' S= 0.0138 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	191.40'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	193.99'	50.0' long + 3.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.13 cfs @ 16.68 hrs HW=192.12' (Free Discharge)

1=Culvert (Passes 0.13 cfs of 5.08 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.13 cfs @ 3.77 fps)
 3=Sharp-Crested Rectangular Weir(Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs)

Pond B-48: Basin #48

Hydrograph



Stage-Discharge for Pond B-48: Basin #48

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.00	0.00	191.52	0.02	192.04	0.12	192.56	0.17
191.01	0.00	191.53	0.03	192.05	0.12	192.57	0.17
191.02	0.00	191.54	0.03	192.06	0.12	192.58	0.17
191.03	0.00	191.55	0.03	192.07	0.12	192.59	0.17
191.04	0.00	191.56	0.04	192.08	0.12	192.60	0.17
191.05	0.00	191.57	0.04	192.09	0.13	192.61	0.17
191.06	0.00	191.58	0.05	192.10	0.13	192.62	0.17
191.07	0.00	191.59	0.05	192.11	0.13	192.63	0.17
191.08	0.00	191.60	0.05	192.12	0.13	192.64	0.17
191.09	0.00	191.61	0.05	192.13	0.13	192.65	0.18
191.10	0.00	191.62	0.06	192.14	0.13	192.66	0.18
191.11	0.00	191.63	0.06	192.15	0.13	192.67	0.18
191.12	0.00	191.64	0.06	192.16	0.13	192.68	0.18
191.13	0.00	191.65	0.06	192.17	0.13	192.69	0.18
191.14	0.00	191.66	0.06	192.18	0.13	192.70	0.18
191.15	0.00	191.67	0.07	192.19	0.14	192.71	0.18
191.16	0.00	191.68	0.07	192.20	0.14	192.72	0.18
191.17	0.00	191.69	0.07	192.21	0.14	192.73	0.18
191.18	0.00	191.70	0.07	192.22	0.14	192.74	0.18
191.19	0.00	191.71	0.07	192.23	0.14	192.75	0.18
191.20	0.00	191.72	0.08	192.24	0.14	192.76	0.18
191.21	0.00	191.73	0.08	192.25	0.14	192.77	0.18
191.22	0.00	191.74	0.08	192.26	0.14	192.78	0.19
191.23	0.00	191.75	0.08	192.27	0.14	192.79	0.19
191.24	0.00	191.76	0.08	192.28	0.14	192.80	0.19
191.25	0.00	191.77	0.08	192.29	0.15	192.81	0.19
191.26	0.00	191.78	0.09	192.30	0.15	192.82	0.19
191.27	0.00	191.79	0.09	192.31	0.15	192.83	0.19
191.28	0.00	191.80	0.09	192.32	0.15	192.84	0.19
191.29	0.00	191.81	0.09	192.33	0.15	192.85	0.19
191.30	0.00	191.82	0.09	192.34	0.15	192.86	0.19
191.31	0.00	191.83	0.09	192.35	0.15	192.87	0.19
191.32	0.00	191.84	0.10	192.36	0.15	192.88	0.19
191.33	0.00	191.85	0.10	192.37	0.15	192.89	0.19
191.34	0.00	191.86	0.10	192.38	0.15	192.90	0.19
191.35	0.00	191.87	0.10	192.39	0.15	192.91	0.19
191.36	0.00	191.88	0.10	192.40	0.16	192.92	0.20
191.37	0.00	191.89	0.10	192.41	0.16	192.93	0.20
191.38	0.00	191.90	0.10	192.42	0.16	192.94	0.20
191.39	0.00	191.91	0.10	192.43	0.16	192.95	0.20
191.40	0.00	191.92	0.11	192.44	0.16	192.96	0.20
191.41	0.00	191.93	0.11	192.45	0.16	192.97	0.20
191.42	0.00	191.94	0.11	192.46	0.16	192.98	0.20
191.43	0.00	191.95	0.11	192.47	0.16	192.99	0.20
191.44	0.00	191.96	0.11	192.48	0.16	193.00	0.20
191.45	0.00	191.97	0.11	192.49	0.16	193.01	0.21
191.46	0.01	191.98	0.11	192.50	0.16	193.02	0.24
191.47	0.01	191.99	0.11	192.51	0.16	193.03	0.27
191.48	0.01	192.00	0.12	192.52	0.17	193.04	0.31
191.49	0.01	192.01	0.12	192.53	0.17	193.05	0.35
191.50	0.02	192.02	0.12	192.54	0.17	193.06	0.40
191.51	0.02	192.03	0.12	192.55	0.17	193.07	0.45

Stage-Discharge for Pond B-48: Basin #48 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.08	0.50	193.60	6.13
193.09	0.56	193.61	6.28
193.10	0.62	193.62	6.43
193.11	0.68	193.63	6.57
193.12	0.75	193.64	6.72
193.13	0.82	193.65	6.87
193.14	0.89	193.66	7.02
193.15	0.96	193.67	7.17
193.16	1.04	193.68	7.33
193.17	1.12	193.69	7.48
193.18	1.20	193.70	7.64
193.19	1.29	193.71	7.79
193.20	1.37	193.72	7.95
193.21	1.46	193.73	8.11
193.22	1.55	193.74	8.26
193.23	1.64	193.75	8.42
193.24	1.74	193.76	8.58
193.25	1.83	193.77	8.74
193.26	1.93	193.78	8.91
193.27	2.03	193.79	9.07
193.28	2.13	193.80	9.23
193.29	2.23	193.81	9.40
193.30	2.34	193.82	9.56
193.31	2.44	193.83	9.73
193.32	2.55	193.84	9.90
193.33	2.66	193.85	10.07
193.34	2.77	193.86	10.24
193.35	2.88	193.87	10.40
193.36	3.00	193.88	10.58
193.37	3.11	193.89	10.75
193.38	3.23	193.90	10.92
193.39	3.35	193.91	11.09
193.40	3.47	193.92	11.27
193.41	3.59	193.93	11.44
193.42	3.71	193.94	11.62
193.43	3.84	193.95	11.79
193.44	3.96	193.96	11.97
193.45	4.09	193.97	12.15
193.46	4.22	193.98	12.33
193.47	4.35	193.99	12.51
193.48	4.48	194.00	12.81
193.49	4.61		
193.50	4.74		
193.51	4.87		
193.52	5.01		
193.53	5.15		
193.54	5.28		
193.55	5.42		
193.56	5.56		
193.57	5.70		
193.58	5.85		
193.59	5.99		

Stage-Area-Storage for Pond B-48: Basin #48

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.00	8,869	0	191.52	9,509	4,778
191.01	8,881	89	191.53	9,521	4,873
191.02	8,894	178	191.54	9,534	4,969
191.03	8,906	267	191.55	9,546	5,064
191.04	8,918	356	191.56	9,558	5,160
191.05	8,931	445	191.57	9,571	5,255
191.06	8,943	534	191.58	9,583	5,351
191.07	8,955	624	191.59	9,595	5,447
191.08	8,967	713	191.60	9,608	5,543
191.09	8,980	803	191.61	9,620	5,639
191.10	8,992	893	191.62	9,632	5,735
191.11	9,004	983	191.63	9,645	5,832
191.12	9,017	1,073	191.64	9,657	5,928
191.13	9,029	1,163	191.65	9,669	6,025
191.14	9,041	1,254	191.66	9,681	6,122
191.15	9,054	1,344	191.67	9,694	6,219
191.16	9,066	1,435	191.68	9,706	6,316
191.17	9,078	1,526	191.69	9,718	6,413
191.18	9,091	1,616	191.70	9,731	6,510
191.19	9,103	1,707	191.71	9,743	6,607
191.20	9,115	1,798	191.72	9,755	6,705
191.21	9,128	1,890	191.73	9,768	6,802
191.22	9,140	1,981	191.74	9,780	6,900
191.23	9,152	2,072	191.75	9,792	6,998
191.24	9,164	2,164	191.76	9,805	7,096
191.25	9,177	2,256	191.77	9,817	7,194
191.26	9,189	2,348	191.78	9,829	7,292
191.27	9,201	2,439	191.79	9,841	7,391
191.28	9,214	2,532	191.80	9,854	7,489
191.29	9,226	2,624	191.81	9,866	7,588
191.30	9,238	2,716	191.82	9,878	7,686
191.31	9,251	2,809	191.83	9,891	7,785
191.32	9,263	2,901	191.84	9,903	7,884
191.33	9,275	2,994	191.85	9,915	7,983
191.34	9,288	3,087	191.86	9,928	8,083
191.35	9,300	3,180	191.87	9,940	8,182
191.36	9,312	3,273	191.88	9,952	8,281
191.37	9,324	3,366	191.89	9,965	8,381
191.38	9,337	3,459	191.90	9,977	8,481
191.39	9,349	3,553	191.91	9,989	8,580
191.40	9,361	3,646	191.92	10,002	8,680
191.41	9,374	3,740	191.93	10,014	8,781
191.42	9,386	3,834	191.94	10,026	8,881
191.43	9,398	3,927	191.95	10,038	8,981
191.44	9,411	4,022	191.96	10,051	9,081
191.45	9,423	4,116	191.97	10,063	9,182
191.46	9,435	4,210	191.98	10,075	9,283
191.47	9,448	4,304	191.99	10,088	9,384
191.48	9,460	4,399	192.00	10,100	9,485
191.49	9,472	4,494	192.01	10,113	9,586
191.50	9,485	4,588	192.02	10,126	9,687
191.51	9,497	4,683	192.03	10,139	9,788

Stage-Area-Storage for Pond B-48: Basin #48 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.04	10,151	9,890	192.56	10,821	15,342
192.05	10,164	9,991	192.57	10,834	15,451
192.06	10,177	10,093	192.58	10,846	15,559
192.07	10,190	10,195	192.59	10,859	15,668
192.08	10,203	10,297	192.60	10,872	15,776
192.09	10,216	10,399	192.61	10,885	15,885
192.10	10,229	10,501	192.62	10,898	15,994
192.11	10,242	10,603	192.63	10,911	16,103
192.12	10,254	10,706	192.64	10,924	16,212
192.13	10,267	10,808	192.65	10,937	16,321
192.14	10,280	10,911	192.66	10,949	16,431
192.15	10,293	11,014	192.67	10,962	16,540
192.16	10,306	11,117	192.68	10,975	16,650
192.17	10,319	11,220	192.69	10,988	16,760
192.18	10,332	11,323	192.70	11,001	16,870
192.19	10,345	11,427	192.71	11,014	16,980
192.20	10,357	11,530	192.72	11,027	17,090
192.21	10,370	11,634	192.73	11,040	17,200
192.22	10,383	11,738	192.74	11,052	17,311
192.23	10,396	11,842	192.75	11,065	17,421
192.24	10,409	11,946	192.76	11,078	17,532
192.25	10,422	12,050	192.77	11,091	17,643
192.26	10,435	12,154	192.78	11,104	17,754
192.27	10,447	12,258	192.79	11,117	17,865
192.28	10,460	12,363	192.80	11,130	17,976
192.29	10,473	12,468	192.81	11,142	18,088
192.30	10,486	12,572	192.82	11,155	18,199
192.31	10,499	12,677	192.83	11,168	18,311
192.32	10,512	12,782	192.84	11,181	18,423
192.33	10,525	12,888	192.85	11,194	18,534
192.34	10,538	12,993	192.86	11,207	18,646
192.35	10,550	13,098	192.87	11,220	18,759
192.36	10,563	13,204	192.88	11,233	18,871
192.37	10,576	13,310	192.89	11,245	18,983
192.38	10,589	13,415	192.90	11,258	19,096
192.39	10,602	13,521	192.91	11,271	19,208
192.40	10,615	13,627	192.92	11,284	19,321
192.41	10,628	13,734	192.93	11,297	19,434
192.42	10,641	13,840	192.94	11,310	19,547
192.43	10,653	13,946	192.95	11,323	19,660
192.44	10,666	14,053	192.96	11,336	19,774
192.45	10,679	14,160	192.97	11,348	19,887
192.46	10,692	14,267	192.98	11,361	20,001
192.47	10,705	14,374	192.99	11,374	20,114
192.48	10,718	14,481	193.00	11,387	20,228
192.49	10,731	14,588	193.01	11,400	20,342
192.50	10,744	14,695	193.02	11,414	20,456
192.51	10,756	14,803	193.03	11,427	20,570
192.52	10,769	14,911	193.04	11,441	20,685
192.53	10,782	15,018	193.05	11,454	20,799
192.54	10,795	15,126	193.06	11,468	20,914
192.55	10,808	15,234	193.07	11,481	21,028

Stage-Area-Storage for Pond B-48: Basin #48 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.08	11,495	21,143	193.60	12,193	27,302
193.09	11,508	21,258	193.61	12,207	27,424
193.10	11,521	21,373	193.62	12,220	27,546
193.11	11,535	21,489	193.63	12,234	27,669
193.12	11,548	21,604	193.64	12,247	27,791
193.13	11,562	21,720	193.65	12,261	27,913
193.14	11,575	21,835	193.66	12,274	28,036
193.15	11,589	21,951	193.67	12,287	28,159
193.16	11,602	22,067	193.68	12,301	28,282
193.17	11,615	22,183	193.69	12,314	28,405
193.18	11,629	22,299	193.70	12,328	28,528
193.19	11,642	22,416	193.71	12,341	28,652
193.20	11,656	22,532	193.72	12,355	28,775
193.21	11,669	22,649	193.73	12,368	28,899
193.22	11,683	22,766	193.74	12,382	29,022
193.23	11,696	22,883	193.75	12,395	29,146
193.24	11,710	23,000	193.76	12,408	29,270
193.25	11,723	23,117	193.77	12,422	29,394
193.26	11,736	23,234	193.78	12,435	29,519
193.27	11,750	23,351	193.79	12,449	29,643
193.28	11,763	23,469	193.80	12,462	29,768
193.29	11,777	23,587	193.81	12,476	29,892
193.30	11,790	23,705	193.82	12,489	30,017
193.31	11,804	23,823	193.83	12,503	30,142
193.32	11,817	23,941	193.84	12,516	30,267
193.33	11,831	24,059	193.85	12,529	30,392
193.34	11,844	24,177	193.86	12,543	30,518
193.35	11,857	24,296	193.87	12,556	30,643
193.36	11,871	24,414	193.88	12,570	30,769
193.37	11,884	24,533	193.89	12,583	30,895
193.38	11,898	24,652	193.90	12,597	31,021
193.39	11,911	24,771	193.91	12,610	31,147
193.40	11,925	24,890	193.92	12,623	31,273
193.41	11,938	25,010	193.93	12,637	31,399
193.42	11,951	25,129	193.94	12,650	31,526
193.43	11,965	25,249	193.95	12,664	31,652
193.44	11,978	25,368	193.96	12,677	31,779
193.45	11,992	25,488	193.97	12,691	31,906
193.46	12,005	25,608	193.98	12,704	32,033
193.47	12,019	25,728	193.99	12,718	32,160
193.48	12,032	25,849	194.00	12,731	32,287
193.49	12,046	25,969			
193.50	12,059	26,090			
193.51	12,072	26,210			
193.52	12,086	26,331			
193.53	12,099	26,452			
193.54	12,113	26,573			
193.55	12,126	26,694			
193.56	12,140	26,815			
193.57	12,153	26,937			
193.58	12,167	27,059			
193.59	12,180	27,180			

Summary for Pond B-49: Basin #49

Inflow Area = 2.090 ac, 43.68% Impervious, Inflow Depth = 2.00" for Current 2 yr event
 Inflow = 4.20 cfs @ 12.17 hrs, Volume= 0.349 af
 Outflow = 0.15 cfs @ 15.56 hrs, Volume= 0.241 af, Atten= 96%, Lag= 203.0 min
 Primary = 0.15 cfs @ 15.56 hrs, Volume= 0.241 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 184.46' @ 15.56 hrs Surf.Area= 8,130 sf Storage= 10,737 cf

Plug-Flow detention time= 707.2 min calculated for 0.240 af (69% of inflow)
 Center-of-Mass det. time= 603.6 min (1,397.9 - 794.3)

Volume	Invert	Avail.Storage	Storage Description
#1	183.00'	52,993 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.00	6,565	0	0
184.00	7,625	7,095	7,095
185.00	8,717	8,171	15,266
186.00	9,853	9,285	24,551
187.00	11,027	10,440	34,991
188.00	12,333	11,680	46,671
188.50	12,956	6,322	52,993

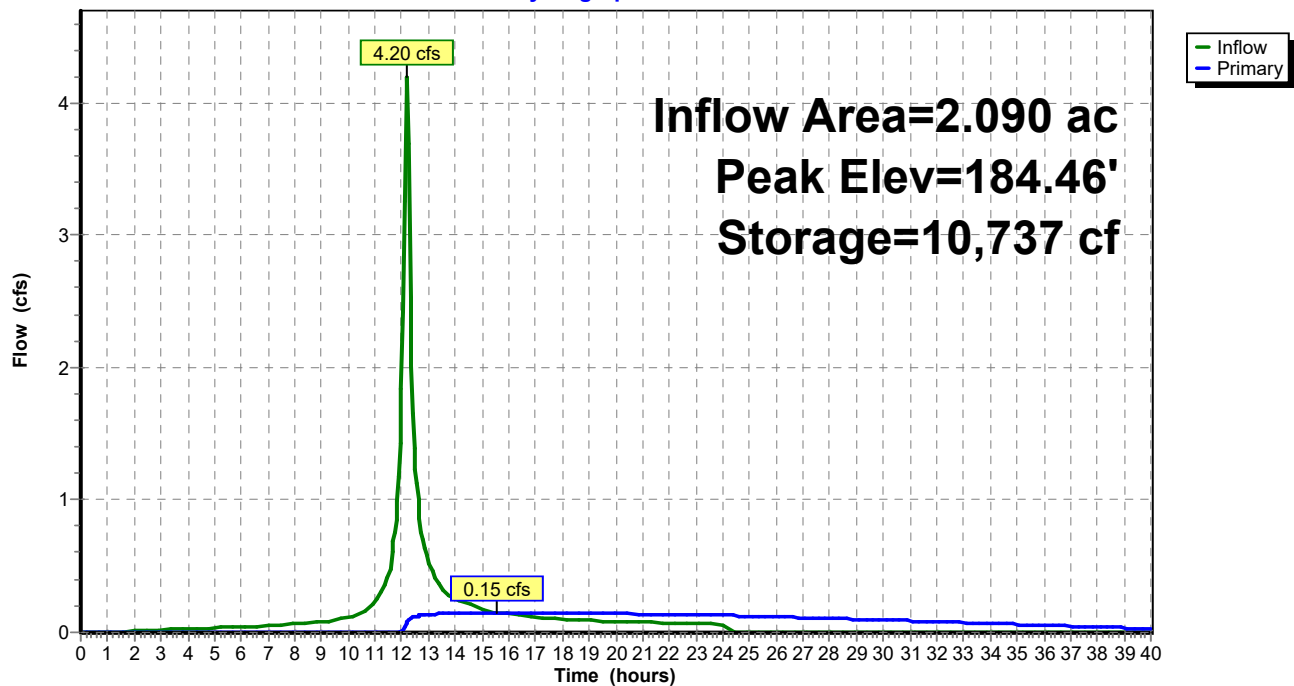
Device	Routing	Invert	Outlet Devices
#1	Primary	183.00'	15.0" Round Culvert L= 25.0' Ke= 0.500 Inlet / Outlet Invert= 183.00' / 182.81' S= 0.0076 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	183.55'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.74'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	187.75'	30.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)

Primary OutFlow Max=0.15 cfs @ 15.56 hrs HW=184.46' (Free Discharge)

1=Culvert (Passes 0.15 cfs of 4.88 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.15 cfs @ 4.33 fps)
 3=Sharp-Crested Rectangular Weir(Controls 0.00 cfs)
 4=Sharp-Crested Rectangular Weir(Controls 0.00 cfs)

Pond B-49: Basin #49

Hydrograph



Stage-Discharge for Pond B-49: Basin #49

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.00	0.00	183.52	0.00	184.04	0.10	184.56	0.16
183.01	0.00	183.53	0.00	184.05	0.10	184.57	0.16
183.02	0.00	183.54	0.00	184.06	0.10	184.58	0.16
183.03	0.00	183.55	0.00	184.07	0.11	184.59	0.16
183.04	0.00	183.56	0.00	184.08	0.11	184.60	0.16
183.05	0.00	183.57	0.00	184.09	0.11	184.61	0.16
183.06	0.00	183.58	0.00	184.10	0.11	184.62	0.16
183.07	0.00	183.59	0.00	184.11	0.11	184.63	0.16
183.08	0.00	183.60	0.00	184.12	0.11	184.64	0.16
183.09	0.00	183.61	0.01	184.13	0.11	184.65	0.16
183.10	0.00	183.62	0.01	184.14	0.11	184.66	0.16
183.11	0.00	183.63	0.01	184.15	0.12	184.67	0.17
183.12	0.00	183.64	0.01	184.16	0.12	184.68	0.17
183.13	0.00	183.65	0.02	184.17	0.12	184.69	0.17
183.14	0.00	183.66	0.02	184.18	0.12	184.70	0.17
183.15	0.00	183.67	0.02	184.19	0.12	184.71	0.17
183.16	0.00	183.68	0.03	184.20	0.12	184.72	0.17
183.17	0.00	183.69	0.03	184.21	0.12	184.73	0.17
183.18	0.00	183.70	0.03	184.22	0.12	184.74	0.17
183.19	0.00	183.71	0.04	184.23	0.12	184.75	0.18
183.20	0.00	183.72	0.04	184.24	0.13	184.76	0.21
183.21	0.00	183.73	0.05	184.25	0.13	184.77	0.24
183.22	0.00	183.74	0.05	184.26	0.13	184.78	0.28
183.23	0.00	183.75	0.05	184.27	0.13	184.79	0.32
183.24	0.00	183.76	0.05	184.28	0.13	184.80	0.37
183.25	0.00	183.77	0.06	184.29	0.13	184.81	0.42
183.26	0.00	183.78	0.06	184.30	0.13	184.82	0.47
183.27	0.00	183.79	0.06	184.31	0.13	184.83	0.53
183.28	0.00	183.80	0.06	184.32	0.13	184.84	0.59
183.29	0.00	183.81	0.06	184.33	0.13	184.85	0.65
183.30	0.00	183.82	0.07	184.34	0.14	184.86	0.72
183.31	0.00	183.83	0.07	184.35	0.14	184.87	0.79
183.32	0.00	183.84	0.07	184.36	0.14	184.88	0.86
183.33	0.00	183.85	0.07	184.37	0.14	184.89	0.94
183.34	0.00	183.86	0.07	184.38	0.14	184.90	1.01
183.35	0.00	183.87	0.08	184.39	0.14	184.91	1.09
183.36	0.00	183.88	0.08	184.40	0.14	184.92	1.17
183.37	0.00	183.89	0.08	184.41	0.14	184.93	1.26
183.38	0.00	183.90	0.08	184.42	0.14	184.94	1.34
183.39	0.00	183.91	0.08	184.43	0.14	184.95	1.43
183.40	0.00	183.92	0.08	184.44	0.15	184.96	1.52
183.41	0.00	183.93	0.09	184.45	0.15	184.97	1.61
183.42	0.00	183.94	0.09	184.46	0.15	184.98	1.71
183.43	0.00	183.95	0.09	184.47	0.15	184.99	1.80
183.44	0.00	183.96	0.09	184.48	0.15	185.00	1.90
183.45	0.00	183.97	0.09	184.49	0.15	185.01	2.00
183.46	0.00	183.98	0.09	184.50	0.15	185.02	2.10
183.47	0.00	183.99	0.10	184.51	0.15	185.03	2.21
183.48	0.00	184.00	0.10	184.52	0.15	185.04	2.31
183.49	0.00	184.01	0.10	184.53	0.15	185.05	2.42
183.50	0.00	184.02	0.10	184.54	0.15	185.06	2.52
183.51	0.00	184.03	0.10	184.55	0.16	185.07	2.63

Stage-Discharge for Pond B-49: Basin #49 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.08	2.75	185.60	8.30	186.12	9.33	186.64	10.26
185.09	2.86	185.61	8.33	186.13	9.35	186.65	10.28
185.10	2.97	185.62	8.35	186.14	9.37	186.66	10.29
185.11	3.09	185.63	8.37	186.15	9.39	186.67	10.31
185.12	3.20	185.64	8.39	186.16	9.41	186.68	10.33
185.13	3.32	185.65	8.41	186.17	9.43	186.69	10.34
185.14	3.44	185.66	8.43	186.18	9.44	186.70	10.36
185.15	3.56	185.67	8.45	186.19	9.46	186.71	10.38
185.16	3.69	185.68	8.47	186.20	9.48	186.72	10.40
185.17	3.81	185.69	8.49	186.21	9.50	186.73	10.41
185.18	3.94	185.70	8.51	186.22	9.52	186.74	10.43
185.19	4.06	185.71	8.53	186.23	9.54	186.75	10.45
185.20	4.19	185.72	8.55	186.24	9.56	186.76	10.46
185.21	4.32	185.73	8.57	186.25	9.57	186.77	10.48
185.22	4.45	185.74	8.59	186.26	9.59	186.78	10.50
185.23	4.58	185.75	8.61	186.27	9.61	186.79	10.51
185.24	4.72	185.76	8.63	186.28	9.63	186.80	10.53
185.25	4.85	185.77	8.65	186.29	9.65	186.81	10.55
185.26	4.99	185.78	8.67	186.30	9.66	186.82	10.56
185.27	5.12	185.79	8.69	186.31	9.68	186.83	10.58
185.28	5.26	185.80	8.71	186.32	9.70	186.84	10.59
185.29	5.40	185.81	8.73	186.33	9.72	186.85	10.61
185.30	5.54	185.82	8.75	186.34	9.74	186.86	10.63
185.31	5.68	185.83	8.77	186.35	9.75	186.87	10.64
185.32	5.82	185.84	8.79	186.36	9.77	186.88	10.66
185.33	5.97	185.85	8.81	186.37	9.79	186.89	10.68
185.34	6.11	185.86	8.83	186.38	9.81	186.90	10.69
185.35	6.26	185.87	8.85	186.39	9.83	186.91	10.71
185.36	6.40	185.88	8.87	186.40	9.84	186.92	10.73
185.37	6.55	185.89	8.89	186.41	9.86	186.93	10.74
185.38	6.70	185.90	8.91	186.42	9.88	186.94	10.76
185.39	6.85	185.91	8.93	186.43	9.90	186.95	10.77
185.40	7.00	185.92	8.95	186.44	9.91	186.96	10.79
185.41	7.15	185.93	8.97	186.45	9.93	186.97	10.81
185.42	7.30	185.94	8.99	186.46	9.95	186.98	10.82
185.43	7.46	185.95	9.01	186.47	9.97	186.99	10.84
185.44	7.61	185.96	9.03	186.48	9.98	187.00	10.86
185.45	7.77	185.97	9.05	186.49	10.00	187.01	10.87
185.46	7.92	185.98	9.07	186.50	10.02	187.02	10.89
185.47	8.03	185.99	9.09	186.51	10.04	187.03	10.90
185.48	8.05	186.00	9.11	186.52	10.05	187.04	10.92
185.49	8.07	186.01	9.13	186.53	10.07	187.05	10.94
185.50	8.09	186.02	9.14	186.54	10.09	187.06	10.95
185.51	8.11	186.03	9.16	186.55	10.11	187.07	10.97
185.52	8.13	186.04	9.18	186.56	10.12	187.08	10.98
185.53	8.16	186.05	9.20	186.57	10.14	187.09	11.00
185.54	8.18	186.06	9.22	186.58	10.16	187.10	11.01
185.55	8.20	186.07	9.24	186.59	10.17	187.11	11.03
185.56	8.22	186.08	9.26	186.60	10.19	187.12	11.05
185.57	8.24	186.09	9.28	186.61	10.21	187.13	11.06
185.58	8.26	186.10	9.30	186.62	10.23	187.14	11.08
185.59	8.28	186.11	9.31	186.63	10.24	187.15	11.09

Stage-Discharge for Pond B-49: Basin #49 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
187.16	11.11	187.68	11.90	188.20	42.16
187.17	11.13	187.69	11.91	188.21	43.16
187.18	11.14	187.70	11.93	188.22	44.18
187.19	11.16	187.71	11.94	188.23	45.20
187.20	11.17	187.72	11.96	188.24	46.23
187.21	11.19	187.73	11.97	188.25	47.28
187.22	11.20	187.74	11.99	188.26	48.33
187.23	11.22	187.75	12.00	188.27	49.39
187.24	11.23	187.76	12.11	188.28	50.47
187.25	11.25	187.77	12.31	188.29	51.55
187.26	11.27	187.78	12.55	188.30	52.64
187.27	11.28	187.79	12.84	188.31	53.75
187.28	11.30	187.80	13.17	188.32	54.86
187.29	11.31	187.81	13.53	188.33	55.98
187.30	11.33	187.82	13.92	188.34	57.11
187.31	11.34	187.83	14.34	188.35	58.25
187.32	11.36	187.84	14.78	188.36	59.40
187.33	11.37	187.85	15.25	188.37	60.56
187.34	11.39	187.86	15.74	188.38	61.73
187.35	11.40	187.87	16.25	188.39	62.91
187.36	11.42	187.88	16.78	188.40	64.10
187.37	11.43	187.89	17.34	188.41	65.29
187.38	11.45	187.90	17.91	188.42	66.50
187.39	11.47	187.91	18.50	188.43	67.71
187.40	11.48	187.92	19.11	188.44	68.93
187.41	11.50	187.93	19.74	188.45	70.16
187.42	11.51	187.94	20.39	188.46	71.40
187.43	11.53	187.95	21.05	188.47	72.65
187.44	11.54	187.96	21.73	188.48	73.91
187.45	11.56	187.97	22.42	188.49	75.17
187.46	11.57	187.98	23.14	188.50	76.45
187.47	11.59	187.99	23.86		
187.48	11.60	188.00	24.60		
187.49	11.62	188.01	25.36		
187.50	11.63	188.02	26.13		
187.51	11.65	188.03	26.91		
187.52	11.66	188.04	27.71		
187.53	11.68	188.05	28.52		
187.54	11.69	188.06	29.34		
187.55	11.71	188.07	30.18		
187.56	11.72	188.08	31.03		
187.57	11.74	188.09	31.89		
187.58	11.75	188.10	32.77		
187.59	11.77	188.11	33.65		
187.60	11.78	188.12	34.55		
187.61	11.80	188.13	35.46		
187.62	11.81	188.14	36.39		
187.63	11.83	188.15	37.32		
187.64	11.84	188.16	38.27		
187.65	11.85	188.17	39.22		
187.66	11.87	188.18	40.19		
187.67	11.88	188.19	41.17		

Stage-Area-Storage for Pond B-49: Basin #49

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.00	6,565	0	183.52	7,116	3,557
183.01	6,576	66	183.53	7,127	3,628
183.02	6,586	132	183.54	7,137	3,700
183.03	6,597	197	183.55	7,148	3,771
183.04	6,607	263	183.56	7,159	3,843
183.05	6,618	330	183.57	7,169	3,914
183.06	6,629	396	183.58	7,180	3,986
183.07	6,639	462	183.59	7,190	4,058
183.08	6,650	529	183.60	7,201	4,130
183.09	6,660	595	183.61	7,212	4,202
183.10	6,671	662	183.62	7,222	4,274
183.11	6,682	729	183.63	7,233	4,346
183.12	6,692	795	183.64	7,243	4,419
183.13	6,703	862	183.65	7,254	4,491
183.14	6,713	929	183.66	7,265	4,564
183.15	6,724	997	183.67	7,275	4,636
183.16	6,735	1,064	183.68	7,286	4,709
183.17	6,745	1,131	183.69	7,296	4,782
183.18	6,756	1,199	183.70	7,307	4,855
183.19	6,766	1,266	183.71	7,318	4,928
183.20	6,777	1,334	183.72	7,328	5,002
183.21	6,788	1,402	183.73	7,339	5,075
183.22	6,798	1,470	183.74	7,349	5,148
183.23	6,809	1,538	183.75	7,360	5,222
183.24	6,819	1,606	183.76	7,371	5,296
183.25	6,830	1,674	183.77	7,381	5,369
183.26	6,841	1,743	183.78	7,392	5,443
183.27	6,851	1,811	183.79	7,402	5,517
183.28	6,862	1,880	183.80	7,413	5,591
183.29	6,872	1,948	183.81	7,424	5,665
183.30	6,883	2,017	183.82	7,434	5,740
183.31	6,894	2,086	183.83	7,445	5,814
183.32	6,904	2,155	183.84	7,455	5,889
183.33	6,915	2,224	183.85	7,466	5,963
183.34	6,925	2,293	183.86	7,477	6,038
183.35	6,936	2,363	183.87	7,487	6,113
183.36	6,947	2,432	183.88	7,498	6,188
183.37	6,957	2,502	183.89	7,508	6,263
183.38	6,968	2,571	183.90	7,519	6,338
183.39	6,978	2,641	183.91	7,530	6,413
183.40	6,989	2,711	183.92	7,540	6,488
183.41	7,000	2,781	183.93	7,551	6,564
183.42	7,010	2,851	183.94	7,561	6,639
183.43	7,021	2,921	183.95	7,572	6,715
183.44	7,031	2,991	183.96	7,583	6,791
183.45	7,042	3,062	183.97	7,593	6,867
183.46	7,053	3,132	183.98	7,604	6,943
183.47	7,063	3,203	183.99	7,614	7,019
183.48	7,074	3,273	184.00	7,625	7,095
183.49	7,084	3,344	184.01	7,636	7,171
183.50	7,095	3,415	184.02	7,647	7,248
183.51	7,106	3,486	184.03	7,658	7,324

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.04	7,669	7,401	184.56	8,237	11,536
184.05	7,680	7,478	184.57	8,247	11,619
184.06	7,691	7,554	184.58	8,258	11,701
184.07	7,701	7,631	184.59	8,269	11,784
184.08	7,712	7,708	184.60	8,280	11,867
184.09	7,723	7,786	184.61	8,291	11,949
184.10	7,734	7,863	184.62	8,302	12,032
184.11	7,745	7,940	184.63	8,313	12,115
184.12	7,756	8,018	184.64	8,324	12,199
184.13	7,767	8,095	184.65	8,335	12,282
184.14	7,778	8,173	184.66	8,346	12,365
184.15	7,789	8,251	184.67	8,357	12,449
184.16	7,800	8,329	184.68	8,368	12,532
184.17	7,811	8,407	184.69	8,378	12,616
184.18	7,822	8,485	184.70	8,389	12,700
184.19	7,832	8,563	184.71	8,400	12,784
184.20	7,843	8,642	184.72	8,411	12,868
184.21	7,854	8,720	184.73	8,422	12,952
184.22	7,865	8,799	184.74	8,433	13,036
184.23	7,876	8,878	184.75	8,444	13,121
184.24	7,887	8,956	184.76	8,455	13,205
184.25	7,898	9,035	184.77	8,466	13,290
184.26	7,909	9,114	184.78	8,477	13,375
184.27	7,920	9,194	184.79	8,488	13,460
184.28	7,931	9,273	184.80	8,499	13,544
184.29	7,942	9,352	184.81	8,510	13,629
184.30	7,953	9,432	184.82	8,520	13,715
184.31	7,964	9,511	184.83	8,531	13,800
184.32	7,974	9,591	184.84	8,542	13,885
184.33	7,985	9,671	184.85	8,553	13,971
184.34	7,996	9,751	184.86	8,564	14,056
184.35	8,007	9,831	184.87	8,575	14,142
184.36	8,018	9,911	184.88	8,586	14,228
184.37	8,029	9,991	184.89	8,597	14,314
184.38	8,040	10,071	184.90	8,608	14,400
184.39	8,051	10,152	184.91	8,619	14,486
184.40	8,062	10,232	184.92	8,630	14,572
184.41	8,073	10,313	184.93	8,641	14,658
184.42	8,084	10,394	184.94	8,651	14,745
184.43	8,095	10,475	184.95	8,662	14,832
184.44	8,105	10,556	184.96	8,673	14,918
184.45	8,116	10,637	184.97	8,684	15,005
184.46	8,127	10,718	184.98	8,695	15,092
184.47	8,138	10,799	184.99	8,706	15,179
184.48	8,149	10,881	185.00	8,717	15,266
184.49	8,160	10,962	185.01	8,728	15,353
184.50	8,171	11,044	185.02	8,740	15,441
184.51	8,182	11,126	185.03	8,751	15,528
184.52	8,193	11,208	185.04	8,762	15,616
184.53	8,204	11,290	185.05	8,774	15,703
184.54	8,215	11,372	185.06	8,785	15,791
184.55	8,226	11,454	185.07	8,797	15,879

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.08	8,808	15,967	185.60	9,399	20,701
185.09	8,819	16,055	185.61	9,410	20,795
185.10	8,831	16,143	185.62	9,421	20,889
185.11	8,842	16,232	185.63	9,433	20,983
185.12	8,853	16,320	185.64	9,444	21,078
185.13	8,865	16,409	185.65	9,455	21,172
185.14	8,876	16,498	185.66	9,467	21,267
185.15	8,887	16,586	185.67	9,478	21,361
185.16	8,899	16,675	185.68	9,489	21,456
185.17	8,910	16,764	185.69	9,501	21,551
185.18	8,921	16,853	185.70	9,512	21,646
185.19	8,933	16,943	185.71	9,524	21,741
185.20	8,944	17,032	185.72	9,535	21,837
185.21	8,956	17,122	185.73	9,546	21,932
185.22	8,967	17,211	185.74	9,558	22,028
185.23	8,978	17,301	185.75	9,569	22,123
185.24	8,990	17,391	185.76	9,580	22,219
185.25	9,001	17,481	185.77	9,592	22,315
185.26	9,012	17,571	185.78	9,603	22,411
185.27	9,024	17,661	185.79	9,614	22,507
185.28	9,035	17,751	185.80	9,626	22,603
185.29	9,046	17,842	185.81	9,637	22,699
185.30	9,058	17,932	185.82	9,649	22,796
185.31	9,069	18,023	185.83	9,660	22,892
185.32	9,081	18,114	185.84	9,671	22,989
185.33	9,092	18,204	185.85	9,683	23,086
185.34	9,103	18,295	185.86	9,694	23,183
185.35	9,115	18,387	185.87	9,705	23,280
185.36	9,126	18,478	185.88	9,717	23,377
185.37	9,137	18,569	185.89	9,728	23,474
185.38	9,149	18,660	185.90	9,739	23,571
185.39	9,160	18,752	185.91	9,751	23,669
185.40	9,171	18,844	185.92	9,762	23,766
185.41	9,183	18,935	185.93	9,773	23,864
185.42	9,194	19,027	185.94	9,785	23,962
185.43	9,205	19,119	185.95	9,796	24,060
185.44	9,217	19,211	185.96	9,808	24,158
185.45	9,228	19,304	185.97	9,819	24,256
185.46	9,240	19,396	185.98	9,830	24,354
185.47	9,251	19,488	185.99	9,842	24,453
185.48	9,262	19,581	186.00	9,853	24,551
185.49	9,274	19,674	186.01	9,865	24,650
185.50	9,285	19,767	186.02	9,876	24,748
185.51	9,296	19,859	186.03	9,888	24,847
185.52	9,308	19,952	186.04	9,900	24,946
185.53	9,319	20,046	186.05	9,912	25,045
185.54	9,330	20,139	186.06	9,923	25,144
185.55	9,342	20,232	186.07	9,935	25,244
185.56	9,353	20,326	186.08	9,947	25,343
185.57	9,365	20,419	186.09	9,959	25,443
185.58	9,376	20,513	186.10	9,970	25,542
185.59	9,387	20,607	186.11	9,982	25,642

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.12	9,994	25,742	186.64	10,604	31,097
186.13	10,006	25,842	186.65	10,616	31,203
186.14	10,017	25,942	186.66	10,628	31,310
186.15	10,029	26,042	186.67	10,640	31,416
186.16	10,041	26,143	186.68	10,651	31,522
186.17	10,053	26,243	186.69	10,663	31,629
186.18	10,064	26,344	186.70	10,675	31,736
186.19	10,076	26,444	186.71	10,687	31,843
186.20	10,088	26,545	186.72	10,698	31,949
186.21	10,100	26,646	186.73	10,710	32,057
186.22	10,111	26,747	186.74	10,722	32,164
186.23	10,123	26,848	186.75	10,734	32,271
186.24	10,135	26,950	186.76	10,745	32,378
186.25	10,147	27,051	186.77	10,757	32,486
186.26	10,158	27,152	186.78	10,769	32,593
186.27	10,170	27,254	186.79	10,780	32,701
186.28	10,182	27,356	186.80	10,792	32,809
186.29	10,193	27,458	186.81	10,804	32,917
186.30	10,205	27,560	186.82	10,816	33,025
186.31	10,217	27,662	186.83	10,827	33,133
186.32	10,229	27,764	186.84	10,839	33,242
186.33	10,240	27,866	186.85	10,851	33,350
186.34	10,252	27,969	186.86	10,863	33,459
186.35	10,264	28,071	186.87	10,874	33,567
186.36	10,276	28,174	186.88	10,886	33,676
186.37	10,287	28,277	186.89	10,898	33,785
186.38	10,299	28,380	186.90	10,910	33,894
186.39	10,311	28,483	186.91	10,921	34,003
186.40	10,323	28,586	186.92	10,933	34,113
186.41	10,334	28,689	186.93	10,945	34,222
186.42	10,346	28,793	186.94	10,957	34,331
186.43	10,358	28,896	186.95	10,968	34,441
186.44	10,370	29,000	186.96	10,980	34,551
186.45	10,381	29,104	186.97	10,992	34,661
186.46	10,393	29,208	186.98	11,004	34,771
186.47	10,405	29,312	186.99	11,015	34,881
186.48	10,417	29,416	187.00	11,027	34,991
186.49	10,428	29,520	187.01	11,040	35,101
186.50	10,440	29,624	187.02	11,053	35,212
186.51	10,452	29,729	187.03	11,066	35,322
186.52	10,463	29,833	187.04	11,079	35,433
186.53	10,475	29,938	187.05	11,092	35,544
186.54	10,487	30,043	187.06	11,105	35,655
186.55	10,499	30,148	187.07	11,118	35,766
186.56	10,510	30,253	187.08	11,131	35,877
186.57	10,522	30,358	187.09	11,145	35,989
186.58	10,534	30,463	187.10	11,158	36,100
186.59	10,546	30,569	187.11	11,171	36,212
186.60	10,557	30,674	187.12	11,184	36,324
186.61	10,569	30,780	187.13	11,197	36,436
186.62	10,581	30,886	187.14	11,210	36,548
186.63	10,593	30,991	187.15	11,223	36,660

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.16	11,236	36,772	187.68	11,915	42,791
187.17	11,249	36,884	187.69	11,928	42,911
187.18	11,262	36,997	187.70	11,941	43,030
187.19	11,275	37,110	187.71	11,954	43,149
187.20	11,288	37,223	187.72	11,967	43,269
187.21	11,301	37,335	187.73	11,980	43,389
187.22	11,314	37,449	187.74	11,993	43,509
187.23	11,327	37,562	187.75	12,007	43,629
187.24	11,340	37,675	187.76	12,020	43,749
187.25	11,354	37,789	187.77	12,033	43,869
187.26	11,367	37,902	187.78	12,046	43,989
187.27	11,380	38,016	187.79	12,059	44,110
187.28	11,393	38,130	187.80	12,072	44,231
187.29	11,406	38,244	187.81	12,085	44,351
187.30	11,419	38,358	187.82	12,098	44,472
187.31	11,432	38,472	187.83	12,111	44,593
187.32	11,445	38,587	187.84	12,124	44,714
187.33	11,458	38,701	187.85	12,137	44,836
187.34	11,471	38,816	187.86	12,150	44,957
187.35	11,484	38,930	187.87	12,163	45,079
187.36	11,497	39,045	187.88	12,176	45,200
187.37	11,510	39,160	187.89	12,189	45,322
187.38	11,523	39,276	187.90	12,202	45,444
187.39	11,536	39,391	187.91	12,215	45,566
187.40	11,549	39,506	187.92	12,229	45,689
187.41	11,562	39,622	187.93	12,242	45,811
187.42	11,576	39,738	187.94	12,255	45,933
187.43	11,589	39,853	187.95	12,268	46,056
187.44	11,602	39,969	187.96	12,281	46,179
187.45	11,615	40,085	187.97	12,294	46,302
187.46	11,628	40,202	187.98	12,307	46,425
187.47	11,641	40,318	187.99	12,320	46,548
187.48	11,654	40,434	188.00	12,333	46,671
187.49	11,667	40,551	188.01	12,345	46,794
187.50	11,680	40,668	188.02	12,358	46,918
187.51	11,693	40,785	188.03	12,370	47,042
187.52	11,706	40,902	188.04	12,383	47,165
187.53	11,719	41,019	188.05	12,395	47,289
187.54	11,732	41,136	188.06	12,408	47,413
187.55	11,745	41,253	188.07	12,420	47,537
187.56	11,758	41,371	188.08	12,433	47,662
187.57	11,771	41,489	188.09	12,445	47,786
187.58	11,784	41,606	188.10	12,458	47,911
187.59	11,798	41,724	188.11	12,470	48,035
187.60	11,811	41,842	188.12	12,483	48,160
187.61	11,824	41,960	188.13	12,495	48,285
187.62	11,837	42,079	188.14	12,507	48,410
187.63	11,850	42,197	188.15	12,520	48,535
187.64	11,863	42,316	188.16	12,532	48,660
187.65	11,876	42,434	188.17	12,545	48,786
187.66	11,889	42,553	188.18	12,557	48,911
187.67	11,902	42,672	188.19	12,570	49,037

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.20	12,582	49,163
188.21	12,595	49,288
188.22	12,607	49,414
188.23	12,620	49,541
188.24	12,632	49,667
188.25	12,645	49,793
188.26	12,657	49,920
188.27	12,669	50,046
188.28	12,682	50,173
188.29	12,694	50,300
188.30	12,707	50,427
188.31	12,719	50,554
188.32	12,732	50,681
188.33	12,744	50,809
188.34	12,757	50,936
188.35	12,769	51,064
188.36	12,782	51,192
188.37	12,794	51,319
188.38	12,806	51,448
188.39	12,819	51,576
188.40	12,831	51,704
188.41	12,844	51,832
188.42	12,856	51,961
188.43	12,869	52,089
188.44	12,881	52,218
188.45	12,894	52,347
188.46	12,906	52,476
188.47	12,919	52,605
188.48	12,931	52,734
188.49	12,944	52,864
188.50	12,956	52,993

Summary for Pond B-50: Basin #50

Inflow Area = 2.262 ac, 29.27% Impervious, Inflow Depth = 1.72" for Current 2 yr event
 Inflow = 3.95 cfs @ 12.18 hrs, Volume= 0.324 af
 Outflow = 0.13 cfs @ 16.50 hrs, Volume= 0.224 af, Atten= 97%, Lag= 259.4 min
 Primary = 0.13 cfs @ 16.50 hrs, Volume= 0.224 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 185.04' @ 16.50 hrs Surf.Area= 10,164 sf Storage= 9,882 cf

Plug-Flow detention time= 729.5 min calculated for 0.224 af (69% of inflow)
 Center-of-Mass det. time= 622.7 min (1,432.7 - 810.1)

Volume	Invert	Avail.Storage	Storage Description
#1	184.00'	53,209 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
184.00	8,805	0	0
185.00	10,108	9,457	9,457
186.00	11,448	10,778	20,235
187.00	12,826	12,137	32,372
188.00	14,244	13,535	45,907
188.50	14,966	7,303	53,209

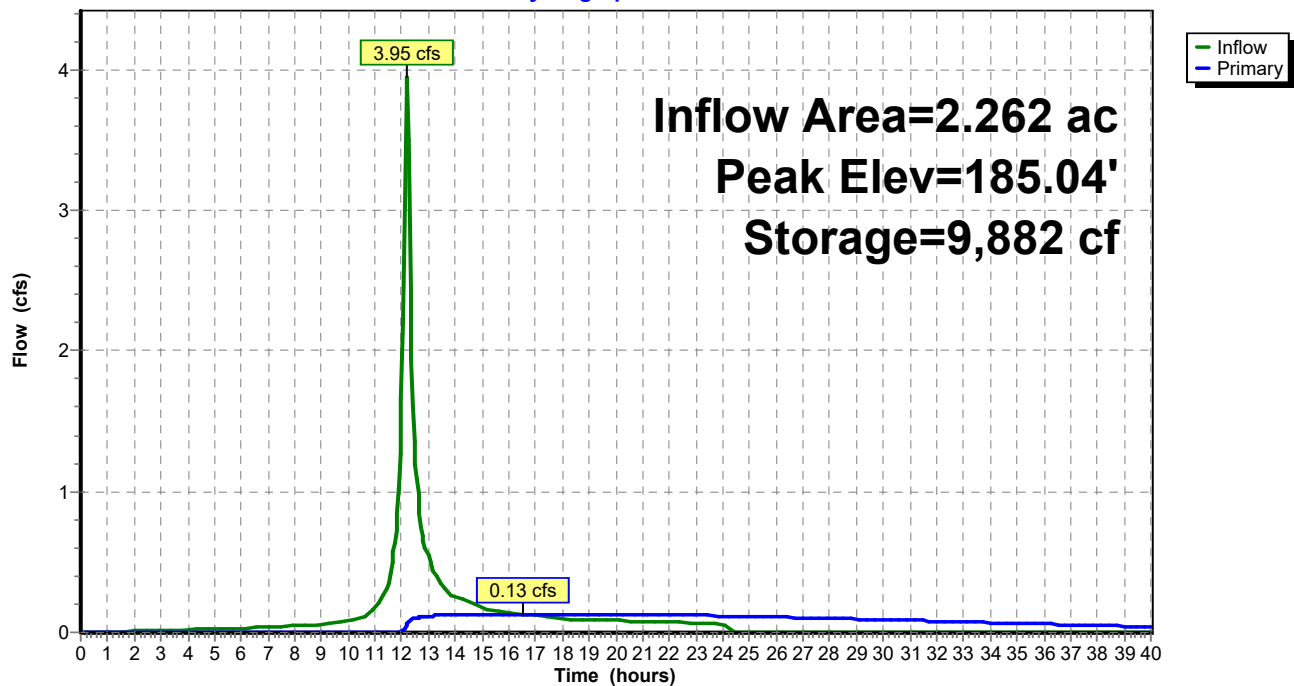
Device	Routing	Invert	Outlet Devices
#1	Primary	180.50'	18.0" Round Culvert L= 83.0' Ke= 0.500 Inlet / Outlet Invert= 180.50' / 179.67' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	184.32'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.30'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	188.45'	30.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.13 cfs @ 16.50 hrs HW=185.04' (Free Discharge)

1=Culvert (Passes 0.13 cfs of 16.06 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.13 cfs @ 3.78 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-50: Basin #50

Hydrograph



Stage-Discharge for Pond B-50: Basin #50

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
184.00	0.00	184.52	0.05	185.04	0.13	185.56	1.89
184.01	0.00	184.53	0.05	185.05	0.13	185.57	1.99
184.02	0.00	184.54	0.06	185.06	0.13	185.58	2.09
184.03	0.00	184.55	0.06	185.07	0.13	185.59	2.19
184.04	0.00	184.56	0.06	185.08	0.13	185.60	2.30
184.05	0.00	184.57	0.06	185.09	0.13	185.61	2.40
184.06	0.00	184.58	0.06	185.10	0.13	185.62	2.51
184.07	0.00	184.59	0.07	185.11	0.14	185.63	2.62
184.08	0.00	184.60	0.07	185.12	0.14	185.64	2.73
184.09	0.00	184.61	0.07	185.13	0.14	185.65	2.84
184.10	0.00	184.62	0.07	185.14	0.14	185.66	2.96
184.11	0.00	184.63	0.07	185.15	0.14	185.67	3.07
184.12	0.00	184.64	0.08	185.16	0.14	185.68	3.19
184.13	0.00	184.65	0.08	185.17	0.14	185.69	3.31
184.14	0.00	184.66	0.08	185.18	0.14	185.70	3.43
184.15	0.00	184.67	0.08	185.19	0.14	185.71	3.55
184.16	0.00	184.68	0.08	185.20	0.14	185.72	3.67
184.17	0.00	184.69	0.08	185.21	0.15	185.73	3.80
184.18	0.00	184.70	0.09	185.22	0.15	185.74	3.92
184.19	0.00	184.71	0.09	185.23	0.15	185.75	4.05
184.20	0.00	184.72	0.09	185.24	0.15	185.76	4.18
184.21	0.00	184.73	0.09	185.25	0.15	185.77	4.31
184.22	0.00	184.74	0.09	185.26	0.15	185.78	4.44
184.23	0.00	184.75	0.09	185.27	0.15	185.79	4.57
184.24	0.00	184.76	0.10	185.28	0.15	185.80	4.70
184.25	0.00	184.77	0.10	185.29	0.15	185.81	4.84
184.26	0.00	184.78	0.10	185.30	0.15	185.82	4.97
184.27	0.00	184.79	0.10	185.31	0.17	185.83	5.11
184.28	0.00	184.80	0.10	185.32	0.19	185.84	5.25
184.29	0.00	184.81	0.10	185.33	0.22	185.85	5.38
184.30	0.00	184.82	0.10	185.34	0.26	185.86	5.52
184.31	0.00	184.83	0.10	185.35	0.30	185.87	5.67
184.32	0.00	184.84	0.11	185.36	0.35	185.88	5.81
184.33	0.00	184.85	0.11	185.37	0.40	185.89	5.95
184.34	0.00	184.86	0.11	185.38	0.46	185.90	6.10
184.35	0.00	184.87	0.11	185.39	0.51	185.91	6.24
184.36	0.00	184.88	0.11	185.40	0.57	185.92	6.39
184.37	0.00	184.89	0.11	185.41	0.64	185.93	6.54
184.38	0.01	184.90	0.11	185.42	0.70	185.94	6.68
184.39	0.01	184.91	0.11	185.43	0.77	185.95	6.83
184.40	0.01	184.92	0.12	185.44	0.85	185.96	6.99
184.41	0.01	184.93	0.12	185.45	0.92	185.97	7.14
184.42	0.02	184.94	0.12	185.46	1.00	185.98	7.29
184.43	0.02	184.95	0.12	185.47	1.08	185.99	7.44
184.44	0.02	184.96	0.12	185.48	1.16	186.00	7.60
184.45	0.03	184.97	0.12	185.49	1.24	186.01	7.75
184.46	0.03	184.98	0.12	185.50	1.33	186.02	7.91
184.47	0.03	184.99	0.12	185.51	1.42	186.03	8.07
184.48	0.04	185.00	0.12	185.52	1.51	186.04	8.23
184.49	0.04	185.01	0.13	185.53	1.60	186.05	8.39
184.50	0.05	185.02	0.13	185.54	1.69	186.06	8.55
184.51	0.05	185.03	0.13	185.55	1.79	186.07	8.71

Stage-Discharge for Pond B-50: Basin #50 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.08	8.87	186.60	18.37	187.12	19.91	187.64	20.76
186.09	9.03	186.61	18.57	187.13	19.93	187.65	20.78
186.10	9.20	186.62	18.77	187.14	19.95	187.66	20.80
186.11	9.36	186.63	18.97	187.15	19.96	187.67	20.81
186.12	9.53	186.64	19.09	187.16	19.98	187.68	20.83
186.13	9.69	186.65	19.11	187.17	20.00	187.69	20.84
186.14	9.86	186.66	19.13	187.18	20.01	187.70	20.86
186.15	10.03	186.67	19.14	187.19	20.03	187.71	20.88
186.16	10.20	186.68	19.16	187.20	20.05	187.72	20.89
186.17	10.37	186.69	19.18	187.21	20.06	187.73	20.91
186.18	10.54	186.70	19.20	187.22	20.08	187.74	20.92
186.19	10.71	186.71	19.21	187.23	20.10	187.75	20.94
186.20	10.88	186.72	19.23	187.24	20.11	187.76	20.96
186.21	11.06	186.73	19.25	187.25	20.13	187.77	20.97
186.22	11.23	186.74	19.27	187.26	20.15	187.78	20.99
186.23	11.41	186.75	19.28	187.27	20.16	187.79	21.00
186.24	11.58	186.76	19.30	187.28	20.18	187.80	21.02
186.25	11.76	186.77	19.32	187.29	20.19	187.81	21.04
186.26	11.93	186.78	19.33	187.30	20.21	187.82	21.05
186.27	12.11	186.79	19.35	187.31	20.23	187.83	21.07
186.28	12.29	186.80	19.37	187.32	20.24	187.84	21.08
186.29	12.47	186.81	19.39	187.33	20.26	187.85	21.10
186.30	12.65	186.82	19.40	187.34	20.28	187.86	21.11
186.31	12.83	186.83	19.42	187.35	20.29	187.87	21.13
186.32	13.01	186.84	19.44	187.36	20.31	187.88	21.15
186.33	13.20	186.85	19.46	187.37	20.33	187.89	21.16
186.34	13.38	186.86	19.47	187.38	20.34	187.90	21.18
186.35	13.56	186.87	19.49	187.39	20.36	187.91	21.19
186.36	13.75	186.88	19.51	187.40	20.38	187.92	21.21
186.37	13.93	186.89	19.52	187.41	20.39	187.93	21.22
186.38	14.12	186.90	19.54	187.42	20.41	187.94	21.24
186.39	14.30	186.91	19.56	187.43	20.42	187.95	21.26
186.40	14.49	186.92	19.57	187.44	20.44	187.96	21.27
186.41	14.68	186.93	19.59	187.45	20.46	187.97	21.29
186.42	14.87	186.94	19.61	187.46	20.47	187.98	21.30
186.43	15.06	186.95	19.63	187.47	20.49	187.99	21.32
186.44	15.25	186.96	19.64	187.48	20.51	188.00	21.33
186.45	15.44	186.97	19.66	187.49	20.52	188.01	21.35
186.46	15.63	186.98	19.68	187.50	20.54	188.02	21.37
186.47	15.82	186.99	19.69	187.51	20.55	188.03	21.38
186.48	16.01	187.00	19.71	187.52	20.57	188.04	21.40
186.49	16.21	187.01	19.73	187.53	20.59	188.05	21.41
186.50	16.40	187.02	19.74	187.54	20.60	188.06	21.43
186.51	16.59	187.03	19.76	187.55	20.62	188.07	21.44
186.52	16.79	187.04	19.78	187.56	20.64	188.08	21.46
186.53	16.98	187.05	19.79	187.57	20.65	188.09	21.47
186.54	17.18	187.06	19.81	187.58	20.67	188.10	21.49
186.55	17.38	187.07	19.83	187.59	20.68	188.11	21.51
186.56	17.57	187.08	19.85	187.60	20.70	188.12	21.52
186.57	17.77	187.09	19.86	187.61	20.72	188.13	21.54
186.58	17.97	187.10	19.88	187.62	20.73	188.14	21.55
186.59	18.17	187.11	19.90	187.63	20.75	188.15	21.57

Stage-Discharge for Pond B-50: Basin #50 (continued)

Elevation (feet)	Primary (cfs)
188.16	21.58
188.17	21.60
188.18	21.61
188.19	21.63
188.20	21.64
188.21	21.66
188.22	21.67
188.23	21.69
188.24	21.71
188.25	21.72
188.26	21.74
188.27	21.75
188.28	21.77
188.29	21.78
188.30	21.80
188.31	21.81
188.32	21.83
188.33	21.84
188.34	21.86
188.35	21.87
188.36	21.89
188.37	21.90
188.38	21.92
188.39	21.93
188.40	21.95
188.41	21.97
188.42	21.98
188.43	22.00
188.44	22.01
188.45	22.03
188.46	22.11
188.47	22.25
188.48	22.44
188.49	22.65
188.50	22.89

Stage-Area-Storage for Pond B-50: Basin #50

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.00	8,805	0	184.52	9,483	4,755
184.01	8,818	88	184.53	9,496	4,850
184.02	8,831	176	184.54	9,509	4,945
184.03	8,844	265	184.55	9,522	5,040
184.04	8,857	353	184.56	9,535	5,135
184.05	8,870	442	184.57	9,548	5,231
184.06	8,883	531	184.58	9,561	5,326
184.07	8,896	620	184.59	9,574	5,422
184.08	8,909	709	184.60	9,587	5,518
184.09	8,922	798	184.61	9,600	5,613
184.10	8,935	887	184.62	9,613	5,710
184.11	8,948	976	184.63	9,626	5,806
184.12	8,961	1,066	184.64	9,639	5,902
184.13	8,974	1,156	184.65	9,652	5,999
184.14	8,987	1,245	184.66	9,665	6,095
184.15	9,000	1,335	184.67	9,678	6,192
184.16	9,013	1,425	184.68	9,691	6,289
184.17	9,027	1,516	184.69	9,704	6,386
184.18	9,040	1,606	184.70	9,717	6,483
184.19	9,053	1,696	184.71	9,730	6,580
184.20	9,066	1,787	184.72	9,743	6,677
184.21	9,079	1,878	184.73	9,756	6,775
184.22	9,092	1,969	184.74	9,769	6,872
184.23	9,105	2,060	184.75	9,782	6,970
184.24	9,118	2,151	184.76	9,795	7,068
184.25	9,131	2,242	184.77	9,808	7,166
184.26	9,144	2,333	184.78	9,821	7,264
184.27	9,157	2,425	184.79	9,834	7,363
184.28	9,170	2,516	184.80	9,847	7,461
184.29	9,183	2,608	184.81	9,860	7,559
184.30	9,196	2,700	184.82	9,873	7,658
184.31	9,209	2,792	184.83	9,886	7,757
184.32	9,222	2,884	184.84	9,900	7,856
184.33	9,235	2,977	184.85	9,913	7,955
184.34	9,248	3,069	184.86	9,926	8,054
184.35	9,261	3,162	184.87	9,939	8,153
184.36	9,274	3,254	184.88	9,952	8,253
184.37	9,287	3,347	184.89	9,965	8,353
184.38	9,300	3,440	184.90	9,978	8,452
184.39	9,313	3,533	184.91	9,991	8,552
184.40	9,326	3,626	184.92	10,004	8,652
184.41	9,339	3,720	184.93	10,017	8,752
184.42	9,352	3,813	184.94	10,030	8,852
184.43	9,365	3,907	184.95	10,043	8,953
184.44	9,378	4,000	184.96	10,056	9,053
184.45	9,391	4,094	184.97	10,069	9,154
184.46	9,404	4,188	184.98	10,082	9,255
184.47	9,417	4,282	184.99	10,095	9,355
184.48	9,430	4,377	185.00	10,108	9,457
184.49	9,443	4,471	185.01	10,121	9,558
184.50	9,457	4,565	185.02	10,135	9,659
184.51	9,470	4,660	185.03	10,148	9,760

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.04	10,162	9,862	185.56	10,858	15,327
185.05	10,175	9,964	185.57	10,872	15,436
185.06	10,188	10,065	185.58	10,885	15,545
185.07	10,202	10,167	185.59	10,899	15,653
185.08	10,215	10,269	185.60	10,912	15,762
185.09	10,229	10,372	185.61	10,925	15,872
185.10	10,242	10,474	185.62	10,939	15,981
185.11	10,255	10,576	185.63	10,952	16,090
185.12	10,269	10,679	185.64	10,966	16,200
185.13	10,282	10,782	185.65	10,979	16,310
185.14	10,296	10,885	185.66	10,992	16,420
185.15	10,309	10,988	185.67	11,006	16,530
185.16	10,322	11,091	185.68	11,019	16,640
185.17	10,336	11,194	185.69	11,033	16,750
185.18	10,349	11,298	185.70	11,046	16,860
185.19	10,363	11,401	185.71	11,059	16,971
185.20	10,376	11,505	185.72	11,073	17,082
185.21	10,389	11,609	185.73	11,086	17,192
185.22	10,403	11,713	185.74	11,100	17,303
185.23	10,416	11,817	185.75	11,113	17,414
185.24	10,430	11,921	185.76	11,126	17,526
185.25	10,443	12,025	185.77	11,140	17,637
185.26	10,456	12,130	185.78	11,153	17,748
185.27	10,470	12,235	185.79	11,167	17,860
185.28	10,483	12,339	185.80	11,180	17,972
185.29	10,497	12,444	185.81	11,193	18,084
185.30	10,510	12,549	185.82	11,207	18,196
185.31	10,523	12,654	185.83	11,220	18,308
185.32	10,537	12,760	185.84	11,234	18,420
185.33	10,550	12,865	185.85	11,247	18,532
185.34	10,564	12,971	185.86	11,260	18,645
185.35	10,577	13,076	185.87	11,274	18,758
185.36	10,590	13,182	185.88	11,287	18,870
185.37	10,604	13,288	185.89	11,301	18,983
185.38	10,617	13,394	185.90	11,314	19,096
185.39	10,631	13,501	185.91	11,327	19,210
185.40	10,644	13,607	185.92	11,341	19,323
185.41	10,657	13,713	185.93	11,354	19,436
185.42	10,671	13,820	185.94	11,368	19,550
185.43	10,684	13,927	185.95	11,381	19,664
185.44	10,698	14,034	185.96	11,394	19,778
185.45	10,711	14,141	185.97	11,408	19,892
185.46	10,724	14,248	185.98	11,421	20,006
185.47	10,738	14,355	185.99	11,435	20,120
185.48	10,751	14,463	186.00	11,448	20,235
185.49	10,765	14,570	186.01	11,462	20,349
185.50	10,778	14,678	186.02	11,476	20,464
185.51	10,791	14,786	186.03	11,489	20,579
185.52	10,805	14,894	186.04	11,503	20,694
185.53	10,818	15,002	186.05	11,517	20,809
185.54	10,832	15,110	186.06	11,531	20,924
185.55	10,845	15,219	186.07	11,544	21,039

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.08	11,558	21,155	186.60	12,275	27,351
186.09	11,572	21,270	186.61	12,289	27,474
186.10	11,586	21,386	186.62	12,302	27,597
186.11	11,600	21,502	186.63	12,316	27,720
186.12	11,613	21,618	186.64	12,330	27,843
186.13	11,627	21,734	186.65	12,344	27,967
186.14	11,641	21,851	186.66	12,357	28,090
186.15	11,655	21,967	186.67	12,371	28,214
186.16	11,668	22,084	186.68	12,385	28,338
186.17	11,682	22,201	186.69	12,399	28,462
186.18	11,696	22,317	186.70	12,413	28,586
186.19	11,710	22,434	186.71	12,426	28,710
186.20	11,724	22,552	186.72	12,440	28,834
186.21	11,737	22,669	186.73	12,454	28,959
186.22	11,751	22,786	186.74	12,468	29,083
186.23	11,765	22,904	186.75	12,482	29,208
186.24	11,779	23,022	186.76	12,495	29,333
186.25	11,793	23,140	186.77	12,509	29,458
186.26	11,806	23,258	186.78	12,523	29,583
186.27	11,820	23,376	186.79	12,537	29,708
186.28	11,834	23,494	186.80	12,550	29,834
186.29	11,848	23,612	186.81	12,564	29,959
186.30	11,861	23,731	186.82	12,578	30,085
186.31	11,875	23,850	186.83	12,592	30,211
186.32	11,889	23,968	186.84	12,606	30,337
186.33	11,903	24,087	186.85	12,619	30,463
186.34	11,917	24,206	186.86	12,633	30,589
186.35	11,930	24,326	186.87	12,647	30,716
186.36	11,944	24,445	186.88	12,661	30,842
186.37	11,958	24,565	186.89	12,674	30,969
186.38	11,972	24,684	186.90	12,688	31,096
186.39	11,985	24,804	186.91	12,702	31,223
186.40	11,999	24,924	186.92	12,716	31,350
186.41	12,013	25,044	186.93	12,730	31,477
186.42	12,027	25,164	186.94	12,743	31,604
186.43	12,041	25,285	186.95	12,757	31,732
186.44	12,054	25,405	186.96	12,771	31,860
186.45	12,068	25,526	186.97	12,785	31,987
186.46	12,082	25,646	186.98	12,798	32,115
186.47	12,096	25,767	186.99	12,812	32,243
186.48	12,109	25,888	187.00	12,826	32,372
186.49	12,123	26,009	187.01	12,840	32,500
186.50	12,137	26,131	187.02	12,854	32,628
186.51	12,151	26,252	187.03	12,869	32,757
186.52	12,165	26,374	187.04	12,883	32,886
186.53	12,178	26,495	187.05	12,897	33,015
186.54	12,192	26,617	187.06	12,911	33,144
186.55	12,206	26,739	187.07	12,925	33,273
186.56	12,220	26,861	187.08	12,939	33,402
186.57	12,233	26,984	187.09	12,954	33,532
186.58	12,247	27,106	187.10	12,968	33,661
186.59	12,261	27,229	187.11	12,982	33,791

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.12	12,996	33,921	187.64	13,734	40,871
187.13	13,010	34,051	187.65	13,748	41,008
187.14	13,025	34,181	187.66	13,762	41,146
187.15	13,039	34,311	187.67	13,776	41,283
187.16	13,053	34,442	187.68	13,790	41,421
187.17	13,067	34,572	187.69	13,804	41,559
187.18	13,081	34,703	187.70	13,819	41,697
187.19	13,095	34,834	187.71	13,833	41,835
187.20	13,110	34,965	187.72	13,847	41,974
187.21	13,124	35,096	187.73	13,861	42,112
187.22	13,138	35,228	187.74	13,875	42,251
187.23	13,152	35,359	187.75	13,890	42,390
187.24	13,166	35,491	187.76	13,904	42,529
187.25	13,181	35,622	187.77	13,918	42,668
187.26	13,195	35,754	187.78	13,932	42,807
187.27	13,209	35,886	187.79	13,946	42,947
187.28	13,223	36,018	187.80	13,960	43,086
187.29	13,237	36,151	187.81	13,975	43,226
187.30	13,251	36,283	187.82	13,989	43,366
187.31	13,266	36,416	187.83	14,003	43,506
187.32	13,280	36,548	187.84	14,017	43,646
187.33	13,294	36,681	187.85	14,031	43,786
187.34	13,308	36,814	187.86	14,045	43,926
187.35	13,322	36,947	187.87	14,060	44,067
187.36	13,336	37,081	187.88	14,074	44,207
187.37	13,351	37,214	187.89	14,088	44,348
187.38	13,365	37,348	187.90	14,102	44,489
187.39	13,379	37,481	187.91	14,116	44,630
187.40	13,393	37,615	187.92	14,131	44,772
187.41	13,407	37,749	187.93	14,145	44,913
187.42	13,422	37,883	187.94	14,159	45,054
187.43	13,436	38,018	187.95	14,173	45,196
187.44	13,450	38,152	187.96	14,187	45,338
187.45	13,464	38,287	187.97	14,201	45,480
187.46	13,478	38,421	187.98	14,216	45,622
187.47	13,492	38,556	187.99	14,230	45,764
187.48	13,507	38,691	188.00	14,244	45,907
187.49	13,521	38,826	188.01	14,258	46,049
187.50	13,535	38,962	188.02	14,273	46,192
187.51	13,549	39,097	188.03	14,287	46,334
187.52	13,563	39,233	188.04	14,302	46,477
187.53	13,578	39,368	188.05	14,316	46,621
187.54	13,592	39,504	188.06	14,331	46,764
187.55	13,606	39,640	188.07	14,345	46,907
187.56	13,620	39,776	188.08	14,360	47,051
187.57	13,634	39,913	188.09	14,374	47,194
187.58	13,648	40,049	188.10	14,388	47,338
187.59	13,663	40,186	188.11	14,403	47,482
187.60	13,677	40,322	188.12	14,417	47,626
187.61	13,691	40,459	188.13	14,432	47,770
187.62	13,705	40,596	188.14	14,446	47,915
187.63	13,719	40,733	188.15	14,461	48,059

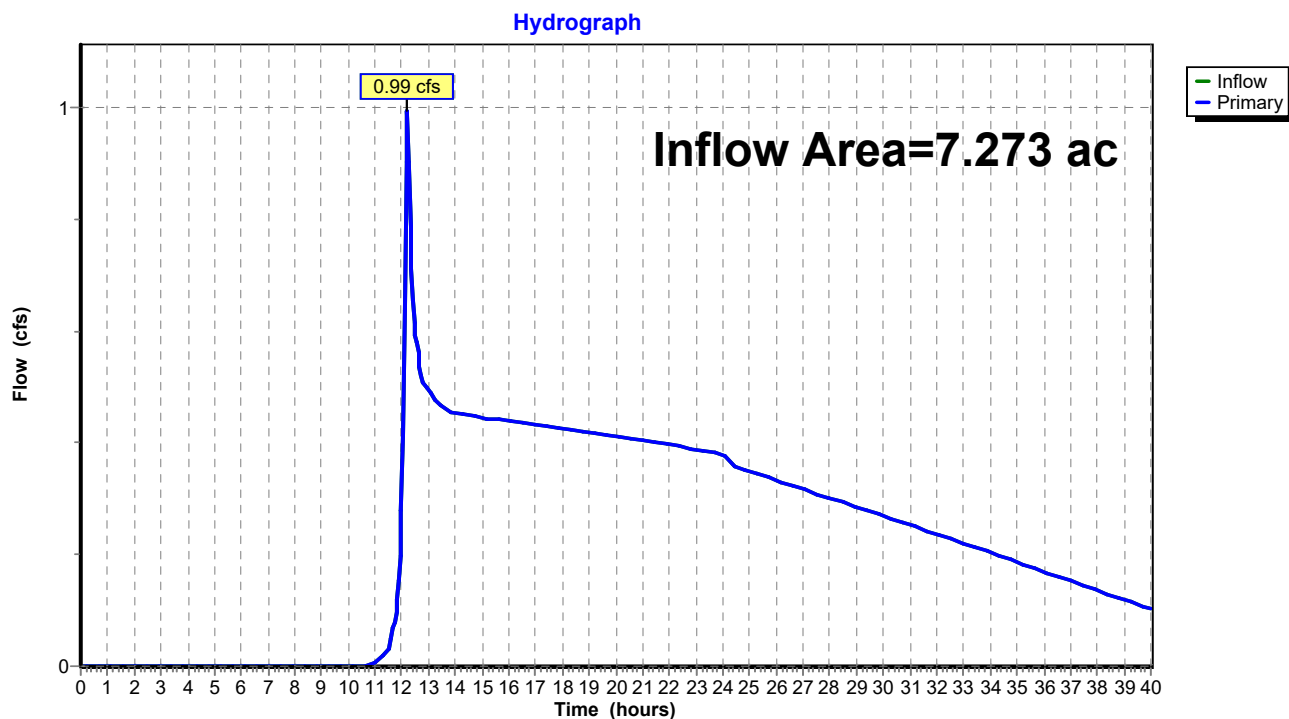
Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.16	14,475	48,204
188.17	14,489	48,349
188.18	14,504	48,494
188.19	14,518	48,639
188.20	14,533	48,784
188.21	14,547	48,930
188.22	14,562	49,075
188.23	14,576	49,221
188.24	14,591	49,367
188.25	14,605	49,513
188.26	14,619	49,659
188.27	14,634	49,805
188.28	14,648	49,951
188.29	14,663	50,098
188.30	14,677	50,245
188.31	14,692	50,392
188.32	14,706	50,539
188.33	14,721	50,686
188.34	14,735	50,833
188.35	14,749	50,980
188.36	14,764	51,128
188.37	14,778	51,276
188.38	14,793	51,423
188.39	14,807	51,571
188.40	14,822	51,720
188.41	14,836	51,868
188.42	14,850	52,016
188.43	14,865	52,165
188.44	14,879	52,314
188.45	14,894	52,463
188.46	14,908	52,612
188.47	14,923	52,761
188.48	14,937	52,910
188.49	14,952	53,059
188.50	14,966	53,209

Summary for Link PDA-5: Proposed Drainage Area #5

Inflow Area = 7.273 ac, 32.33% Impervious, Inflow Depth > 1.24" for Current 2 yr event
Inflow = 0.99 cfs @ 12.20 hrs, Volume= 0.751 af
Primary = 0.99 cfs @ 12.20 hrs, Volume= 0.751 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-5: Proposed Drainage Area #5

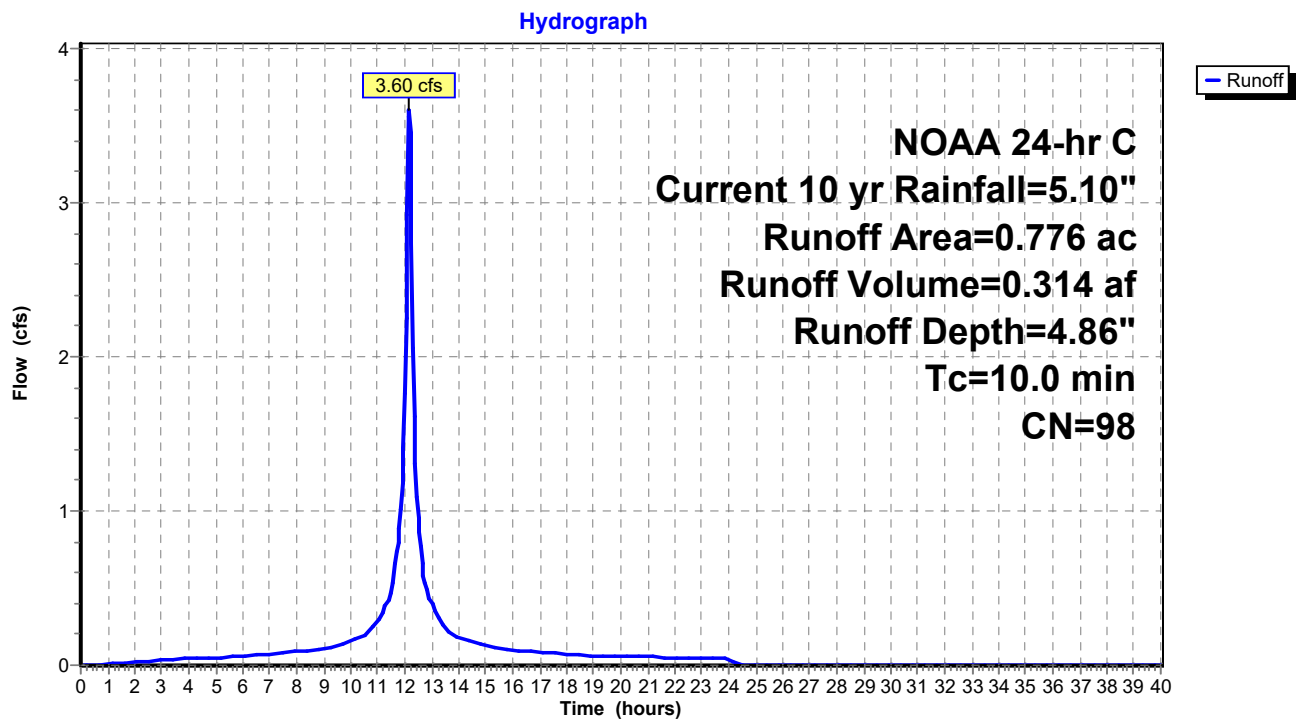
Summary for Subcatchment 48I: PDA-48 (impervious)

Runoff = 3.60 cfs @ 12.17 hrs, Volume= 0.314 af, Depth= 4.86"
 Routed to Pond B-48 : Basin #48

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
* 0.235	98	Pavement, HSG C
* 0.522	98	Roof, HSG C
* 0.019	98	Concrete, HSG C
0.776	98	Weighted Average
0.776		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 48I: PDA-48 (impervious)

Summary for Subcatchment 48P: PDA-48 (pervious)

Runoff = 4.02 cfs @ 12.18 hrs, Volume= 0.303 af, Depth= 2.44"
 Routed to Pond B-48 : Basin #48

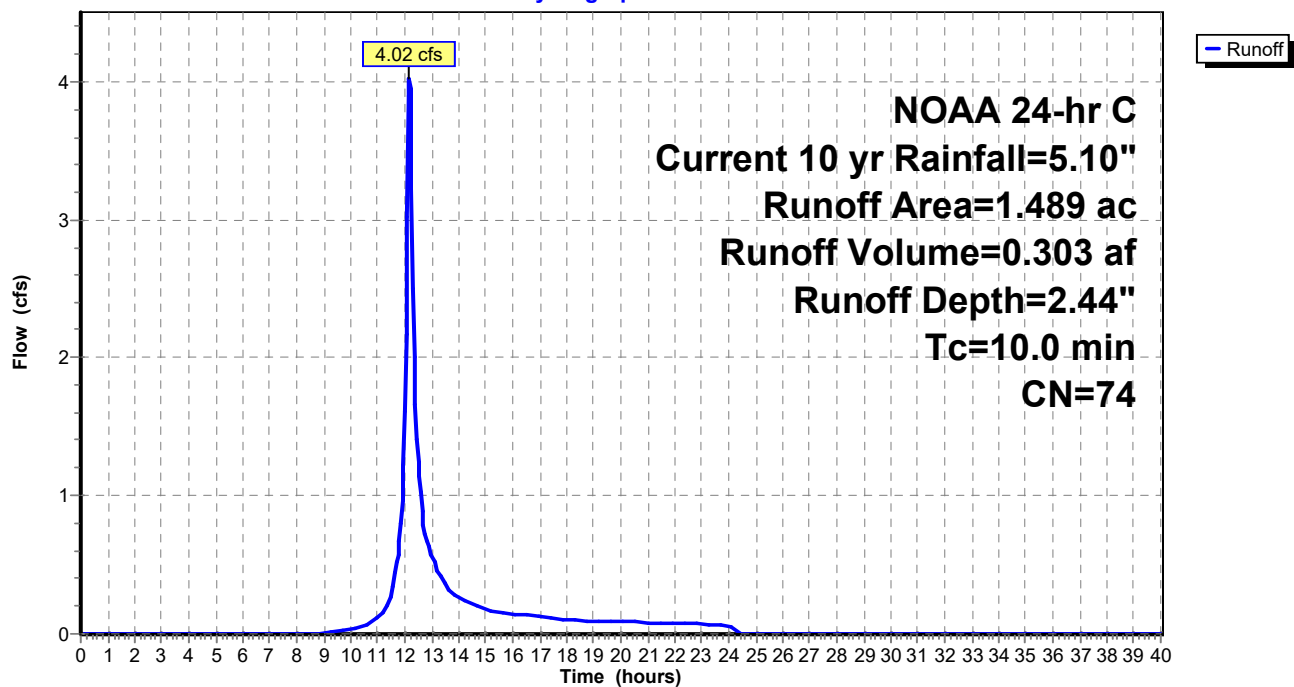
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.489	74	>75% Grass cover, Good, HSG C
1.489		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 48P: PDA-48 (pervious)

Hydrograph



Summary for Subcatchment 49I: PDA-49 (impervious)

Runoff = 4.24 cfs @ 12.17 hrs, Volume= 0.370 af, Depth= 4.86"
 Routed to Pond B-49 : Basin #49

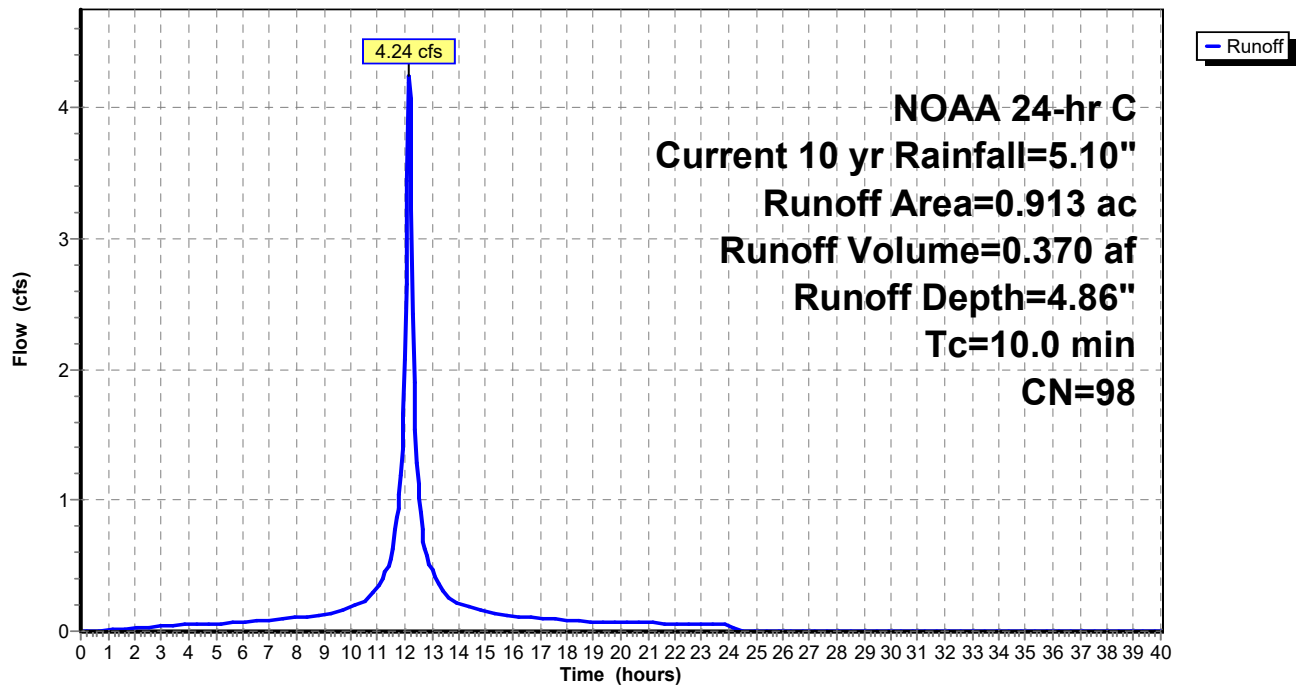
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
* 0.434	98	Pavement, HSG C
* 0.418	98	Roof, HSG C
* 0.061	98	Concrete, HSG C
0.913	98	Weighted Average
0.913		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 49I: PDA-49 (impervious)

Hydrograph



Summary for Subcatchment 49P: PDA-49 (pervious)

Runoff = 3.18 cfs @ 12.18 hrs, Volume= 0.240 af, Depth= 2.44"
 Routed to Pond B-49 : Basin #49

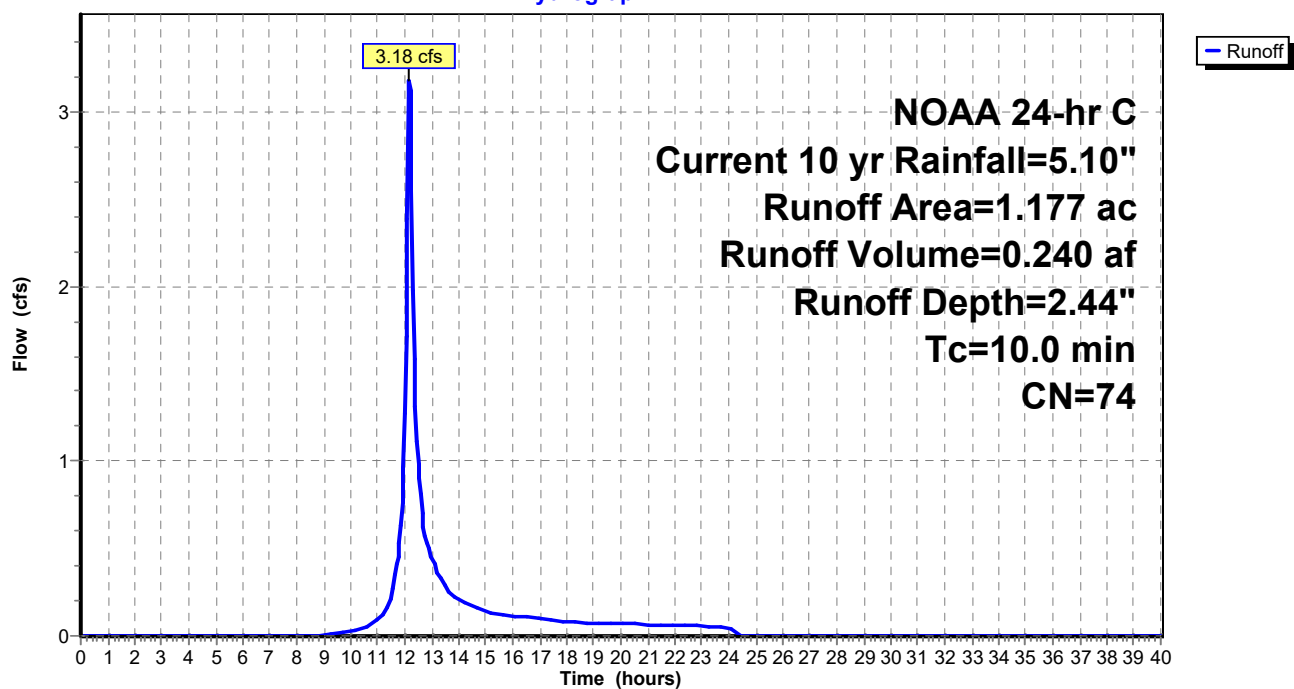
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.177	74	>75% Grass cover, Good, HSG C
1.177		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 49P: PDA-49 (pervious)

Hydrograph



Summary for Subcatchment 50I: PDA-50 (impervious)

Runoff = 3.07 cfs @ 12.17 hrs, Volume= 0.268 af, Depth= 4.86"
 Routed to Pond B-50 : Basin #50

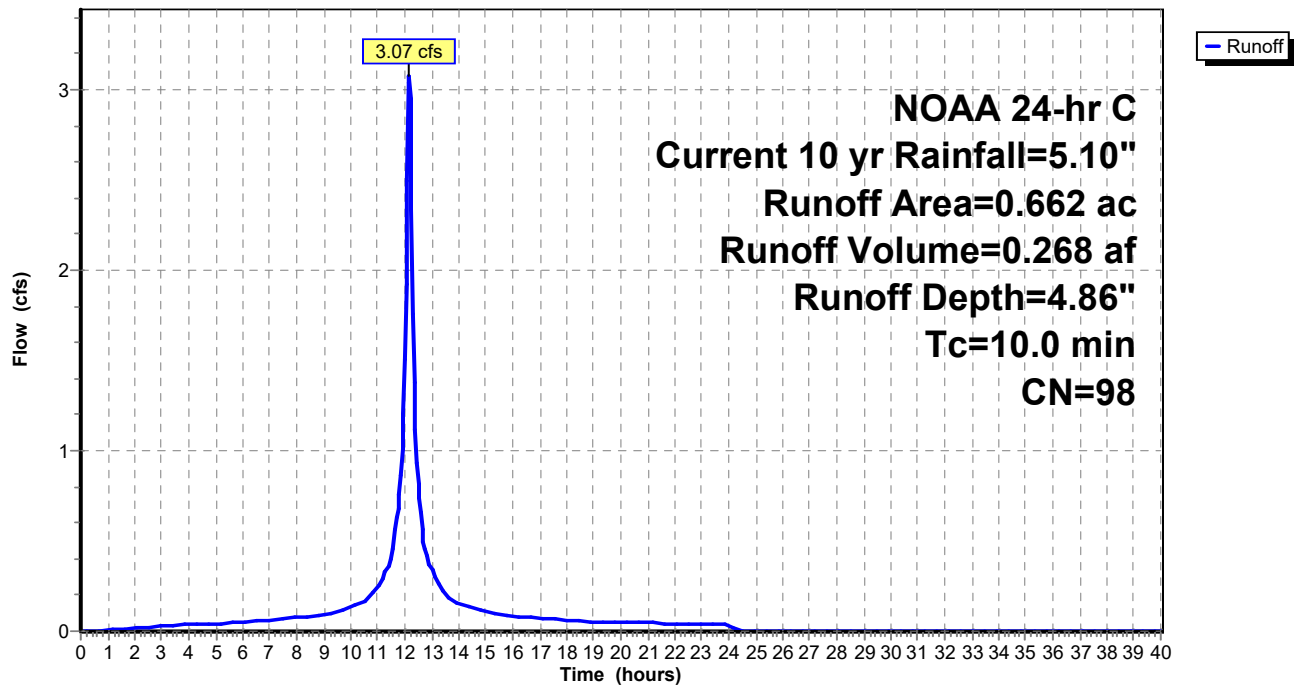
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
* 0.291	98	Pavement, HSG C
* 0.325	98	Roof, HSG C
* 0.046	98	Concrete, HSG C
0.662	98	Weighted Average
0.662		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 50I: PDA-50 (impervious)

Hydrograph



Summary for Subcatchment 50P: PDA-50 (pervious)

Runoff = 4.32 cfs @ 12.18 hrs, Volume= 0.326 af, Depth= 2.44"
 Routed to Pond B-50 : Basin #50

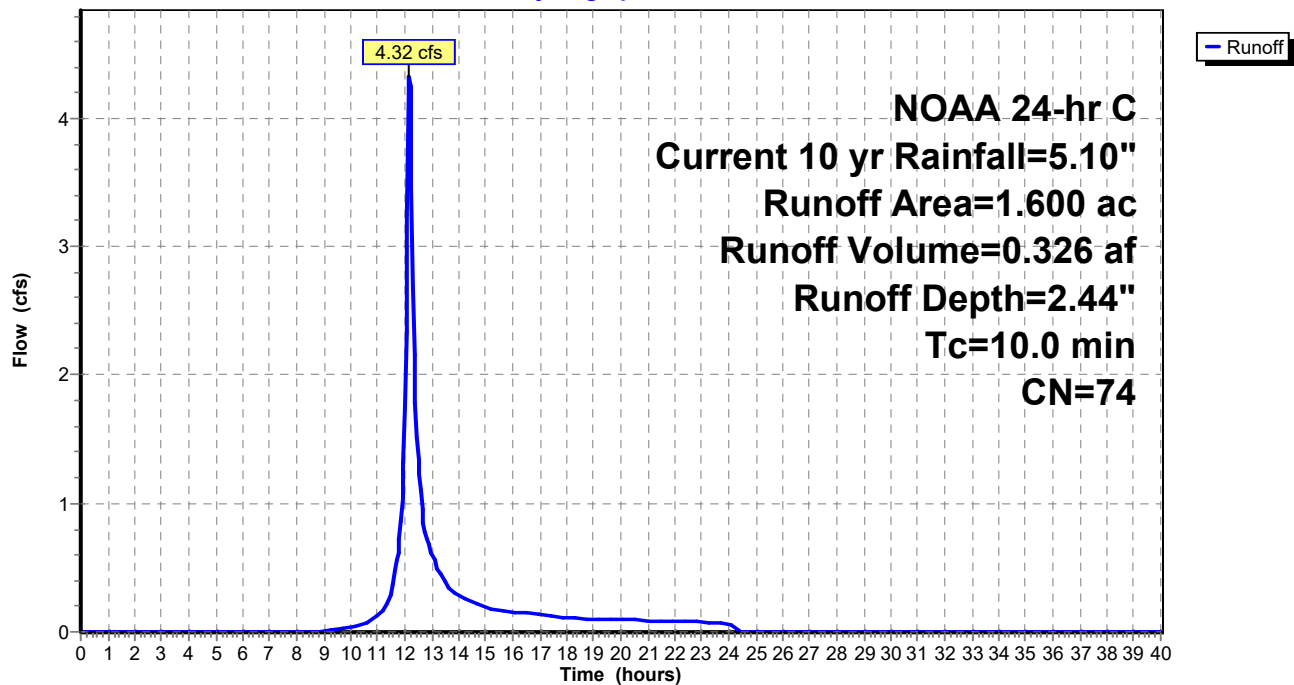
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.600	74	>75% Grass cover, Good, HSG C
1.600		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 50P: PDA-50 (pervious)

Hydrograph



Summary for Subcatchment UPDA-5: PDA-5 (undetained)

Runoff = 1.77 cfs @ 12.18 hrs, Volume= 0.134 af, Depth= 2.44"
 Routed to Link PDA-5 : Proposed Drainage Area #5

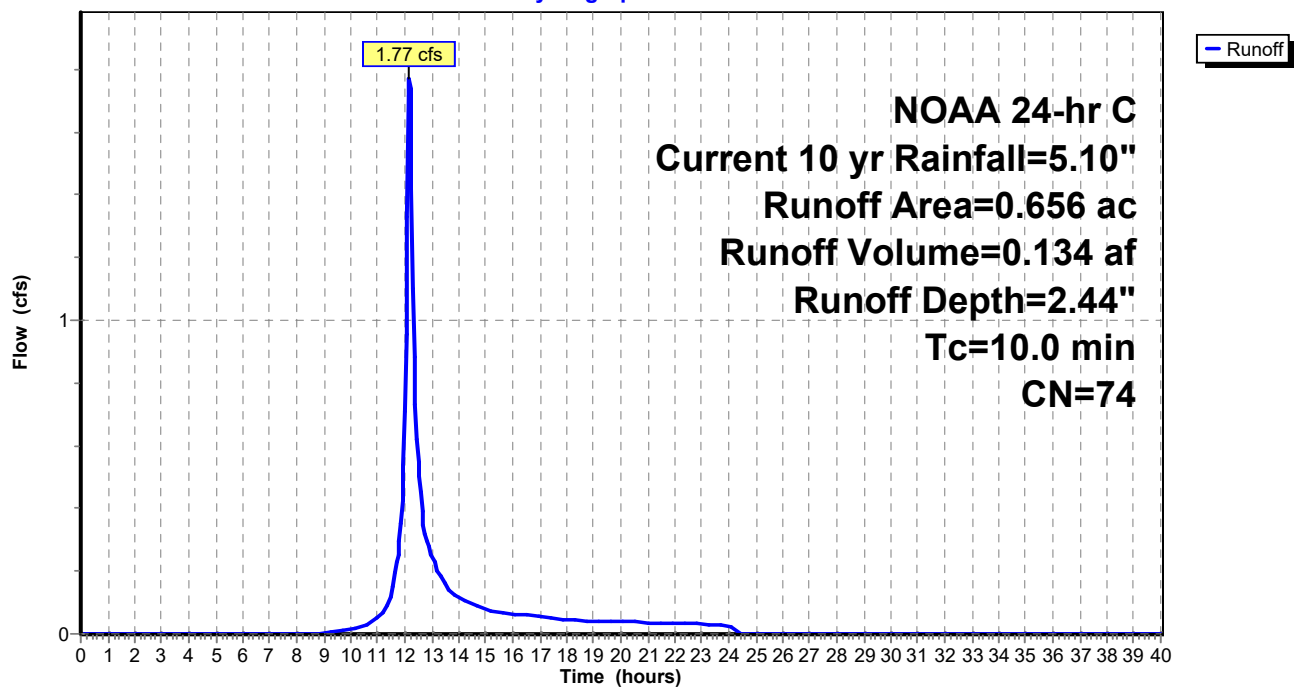
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.656	74	>75% Grass cover, Good, HSG C
0.656		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment UPDA-5: PDA-5 (undetained)

Hydrograph



Summary for Pond B-48: Basin #48

Inflow Area = 2.265 ac, 34.26% Impervious, Inflow Depth = 3.27" for Current 10 yr event
 Inflow = 7.62 cfs @ 12.17 hrs, Volume= 0.618 af
 Outflow = 0.20 cfs @ 17.23 hrs, Volume= 0.396 af, Atten= 97%, Lag= 303.2 min
 Primary = 0.20 cfs @ 17.23 hrs, Volume= 0.396 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 192.97' @ 17.23 hrs Surf.Area= 11,345 sf Storage= 19,859 cf

Plug-Flow detention time= 808.0 min calculated for 0.396 af (64% of inflow)
 Center-of-Mass det. time= 699.3 min (1,496.4 - 797.0)

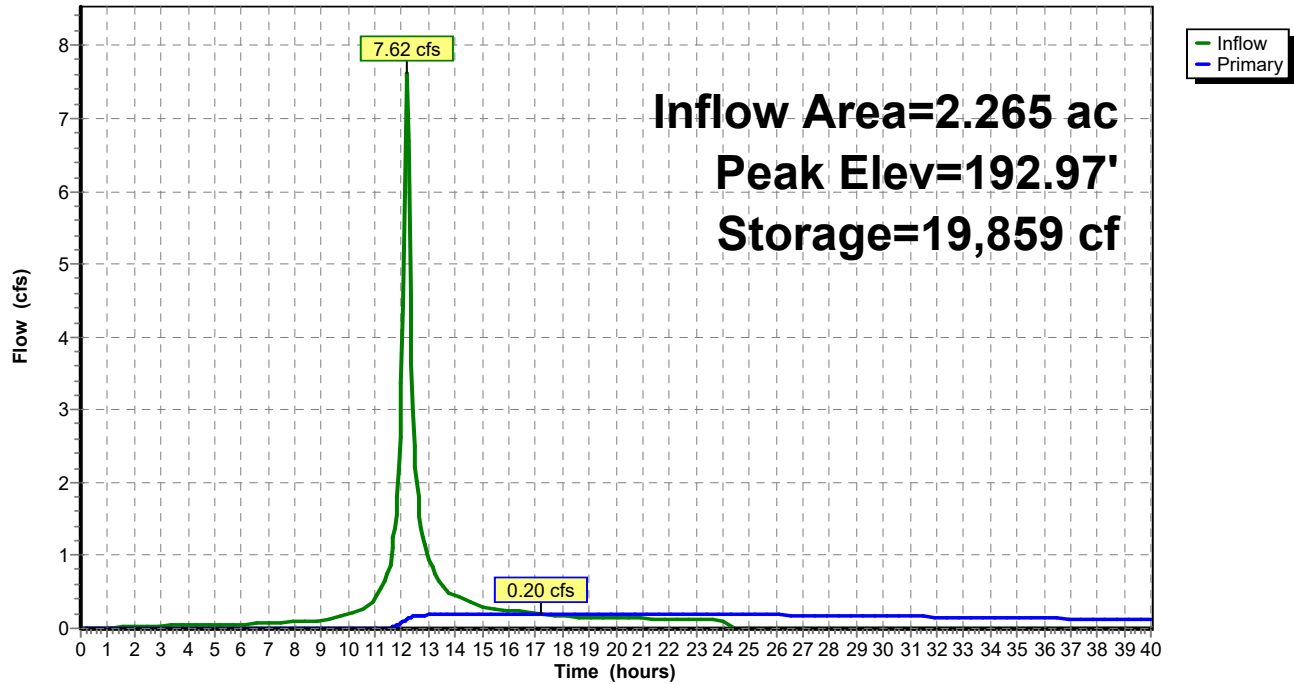
Volume	Invert	Avail.Storage	Storage Description
#1	191.00'	32,287 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.00	8,869	0	0
192.00	10,100	9,485	9,485
193.00	11,387	10,744	20,228
194.00	12,731	12,059	32,287

Device	Routing	Invert	Outlet Devices
#1	Primary	191.00'	18.0" Round Culvert L= 185.0' Ke= 0.500 Inlet / Outlet Invert= 191.00' / 188.45' S= 0.0138 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	191.40'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	193.99'	50.0' long + 3.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.20 cfs @ 17.23 hrs HW=192.97' (Free Discharge)

1=Culvert (Passes 0.20 cfs of 9.39 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.20 cfs @ 5.82 fps)
 3=Sharp-Crested Rectangular Weir(Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs)

Pond B-48: Basin #48**Hydrograph**

Stage-Discharge for Pond B-48: Basin #48

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.00	0.00	191.52	0.02	192.04	0.12	192.56	0.17
191.01	0.00	191.53	0.03	192.05	0.12	192.57	0.17
191.02	0.00	191.54	0.03	192.06	0.12	192.58	0.17
191.03	0.00	191.55	0.03	192.07	0.12	192.59	0.17
191.04	0.00	191.56	0.04	192.08	0.12	192.60	0.17
191.05	0.00	191.57	0.04	192.09	0.13	192.61	0.17
191.06	0.00	191.58	0.05	192.10	0.13	192.62	0.17
191.07	0.00	191.59	0.05	192.11	0.13	192.63	0.17
191.08	0.00	191.60	0.05	192.12	0.13	192.64	0.17
191.09	0.00	191.61	0.05	192.13	0.13	192.65	0.18
191.10	0.00	191.62	0.06	192.14	0.13	192.66	0.18
191.11	0.00	191.63	0.06	192.15	0.13	192.67	0.18
191.12	0.00	191.64	0.06	192.16	0.13	192.68	0.18
191.13	0.00	191.65	0.06	192.17	0.13	192.69	0.18
191.14	0.00	191.66	0.06	192.18	0.13	192.70	0.18
191.15	0.00	191.67	0.07	192.19	0.14	192.71	0.18
191.16	0.00	191.68	0.07	192.20	0.14	192.72	0.18
191.17	0.00	191.69	0.07	192.21	0.14	192.73	0.18
191.18	0.00	191.70	0.07	192.22	0.14	192.74	0.18
191.19	0.00	191.71	0.07	192.23	0.14	192.75	0.18
191.20	0.00	191.72	0.08	192.24	0.14	192.76	0.18
191.21	0.00	191.73	0.08	192.25	0.14	192.77	0.18
191.22	0.00	191.74	0.08	192.26	0.14	192.78	0.19
191.23	0.00	191.75	0.08	192.27	0.14	192.79	0.19
191.24	0.00	191.76	0.08	192.28	0.14	192.80	0.19
191.25	0.00	191.77	0.08	192.29	0.15	192.81	0.19
191.26	0.00	191.78	0.09	192.30	0.15	192.82	0.19
191.27	0.00	191.79	0.09	192.31	0.15	192.83	0.19
191.28	0.00	191.80	0.09	192.32	0.15	192.84	0.19
191.29	0.00	191.81	0.09	192.33	0.15	192.85	0.19
191.30	0.00	191.82	0.09	192.34	0.15	192.86	0.19
191.31	0.00	191.83	0.09	192.35	0.15	192.87	0.19
191.32	0.00	191.84	0.10	192.36	0.15	192.88	0.19
191.33	0.00	191.85	0.10	192.37	0.15	192.89	0.19
191.34	0.00	191.86	0.10	192.38	0.15	192.90	0.19
191.35	0.00	191.87	0.10	192.39	0.15	192.91	0.19
191.36	0.00	191.88	0.10	192.40	0.16	192.92	0.20
191.37	0.00	191.89	0.10	192.41	0.16	192.93	0.20
191.38	0.00	191.90	0.10	192.42	0.16	192.94	0.20
191.39	0.00	191.91	0.10	192.43	0.16	192.95	0.20
191.40	0.00	191.92	0.11	192.44	0.16	192.96	0.20
191.41	0.00	191.93	0.11	192.45	0.16	192.97	0.20
191.42	0.00	191.94	0.11	192.46	0.16	192.98	0.20
191.43	0.00	191.95	0.11	192.47	0.16	192.99	0.20
191.44	0.00	191.96	0.11	192.48	0.16	193.00	0.20
191.45	0.00	191.97	0.11	192.49	0.16	193.01	0.21
191.46	0.01	191.98	0.11	192.50	0.16	193.02	0.24
191.47	0.01	191.99	0.11	192.51	0.16	193.03	0.27
191.48	0.01	192.00	0.12	192.52	0.17	193.04	0.31
191.49	0.01	192.01	0.12	192.53	0.17	193.05	0.35
191.50	0.02	192.02	0.12	192.54	0.17	193.06	0.40
191.51	0.02	192.03	0.12	192.55	0.17	193.07	0.45

Stage-Discharge for Pond B-48: Basin #48 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.08	0.50	193.60	6.13
193.09	0.56	193.61	6.28
193.10	0.62	193.62	6.43
193.11	0.68	193.63	6.57
193.12	0.75	193.64	6.72
193.13	0.82	193.65	6.87
193.14	0.89	193.66	7.02
193.15	0.96	193.67	7.17
193.16	1.04	193.68	7.33
193.17	1.12	193.69	7.48
193.18	1.20	193.70	7.64
193.19	1.29	193.71	7.79
193.20	1.37	193.72	7.95
193.21	1.46	193.73	8.11
193.22	1.55	193.74	8.26
193.23	1.64	193.75	8.42
193.24	1.74	193.76	8.58
193.25	1.83	193.77	8.74
193.26	1.93	193.78	8.91
193.27	2.03	193.79	9.07
193.28	2.13	193.80	9.23
193.29	2.23	193.81	9.40
193.30	2.34	193.82	9.56
193.31	2.44	193.83	9.73
193.32	2.55	193.84	9.90
193.33	2.66	193.85	10.07
193.34	2.77	193.86	10.24
193.35	2.88	193.87	10.40
193.36	3.00	193.88	10.58
193.37	3.11	193.89	10.75
193.38	3.23	193.90	10.92
193.39	3.35	193.91	11.09
193.40	3.47	193.92	11.27
193.41	3.59	193.93	11.44
193.42	3.71	193.94	11.62
193.43	3.84	193.95	11.79
193.44	3.96	193.96	11.97
193.45	4.09	193.97	12.15
193.46	4.22	193.98	12.33
193.47	4.35	193.99	12.51
193.48	4.48	194.00	12.81
193.49	4.61		
193.50	4.74		
193.51	4.87		
193.52	5.01		
193.53	5.15		
193.54	5.28		
193.55	5.42		
193.56	5.56		
193.57	5.70		
193.58	5.85		
193.59	5.99		

Stage-Area-Storage for Pond B-48: Basin #48

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.00	8,869	0	191.52	9,509	4,778
191.01	8,881	89	191.53	9,521	4,873
191.02	8,894	178	191.54	9,534	4,969
191.03	8,906	267	191.55	9,546	5,064
191.04	8,918	356	191.56	9,558	5,160
191.05	8,931	445	191.57	9,571	5,255
191.06	8,943	534	191.58	9,583	5,351
191.07	8,955	624	191.59	9,595	5,447
191.08	8,967	713	191.60	9,608	5,543
191.09	8,980	803	191.61	9,620	5,639
191.10	8,992	893	191.62	9,632	5,735
191.11	9,004	983	191.63	9,645	5,832
191.12	9,017	1,073	191.64	9,657	5,928
191.13	9,029	1,163	191.65	9,669	6,025
191.14	9,041	1,254	191.66	9,681	6,122
191.15	9,054	1,344	191.67	9,694	6,219
191.16	9,066	1,435	191.68	9,706	6,316
191.17	9,078	1,526	191.69	9,718	6,413
191.18	9,091	1,616	191.70	9,731	6,510
191.19	9,103	1,707	191.71	9,743	6,607
191.20	9,115	1,798	191.72	9,755	6,705
191.21	9,128	1,890	191.73	9,768	6,802
191.22	9,140	1,981	191.74	9,780	6,900
191.23	9,152	2,072	191.75	9,792	6,998
191.24	9,164	2,164	191.76	9,805	7,096
191.25	9,177	2,256	191.77	9,817	7,194
191.26	9,189	2,348	191.78	9,829	7,292
191.27	9,201	2,439	191.79	9,841	7,391
191.28	9,214	2,532	191.80	9,854	7,489
191.29	9,226	2,624	191.81	9,866	7,588
191.30	9,238	2,716	191.82	9,878	7,686
191.31	9,251	2,809	191.83	9,891	7,785
191.32	9,263	2,901	191.84	9,903	7,884
191.33	9,275	2,994	191.85	9,915	7,983
191.34	9,288	3,087	191.86	9,928	8,083
191.35	9,300	3,180	191.87	9,940	8,182
191.36	9,312	3,273	191.88	9,952	8,281
191.37	9,324	3,366	191.89	9,965	8,381
191.38	9,337	3,459	191.90	9,977	8,481
191.39	9,349	3,553	191.91	9,989	8,580
191.40	9,361	3,646	191.92	10,002	8,680
191.41	9,374	3,740	191.93	10,014	8,781
191.42	9,386	3,834	191.94	10,026	8,881
191.43	9,398	3,927	191.95	10,038	8,981
191.44	9,411	4,022	191.96	10,051	9,081
191.45	9,423	4,116	191.97	10,063	9,182
191.46	9,435	4,210	191.98	10,075	9,283
191.47	9,448	4,304	191.99	10,088	9,384
191.48	9,460	4,399	192.00	10,100	9,485
191.49	9,472	4,494	192.01	10,113	9,586
191.50	9,485	4,588	192.02	10,126	9,687
191.51	9,497	4,683	192.03	10,139	9,788

Stage-Area-Storage for Pond B-48: Basin #48 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.04	10,151	9,890	192.56	10,821	15,342
192.05	10,164	9,991	192.57	10,834	15,451
192.06	10,177	10,093	192.58	10,846	15,559
192.07	10,190	10,195	192.59	10,859	15,668
192.08	10,203	10,297	192.60	10,872	15,776
192.09	10,216	10,399	192.61	10,885	15,885
192.10	10,229	10,501	192.62	10,898	15,994
192.11	10,242	10,603	192.63	10,911	16,103
192.12	10,254	10,706	192.64	10,924	16,212
192.13	10,267	10,808	192.65	10,937	16,321
192.14	10,280	10,911	192.66	10,949	16,431
192.15	10,293	11,014	192.67	10,962	16,540
192.16	10,306	11,117	192.68	10,975	16,650
192.17	10,319	11,220	192.69	10,988	16,760
192.18	10,332	11,323	192.70	11,001	16,870
192.19	10,345	11,427	192.71	11,014	16,980
192.20	10,357	11,530	192.72	11,027	17,090
192.21	10,370	11,634	192.73	11,040	17,200
192.22	10,383	11,738	192.74	11,052	17,311
192.23	10,396	11,842	192.75	11,065	17,421
192.24	10,409	11,946	192.76	11,078	17,532
192.25	10,422	12,050	192.77	11,091	17,643
192.26	10,435	12,154	192.78	11,104	17,754
192.27	10,447	12,258	192.79	11,117	17,865
192.28	10,460	12,363	192.80	11,130	17,976
192.29	10,473	12,468	192.81	11,142	18,088
192.30	10,486	12,572	192.82	11,155	18,199
192.31	10,499	12,677	192.83	11,168	18,311
192.32	10,512	12,782	192.84	11,181	18,423
192.33	10,525	12,888	192.85	11,194	18,534
192.34	10,538	12,993	192.86	11,207	18,646
192.35	10,550	13,098	192.87	11,220	18,759
192.36	10,563	13,204	192.88	11,233	18,871
192.37	10,576	13,310	192.89	11,245	18,983
192.38	10,589	13,415	192.90	11,258	19,096
192.39	10,602	13,521	192.91	11,271	19,208
192.40	10,615	13,627	192.92	11,284	19,321
192.41	10,628	13,734	192.93	11,297	19,434
192.42	10,641	13,840	192.94	11,310	19,547
192.43	10,653	13,946	192.95	11,323	19,660
192.44	10,666	14,053	192.96	11,336	19,774
192.45	10,679	14,160	192.97	11,348	19,887
192.46	10,692	14,267	192.98	11,361	20,001
192.47	10,705	14,374	192.99	11,374	20,114
192.48	10,718	14,481	193.00	11,387	20,228
192.49	10,731	14,588	193.01	11,400	20,342
192.50	10,744	14,695	193.02	11,414	20,456
192.51	10,756	14,803	193.03	11,427	20,570
192.52	10,769	14,911	193.04	11,441	20,685
192.53	10,782	15,018	193.05	11,454	20,799
192.54	10,795	15,126	193.06	11,468	20,914
192.55	10,808	15,234	193.07	11,481	21,028

Stage-Area-Storage for Pond B-48: Basin #48 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.08	11,495	21,143	193.60	12,193	27,302
193.09	11,508	21,258	193.61	12,207	27,424
193.10	11,521	21,373	193.62	12,220	27,546
193.11	11,535	21,489	193.63	12,234	27,669
193.12	11,548	21,604	193.64	12,247	27,791
193.13	11,562	21,720	193.65	12,261	27,913
193.14	11,575	21,835	193.66	12,274	28,036
193.15	11,589	21,951	193.67	12,287	28,159
193.16	11,602	22,067	193.68	12,301	28,282
193.17	11,615	22,183	193.69	12,314	28,405
193.18	11,629	22,299	193.70	12,328	28,528
193.19	11,642	22,416	193.71	12,341	28,652
193.20	11,656	22,532	193.72	12,355	28,775
193.21	11,669	22,649	193.73	12,368	28,899
193.22	11,683	22,766	193.74	12,382	29,022
193.23	11,696	22,883	193.75	12,395	29,146
193.24	11,710	23,000	193.76	12,408	29,270
193.25	11,723	23,117	193.77	12,422	29,394
193.26	11,736	23,234	193.78	12,435	29,519
193.27	11,750	23,351	193.79	12,449	29,643
193.28	11,763	23,469	193.80	12,462	29,768
193.29	11,777	23,587	193.81	12,476	29,892
193.30	11,790	23,705	193.82	12,489	30,017
193.31	11,804	23,823	193.83	12,503	30,142
193.32	11,817	23,941	193.84	12,516	30,267
193.33	11,831	24,059	193.85	12,529	30,392
193.34	11,844	24,177	193.86	12,543	30,518
193.35	11,857	24,296	193.87	12,556	30,643
193.36	11,871	24,414	193.88	12,570	30,769
193.37	11,884	24,533	193.89	12,583	30,895
193.38	11,898	24,652	193.90	12,597	31,021
193.39	11,911	24,771	193.91	12,610	31,147
193.40	11,925	24,890	193.92	12,623	31,273
193.41	11,938	25,010	193.93	12,637	31,399
193.42	11,951	25,129	193.94	12,650	31,526
193.43	11,965	25,249	193.95	12,664	31,652
193.44	11,978	25,368	193.96	12,677	31,779
193.45	11,992	25,488	193.97	12,691	31,906
193.46	12,005	25,608	193.98	12,704	32,033
193.47	12,019	25,728	193.99	12,718	32,160
193.48	12,032	25,849	194.00	12,731	32,287
193.49	12,046	25,969			
193.50	12,059	26,090			
193.51	12,072	26,210			
193.52	12,086	26,331			
193.53	12,099	26,452			
193.54	12,113	26,573			
193.55	12,126	26,694			
193.56	12,140	26,815			
193.57	12,153	26,937			
193.58	12,167	27,059			
193.59	12,180	27,180			

Summary for Pond B-49: Basin #49

Inflow Area = 2.090 ac, 43.68% Impervious, Inflow Depth = 3.50" for Current 10 yr event
 Inflow = 7.42 cfs @ 12.17 hrs, Volume= 0.610 af
 Outflow = 1.54 cfs @ 12.64 hrs, Volume= 0.480 af, Atten= 79%, Lag= 28.1 min
 Primary = 1.54 cfs @ 12.64 hrs, Volume= 0.480 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 184.96' @ 12.64 hrs Surf.Area= 8,675 sf Storage= 14,929 cf

Plug-Flow detention time= 532.3 min calculated for 0.480 af (79% of inflow)
 Center-of-Mass det. time= 446.9 min (1,235.0 - 788.1)

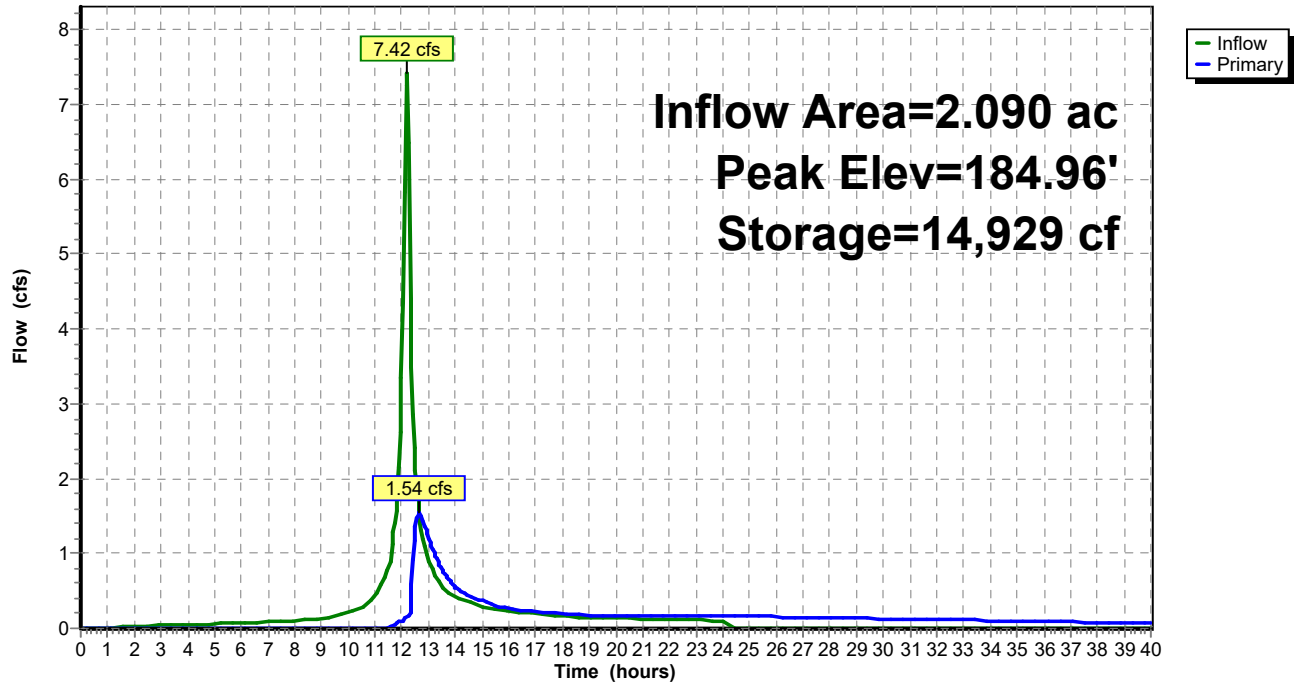
Volume	Invert	Avail.Storage	Storage Description
#1	183.00'	52,993 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.00	6,565	0	0
184.00	7,625	7,095	7,095
185.00	8,717	8,171	15,266
186.00	9,853	9,285	24,551
187.00	11,027	10,440	34,991
188.00	12,333	11,680	46,671
188.50	12,956	6,322	52,993

Device	Routing	Invert	Outlet Devices
#1	Primary	183.00'	15.0" Round Culvert L= 25.0' Ke= 0.500 Inlet / Outlet Invert= 183.00' / 182.81' S= 0.0076 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	183.55'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.74'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	187.75'	30.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)

Primary OutFlow Max=1.53 cfs @ 12.64 hrs HW=184.96' (Free Discharge)

1=Culvert (Passes 1.53 cfs of 6.48 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.19 cfs @ 5.50 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 1.34 cfs @ 1.54 fps)
 4=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-49: Basin #49**Hydrograph**

Stage-Discharge for Pond B-49: Basin #49

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.00	0.00	183.52	0.00	184.04	0.10	184.56	0.16
183.01	0.00	183.53	0.00	184.05	0.10	184.57	0.16
183.02	0.00	183.54	0.00	184.06	0.10	184.58	0.16
183.03	0.00	183.55	0.00	184.07	0.11	184.59	0.16
183.04	0.00	183.56	0.00	184.08	0.11	184.60	0.16
183.05	0.00	183.57	0.00	184.09	0.11	184.61	0.16
183.06	0.00	183.58	0.00	184.10	0.11	184.62	0.16
183.07	0.00	183.59	0.00	184.11	0.11	184.63	0.16
183.08	0.00	183.60	0.00	184.12	0.11	184.64	0.16
183.09	0.00	183.61	0.01	184.13	0.11	184.65	0.16
183.10	0.00	183.62	0.01	184.14	0.11	184.66	0.16
183.11	0.00	183.63	0.01	184.15	0.12	184.67	0.17
183.12	0.00	183.64	0.01	184.16	0.12	184.68	0.17
183.13	0.00	183.65	0.02	184.17	0.12	184.69	0.17
183.14	0.00	183.66	0.02	184.18	0.12	184.70	0.17
183.15	0.00	183.67	0.02	184.19	0.12	184.71	0.17
183.16	0.00	183.68	0.03	184.20	0.12	184.72	0.17
183.17	0.00	183.69	0.03	184.21	0.12	184.73	0.17
183.18	0.00	183.70	0.03	184.22	0.12	184.74	0.17
183.19	0.00	183.71	0.04	184.23	0.12	184.75	0.18
183.20	0.00	183.72	0.04	184.24	0.13	184.76	0.21
183.21	0.00	183.73	0.05	184.25	0.13	184.77	0.24
183.22	0.00	183.74	0.05	184.26	0.13	184.78	0.28
183.23	0.00	183.75	0.05	184.27	0.13	184.79	0.32
183.24	0.00	183.76	0.05	184.28	0.13	184.80	0.37
183.25	0.00	183.77	0.06	184.29	0.13	184.81	0.42
183.26	0.00	183.78	0.06	184.30	0.13	184.82	0.47
183.27	0.00	183.79	0.06	184.31	0.13	184.83	0.53
183.28	0.00	183.80	0.06	184.32	0.13	184.84	0.59
183.29	0.00	183.81	0.06	184.33	0.13	184.85	0.65
183.30	0.00	183.82	0.07	184.34	0.14	184.86	0.72
183.31	0.00	183.83	0.07	184.35	0.14	184.87	0.79
183.32	0.00	183.84	0.07	184.36	0.14	184.88	0.86
183.33	0.00	183.85	0.07	184.37	0.14	184.89	0.94
183.34	0.00	183.86	0.07	184.38	0.14	184.90	1.01
183.35	0.00	183.87	0.08	184.39	0.14	184.91	1.09
183.36	0.00	183.88	0.08	184.40	0.14	184.92	1.17
183.37	0.00	183.89	0.08	184.41	0.14	184.93	1.26
183.38	0.00	183.90	0.08	184.42	0.14	184.94	1.34
183.39	0.00	183.91	0.08	184.43	0.14	184.95	1.43
183.40	0.00	183.92	0.08	184.44	0.15	184.96	1.52
183.41	0.00	183.93	0.09	184.45	0.15	184.97	1.61
183.42	0.00	183.94	0.09	184.46	0.15	184.98	1.71
183.43	0.00	183.95	0.09	184.47	0.15	184.99	1.80
183.44	0.00	183.96	0.09	184.48	0.15	185.00	1.90
183.45	0.00	183.97	0.09	184.49	0.15	185.01	2.00
183.46	0.00	183.98	0.09	184.50	0.15	185.02	2.10
183.47	0.00	183.99	0.10	184.51	0.15	185.03	2.21
183.48	0.00	184.00	0.10	184.52	0.15	185.04	2.31
183.49	0.00	184.01	0.10	184.53	0.15	185.05	2.42
183.50	0.00	184.02	0.10	184.54	0.15	185.06	2.52
183.51	0.00	184.03	0.10	184.55	0.16	185.07	2.63

Stage-Discharge for Pond B-49: Basin #49 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.08	2.75	185.60	8.30	186.12	9.33	186.64	10.26
185.09	2.86	185.61	8.33	186.13	9.35	186.65	10.28
185.10	2.97	185.62	8.35	186.14	9.37	186.66	10.29
185.11	3.09	185.63	8.37	186.15	9.39	186.67	10.31
185.12	3.20	185.64	8.39	186.16	9.41	186.68	10.33
185.13	3.32	185.65	8.41	186.17	9.43	186.69	10.34
185.14	3.44	185.66	8.43	186.18	9.44	186.70	10.36
185.15	3.56	185.67	8.45	186.19	9.46	186.71	10.38
185.16	3.69	185.68	8.47	186.20	9.48	186.72	10.40
185.17	3.81	185.69	8.49	186.21	9.50	186.73	10.41
185.18	3.94	185.70	8.51	186.22	9.52	186.74	10.43
185.19	4.06	185.71	8.53	186.23	9.54	186.75	10.45
185.20	4.19	185.72	8.55	186.24	9.56	186.76	10.46
185.21	4.32	185.73	8.57	186.25	9.57	186.77	10.48
185.22	4.45	185.74	8.59	186.26	9.59	186.78	10.50
185.23	4.58	185.75	8.61	186.27	9.61	186.79	10.51
185.24	4.72	185.76	8.63	186.28	9.63	186.80	10.53
185.25	4.85	185.77	8.65	186.29	9.65	186.81	10.55
185.26	4.99	185.78	8.67	186.30	9.66	186.82	10.56
185.27	5.12	185.79	8.69	186.31	9.68	186.83	10.58
185.28	5.26	185.80	8.71	186.32	9.70	186.84	10.59
185.29	5.40	185.81	8.73	186.33	9.72	186.85	10.61
185.30	5.54	185.82	8.75	186.34	9.74	186.86	10.63
185.31	5.68	185.83	8.77	186.35	9.75	186.87	10.64
185.32	5.82	185.84	8.79	186.36	9.77	186.88	10.66
185.33	5.97	185.85	8.81	186.37	9.79	186.89	10.68
185.34	6.11	185.86	8.83	186.38	9.81	186.90	10.69
185.35	6.26	185.87	8.85	186.39	9.83	186.91	10.71
185.36	6.40	185.88	8.87	186.40	9.84	186.92	10.73
185.37	6.55	185.89	8.89	186.41	9.86	186.93	10.74
185.38	6.70	185.90	8.91	186.42	9.88	186.94	10.76
185.39	6.85	185.91	8.93	186.43	9.90	186.95	10.77
185.40	7.00	185.92	8.95	186.44	9.91	186.96	10.79
185.41	7.15	185.93	8.97	186.45	9.93	186.97	10.81
185.42	7.30	185.94	8.99	186.46	9.95	186.98	10.82
185.43	7.46	185.95	9.01	186.47	9.97	186.99	10.84
185.44	7.61	185.96	9.03	186.48	9.98	187.00	10.86
185.45	7.77	185.97	9.05	186.49	10.00	187.01	10.87
185.46	7.92	185.98	9.07	186.50	10.02	187.02	10.89
185.47	8.03	185.99	9.09	186.51	10.04	187.03	10.90
185.48	8.05	186.00	9.11	186.52	10.05	187.04	10.92
185.49	8.07	186.01	9.13	186.53	10.07	187.05	10.94
185.50	8.09	186.02	9.14	186.54	10.09	187.06	10.95
185.51	8.11	186.03	9.16	186.55	10.11	187.07	10.97
185.52	8.13	186.04	9.18	186.56	10.12	187.08	10.98
185.53	8.16	186.05	9.20	186.57	10.14	187.09	11.00
185.54	8.18	186.06	9.22	186.58	10.16	187.10	11.01
185.55	8.20	186.07	9.24	186.59	10.17	187.11	11.03
185.56	8.22	186.08	9.26	186.60	10.19	187.12	11.05
185.57	8.24	186.09	9.28	186.61	10.21	187.13	11.06
185.58	8.26	186.10	9.30	186.62	10.23	187.14	11.08
185.59	8.28	186.11	9.31	186.63	10.24	187.15	11.09

Stage-Discharge for Pond B-49: Basin #49 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
187.16	11.11	187.68	11.90	188.20	42.16
187.17	11.13	187.69	11.91	188.21	43.16
187.18	11.14	187.70	11.93	188.22	44.18
187.19	11.16	187.71	11.94	188.23	45.20
187.20	11.17	187.72	11.96	188.24	46.23
187.21	11.19	187.73	11.97	188.25	47.28
187.22	11.20	187.74	11.99	188.26	48.33
187.23	11.22	187.75	12.00	188.27	49.39
187.24	11.23	187.76	12.11	188.28	50.47
187.25	11.25	187.77	12.31	188.29	51.55
187.26	11.27	187.78	12.55	188.30	52.64
187.27	11.28	187.79	12.84	188.31	53.75
187.28	11.30	187.80	13.17	188.32	54.86
187.29	11.31	187.81	13.53	188.33	55.98
187.30	11.33	187.82	13.92	188.34	57.11
187.31	11.34	187.83	14.34	188.35	58.25
187.32	11.36	187.84	14.78	188.36	59.40
187.33	11.37	187.85	15.25	188.37	60.56
187.34	11.39	187.86	15.74	188.38	61.73
187.35	11.40	187.87	16.25	188.39	62.91
187.36	11.42	187.88	16.78	188.40	64.10
187.37	11.43	187.89	17.34	188.41	65.29
187.38	11.45	187.90	17.91	188.42	66.50
187.39	11.47	187.91	18.50	188.43	67.71
187.40	11.48	187.92	19.11	188.44	68.93
187.41	11.50	187.93	19.74	188.45	70.16
187.42	11.51	187.94	20.39	188.46	71.40
187.43	11.53	187.95	21.05	188.47	72.65
187.44	11.54	187.96	21.73	188.48	73.91
187.45	11.56	187.97	22.42	188.49	75.17
187.46	11.57	187.98	23.14	188.50	76.45
187.47	11.59	187.99	23.86		
187.48	11.60	188.00	24.60		
187.49	11.62	188.01	25.36		
187.50	11.63	188.02	26.13		
187.51	11.65	188.03	26.91		
187.52	11.66	188.04	27.71		
187.53	11.68	188.05	28.52		
187.54	11.69	188.06	29.34		
187.55	11.71	188.07	30.18		
187.56	11.72	188.08	31.03		
187.57	11.74	188.09	31.89		
187.58	11.75	188.10	32.77		
187.59	11.77	188.11	33.65		
187.60	11.78	188.12	34.55		
187.61	11.80	188.13	35.46		
187.62	11.81	188.14	36.39		
187.63	11.83	188.15	37.32		
187.64	11.84	188.16	38.27		
187.65	11.85	188.17	39.22		
187.66	11.87	188.18	40.19		
187.67	11.88	188.19	41.17		

Stage-Area-Storage for Pond B-49: Basin #49

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.00	6,565	0	183.52	7,116	3,557
183.01	6,576	66	183.53	7,127	3,628
183.02	6,586	132	183.54	7,137	3,700
183.03	6,597	197	183.55	7,148	3,771
183.04	6,607	263	183.56	7,159	3,843
183.05	6,618	330	183.57	7,169	3,914
183.06	6,629	396	183.58	7,180	3,986
183.07	6,639	462	183.59	7,190	4,058
183.08	6,650	529	183.60	7,201	4,130
183.09	6,660	595	183.61	7,212	4,202
183.10	6,671	662	183.62	7,222	4,274
183.11	6,682	729	183.63	7,233	4,346
183.12	6,692	795	183.64	7,243	4,419
183.13	6,703	862	183.65	7,254	4,491
183.14	6,713	929	183.66	7,265	4,564
183.15	6,724	997	183.67	7,275	4,636
183.16	6,735	1,064	183.68	7,286	4,709
183.17	6,745	1,131	183.69	7,296	4,782
183.18	6,756	1,199	183.70	7,307	4,855
183.19	6,766	1,266	183.71	7,318	4,928
183.20	6,777	1,334	183.72	7,328	5,002
183.21	6,788	1,402	183.73	7,339	5,075
183.22	6,798	1,470	183.74	7,349	5,148
183.23	6,809	1,538	183.75	7,360	5,222
183.24	6,819	1,606	183.76	7,371	5,296
183.25	6,830	1,674	183.77	7,381	5,369
183.26	6,841	1,743	183.78	7,392	5,443
183.27	6,851	1,811	183.79	7,402	5,517
183.28	6,862	1,880	183.80	7,413	5,591
183.29	6,872	1,948	183.81	7,424	5,665
183.30	6,883	2,017	183.82	7,434	5,740
183.31	6,894	2,086	183.83	7,445	5,814
183.32	6,904	2,155	183.84	7,455	5,889
183.33	6,915	2,224	183.85	7,466	5,963
183.34	6,925	2,293	183.86	7,477	6,038
183.35	6,936	2,363	183.87	7,487	6,113
183.36	6,947	2,432	183.88	7,498	6,188
183.37	6,957	2,502	183.89	7,508	6,263
183.38	6,968	2,571	183.90	7,519	6,338
183.39	6,978	2,641	183.91	7,530	6,413
183.40	6,989	2,711	183.92	7,540	6,488
183.41	7,000	2,781	183.93	7,551	6,564
183.42	7,010	2,851	183.94	7,561	6,639
183.43	7,021	2,921	183.95	7,572	6,715
183.44	7,031	2,991	183.96	7,583	6,791
183.45	7,042	3,062	183.97	7,593	6,867
183.46	7,053	3,132	183.98	7,604	6,943
183.47	7,063	3,203	183.99	7,614	7,019
183.48	7,074	3,273	184.00	7,625	7,095
183.49	7,084	3,344	184.01	7,636	7,171
183.50	7,095	3,415	184.02	7,647	7,248
183.51	7,106	3,486	184.03	7,658	7,324

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.04	7,669	7,401	184.56	8,237	11,536
184.05	7,680	7,478	184.57	8,247	11,619
184.06	7,691	7,554	184.58	8,258	11,701
184.07	7,701	7,631	184.59	8,269	11,784
184.08	7,712	7,708	184.60	8,280	11,867
184.09	7,723	7,786	184.61	8,291	11,949
184.10	7,734	7,863	184.62	8,302	12,032
184.11	7,745	7,940	184.63	8,313	12,115
184.12	7,756	8,018	184.64	8,324	12,199
184.13	7,767	8,095	184.65	8,335	12,282
184.14	7,778	8,173	184.66	8,346	12,365
184.15	7,789	8,251	184.67	8,357	12,449
184.16	7,800	8,329	184.68	8,368	12,532
184.17	7,811	8,407	184.69	8,378	12,616
184.18	7,822	8,485	184.70	8,389	12,700
184.19	7,832	8,563	184.71	8,400	12,784
184.20	7,843	8,642	184.72	8,411	12,868
184.21	7,854	8,720	184.73	8,422	12,952
184.22	7,865	8,799	184.74	8,433	13,036
184.23	7,876	8,878	184.75	8,444	13,121
184.24	7,887	8,956	184.76	8,455	13,205
184.25	7,898	9,035	184.77	8,466	13,290
184.26	7,909	9,114	184.78	8,477	13,375
184.27	7,920	9,194	184.79	8,488	13,460
184.28	7,931	9,273	184.80	8,499	13,544
184.29	7,942	9,352	184.81	8,510	13,629
184.30	7,953	9,432	184.82	8,520	13,715
184.31	7,964	9,511	184.83	8,531	13,800
184.32	7,974	9,591	184.84	8,542	13,885
184.33	7,985	9,671	184.85	8,553	13,971
184.34	7,996	9,751	184.86	8,564	14,056
184.35	8,007	9,831	184.87	8,575	14,142
184.36	8,018	9,911	184.88	8,586	14,228
184.37	8,029	9,991	184.89	8,597	14,314
184.38	8,040	10,071	184.90	8,608	14,400
184.39	8,051	10,152	184.91	8,619	14,486
184.40	8,062	10,232	184.92	8,630	14,572
184.41	8,073	10,313	184.93	8,641	14,658
184.42	8,084	10,394	184.94	8,651	14,745
184.43	8,095	10,475	184.95	8,662	14,832
184.44	8,105	10,556	184.96	8,673	14,918
184.45	8,116	10,637	184.97	8,684	15,005
184.46	8,127	10,718	184.98	8,695	15,092
184.47	8,138	10,799	184.99	8,706	15,179
184.48	8,149	10,881	185.00	8,717	15,266
184.49	8,160	10,962	185.01	8,728	15,353
184.50	8,171	11,044	185.02	8,740	15,441
184.51	8,182	11,126	185.03	8,751	15,528
184.52	8,193	11,208	185.04	8,762	15,616
184.53	8,204	11,290	185.05	8,774	15,703
184.54	8,215	11,372	185.06	8,785	15,791
184.55	8,226	11,454	185.07	8,797	15,879

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.08	8,808	15,967	185.60	9,399	20,701
185.09	8,819	16,055	185.61	9,410	20,795
185.10	8,831	16,143	185.62	9,421	20,889
185.11	8,842	16,232	185.63	9,433	20,983
185.12	8,853	16,320	185.64	9,444	21,078
185.13	8,865	16,409	185.65	9,455	21,172
185.14	8,876	16,498	185.66	9,467	21,267
185.15	8,887	16,586	185.67	9,478	21,361
185.16	8,899	16,675	185.68	9,489	21,456
185.17	8,910	16,764	185.69	9,501	21,551
185.18	8,921	16,853	185.70	9,512	21,646
185.19	8,933	16,943	185.71	9,524	21,741
185.20	8,944	17,032	185.72	9,535	21,837
185.21	8,956	17,122	185.73	9,546	21,932
185.22	8,967	17,211	185.74	9,558	22,028
185.23	8,978	17,301	185.75	9,569	22,123
185.24	8,990	17,391	185.76	9,580	22,219
185.25	9,001	17,481	185.77	9,592	22,315
185.26	9,012	17,571	185.78	9,603	22,411
185.27	9,024	17,661	185.79	9,614	22,507
185.28	9,035	17,751	185.80	9,626	22,603
185.29	9,046	17,842	185.81	9,637	22,699
185.30	9,058	17,932	185.82	9,649	22,796
185.31	9,069	18,023	185.83	9,660	22,892
185.32	9,081	18,114	185.84	9,671	22,989
185.33	9,092	18,204	185.85	9,683	23,086
185.34	9,103	18,295	185.86	9,694	23,183
185.35	9,115	18,387	185.87	9,705	23,280
185.36	9,126	18,478	185.88	9,717	23,377
185.37	9,137	18,569	185.89	9,728	23,474
185.38	9,149	18,660	185.90	9,739	23,571
185.39	9,160	18,752	185.91	9,751	23,669
185.40	9,171	18,844	185.92	9,762	23,766
185.41	9,183	18,935	185.93	9,773	23,864
185.42	9,194	19,027	185.94	9,785	23,962
185.43	9,205	19,119	185.95	9,796	24,060
185.44	9,217	19,211	185.96	9,808	24,158
185.45	9,228	19,304	185.97	9,819	24,256
185.46	9,240	19,396	185.98	9,830	24,354
185.47	9,251	19,488	185.99	9,842	24,453
185.48	9,262	19,581	186.00	9,853	24,551
185.49	9,274	19,674	186.01	9,865	24,650
185.50	9,285	19,767	186.02	9,876	24,748
185.51	9,296	19,859	186.03	9,888	24,847
185.52	9,308	19,952	186.04	9,900	24,946
185.53	9,319	20,046	186.05	9,912	25,045
185.54	9,330	20,139	186.06	9,923	25,144
185.55	9,342	20,232	186.07	9,935	25,244
185.56	9,353	20,326	186.08	9,947	25,343
185.57	9,365	20,419	186.09	9,959	25,443
185.58	9,376	20,513	186.10	9,970	25,542
185.59	9,387	20,607	186.11	9,982	25,642

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.12	9,994	25,742	186.64	10,604	31,097
186.13	10,006	25,842	186.65	10,616	31,203
186.14	10,017	25,942	186.66	10,628	31,310
186.15	10,029	26,042	186.67	10,640	31,416
186.16	10,041	26,143	186.68	10,651	31,522
186.17	10,053	26,243	186.69	10,663	31,629
186.18	10,064	26,344	186.70	10,675	31,736
186.19	10,076	26,444	186.71	10,687	31,843
186.20	10,088	26,545	186.72	10,698	31,949
186.21	10,100	26,646	186.73	10,710	32,057
186.22	10,111	26,747	186.74	10,722	32,164
186.23	10,123	26,848	186.75	10,734	32,271
186.24	10,135	26,950	186.76	10,745	32,378
186.25	10,147	27,051	186.77	10,757	32,486
186.26	10,158	27,152	186.78	10,769	32,593
186.27	10,170	27,254	186.79	10,780	32,701
186.28	10,182	27,356	186.80	10,792	32,809
186.29	10,193	27,458	186.81	10,804	32,917
186.30	10,205	27,560	186.82	10,816	33,025
186.31	10,217	27,662	186.83	10,827	33,133
186.32	10,229	27,764	186.84	10,839	33,242
186.33	10,240	27,866	186.85	10,851	33,350
186.34	10,252	27,969	186.86	10,863	33,459
186.35	10,264	28,071	186.87	10,874	33,567
186.36	10,276	28,174	186.88	10,886	33,676
186.37	10,287	28,277	186.89	10,898	33,785
186.38	10,299	28,380	186.90	10,910	33,894
186.39	10,311	28,483	186.91	10,921	34,003
186.40	10,323	28,586	186.92	10,933	34,113
186.41	10,334	28,689	186.93	10,945	34,222
186.42	10,346	28,793	186.94	10,957	34,331
186.43	10,358	28,896	186.95	10,968	34,441
186.44	10,370	29,000	186.96	10,980	34,551
186.45	10,381	29,104	186.97	10,992	34,661
186.46	10,393	29,208	186.98	11,004	34,771
186.47	10,405	29,312	186.99	11,015	34,881
186.48	10,417	29,416	187.00	11,027	34,991
186.49	10,428	29,520	187.01	11,040	35,101
186.50	10,440	29,624	187.02	11,053	35,212
186.51	10,452	29,729	187.03	11,066	35,322
186.52	10,463	29,833	187.04	11,079	35,433
186.53	10,475	29,938	187.05	11,092	35,544
186.54	10,487	30,043	187.06	11,105	35,655
186.55	10,499	30,148	187.07	11,118	35,766
186.56	10,510	30,253	187.08	11,131	35,877
186.57	10,522	30,358	187.09	11,145	35,989
186.58	10,534	30,463	187.10	11,158	36,100
186.59	10,546	30,569	187.11	11,171	36,212
186.60	10,557	30,674	187.12	11,184	36,324
186.61	10,569	30,780	187.13	11,197	36,436
186.62	10,581	30,886	187.14	11,210	36,548
186.63	10,593	30,991	187.15	11,223	36,660

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.16	11,236	36,772	187.68	11,915	42,791
187.17	11,249	36,884	187.69	11,928	42,911
187.18	11,262	36,997	187.70	11,941	43,030
187.19	11,275	37,110	187.71	11,954	43,149
187.20	11,288	37,223	187.72	11,967	43,269
187.21	11,301	37,335	187.73	11,980	43,389
187.22	11,314	37,449	187.74	11,993	43,509
187.23	11,327	37,562	187.75	12,007	43,629
187.24	11,340	37,675	187.76	12,020	43,749
187.25	11,354	37,789	187.77	12,033	43,869
187.26	11,367	37,902	187.78	12,046	43,989
187.27	11,380	38,016	187.79	12,059	44,110
187.28	11,393	38,130	187.80	12,072	44,231
187.29	11,406	38,244	187.81	12,085	44,351
187.30	11,419	38,358	187.82	12,098	44,472
187.31	11,432	38,472	187.83	12,111	44,593
187.32	11,445	38,587	187.84	12,124	44,714
187.33	11,458	38,701	187.85	12,137	44,836
187.34	11,471	38,816	187.86	12,150	44,957
187.35	11,484	38,930	187.87	12,163	45,079
187.36	11,497	39,045	187.88	12,176	45,200
187.37	11,510	39,160	187.89	12,189	45,322
187.38	11,523	39,276	187.90	12,202	45,444
187.39	11,536	39,391	187.91	12,215	45,566
187.40	11,549	39,506	187.92	12,229	45,689
187.41	11,562	39,622	187.93	12,242	45,811
187.42	11,576	39,738	187.94	12,255	45,933
187.43	11,589	39,853	187.95	12,268	46,056
187.44	11,602	39,969	187.96	12,281	46,179
187.45	11,615	40,085	187.97	12,294	46,302
187.46	11,628	40,202	187.98	12,307	46,425
187.47	11,641	40,318	187.99	12,320	46,548
187.48	11,654	40,434	188.00	12,333	46,671
187.49	11,667	40,551	188.01	12,345	46,794
187.50	11,680	40,668	188.02	12,358	46,918
187.51	11,693	40,785	188.03	12,370	47,042
187.52	11,706	40,902	188.04	12,383	47,165
187.53	11,719	41,019	188.05	12,395	47,289
187.54	11,732	41,136	188.06	12,408	47,413
187.55	11,745	41,253	188.07	12,420	47,537
187.56	11,758	41,371	188.08	12,433	47,662
187.57	11,771	41,489	188.09	12,445	47,786
187.58	11,784	41,606	188.10	12,458	47,911
187.59	11,798	41,724	188.11	12,470	48,035
187.60	11,811	41,842	188.12	12,483	48,160
187.61	11,824	41,960	188.13	12,495	48,285
187.62	11,837	42,079	188.14	12,507	48,410
187.63	11,850	42,197	188.15	12,520	48,535
187.64	11,863	42,316	188.16	12,532	48,660
187.65	11,876	42,434	188.17	12,545	48,786
187.66	11,889	42,553	188.18	12,557	48,911
187.67	11,902	42,672	188.19	12,570	49,037

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.20	12,582	49,163
188.21	12,595	49,288
188.22	12,607	49,414
188.23	12,620	49,541
188.24	12,632	49,667
188.25	12,645	49,793
188.26	12,657	49,920
188.27	12,669	50,046
188.28	12,682	50,173
188.29	12,694	50,300
188.30	12,707	50,427
188.31	12,719	50,554
188.32	12,732	50,681
188.33	12,744	50,809
188.34	12,757	50,936
188.35	12,769	51,064
188.36	12,782	51,192
188.37	12,794	51,319
188.38	12,806	51,448
188.39	12,819	51,576
188.40	12,831	51,704
188.41	12,844	51,832
188.42	12,856	51,961
188.43	12,869	52,089
188.44	12,881	52,218
188.45	12,894	52,347
188.46	12,906	52,476
188.47	12,919	52,605
188.48	12,931	52,734
188.49	12,944	52,864
188.50	12,956	52,993

Summary for Pond B-50: Basin #50

Inflow Area = 2.262 ac, 29.27% Impervious, Inflow Depth = 3.15" for Current 10 yr event
 Inflow = 7.40 cfs @ 12.17 hrs, Volume= 0.594 af
 Outflow = 1.21 cfs @ 12.77 hrs, Volume= 0.463 af, Atten= 84%, Lag= 35.6 min
 Primary = 1.21 cfs @ 12.77 hrs, Volume= 0.463 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 185.49' @ 12.77 hrs Surf.Area= 10,759 sf Storage= 14,524 cf

Plug-Flow detention time= 533.9 min calculated for 0.463 af (78% of inflow)
 Center-of-Mass det. time= 445.9 min (1,248.2 - 802.3)

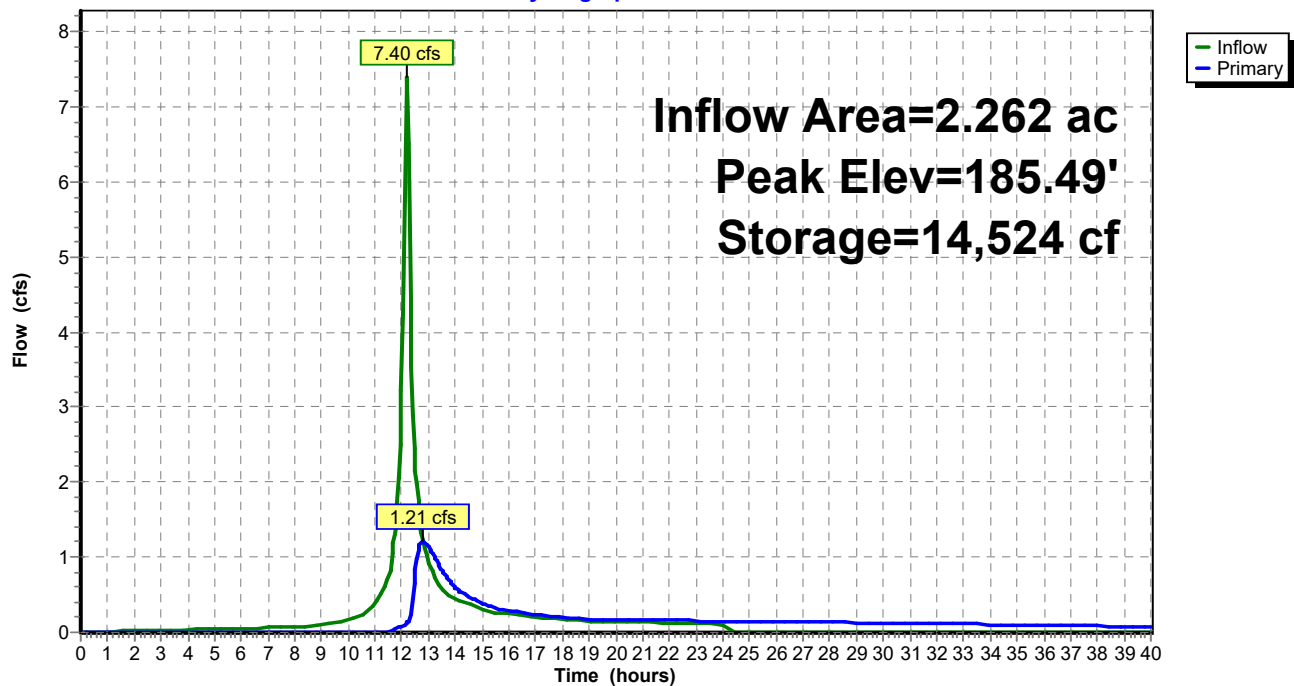
Volume	Invert	Avail.Storage	Storage Description
#1	184.00'	53,209 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
184.00	8,805	0	0
185.00	10,108	9,457	9,457
186.00	11,448	10,778	20,235
187.00	12,826	12,137	32,372
188.00	14,244	13,535	45,907
188.50	14,966	7,303	53,209

Device	Routing	Invert	Outlet Devices
#1	Primary	180.50'	18.0" Round Culvert L= 83.0' Ke= 0.500 Inlet / Outlet Invert= 180.50' / 179.67' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	184.32'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.30'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	188.45'	30.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.20 cfs @ 12.77 hrs HW=185.49' (Free Discharge)

1=Culvert (Passes 1.20 cfs of 16.96 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.17 cfs @ 4.96 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 1.04 cfs @ 1.41 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-50: Basin #50**Hydrograph**

Stage-Discharge for Pond B-50: Basin #50

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
184.00	0.00	184.52	0.05	185.04	0.13	185.56	1.89
184.01	0.00	184.53	0.05	185.05	0.13	185.57	1.99
184.02	0.00	184.54	0.06	185.06	0.13	185.58	2.09
184.03	0.00	184.55	0.06	185.07	0.13	185.59	2.19
184.04	0.00	184.56	0.06	185.08	0.13	185.60	2.30
184.05	0.00	184.57	0.06	185.09	0.13	185.61	2.40
184.06	0.00	184.58	0.06	185.10	0.13	185.62	2.51
184.07	0.00	184.59	0.07	185.11	0.14	185.63	2.62
184.08	0.00	184.60	0.07	185.12	0.14	185.64	2.73
184.09	0.00	184.61	0.07	185.13	0.14	185.65	2.84
184.10	0.00	184.62	0.07	185.14	0.14	185.66	2.96
184.11	0.00	184.63	0.07	185.15	0.14	185.67	3.07
184.12	0.00	184.64	0.08	185.16	0.14	185.68	3.19
184.13	0.00	184.65	0.08	185.17	0.14	185.69	3.31
184.14	0.00	184.66	0.08	185.18	0.14	185.70	3.43
184.15	0.00	184.67	0.08	185.19	0.14	185.71	3.55
184.16	0.00	184.68	0.08	185.20	0.14	185.72	3.67
184.17	0.00	184.69	0.08	185.21	0.15	185.73	3.80
184.18	0.00	184.70	0.09	185.22	0.15	185.74	3.92
184.19	0.00	184.71	0.09	185.23	0.15	185.75	4.05
184.20	0.00	184.72	0.09	185.24	0.15	185.76	4.18
184.21	0.00	184.73	0.09	185.25	0.15	185.77	4.31
184.22	0.00	184.74	0.09	185.26	0.15	185.78	4.44
184.23	0.00	184.75	0.09	185.27	0.15	185.79	4.57
184.24	0.00	184.76	0.10	185.28	0.15	185.80	4.70
184.25	0.00	184.77	0.10	185.29	0.15	185.81	4.84
184.26	0.00	184.78	0.10	185.30	0.15	185.82	4.97
184.27	0.00	184.79	0.10	185.31	0.17	185.83	5.11
184.28	0.00	184.80	0.10	185.32	0.19	185.84	5.25
184.29	0.00	184.81	0.10	185.33	0.22	185.85	5.38
184.30	0.00	184.82	0.10	185.34	0.26	185.86	5.52
184.31	0.00	184.83	0.10	185.35	0.30	185.87	5.67
184.32	0.00	184.84	0.11	185.36	0.35	185.88	5.81
184.33	0.00	184.85	0.11	185.37	0.40	185.89	5.95
184.34	0.00	184.86	0.11	185.38	0.46	185.90	6.10
184.35	0.00	184.87	0.11	185.39	0.51	185.91	6.24
184.36	0.00	184.88	0.11	185.40	0.57	185.92	6.39
184.37	0.00	184.89	0.11	185.41	0.64	185.93	6.54
184.38	0.01	184.90	0.11	185.42	0.70	185.94	6.68
184.39	0.01	184.91	0.11	185.43	0.77	185.95	6.83
184.40	0.01	184.92	0.12	185.44	0.85	185.96	6.99
184.41	0.01	184.93	0.12	185.45	0.92	185.97	7.14
184.42	0.02	184.94	0.12	185.46	1.00	185.98	7.29
184.43	0.02	184.95	0.12	185.47	1.08	185.99	7.44
184.44	0.02	184.96	0.12	185.48	1.16	186.00	7.60
184.45	0.03	184.97	0.12	185.49	1.24	186.01	7.75
184.46	0.03	184.98	0.12	185.50	1.33	186.02	7.91
184.47	0.03	184.99	0.12	185.51	1.42	186.03	8.07
184.48	0.04	185.00	0.12	185.52	1.51	186.04	8.23
184.49	0.04	185.01	0.13	185.53	1.60	186.05	8.39
184.50	0.05	185.02	0.13	185.54	1.69	186.06	8.55
184.51	0.05	185.03	0.13	185.55	1.79	186.07	8.71

Stage-Discharge for Pond B-50: Basin #50 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.08	8.87	186.60	18.37	187.12	19.91	187.64	20.76
186.09	9.03	186.61	18.57	187.13	19.93	187.65	20.78
186.10	9.20	186.62	18.77	187.14	19.95	187.66	20.80
186.11	9.36	186.63	18.97	187.15	19.96	187.67	20.81
186.12	9.53	186.64	19.09	187.16	19.98	187.68	20.83
186.13	9.69	186.65	19.11	187.17	20.00	187.69	20.84
186.14	9.86	186.66	19.13	187.18	20.01	187.70	20.86
186.15	10.03	186.67	19.14	187.19	20.03	187.71	20.88
186.16	10.20	186.68	19.16	187.20	20.05	187.72	20.89
186.17	10.37	186.69	19.18	187.21	20.06	187.73	20.91
186.18	10.54	186.70	19.20	187.22	20.08	187.74	20.92
186.19	10.71	186.71	19.21	187.23	20.10	187.75	20.94
186.20	10.88	186.72	19.23	187.24	20.11	187.76	20.96
186.21	11.06	186.73	19.25	187.25	20.13	187.77	20.97
186.22	11.23	186.74	19.27	187.26	20.15	187.78	20.99
186.23	11.41	186.75	19.28	187.27	20.16	187.79	21.00
186.24	11.58	186.76	19.30	187.28	20.18	187.80	21.02
186.25	11.76	186.77	19.32	187.29	20.19	187.81	21.04
186.26	11.93	186.78	19.33	187.30	20.21	187.82	21.05
186.27	12.11	186.79	19.35	187.31	20.23	187.83	21.07
186.28	12.29	186.80	19.37	187.32	20.24	187.84	21.08
186.29	12.47	186.81	19.39	187.33	20.26	187.85	21.10
186.30	12.65	186.82	19.40	187.34	20.28	187.86	21.11
186.31	12.83	186.83	19.42	187.35	20.29	187.87	21.13
186.32	13.01	186.84	19.44	187.36	20.31	187.88	21.15
186.33	13.20	186.85	19.46	187.37	20.33	187.89	21.16
186.34	13.38	186.86	19.47	187.38	20.34	187.90	21.18
186.35	13.56	186.87	19.49	187.39	20.36	187.91	21.19
186.36	13.75	186.88	19.51	187.40	20.38	187.92	21.21
186.37	13.93	186.89	19.52	187.41	20.39	187.93	21.22
186.38	14.12	186.90	19.54	187.42	20.41	187.94	21.24
186.39	14.30	186.91	19.56	187.43	20.42	187.95	21.26
186.40	14.49	186.92	19.57	187.44	20.44	187.96	21.27
186.41	14.68	186.93	19.59	187.45	20.46	187.97	21.29
186.42	14.87	186.94	19.61	187.46	20.47	187.98	21.30
186.43	15.06	186.95	19.63	187.47	20.49	187.99	21.32
186.44	15.25	186.96	19.64	187.48	20.51	188.00	21.33
186.45	15.44	186.97	19.66	187.49	20.52	188.01	21.35
186.46	15.63	186.98	19.68	187.50	20.54	188.02	21.37
186.47	15.82	186.99	19.69	187.51	20.55	188.03	21.38
186.48	16.01	187.00	19.71	187.52	20.57	188.04	21.40
186.49	16.21	187.01	19.73	187.53	20.59	188.05	21.41
186.50	16.40	187.02	19.74	187.54	20.60	188.06	21.43
186.51	16.59	187.03	19.76	187.55	20.62	188.07	21.44
186.52	16.79	187.04	19.78	187.56	20.64	188.08	21.46
186.53	16.98	187.05	19.79	187.57	20.65	188.09	21.47
186.54	17.18	187.06	19.81	187.58	20.67	188.10	21.49
186.55	17.38	187.07	19.83	187.59	20.68	188.11	21.51
186.56	17.57	187.08	19.85	187.60	20.70	188.12	21.52
186.57	17.77	187.09	19.86	187.61	20.72	188.13	21.54
186.58	17.97	187.10	19.88	187.62	20.73	188.14	21.55
186.59	18.17	187.11	19.90	187.63	20.75	188.15	21.57

Stage-Discharge for Pond B-50: Basin #50 (continued)

Elevation (feet)	Primary (cfs)
188.16	21.58
188.17	21.60
188.18	21.61
188.19	21.63
188.20	21.64
188.21	21.66
188.22	21.67
188.23	21.69
188.24	21.71
188.25	21.72
188.26	21.74
188.27	21.75
188.28	21.77
188.29	21.78
188.30	21.80
188.31	21.81
188.32	21.83
188.33	21.84
188.34	21.86
188.35	21.87
188.36	21.89
188.37	21.90
188.38	21.92
188.39	21.93
188.40	21.95
188.41	21.97
188.42	21.98
188.43	22.00
188.44	22.01
188.45	22.03
188.46	22.11
188.47	22.25
188.48	22.44
188.49	22.65
188.50	22.89

Stage-Area-Storage for Pond B-50: Basin #50

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.00	8,805	0	184.52	9,483	4,755
184.01	8,818	88	184.53	9,496	4,850
184.02	8,831	176	184.54	9,509	4,945
184.03	8,844	265	184.55	9,522	5,040
184.04	8,857	353	184.56	9,535	5,135
184.05	8,870	442	184.57	9,548	5,231
184.06	8,883	531	184.58	9,561	5,326
184.07	8,896	620	184.59	9,574	5,422
184.08	8,909	709	184.60	9,587	5,518
184.09	8,922	798	184.61	9,600	5,613
184.10	8,935	887	184.62	9,613	5,710
184.11	8,948	976	184.63	9,626	5,806
184.12	8,961	1,066	184.64	9,639	5,902
184.13	8,974	1,156	184.65	9,652	5,999
184.14	8,987	1,245	184.66	9,665	6,095
184.15	9,000	1,335	184.67	9,678	6,192
184.16	9,013	1,425	184.68	9,691	6,289
184.17	9,027	1,516	184.69	9,704	6,386
184.18	9,040	1,606	184.70	9,717	6,483
184.19	9,053	1,696	184.71	9,730	6,580
184.20	9,066	1,787	184.72	9,743	6,677
184.21	9,079	1,878	184.73	9,756	6,775
184.22	9,092	1,969	184.74	9,769	6,872
184.23	9,105	2,060	184.75	9,782	6,970
184.24	9,118	2,151	184.76	9,795	7,068
184.25	9,131	2,242	184.77	9,808	7,166
184.26	9,144	2,333	184.78	9,821	7,264
184.27	9,157	2,425	184.79	9,834	7,363
184.28	9,170	2,516	184.80	9,847	7,461
184.29	9,183	2,608	184.81	9,860	7,559
184.30	9,196	2,700	184.82	9,873	7,658
184.31	9,209	2,792	184.83	9,886	7,757
184.32	9,222	2,884	184.84	9,900	7,856
184.33	9,235	2,977	184.85	9,913	7,955
184.34	9,248	3,069	184.86	9,926	8,054
184.35	9,261	3,162	184.87	9,939	8,153
184.36	9,274	3,254	184.88	9,952	8,253
184.37	9,287	3,347	184.89	9,965	8,353
184.38	9,300	3,440	184.90	9,978	8,452
184.39	9,313	3,533	184.91	9,991	8,552
184.40	9,326	3,626	184.92	10,004	8,652
184.41	9,339	3,720	184.93	10,017	8,752
184.42	9,352	3,813	184.94	10,030	8,852
184.43	9,365	3,907	184.95	10,043	8,953
184.44	9,378	4,000	184.96	10,056	9,053
184.45	9,391	4,094	184.97	10,069	9,154
184.46	9,404	4,188	184.98	10,082	9,255
184.47	9,417	4,282	184.99	10,095	9,355
184.48	9,430	4,377	185.00	10,108	9,457
184.49	9,443	4,471	185.01	10,121	9,558
184.50	9,457	4,565	185.02	10,135	9,659
184.51	9,470	4,660	185.03	10,148	9,760

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.04	10,162	9,862	185.56	10,858	15,327
185.05	10,175	9,964	185.57	10,872	15,436
185.06	10,188	10,065	185.58	10,885	15,545
185.07	10,202	10,167	185.59	10,899	15,653
185.08	10,215	10,269	185.60	10,912	15,762
185.09	10,229	10,372	185.61	10,925	15,872
185.10	10,242	10,474	185.62	10,939	15,981
185.11	10,255	10,576	185.63	10,952	16,090
185.12	10,269	10,679	185.64	10,966	16,200
185.13	10,282	10,782	185.65	10,979	16,310
185.14	10,296	10,885	185.66	10,992	16,420
185.15	10,309	10,988	185.67	11,006	16,530
185.16	10,322	11,091	185.68	11,019	16,640
185.17	10,336	11,194	185.69	11,033	16,750
185.18	10,349	11,298	185.70	11,046	16,860
185.19	10,363	11,401	185.71	11,059	16,971
185.20	10,376	11,505	185.72	11,073	17,082
185.21	10,389	11,609	185.73	11,086	17,192
185.22	10,403	11,713	185.74	11,100	17,303
185.23	10,416	11,817	185.75	11,113	17,414
185.24	10,430	11,921	185.76	11,126	17,526
185.25	10,443	12,025	185.77	11,140	17,637
185.26	10,456	12,130	185.78	11,153	17,748
185.27	10,470	12,235	185.79	11,167	17,860
185.28	10,483	12,339	185.80	11,180	17,972
185.29	10,497	12,444	185.81	11,193	18,084
185.30	10,510	12,549	185.82	11,207	18,196
185.31	10,523	12,654	185.83	11,220	18,308
185.32	10,537	12,760	185.84	11,234	18,420
185.33	10,550	12,865	185.85	11,247	18,532
185.34	10,564	12,971	185.86	11,260	18,645
185.35	10,577	13,076	185.87	11,274	18,758
185.36	10,590	13,182	185.88	11,287	18,870
185.37	10,604	13,288	185.89	11,301	18,983
185.38	10,617	13,394	185.90	11,314	19,096
185.39	10,631	13,501	185.91	11,327	19,210
185.40	10,644	13,607	185.92	11,341	19,323
185.41	10,657	13,713	185.93	11,354	19,436
185.42	10,671	13,820	185.94	11,368	19,550
185.43	10,684	13,927	185.95	11,381	19,664
185.44	10,698	14,034	185.96	11,394	19,778
185.45	10,711	14,141	185.97	11,408	19,892
185.46	10,724	14,248	185.98	11,421	20,006
185.47	10,738	14,355	185.99	11,435	20,120
185.48	10,751	14,463	186.00	11,448	20,235
185.49	10,765	14,570	186.01	11,462	20,349
185.50	10,778	14,678	186.02	11,476	20,464
185.51	10,791	14,786	186.03	11,489	20,579
185.52	10,805	14,894	186.04	11,503	20,694
185.53	10,818	15,002	186.05	11,517	20,809
185.54	10,832	15,110	186.06	11,531	20,924
185.55	10,845	15,219	186.07	11,544	21,039

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.08	11,558	21,155	186.60	12,275	27,351
186.09	11,572	21,270	186.61	12,289	27,474
186.10	11,586	21,386	186.62	12,302	27,597
186.11	11,600	21,502	186.63	12,316	27,720
186.12	11,613	21,618	186.64	12,330	27,843
186.13	11,627	21,734	186.65	12,344	27,967
186.14	11,641	21,851	186.66	12,357	28,090
186.15	11,655	21,967	186.67	12,371	28,214
186.16	11,668	22,084	186.68	12,385	28,338
186.17	11,682	22,201	186.69	12,399	28,462
186.18	11,696	22,317	186.70	12,413	28,586
186.19	11,710	22,434	186.71	12,426	28,710
186.20	11,724	22,552	186.72	12,440	28,834
186.21	11,737	22,669	186.73	12,454	28,959
186.22	11,751	22,786	186.74	12,468	29,083
186.23	11,765	22,904	186.75	12,482	29,208
186.24	11,779	23,022	186.76	12,495	29,333
186.25	11,793	23,140	186.77	12,509	29,458
186.26	11,806	23,258	186.78	12,523	29,583
186.27	11,820	23,376	186.79	12,537	29,708
186.28	11,834	23,494	186.80	12,550	29,834
186.29	11,848	23,612	186.81	12,564	29,959
186.30	11,861	23,731	186.82	12,578	30,085
186.31	11,875	23,850	186.83	12,592	30,211
186.32	11,889	23,968	186.84	12,606	30,337
186.33	11,903	24,087	186.85	12,619	30,463
186.34	11,917	24,206	186.86	12,633	30,589
186.35	11,930	24,326	186.87	12,647	30,716
186.36	11,944	24,445	186.88	12,661	30,842
186.37	11,958	24,565	186.89	12,674	30,969
186.38	11,972	24,684	186.90	12,688	31,096
186.39	11,985	24,804	186.91	12,702	31,223
186.40	11,999	24,924	186.92	12,716	31,350
186.41	12,013	25,044	186.93	12,730	31,477
186.42	12,027	25,164	186.94	12,743	31,604
186.43	12,041	25,285	186.95	12,757	31,732
186.44	12,054	25,405	186.96	12,771	31,860
186.45	12,068	25,526	186.97	12,785	31,987
186.46	12,082	25,646	186.98	12,798	32,115
186.47	12,096	25,767	186.99	12,812	32,243
186.48	12,109	25,888	187.00	12,826	32,372
186.49	12,123	26,009	187.01	12,840	32,500
186.50	12,137	26,131	187.02	12,854	32,628
186.51	12,151	26,252	187.03	12,869	32,757
186.52	12,165	26,374	187.04	12,883	32,886
186.53	12,178	26,495	187.05	12,897	33,015
186.54	12,192	26,617	187.06	12,911	33,144
186.55	12,206	26,739	187.07	12,925	33,273
186.56	12,220	26,861	187.08	12,939	33,402
186.57	12,233	26,984	187.09	12,954	33,532
186.58	12,247	27,106	187.10	12,968	33,661
186.59	12,261	27,229	187.11	12,982	33,791

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.12	12,996	33,921	187.64	13,734	40,871
187.13	13,010	34,051	187.65	13,748	41,008
187.14	13,025	34,181	187.66	13,762	41,146
187.15	13,039	34,311	187.67	13,776	41,283
187.16	13,053	34,442	187.68	13,790	41,421
187.17	13,067	34,572	187.69	13,804	41,559
187.18	13,081	34,703	187.70	13,819	41,697
187.19	13,095	34,834	187.71	13,833	41,835
187.20	13,110	34,965	187.72	13,847	41,974
187.21	13,124	35,096	187.73	13,861	42,112
187.22	13,138	35,228	187.74	13,875	42,251
187.23	13,152	35,359	187.75	13,890	42,390
187.24	13,166	35,491	187.76	13,904	42,529
187.25	13,181	35,622	187.77	13,918	42,668
187.26	13,195	35,754	187.78	13,932	42,807
187.27	13,209	35,886	187.79	13,946	42,947
187.28	13,223	36,018	187.80	13,960	43,086
187.29	13,237	36,151	187.81	13,975	43,226
187.30	13,251	36,283	187.82	13,989	43,366
187.31	13,266	36,416	187.83	14,003	43,506
187.32	13,280	36,548	187.84	14,017	43,646
187.33	13,294	36,681	187.85	14,031	43,786
187.34	13,308	36,814	187.86	14,045	43,926
187.35	13,322	36,947	187.87	14,060	44,067
187.36	13,336	37,081	187.88	14,074	44,207
187.37	13,351	37,214	187.89	14,088	44,348
187.38	13,365	37,348	187.90	14,102	44,489
187.39	13,379	37,481	187.91	14,116	44,630
187.40	13,393	37,615	187.92	14,131	44,772
187.41	13,407	37,749	187.93	14,145	44,913
187.42	13,422	37,883	187.94	14,159	45,054
187.43	13,436	38,018	187.95	14,173	45,196
187.44	13,450	38,152	187.96	14,187	45,338
187.45	13,464	38,287	187.97	14,201	45,480
187.46	13,478	38,421	187.98	14,216	45,622
187.47	13,492	38,556	187.99	14,230	45,764
187.48	13,507	38,691	188.00	14,244	45,907
187.49	13,521	38,826	188.01	14,258	46,049
187.50	13,535	38,962	188.02	14,273	46,192
187.51	13,549	39,097	188.03	14,287	46,334
187.52	13,563	39,233	188.04	14,302	46,477
187.53	13,578	39,368	188.05	14,316	46,621
187.54	13,592	39,504	188.06	14,331	46,764
187.55	13,606	39,640	188.07	14,345	46,907
187.56	13,620	39,776	188.08	14,360	47,051
187.57	13,634	39,913	188.09	14,374	47,194
187.58	13,648	40,049	188.10	14,388	47,338
187.59	13,663	40,186	188.11	14,403	47,482
187.60	13,677	40,322	188.12	14,417	47,626
187.61	13,691	40,459	188.13	14,432	47,770
187.62	13,705	40,596	188.14	14,446	47,915
187.63	13,719	40,733	188.15	14,461	48,059

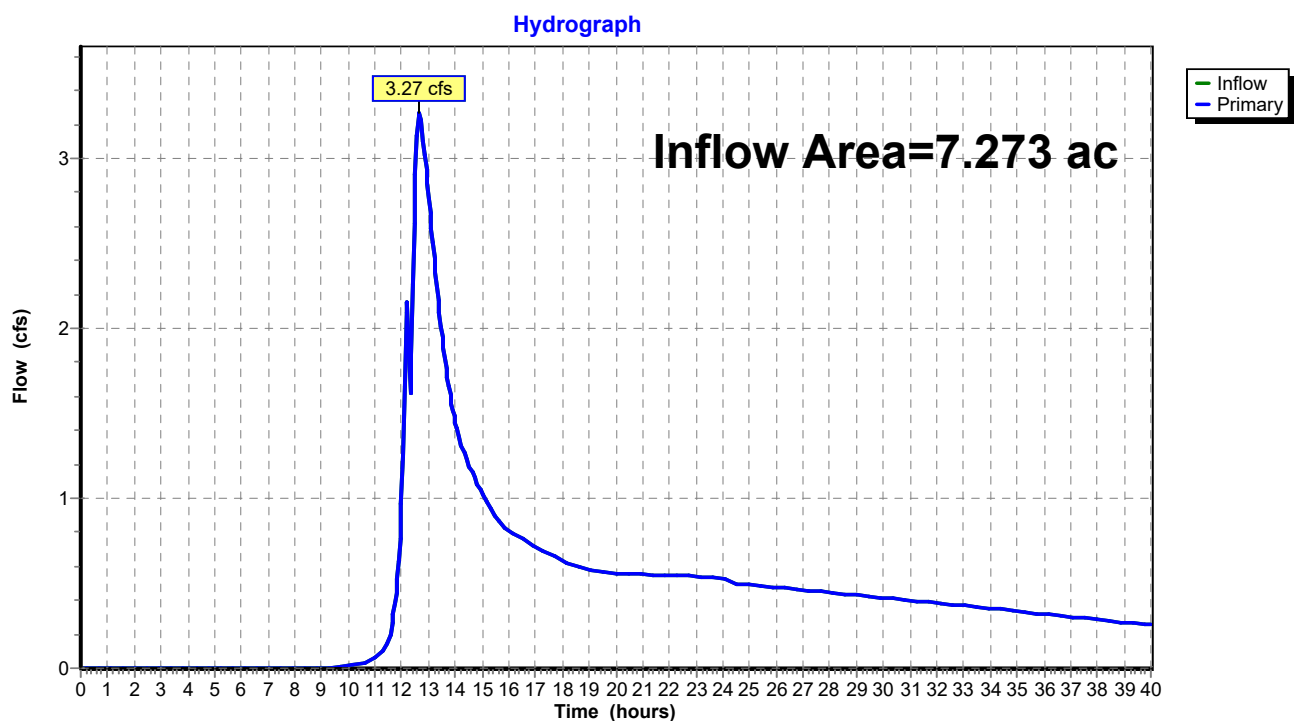
Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.16	14,475	48,204
188.17	14,489	48,349
188.18	14,504	48,494
188.19	14,518	48,639
188.20	14,533	48,784
188.21	14,547	48,930
188.22	14,562	49,075
188.23	14,576	49,221
188.24	14,591	49,367
188.25	14,605	49,513
188.26	14,619	49,659
188.27	14,634	49,805
188.28	14,648	49,951
188.29	14,663	50,098
188.30	14,677	50,245
188.31	14,692	50,392
188.32	14,706	50,539
188.33	14,721	50,686
188.34	14,735	50,833
188.35	14,749	50,980
188.36	14,764	51,128
188.37	14,778	51,276
188.38	14,793	51,423
188.39	14,807	51,571
188.40	14,822	51,720
188.41	14,836	51,868
188.42	14,850	52,016
188.43	14,865	52,165
188.44	14,879	52,314
188.45	14,894	52,463
188.46	14,908	52,612
188.47	14,923	52,761
188.48	14,937	52,910
188.49	14,952	53,059
188.50	14,966	53,209

Summary for Link PDA-5: Proposed Drainage Area #5

Inflow Area = 7.273 ac, 32.33% Impervious, Inflow Depth > 2.43" for Current 10 yr event
Inflow = 3.27 cfs @ 12.64 hrs, Volume= 1.473 af
Primary = 3.27 cfs @ 12.64 hrs, Volume= 1.473 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-5: Proposed Drainage Area #5

Summary for Subcatchment 48I: PDA-48 (impervious)

Runoff = 6.09 cfs @ 12.17 hrs, Volume= 0.540 af, Depth= 8.35"
 Routed to Pond B-48 : Basin #48

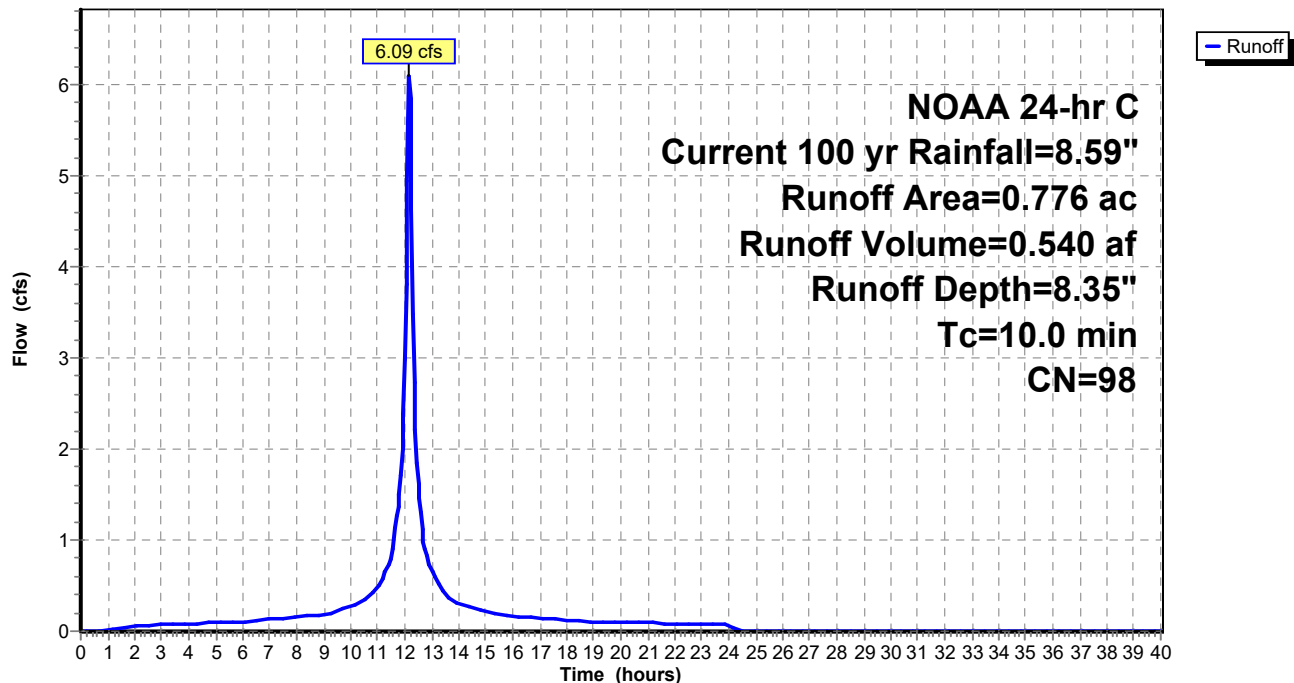
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
* 0.235	98	Pavement, HSG C
* 0.522	98	Roof, HSG C
* 0.019	98	Concrete, HSG C
0.776	98	Weighted Average
0.776		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 48I: PDA-48 (impervious)

Hydrograph



Summary for Subcatchment 48P: PDA-48 (pervious)

Runoff = 8.91 cfs @ 12.17 hrs, Volume= 0.677 af, Depth= 5.46"
 Routed to Pond B-48 : Basin #48

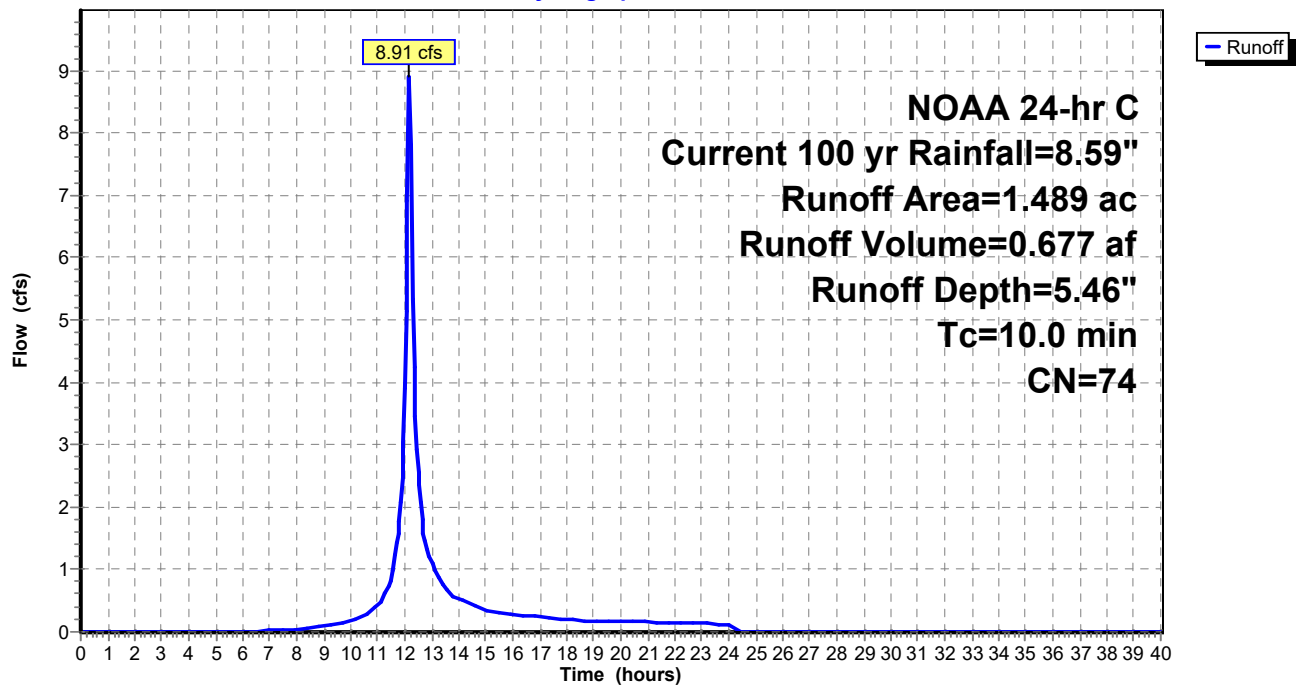
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.489	74	>75% Grass cover, Good, HSG C
1.489		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 48P: PDA-48 (pervious)

Hydrograph



Summary for Subcatchment 49I: PDA-49 (impervious)

Runoff = 7.17 cfs @ 12.17 hrs, Volume= 0.635 af, Depth= 8.35"
 Routed to Pond B-49 : Basin #49

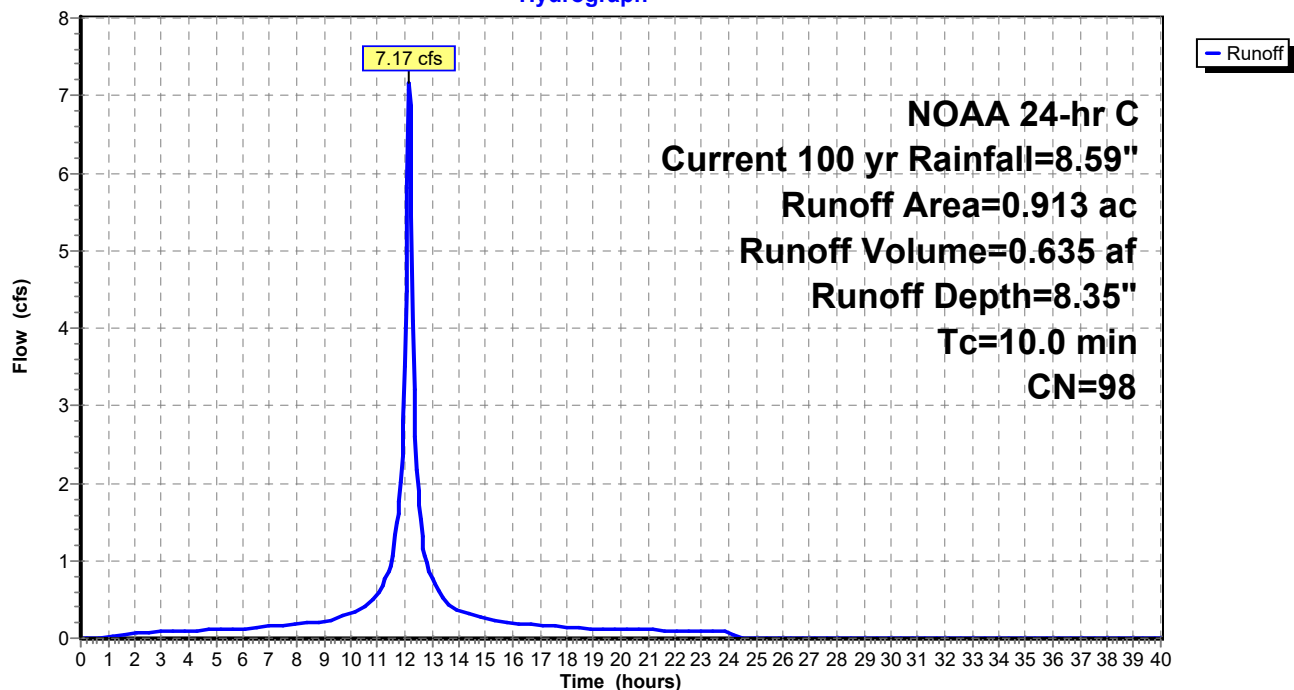
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
* 0.434	98	Pavement, HSG C
* 0.418	98	Roof, HSG C
* 0.061	98	Concrete, HSG C
0.913	98	Weighted Average
0.913		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 49I: PDA-49 (impervious)

Hydrograph



Summary for Subcatchment 49P: PDA-49 (pervious)

Runoff = 7.04 cfs @ 12.17 hrs, Volume= 0.535 af, Depth= 5.46"
 Routed to Pond B-49 : Basin #49

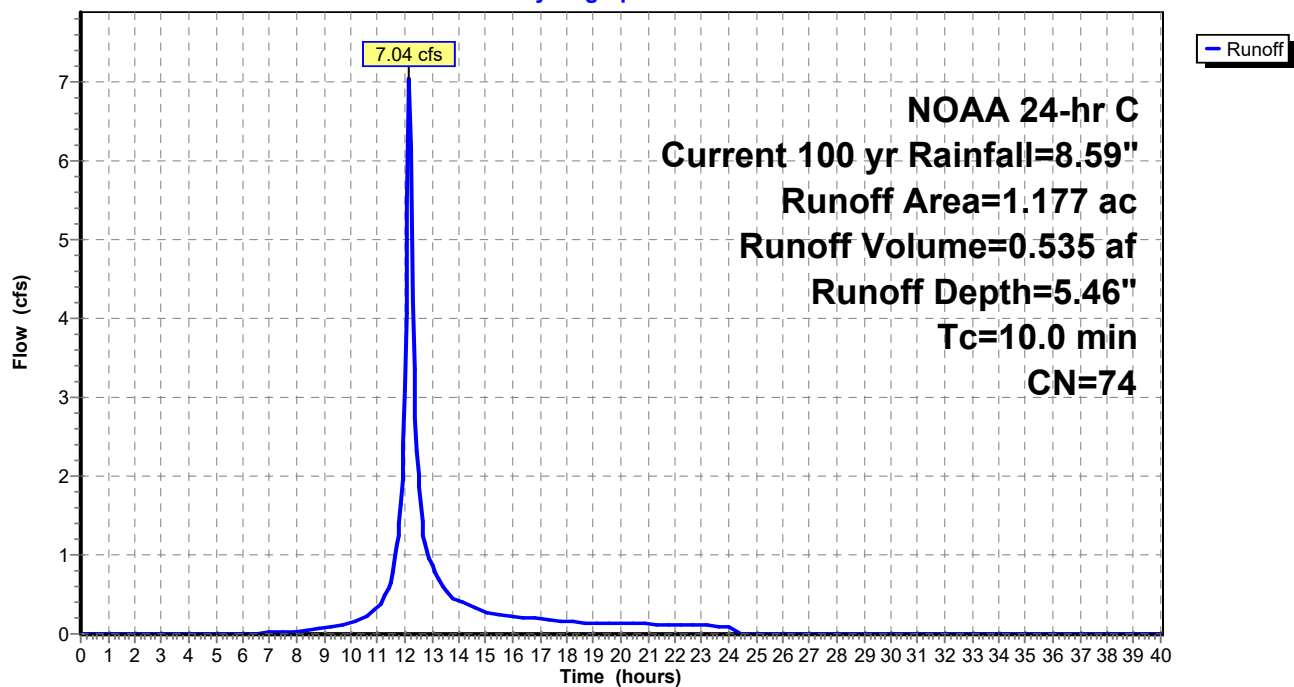
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.177	74	>75% Grass cover, Good, HSG C
1.177		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 49P: PDA-49 (pervious)

Hydrograph



Summary for Subcatchment 50I: PDA-50 (impervious)

Runoff = 5.20 cfs @ 12.17 hrs, Volume= 0.461 af, Depth= 8.35"
 Routed to Pond B-50 : Basin #50

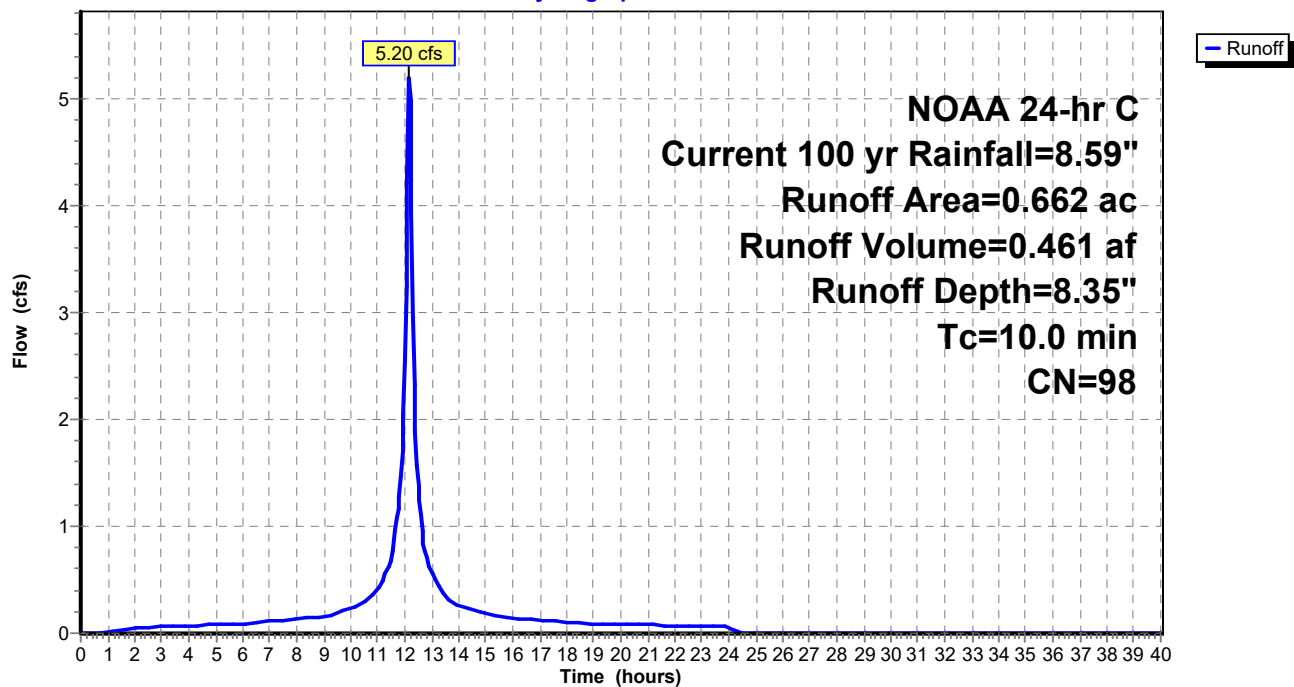
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
* 0.291	98	Pavement, HSG C
* 0.325	98	Roof, HSG C
* 0.046	98	Concrete, HSG C
0.662	98	Weighted Average
0.662		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 50I: PDA-50 (impervious)

Hydrograph



Summary for Subcatchment 50P: PDA-50 (pervious)

Runoff = 9.57 cfs @ 12.17 hrs, Volume= 0.728 af, Depth= 5.46"
 Routed to Pond B-50 : Basin #50

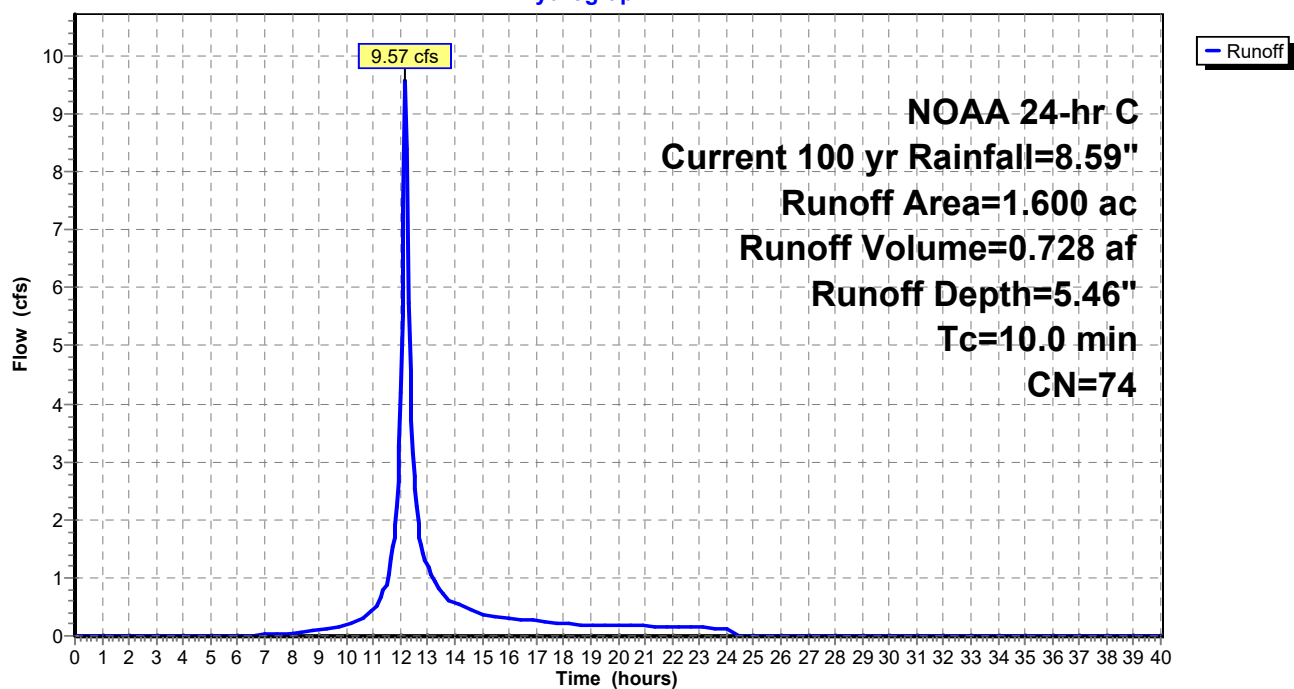
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.600	74	>75% Grass cover, Good, HSG C
1.600		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 50P: PDA-50 (pervious)

Hydrograph



Summary for Subcatchment UPDA-5: PDA-5 (undetained)

Runoff = 3.92 cfs @ 12.17 hrs, Volume= 0.298 af, Depth= 5.46"
 Routed to Link PDA-5 : Proposed Drainage Area #5

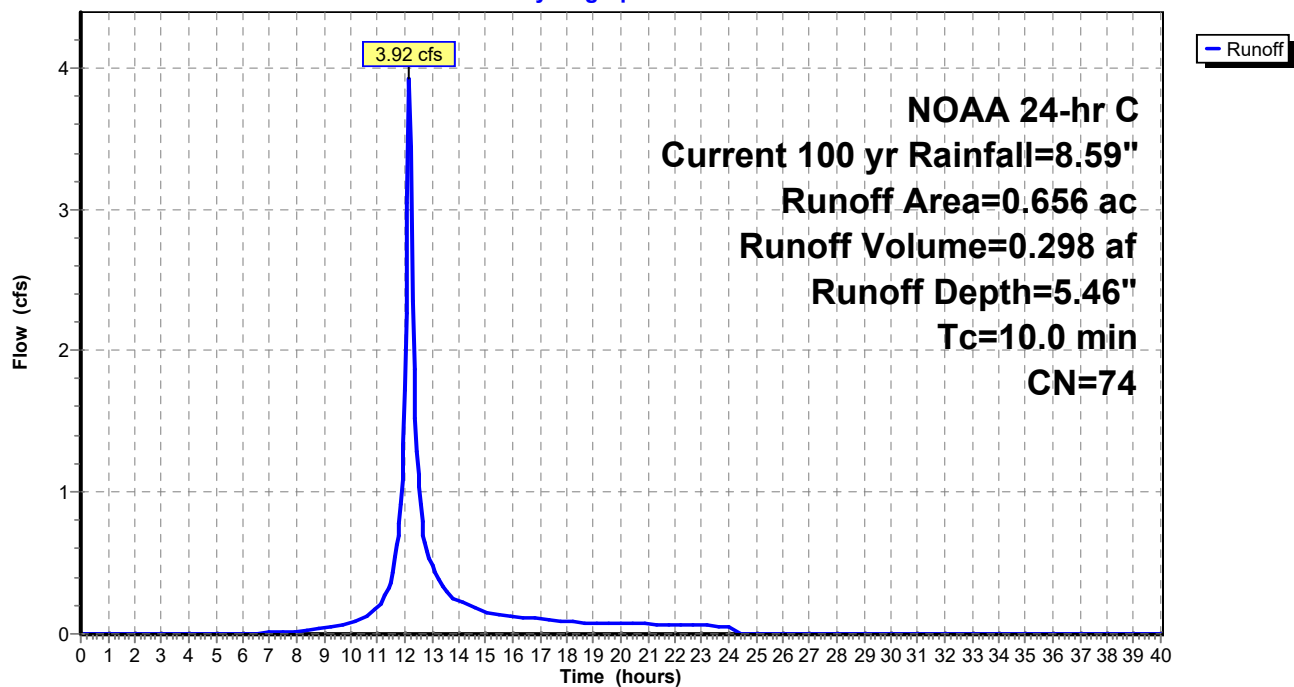
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.656	74	>75% Grass cover, Good, HSG C
0.656		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment UPDA-5: PDA-5 (undetained)

Hydrograph



Summary for Pond B-48: Basin #48

Inflow Area = 2.265 ac, 34.26% Impervious, Inflow Depth = 6.45" for Current 100 yr event
 Inflow = 14.99 cfs @ 12.17 hrs, Volume= 1.217 af
 Outflow = 5.15 cfs @ 12.43 hrs, Volume= 0.969 af, Atten= 66%, Lag= 15.6 min
 Primary = 5.15 cfs @ 12.43 hrs, Volume= 0.969 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 193.53' @ 12.43 hrs Surf.Area= 12,099 sf Storage= 26,452 cf

Plug-Flow detention time= 416.3 min calculated for 0.967 af (79% of inflow)
 Center-of-Mass det. time= 335.6 min (1,122.2 - 786.6)

Volume	Invert	Avail.Storage	Storage Description
#1	191.00'	32,287 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.00	8,869	0	0
192.00	10,100	9,485	9,485
193.00	11,387	10,744	20,228
194.00	12,731	12,059	32,287

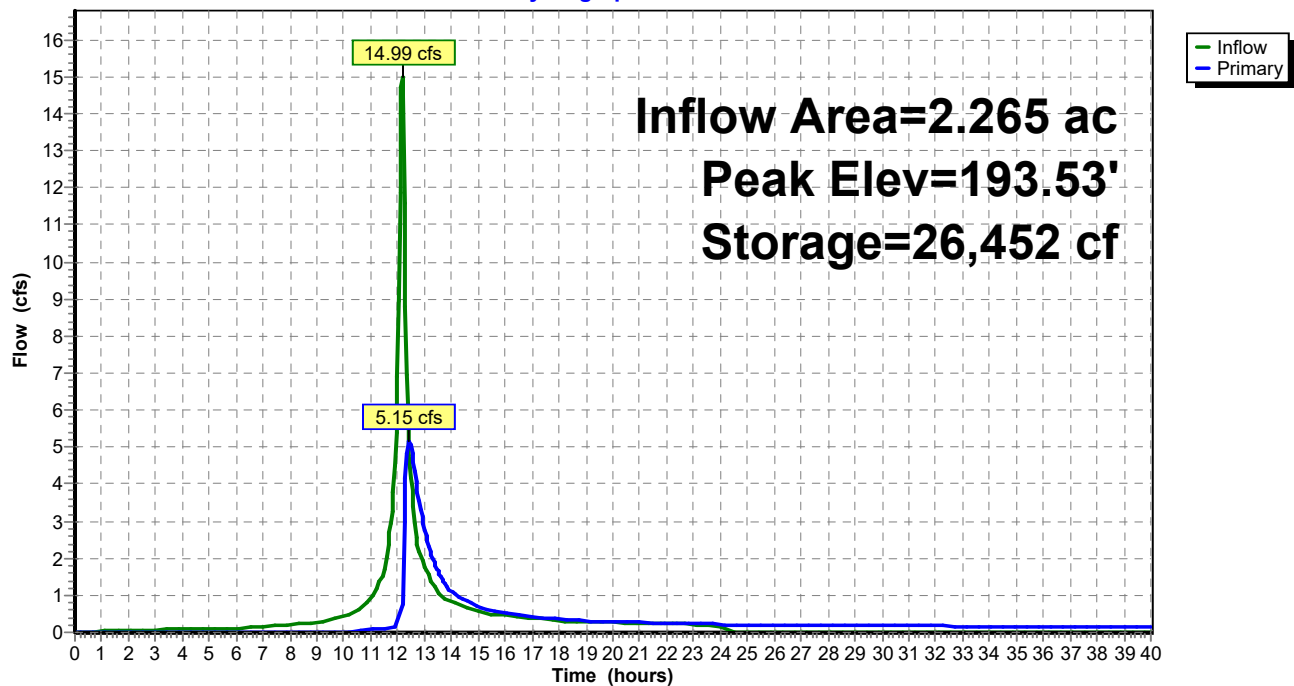
Device	Routing	Invert	Outlet Devices
#1	Primary	191.00'	18.0" Round Culvert L= 185.0' Ke= 0.500 Inlet / Outlet Invert= 191.00' / 188.45' S= 0.0138 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	191.40'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	193.99'	50.0' long + 3.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=5.13 cfs @ 12.43 hrs HW=193.53' (Free Discharge)

1=Culvert (Passes 5.13 cfs of 11.35 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.23 cfs @ 6.85 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 4.90 cfs @ 2.38 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-48: Basin #48

Hydrograph



Stage-Discharge for Pond B-48: Basin #48

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.00	0.00	191.52	0.02	192.04	0.12	192.56	0.17
191.01	0.00	191.53	0.03	192.05	0.12	192.57	0.17
191.02	0.00	191.54	0.03	192.06	0.12	192.58	0.17
191.03	0.00	191.55	0.03	192.07	0.12	192.59	0.17
191.04	0.00	191.56	0.04	192.08	0.12	192.60	0.17
191.05	0.00	191.57	0.04	192.09	0.13	192.61	0.17
191.06	0.00	191.58	0.05	192.10	0.13	192.62	0.17
191.07	0.00	191.59	0.05	192.11	0.13	192.63	0.17
191.08	0.00	191.60	0.05	192.12	0.13	192.64	0.17
191.09	0.00	191.61	0.05	192.13	0.13	192.65	0.18
191.10	0.00	191.62	0.06	192.14	0.13	192.66	0.18
191.11	0.00	191.63	0.06	192.15	0.13	192.67	0.18
191.12	0.00	191.64	0.06	192.16	0.13	192.68	0.18
191.13	0.00	191.65	0.06	192.17	0.13	192.69	0.18
191.14	0.00	191.66	0.06	192.18	0.13	192.70	0.18
191.15	0.00	191.67	0.07	192.19	0.14	192.71	0.18
191.16	0.00	191.68	0.07	192.20	0.14	192.72	0.18
191.17	0.00	191.69	0.07	192.21	0.14	192.73	0.18
191.18	0.00	191.70	0.07	192.22	0.14	192.74	0.18
191.19	0.00	191.71	0.07	192.23	0.14	192.75	0.18
191.20	0.00	191.72	0.08	192.24	0.14	192.76	0.18
191.21	0.00	191.73	0.08	192.25	0.14	192.77	0.18
191.22	0.00	191.74	0.08	192.26	0.14	192.78	0.19
191.23	0.00	191.75	0.08	192.27	0.14	192.79	0.19
191.24	0.00	191.76	0.08	192.28	0.14	192.80	0.19
191.25	0.00	191.77	0.08	192.29	0.15	192.81	0.19
191.26	0.00	191.78	0.09	192.30	0.15	192.82	0.19
191.27	0.00	191.79	0.09	192.31	0.15	192.83	0.19
191.28	0.00	191.80	0.09	192.32	0.15	192.84	0.19
191.29	0.00	191.81	0.09	192.33	0.15	192.85	0.19
191.30	0.00	191.82	0.09	192.34	0.15	192.86	0.19
191.31	0.00	191.83	0.09	192.35	0.15	192.87	0.19
191.32	0.00	191.84	0.10	192.36	0.15	192.88	0.19
191.33	0.00	191.85	0.10	192.37	0.15	192.89	0.19
191.34	0.00	191.86	0.10	192.38	0.15	192.90	0.19
191.35	0.00	191.87	0.10	192.39	0.15	192.91	0.19
191.36	0.00	191.88	0.10	192.40	0.16	192.92	0.20
191.37	0.00	191.89	0.10	192.41	0.16	192.93	0.20
191.38	0.00	191.90	0.10	192.42	0.16	192.94	0.20
191.39	0.00	191.91	0.10	192.43	0.16	192.95	0.20
191.40	0.00	191.92	0.11	192.44	0.16	192.96	0.20
191.41	0.00	191.93	0.11	192.45	0.16	192.97	0.20
191.42	0.00	191.94	0.11	192.46	0.16	192.98	0.20
191.43	0.00	191.95	0.11	192.47	0.16	192.99	0.20
191.44	0.00	191.96	0.11	192.48	0.16	193.00	0.20
191.45	0.00	191.97	0.11	192.49	0.16	193.01	0.21
191.46	0.01	191.98	0.11	192.50	0.16	193.02	0.24
191.47	0.01	191.99	0.11	192.51	0.16	193.03	0.27
191.48	0.01	192.00	0.12	192.52	0.17	193.04	0.31
191.49	0.01	192.01	0.12	192.53	0.17	193.05	0.35
191.50	0.02	192.02	0.12	192.54	0.17	193.06	0.40
191.51	0.02	192.03	0.12	192.55	0.17	193.07	0.45

Stage-Discharge for Pond B-48: Basin #48 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.08	0.50	193.60	6.13
193.09	0.56	193.61	6.28
193.10	0.62	193.62	6.43
193.11	0.68	193.63	6.57
193.12	0.75	193.64	6.72
193.13	0.82	193.65	6.87
193.14	0.89	193.66	7.02
193.15	0.96	193.67	7.17
193.16	1.04	193.68	7.33
193.17	1.12	193.69	7.48
193.18	1.20	193.70	7.64
193.19	1.29	193.71	7.79
193.20	1.37	193.72	7.95
193.21	1.46	193.73	8.11
193.22	1.55	193.74	8.26
193.23	1.64	193.75	8.42
193.24	1.74	193.76	8.58
193.25	1.83	193.77	8.74
193.26	1.93	193.78	8.91
193.27	2.03	193.79	9.07
193.28	2.13	193.80	9.23
193.29	2.23	193.81	9.40
193.30	2.34	193.82	9.56
193.31	2.44	193.83	9.73
193.32	2.55	193.84	9.90
193.33	2.66	193.85	10.07
193.34	2.77	193.86	10.24
193.35	2.88	193.87	10.40
193.36	3.00	193.88	10.58
193.37	3.11	193.89	10.75
193.38	3.23	193.90	10.92
193.39	3.35	193.91	11.09
193.40	3.47	193.92	11.27
193.41	3.59	193.93	11.44
193.42	3.71	193.94	11.62
193.43	3.84	193.95	11.79
193.44	3.96	193.96	11.97
193.45	4.09	193.97	12.15
193.46	4.22	193.98	12.33
193.47	4.35	193.99	12.51
193.48	4.48	194.00	12.81
193.49	4.61		
193.50	4.74		
193.51	4.87		
193.52	5.01		
193.53	5.15		
193.54	5.28		
193.55	5.42		
193.56	5.56		
193.57	5.70		
193.58	5.85		
193.59	5.99		

Stage-Area-Storage for Pond B-48: Basin #48

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.00	8,869	0	191.52	9,509	4,778
191.01	8,881	89	191.53	9,521	4,873
191.02	8,894	178	191.54	9,534	4,969
191.03	8,906	267	191.55	9,546	5,064
191.04	8,918	356	191.56	9,558	5,160
191.05	8,931	445	191.57	9,571	5,255
191.06	8,943	534	191.58	9,583	5,351
191.07	8,955	624	191.59	9,595	5,447
191.08	8,967	713	191.60	9,608	5,543
191.09	8,980	803	191.61	9,620	5,639
191.10	8,992	893	191.62	9,632	5,735
191.11	9,004	983	191.63	9,645	5,832
191.12	9,017	1,073	191.64	9,657	5,928
191.13	9,029	1,163	191.65	9,669	6,025
191.14	9,041	1,254	191.66	9,681	6,122
191.15	9,054	1,344	191.67	9,694	6,219
191.16	9,066	1,435	191.68	9,706	6,316
191.17	9,078	1,526	191.69	9,718	6,413
191.18	9,091	1,616	191.70	9,731	6,510
191.19	9,103	1,707	191.71	9,743	6,607
191.20	9,115	1,798	191.72	9,755	6,705
191.21	9,128	1,890	191.73	9,768	6,802
191.22	9,140	1,981	191.74	9,780	6,900
191.23	9,152	2,072	191.75	9,792	6,998
191.24	9,164	2,164	191.76	9,805	7,096
191.25	9,177	2,256	191.77	9,817	7,194
191.26	9,189	2,348	191.78	9,829	7,292
191.27	9,201	2,439	191.79	9,841	7,391
191.28	9,214	2,532	191.80	9,854	7,489
191.29	9,226	2,624	191.81	9,866	7,588
191.30	9,238	2,716	191.82	9,878	7,686
191.31	9,251	2,809	191.83	9,891	7,785
191.32	9,263	2,901	191.84	9,903	7,884
191.33	9,275	2,994	191.85	9,915	7,983
191.34	9,288	3,087	191.86	9,928	8,083
191.35	9,300	3,180	191.87	9,940	8,182
191.36	9,312	3,273	191.88	9,952	8,281
191.37	9,324	3,366	191.89	9,965	8,381
191.38	9,337	3,459	191.90	9,977	8,481
191.39	9,349	3,553	191.91	9,989	8,580
191.40	9,361	3,646	191.92	10,002	8,680
191.41	9,374	3,740	191.93	10,014	8,781
191.42	9,386	3,834	191.94	10,026	8,881
191.43	9,398	3,927	191.95	10,038	8,981
191.44	9,411	4,022	191.96	10,051	9,081
191.45	9,423	4,116	191.97	10,063	9,182
191.46	9,435	4,210	191.98	10,075	9,283
191.47	9,448	4,304	191.99	10,088	9,384
191.48	9,460	4,399	192.00	10,100	9,485
191.49	9,472	4,494	192.01	10,113	9,586
191.50	9,485	4,588	192.02	10,126	9,687
191.51	9,497	4,683	192.03	10,139	9,788

Stage-Area-Storage for Pond B-48: Basin #48 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.04	10,151	9,890	192.56	10,821	15,342
192.05	10,164	9,991	192.57	10,834	15,451
192.06	10,177	10,093	192.58	10,846	15,559
192.07	10,190	10,195	192.59	10,859	15,668
192.08	10,203	10,297	192.60	10,872	15,776
192.09	10,216	10,399	192.61	10,885	15,885
192.10	10,229	10,501	192.62	10,898	15,994
192.11	10,242	10,603	192.63	10,911	16,103
192.12	10,254	10,706	192.64	10,924	16,212
192.13	10,267	10,808	192.65	10,937	16,321
192.14	10,280	10,911	192.66	10,949	16,431
192.15	10,293	11,014	192.67	10,962	16,540
192.16	10,306	11,117	192.68	10,975	16,650
192.17	10,319	11,220	192.69	10,988	16,760
192.18	10,332	11,323	192.70	11,001	16,870
192.19	10,345	11,427	192.71	11,014	16,980
192.20	10,357	11,530	192.72	11,027	17,090
192.21	10,370	11,634	192.73	11,040	17,200
192.22	10,383	11,738	192.74	11,052	17,311
192.23	10,396	11,842	192.75	11,065	17,421
192.24	10,409	11,946	192.76	11,078	17,532
192.25	10,422	12,050	192.77	11,091	17,643
192.26	10,435	12,154	192.78	11,104	17,754
192.27	10,447	12,258	192.79	11,117	17,865
192.28	10,460	12,363	192.80	11,130	17,976
192.29	10,473	12,468	192.81	11,142	18,088
192.30	10,486	12,572	192.82	11,155	18,199
192.31	10,499	12,677	192.83	11,168	18,311
192.32	10,512	12,782	192.84	11,181	18,423
192.33	10,525	12,888	192.85	11,194	18,534
192.34	10,538	12,993	192.86	11,207	18,646
192.35	10,550	13,098	192.87	11,220	18,759
192.36	10,563	13,204	192.88	11,233	18,871
192.37	10,576	13,310	192.89	11,245	18,983
192.38	10,589	13,415	192.90	11,258	19,096
192.39	10,602	13,521	192.91	11,271	19,208
192.40	10,615	13,627	192.92	11,284	19,321
192.41	10,628	13,734	192.93	11,297	19,434
192.42	10,641	13,840	192.94	11,310	19,547
192.43	10,653	13,946	192.95	11,323	19,660
192.44	10,666	14,053	192.96	11,336	19,774
192.45	10,679	14,160	192.97	11,348	19,887
192.46	10,692	14,267	192.98	11,361	20,001
192.47	10,705	14,374	192.99	11,374	20,114
192.48	10,718	14,481	193.00	11,387	20,228
192.49	10,731	14,588	193.01	11,400	20,342
192.50	10,744	14,695	193.02	11,414	20,456
192.51	10,756	14,803	193.03	11,427	20,570
192.52	10,769	14,911	193.04	11,441	20,685
192.53	10,782	15,018	193.05	11,454	20,799
192.54	10,795	15,126	193.06	11,468	20,914
192.55	10,808	15,234	193.07	11,481	21,028

Stage-Area-Storage for Pond B-48: Basin #48 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.08	11,495	21,143	193.60	12,193	27,302
193.09	11,508	21,258	193.61	12,207	27,424
193.10	11,521	21,373	193.62	12,220	27,546
193.11	11,535	21,489	193.63	12,234	27,669
193.12	11,548	21,604	193.64	12,247	27,791
193.13	11,562	21,720	193.65	12,261	27,913
193.14	11,575	21,835	193.66	12,274	28,036
193.15	11,589	21,951	193.67	12,287	28,159
193.16	11,602	22,067	193.68	12,301	28,282
193.17	11,615	22,183	193.69	12,314	28,405
193.18	11,629	22,299	193.70	12,328	28,528
193.19	11,642	22,416	193.71	12,341	28,652
193.20	11,656	22,532	193.72	12,355	28,775
193.21	11,669	22,649	193.73	12,368	28,899
193.22	11,683	22,766	193.74	12,382	29,022
193.23	11,696	22,883	193.75	12,395	29,146
193.24	11,710	23,000	193.76	12,408	29,270
193.25	11,723	23,117	193.77	12,422	29,394
193.26	11,736	23,234	193.78	12,435	29,519
193.27	11,750	23,351	193.79	12,449	29,643
193.28	11,763	23,469	193.80	12,462	29,768
193.29	11,777	23,587	193.81	12,476	29,892
193.30	11,790	23,705	193.82	12,489	30,017
193.31	11,804	23,823	193.83	12,503	30,142
193.32	11,817	23,941	193.84	12,516	30,267
193.33	11,831	24,059	193.85	12,529	30,392
193.34	11,844	24,177	193.86	12,543	30,518
193.35	11,857	24,296	193.87	12,556	30,643
193.36	11,871	24,414	193.88	12,570	30,769
193.37	11,884	24,533	193.89	12,583	30,895
193.38	11,898	24,652	193.90	12,597	31,021
193.39	11,911	24,771	193.91	12,610	31,147
193.40	11,925	24,890	193.92	12,623	31,273
193.41	11,938	25,010	193.93	12,637	31,399
193.42	11,951	25,129	193.94	12,650	31,526
193.43	11,965	25,249	193.95	12,664	31,652
193.44	11,978	25,368	193.96	12,677	31,779
193.45	11,992	25,488	193.97	12,691	31,906
193.46	12,005	25,608	193.98	12,704	32,033
193.47	12,019	25,728	193.99	12,718	32,160
193.48	12,032	25,849	194.00	12,731	32,287
193.49	12,046	25,969			
193.50	12,059	26,090			
193.51	12,072	26,210			
193.52	12,086	26,331			
193.53	12,099	26,452			
193.54	12,113	26,573			
193.55	12,126	26,694			
193.56	12,140	26,815			
193.57	12,153	26,937			
193.58	12,167	27,059			
193.59	12,180	27,180			

Summary for Pond B-49: Basin #49

Inflow Area = 2.090 ac, 43.68% Impervious, Inflow Depth = 6.72" for Current 100 yr event
 Inflow = 14.20 cfs @ 12.17 hrs, Volume= 1.170 af
 Outflow = 8.24 cfs @ 12.31 hrs, Volume= 1.032 af, Atten= 42%, Lag= 8.2 min
 Primary = 8.24 cfs @ 12.31 hrs, Volume= 1.032 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 185.57' @ 12.31 hrs Surf.Area= 9,363 sf Storage= 20,404 cf

Plug-Flow detention time= 299.8 min calculated for 1.032 af (88% of inflow)
 Center-of-Mass det. time= 241.2 min (1,020.3 - 779.2)

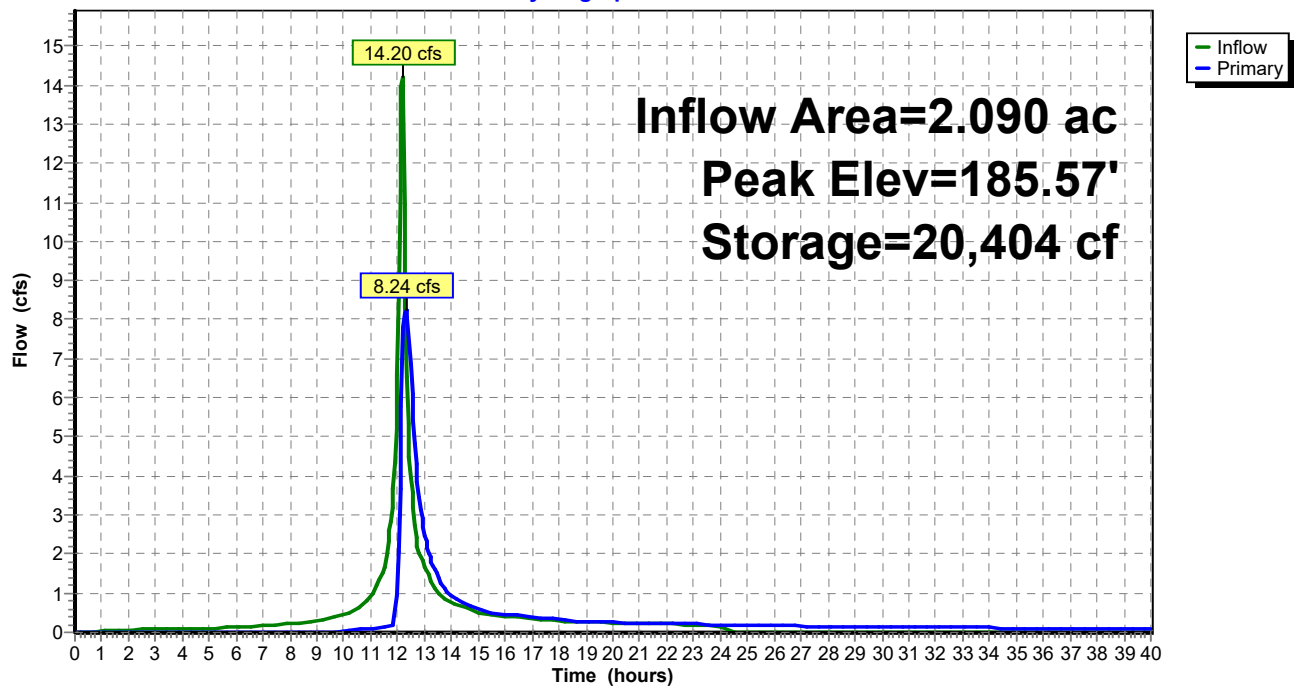
Volume	Invert	Avail.Storage	Storage Description
#1	183.00'	52,993 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.00	6,565	0	0
184.00	7,625	7,095	7,095
185.00	8,717	8,171	15,266
186.00	9,853	9,285	24,551
187.00	11,027	10,440	34,991
188.00	12,333	11,680	46,671
188.50	12,956	6,322	52,993

Device	Routing	Invert	Outlet Devices
#1	Primary	183.00'	15.0" Round Culvert L= 25.0' Ke= 0.500 Inlet / Outlet Invert= 183.00' / 182.81' S= 0.0076 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	183.55'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.74'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	187.75'	30.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)

Primary OutFlow Max=8.23 cfs @ 12.31 hrs HW=185.57' (Free Discharge)

1=Culvert (Inlet Controls 8.23 cfs @ 6.71 fps)
 2=Orifice/Grate (Passes < 0.23 cfs potential flow)
 3=Sharp-Crested Rectangular Weir (Passes < 9.41 cfs potential flow)
 4=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-49: Basin #49**Hydrograph**

Stage-Discharge for Pond B-49: Basin #49

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.00	0.00	183.52	0.00	184.04	0.10	184.56	0.16
183.01	0.00	183.53	0.00	184.05	0.10	184.57	0.16
183.02	0.00	183.54	0.00	184.06	0.10	184.58	0.16
183.03	0.00	183.55	0.00	184.07	0.11	184.59	0.16
183.04	0.00	183.56	0.00	184.08	0.11	184.60	0.16
183.05	0.00	183.57	0.00	184.09	0.11	184.61	0.16
183.06	0.00	183.58	0.00	184.10	0.11	184.62	0.16
183.07	0.00	183.59	0.00	184.11	0.11	184.63	0.16
183.08	0.00	183.60	0.00	184.12	0.11	184.64	0.16
183.09	0.00	183.61	0.01	184.13	0.11	184.65	0.16
183.10	0.00	183.62	0.01	184.14	0.11	184.66	0.16
183.11	0.00	183.63	0.01	184.15	0.12	184.67	0.17
183.12	0.00	183.64	0.01	184.16	0.12	184.68	0.17
183.13	0.00	183.65	0.02	184.17	0.12	184.69	0.17
183.14	0.00	183.66	0.02	184.18	0.12	184.70	0.17
183.15	0.00	183.67	0.02	184.19	0.12	184.71	0.17
183.16	0.00	183.68	0.03	184.20	0.12	184.72	0.17
183.17	0.00	183.69	0.03	184.21	0.12	184.73	0.17
183.18	0.00	183.70	0.03	184.22	0.12	184.74	0.17
183.19	0.00	183.71	0.04	184.23	0.12	184.75	0.18
183.20	0.00	183.72	0.04	184.24	0.13	184.76	0.21
183.21	0.00	183.73	0.05	184.25	0.13	184.77	0.24
183.22	0.00	183.74	0.05	184.26	0.13	184.78	0.28
183.23	0.00	183.75	0.05	184.27	0.13	184.79	0.32
183.24	0.00	183.76	0.05	184.28	0.13	184.80	0.37
183.25	0.00	183.77	0.06	184.29	0.13	184.81	0.42
183.26	0.00	183.78	0.06	184.30	0.13	184.82	0.47
183.27	0.00	183.79	0.06	184.31	0.13	184.83	0.53
183.28	0.00	183.80	0.06	184.32	0.13	184.84	0.59
183.29	0.00	183.81	0.06	184.33	0.13	184.85	0.65
183.30	0.00	183.82	0.07	184.34	0.14	184.86	0.72
183.31	0.00	183.83	0.07	184.35	0.14	184.87	0.79
183.32	0.00	183.84	0.07	184.36	0.14	184.88	0.86
183.33	0.00	183.85	0.07	184.37	0.14	184.89	0.94
183.34	0.00	183.86	0.07	184.38	0.14	184.90	1.01
183.35	0.00	183.87	0.08	184.39	0.14	184.91	1.09
183.36	0.00	183.88	0.08	184.40	0.14	184.92	1.17
183.37	0.00	183.89	0.08	184.41	0.14	184.93	1.26
183.38	0.00	183.90	0.08	184.42	0.14	184.94	1.34
183.39	0.00	183.91	0.08	184.43	0.14	184.95	1.43
183.40	0.00	183.92	0.08	184.44	0.15	184.96	1.52
183.41	0.00	183.93	0.09	184.45	0.15	184.97	1.61
183.42	0.00	183.94	0.09	184.46	0.15	184.98	1.71
183.43	0.00	183.95	0.09	184.47	0.15	184.99	1.80
183.44	0.00	183.96	0.09	184.48	0.15	185.00	1.90
183.45	0.00	183.97	0.09	184.49	0.15	185.01	2.00
183.46	0.00	183.98	0.09	184.50	0.15	185.02	2.10
183.47	0.00	183.99	0.10	184.51	0.15	185.03	2.21
183.48	0.00	184.00	0.10	184.52	0.15	185.04	2.31
183.49	0.00	184.01	0.10	184.53	0.15	185.05	2.42
183.50	0.00	184.02	0.10	184.54	0.15	185.06	2.52
183.51	0.00	184.03	0.10	184.55	0.16	185.07	2.63

Stage-Discharge for Pond B-49: Basin #49 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.08	2.75	185.60	8.30	186.12	9.33	186.64	10.26
185.09	2.86	185.61	8.33	186.13	9.35	186.65	10.28
185.10	2.97	185.62	8.35	186.14	9.37	186.66	10.29
185.11	3.09	185.63	8.37	186.15	9.39	186.67	10.31
185.12	3.20	185.64	8.39	186.16	9.41	186.68	10.33
185.13	3.32	185.65	8.41	186.17	9.43	186.69	10.34
185.14	3.44	185.66	8.43	186.18	9.44	186.70	10.36
185.15	3.56	185.67	8.45	186.19	9.46	186.71	10.38
185.16	3.69	185.68	8.47	186.20	9.48	186.72	10.40
185.17	3.81	185.69	8.49	186.21	9.50	186.73	10.41
185.18	3.94	185.70	8.51	186.22	9.52	186.74	10.43
185.19	4.06	185.71	8.53	186.23	9.54	186.75	10.45
185.20	4.19	185.72	8.55	186.24	9.56	186.76	10.46
185.21	4.32	185.73	8.57	186.25	9.57	186.77	10.48
185.22	4.45	185.74	8.59	186.26	9.59	186.78	10.50
185.23	4.58	185.75	8.61	186.27	9.61	186.79	10.51
185.24	4.72	185.76	8.63	186.28	9.63	186.80	10.53
185.25	4.85	185.77	8.65	186.29	9.65	186.81	10.55
185.26	4.99	185.78	8.67	186.30	9.66	186.82	10.56
185.27	5.12	185.79	8.69	186.31	9.68	186.83	10.58
185.28	5.26	185.80	8.71	186.32	9.70	186.84	10.59
185.29	5.40	185.81	8.73	186.33	9.72	186.85	10.61
185.30	5.54	185.82	8.75	186.34	9.74	186.86	10.63
185.31	5.68	185.83	8.77	186.35	9.75	186.87	10.64
185.32	5.82	185.84	8.79	186.36	9.77	186.88	10.66
185.33	5.97	185.85	8.81	186.37	9.79	186.89	10.68
185.34	6.11	185.86	8.83	186.38	9.81	186.90	10.69
185.35	6.26	185.87	8.85	186.39	9.83	186.91	10.71
185.36	6.40	185.88	8.87	186.40	9.84	186.92	10.73
185.37	6.55	185.89	8.89	186.41	9.86	186.93	10.74
185.38	6.70	185.90	8.91	186.42	9.88	186.94	10.76
185.39	6.85	185.91	8.93	186.43	9.90	186.95	10.77
185.40	7.00	185.92	8.95	186.44	9.91	186.96	10.79
185.41	7.15	185.93	8.97	186.45	9.93	186.97	10.81
185.42	7.30	185.94	8.99	186.46	9.95	186.98	10.82
185.43	7.46	185.95	9.01	186.47	9.97	186.99	10.84
185.44	7.61	185.96	9.03	186.48	9.98	187.00	10.86
185.45	7.77	185.97	9.05	186.49	10.00	187.01	10.87
185.46	7.92	185.98	9.07	186.50	10.02	187.02	10.89
185.47	8.03	185.99	9.09	186.51	10.04	187.03	10.90
185.48	8.05	186.00	9.11	186.52	10.05	187.04	10.92
185.49	8.07	186.01	9.13	186.53	10.07	187.05	10.94
185.50	8.09	186.02	9.14	186.54	10.09	187.06	10.95
185.51	8.11	186.03	9.16	186.55	10.11	187.07	10.97
185.52	8.13	186.04	9.18	186.56	10.12	187.08	10.98
185.53	8.16	186.05	9.20	186.57	10.14	187.09	11.00
185.54	8.18	186.06	9.22	186.58	10.16	187.10	11.01
185.55	8.20	186.07	9.24	186.59	10.17	187.11	11.03
185.56	8.22	186.08	9.26	186.60	10.19	187.12	11.05
185.57	8.24	186.09	9.28	186.61	10.21	187.13	11.06
185.58	8.26	186.10	9.30	186.62	10.23	187.14	11.08
185.59	8.28	186.11	9.31	186.63	10.24	187.15	11.09

Stage-Discharge for Pond B-49: Basin #49 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
187.16	11.11	187.68	11.90	188.20	42.16
187.17	11.13	187.69	11.91	188.21	43.16
187.18	11.14	187.70	11.93	188.22	44.18
187.19	11.16	187.71	11.94	188.23	45.20
187.20	11.17	187.72	11.96	188.24	46.23
187.21	11.19	187.73	11.97	188.25	47.28
187.22	11.20	187.74	11.99	188.26	48.33
187.23	11.22	187.75	12.00	188.27	49.39
187.24	11.23	187.76	12.11	188.28	50.47
187.25	11.25	187.77	12.31	188.29	51.55
187.26	11.27	187.78	12.55	188.30	52.64
187.27	11.28	187.79	12.84	188.31	53.75
187.28	11.30	187.80	13.17	188.32	54.86
187.29	11.31	187.81	13.53	188.33	55.98
187.30	11.33	187.82	13.92	188.34	57.11
187.31	11.34	187.83	14.34	188.35	58.25
187.32	11.36	187.84	14.78	188.36	59.40
187.33	11.37	187.85	15.25	188.37	60.56
187.34	11.39	187.86	15.74	188.38	61.73
187.35	11.40	187.87	16.25	188.39	62.91
187.36	11.42	187.88	16.78	188.40	64.10
187.37	11.43	187.89	17.34	188.41	65.29
187.38	11.45	187.90	17.91	188.42	66.50
187.39	11.47	187.91	18.50	188.43	67.71
187.40	11.48	187.92	19.11	188.44	68.93
187.41	11.50	187.93	19.74	188.45	70.16
187.42	11.51	187.94	20.39	188.46	71.40
187.43	11.53	187.95	21.05	188.47	72.65
187.44	11.54	187.96	21.73	188.48	73.91
187.45	11.56	187.97	22.42	188.49	75.17
187.46	11.57	187.98	23.14	188.50	76.45
187.47	11.59	187.99	23.86		
187.48	11.60	188.00	24.60		
187.49	11.62	188.01	25.36		
187.50	11.63	188.02	26.13		
187.51	11.65	188.03	26.91		
187.52	11.66	188.04	27.71		
187.53	11.68	188.05	28.52		
187.54	11.69	188.06	29.34		
187.55	11.71	188.07	30.18		
187.56	11.72	188.08	31.03		
187.57	11.74	188.09	31.89		
187.58	11.75	188.10	32.77		
187.59	11.77	188.11	33.65		
187.60	11.78	188.12	34.55		
187.61	11.80	188.13	35.46		
187.62	11.81	188.14	36.39		
187.63	11.83	188.15	37.32		
187.64	11.84	188.16	38.27		
187.65	11.85	188.17	39.22		
187.66	11.87	188.18	40.19		
187.67	11.88	188.19	41.17		

Stage-Area-Storage for Pond B-49: Basin #49

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.00	6,565	0	183.52	7,116	3,557
183.01	6,576	66	183.53	7,127	3,628
183.02	6,586	132	183.54	7,137	3,700
183.03	6,597	197	183.55	7,148	3,771
183.04	6,607	263	183.56	7,159	3,843
183.05	6,618	330	183.57	7,169	3,914
183.06	6,629	396	183.58	7,180	3,986
183.07	6,639	462	183.59	7,190	4,058
183.08	6,650	529	183.60	7,201	4,130
183.09	6,660	595	183.61	7,212	4,202
183.10	6,671	662	183.62	7,222	4,274
183.11	6,682	729	183.63	7,233	4,346
183.12	6,692	795	183.64	7,243	4,419
183.13	6,703	862	183.65	7,254	4,491
183.14	6,713	929	183.66	7,265	4,564
183.15	6,724	997	183.67	7,275	4,636
183.16	6,735	1,064	183.68	7,286	4,709
183.17	6,745	1,131	183.69	7,296	4,782
183.18	6,756	1,199	183.70	7,307	4,855
183.19	6,766	1,266	183.71	7,318	4,928
183.20	6,777	1,334	183.72	7,328	5,002
183.21	6,788	1,402	183.73	7,339	5,075
183.22	6,798	1,470	183.74	7,349	5,148
183.23	6,809	1,538	183.75	7,360	5,222
183.24	6,819	1,606	183.76	7,371	5,296
183.25	6,830	1,674	183.77	7,381	5,369
183.26	6,841	1,743	183.78	7,392	5,443
183.27	6,851	1,811	183.79	7,402	5,517
183.28	6,862	1,880	183.80	7,413	5,591
183.29	6,872	1,948	183.81	7,424	5,665
183.30	6,883	2,017	183.82	7,434	5,740
183.31	6,894	2,086	183.83	7,445	5,814
183.32	6,904	2,155	183.84	7,455	5,889
183.33	6,915	2,224	183.85	7,466	5,963
183.34	6,925	2,293	183.86	7,477	6,038
183.35	6,936	2,363	183.87	7,487	6,113
183.36	6,947	2,432	183.88	7,498	6,188
183.37	6,957	2,502	183.89	7,508	6,263
183.38	6,968	2,571	183.90	7,519	6,338
183.39	6,978	2,641	183.91	7,530	6,413
183.40	6,989	2,711	183.92	7,540	6,488
183.41	7,000	2,781	183.93	7,551	6,564
183.42	7,010	2,851	183.94	7,561	6,639
183.43	7,021	2,921	183.95	7,572	6,715
183.44	7,031	2,991	183.96	7,583	6,791
183.45	7,042	3,062	183.97	7,593	6,867
183.46	7,053	3,132	183.98	7,604	6,943
183.47	7,063	3,203	183.99	7,614	7,019
183.48	7,074	3,273	184.00	7,625	7,095
183.49	7,084	3,344	184.01	7,636	7,171
183.50	7,095	3,415	184.02	7,647	7,248
183.51	7,106	3,486	184.03	7,658	7,324

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.04	7,669	7,401	184.56	8,237	11,536
184.05	7,680	7,478	184.57	8,247	11,619
184.06	7,691	7,554	184.58	8,258	11,701
184.07	7,701	7,631	184.59	8,269	11,784
184.08	7,712	7,708	184.60	8,280	11,867
184.09	7,723	7,786	184.61	8,291	11,949
184.10	7,734	7,863	184.62	8,302	12,032
184.11	7,745	7,940	184.63	8,313	12,115
184.12	7,756	8,018	184.64	8,324	12,199
184.13	7,767	8,095	184.65	8,335	12,282
184.14	7,778	8,173	184.66	8,346	12,365
184.15	7,789	8,251	184.67	8,357	12,449
184.16	7,800	8,329	184.68	8,368	12,532
184.17	7,811	8,407	184.69	8,378	12,616
184.18	7,822	8,485	184.70	8,389	12,700
184.19	7,832	8,563	184.71	8,400	12,784
184.20	7,843	8,642	184.72	8,411	12,868
184.21	7,854	8,720	184.73	8,422	12,952
184.22	7,865	8,799	184.74	8,433	13,036
184.23	7,876	8,878	184.75	8,444	13,121
184.24	7,887	8,956	184.76	8,455	13,205
184.25	7,898	9,035	184.77	8,466	13,290
184.26	7,909	9,114	184.78	8,477	13,375
184.27	7,920	9,194	184.79	8,488	13,460
184.28	7,931	9,273	184.80	8,499	13,544
184.29	7,942	9,352	184.81	8,510	13,629
184.30	7,953	9,432	184.82	8,520	13,715
184.31	7,964	9,511	184.83	8,531	13,800
184.32	7,974	9,591	184.84	8,542	13,885
184.33	7,985	9,671	184.85	8,553	13,971
184.34	7,996	9,751	184.86	8,564	14,056
184.35	8,007	9,831	184.87	8,575	14,142
184.36	8,018	9,911	184.88	8,586	14,228
184.37	8,029	9,991	184.89	8,597	14,314
184.38	8,040	10,071	184.90	8,608	14,400
184.39	8,051	10,152	184.91	8,619	14,486
184.40	8,062	10,232	184.92	8,630	14,572
184.41	8,073	10,313	184.93	8,641	14,658
184.42	8,084	10,394	184.94	8,651	14,745
184.43	8,095	10,475	184.95	8,662	14,832
184.44	8,105	10,556	184.96	8,673	14,918
184.45	8,116	10,637	184.97	8,684	15,005
184.46	8,127	10,718	184.98	8,695	15,092
184.47	8,138	10,799	184.99	8,706	15,179
184.48	8,149	10,881	185.00	8,717	15,266
184.49	8,160	10,962	185.01	8,728	15,353
184.50	8,171	11,044	185.02	8,740	15,441
184.51	8,182	11,126	185.03	8,751	15,528
184.52	8,193	11,208	185.04	8,762	15,616
184.53	8,204	11,290	185.05	8,774	15,703
184.54	8,215	11,372	185.06	8,785	15,791
184.55	8,226	11,454	185.07	8,797	15,879

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.08	8,808	15,967	185.60	9,399	20,701
185.09	8,819	16,055	185.61	9,410	20,795
185.10	8,831	16,143	185.62	9,421	20,889
185.11	8,842	16,232	185.63	9,433	20,983
185.12	8,853	16,320	185.64	9,444	21,078
185.13	8,865	16,409	185.65	9,455	21,172
185.14	8,876	16,498	185.66	9,467	21,267
185.15	8,887	16,586	185.67	9,478	21,361
185.16	8,899	16,675	185.68	9,489	21,456
185.17	8,910	16,764	185.69	9,501	21,551
185.18	8,921	16,853	185.70	9,512	21,646
185.19	8,933	16,943	185.71	9,524	21,741
185.20	8,944	17,032	185.72	9,535	21,837
185.21	8,956	17,122	185.73	9,546	21,932
185.22	8,967	17,211	185.74	9,558	22,028
185.23	8,978	17,301	185.75	9,569	22,123
185.24	8,990	17,391	185.76	9,580	22,219
185.25	9,001	17,481	185.77	9,592	22,315
185.26	9,012	17,571	185.78	9,603	22,411
185.27	9,024	17,661	185.79	9,614	22,507
185.28	9,035	17,751	185.80	9,626	22,603
185.29	9,046	17,842	185.81	9,637	22,699
185.30	9,058	17,932	185.82	9,649	22,796
185.31	9,069	18,023	185.83	9,660	22,892
185.32	9,081	18,114	185.84	9,671	22,989
185.33	9,092	18,204	185.85	9,683	23,086
185.34	9,103	18,295	185.86	9,694	23,183
185.35	9,115	18,387	185.87	9,705	23,280
185.36	9,126	18,478	185.88	9,717	23,377
185.37	9,137	18,569	185.89	9,728	23,474
185.38	9,149	18,660	185.90	9,739	23,571
185.39	9,160	18,752	185.91	9,751	23,669
185.40	9,171	18,844	185.92	9,762	23,766
185.41	9,183	18,935	185.93	9,773	23,864
185.42	9,194	19,027	185.94	9,785	23,962
185.43	9,205	19,119	185.95	9,796	24,060
185.44	9,217	19,211	185.96	9,808	24,158
185.45	9,228	19,304	185.97	9,819	24,256
185.46	9,240	19,396	185.98	9,830	24,354
185.47	9,251	19,488	185.99	9,842	24,453
185.48	9,262	19,581	186.00	9,853	24,551
185.49	9,274	19,674	186.01	9,865	24,650
185.50	9,285	19,767	186.02	9,876	24,748
185.51	9,296	19,859	186.03	9,888	24,847
185.52	9,308	19,952	186.04	9,900	24,946
185.53	9,319	20,046	186.05	9,912	25,045
185.54	9,330	20,139	186.06	9,923	25,144
185.55	9,342	20,232	186.07	9,935	25,244
185.56	9,353	20,326	186.08	9,947	25,343
185.57	9,365	20,419	186.09	9,959	25,443
185.58	9,376	20,513	186.10	9,970	25,542
185.59	9,387	20,607	186.11	9,982	25,642

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.12	9,994	25,742	186.64	10,604	31,097
186.13	10,006	25,842	186.65	10,616	31,203
186.14	10,017	25,942	186.66	10,628	31,310
186.15	10,029	26,042	186.67	10,640	31,416
186.16	10,041	26,143	186.68	10,651	31,522
186.17	10,053	26,243	186.69	10,663	31,629
186.18	10,064	26,344	186.70	10,675	31,736
186.19	10,076	26,444	186.71	10,687	31,843
186.20	10,088	26,545	186.72	10,698	31,949
186.21	10,100	26,646	186.73	10,710	32,057
186.22	10,111	26,747	186.74	10,722	32,164
186.23	10,123	26,848	186.75	10,734	32,271
186.24	10,135	26,950	186.76	10,745	32,378
186.25	10,147	27,051	186.77	10,757	32,486
186.26	10,158	27,152	186.78	10,769	32,593
186.27	10,170	27,254	186.79	10,780	32,701
186.28	10,182	27,356	186.80	10,792	32,809
186.29	10,193	27,458	186.81	10,804	32,917
186.30	10,205	27,560	186.82	10,816	33,025
186.31	10,217	27,662	186.83	10,827	33,133
186.32	10,229	27,764	186.84	10,839	33,242
186.33	10,240	27,866	186.85	10,851	33,350
186.34	10,252	27,969	186.86	10,863	33,459
186.35	10,264	28,071	186.87	10,874	33,567
186.36	10,276	28,174	186.88	10,886	33,676
186.37	10,287	28,277	186.89	10,898	33,785
186.38	10,299	28,380	186.90	10,910	33,894
186.39	10,311	28,483	186.91	10,921	34,003
186.40	10,323	28,586	186.92	10,933	34,113
186.41	10,334	28,689	186.93	10,945	34,222
186.42	10,346	28,793	186.94	10,957	34,331
186.43	10,358	28,896	186.95	10,968	34,441
186.44	10,370	29,000	186.96	10,980	34,551
186.45	10,381	29,104	186.97	10,992	34,661
186.46	10,393	29,208	186.98	11,004	34,771
186.47	10,405	29,312	186.99	11,015	34,881
186.48	10,417	29,416	187.00	11,027	34,991
186.49	10,428	29,520	187.01	11,040	35,101
186.50	10,440	29,624	187.02	11,053	35,212
186.51	10,452	29,729	187.03	11,066	35,322
186.52	10,463	29,833	187.04	11,079	35,433
186.53	10,475	29,938	187.05	11,092	35,544
186.54	10,487	30,043	187.06	11,105	35,655
186.55	10,499	30,148	187.07	11,118	35,766
186.56	10,510	30,253	187.08	11,131	35,877
186.57	10,522	30,358	187.09	11,145	35,989
186.58	10,534	30,463	187.10	11,158	36,100
186.59	10,546	30,569	187.11	11,171	36,212
186.60	10,557	30,674	187.12	11,184	36,324
186.61	10,569	30,780	187.13	11,197	36,436
186.62	10,581	30,886	187.14	11,210	36,548
186.63	10,593	30,991	187.15	11,223	36,660

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.16	11,236	36,772	187.68	11,915	42,791
187.17	11,249	36,884	187.69	11,928	42,911
187.18	11,262	36,997	187.70	11,941	43,030
187.19	11,275	37,110	187.71	11,954	43,149
187.20	11,288	37,223	187.72	11,967	43,269
187.21	11,301	37,335	187.73	11,980	43,389
187.22	11,314	37,449	187.74	11,993	43,509
187.23	11,327	37,562	187.75	12,007	43,629
187.24	11,340	37,675	187.76	12,020	43,749
187.25	11,354	37,789	187.77	12,033	43,869
187.26	11,367	37,902	187.78	12,046	43,989
187.27	11,380	38,016	187.79	12,059	44,110
187.28	11,393	38,130	187.80	12,072	44,231
187.29	11,406	38,244	187.81	12,085	44,351
187.30	11,419	38,358	187.82	12,098	44,472
187.31	11,432	38,472	187.83	12,111	44,593
187.32	11,445	38,587	187.84	12,124	44,714
187.33	11,458	38,701	187.85	12,137	44,836
187.34	11,471	38,816	187.86	12,150	44,957
187.35	11,484	38,930	187.87	12,163	45,079
187.36	11,497	39,045	187.88	12,176	45,200
187.37	11,510	39,160	187.89	12,189	45,322
187.38	11,523	39,276	187.90	12,202	45,444
187.39	11,536	39,391	187.91	12,215	45,566
187.40	11,549	39,506	187.92	12,229	45,689
187.41	11,562	39,622	187.93	12,242	45,811
187.42	11,576	39,738	187.94	12,255	45,933
187.43	11,589	39,853	187.95	12,268	46,056
187.44	11,602	39,969	187.96	12,281	46,179
187.45	11,615	40,085	187.97	12,294	46,302
187.46	11,628	40,202	187.98	12,307	46,425
187.47	11,641	40,318	187.99	12,320	46,548
187.48	11,654	40,434	188.00	12,333	46,671
187.49	11,667	40,551	188.01	12,345	46,794
187.50	11,680	40,668	188.02	12,358	46,918
187.51	11,693	40,785	188.03	12,370	47,042
187.52	11,706	40,902	188.04	12,383	47,165
187.53	11,719	41,019	188.05	12,395	47,289
187.54	11,732	41,136	188.06	12,408	47,413
187.55	11,745	41,253	188.07	12,420	47,537
187.56	11,758	41,371	188.08	12,433	47,662
187.57	11,771	41,489	188.09	12,445	47,786
187.58	11,784	41,606	188.10	12,458	47,911
187.59	11,798	41,724	188.11	12,470	48,035
187.60	11,811	41,842	188.12	12,483	48,160
187.61	11,824	41,960	188.13	12,495	48,285
187.62	11,837	42,079	188.14	12,507	48,410
187.63	11,850	42,197	188.15	12,520	48,535
187.64	11,863	42,316	188.16	12,532	48,660
187.65	11,876	42,434	188.17	12,545	48,786
187.66	11,889	42,553	188.18	12,557	48,911
187.67	11,902	42,672	188.19	12,570	49,037

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.20	12,582	49,163
188.21	12,595	49,288
188.22	12,607	49,414
188.23	12,620	49,541
188.24	12,632	49,667
188.25	12,645	49,793
188.26	12,657	49,920
188.27	12,669	50,046
188.28	12,682	50,173
188.29	12,694	50,300
188.30	12,707	50,427
188.31	12,719	50,554
188.32	12,732	50,681
188.33	12,744	50,809
188.34	12,757	50,936
188.35	12,769	51,064
188.36	12,782	51,192
188.37	12,794	51,319
188.38	12,806	51,448
188.39	12,819	51,576
188.40	12,831	51,704
188.41	12,844	51,832
188.42	12,856	51,961
188.43	12,869	52,089
188.44	12,881	52,218
188.45	12,894	52,347
188.46	12,906	52,476
188.47	12,919	52,605
188.48	12,931	52,734
188.49	12,944	52,864
188.50	12,956	52,993

Summary for Pond B-50: Basin #50

Inflow Area = 2.262 ac, 29.27% Impervious, Inflow Depth = 6.30" for Current 100 yr event
 Inflow = 14.76 cfs @ 12.17 hrs, Volume= 1.188 af
 Outflow = 8.40 cfs @ 12.31 hrs, Volume= 1.050 af, Atten= 43%, Lag= 8.6 min
 Primary = 8.40 cfs @ 12.31 hrs, Volume= 1.050 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 186.05' @ 12.31 hrs Surf.Area= 11,518 sf Storage= 20,816 cf

Plug-Flow detention time= 284.2 min calculated for 1.050 af (88% of inflow)
 Center-of-Mass det. time= 226.6 min (1,017.4 - 790.9)

Volume	Invert	Avail.Storage	Storage Description
#1	184.00'	53,209 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
184.00	8,805	0	0
185.00	10,108	9,457	9,457
186.00	11,448	10,778	20,235
187.00	12,826	12,137	32,372
188.00	14,244	13,535	45,907
188.50	14,966	7,303	53,209

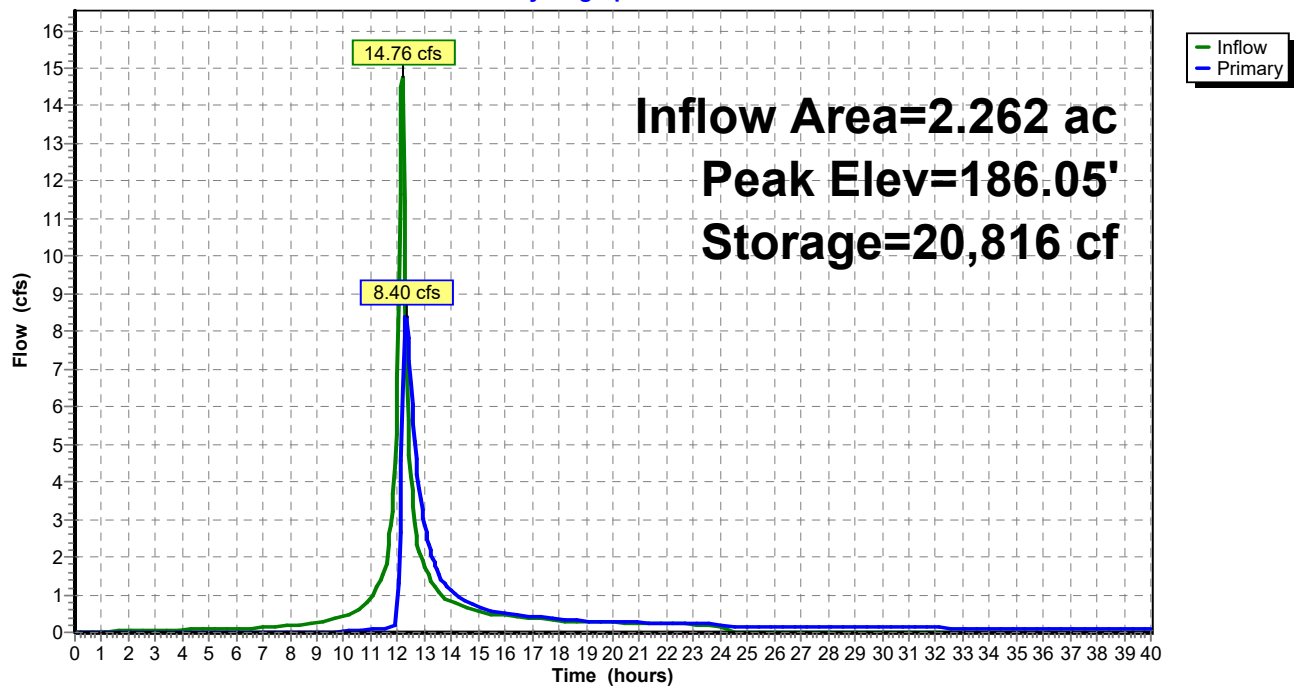
Device	Routing	Invert	Outlet Devices
#1	Primary	180.50'	18.0" Round Culvert L= 83.0' Ke= 0.500 Inlet / Outlet Invert= 180.50' / 179.67' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	184.32'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.30'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	188.45'	30.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=8.33 cfs @ 12.31 hrs HW=186.05' (Free Discharge)

1=Culvert (Passes 8.33 cfs of 18.03 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.21 cfs @ 6.13 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 8.13 cfs @ 2.83 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-50: Basin #50

Hydrograph



Stage-Discharge for Pond B-50: Basin #50

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
184.00	0.00	184.52	0.05	185.04	0.13	185.56	1.89
184.01	0.00	184.53	0.05	185.05	0.13	185.57	1.99
184.02	0.00	184.54	0.06	185.06	0.13	185.58	2.09
184.03	0.00	184.55	0.06	185.07	0.13	185.59	2.19
184.04	0.00	184.56	0.06	185.08	0.13	185.60	2.30
184.05	0.00	184.57	0.06	185.09	0.13	185.61	2.40
184.06	0.00	184.58	0.06	185.10	0.13	185.62	2.51
184.07	0.00	184.59	0.07	185.11	0.14	185.63	2.62
184.08	0.00	184.60	0.07	185.12	0.14	185.64	2.73
184.09	0.00	184.61	0.07	185.13	0.14	185.65	2.84
184.10	0.00	184.62	0.07	185.14	0.14	185.66	2.96
184.11	0.00	184.63	0.07	185.15	0.14	185.67	3.07
184.12	0.00	184.64	0.08	185.16	0.14	185.68	3.19
184.13	0.00	184.65	0.08	185.17	0.14	185.69	3.31
184.14	0.00	184.66	0.08	185.18	0.14	185.70	3.43
184.15	0.00	184.67	0.08	185.19	0.14	185.71	3.55
184.16	0.00	184.68	0.08	185.20	0.14	185.72	3.67
184.17	0.00	184.69	0.08	185.21	0.15	185.73	3.80
184.18	0.00	184.70	0.09	185.22	0.15	185.74	3.92
184.19	0.00	184.71	0.09	185.23	0.15	185.75	4.05
184.20	0.00	184.72	0.09	185.24	0.15	185.76	4.18
184.21	0.00	184.73	0.09	185.25	0.15	185.77	4.31
184.22	0.00	184.74	0.09	185.26	0.15	185.78	4.44
184.23	0.00	184.75	0.09	185.27	0.15	185.79	4.57
184.24	0.00	184.76	0.10	185.28	0.15	185.80	4.70
184.25	0.00	184.77	0.10	185.29	0.15	185.81	4.84
184.26	0.00	184.78	0.10	185.30	0.15	185.82	4.97
184.27	0.00	184.79	0.10	185.31	0.17	185.83	5.11
184.28	0.00	184.80	0.10	185.32	0.19	185.84	5.25
184.29	0.00	184.81	0.10	185.33	0.22	185.85	5.38
184.30	0.00	184.82	0.10	185.34	0.26	185.86	5.52
184.31	0.00	184.83	0.10	185.35	0.30	185.87	5.67
184.32	0.00	184.84	0.11	185.36	0.35	185.88	5.81
184.33	0.00	184.85	0.11	185.37	0.40	185.89	5.95
184.34	0.00	184.86	0.11	185.38	0.46	185.90	6.10
184.35	0.00	184.87	0.11	185.39	0.51	185.91	6.24
184.36	0.00	184.88	0.11	185.40	0.57	185.92	6.39
184.37	0.00	184.89	0.11	185.41	0.64	185.93	6.54
184.38	0.01	184.90	0.11	185.42	0.70	185.94	6.68
184.39	0.01	184.91	0.11	185.43	0.77	185.95	6.83
184.40	0.01	184.92	0.12	185.44	0.85	185.96	6.99
184.41	0.01	184.93	0.12	185.45	0.92	185.97	7.14
184.42	0.02	184.94	0.12	185.46	1.00	185.98	7.29
184.43	0.02	184.95	0.12	185.47	1.08	185.99	7.44
184.44	0.02	184.96	0.12	185.48	1.16	186.00	7.60
184.45	0.03	184.97	0.12	185.49	1.24	186.01	7.75
184.46	0.03	184.98	0.12	185.50	1.33	186.02	7.91
184.47	0.03	184.99	0.12	185.51	1.42	186.03	8.07
184.48	0.04	185.00	0.12	185.52	1.51	186.04	8.23
184.49	0.04	185.01	0.13	185.53	1.60	186.05	8.39
184.50	0.05	185.02	0.13	185.54	1.69	186.06	8.55
184.51	0.05	185.03	0.13	185.55	1.79	186.07	8.71

Stage-Discharge for Pond B-50: Basin #50 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.08	8.87	186.60	18.37	187.12	19.91	187.64	20.76
186.09	9.03	186.61	18.57	187.13	19.93	187.65	20.78
186.10	9.20	186.62	18.77	187.14	19.95	187.66	20.80
186.11	9.36	186.63	18.97	187.15	19.96	187.67	20.81
186.12	9.53	186.64	19.09	187.16	19.98	187.68	20.83
186.13	9.69	186.65	19.11	187.17	20.00	187.69	20.84
186.14	9.86	186.66	19.13	187.18	20.01	187.70	20.86
186.15	10.03	186.67	19.14	187.19	20.03	187.71	20.88
186.16	10.20	186.68	19.16	187.20	20.05	187.72	20.89
186.17	10.37	186.69	19.18	187.21	20.06	187.73	20.91
186.18	10.54	186.70	19.20	187.22	20.08	187.74	20.92
186.19	10.71	186.71	19.21	187.23	20.10	187.75	20.94
186.20	10.88	186.72	19.23	187.24	20.11	187.76	20.96
186.21	11.06	186.73	19.25	187.25	20.13	187.77	20.97
186.22	11.23	186.74	19.27	187.26	20.15	187.78	20.99
186.23	11.41	186.75	19.28	187.27	20.16	187.79	21.00
186.24	11.58	186.76	19.30	187.28	20.18	187.80	21.02
186.25	11.76	186.77	19.32	187.29	20.19	187.81	21.04
186.26	11.93	186.78	19.33	187.30	20.21	187.82	21.05
186.27	12.11	186.79	19.35	187.31	20.23	187.83	21.07
186.28	12.29	186.80	19.37	187.32	20.24	187.84	21.08
186.29	12.47	186.81	19.39	187.33	20.26	187.85	21.10
186.30	12.65	186.82	19.40	187.34	20.28	187.86	21.11
186.31	12.83	186.83	19.42	187.35	20.29	187.87	21.13
186.32	13.01	186.84	19.44	187.36	20.31	187.88	21.15
186.33	13.20	186.85	19.46	187.37	20.33	187.89	21.16
186.34	13.38	186.86	19.47	187.38	20.34	187.90	21.18
186.35	13.56	186.87	19.49	187.39	20.36	187.91	21.19
186.36	13.75	186.88	19.51	187.40	20.38	187.92	21.21
186.37	13.93	186.89	19.52	187.41	20.39	187.93	21.22
186.38	14.12	186.90	19.54	187.42	20.41	187.94	21.24
186.39	14.30	186.91	19.56	187.43	20.42	187.95	21.26
186.40	14.49	186.92	19.57	187.44	20.44	187.96	21.27
186.41	14.68	186.93	19.59	187.45	20.46	187.97	21.29
186.42	14.87	186.94	19.61	187.46	20.47	187.98	21.30
186.43	15.06	186.95	19.63	187.47	20.49	187.99	21.32
186.44	15.25	186.96	19.64	187.48	20.51	188.00	21.33
186.45	15.44	186.97	19.66	187.49	20.52	188.01	21.35
186.46	15.63	186.98	19.68	187.50	20.54	188.02	21.37
186.47	15.82	186.99	19.69	187.51	20.55	188.03	21.38
186.48	16.01	187.00	19.71	187.52	20.57	188.04	21.40
186.49	16.21	187.01	19.73	187.53	20.59	188.05	21.41
186.50	16.40	187.02	19.74	187.54	20.60	188.06	21.43
186.51	16.59	187.03	19.76	187.55	20.62	188.07	21.44
186.52	16.79	187.04	19.78	187.56	20.64	188.08	21.46
186.53	16.98	187.05	19.79	187.57	20.65	188.09	21.47
186.54	17.18	187.06	19.81	187.58	20.67	188.10	21.49
186.55	17.38	187.07	19.83	187.59	20.68	188.11	21.51
186.56	17.57	187.08	19.85	187.60	20.70	188.12	21.52
186.57	17.77	187.09	19.86	187.61	20.72	188.13	21.54
186.58	17.97	187.10	19.88	187.62	20.73	188.14	21.55
186.59	18.17	187.11	19.90	187.63	20.75	188.15	21.57

Stage-Discharge for Pond B-50: Basin #50 (continued)

Elevation (feet)	Primary (cfs)
188.16	21.58
188.17	21.60
188.18	21.61
188.19	21.63
188.20	21.64
188.21	21.66
188.22	21.67
188.23	21.69
188.24	21.71
188.25	21.72
188.26	21.74
188.27	21.75
188.28	21.77
188.29	21.78
188.30	21.80
188.31	21.81
188.32	21.83
188.33	21.84
188.34	21.86
188.35	21.87
188.36	21.89
188.37	21.90
188.38	21.92
188.39	21.93
188.40	21.95
188.41	21.97
188.42	21.98
188.43	22.00
188.44	22.01
188.45	22.03
188.46	22.11
188.47	22.25
188.48	22.44
188.49	22.65
188.50	22.89

Stage-Area-Storage for Pond B-50: Basin #50

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.00	8,805	0	184.52	9,483	4,755
184.01	8,818	88	184.53	9,496	4,850
184.02	8,831	176	184.54	9,509	4,945
184.03	8,844	265	184.55	9,522	5,040
184.04	8,857	353	184.56	9,535	5,135
184.05	8,870	442	184.57	9,548	5,231
184.06	8,883	531	184.58	9,561	5,326
184.07	8,896	620	184.59	9,574	5,422
184.08	8,909	709	184.60	9,587	5,518
184.09	8,922	798	184.61	9,600	5,613
184.10	8,935	887	184.62	9,613	5,710
184.11	8,948	976	184.63	9,626	5,806
184.12	8,961	1,066	184.64	9,639	5,902
184.13	8,974	1,156	184.65	9,652	5,999
184.14	8,987	1,245	184.66	9,665	6,095
184.15	9,000	1,335	184.67	9,678	6,192
184.16	9,013	1,425	184.68	9,691	6,289
184.17	9,027	1,516	184.69	9,704	6,386
184.18	9,040	1,606	184.70	9,717	6,483
184.19	9,053	1,696	184.71	9,730	6,580
184.20	9,066	1,787	184.72	9,743	6,677
184.21	9,079	1,878	184.73	9,756	6,775
184.22	9,092	1,969	184.74	9,769	6,872
184.23	9,105	2,060	184.75	9,782	6,970
184.24	9,118	2,151	184.76	9,795	7,068
184.25	9,131	2,242	184.77	9,808	7,166
184.26	9,144	2,333	184.78	9,821	7,264
184.27	9,157	2,425	184.79	9,834	7,363
184.28	9,170	2,516	184.80	9,847	7,461
184.29	9,183	2,608	184.81	9,860	7,559
184.30	9,196	2,700	184.82	9,873	7,658
184.31	9,209	2,792	184.83	9,886	7,757
184.32	9,222	2,884	184.84	9,900	7,856
184.33	9,235	2,977	184.85	9,913	7,955
184.34	9,248	3,069	184.86	9,926	8,054
184.35	9,261	3,162	184.87	9,939	8,153
184.36	9,274	3,254	184.88	9,952	8,253
184.37	9,287	3,347	184.89	9,965	8,353
184.38	9,300	3,440	184.90	9,978	8,452
184.39	9,313	3,533	184.91	9,991	8,552
184.40	9,326	3,626	184.92	10,004	8,652
184.41	9,339	3,720	184.93	10,017	8,752
184.42	9,352	3,813	184.94	10,030	8,852
184.43	9,365	3,907	184.95	10,043	8,953
184.44	9,378	4,000	184.96	10,056	9,053
184.45	9,391	4,094	184.97	10,069	9,154
184.46	9,404	4,188	184.98	10,082	9,255
184.47	9,417	4,282	184.99	10,095	9,355
184.48	9,430	4,377	185.00	10,108	9,457
184.49	9,443	4,471	185.01	10,121	9,558
184.50	9,457	4,565	185.02	10,135	9,659
184.51	9,470	4,660	185.03	10,148	9,760

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.04	10,162	9,862	185.56	10,858	15,327
185.05	10,175	9,964	185.57	10,872	15,436
185.06	10,188	10,065	185.58	10,885	15,545
185.07	10,202	10,167	185.59	10,899	15,653
185.08	10,215	10,269	185.60	10,912	15,762
185.09	10,229	10,372	185.61	10,925	15,872
185.10	10,242	10,474	185.62	10,939	15,981
185.11	10,255	10,576	185.63	10,952	16,090
185.12	10,269	10,679	185.64	10,966	16,200
185.13	10,282	10,782	185.65	10,979	16,310
185.14	10,296	10,885	185.66	10,992	16,420
185.15	10,309	10,988	185.67	11,006	16,530
185.16	10,322	11,091	185.68	11,019	16,640
185.17	10,336	11,194	185.69	11,033	16,750
185.18	10,349	11,298	185.70	11,046	16,860
185.19	10,363	11,401	185.71	11,059	16,971
185.20	10,376	11,505	185.72	11,073	17,082
185.21	10,389	11,609	185.73	11,086	17,192
185.22	10,403	11,713	185.74	11,100	17,303
185.23	10,416	11,817	185.75	11,113	17,414
185.24	10,430	11,921	185.76	11,126	17,526
185.25	10,443	12,025	185.77	11,140	17,637
185.26	10,456	12,130	185.78	11,153	17,748
185.27	10,470	12,235	185.79	11,167	17,860
185.28	10,483	12,339	185.80	11,180	17,972
185.29	10,497	12,444	185.81	11,193	18,084
185.30	10,510	12,549	185.82	11,207	18,196
185.31	10,523	12,654	185.83	11,220	18,308
185.32	10,537	12,760	185.84	11,234	18,420
185.33	10,550	12,865	185.85	11,247	18,532
185.34	10,564	12,971	185.86	11,260	18,645
185.35	10,577	13,076	185.87	11,274	18,758
185.36	10,590	13,182	185.88	11,287	18,870
185.37	10,604	13,288	185.89	11,301	18,983
185.38	10,617	13,394	185.90	11,314	19,096
185.39	10,631	13,501	185.91	11,327	19,210
185.40	10,644	13,607	185.92	11,341	19,323
185.41	10,657	13,713	185.93	11,354	19,436
185.42	10,671	13,820	185.94	11,368	19,550
185.43	10,684	13,927	185.95	11,381	19,664
185.44	10,698	14,034	185.96	11,394	19,778
185.45	10,711	14,141	185.97	11,408	19,892
185.46	10,724	14,248	185.98	11,421	20,006
185.47	10,738	14,355	185.99	11,435	20,120
185.48	10,751	14,463	186.00	11,448	20,235
185.49	10,765	14,570	186.01	11,462	20,349
185.50	10,778	14,678	186.02	11,476	20,464
185.51	10,791	14,786	186.03	11,489	20,579
185.52	10,805	14,894	186.04	11,503	20,694
185.53	10,818	15,002	186.05	11,517	20,809
185.54	10,832	15,110	186.06	11,531	20,924
185.55	10,845	15,219	186.07	11,544	21,039

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.08	11,558	21,155	186.60	12,275	27,351
186.09	11,572	21,270	186.61	12,289	27,474
186.10	11,586	21,386	186.62	12,302	27,597
186.11	11,600	21,502	186.63	12,316	27,720
186.12	11,613	21,618	186.64	12,330	27,843
186.13	11,627	21,734	186.65	12,344	27,967
186.14	11,641	21,851	186.66	12,357	28,090
186.15	11,655	21,967	186.67	12,371	28,214
186.16	11,668	22,084	186.68	12,385	28,338
186.17	11,682	22,201	186.69	12,399	28,462
186.18	11,696	22,317	186.70	12,413	28,586
186.19	11,710	22,434	186.71	12,426	28,710
186.20	11,724	22,552	186.72	12,440	28,834
186.21	11,737	22,669	186.73	12,454	28,959
186.22	11,751	22,786	186.74	12,468	29,083
186.23	11,765	22,904	186.75	12,482	29,208
186.24	11,779	23,022	186.76	12,495	29,333
186.25	11,793	23,140	186.77	12,509	29,458
186.26	11,806	23,258	186.78	12,523	29,583
186.27	11,820	23,376	186.79	12,537	29,708
186.28	11,834	23,494	186.80	12,550	29,834
186.29	11,848	23,612	186.81	12,564	29,959
186.30	11,861	23,731	186.82	12,578	30,085
186.31	11,875	23,850	186.83	12,592	30,211
186.32	11,889	23,968	186.84	12,606	30,337
186.33	11,903	24,087	186.85	12,619	30,463
186.34	11,917	24,206	186.86	12,633	30,589
186.35	11,930	24,326	186.87	12,647	30,716
186.36	11,944	24,445	186.88	12,661	30,842
186.37	11,958	24,565	186.89	12,674	30,969
186.38	11,972	24,684	186.90	12,688	31,096
186.39	11,985	24,804	186.91	12,702	31,223
186.40	11,999	24,924	186.92	12,716	31,350
186.41	12,013	25,044	186.93	12,730	31,477
186.42	12,027	25,164	186.94	12,743	31,604
186.43	12,041	25,285	186.95	12,757	31,732
186.44	12,054	25,405	186.96	12,771	31,860
186.45	12,068	25,526	186.97	12,785	31,987
186.46	12,082	25,646	186.98	12,798	32,115
186.47	12,096	25,767	186.99	12,812	32,243
186.48	12,109	25,888	187.00	12,826	32,372
186.49	12,123	26,009	187.01	12,840	32,500
186.50	12,137	26,131	187.02	12,854	32,628
186.51	12,151	26,252	187.03	12,869	32,757
186.52	12,165	26,374	187.04	12,883	32,886
186.53	12,178	26,495	187.05	12,897	33,015
186.54	12,192	26,617	187.06	12,911	33,144
186.55	12,206	26,739	187.07	12,925	33,273
186.56	12,220	26,861	187.08	12,939	33,402
186.57	12,233	26,984	187.09	12,954	33,532
186.58	12,247	27,106	187.10	12,968	33,661
186.59	12,261	27,229	187.11	12,982	33,791

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.12	12,996	33,921	187.64	13,734	40,871
187.13	13,010	34,051	187.65	13,748	41,008
187.14	13,025	34,181	187.66	13,762	41,146
187.15	13,039	34,311	187.67	13,776	41,283
187.16	13,053	34,442	187.68	13,790	41,421
187.17	13,067	34,572	187.69	13,804	41,559
187.18	13,081	34,703	187.70	13,819	41,697
187.19	13,095	34,834	187.71	13,833	41,835
187.20	13,110	34,965	187.72	13,847	41,974
187.21	13,124	35,096	187.73	13,861	42,112
187.22	13,138	35,228	187.74	13,875	42,251
187.23	13,152	35,359	187.75	13,890	42,390
187.24	13,166	35,491	187.76	13,904	42,529
187.25	13,181	35,622	187.77	13,918	42,668
187.26	13,195	35,754	187.78	13,932	42,807
187.27	13,209	35,886	187.79	13,946	42,947
187.28	13,223	36,018	187.80	13,960	43,086
187.29	13,237	36,151	187.81	13,975	43,226
187.30	13,251	36,283	187.82	13,989	43,366
187.31	13,266	36,416	187.83	14,003	43,506
187.32	13,280	36,548	187.84	14,017	43,646
187.33	13,294	36,681	187.85	14,031	43,786
187.34	13,308	36,814	187.86	14,045	43,926
187.35	13,322	36,947	187.87	14,060	44,067
187.36	13,336	37,081	187.88	14,074	44,207
187.37	13,351	37,214	187.89	14,088	44,348
187.38	13,365	37,348	187.90	14,102	44,489
187.39	13,379	37,481	187.91	14,116	44,630
187.40	13,393	37,615	187.92	14,131	44,772
187.41	13,407	37,749	187.93	14,145	44,913
187.42	13,422	37,883	187.94	14,159	45,054
187.43	13,436	38,018	187.95	14,173	45,196
187.44	13,450	38,152	187.96	14,187	45,338
187.45	13,464	38,287	187.97	14,201	45,480
187.46	13,478	38,421	187.98	14,216	45,622
187.47	13,492	38,556	187.99	14,230	45,764
187.48	13,507	38,691	188.00	14,244	45,907
187.49	13,521	38,826	188.01	14,258	46,049
187.50	13,535	38,962	188.02	14,273	46,192
187.51	13,549	39,097	188.03	14,287	46,334
187.52	13,563	39,233	188.04	14,302	46,477
187.53	13,578	39,368	188.05	14,316	46,621
187.54	13,592	39,504	188.06	14,331	46,764
187.55	13,606	39,640	188.07	14,345	46,907
187.56	13,620	39,776	188.08	14,360	47,051
187.57	13,634	39,913	188.09	14,374	47,194
187.58	13,648	40,049	188.10	14,388	47,338
187.59	13,663	40,186	188.11	14,403	47,482
187.60	13,677	40,322	188.12	14,417	47,626
187.61	13,691	40,459	188.13	14,432	47,770
187.62	13,705	40,596	188.14	14,446	47,915
187.63	13,719	40,733	188.15	14,461	48,059

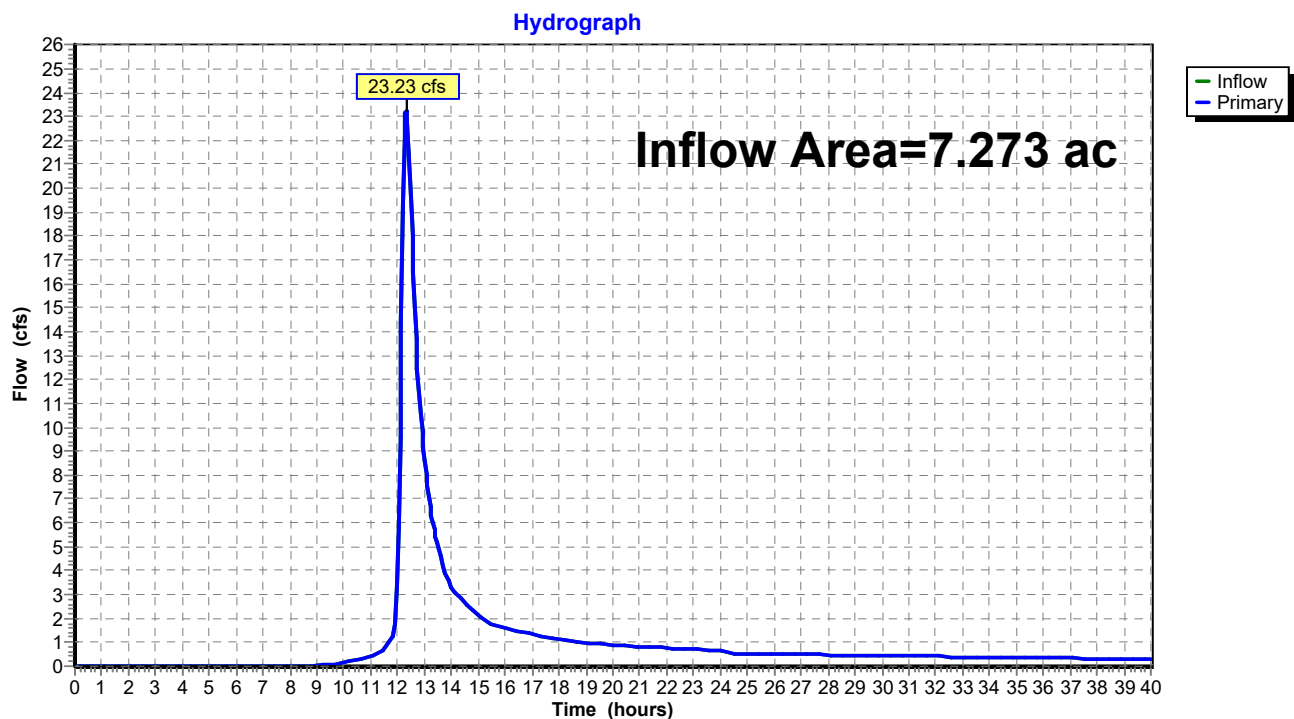
Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.16	14,475	48,204
188.17	14,489	48,349
188.18	14,504	48,494
188.19	14,518	48,639
188.20	14,533	48,784
188.21	14,547	48,930
188.22	14,562	49,075
188.23	14,576	49,221
188.24	14,591	49,367
188.25	14,605	49,513
188.26	14,619	49,659
188.27	14,634	49,805
188.28	14,648	49,951
188.29	14,663	50,098
188.30	14,677	50,245
188.31	14,692	50,392
188.32	14,706	50,539
188.33	14,721	50,686
188.34	14,735	50,833
188.35	14,749	50,980
188.36	14,764	51,128
188.37	14,778	51,276
188.38	14,793	51,423
188.39	14,807	51,571
188.40	14,822	51,720
188.41	14,836	51,868
188.42	14,850	52,016
188.43	14,865	52,165
188.44	14,879	52,314
188.45	14,894	52,463
188.46	14,908	52,612
188.47	14,923	52,761
188.48	14,937	52,910
188.49	14,952	53,059
188.50	14,966	53,209

Summary for Link PDA-5: Proposed Drainage Area #5

Inflow Area = 7.273 ac, 32.33% Impervious, Inflow Depth > 5.52" for Current 100 yr event
Inflow = 23.23 cfs @ 12.33 hrs, Volume= 3.348 af
Primary = 23.23 cfs @ 12.33 hrs, Volume= 3.348 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-5: Proposed Drainage Area #5

Summary for Subcatchment 48I: PDA-48 (impervious)

Runoff = 2.71 cfs @ 12.17 hrs, Volume= 0.234 af, Depth= 3.62"
 Routed to Pond B-48 : Basin #48

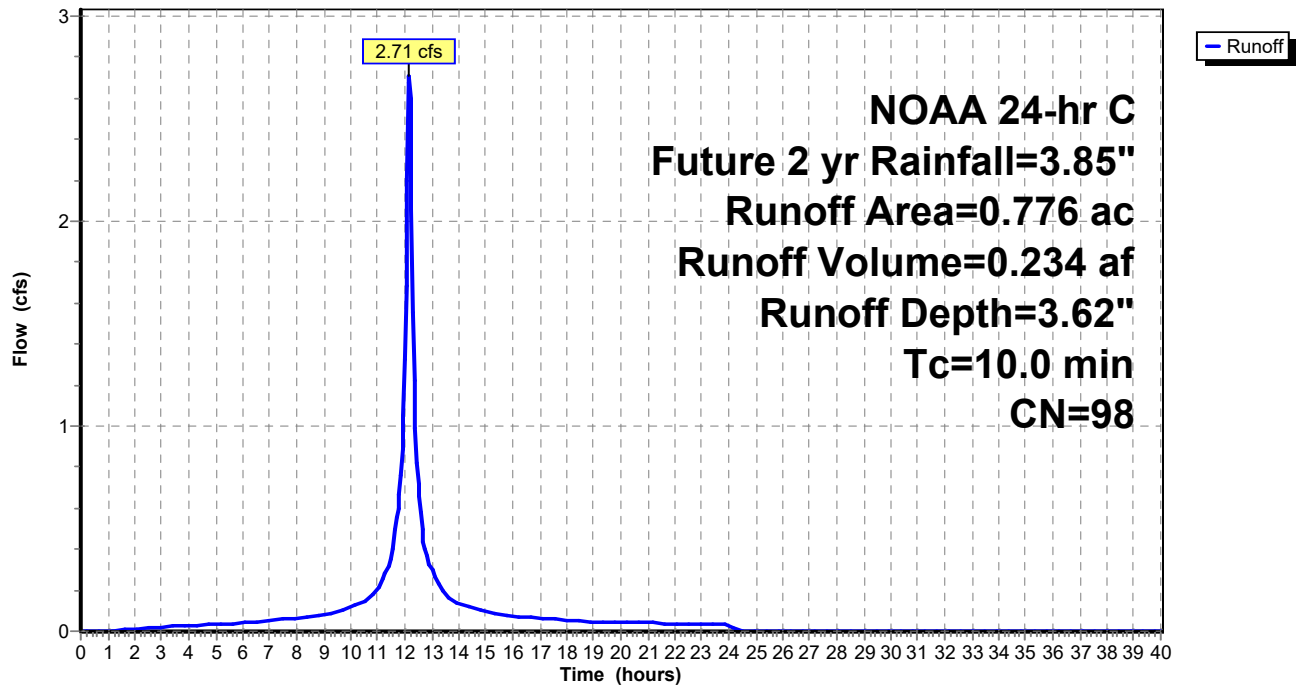
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
* 0.235	98	Pavement, HSG C
* 0.522	98	Roof, HSG C
* 0.019	98	Concrete, HSG C
0.776	98	Weighted Average
0.776		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 48I: PDA-48 (impervious)

Hydrograph



Summary for Subcatchment 48P: PDA-48 (pervious)

Runoff = 2.42 cfs @ 12.18 hrs, Volume= 0.185 af, Depth= 1.49"
 Routed to Pond B-48 : Basin #48

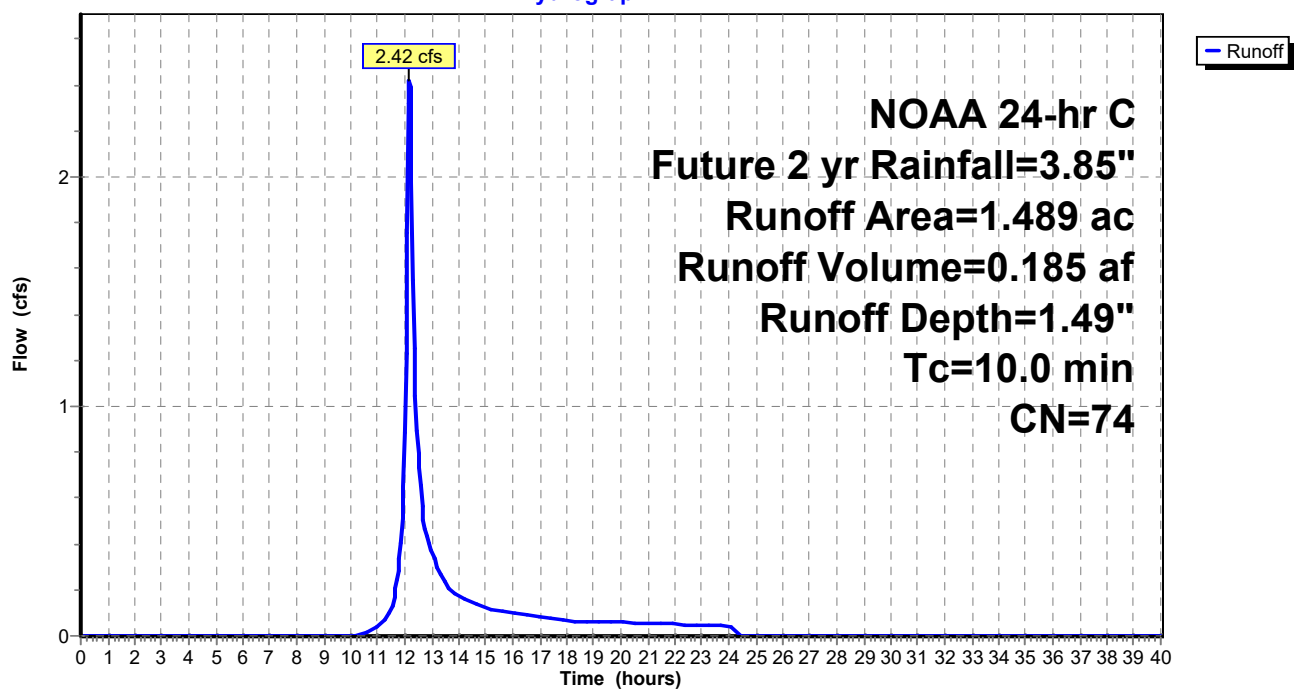
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.489	74	>75% Grass cover, Good, HSG C
1.489		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 48P: PDA-48 (pervious)

Hydrograph



Summary for Subcatchment 49I: PDA-49 (impervious)

Runoff = 3.19 cfs @ 12.17 hrs, Volume= 0.275 af, Depth= 3.62"
 Routed to Pond B-49 : Basin #49

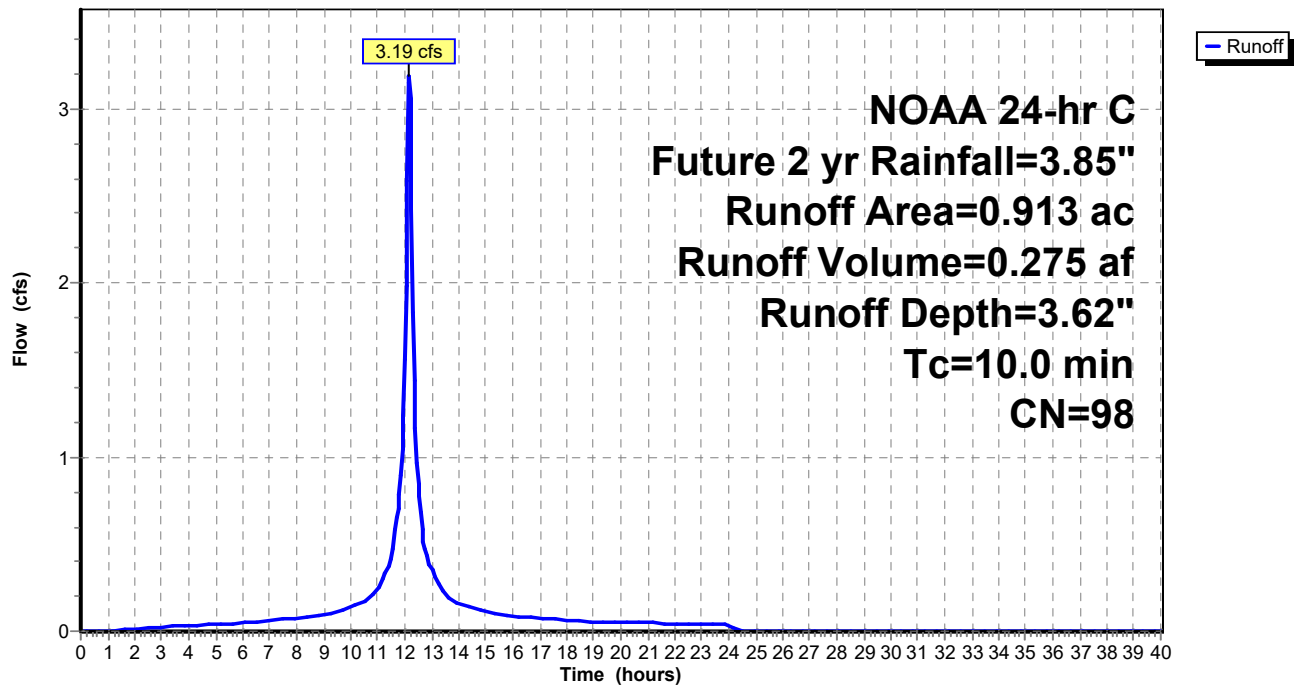
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
* 0.434	98	Pavement, HSG C
* 0.418	98	Roof, HSG C
* 0.061	98	Concrete, HSG C
0.913	98	Weighted Average
0.913		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 49I: PDA-49 (impervious)

Hydrograph



Summary for Subcatchment 49P: PDA-49 (pervious)

Runoff = 1.91 cfs @ 12.18 hrs, Volume= 0.146 af, Depth= 1.49"
 Routed to Pond B-49 : Basin #49

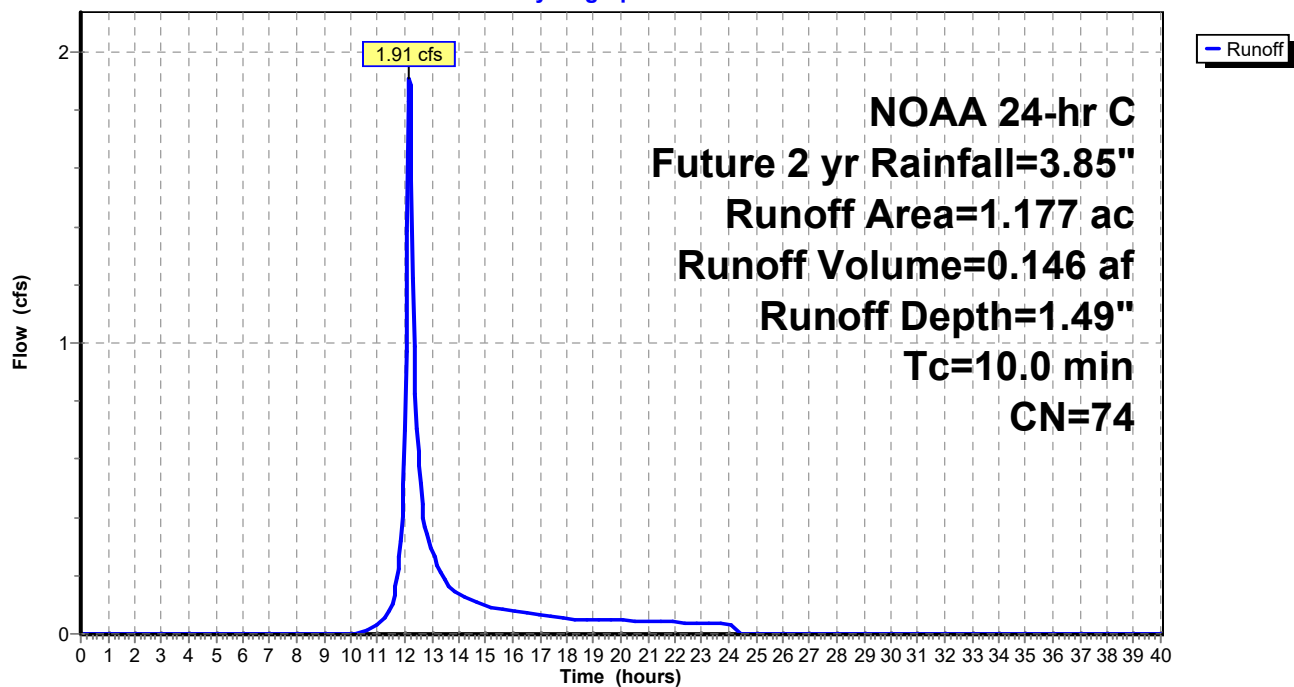
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.177	74	>75% Grass cover, Good, HSG C
1.177		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 49P: PDA-49 (pervious)

Hydrograph



Summary for Subcatchment 50I: PDA-50 (impervious)

Runoff = 2.31 cfs @ 12.17 hrs, Volume= 0.199 af, Depth= 3.62"
 Routed to Pond B-50 : Basin #50

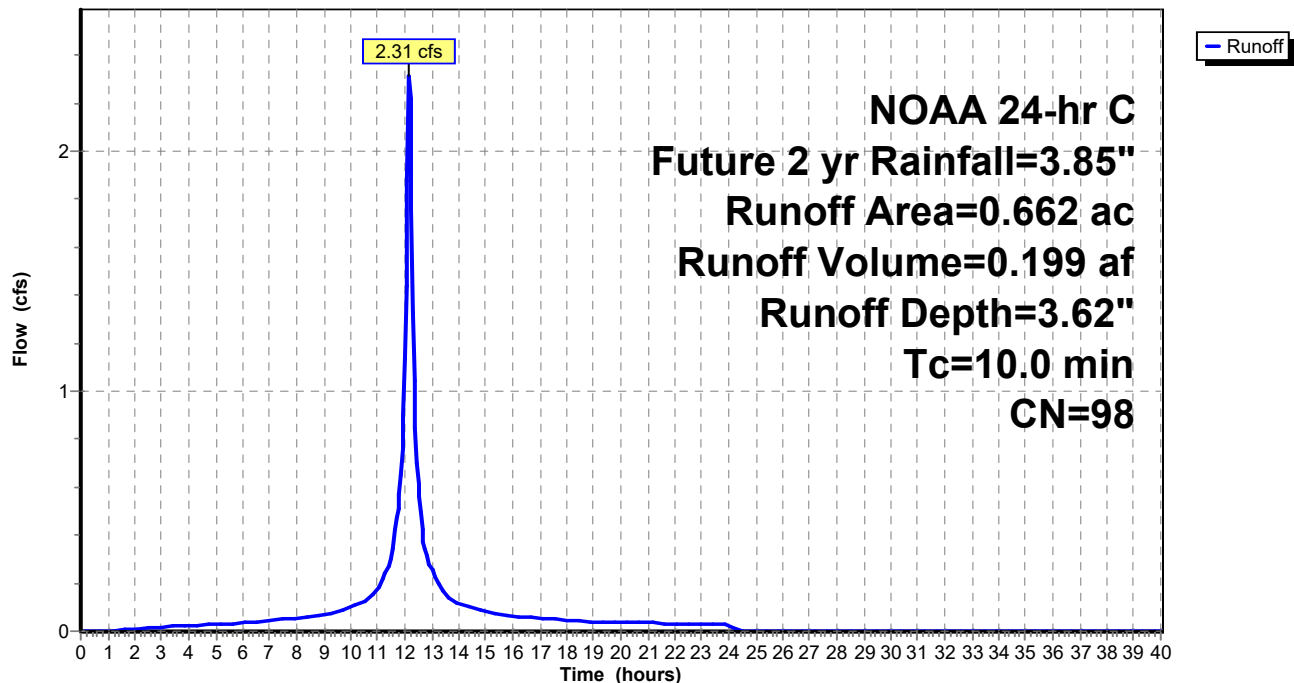
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
* 0.291	98	Pavement, HSG C
* 0.325	98	Roof, HSG C
* 0.046	98	Concrete, HSG C
0.662	98	Weighted Average
0.662		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 50I: PDA-50 (impervious)

Hydrograph



Summary for Subcatchment 50P: PDA-50 (pervious)

Runoff = 2.60 cfs @ 12.18 hrs, Volume= 0.198 af, Depth= 1.49"
 Routed to Pond B-50 : Basin #50

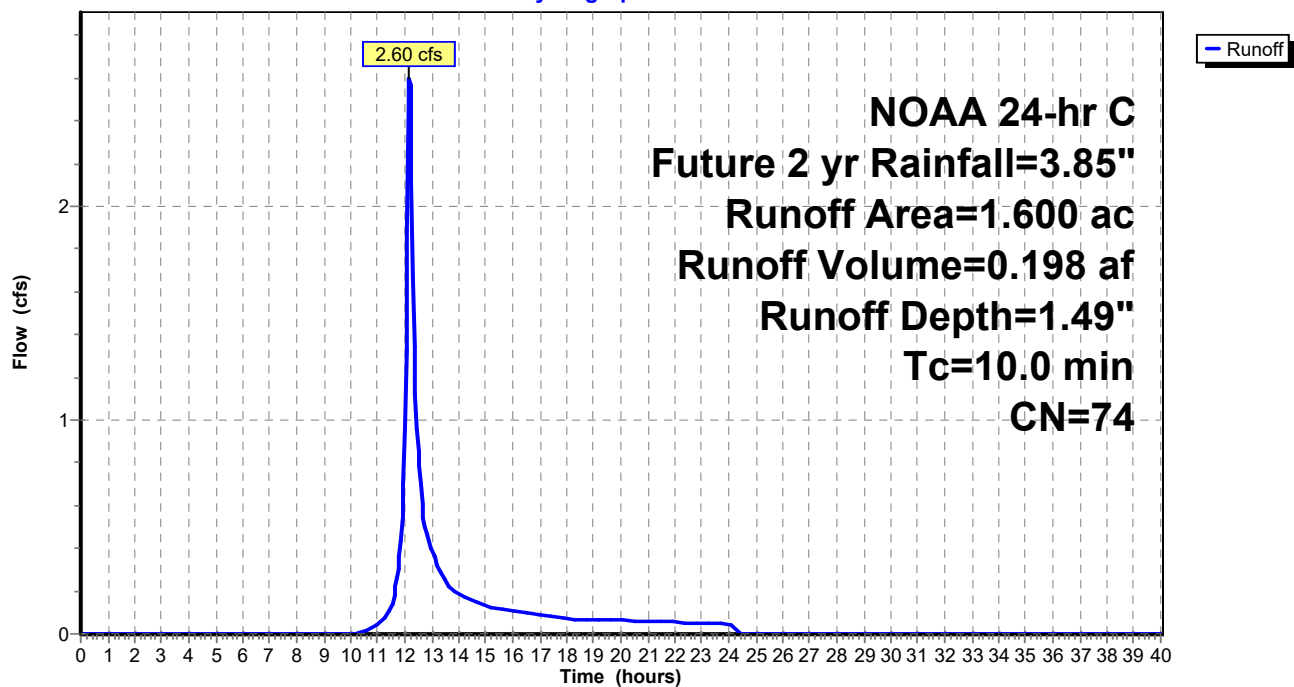
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.600	74	>75% Grass cover, Good, HSG C
1.600		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 50P: PDA-50 (pervious)

Hydrograph



Summary for Subcatchment UPDA-5: PDA-5 (undetained)

Runoff = 1.06 cfs @ 12.18 hrs, Volume= 0.081 af, Depth= 1.49"

Routed to Link PDA-5 : Proposed Drainage Area #5

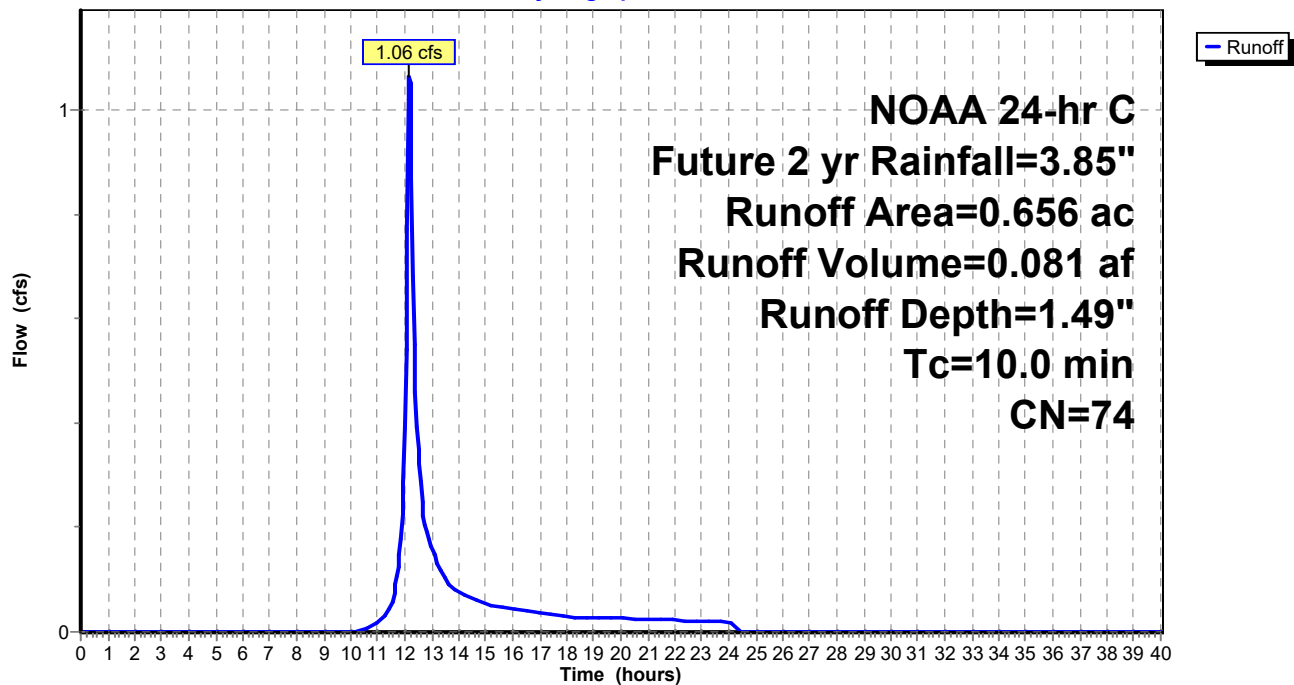
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.656	74	>75% Grass cover, Good, HSG C
0.656		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment UPDA-5: PDA-5 (undetained)

Hydrograph



Summary for Pond B-48: Basin #48

Inflow Area = 2.265 ac, 34.26% Impervious, Inflow Depth = 2.22" for Future 2 yr event
 Inflow = 5.12 cfs @ 12.17 hrs, Volume= 0.418 af
 Outflow = 0.15 cfs @ 16.79 hrs, Volume= 0.279 af, Atten= 97%, Lag= 276.8 min
 Primary = 0.15 cfs @ 16.79 hrs, Volume= 0.279 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 192.35' @ 16.79 hrs Surf.Area= 10,555 sf Storage= 13,137 cf

Plug-Flow detention time= 769.5 min calculated for 0.279 af (67% of inflow)
 Center-of-Mass det. time= 662.0 min (1,463.9 - 801.9)

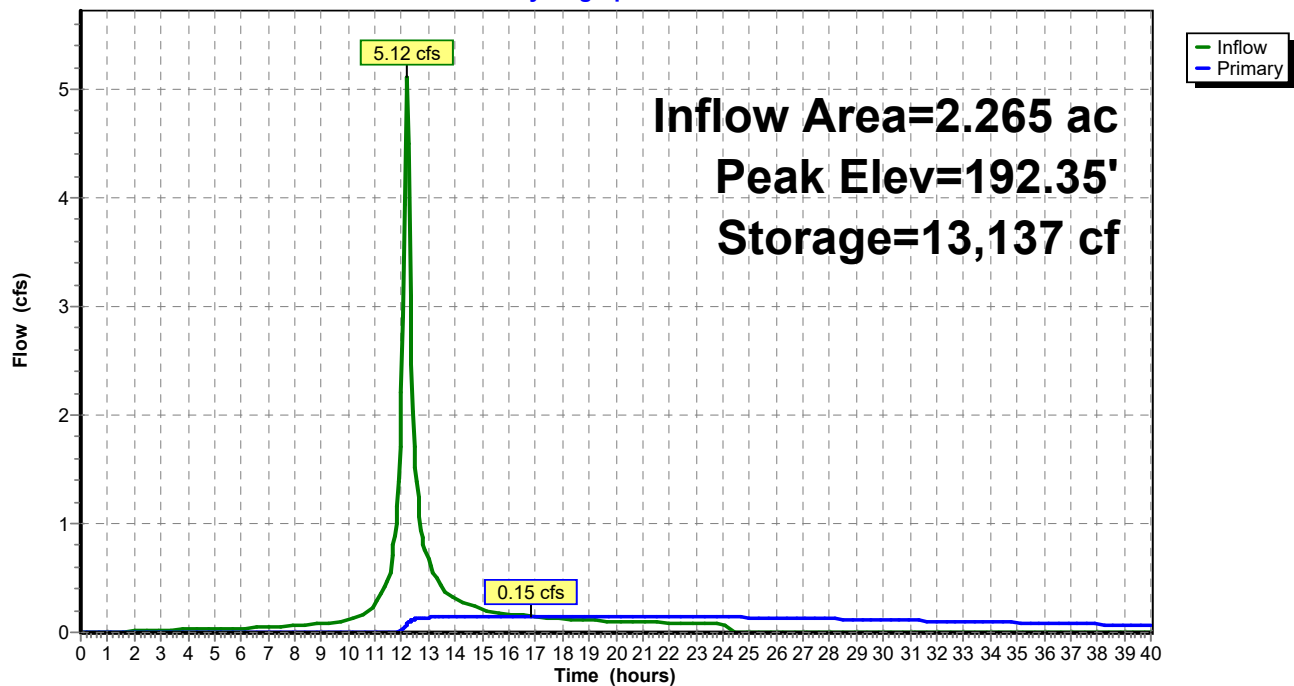
Volume	Invert	Avail.Storage	Storage Description
#1	191.00'	32,287 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.00	8,869	0	0
192.00	10,100	9,485	9,485
193.00	11,387	10,744	20,228
194.00	12,731	12,059	32,287

Device	Routing	Invert	Outlet Devices
#1	Primary	191.00'	18.0" Round Culvert L= 185.0' Ke= 0.500 Inlet / Outlet Invert= 191.00' / 188.45' S= 0.0138 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	191.40'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	193.99'	50.0' long + 3.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.15 cfs @ 16.79 hrs HW=192.35' (Free Discharge)

1=Culvert (Passes 0.15 cfs of 6.65 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.15 cfs @ 4.44 fps)
 3=Sharp-Crested Rectangular Weir(Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs)

Pond B-48: Basin #48**Hydrograph**

Stage-Discharge for Pond B-48: Basin #48

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.00	0.00	191.52	0.02	192.04	0.12	192.56	0.17
191.01	0.00	191.53	0.03	192.05	0.12	192.57	0.17
191.02	0.00	191.54	0.03	192.06	0.12	192.58	0.17
191.03	0.00	191.55	0.03	192.07	0.12	192.59	0.17
191.04	0.00	191.56	0.04	192.08	0.12	192.60	0.17
191.05	0.00	191.57	0.04	192.09	0.13	192.61	0.17
191.06	0.00	191.58	0.05	192.10	0.13	192.62	0.17
191.07	0.00	191.59	0.05	192.11	0.13	192.63	0.17
191.08	0.00	191.60	0.05	192.12	0.13	192.64	0.17
191.09	0.00	191.61	0.05	192.13	0.13	192.65	0.18
191.10	0.00	191.62	0.06	192.14	0.13	192.66	0.18
191.11	0.00	191.63	0.06	192.15	0.13	192.67	0.18
191.12	0.00	191.64	0.06	192.16	0.13	192.68	0.18
191.13	0.00	191.65	0.06	192.17	0.13	192.69	0.18
191.14	0.00	191.66	0.06	192.18	0.13	192.70	0.18
191.15	0.00	191.67	0.07	192.19	0.14	192.71	0.18
191.16	0.00	191.68	0.07	192.20	0.14	192.72	0.18
191.17	0.00	191.69	0.07	192.21	0.14	192.73	0.18
191.18	0.00	191.70	0.07	192.22	0.14	192.74	0.18
191.19	0.00	191.71	0.07	192.23	0.14	192.75	0.18
191.20	0.00	191.72	0.08	192.24	0.14	192.76	0.18
191.21	0.00	191.73	0.08	192.25	0.14	192.77	0.18
191.22	0.00	191.74	0.08	192.26	0.14	192.78	0.19
191.23	0.00	191.75	0.08	192.27	0.14	192.79	0.19
191.24	0.00	191.76	0.08	192.28	0.14	192.80	0.19
191.25	0.00	191.77	0.08	192.29	0.15	192.81	0.19
191.26	0.00	191.78	0.09	192.30	0.15	192.82	0.19
191.27	0.00	191.79	0.09	192.31	0.15	192.83	0.19
191.28	0.00	191.80	0.09	192.32	0.15	192.84	0.19
191.29	0.00	191.81	0.09	192.33	0.15	192.85	0.19
191.30	0.00	191.82	0.09	192.34	0.15	192.86	0.19
191.31	0.00	191.83	0.09	192.35	0.15	192.87	0.19
191.32	0.00	191.84	0.10	192.36	0.15	192.88	0.19
191.33	0.00	191.85	0.10	192.37	0.15	192.89	0.19
191.34	0.00	191.86	0.10	192.38	0.15	192.90	0.19
191.35	0.00	191.87	0.10	192.39	0.15	192.91	0.19
191.36	0.00	191.88	0.10	192.40	0.16	192.92	0.20
191.37	0.00	191.89	0.10	192.41	0.16	192.93	0.20
191.38	0.00	191.90	0.10	192.42	0.16	192.94	0.20
191.39	0.00	191.91	0.10	192.43	0.16	192.95	0.20
191.40	0.00	191.92	0.11	192.44	0.16	192.96	0.20
191.41	0.00	191.93	0.11	192.45	0.16	192.97	0.20
191.42	0.00	191.94	0.11	192.46	0.16	192.98	0.20
191.43	0.00	191.95	0.11	192.47	0.16	192.99	0.20
191.44	0.00	191.96	0.11	192.48	0.16	193.00	0.20
191.45	0.00	191.97	0.11	192.49	0.16	193.01	0.21
191.46	0.01	191.98	0.11	192.50	0.16	193.02	0.24
191.47	0.01	191.99	0.11	192.51	0.16	193.03	0.27
191.48	0.01	192.00	0.12	192.52	0.17	193.04	0.31
191.49	0.01	192.01	0.12	192.53	0.17	193.05	0.35
191.50	0.02	192.02	0.12	192.54	0.17	193.06	0.40
191.51	0.02	192.03	0.12	192.55	0.17	193.07	0.45

Stage-Discharge for Pond B-48: Basin #48 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.08	0.50	193.60	6.13
193.09	0.56	193.61	6.28
193.10	0.62	193.62	6.43
193.11	0.68	193.63	6.57
193.12	0.75	193.64	6.72
193.13	0.82	193.65	6.87
193.14	0.89	193.66	7.02
193.15	0.96	193.67	7.17
193.16	1.04	193.68	7.33
193.17	1.12	193.69	7.48
193.18	1.20	193.70	7.64
193.19	1.29	193.71	7.79
193.20	1.37	193.72	7.95
193.21	1.46	193.73	8.11
193.22	1.55	193.74	8.26
193.23	1.64	193.75	8.42
193.24	1.74	193.76	8.58
193.25	1.83	193.77	8.74
193.26	1.93	193.78	8.91
193.27	2.03	193.79	9.07
193.28	2.13	193.80	9.23
193.29	2.23	193.81	9.40
193.30	2.34	193.82	9.56
193.31	2.44	193.83	9.73
193.32	2.55	193.84	9.90
193.33	2.66	193.85	10.07
193.34	2.77	193.86	10.24
193.35	2.88	193.87	10.40
193.36	3.00	193.88	10.58
193.37	3.11	193.89	10.75
193.38	3.23	193.90	10.92
193.39	3.35	193.91	11.09
193.40	3.47	193.92	11.27
193.41	3.59	193.93	11.44
193.42	3.71	193.94	11.62
193.43	3.84	193.95	11.79
193.44	3.96	193.96	11.97
193.45	4.09	193.97	12.15
193.46	4.22	193.98	12.33
193.47	4.35	193.99	12.51
193.48	4.48	194.00	12.81
193.49	4.61		
193.50	4.74		
193.51	4.87		
193.52	5.01		
193.53	5.15		
193.54	5.28		
193.55	5.42		
193.56	5.56		
193.57	5.70		
193.58	5.85		
193.59	5.99		

Stage-Area-Storage for Pond B-48: Basin #48

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.00	8,869	0	191.52	9,509	4,778
191.01	8,881	89	191.53	9,521	4,873
191.02	8,894	178	191.54	9,534	4,969
191.03	8,906	267	191.55	9,546	5,064
191.04	8,918	356	191.56	9,558	5,160
191.05	8,931	445	191.57	9,571	5,255
191.06	8,943	534	191.58	9,583	5,351
191.07	8,955	624	191.59	9,595	5,447
191.08	8,967	713	191.60	9,608	5,543
191.09	8,980	803	191.61	9,620	5,639
191.10	8,992	893	191.62	9,632	5,735
191.11	9,004	983	191.63	9,645	5,832
191.12	9,017	1,073	191.64	9,657	5,928
191.13	9,029	1,163	191.65	9,669	6,025
191.14	9,041	1,254	191.66	9,681	6,122
191.15	9,054	1,344	191.67	9,694	6,219
191.16	9,066	1,435	191.68	9,706	6,316
191.17	9,078	1,526	191.69	9,718	6,413
191.18	9,091	1,616	191.70	9,731	6,510
191.19	9,103	1,707	191.71	9,743	6,607
191.20	9,115	1,798	191.72	9,755	6,705
191.21	9,128	1,890	191.73	9,768	6,802
191.22	9,140	1,981	191.74	9,780	6,900
191.23	9,152	2,072	191.75	9,792	6,998
191.24	9,164	2,164	191.76	9,805	7,096
191.25	9,177	2,256	191.77	9,817	7,194
191.26	9,189	2,348	191.78	9,829	7,292
191.27	9,201	2,439	191.79	9,841	7,391
191.28	9,214	2,532	191.80	9,854	7,489
191.29	9,226	2,624	191.81	9,866	7,588
191.30	9,238	2,716	191.82	9,878	7,686
191.31	9,251	2,809	191.83	9,891	7,785
191.32	9,263	2,901	191.84	9,903	7,884
191.33	9,275	2,994	191.85	9,915	7,983
191.34	9,288	3,087	191.86	9,928	8,083
191.35	9,300	3,180	191.87	9,940	8,182
191.36	9,312	3,273	191.88	9,952	8,281
191.37	9,324	3,366	191.89	9,965	8,381
191.38	9,337	3,459	191.90	9,977	8,481
191.39	9,349	3,553	191.91	9,989	8,580
191.40	9,361	3,646	191.92	10,002	8,680
191.41	9,374	3,740	191.93	10,014	8,781
191.42	9,386	3,834	191.94	10,026	8,881
191.43	9,398	3,927	191.95	10,038	8,981
191.44	9,411	4,022	191.96	10,051	9,081
191.45	9,423	4,116	191.97	10,063	9,182
191.46	9,435	4,210	191.98	10,075	9,283
191.47	9,448	4,304	191.99	10,088	9,384
191.48	9,460	4,399	192.00	10,100	9,485
191.49	9,472	4,494	192.01	10,113	9,586
191.50	9,485	4,588	192.02	10,126	9,687
191.51	9,497	4,683	192.03	10,139	9,788

Stage-Area-Storage for Pond B-48: Basin #48 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.04	10,151	9,890	192.56	10,821	15,342
192.05	10,164	9,991	192.57	10,834	15,451
192.06	10,177	10,093	192.58	10,846	15,559
192.07	10,190	10,195	192.59	10,859	15,668
192.08	10,203	10,297	192.60	10,872	15,776
192.09	10,216	10,399	192.61	10,885	15,885
192.10	10,229	10,501	192.62	10,898	15,994
192.11	10,242	10,603	192.63	10,911	16,103
192.12	10,254	10,706	192.64	10,924	16,212
192.13	10,267	10,808	192.65	10,937	16,321
192.14	10,280	10,911	192.66	10,949	16,431
192.15	10,293	11,014	192.67	10,962	16,540
192.16	10,306	11,117	192.68	10,975	16,650
192.17	10,319	11,220	192.69	10,988	16,760
192.18	10,332	11,323	192.70	11,001	16,870
192.19	10,345	11,427	192.71	11,014	16,980
192.20	10,357	11,530	192.72	11,027	17,090
192.21	10,370	11,634	192.73	11,040	17,200
192.22	10,383	11,738	192.74	11,052	17,311
192.23	10,396	11,842	192.75	11,065	17,421
192.24	10,409	11,946	192.76	11,078	17,532
192.25	10,422	12,050	192.77	11,091	17,643
192.26	10,435	12,154	192.78	11,104	17,754
192.27	10,447	12,258	192.79	11,117	17,865
192.28	10,460	12,363	192.80	11,130	17,976
192.29	10,473	12,468	192.81	11,142	18,088
192.30	10,486	12,572	192.82	11,155	18,199
192.31	10,499	12,677	192.83	11,168	18,311
192.32	10,512	12,782	192.84	11,181	18,423
192.33	10,525	12,888	192.85	11,194	18,534
192.34	10,538	12,993	192.86	11,207	18,646
192.35	10,550	13,098	192.87	11,220	18,759
192.36	10,563	13,204	192.88	11,233	18,871
192.37	10,576	13,310	192.89	11,245	18,983
192.38	10,589	13,415	192.90	11,258	19,096
192.39	10,602	13,521	192.91	11,271	19,208
192.40	10,615	13,627	192.92	11,284	19,321
192.41	10,628	13,734	192.93	11,297	19,434
192.42	10,641	13,840	192.94	11,310	19,547
192.43	10,653	13,946	192.95	11,323	19,660
192.44	10,666	14,053	192.96	11,336	19,774
192.45	10,679	14,160	192.97	11,348	19,887
192.46	10,692	14,267	192.98	11,361	20,001
192.47	10,705	14,374	192.99	11,374	20,114
192.48	10,718	14,481	193.00	11,387	20,228
192.49	10,731	14,588	193.01	11,400	20,342
192.50	10,744	14,695	193.02	11,414	20,456
192.51	10,756	14,803	193.03	11,427	20,570
192.52	10,769	14,911	193.04	11,441	20,685
192.53	10,782	15,018	193.05	11,454	20,799
192.54	10,795	15,126	193.06	11,468	20,914
192.55	10,808	15,234	193.07	11,481	21,028

Stage-Area-Storage for Pond B-48: Basin #48 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.08	11,495	21,143	193.60	12,193	27,302
193.09	11,508	21,258	193.61	12,207	27,424
193.10	11,521	21,373	193.62	12,220	27,546
193.11	11,535	21,489	193.63	12,234	27,669
193.12	11,548	21,604	193.64	12,247	27,791
193.13	11,562	21,720	193.65	12,261	27,913
193.14	11,575	21,835	193.66	12,274	28,036
193.15	11,589	21,951	193.67	12,287	28,159
193.16	11,602	22,067	193.68	12,301	28,282
193.17	11,615	22,183	193.69	12,314	28,405
193.18	11,629	22,299	193.70	12,328	28,528
193.19	11,642	22,416	193.71	12,341	28,652
193.20	11,656	22,532	193.72	12,355	28,775
193.21	11,669	22,649	193.73	12,368	28,899
193.22	11,683	22,766	193.74	12,382	29,022
193.23	11,696	22,883	193.75	12,395	29,146
193.24	11,710	23,000	193.76	12,408	29,270
193.25	11,723	23,117	193.77	12,422	29,394
193.26	11,736	23,234	193.78	12,435	29,519
193.27	11,750	23,351	193.79	12,449	29,643
193.28	11,763	23,469	193.80	12,462	29,768
193.29	11,777	23,587	193.81	12,476	29,892
193.30	11,790	23,705	193.82	12,489	30,017
193.31	11,804	23,823	193.83	12,503	30,142
193.32	11,817	23,941	193.84	12,516	30,267
193.33	11,831	24,059	193.85	12,529	30,392
193.34	11,844	24,177	193.86	12,543	30,518
193.35	11,857	24,296	193.87	12,556	30,643
193.36	11,871	24,414	193.88	12,570	30,769
193.37	11,884	24,533	193.89	12,583	30,895
193.38	11,898	24,652	193.90	12,597	31,021
193.39	11,911	24,771	193.91	12,610	31,147
193.40	11,925	24,890	193.92	12,623	31,273
193.41	11,938	25,010	193.93	12,637	31,399
193.42	11,951	25,129	193.94	12,650	31,526
193.43	11,965	25,249	193.95	12,664	31,652
193.44	11,978	25,368	193.96	12,677	31,779
193.45	11,992	25,488	193.97	12,691	31,906
193.46	12,005	25,608	193.98	12,704	32,033
193.47	12,019	25,728	193.99	12,718	32,160
193.48	12,032	25,849	194.00	12,731	32,287
193.49	12,046	25,969			
193.50	12,059	26,090			
193.51	12,072	26,210			
193.52	12,086	26,331			
193.53	12,099	26,452			
193.54	12,113	26,573			
193.55	12,126	26,694			
193.56	12,140	26,815			
193.57	12,153	26,937			
193.58	12,167	27,059			
193.59	12,180	27,180			

Summary for Pond B-49: Basin #49

Inflow Area = 2.090 ac, 43.68% Impervious, Inflow Depth = 2.42" for Future 2 yr event
 Inflow = 5.09 cfs @ 12.17 hrs, Volume= 0.421 af
 Outflow = 0.17 cfs @ 15.67 hrs, Volume= 0.299 af, Atten= 97%, Lag= 209.9 min
 Primary = 0.17 cfs @ 15.67 hrs, Volume= 0.299 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 184.74' @ 15.67 hrs Surf.Area= 8,434 sf Storage= 13,046 cf

Plug-Flow detention time= 741.6 min calculated for 0.299 af (71% of inflow)
 Center-of-Mass det. time= 640.9 min (1,433.2 - 792.4)

Volume	Invert	Avail.Storage	Storage Description
#1	183.00'	52,993 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.00	6,565	0	0
184.00	7,625	7,095	7,095
185.00	8,717	8,171	15,266
186.00	9,853	9,285	24,551
187.00	11,027	10,440	34,991
188.00	12,333	11,680	46,671
188.50	12,956	6,322	52,993

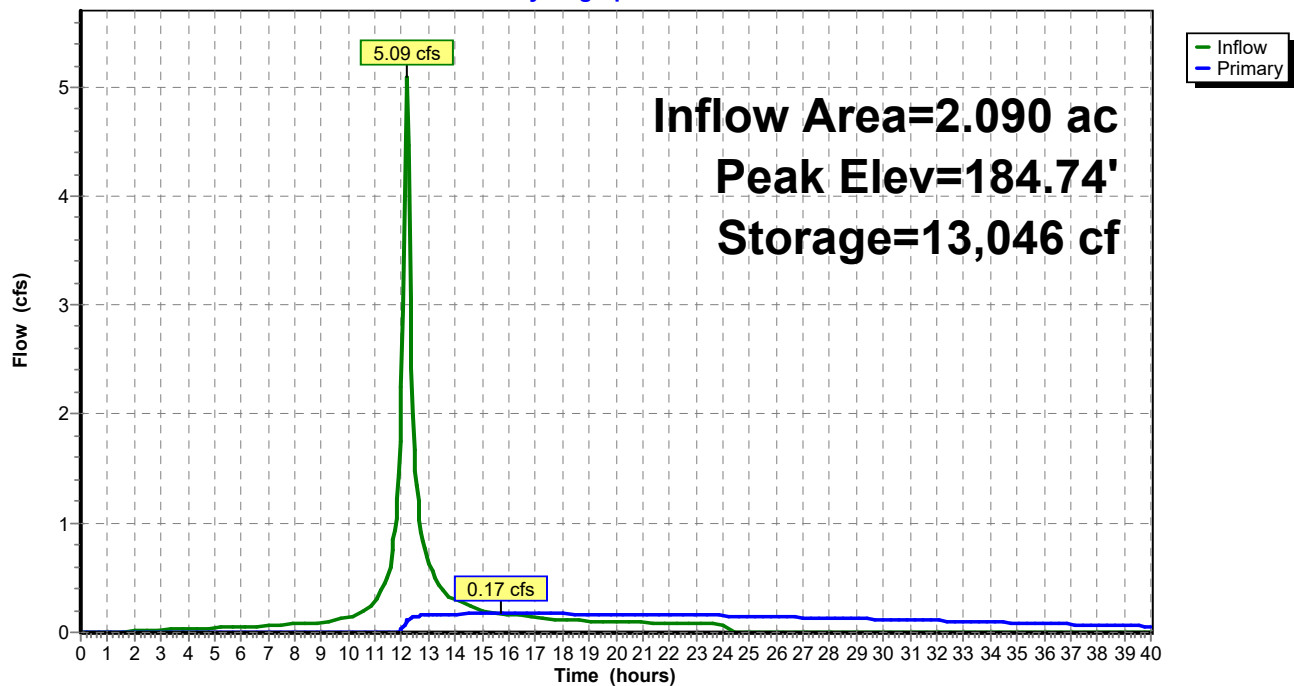
Device	Routing	Invert	Outlet Devices
#1	Primary	183.00'	15.0" Round Culvert L= 25.0' Ke= 0.500 Inlet / Outlet Invert= 183.00' / 182.81' S= 0.0076 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	183.55'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.74'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	187.75'	30.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)

Primary OutFlow Max=0.17 cfs @ 15.67 hrs HW=184.74' (Free Discharge)

1=Culvert (Passes 0.17 cfs of 5.63 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.17 cfs @ 5.02 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 0.00 cfs @ 0.11 fps)
 4=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-49: Basin #49

Hydrograph



Stage-Discharge for Pond B-49: Basin #49

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.00	0.00	183.52	0.00	184.04	0.10	184.56	0.16
183.01	0.00	183.53	0.00	184.05	0.10	184.57	0.16
183.02	0.00	183.54	0.00	184.06	0.10	184.58	0.16
183.03	0.00	183.55	0.00	184.07	0.11	184.59	0.16
183.04	0.00	183.56	0.00	184.08	0.11	184.60	0.16
183.05	0.00	183.57	0.00	184.09	0.11	184.61	0.16
183.06	0.00	183.58	0.00	184.10	0.11	184.62	0.16
183.07	0.00	183.59	0.00	184.11	0.11	184.63	0.16
183.08	0.00	183.60	0.00	184.12	0.11	184.64	0.16
183.09	0.00	183.61	0.01	184.13	0.11	184.65	0.16
183.10	0.00	183.62	0.01	184.14	0.11	184.66	0.16
183.11	0.00	183.63	0.01	184.15	0.12	184.67	0.17
183.12	0.00	183.64	0.01	184.16	0.12	184.68	0.17
183.13	0.00	183.65	0.02	184.17	0.12	184.69	0.17
183.14	0.00	183.66	0.02	184.18	0.12	184.70	0.17
183.15	0.00	183.67	0.02	184.19	0.12	184.71	0.17
183.16	0.00	183.68	0.03	184.20	0.12	184.72	0.17
183.17	0.00	183.69	0.03	184.21	0.12	184.73	0.17
183.18	0.00	183.70	0.03	184.22	0.12	184.74	0.17
183.19	0.00	183.71	0.04	184.23	0.12	184.75	0.18
183.20	0.00	183.72	0.04	184.24	0.13	184.76	0.21
183.21	0.00	183.73	0.05	184.25	0.13	184.77	0.24
183.22	0.00	183.74	0.05	184.26	0.13	184.78	0.28
183.23	0.00	183.75	0.05	184.27	0.13	184.79	0.32
183.24	0.00	183.76	0.05	184.28	0.13	184.80	0.37
183.25	0.00	183.77	0.06	184.29	0.13	184.81	0.42
183.26	0.00	183.78	0.06	184.30	0.13	184.82	0.47
183.27	0.00	183.79	0.06	184.31	0.13	184.83	0.53
183.28	0.00	183.80	0.06	184.32	0.13	184.84	0.59
183.29	0.00	183.81	0.06	184.33	0.13	184.85	0.65
183.30	0.00	183.82	0.07	184.34	0.14	184.86	0.72
183.31	0.00	183.83	0.07	184.35	0.14	184.87	0.79
183.32	0.00	183.84	0.07	184.36	0.14	184.88	0.86
183.33	0.00	183.85	0.07	184.37	0.14	184.89	0.94
183.34	0.00	183.86	0.07	184.38	0.14	184.90	1.01
183.35	0.00	183.87	0.08	184.39	0.14	184.91	1.09
183.36	0.00	183.88	0.08	184.40	0.14	184.92	1.17
183.37	0.00	183.89	0.08	184.41	0.14	184.93	1.26
183.38	0.00	183.90	0.08	184.42	0.14	184.94	1.34
183.39	0.00	183.91	0.08	184.43	0.14	184.95	1.43
183.40	0.00	183.92	0.08	184.44	0.15	184.96	1.52
183.41	0.00	183.93	0.09	184.45	0.15	184.97	1.61
183.42	0.00	183.94	0.09	184.46	0.15	184.98	1.71
183.43	0.00	183.95	0.09	184.47	0.15	184.99	1.80
183.44	0.00	183.96	0.09	184.48	0.15	185.00	1.90
183.45	0.00	183.97	0.09	184.49	0.15	185.01	2.00
183.46	0.00	183.98	0.09	184.50	0.15	185.02	2.10
183.47	0.00	183.99	0.10	184.51	0.15	185.03	2.21
183.48	0.00	184.00	0.10	184.52	0.15	185.04	2.31
183.49	0.00	184.01	0.10	184.53	0.15	185.05	2.42
183.50	0.00	184.02	0.10	184.54	0.15	185.06	2.52
183.51	0.00	184.03	0.10	184.55	0.16	185.07	2.63

Stage-Discharge for Pond B-49: Basin #49 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.08	2.75	185.60	8.30	186.12	9.33	186.64	10.26
185.09	2.86	185.61	8.33	186.13	9.35	186.65	10.28
185.10	2.97	185.62	8.35	186.14	9.37	186.66	10.29
185.11	3.09	185.63	8.37	186.15	9.39	186.67	10.31
185.12	3.20	185.64	8.39	186.16	9.41	186.68	10.33
185.13	3.32	185.65	8.41	186.17	9.43	186.69	10.34
185.14	3.44	185.66	8.43	186.18	9.44	186.70	10.36
185.15	3.56	185.67	8.45	186.19	9.46	186.71	10.38
185.16	3.69	185.68	8.47	186.20	9.48	186.72	10.40
185.17	3.81	185.69	8.49	186.21	9.50	186.73	10.41
185.18	3.94	185.70	8.51	186.22	9.52	186.74	10.43
185.19	4.06	185.71	8.53	186.23	9.54	186.75	10.45
185.20	4.19	185.72	8.55	186.24	9.56	186.76	10.46
185.21	4.32	185.73	8.57	186.25	9.57	186.77	10.48
185.22	4.45	185.74	8.59	186.26	9.59	186.78	10.50
185.23	4.58	185.75	8.61	186.27	9.61	186.79	10.51
185.24	4.72	185.76	8.63	186.28	9.63	186.80	10.53
185.25	4.85	185.77	8.65	186.29	9.65	186.81	10.55
185.26	4.99	185.78	8.67	186.30	9.66	186.82	10.56
185.27	5.12	185.79	8.69	186.31	9.68	186.83	10.58
185.28	5.26	185.80	8.71	186.32	9.70	186.84	10.59
185.29	5.40	185.81	8.73	186.33	9.72	186.85	10.61
185.30	5.54	185.82	8.75	186.34	9.74	186.86	10.63
185.31	5.68	185.83	8.77	186.35	9.75	186.87	10.64
185.32	5.82	185.84	8.79	186.36	9.77	186.88	10.66
185.33	5.97	185.85	8.81	186.37	9.79	186.89	10.68
185.34	6.11	185.86	8.83	186.38	9.81	186.90	10.69
185.35	6.26	185.87	8.85	186.39	9.83	186.91	10.71
185.36	6.40	185.88	8.87	186.40	9.84	186.92	10.73
185.37	6.55	185.89	8.89	186.41	9.86	186.93	10.74
185.38	6.70	185.90	8.91	186.42	9.88	186.94	10.76
185.39	6.85	185.91	8.93	186.43	9.90	186.95	10.77
185.40	7.00	185.92	8.95	186.44	9.91	186.96	10.79
185.41	7.15	185.93	8.97	186.45	9.93	186.97	10.81
185.42	7.30	185.94	8.99	186.46	9.95	186.98	10.82
185.43	7.46	185.95	9.01	186.47	9.97	186.99	10.84
185.44	7.61	185.96	9.03	186.48	9.98	187.00	10.86
185.45	7.77	185.97	9.05	186.49	10.00	187.01	10.87
185.46	7.92	185.98	9.07	186.50	10.02	187.02	10.89
185.47	8.03	185.99	9.09	186.51	10.04	187.03	10.90
185.48	8.05	186.00	9.11	186.52	10.05	187.04	10.92
185.49	8.07	186.01	9.13	186.53	10.07	187.05	10.94
185.50	8.09	186.02	9.14	186.54	10.09	187.06	10.95
185.51	8.11	186.03	9.16	186.55	10.11	187.07	10.97
185.52	8.13	186.04	9.18	186.56	10.12	187.08	10.98
185.53	8.16	186.05	9.20	186.57	10.14	187.09	11.00
185.54	8.18	186.06	9.22	186.58	10.16	187.10	11.01
185.55	8.20	186.07	9.24	186.59	10.17	187.11	11.03
185.56	8.22	186.08	9.26	186.60	10.19	187.12	11.05
185.57	8.24	186.09	9.28	186.61	10.21	187.13	11.06
185.58	8.26	186.10	9.30	186.62	10.23	187.14	11.08
185.59	8.28	186.11	9.31	186.63	10.24	187.15	11.09

Stage-Discharge for Pond B-49: Basin #49 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
187.16	11.11	187.68	11.90	188.20	42.16
187.17	11.13	187.69	11.91	188.21	43.16
187.18	11.14	187.70	11.93	188.22	44.18
187.19	11.16	187.71	11.94	188.23	45.20
187.20	11.17	187.72	11.96	188.24	46.23
187.21	11.19	187.73	11.97	188.25	47.28
187.22	11.20	187.74	11.99	188.26	48.33
187.23	11.22	187.75	12.00	188.27	49.39
187.24	11.23	187.76	12.11	188.28	50.47
187.25	11.25	187.77	12.31	188.29	51.55
187.26	11.27	187.78	12.55	188.30	52.64
187.27	11.28	187.79	12.84	188.31	53.75
187.28	11.30	187.80	13.17	188.32	54.86
187.29	11.31	187.81	13.53	188.33	55.98
187.30	11.33	187.82	13.92	188.34	57.11
187.31	11.34	187.83	14.34	188.35	58.25
187.32	11.36	187.84	14.78	188.36	59.40
187.33	11.37	187.85	15.25	188.37	60.56
187.34	11.39	187.86	15.74	188.38	61.73
187.35	11.40	187.87	16.25	188.39	62.91
187.36	11.42	187.88	16.78	188.40	64.10
187.37	11.43	187.89	17.34	188.41	65.29
187.38	11.45	187.90	17.91	188.42	66.50
187.39	11.47	187.91	18.50	188.43	67.71
187.40	11.48	187.92	19.11	188.44	68.93
187.41	11.50	187.93	19.74	188.45	70.16
187.42	11.51	187.94	20.39	188.46	71.40
187.43	11.53	187.95	21.05	188.47	72.65
187.44	11.54	187.96	21.73	188.48	73.91
187.45	11.56	187.97	22.42	188.49	75.17
187.46	11.57	187.98	23.14	188.50	76.45
187.47	11.59	187.99	23.86		
187.48	11.60	188.00	24.60		
187.49	11.62	188.01	25.36		
187.50	11.63	188.02	26.13		
187.51	11.65	188.03	26.91		
187.52	11.66	188.04	27.71		
187.53	11.68	188.05	28.52		
187.54	11.69	188.06	29.34		
187.55	11.71	188.07	30.18		
187.56	11.72	188.08	31.03		
187.57	11.74	188.09	31.89		
187.58	11.75	188.10	32.77		
187.59	11.77	188.11	33.65		
187.60	11.78	188.12	34.55		
187.61	11.80	188.13	35.46		
187.62	11.81	188.14	36.39		
187.63	11.83	188.15	37.32		
187.64	11.84	188.16	38.27		
187.65	11.85	188.17	39.22		
187.66	11.87	188.18	40.19		
187.67	11.88	188.19	41.17		

Stage-Area-Storage for Pond B-49: Basin #49

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.00	6,565	0	183.52	7,116	3,557
183.01	6,576	66	183.53	7,127	3,628
183.02	6,586	132	183.54	7,137	3,700
183.03	6,597	197	183.55	7,148	3,771
183.04	6,607	263	183.56	7,159	3,843
183.05	6,618	330	183.57	7,169	3,914
183.06	6,629	396	183.58	7,180	3,986
183.07	6,639	462	183.59	7,190	4,058
183.08	6,650	529	183.60	7,201	4,130
183.09	6,660	595	183.61	7,212	4,202
183.10	6,671	662	183.62	7,222	4,274
183.11	6,682	729	183.63	7,233	4,346
183.12	6,692	795	183.64	7,243	4,419
183.13	6,703	862	183.65	7,254	4,491
183.14	6,713	929	183.66	7,265	4,564
183.15	6,724	997	183.67	7,275	4,636
183.16	6,735	1,064	183.68	7,286	4,709
183.17	6,745	1,131	183.69	7,296	4,782
183.18	6,756	1,199	183.70	7,307	4,855
183.19	6,766	1,266	183.71	7,318	4,928
183.20	6,777	1,334	183.72	7,328	5,002
183.21	6,788	1,402	183.73	7,339	5,075
183.22	6,798	1,470	183.74	7,349	5,148
183.23	6,809	1,538	183.75	7,360	5,222
183.24	6,819	1,606	183.76	7,371	5,296
183.25	6,830	1,674	183.77	7,381	5,369
183.26	6,841	1,743	183.78	7,392	5,443
183.27	6,851	1,811	183.79	7,402	5,517
183.28	6,862	1,880	183.80	7,413	5,591
183.29	6,872	1,948	183.81	7,424	5,665
183.30	6,883	2,017	183.82	7,434	5,740
183.31	6,894	2,086	183.83	7,445	5,814
183.32	6,904	2,155	183.84	7,455	5,889
183.33	6,915	2,224	183.85	7,466	5,963
183.34	6,925	2,293	183.86	7,477	6,038
183.35	6,936	2,363	183.87	7,487	6,113
183.36	6,947	2,432	183.88	7,498	6,188
183.37	6,957	2,502	183.89	7,508	6,263
183.38	6,968	2,571	183.90	7,519	6,338
183.39	6,978	2,641	183.91	7,530	6,413
183.40	6,989	2,711	183.92	7,540	6,488
183.41	7,000	2,781	183.93	7,551	6,564
183.42	7,010	2,851	183.94	7,561	6,639
183.43	7,021	2,921	183.95	7,572	6,715
183.44	7,031	2,991	183.96	7,583	6,791
183.45	7,042	3,062	183.97	7,593	6,867
183.46	7,053	3,132	183.98	7,604	6,943
183.47	7,063	3,203	183.99	7,614	7,019
183.48	7,074	3,273	184.00	7,625	7,095
183.49	7,084	3,344	184.01	7,636	7,171
183.50	7,095	3,415	184.02	7,647	7,248
183.51	7,106	3,486	184.03	7,658	7,324

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.04	7,669	7,401	184.56	8,237	11,536
184.05	7,680	7,478	184.57	8,247	11,619
184.06	7,691	7,554	184.58	8,258	11,701
184.07	7,701	7,631	184.59	8,269	11,784
184.08	7,712	7,708	184.60	8,280	11,867
184.09	7,723	7,786	184.61	8,291	11,949
184.10	7,734	7,863	184.62	8,302	12,032
184.11	7,745	7,940	184.63	8,313	12,115
184.12	7,756	8,018	184.64	8,324	12,199
184.13	7,767	8,095	184.65	8,335	12,282
184.14	7,778	8,173	184.66	8,346	12,365
184.15	7,789	8,251	184.67	8,357	12,449
184.16	7,800	8,329	184.68	8,368	12,532
184.17	7,811	8,407	184.69	8,378	12,616
184.18	7,822	8,485	184.70	8,389	12,700
184.19	7,832	8,563	184.71	8,400	12,784
184.20	7,843	8,642	184.72	8,411	12,868
184.21	7,854	8,720	184.73	8,422	12,952
184.22	7,865	8,799	184.74	8,433	13,036
184.23	7,876	8,878	184.75	8,444	13,121
184.24	7,887	8,956	184.76	8,455	13,205
184.25	7,898	9,035	184.77	8,466	13,290
184.26	7,909	9,114	184.78	8,477	13,375
184.27	7,920	9,194	184.79	8,488	13,460
184.28	7,931	9,273	184.80	8,499	13,544
184.29	7,942	9,352	184.81	8,510	13,629
184.30	7,953	9,432	184.82	8,520	13,715
184.31	7,964	9,511	184.83	8,531	13,800
184.32	7,974	9,591	184.84	8,542	13,885
184.33	7,985	9,671	184.85	8,553	13,971
184.34	7,996	9,751	184.86	8,564	14,056
184.35	8,007	9,831	184.87	8,575	14,142
184.36	8,018	9,911	184.88	8,586	14,228
184.37	8,029	9,991	184.89	8,597	14,314
184.38	8,040	10,071	184.90	8,608	14,400
184.39	8,051	10,152	184.91	8,619	14,486
184.40	8,062	10,232	184.92	8,630	14,572
184.41	8,073	10,313	184.93	8,641	14,658
184.42	8,084	10,394	184.94	8,651	14,745
184.43	8,095	10,475	184.95	8,662	14,832
184.44	8,105	10,556	184.96	8,673	14,918
184.45	8,116	10,637	184.97	8,684	15,005
184.46	8,127	10,718	184.98	8,695	15,092
184.47	8,138	10,799	184.99	8,706	15,179
184.48	8,149	10,881	185.00	8,717	15,266
184.49	8,160	10,962	185.01	8,728	15,353
184.50	8,171	11,044	185.02	8,740	15,441
184.51	8,182	11,126	185.03	8,751	15,528
184.52	8,193	11,208	185.04	8,762	15,616
184.53	8,204	11,290	185.05	8,774	15,703
184.54	8,215	11,372	185.06	8,785	15,791
184.55	8,226	11,454	185.07	8,797	15,879

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.08	8,808	15,967	185.60	9,399	20,701
185.09	8,819	16,055	185.61	9,410	20,795
185.10	8,831	16,143	185.62	9,421	20,889
185.11	8,842	16,232	185.63	9,433	20,983
185.12	8,853	16,320	185.64	9,444	21,078
185.13	8,865	16,409	185.65	9,455	21,172
185.14	8,876	16,498	185.66	9,467	21,267
185.15	8,887	16,586	185.67	9,478	21,361
185.16	8,899	16,675	185.68	9,489	21,456
185.17	8,910	16,764	185.69	9,501	21,551
185.18	8,921	16,853	185.70	9,512	21,646
185.19	8,933	16,943	185.71	9,524	21,741
185.20	8,944	17,032	185.72	9,535	21,837
185.21	8,956	17,122	185.73	9,546	21,932
185.22	8,967	17,211	185.74	9,558	22,028
185.23	8,978	17,301	185.75	9,569	22,123
185.24	8,990	17,391	185.76	9,580	22,219
185.25	9,001	17,481	185.77	9,592	22,315
185.26	9,012	17,571	185.78	9,603	22,411
185.27	9,024	17,661	185.79	9,614	22,507
185.28	9,035	17,751	185.80	9,626	22,603
185.29	9,046	17,842	185.81	9,637	22,699
185.30	9,058	17,932	185.82	9,649	22,796
185.31	9,069	18,023	185.83	9,660	22,892
185.32	9,081	18,114	185.84	9,671	22,989
185.33	9,092	18,204	185.85	9,683	23,086
185.34	9,103	18,295	185.86	9,694	23,183
185.35	9,115	18,387	185.87	9,705	23,280
185.36	9,126	18,478	185.88	9,717	23,377
185.37	9,137	18,569	185.89	9,728	23,474
185.38	9,149	18,660	185.90	9,739	23,571
185.39	9,160	18,752	185.91	9,751	23,669
185.40	9,171	18,844	185.92	9,762	23,766
185.41	9,183	18,935	185.93	9,773	23,864
185.42	9,194	19,027	185.94	9,785	23,962
185.43	9,205	19,119	185.95	9,796	24,060
185.44	9,217	19,211	185.96	9,808	24,158
185.45	9,228	19,304	185.97	9,819	24,256
185.46	9,240	19,396	185.98	9,830	24,354
185.47	9,251	19,488	185.99	9,842	24,453
185.48	9,262	19,581	186.00	9,853	24,551
185.49	9,274	19,674	186.01	9,865	24,650
185.50	9,285	19,767	186.02	9,876	24,748
185.51	9,296	19,859	186.03	9,888	24,847
185.52	9,308	19,952	186.04	9,900	24,946
185.53	9,319	20,046	186.05	9,912	25,045
185.54	9,330	20,139	186.06	9,923	25,144
185.55	9,342	20,232	186.07	9,935	25,244
185.56	9,353	20,326	186.08	9,947	25,343
185.57	9,365	20,419	186.09	9,959	25,443
185.58	9,376	20,513	186.10	9,970	25,542
185.59	9,387	20,607	186.11	9,982	25,642

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.12	9,994	25,742	186.64	10,604	31,097
186.13	10,006	25,842	186.65	10,616	31,203
186.14	10,017	25,942	186.66	10,628	31,310
186.15	10,029	26,042	186.67	10,640	31,416
186.16	10,041	26,143	186.68	10,651	31,522
186.17	10,053	26,243	186.69	10,663	31,629
186.18	10,064	26,344	186.70	10,675	31,736
186.19	10,076	26,444	186.71	10,687	31,843
186.20	10,088	26,545	186.72	10,698	31,949
186.21	10,100	26,646	186.73	10,710	32,057
186.22	10,111	26,747	186.74	10,722	32,164
186.23	10,123	26,848	186.75	10,734	32,271
186.24	10,135	26,950	186.76	10,745	32,378
186.25	10,147	27,051	186.77	10,757	32,486
186.26	10,158	27,152	186.78	10,769	32,593
186.27	10,170	27,254	186.79	10,780	32,701
186.28	10,182	27,356	186.80	10,792	32,809
186.29	10,193	27,458	186.81	10,804	32,917
186.30	10,205	27,560	186.82	10,816	33,025
186.31	10,217	27,662	186.83	10,827	33,133
186.32	10,229	27,764	186.84	10,839	33,242
186.33	10,240	27,866	186.85	10,851	33,350
186.34	10,252	27,969	186.86	10,863	33,459
186.35	10,264	28,071	186.87	10,874	33,567
186.36	10,276	28,174	186.88	10,886	33,676
186.37	10,287	28,277	186.89	10,898	33,785
186.38	10,299	28,380	186.90	10,910	33,894
186.39	10,311	28,483	186.91	10,921	34,003
186.40	10,323	28,586	186.92	10,933	34,113
186.41	10,334	28,689	186.93	10,945	34,222
186.42	10,346	28,793	186.94	10,957	34,331
186.43	10,358	28,896	186.95	10,968	34,441
186.44	10,370	29,000	186.96	10,980	34,551
186.45	10,381	29,104	186.97	10,992	34,661
186.46	10,393	29,208	186.98	11,004	34,771
186.47	10,405	29,312	186.99	11,015	34,881
186.48	10,417	29,416	187.00	11,027	34,991
186.49	10,428	29,520	187.01	11,040	35,101
186.50	10,440	29,624	187.02	11,053	35,212
186.51	10,452	29,729	187.03	11,066	35,322
186.52	10,463	29,833	187.04	11,079	35,433
186.53	10,475	29,938	187.05	11,092	35,544
186.54	10,487	30,043	187.06	11,105	35,655
186.55	10,499	30,148	187.07	11,118	35,766
186.56	10,510	30,253	187.08	11,131	35,877
186.57	10,522	30,358	187.09	11,145	35,989
186.58	10,534	30,463	187.10	11,158	36,100
186.59	10,546	30,569	187.11	11,171	36,212
186.60	10,557	30,674	187.12	11,184	36,324
186.61	10,569	30,780	187.13	11,197	36,436
186.62	10,581	30,886	187.14	11,210	36,548
186.63	10,593	30,991	187.15	11,223	36,660

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.16	11,236	36,772	187.68	11,915	42,791
187.17	11,249	36,884	187.69	11,928	42,911
187.18	11,262	36,997	187.70	11,941	43,030
187.19	11,275	37,110	187.71	11,954	43,149
187.20	11,288	37,223	187.72	11,967	43,269
187.21	11,301	37,335	187.73	11,980	43,389
187.22	11,314	37,449	187.74	11,993	43,509
187.23	11,327	37,562	187.75	12,007	43,629
187.24	11,340	37,675	187.76	12,020	43,749
187.25	11,354	37,789	187.77	12,033	43,869
187.26	11,367	37,902	187.78	12,046	43,989
187.27	11,380	38,016	187.79	12,059	44,110
187.28	11,393	38,130	187.80	12,072	44,231
187.29	11,406	38,244	187.81	12,085	44,351
187.30	11,419	38,358	187.82	12,098	44,472
187.31	11,432	38,472	187.83	12,111	44,593
187.32	11,445	38,587	187.84	12,124	44,714
187.33	11,458	38,701	187.85	12,137	44,836
187.34	11,471	38,816	187.86	12,150	44,957
187.35	11,484	38,930	187.87	12,163	45,079
187.36	11,497	39,045	187.88	12,176	45,200
187.37	11,510	39,160	187.89	12,189	45,322
187.38	11,523	39,276	187.90	12,202	45,444
187.39	11,536	39,391	187.91	12,215	45,566
187.40	11,549	39,506	187.92	12,229	45,689
187.41	11,562	39,622	187.93	12,242	45,811
187.42	11,576	39,738	187.94	12,255	45,933
187.43	11,589	39,853	187.95	12,268	46,056
187.44	11,602	39,969	187.96	12,281	46,179
187.45	11,615	40,085	187.97	12,294	46,302
187.46	11,628	40,202	187.98	12,307	46,425
187.47	11,641	40,318	187.99	12,320	46,548
187.48	11,654	40,434	188.00	12,333	46,671
187.49	11,667	40,551	188.01	12,345	46,794
187.50	11,680	40,668	188.02	12,358	46,918
187.51	11,693	40,785	188.03	12,370	47,042
187.52	11,706	40,902	188.04	12,383	47,165
187.53	11,719	41,019	188.05	12,395	47,289
187.54	11,732	41,136	188.06	12,408	47,413
187.55	11,745	41,253	188.07	12,420	47,537
187.56	11,758	41,371	188.08	12,433	47,662
187.57	11,771	41,489	188.09	12,445	47,786
187.58	11,784	41,606	188.10	12,458	47,911
187.59	11,798	41,724	188.11	12,470	48,035
187.60	11,811	41,842	188.12	12,483	48,160
187.61	11,824	41,960	188.13	12,495	48,285
187.62	11,837	42,079	188.14	12,507	48,410
187.63	11,850	42,197	188.15	12,520	48,535
187.64	11,863	42,316	188.16	12,532	48,660
187.65	11,876	42,434	188.17	12,545	48,786
187.66	11,889	42,553	188.18	12,557	48,911
187.67	11,902	42,672	188.19	12,570	49,037

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.20	12,582	49,163
188.21	12,595	49,288
188.22	12,607	49,414
188.23	12,620	49,541
188.24	12,632	49,667
188.25	12,645	49,793
188.26	12,657	49,920
188.27	12,669	50,046
188.28	12,682	50,173
188.29	12,694	50,300
188.30	12,707	50,427
188.31	12,719	50,554
188.32	12,732	50,681
188.33	12,744	50,809
188.34	12,757	50,936
188.35	12,769	51,064
188.36	12,782	51,192
188.37	12,794	51,319
188.38	12,806	51,448
188.39	12,819	51,576
188.40	12,831	51,704
188.41	12,844	51,832
188.42	12,856	51,961
188.43	12,869	52,089
188.44	12,881	52,218
188.45	12,894	52,347
188.46	12,906	52,476
188.47	12,919	52,605
188.48	12,931	52,734
188.49	12,944	52,864
188.50	12,956	52,993

Summary for Pond B-50: Basin #50

Inflow Area = 2.262 ac, 29.27% Impervious, Inflow Depth = 2.11" for Future 2 yr event
 Inflow = 4.89 cfs @ 12.18 hrs, Volume= 0.398 af
 Outflow = 0.15 cfs @ 16.67 hrs, Volume= 0.278 af, Atten= 97%, Lag= 269.4 min
 Primary = 0.15 cfs @ 16.67 hrs, Volume= 0.278 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 185.27' @ 16.67 hrs Surf.Area= 10,475 sf Storage= 12,276 cf

Plug-Flow detention time= 756.4 min calculated for 0.278 af (70% of inflow)
 Center-of-Mass det. time= 653.0 min (1,460.7 - 807.7)

Volume	Invert	Avail.Storage	Storage Description
#1	184.00'	53,209 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
184.00	8,805	0	0
185.00	10,108	9,457	9,457
186.00	11,448	10,778	20,235
187.00	12,826	12,137	32,372
188.00	14,244	13,535	45,907
188.50	14,966	7,303	53,209

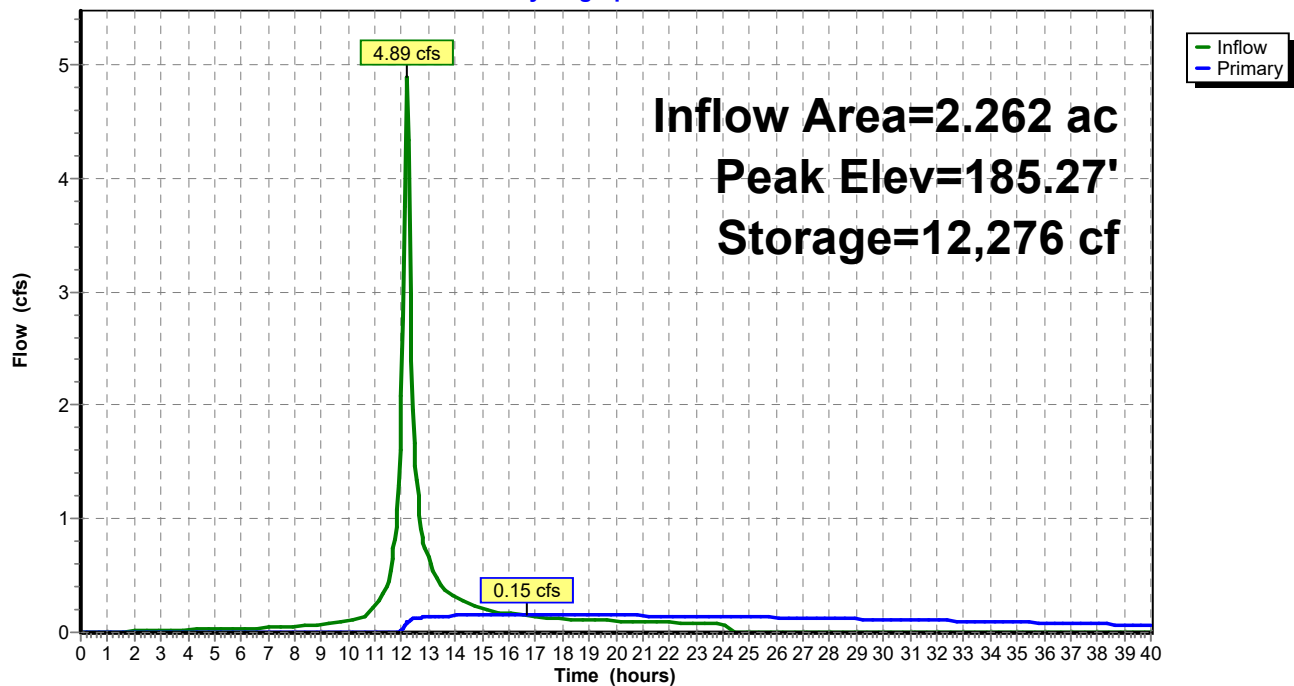
Device	Routing	Invert	Outlet Devices
#1	Primary	180.50'	18.0" Round Culvert L= 83.0' Ke= 0.500 Inlet / Outlet Invert= 180.50' / 179.67' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	184.32'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.30'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	188.45'	30.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.15 cfs @ 16.67 hrs HW=185.27' (Free Discharge)

1=Culvert (Passes 0.15 cfs of 16.54 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.15 cfs @ 4.44 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-50: Basin #50

Hydrograph



Stage-Discharge for Pond B-50: Basin #50

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
184.00	0.00	184.52	0.05	185.04	0.13	185.56	1.89
184.01	0.00	184.53	0.05	185.05	0.13	185.57	1.99
184.02	0.00	184.54	0.06	185.06	0.13	185.58	2.09
184.03	0.00	184.55	0.06	185.07	0.13	185.59	2.19
184.04	0.00	184.56	0.06	185.08	0.13	185.60	2.30
184.05	0.00	184.57	0.06	185.09	0.13	185.61	2.40
184.06	0.00	184.58	0.06	185.10	0.13	185.62	2.51
184.07	0.00	184.59	0.07	185.11	0.14	185.63	2.62
184.08	0.00	184.60	0.07	185.12	0.14	185.64	2.73
184.09	0.00	184.61	0.07	185.13	0.14	185.65	2.84
184.10	0.00	184.62	0.07	185.14	0.14	185.66	2.96
184.11	0.00	184.63	0.07	185.15	0.14	185.67	3.07
184.12	0.00	184.64	0.08	185.16	0.14	185.68	3.19
184.13	0.00	184.65	0.08	185.17	0.14	185.69	3.31
184.14	0.00	184.66	0.08	185.18	0.14	185.70	3.43
184.15	0.00	184.67	0.08	185.19	0.14	185.71	3.55
184.16	0.00	184.68	0.08	185.20	0.14	185.72	3.67
184.17	0.00	184.69	0.08	185.21	0.15	185.73	3.80
184.18	0.00	184.70	0.09	185.22	0.15	185.74	3.92
184.19	0.00	184.71	0.09	185.23	0.15	185.75	4.05
184.20	0.00	184.72	0.09	185.24	0.15	185.76	4.18
184.21	0.00	184.73	0.09	185.25	0.15	185.77	4.31
184.22	0.00	184.74	0.09	185.26	0.15	185.78	4.44
184.23	0.00	184.75	0.09	185.27	0.15	185.79	4.57
184.24	0.00	184.76	0.10	185.28	0.15	185.80	4.70
184.25	0.00	184.77	0.10	185.29	0.15	185.81	4.84
184.26	0.00	184.78	0.10	185.30	0.15	185.82	4.97
184.27	0.00	184.79	0.10	185.31	0.17	185.83	5.11
184.28	0.00	184.80	0.10	185.32	0.19	185.84	5.25
184.29	0.00	184.81	0.10	185.33	0.22	185.85	5.38
184.30	0.00	184.82	0.10	185.34	0.26	185.86	5.52
184.31	0.00	184.83	0.10	185.35	0.30	185.87	5.67
184.32	0.00	184.84	0.11	185.36	0.35	185.88	5.81
184.33	0.00	184.85	0.11	185.37	0.40	185.89	5.95
184.34	0.00	184.86	0.11	185.38	0.46	185.90	6.10
184.35	0.00	184.87	0.11	185.39	0.51	185.91	6.24
184.36	0.00	184.88	0.11	185.40	0.57	185.92	6.39
184.37	0.00	184.89	0.11	185.41	0.64	185.93	6.54
184.38	0.01	184.90	0.11	185.42	0.70	185.94	6.68
184.39	0.01	184.91	0.11	185.43	0.77	185.95	6.83
184.40	0.01	184.92	0.12	185.44	0.85	185.96	6.99
184.41	0.01	184.93	0.12	185.45	0.92	185.97	7.14
184.42	0.02	184.94	0.12	185.46	1.00	185.98	7.29
184.43	0.02	184.95	0.12	185.47	1.08	185.99	7.44
184.44	0.02	184.96	0.12	185.48	1.16	186.00	7.60
184.45	0.03	184.97	0.12	185.49	1.24	186.01	7.75
184.46	0.03	184.98	0.12	185.50	1.33	186.02	7.91
184.47	0.03	184.99	0.12	185.51	1.42	186.03	8.07
184.48	0.04	185.00	0.12	185.52	1.51	186.04	8.23
184.49	0.04	185.01	0.13	185.53	1.60	186.05	8.39
184.50	0.05	185.02	0.13	185.54	1.69	186.06	8.55
184.51	0.05	185.03	0.13	185.55	1.79	186.07	8.71

Stage-Discharge for Pond B-50: Basin #50 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.08	8.87	186.60	18.37	187.12	19.91	187.64	20.76
186.09	9.03	186.61	18.57	187.13	19.93	187.65	20.78
186.10	9.20	186.62	18.77	187.14	19.95	187.66	20.80
186.11	9.36	186.63	18.97	187.15	19.96	187.67	20.81
186.12	9.53	186.64	19.09	187.16	19.98	187.68	20.83
186.13	9.69	186.65	19.11	187.17	20.00	187.69	20.84
186.14	9.86	186.66	19.13	187.18	20.01	187.70	20.86
186.15	10.03	186.67	19.14	187.19	20.03	187.71	20.88
186.16	10.20	186.68	19.16	187.20	20.05	187.72	20.89
186.17	10.37	186.69	19.18	187.21	20.06	187.73	20.91
186.18	10.54	186.70	19.20	187.22	20.08	187.74	20.92
186.19	10.71	186.71	19.21	187.23	20.10	187.75	20.94
186.20	10.88	186.72	19.23	187.24	20.11	187.76	20.96
186.21	11.06	186.73	19.25	187.25	20.13	187.77	20.97
186.22	11.23	186.74	19.27	187.26	20.15	187.78	20.99
186.23	11.41	186.75	19.28	187.27	20.16	187.79	21.00
186.24	11.58	186.76	19.30	187.28	20.18	187.80	21.02
186.25	11.76	186.77	19.32	187.29	20.19	187.81	21.04
186.26	11.93	186.78	19.33	187.30	20.21	187.82	21.05
186.27	12.11	186.79	19.35	187.31	20.23	187.83	21.07
186.28	12.29	186.80	19.37	187.32	20.24	187.84	21.08
186.29	12.47	186.81	19.39	187.33	20.26	187.85	21.10
186.30	12.65	186.82	19.40	187.34	20.28	187.86	21.11
186.31	12.83	186.83	19.42	187.35	20.29	187.87	21.13
186.32	13.01	186.84	19.44	187.36	20.31	187.88	21.15
186.33	13.20	186.85	19.46	187.37	20.33	187.89	21.16
186.34	13.38	186.86	19.47	187.38	20.34	187.90	21.18
186.35	13.56	186.87	19.49	187.39	20.36	187.91	21.19
186.36	13.75	186.88	19.51	187.40	20.38	187.92	21.21
186.37	13.93	186.89	19.52	187.41	20.39	187.93	21.22
186.38	14.12	186.90	19.54	187.42	20.41	187.94	21.24
186.39	14.30	186.91	19.56	187.43	20.42	187.95	21.26
186.40	14.49	186.92	19.57	187.44	20.44	187.96	21.27
186.41	14.68	186.93	19.59	187.45	20.46	187.97	21.29
186.42	14.87	186.94	19.61	187.46	20.47	187.98	21.30
186.43	15.06	186.95	19.63	187.47	20.49	187.99	21.32
186.44	15.25	186.96	19.64	187.48	20.51	188.00	21.33
186.45	15.44	186.97	19.66	187.49	20.52	188.01	21.35
186.46	15.63	186.98	19.68	187.50	20.54	188.02	21.37
186.47	15.82	186.99	19.69	187.51	20.55	188.03	21.38
186.48	16.01	187.00	19.71	187.52	20.57	188.04	21.40
186.49	16.21	187.01	19.73	187.53	20.59	188.05	21.41
186.50	16.40	187.02	19.74	187.54	20.60	188.06	21.43
186.51	16.59	187.03	19.76	187.55	20.62	188.07	21.44
186.52	16.79	187.04	19.78	187.56	20.64	188.08	21.46
186.53	16.98	187.05	19.79	187.57	20.65	188.09	21.47
186.54	17.18	187.06	19.81	187.58	20.67	188.10	21.49
186.55	17.38	187.07	19.83	187.59	20.68	188.11	21.51
186.56	17.57	187.08	19.85	187.60	20.70	188.12	21.52
186.57	17.77	187.09	19.86	187.61	20.72	188.13	21.54
186.58	17.97	187.10	19.88	187.62	20.73	188.14	21.55
186.59	18.17	187.11	19.90	187.63	20.75	188.15	21.57

Stage-Discharge for Pond B-50: Basin #50 (continued)

Elevation (feet)	Primary (cfs)
188.16	21.58
188.17	21.60
188.18	21.61
188.19	21.63
188.20	21.64
188.21	21.66
188.22	21.67
188.23	21.69
188.24	21.71
188.25	21.72
188.26	21.74
188.27	21.75
188.28	21.77
188.29	21.78
188.30	21.80
188.31	21.81
188.32	21.83
188.33	21.84
188.34	21.86
188.35	21.87
188.36	21.89
188.37	21.90
188.38	21.92
188.39	21.93
188.40	21.95
188.41	21.97
188.42	21.98
188.43	22.00
188.44	22.01
188.45	22.03
188.46	22.11
188.47	22.25
188.48	22.44
188.49	22.65
188.50	22.89

Stage-Area-Storage for Pond B-50: Basin #50

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.00	8,805	0	184.52	9,483	4,755
184.01	8,818	88	184.53	9,496	4,850
184.02	8,831	176	184.54	9,509	4,945
184.03	8,844	265	184.55	9,522	5,040
184.04	8,857	353	184.56	9,535	5,135
184.05	8,870	442	184.57	9,548	5,231
184.06	8,883	531	184.58	9,561	5,326
184.07	8,896	620	184.59	9,574	5,422
184.08	8,909	709	184.60	9,587	5,518
184.09	8,922	798	184.61	9,600	5,613
184.10	8,935	887	184.62	9,613	5,710
184.11	8,948	976	184.63	9,626	5,806
184.12	8,961	1,066	184.64	9,639	5,902
184.13	8,974	1,156	184.65	9,652	5,999
184.14	8,987	1,245	184.66	9,665	6,095
184.15	9,000	1,335	184.67	9,678	6,192
184.16	9,013	1,425	184.68	9,691	6,289
184.17	9,027	1,516	184.69	9,704	6,386
184.18	9,040	1,606	184.70	9,717	6,483
184.19	9,053	1,696	184.71	9,730	6,580
184.20	9,066	1,787	184.72	9,743	6,677
184.21	9,079	1,878	184.73	9,756	6,775
184.22	9,092	1,969	184.74	9,769	6,872
184.23	9,105	2,060	184.75	9,782	6,970
184.24	9,118	2,151	184.76	9,795	7,068
184.25	9,131	2,242	184.77	9,808	7,166
184.26	9,144	2,333	184.78	9,821	7,264
184.27	9,157	2,425	184.79	9,834	7,363
184.28	9,170	2,516	184.80	9,847	7,461
184.29	9,183	2,608	184.81	9,860	7,559
184.30	9,196	2,700	184.82	9,873	7,658
184.31	9,209	2,792	184.83	9,886	7,757
184.32	9,222	2,884	184.84	9,900	7,856
184.33	9,235	2,977	184.85	9,913	7,955
184.34	9,248	3,069	184.86	9,926	8,054
184.35	9,261	3,162	184.87	9,939	8,153
184.36	9,274	3,254	184.88	9,952	8,253
184.37	9,287	3,347	184.89	9,965	8,353
184.38	9,300	3,440	184.90	9,978	8,452
184.39	9,313	3,533	184.91	9,991	8,552
184.40	9,326	3,626	184.92	10,004	8,652
184.41	9,339	3,720	184.93	10,017	8,752
184.42	9,352	3,813	184.94	10,030	8,852
184.43	9,365	3,907	184.95	10,043	8,953
184.44	9,378	4,000	184.96	10,056	9,053
184.45	9,391	4,094	184.97	10,069	9,154
184.46	9,404	4,188	184.98	10,082	9,255
184.47	9,417	4,282	184.99	10,095	9,355
184.48	9,430	4,377	185.00	10,108	9,457
184.49	9,443	4,471	185.01	10,121	9,558
184.50	9,457	4,565	185.02	10,135	9,659
184.51	9,470	4,660	185.03	10,148	9,760

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.04	10,162	9,862	185.56	10,858	15,327
185.05	10,175	9,964	185.57	10,872	15,436
185.06	10,188	10,065	185.58	10,885	15,545
185.07	10,202	10,167	185.59	10,899	15,653
185.08	10,215	10,269	185.60	10,912	15,762
185.09	10,229	10,372	185.61	10,925	15,872
185.10	10,242	10,474	185.62	10,939	15,981
185.11	10,255	10,576	185.63	10,952	16,090
185.12	10,269	10,679	185.64	10,966	16,200
185.13	10,282	10,782	185.65	10,979	16,310
185.14	10,296	10,885	185.66	10,992	16,420
185.15	10,309	10,988	185.67	11,006	16,530
185.16	10,322	11,091	185.68	11,019	16,640
185.17	10,336	11,194	185.69	11,033	16,750
185.18	10,349	11,298	185.70	11,046	16,860
185.19	10,363	11,401	185.71	11,059	16,971
185.20	10,376	11,505	185.72	11,073	17,082
185.21	10,389	11,609	185.73	11,086	17,192
185.22	10,403	11,713	185.74	11,100	17,303
185.23	10,416	11,817	185.75	11,113	17,414
185.24	10,430	11,921	185.76	11,126	17,526
185.25	10,443	12,025	185.77	11,140	17,637
185.26	10,456	12,130	185.78	11,153	17,748
185.27	10,470	12,235	185.79	11,167	17,860
185.28	10,483	12,339	185.80	11,180	17,972
185.29	10,497	12,444	185.81	11,193	18,084
185.30	10,510	12,549	185.82	11,207	18,196
185.31	10,523	12,654	185.83	11,220	18,308
185.32	10,537	12,760	185.84	11,234	18,420
185.33	10,550	12,865	185.85	11,247	18,532
185.34	10,564	12,971	185.86	11,260	18,645
185.35	10,577	13,076	185.87	11,274	18,758
185.36	10,590	13,182	185.88	11,287	18,870
185.37	10,604	13,288	185.89	11,301	18,983
185.38	10,617	13,394	185.90	11,314	19,096
185.39	10,631	13,501	185.91	11,327	19,210
185.40	10,644	13,607	185.92	11,341	19,323
185.41	10,657	13,713	185.93	11,354	19,436
185.42	10,671	13,820	185.94	11,368	19,550
185.43	10,684	13,927	185.95	11,381	19,664
185.44	10,698	14,034	185.96	11,394	19,778
185.45	10,711	14,141	185.97	11,408	19,892
185.46	10,724	14,248	185.98	11,421	20,006
185.47	10,738	14,355	185.99	11,435	20,120
185.48	10,751	14,463	186.00	11,448	20,235
185.49	10,765	14,570	186.01	11,462	20,349
185.50	10,778	14,678	186.02	11,476	20,464
185.51	10,791	14,786	186.03	11,489	20,579
185.52	10,805	14,894	186.04	11,503	20,694
185.53	10,818	15,002	186.05	11,517	20,809
185.54	10,832	15,110	186.06	11,531	20,924
185.55	10,845	15,219	186.07	11,544	21,039

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.08	11,558	21,155	186.60	12,275	27,351
186.09	11,572	21,270	186.61	12,289	27,474
186.10	11,586	21,386	186.62	12,302	27,597
186.11	11,600	21,502	186.63	12,316	27,720
186.12	11,613	21,618	186.64	12,330	27,843
186.13	11,627	21,734	186.65	12,344	27,967
186.14	11,641	21,851	186.66	12,357	28,090
186.15	11,655	21,967	186.67	12,371	28,214
186.16	11,668	22,084	186.68	12,385	28,338
186.17	11,682	22,201	186.69	12,399	28,462
186.18	11,696	22,317	186.70	12,413	28,586
186.19	11,710	22,434	186.71	12,426	28,710
186.20	11,724	22,552	186.72	12,440	28,834
186.21	11,737	22,669	186.73	12,454	28,959
186.22	11,751	22,786	186.74	12,468	29,083
186.23	11,765	22,904	186.75	12,482	29,208
186.24	11,779	23,022	186.76	12,495	29,333
186.25	11,793	23,140	186.77	12,509	29,458
186.26	11,806	23,258	186.78	12,523	29,583
186.27	11,820	23,376	186.79	12,537	29,708
186.28	11,834	23,494	186.80	12,550	29,834
186.29	11,848	23,612	186.81	12,564	29,959
186.30	11,861	23,731	186.82	12,578	30,085
186.31	11,875	23,850	186.83	12,592	30,211
186.32	11,889	23,968	186.84	12,606	30,337
186.33	11,903	24,087	186.85	12,619	30,463
186.34	11,917	24,206	186.86	12,633	30,589
186.35	11,930	24,326	186.87	12,647	30,716
186.36	11,944	24,445	186.88	12,661	30,842
186.37	11,958	24,565	186.89	12,674	30,969
186.38	11,972	24,684	186.90	12,688	31,096
186.39	11,985	24,804	186.91	12,702	31,223
186.40	11,999	24,924	186.92	12,716	31,350
186.41	12,013	25,044	186.93	12,730	31,477
186.42	12,027	25,164	186.94	12,743	31,604
186.43	12,041	25,285	186.95	12,757	31,732
186.44	12,054	25,405	186.96	12,771	31,860
186.45	12,068	25,526	186.97	12,785	31,987
186.46	12,082	25,646	186.98	12,798	32,115
186.47	12,096	25,767	186.99	12,812	32,243
186.48	12,109	25,888	187.00	12,826	32,372
186.49	12,123	26,009	187.01	12,840	32,500
186.50	12,137	26,131	187.02	12,854	32,628
186.51	12,151	26,252	187.03	12,869	32,757
186.52	12,165	26,374	187.04	12,883	32,886
186.53	12,178	26,495	187.05	12,897	33,015
186.54	12,192	26,617	187.06	12,911	33,144
186.55	12,206	26,739	187.07	12,925	33,273
186.56	12,220	26,861	187.08	12,939	33,402
186.57	12,233	26,984	187.09	12,954	33,532
186.58	12,247	27,106	187.10	12,968	33,661
186.59	12,261	27,229	187.11	12,982	33,791

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.12	12,996	33,921	187.64	13,734	40,871
187.13	13,010	34,051	187.65	13,748	41,008
187.14	13,025	34,181	187.66	13,762	41,146
187.15	13,039	34,311	187.67	13,776	41,283
187.16	13,053	34,442	187.68	13,790	41,421
187.17	13,067	34,572	187.69	13,804	41,559
187.18	13,081	34,703	187.70	13,819	41,697
187.19	13,095	34,834	187.71	13,833	41,835
187.20	13,110	34,965	187.72	13,847	41,974
187.21	13,124	35,096	187.73	13,861	42,112
187.22	13,138	35,228	187.74	13,875	42,251
187.23	13,152	35,359	187.75	13,890	42,390
187.24	13,166	35,491	187.76	13,904	42,529
187.25	13,181	35,622	187.77	13,918	42,668
187.26	13,195	35,754	187.78	13,932	42,807
187.27	13,209	35,886	187.79	13,946	42,947
187.28	13,223	36,018	187.80	13,960	43,086
187.29	13,237	36,151	187.81	13,975	43,226
187.30	13,251	36,283	187.82	13,989	43,366
187.31	13,266	36,416	187.83	14,003	43,506
187.32	13,280	36,548	187.84	14,017	43,646
187.33	13,294	36,681	187.85	14,031	43,786
187.34	13,308	36,814	187.86	14,045	43,926
187.35	13,322	36,947	187.87	14,060	44,067
187.36	13,336	37,081	187.88	14,074	44,207
187.37	13,351	37,214	187.89	14,088	44,348
187.38	13,365	37,348	187.90	14,102	44,489
187.39	13,379	37,481	187.91	14,116	44,630
187.40	13,393	37,615	187.92	14,131	44,772
187.41	13,407	37,749	187.93	14,145	44,913
187.42	13,422	37,883	187.94	14,159	45,054
187.43	13,436	38,018	187.95	14,173	45,196
187.44	13,450	38,152	187.96	14,187	45,338
187.45	13,464	38,287	187.97	14,201	45,480
187.46	13,478	38,421	187.98	14,216	45,622
187.47	13,492	38,556	187.99	14,230	45,764
187.48	13,507	38,691	188.00	14,244	45,907
187.49	13,521	38,826	188.01	14,258	46,049
187.50	13,535	38,962	188.02	14,273	46,192
187.51	13,549	39,097	188.03	14,287	46,334
187.52	13,563	39,233	188.04	14,302	46,477
187.53	13,578	39,368	188.05	14,316	46,621
187.54	13,592	39,504	188.06	14,331	46,764
187.55	13,606	39,640	188.07	14,345	46,907
187.56	13,620	39,776	188.08	14,360	47,051
187.57	13,634	39,913	188.09	14,374	47,194
187.58	13,648	40,049	188.10	14,388	47,338
187.59	13,663	40,186	188.11	14,403	47,482
187.60	13,677	40,322	188.12	14,417	47,626
187.61	13,691	40,459	188.13	14,432	47,770
187.62	13,705	40,596	188.14	14,446	47,915
187.63	13,719	40,733	188.15	14,461	48,059

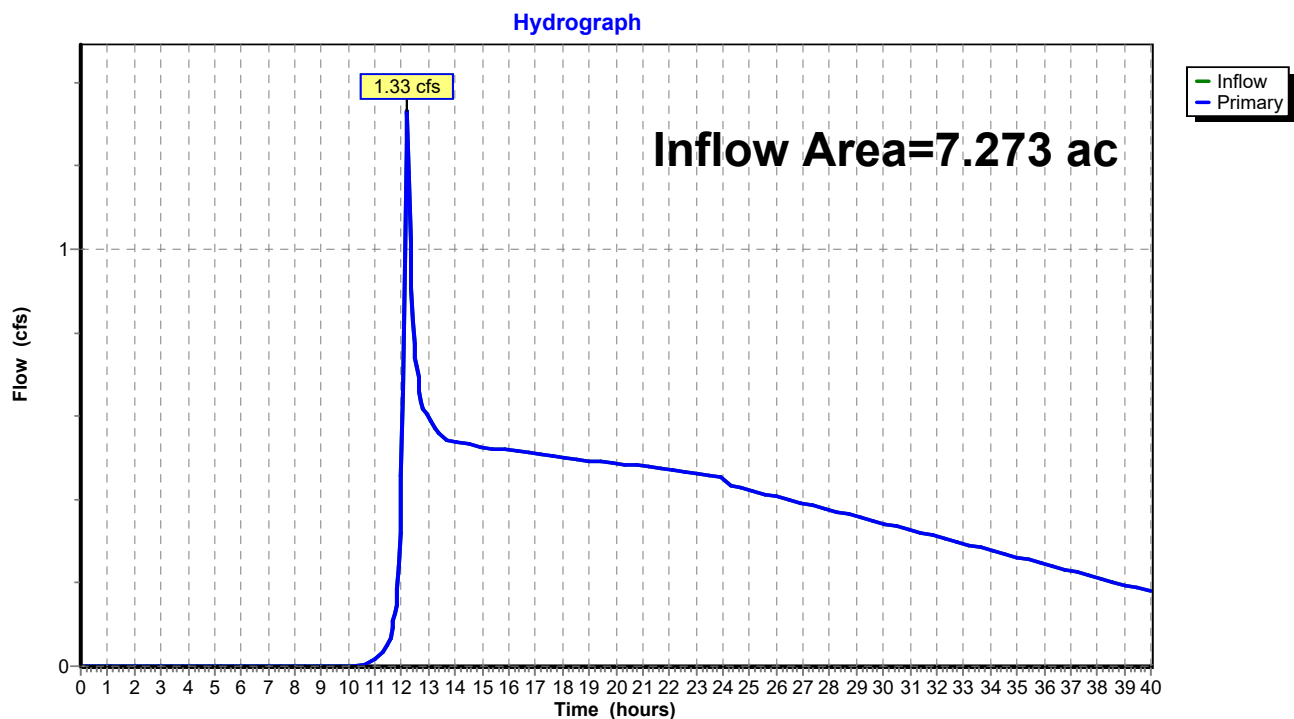
Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.16	14,475	48,204
188.17	14,489	48,349
188.18	14,504	48,494
188.19	14,518	48,639
188.20	14,533	48,784
188.21	14,547	48,930
188.22	14,562	49,075
188.23	14,576	49,221
188.24	14,591	49,367
188.25	14,605	49,513
188.26	14,619	49,659
188.27	14,634	49,805
188.28	14,648	49,951
188.29	14,663	50,098
188.30	14,677	50,245
188.31	14,692	50,392
188.32	14,706	50,539
188.33	14,721	50,686
188.34	14,735	50,833
188.35	14,749	50,980
188.36	14,764	51,128
188.37	14,778	51,276
188.38	14,793	51,423
188.39	14,807	51,571
188.40	14,822	51,720
188.41	14,836	51,868
188.42	14,850	52,016
188.43	14,865	52,165
188.44	14,879	52,314
188.45	14,894	52,463
188.46	14,908	52,612
188.47	14,923	52,761
188.48	14,937	52,910
188.49	14,952	53,059
188.50	14,966	53,209

Summary for Link PDA-5: Proposed Drainage Area #5

Inflow Area = 7.273 ac, 32.33% Impervious, Inflow Depth > 1.55" for Future 2 yr event
Inflow = 1.33 cfs @ 12.19 hrs, Volume= 0.938 af
Primary = 1.33 cfs @ 12.19 hrs, Volume= 0.938 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-5: Proposed Drainage Area #5

Summary for Subcatchment 48I: PDA-48 (impervious)

Runoff = 4.14 cfs @ 12.17 hrs, Volume= 0.363 af, Depth= 5.61"
 Routed to Pond B-48 : Basin #48

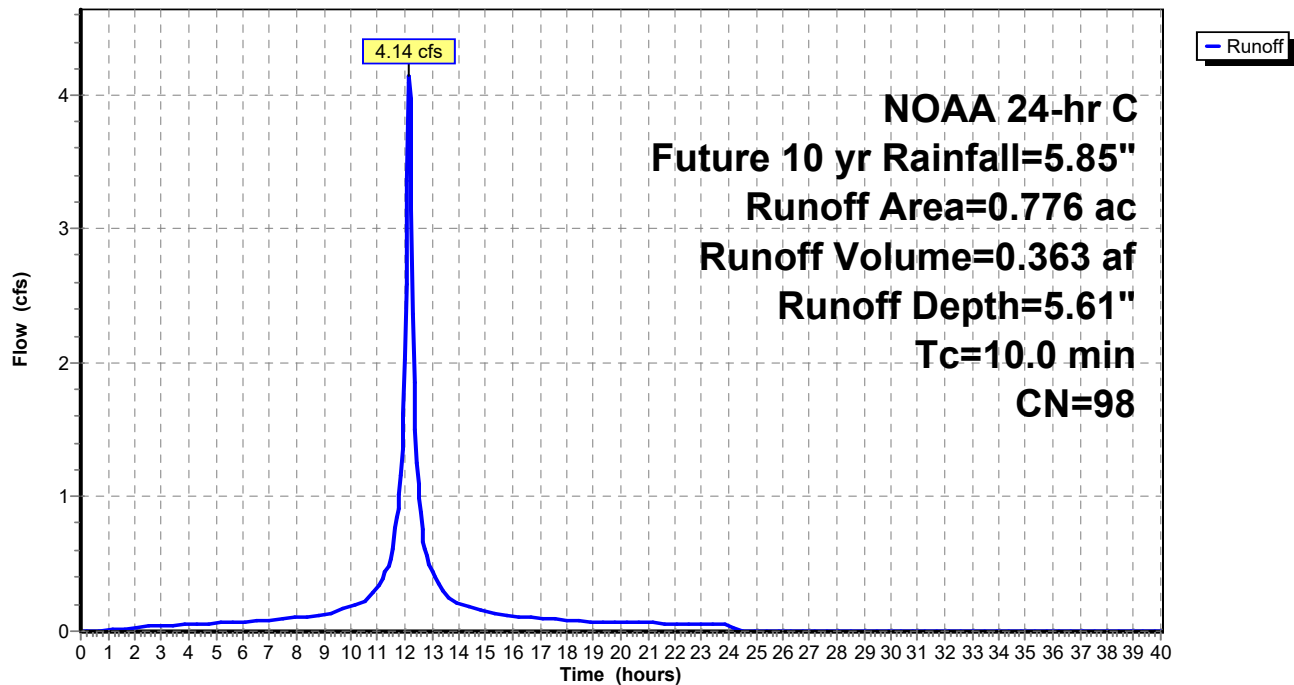
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
* 0.235	98	Pavement, HSG C
* 0.522	98	Roof, HSG C
* 0.019	98	Concrete, HSG C
0.776	98	Weighted Average
0.776		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 48I: PDA-48 (impervious)

Hydrograph



Summary for Subcatchment 48P: PDA-48 (pervious)

Runoff = 5.03 cfs @ 12.18 hrs, Volume= 0.380 af, Depth= 3.06"
 Routed to Pond B-48 : Basin #48

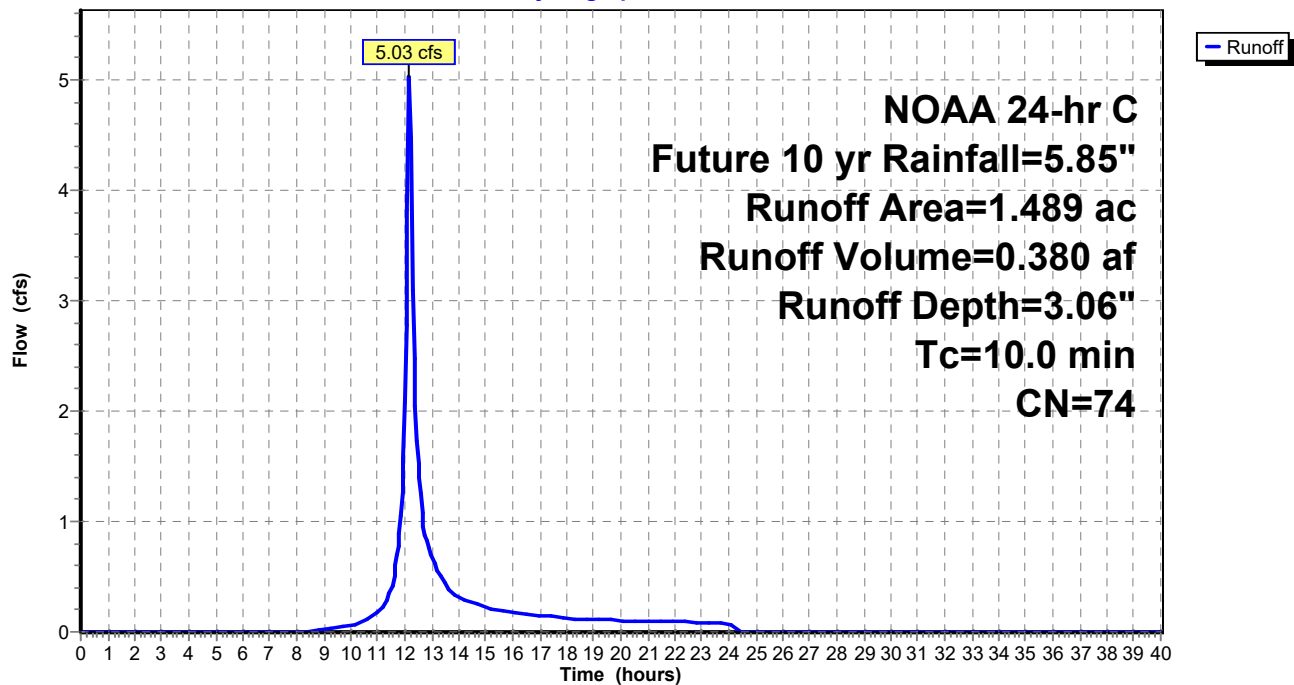
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.489	74	>75% Grass cover, Good, HSG C
1.489		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 48P: PDA-48 (pervious)

Hydrograph



Summary for Subcatchment 49I: PDA-49 (impervious)

Runoff = 4.87 cfs @ 12.17 hrs, Volume= 0.427 af, Depth= 5.61"
 Routed to Pond B-49 : Basin #49

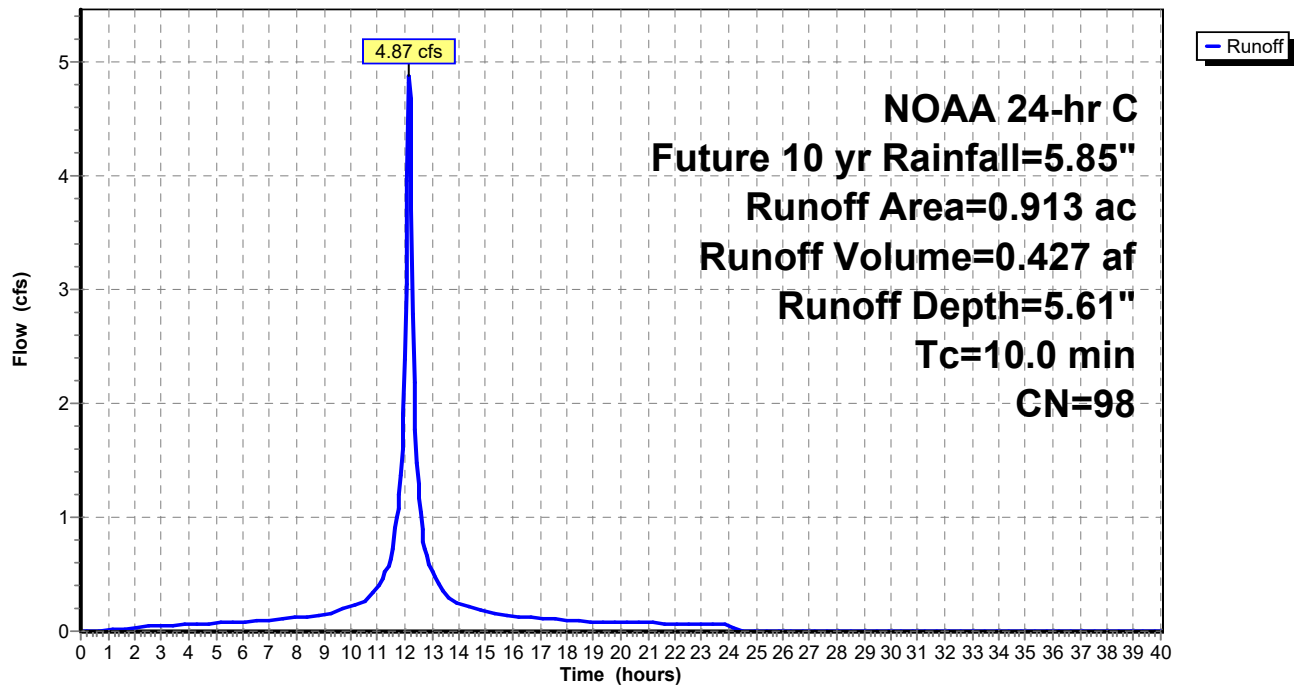
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
* 0.434	98	Pavement, HSG C
* 0.418	98	Roof, HSG C
* 0.061	98	Concrete, HSG C
0.913	98	Weighted Average
0.913		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 49I: PDA-49 (impervious)

Hydrograph



Summary for Subcatchment 49P: PDA-49 (pervious)

Runoff = 3.98 cfs @ 12.18 hrs, Volume= 0.300 af, Depth= 3.06"
 Routed to Pond B-49 : Basin #49

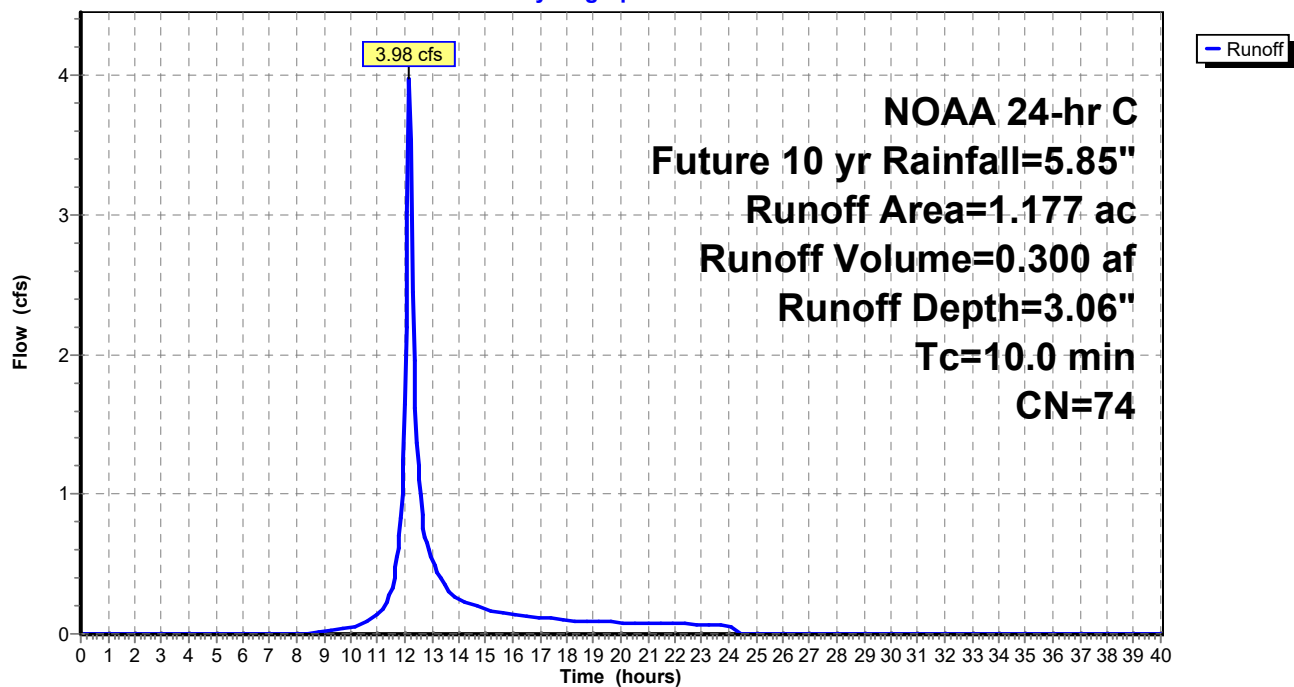
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.177	74	>75% Grass cover, Good, HSG C
1.177		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 49P: PDA-49 (pervious)

Hydrograph



Summary for Subcatchment 50I: PDA-50 (impervious)

Runoff = 3.53 cfs @ 12.17 hrs, Volume= 0.310 af, Depth= 5.61"
 Routed to Pond B-50 : Basin #50

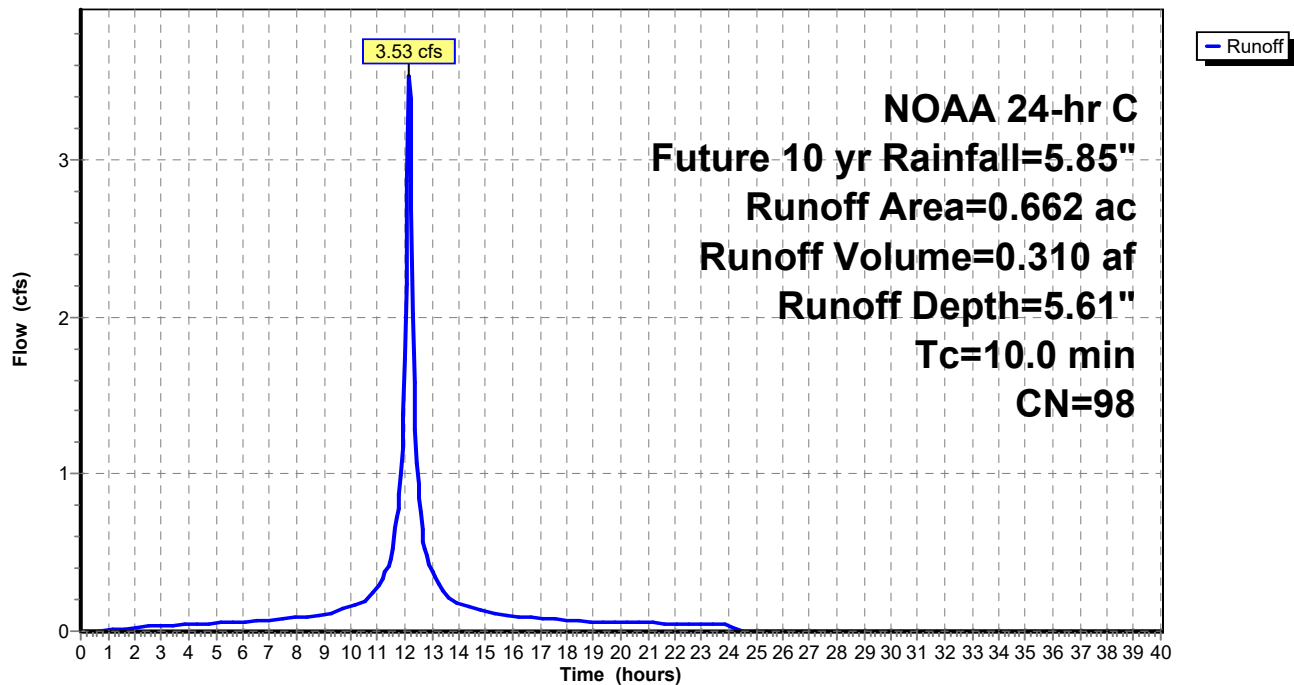
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
* 0.291	98	Pavement, HSG C
* 0.325	98	Roof, HSG C
* 0.046	98	Concrete, HSG C
0.662	98	Weighted Average
0.662		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 50I: PDA-50 (impervious)

Hydrograph



Summary for Subcatchment 50P: PDA-50 (pervious)

Runoff = 5.41 cfs @ 12.18 hrs, Volume= 0.408 af, Depth= 3.06"
 Routed to Pond B-50 : Basin #50

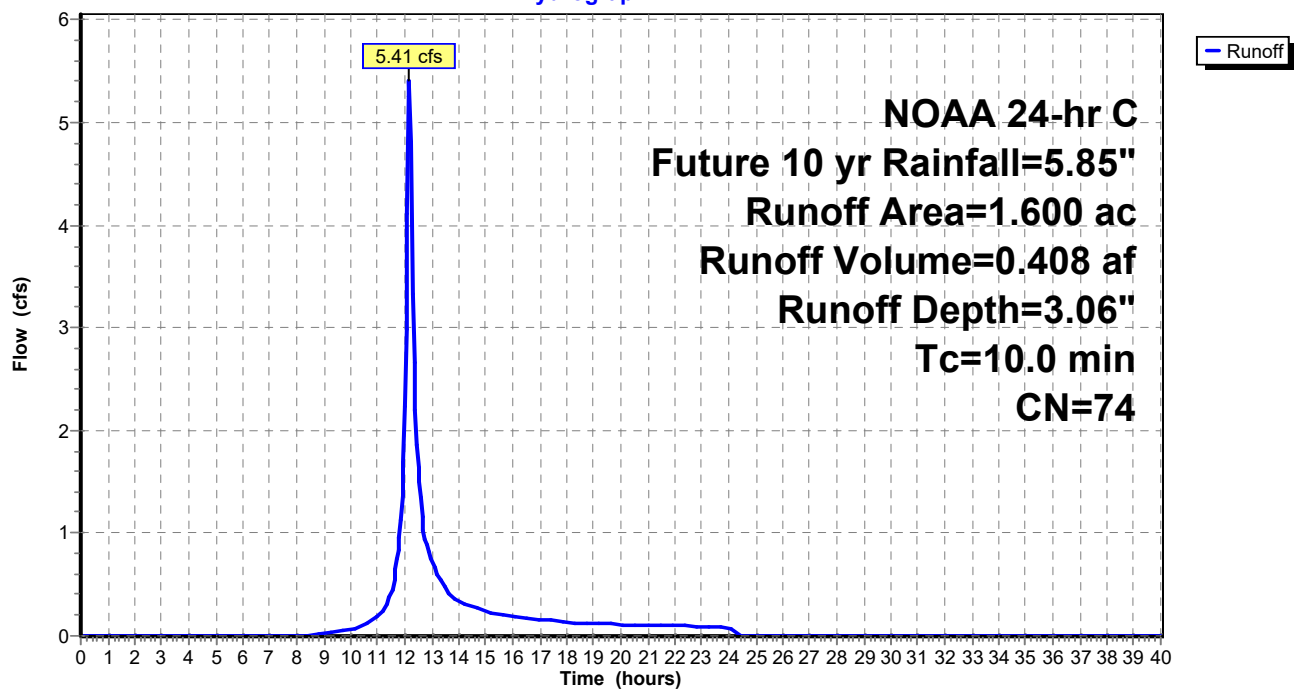
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.600	74	>75% Grass cover, Good, HSG C
1.600		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 50P: PDA-50 (pervious)

Hydrograph



Summary for Subcatchment UPDA-5: PDA-5 (undetained)

Runoff = 2.22 cfs @ 12.18 hrs, Volume= 0.167 af, Depth= 3.06"
 Routed to Link PDA-5 : Proposed Drainage Area #5

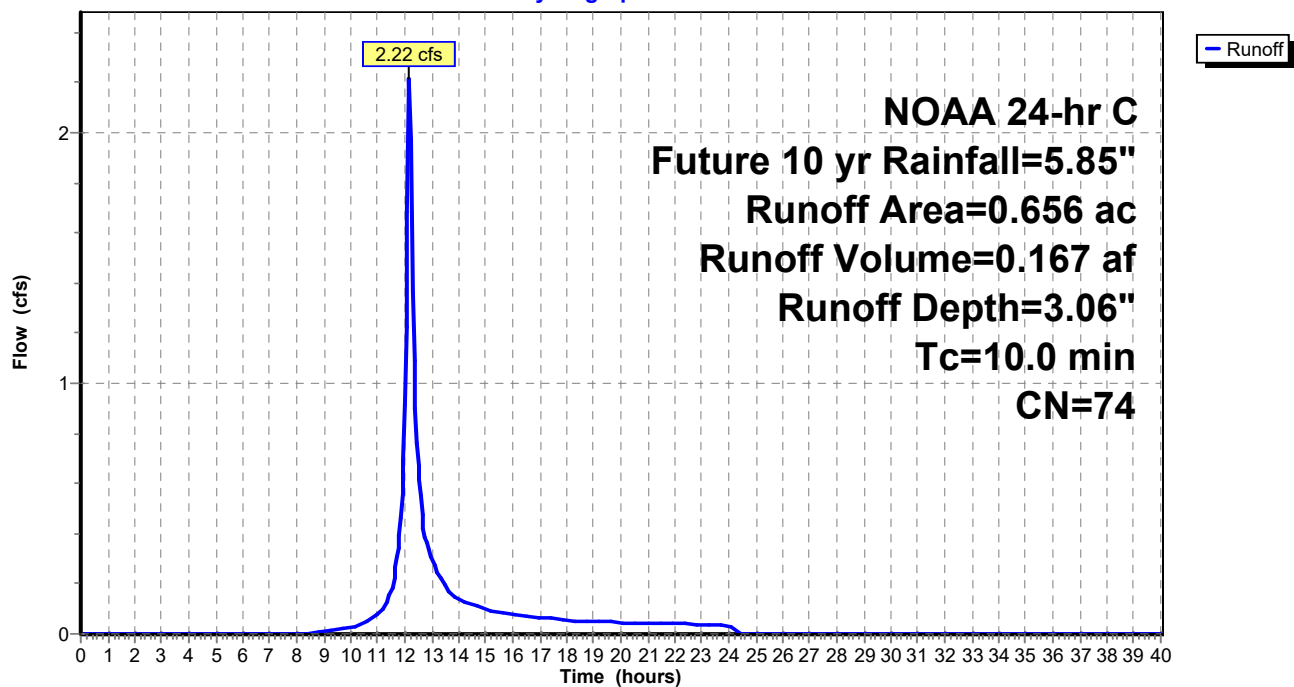
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.656	74	>75% Grass cover, Good, HSG C
0.656		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment UPDA-5: PDA-5 (undetained)

Hydrograph



Summary for Pond B-48: Basin #48

Inflow Area = 2.265 ac, 34.26% Impervious, Inflow Depth = 3.93" for Future 10 yr event
 Inflow = 9.18 cfs @ 12.17 hrs, Volume= 0.742 af
 Outflow = 0.67 cfs @ 13.56 hrs, Volume= 0.507 af, Atten= 93%, Lag= 83.3 min
 Primary = 0.67 cfs @ 13.56 hrs, Volume= 0.507 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 193.11' @ 13.56 hrs Surf.Area= 11,532 sf Storage= 21,462 cf

Plug-Flow detention time= 688.8 min calculated for 0.507 af (68% of inflow)
 Center-of-Mass det. time= 585.7 min (1,380.1 - 794.5)

Volume	Invert	Avail.Storage	Storage Description
#1	191.00'	32,287 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.00	8,869	0	0
192.00	10,100	9,485	9,485
193.00	11,387	10,744	20,228
194.00	12,731	12,059	32,287

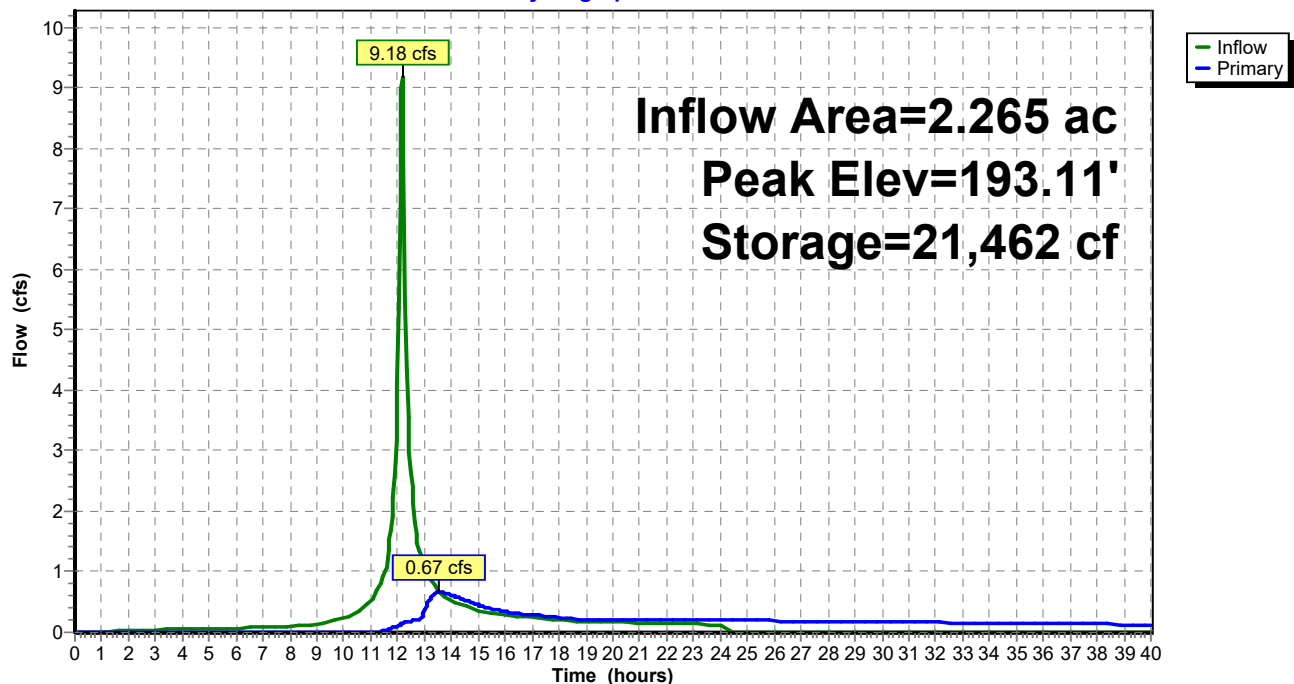
Device	Routing	Invert	Outlet Devices
#1	Primary	191.00'	18.0" Round Culvert L= 185.0' Ke= 0.500 Inlet / Outlet Invert= 191.00' / 188.45' S= 0.0138 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	191.40'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	193.99'	50.0' long + 3.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.67 cfs @ 13.56 hrs HW=193.11' (Free Discharge)

1=Culvert (Passes 0.67 cfs of 9.91 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.21 cfs @ 6.10 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 0.46 cfs @ 1.07 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-48: Basin #48

Hydrograph



Stage-Discharge for Pond B-48: Basin #48

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.00	0.00	191.52	0.02	192.04	0.12	192.56	0.17
191.01	0.00	191.53	0.03	192.05	0.12	192.57	0.17
191.02	0.00	191.54	0.03	192.06	0.12	192.58	0.17
191.03	0.00	191.55	0.03	192.07	0.12	192.59	0.17
191.04	0.00	191.56	0.04	192.08	0.12	192.60	0.17
191.05	0.00	191.57	0.04	192.09	0.13	192.61	0.17
191.06	0.00	191.58	0.05	192.10	0.13	192.62	0.17
191.07	0.00	191.59	0.05	192.11	0.13	192.63	0.17
191.08	0.00	191.60	0.05	192.12	0.13	192.64	0.17
191.09	0.00	191.61	0.05	192.13	0.13	192.65	0.18
191.10	0.00	191.62	0.06	192.14	0.13	192.66	0.18
191.11	0.00	191.63	0.06	192.15	0.13	192.67	0.18
191.12	0.00	191.64	0.06	192.16	0.13	192.68	0.18
191.13	0.00	191.65	0.06	192.17	0.13	192.69	0.18
191.14	0.00	191.66	0.06	192.18	0.13	192.70	0.18
191.15	0.00	191.67	0.07	192.19	0.14	192.71	0.18
191.16	0.00	191.68	0.07	192.20	0.14	192.72	0.18
191.17	0.00	191.69	0.07	192.21	0.14	192.73	0.18
191.18	0.00	191.70	0.07	192.22	0.14	192.74	0.18
191.19	0.00	191.71	0.07	192.23	0.14	192.75	0.18
191.20	0.00	191.72	0.08	192.24	0.14	192.76	0.18
191.21	0.00	191.73	0.08	192.25	0.14	192.77	0.18
191.22	0.00	191.74	0.08	192.26	0.14	192.78	0.19
191.23	0.00	191.75	0.08	192.27	0.14	192.79	0.19
191.24	0.00	191.76	0.08	192.28	0.14	192.80	0.19
191.25	0.00	191.77	0.08	192.29	0.15	192.81	0.19
191.26	0.00	191.78	0.09	192.30	0.15	192.82	0.19
191.27	0.00	191.79	0.09	192.31	0.15	192.83	0.19
191.28	0.00	191.80	0.09	192.32	0.15	192.84	0.19
191.29	0.00	191.81	0.09	192.33	0.15	192.85	0.19
191.30	0.00	191.82	0.09	192.34	0.15	192.86	0.19
191.31	0.00	191.83	0.09	192.35	0.15	192.87	0.19
191.32	0.00	191.84	0.10	192.36	0.15	192.88	0.19
191.33	0.00	191.85	0.10	192.37	0.15	192.89	0.19
191.34	0.00	191.86	0.10	192.38	0.15	192.90	0.19
191.35	0.00	191.87	0.10	192.39	0.15	192.91	0.19
191.36	0.00	191.88	0.10	192.40	0.16	192.92	0.20
191.37	0.00	191.89	0.10	192.41	0.16	192.93	0.20
191.38	0.00	191.90	0.10	192.42	0.16	192.94	0.20
191.39	0.00	191.91	0.10	192.43	0.16	192.95	0.20
191.40	0.00	191.92	0.11	192.44	0.16	192.96	0.20
191.41	0.00	191.93	0.11	192.45	0.16	192.97	0.20
191.42	0.00	191.94	0.11	192.46	0.16	192.98	0.20
191.43	0.00	191.95	0.11	192.47	0.16	192.99	0.20
191.44	0.00	191.96	0.11	192.48	0.16	193.00	0.20
191.45	0.00	191.97	0.11	192.49	0.16	193.01	0.21
191.46	0.01	191.98	0.11	192.50	0.16	193.02	0.24
191.47	0.01	191.99	0.11	192.51	0.16	193.03	0.27
191.48	0.01	192.00	0.12	192.52	0.17	193.04	0.31
191.49	0.01	192.01	0.12	192.53	0.17	193.05	0.35
191.50	0.02	192.02	0.12	192.54	0.17	193.06	0.40
191.51	0.02	192.03	0.12	192.55	0.17	193.07	0.45

Stage-Discharge for Pond B-48: Basin #48 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.08	0.50	193.60	6.13
193.09	0.56	193.61	6.28
193.10	0.62	193.62	6.43
193.11	0.68	193.63	6.57
193.12	0.75	193.64	6.72
193.13	0.82	193.65	6.87
193.14	0.89	193.66	7.02
193.15	0.96	193.67	7.17
193.16	1.04	193.68	7.33
193.17	1.12	193.69	7.48
193.18	1.20	193.70	7.64
193.19	1.29	193.71	7.79
193.20	1.37	193.72	7.95
193.21	1.46	193.73	8.11
193.22	1.55	193.74	8.26
193.23	1.64	193.75	8.42
193.24	1.74	193.76	8.58
193.25	1.83	193.77	8.74
193.26	1.93	193.78	8.91
193.27	2.03	193.79	9.07
193.28	2.13	193.80	9.23
193.29	2.23	193.81	9.40
193.30	2.34	193.82	9.56
193.31	2.44	193.83	9.73
193.32	2.55	193.84	9.90
193.33	2.66	193.85	10.07
193.34	2.77	193.86	10.24
193.35	2.88	193.87	10.40
193.36	3.00	193.88	10.58
193.37	3.11	193.89	10.75
193.38	3.23	193.90	10.92
193.39	3.35	193.91	11.09
193.40	3.47	193.92	11.27
193.41	3.59	193.93	11.44
193.42	3.71	193.94	11.62
193.43	3.84	193.95	11.79
193.44	3.96	193.96	11.97
193.45	4.09	193.97	12.15
193.46	4.22	193.98	12.33
193.47	4.35	193.99	12.51
193.48	4.48	194.00	12.81
193.49	4.61		
193.50	4.74		
193.51	4.87		
193.52	5.01		
193.53	5.15		
193.54	5.28		
193.55	5.42		
193.56	5.56		
193.57	5.70		
193.58	5.85		
193.59	5.99		

Stage-Area-Storage for Pond B-48: Basin #48

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.00	8,869	0	191.52	9,509	4,778
191.01	8,881	89	191.53	9,521	4,873
191.02	8,894	178	191.54	9,534	4,969
191.03	8,906	267	191.55	9,546	5,064
191.04	8,918	356	191.56	9,558	5,160
191.05	8,931	445	191.57	9,571	5,255
191.06	8,943	534	191.58	9,583	5,351
191.07	8,955	624	191.59	9,595	5,447
191.08	8,967	713	191.60	9,608	5,543
191.09	8,980	803	191.61	9,620	5,639
191.10	8,992	893	191.62	9,632	5,735
191.11	9,004	983	191.63	9,645	5,832
191.12	9,017	1,073	191.64	9,657	5,928
191.13	9,029	1,163	191.65	9,669	6,025
191.14	9,041	1,254	191.66	9,681	6,122
191.15	9,054	1,344	191.67	9,694	6,219
191.16	9,066	1,435	191.68	9,706	6,316
191.17	9,078	1,526	191.69	9,718	6,413
191.18	9,091	1,616	191.70	9,731	6,510
191.19	9,103	1,707	191.71	9,743	6,607
191.20	9,115	1,798	191.72	9,755	6,705
191.21	9,128	1,890	191.73	9,768	6,802
191.22	9,140	1,981	191.74	9,780	6,900
191.23	9,152	2,072	191.75	9,792	6,998
191.24	9,164	2,164	191.76	9,805	7,096
191.25	9,177	2,256	191.77	9,817	7,194
191.26	9,189	2,348	191.78	9,829	7,292
191.27	9,201	2,439	191.79	9,841	7,391
191.28	9,214	2,532	191.80	9,854	7,489
191.29	9,226	2,624	191.81	9,866	7,588
191.30	9,238	2,716	191.82	9,878	7,686
191.31	9,251	2,809	191.83	9,891	7,785
191.32	9,263	2,901	191.84	9,903	7,884
191.33	9,275	2,994	191.85	9,915	7,983
191.34	9,288	3,087	191.86	9,928	8,083
191.35	9,300	3,180	191.87	9,940	8,182
191.36	9,312	3,273	191.88	9,952	8,281
191.37	9,324	3,366	191.89	9,965	8,381
191.38	9,337	3,459	191.90	9,977	8,481
191.39	9,349	3,553	191.91	9,989	8,580
191.40	9,361	3,646	191.92	10,002	8,680
191.41	9,374	3,740	191.93	10,014	8,781
191.42	9,386	3,834	191.94	10,026	8,881
191.43	9,398	3,927	191.95	10,038	8,981
191.44	9,411	4,022	191.96	10,051	9,081
191.45	9,423	4,116	191.97	10,063	9,182
191.46	9,435	4,210	191.98	10,075	9,283
191.47	9,448	4,304	191.99	10,088	9,384
191.48	9,460	4,399	192.00	10,100	9,485
191.49	9,472	4,494	192.01	10,113	9,586
191.50	9,485	4,588	192.02	10,126	9,687
191.51	9,497	4,683	192.03	10,139	9,788

Stage-Area-Storage for Pond B-48: Basin #48 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.04	10,151	9,890	192.56	10,821	15,342
192.05	10,164	9,991	192.57	10,834	15,451
192.06	10,177	10,093	192.58	10,846	15,559
192.07	10,190	10,195	192.59	10,859	15,668
192.08	10,203	10,297	192.60	10,872	15,776
192.09	10,216	10,399	192.61	10,885	15,885
192.10	10,229	10,501	192.62	10,898	15,994
192.11	10,242	10,603	192.63	10,911	16,103
192.12	10,254	10,706	192.64	10,924	16,212
192.13	10,267	10,808	192.65	10,937	16,321
192.14	10,280	10,911	192.66	10,949	16,431
192.15	10,293	11,014	192.67	10,962	16,540
192.16	10,306	11,117	192.68	10,975	16,650
192.17	10,319	11,220	192.69	10,988	16,760
192.18	10,332	11,323	192.70	11,001	16,870
192.19	10,345	11,427	192.71	11,014	16,980
192.20	10,357	11,530	192.72	11,027	17,090
192.21	10,370	11,634	192.73	11,040	17,200
192.22	10,383	11,738	192.74	11,052	17,311
192.23	10,396	11,842	192.75	11,065	17,421
192.24	10,409	11,946	192.76	11,078	17,532
192.25	10,422	12,050	192.77	11,091	17,643
192.26	10,435	12,154	192.78	11,104	17,754
192.27	10,447	12,258	192.79	11,117	17,865
192.28	10,460	12,363	192.80	11,130	17,976
192.29	10,473	12,468	192.81	11,142	18,088
192.30	10,486	12,572	192.82	11,155	18,199
192.31	10,499	12,677	192.83	11,168	18,311
192.32	10,512	12,782	192.84	11,181	18,423
192.33	10,525	12,888	192.85	11,194	18,534
192.34	10,538	12,993	192.86	11,207	18,646
192.35	10,550	13,098	192.87	11,220	18,759
192.36	10,563	13,204	192.88	11,233	18,871
192.37	10,576	13,310	192.89	11,245	18,983
192.38	10,589	13,415	192.90	11,258	19,096
192.39	10,602	13,521	192.91	11,271	19,208
192.40	10,615	13,627	192.92	11,284	19,321
192.41	10,628	13,734	192.93	11,297	19,434
192.42	10,641	13,840	192.94	11,310	19,547
192.43	10,653	13,946	192.95	11,323	19,660
192.44	10,666	14,053	192.96	11,336	19,774
192.45	10,679	14,160	192.97	11,348	19,887
192.46	10,692	14,267	192.98	11,361	20,001
192.47	10,705	14,374	192.99	11,374	20,114
192.48	10,718	14,481	193.00	11,387	20,228
192.49	10,731	14,588	193.01	11,400	20,342
192.50	10,744	14,695	193.02	11,414	20,456
192.51	10,756	14,803	193.03	11,427	20,570
192.52	10,769	14,911	193.04	11,441	20,685
192.53	10,782	15,018	193.05	11,454	20,799
192.54	10,795	15,126	193.06	11,468	20,914
192.55	10,808	15,234	193.07	11,481	21,028

Stage-Area-Storage for Pond B-48: Basin #48 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.08	11,495	21,143	193.60	12,193	27,302
193.09	11,508	21,258	193.61	12,207	27,424
193.10	11,521	21,373	193.62	12,220	27,546
193.11	11,535	21,489	193.63	12,234	27,669
193.12	11,548	21,604	193.64	12,247	27,791
193.13	11,562	21,720	193.65	12,261	27,913
193.14	11,575	21,835	193.66	12,274	28,036
193.15	11,589	21,951	193.67	12,287	28,159
193.16	11,602	22,067	193.68	12,301	28,282
193.17	11,615	22,183	193.69	12,314	28,405
193.18	11,629	22,299	193.70	12,328	28,528
193.19	11,642	22,416	193.71	12,341	28,652
193.20	11,656	22,532	193.72	12,355	28,775
193.21	11,669	22,649	193.73	12,368	28,899
193.22	11,683	22,766	193.74	12,382	29,022
193.23	11,696	22,883	193.75	12,395	29,146
193.24	11,710	23,000	193.76	12,408	29,270
193.25	11,723	23,117	193.77	12,422	29,394
193.26	11,736	23,234	193.78	12,435	29,519
193.27	11,750	23,351	193.79	12,449	29,643
193.28	11,763	23,469	193.80	12,462	29,768
193.29	11,777	23,587	193.81	12,476	29,892
193.30	11,790	23,705	193.82	12,489	30,017
193.31	11,804	23,823	193.83	12,503	30,142
193.32	11,817	23,941	193.84	12,516	30,267
193.33	11,831	24,059	193.85	12,529	30,392
193.34	11,844	24,177	193.86	12,543	30,518
193.35	11,857	24,296	193.87	12,556	30,643
193.36	11,871	24,414	193.88	12,570	30,769
193.37	11,884	24,533	193.89	12,583	30,895
193.38	11,898	24,652	193.90	12,597	31,021
193.39	11,911	24,771	193.91	12,610	31,147
193.40	11,925	24,890	193.92	12,623	31,273
193.41	11,938	25,010	193.93	12,637	31,399
193.42	11,951	25,129	193.94	12,650	31,526
193.43	11,965	25,249	193.95	12,664	31,652
193.44	11,978	25,368	193.96	12,677	31,779
193.45	11,992	25,488	193.97	12,691	31,906
193.46	12,005	25,608	193.98	12,704	32,033
193.47	12,019	25,728	193.99	12,718	32,160
193.48	12,032	25,849	194.00	12,731	32,287
193.49	12,046	25,969			
193.50	12,059	26,090			
193.51	12,072	26,210			
193.52	12,086	26,331			
193.53	12,099	26,452			
193.54	12,113	26,573			
193.55	12,126	26,694			
193.56	12,140	26,815			
193.57	12,153	26,937			
193.58	12,167	27,059			
193.59	12,180	27,180			

Summary for Pond B-49: Basin #49

Inflow Area = 2.090 ac, 43.68% Impervious, Inflow Depth = 4.17" for Future 10 yr event
 Inflow = 8.85 cfs @ 12.17 hrs, Volume= 0.727 af
 Outflow = 2.92 cfs @ 12.45 hrs, Volume= 0.594 af, Atten= 67%, Lag= 16.7 min
 Primary = 2.92 cfs @ 12.45 hrs, Volume= 0.594 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 185.10' @ 12.45 hrs Surf.Area= 8,825 sf Storage= 16,103 cf

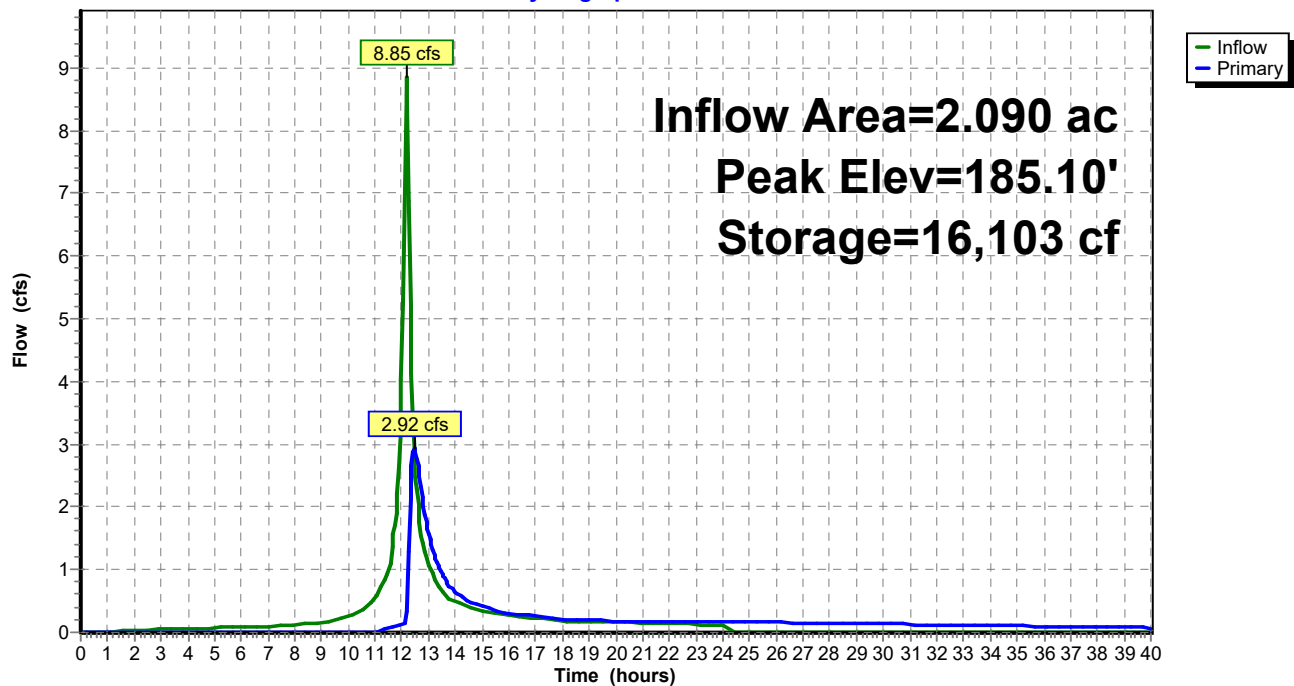
Plug-Flow detention time= 454.3 min calculated for 0.594 af (82% of inflow)
 Center-of-Mass det. time= 376.0 min (1,161.9 - 785.9)

Volume	Invert	Avail.Storage	Storage Description
#1	183.00'	52,993 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.00	6,565	0	0
184.00	7,625	7,095	7,095
185.00	8,717	8,171	15,266
186.00	9,853	9,285	24,551
187.00	11,027	10,440	34,991
188.00	12,333	11,680	46,671
188.50	12,956	6,322	52,993

Device	Routing	Invert	Outlet Devices
#1	Primary	183.00'	15.0" Round Culvert L= 25.0' Ke= 0.500 Inlet / Outlet Invert= 183.00' / 182.81' S= 0.0076 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	183.55'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.74'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	187.75'	30.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)

Primary OutFlow Max=2.92 cfs @ 12.45 hrs HW=185.10' (Free Discharge)

- 1=Culvert (Passes 2.92 cfs of 6.94 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.20 cfs @ 5.78 fps)
- 3=Sharp-Crested Rectangular Weir (Weir Controls 2.72 cfs @ 1.95 fps)
- 4=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-49: Basin #49**Hydrograph**

Stage-Discharge for Pond B-49: Basin #49

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.00	0.00	183.52	0.00	184.04	0.10	184.56	0.16
183.01	0.00	183.53	0.00	184.05	0.10	184.57	0.16
183.02	0.00	183.54	0.00	184.06	0.10	184.58	0.16
183.03	0.00	183.55	0.00	184.07	0.11	184.59	0.16
183.04	0.00	183.56	0.00	184.08	0.11	184.60	0.16
183.05	0.00	183.57	0.00	184.09	0.11	184.61	0.16
183.06	0.00	183.58	0.00	184.10	0.11	184.62	0.16
183.07	0.00	183.59	0.00	184.11	0.11	184.63	0.16
183.08	0.00	183.60	0.00	184.12	0.11	184.64	0.16
183.09	0.00	183.61	0.01	184.13	0.11	184.65	0.16
183.10	0.00	183.62	0.01	184.14	0.11	184.66	0.16
183.11	0.00	183.63	0.01	184.15	0.12	184.67	0.17
183.12	0.00	183.64	0.01	184.16	0.12	184.68	0.17
183.13	0.00	183.65	0.02	184.17	0.12	184.69	0.17
183.14	0.00	183.66	0.02	184.18	0.12	184.70	0.17
183.15	0.00	183.67	0.02	184.19	0.12	184.71	0.17
183.16	0.00	183.68	0.03	184.20	0.12	184.72	0.17
183.17	0.00	183.69	0.03	184.21	0.12	184.73	0.17
183.18	0.00	183.70	0.03	184.22	0.12	184.74	0.17
183.19	0.00	183.71	0.04	184.23	0.12	184.75	0.18
183.20	0.00	183.72	0.04	184.24	0.13	184.76	0.21
183.21	0.00	183.73	0.05	184.25	0.13	184.77	0.24
183.22	0.00	183.74	0.05	184.26	0.13	184.78	0.28
183.23	0.00	183.75	0.05	184.27	0.13	184.79	0.32
183.24	0.00	183.76	0.05	184.28	0.13	184.80	0.37
183.25	0.00	183.77	0.06	184.29	0.13	184.81	0.42
183.26	0.00	183.78	0.06	184.30	0.13	184.82	0.47
183.27	0.00	183.79	0.06	184.31	0.13	184.83	0.53
183.28	0.00	183.80	0.06	184.32	0.13	184.84	0.59
183.29	0.00	183.81	0.06	184.33	0.13	184.85	0.65
183.30	0.00	183.82	0.07	184.34	0.14	184.86	0.72
183.31	0.00	183.83	0.07	184.35	0.14	184.87	0.79
183.32	0.00	183.84	0.07	184.36	0.14	184.88	0.86
183.33	0.00	183.85	0.07	184.37	0.14	184.89	0.94
183.34	0.00	183.86	0.07	184.38	0.14	184.90	1.01
183.35	0.00	183.87	0.08	184.39	0.14	184.91	1.09
183.36	0.00	183.88	0.08	184.40	0.14	184.92	1.17
183.37	0.00	183.89	0.08	184.41	0.14	184.93	1.26
183.38	0.00	183.90	0.08	184.42	0.14	184.94	1.34
183.39	0.00	183.91	0.08	184.43	0.14	184.95	1.43
183.40	0.00	183.92	0.08	184.44	0.15	184.96	1.52
183.41	0.00	183.93	0.09	184.45	0.15	184.97	1.61
183.42	0.00	183.94	0.09	184.46	0.15	184.98	1.71
183.43	0.00	183.95	0.09	184.47	0.15	184.99	1.80
183.44	0.00	183.96	0.09	184.48	0.15	185.00	1.90
183.45	0.00	183.97	0.09	184.49	0.15	185.01	2.00
183.46	0.00	183.98	0.09	184.50	0.15	185.02	2.10
183.47	0.00	183.99	0.10	184.51	0.15	185.03	2.21
183.48	0.00	184.00	0.10	184.52	0.15	185.04	2.31
183.49	0.00	184.01	0.10	184.53	0.15	185.05	2.42
183.50	0.00	184.02	0.10	184.54	0.15	185.06	2.52
183.51	0.00	184.03	0.10	184.55	0.16	185.07	2.63

Stage-Discharge for Pond B-49: Basin #49 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.08	2.75	185.60	8.30	186.12	9.33	186.64	10.26
185.09	2.86	185.61	8.33	186.13	9.35	186.65	10.28
185.10	2.97	185.62	8.35	186.14	9.37	186.66	10.29
185.11	3.09	185.63	8.37	186.15	9.39	186.67	10.31
185.12	3.20	185.64	8.39	186.16	9.41	186.68	10.33
185.13	3.32	185.65	8.41	186.17	9.43	186.69	10.34
185.14	3.44	185.66	8.43	186.18	9.44	186.70	10.36
185.15	3.56	185.67	8.45	186.19	9.46	186.71	10.38
185.16	3.69	185.68	8.47	186.20	9.48	186.72	10.40
185.17	3.81	185.69	8.49	186.21	9.50	186.73	10.41
185.18	3.94	185.70	8.51	186.22	9.52	186.74	10.43
185.19	4.06	185.71	8.53	186.23	9.54	186.75	10.45
185.20	4.19	185.72	8.55	186.24	9.56	186.76	10.46
185.21	4.32	185.73	8.57	186.25	9.57	186.77	10.48
185.22	4.45	185.74	8.59	186.26	9.59	186.78	10.50
185.23	4.58	185.75	8.61	186.27	9.61	186.79	10.51
185.24	4.72	185.76	8.63	186.28	9.63	186.80	10.53
185.25	4.85	185.77	8.65	186.29	9.65	186.81	10.55
185.26	4.99	185.78	8.67	186.30	9.66	186.82	10.56
185.27	5.12	185.79	8.69	186.31	9.68	186.83	10.58
185.28	5.26	185.80	8.71	186.32	9.70	186.84	10.59
185.29	5.40	185.81	8.73	186.33	9.72	186.85	10.61
185.30	5.54	185.82	8.75	186.34	9.74	186.86	10.63
185.31	5.68	185.83	8.77	186.35	9.75	186.87	10.64
185.32	5.82	185.84	8.79	186.36	9.77	186.88	10.66
185.33	5.97	185.85	8.81	186.37	9.79	186.89	10.68
185.34	6.11	185.86	8.83	186.38	9.81	186.90	10.69
185.35	6.26	185.87	8.85	186.39	9.83	186.91	10.71
185.36	6.40	185.88	8.87	186.40	9.84	186.92	10.73
185.37	6.55	185.89	8.89	186.41	9.86	186.93	10.74
185.38	6.70	185.90	8.91	186.42	9.88	186.94	10.76
185.39	6.85	185.91	8.93	186.43	9.90	186.95	10.77
185.40	7.00	185.92	8.95	186.44	9.91	186.96	10.79
185.41	7.15	185.93	8.97	186.45	9.93	186.97	10.81
185.42	7.30	185.94	8.99	186.46	9.95	186.98	10.82
185.43	7.46	185.95	9.01	186.47	9.97	186.99	10.84
185.44	7.61	185.96	9.03	186.48	9.98	187.00	10.86
185.45	7.77	185.97	9.05	186.49	10.00	187.01	10.87
185.46	7.92	185.98	9.07	186.50	10.02	187.02	10.89
185.47	8.03	185.99	9.09	186.51	10.04	187.03	10.90
185.48	8.05	186.00	9.11	186.52	10.05	187.04	10.92
185.49	8.07	186.01	9.13	186.53	10.07	187.05	10.94
185.50	8.09	186.02	9.14	186.54	10.09	187.06	10.95
185.51	8.11	186.03	9.16	186.55	10.11	187.07	10.97
185.52	8.13	186.04	9.18	186.56	10.12	187.08	10.98
185.53	8.16	186.05	9.20	186.57	10.14	187.09	11.00
185.54	8.18	186.06	9.22	186.58	10.16	187.10	11.01
185.55	8.20	186.07	9.24	186.59	10.17	187.11	11.03
185.56	8.22	186.08	9.26	186.60	10.19	187.12	11.05
185.57	8.24	186.09	9.28	186.61	10.21	187.13	11.06
185.58	8.26	186.10	9.30	186.62	10.23	187.14	11.08
185.59	8.28	186.11	9.31	186.63	10.24	187.15	11.09

Stage-Discharge for Pond B-49: Basin #49 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
187.16	11.11	187.68	11.90	188.20	42.16
187.17	11.13	187.69	11.91	188.21	43.16
187.18	11.14	187.70	11.93	188.22	44.18
187.19	11.16	187.71	11.94	188.23	45.20
187.20	11.17	187.72	11.96	188.24	46.23
187.21	11.19	187.73	11.97	188.25	47.28
187.22	11.20	187.74	11.99	188.26	48.33
187.23	11.22	187.75	12.00	188.27	49.39
187.24	11.23	187.76	12.11	188.28	50.47
187.25	11.25	187.77	12.31	188.29	51.55
187.26	11.27	187.78	12.55	188.30	52.64
187.27	11.28	187.79	12.84	188.31	53.75
187.28	11.30	187.80	13.17	188.32	54.86
187.29	11.31	187.81	13.53	188.33	55.98
187.30	11.33	187.82	13.92	188.34	57.11
187.31	11.34	187.83	14.34	188.35	58.25
187.32	11.36	187.84	14.78	188.36	59.40
187.33	11.37	187.85	15.25	188.37	60.56
187.34	11.39	187.86	15.74	188.38	61.73
187.35	11.40	187.87	16.25	188.39	62.91
187.36	11.42	187.88	16.78	188.40	64.10
187.37	11.43	187.89	17.34	188.41	65.29
187.38	11.45	187.90	17.91	188.42	66.50
187.39	11.47	187.91	18.50	188.43	67.71
187.40	11.48	187.92	19.11	188.44	68.93
187.41	11.50	187.93	19.74	188.45	70.16
187.42	11.51	187.94	20.39	188.46	71.40
187.43	11.53	187.95	21.05	188.47	72.65
187.44	11.54	187.96	21.73	188.48	73.91
187.45	11.56	187.97	22.42	188.49	75.17
187.46	11.57	187.98	23.14	188.50	76.45
187.47	11.59	187.99	23.86		
187.48	11.60	188.00	24.60		
187.49	11.62	188.01	25.36		
187.50	11.63	188.02	26.13		
187.51	11.65	188.03	26.91		
187.52	11.66	188.04	27.71		
187.53	11.68	188.05	28.52		
187.54	11.69	188.06	29.34		
187.55	11.71	188.07	30.18		
187.56	11.72	188.08	31.03		
187.57	11.74	188.09	31.89		
187.58	11.75	188.10	32.77		
187.59	11.77	188.11	33.65		
187.60	11.78	188.12	34.55		
187.61	11.80	188.13	35.46		
187.62	11.81	188.14	36.39		
187.63	11.83	188.15	37.32		
187.64	11.84	188.16	38.27		
187.65	11.85	188.17	39.22		
187.66	11.87	188.18	40.19		
187.67	11.88	188.19	41.17		

Stage-Area-Storage for Pond B-49: Basin #49

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.00	6,565	0	183.52	7,116	3,557
183.01	6,576	66	183.53	7,127	3,628
183.02	6,586	132	183.54	7,137	3,700
183.03	6,597	197	183.55	7,148	3,771
183.04	6,607	263	183.56	7,159	3,843
183.05	6,618	330	183.57	7,169	3,914
183.06	6,629	396	183.58	7,180	3,986
183.07	6,639	462	183.59	7,190	4,058
183.08	6,650	529	183.60	7,201	4,130
183.09	6,660	595	183.61	7,212	4,202
183.10	6,671	662	183.62	7,222	4,274
183.11	6,682	729	183.63	7,233	4,346
183.12	6,692	795	183.64	7,243	4,419
183.13	6,703	862	183.65	7,254	4,491
183.14	6,713	929	183.66	7,265	4,564
183.15	6,724	997	183.67	7,275	4,636
183.16	6,735	1,064	183.68	7,286	4,709
183.17	6,745	1,131	183.69	7,296	4,782
183.18	6,756	1,199	183.70	7,307	4,855
183.19	6,766	1,266	183.71	7,318	4,928
183.20	6,777	1,334	183.72	7,328	5,002
183.21	6,788	1,402	183.73	7,339	5,075
183.22	6,798	1,470	183.74	7,349	5,148
183.23	6,809	1,538	183.75	7,360	5,222
183.24	6,819	1,606	183.76	7,371	5,296
183.25	6,830	1,674	183.77	7,381	5,369
183.26	6,841	1,743	183.78	7,392	5,443
183.27	6,851	1,811	183.79	7,402	5,517
183.28	6,862	1,880	183.80	7,413	5,591
183.29	6,872	1,948	183.81	7,424	5,665
183.30	6,883	2,017	183.82	7,434	5,740
183.31	6,894	2,086	183.83	7,445	5,814
183.32	6,904	2,155	183.84	7,455	5,889
183.33	6,915	2,224	183.85	7,466	5,963
183.34	6,925	2,293	183.86	7,477	6,038
183.35	6,936	2,363	183.87	7,487	6,113
183.36	6,947	2,432	183.88	7,498	6,188
183.37	6,957	2,502	183.89	7,508	6,263
183.38	6,968	2,571	183.90	7,519	6,338
183.39	6,978	2,641	183.91	7,530	6,413
183.40	6,989	2,711	183.92	7,540	6,488
183.41	7,000	2,781	183.93	7,551	6,564
183.42	7,010	2,851	183.94	7,561	6,639
183.43	7,021	2,921	183.95	7,572	6,715
183.44	7,031	2,991	183.96	7,583	6,791
183.45	7,042	3,062	183.97	7,593	6,867
183.46	7,053	3,132	183.98	7,604	6,943
183.47	7,063	3,203	183.99	7,614	7,019
183.48	7,074	3,273	184.00	7,625	7,095
183.49	7,084	3,344	184.01	7,636	7,171
183.50	7,095	3,415	184.02	7,647	7,248
183.51	7,106	3,486	184.03	7,658	7,324

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.04	7,669	7,401	184.56	8,237	11,536
184.05	7,680	7,478	184.57	8,247	11,619
184.06	7,691	7,554	184.58	8,258	11,701
184.07	7,701	7,631	184.59	8,269	11,784
184.08	7,712	7,708	184.60	8,280	11,867
184.09	7,723	7,786	184.61	8,291	11,949
184.10	7,734	7,863	184.62	8,302	12,032
184.11	7,745	7,940	184.63	8,313	12,115
184.12	7,756	8,018	184.64	8,324	12,199
184.13	7,767	8,095	184.65	8,335	12,282
184.14	7,778	8,173	184.66	8,346	12,365
184.15	7,789	8,251	184.67	8,357	12,449
184.16	7,800	8,329	184.68	8,368	12,532
184.17	7,811	8,407	184.69	8,378	12,616
184.18	7,822	8,485	184.70	8,389	12,700
184.19	7,832	8,563	184.71	8,400	12,784
184.20	7,843	8,642	184.72	8,411	12,868
184.21	7,854	8,720	184.73	8,422	12,952
184.22	7,865	8,799	184.74	8,433	13,036
184.23	7,876	8,878	184.75	8,444	13,121
184.24	7,887	8,956	184.76	8,455	13,205
184.25	7,898	9,035	184.77	8,466	13,290
184.26	7,909	9,114	184.78	8,477	13,375
184.27	7,920	9,194	184.79	8,488	13,460
184.28	7,931	9,273	184.80	8,499	13,544
184.29	7,942	9,352	184.81	8,510	13,629
184.30	7,953	9,432	184.82	8,520	13,715
184.31	7,964	9,511	184.83	8,531	13,800
184.32	7,974	9,591	184.84	8,542	13,885
184.33	7,985	9,671	184.85	8,553	13,971
184.34	7,996	9,751	184.86	8,564	14,056
184.35	8,007	9,831	184.87	8,575	14,142
184.36	8,018	9,911	184.88	8,586	14,228
184.37	8,029	9,991	184.89	8,597	14,314
184.38	8,040	10,071	184.90	8,608	14,400
184.39	8,051	10,152	184.91	8,619	14,486
184.40	8,062	10,232	184.92	8,630	14,572
184.41	8,073	10,313	184.93	8,641	14,658
184.42	8,084	10,394	184.94	8,651	14,745
184.43	8,095	10,475	184.95	8,662	14,832
184.44	8,105	10,556	184.96	8,673	14,918
184.45	8,116	10,637	184.97	8,684	15,005
184.46	8,127	10,718	184.98	8,695	15,092
184.47	8,138	10,799	184.99	8,706	15,179
184.48	8,149	10,881	185.00	8,717	15,266
184.49	8,160	10,962	185.01	8,728	15,353
184.50	8,171	11,044	185.02	8,740	15,441
184.51	8,182	11,126	185.03	8,751	15,528
184.52	8,193	11,208	185.04	8,762	15,616
184.53	8,204	11,290	185.05	8,774	15,703
184.54	8,215	11,372	185.06	8,785	15,791
184.55	8,226	11,454	185.07	8,797	15,879

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.08	8,808	15,967	185.60	9,399	20,701
185.09	8,819	16,055	185.61	9,410	20,795
185.10	8,831	16,143	185.62	9,421	20,889
185.11	8,842	16,232	185.63	9,433	20,983
185.12	8,853	16,320	185.64	9,444	21,078
185.13	8,865	16,409	185.65	9,455	21,172
185.14	8,876	16,498	185.66	9,467	21,267
185.15	8,887	16,586	185.67	9,478	21,361
185.16	8,899	16,675	185.68	9,489	21,456
185.17	8,910	16,764	185.69	9,501	21,551
185.18	8,921	16,853	185.70	9,512	21,646
185.19	8,933	16,943	185.71	9,524	21,741
185.20	8,944	17,032	185.72	9,535	21,837
185.21	8,956	17,122	185.73	9,546	21,932
185.22	8,967	17,211	185.74	9,558	22,028
185.23	8,978	17,301	185.75	9,569	22,123
185.24	8,990	17,391	185.76	9,580	22,219
185.25	9,001	17,481	185.77	9,592	22,315
185.26	9,012	17,571	185.78	9,603	22,411
185.27	9,024	17,661	185.79	9,614	22,507
185.28	9,035	17,751	185.80	9,626	22,603
185.29	9,046	17,842	185.81	9,637	22,699
185.30	9,058	17,932	185.82	9,649	22,796
185.31	9,069	18,023	185.83	9,660	22,892
185.32	9,081	18,114	185.84	9,671	22,989
185.33	9,092	18,204	185.85	9,683	23,086
185.34	9,103	18,295	185.86	9,694	23,183
185.35	9,115	18,387	185.87	9,705	23,280
185.36	9,126	18,478	185.88	9,717	23,377
185.37	9,137	18,569	185.89	9,728	23,474
185.38	9,149	18,660	185.90	9,739	23,571
185.39	9,160	18,752	185.91	9,751	23,669
185.40	9,171	18,844	185.92	9,762	23,766
185.41	9,183	18,935	185.93	9,773	23,864
185.42	9,194	19,027	185.94	9,785	23,962
185.43	9,205	19,119	185.95	9,796	24,060
185.44	9,217	19,211	185.96	9,808	24,158
185.45	9,228	19,304	185.97	9,819	24,256
185.46	9,240	19,396	185.98	9,830	24,354
185.47	9,251	19,488	185.99	9,842	24,453
185.48	9,262	19,581	186.00	9,853	24,551
185.49	9,274	19,674	186.01	9,865	24,650
185.50	9,285	19,767	186.02	9,876	24,748
185.51	9,296	19,859	186.03	9,888	24,847
185.52	9,308	19,952	186.04	9,900	24,946
185.53	9,319	20,046	186.05	9,912	25,045
185.54	9,330	20,139	186.06	9,923	25,144
185.55	9,342	20,232	186.07	9,935	25,244
185.56	9,353	20,326	186.08	9,947	25,343
185.57	9,365	20,419	186.09	9,959	25,443
185.58	9,376	20,513	186.10	9,970	25,542
185.59	9,387	20,607	186.11	9,982	25,642

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.12	9,994	25,742	186.64	10,604	31,097
186.13	10,006	25,842	186.65	10,616	31,203
186.14	10,017	25,942	186.66	10,628	31,310
186.15	10,029	26,042	186.67	10,640	31,416
186.16	10,041	26,143	186.68	10,651	31,522
186.17	10,053	26,243	186.69	10,663	31,629
186.18	10,064	26,344	186.70	10,675	31,736
186.19	10,076	26,444	186.71	10,687	31,843
186.20	10,088	26,545	186.72	10,698	31,949
186.21	10,100	26,646	186.73	10,710	32,057
186.22	10,111	26,747	186.74	10,722	32,164
186.23	10,123	26,848	186.75	10,734	32,271
186.24	10,135	26,950	186.76	10,745	32,378
186.25	10,147	27,051	186.77	10,757	32,486
186.26	10,158	27,152	186.78	10,769	32,593
186.27	10,170	27,254	186.79	10,780	32,701
186.28	10,182	27,356	186.80	10,792	32,809
186.29	10,193	27,458	186.81	10,804	32,917
186.30	10,205	27,560	186.82	10,816	33,025
186.31	10,217	27,662	186.83	10,827	33,133
186.32	10,229	27,764	186.84	10,839	33,242
186.33	10,240	27,866	186.85	10,851	33,350
186.34	10,252	27,969	186.86	10,863	33,459
186.35	10,264	28,071	186.87	10,874	33,567
186.36	10,276	28,174	186.88	10,886	33,676
186.37	10,287	28,277	186.89	10,898	33,785
186.38	10,299	28,380	186.90	10,910	33,894
186.39	10,311	28,483	186.91	10,921	34,003
186.40	10,323	28,586	186.92	10,933	34,113
186.41	10,334	28,689	186.93	10,945	34,222
186.42	10,346	28,793	186.94	10,957	34,331
186.43	10,358	28,896	186.95	10,968	34,441
186.44	10,370	29,000	186.96	10,980	34,551
186.45	10,381	29,104	186.97	10,992	34,661
186.46	10,393	29,208	186.98	11,004	34,771
186.47	10,405	29,312	186.99	11,015	34,881
186.48	10,417	29,416	187.00	11,027	34,991
186.49	10,428	29,520	187.01	11,040	35,101
186.50	10,440	29,624	187.02	11,053	35,212
186.51	10,452	29,729	187.03	11,066	35,322
186.52	10,463	29,833	187.04	11,079	35,433
186.53	10,475	29,938	187.05	11,092	35,544
186.54	10,487	30,043	187.06	11,105	35,655
186.55	10,499	30,148	187.07	11,118	35,766
186.56	10,510	30,253	187.08	11,131	35,877
186.57	10,522	30,358	187.09	11,145	35,989
186.58	10,534	30,463	187.10	11,158	36,100
186.59	10,546	30,569	187.11	11,171	36,212
186.60	10,557	30,674	187.12	11,184	36,324
186.61	10,569	30,780	187.13	11,197	36,436
186.62	10,581	30,886	187.14	11,210	36,548
186.63	10,593	30,991	187.15	11,223	36,660

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.16	11,236	36,772	187.68	11,915	42,791
187.17	11,249	36,884	187.69	11,928	42,911
187.18	11,262	36,997	187.70	11,941	43,030
187.19	11,275	37,110	187.71	11,954	43,149
187.20	11,288	37,223	187.72	11,967	43,269
187.21	11,301	37,335	187.73	11,980	43,389
187.22	11,314	37,449	187.74	11,993	43,509
187.23	11,327	37,562	187.75	12,007	43,629
187.24	11,340	37,675	187.76	12,020	43,749
187.25	11,354	37,789	187.77	12,033	43,869
187.26	11,367	37,902	187.78	12,046	43,989
187.27	11,380	38,016	187.79	12,059	44,110
187.28	11,393	38,130	187.80	12,072	44,231
187.29	11,406	38,244	187.81	12,085	44,351
187.30	11,419	38,358	187.82	12,098	44,472
187.31	11,432	38,472	187.83	12,111	44,593
187.32	11,445	38,587	187.84	12,124	44,714
187.33	11,458	38,701	187.85	12,137	44,836
187.34	11,471	38,816	187.86	12,150	44,957
187.35	11,484	38,930	187.87	12,163	45,079
187.36	11,497	39,045	187.88	12,176	45,200
187.37	11,510	39,160	187.89	12,189	45,322
187.38	11,523	39,276	187.90	12,202	45,444
187.39	11,536	39,391	187.91	12,215	45,566
187.40	11,549	39,506	187.92	12,229	45,689
187.41	11,562	39,622	187.93	12,242	45,811
187.42	11,576	39,738	187.94	12,255	45,933
187.43	11,589	39,853	187.95	12,268	46,056
187.44	11,602	39,969	187.96	12,281	46,179
187.45	11,615	40,085	187.97	12,294	46,302
187.46	11,628	40,202	187.98	12,307	46,425
187.47	11,641	40,318	187.99	12,320	46,548
187.48	11,654	40,434	188.00	12,333	46,671
187.49	11,667	40,551	188.01	12,345	46,794
187.50	11,680	40,668	188.02	12,358	46,918
187.51	11,693	40,785	188.03	12,370	47,042
187.52	11,706	40,902	188.04	12,383	47,165
187.53	11,719	41,019	188.05	12,395	47,289
187.54	11,732	41,136	188.06	12,408	47,413
187.55	11,745	41,253	188.07	12,420	47,537
187.56	11,758	41,371	188.08	12,433	47,662
187.57	11,771	41,489	188.09	12,445	47,786
187.58	11,784	41,606	188.10	12,458	47,911
187.59	11,798	41,724	188.11	12,470	48,035
187.60	11,811	41,842	188.12	12,483	48,160
187.61	11,824	41,960	188.13	12,495	48,285
187.62	11,837	42,079	188.14	12,507	48,410
187.63	11,850	42,197	188.15	12,520	48,535
187.64	11,863	42,316	188.16	12,532	48,660
187.65	11,876	42,434	188.17	12,545	48,786
187.66	11,889	42,553	188.18	12,557	48,911
187.67	11,902	42,672	188.19	12,570	49,037

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.20	12,582	49,163
188.21	12,595	49,288
188.22	12,607	49,414
188.23	12,620	49,541
188.24	12,632	49,667
188.25	12,645	49,793
188.26	12,657	49,920
188.27	12,669	50,046
188.28	12,682	50,173
188.29	12,694	50,300
188.30	12,707	50,427
188.31	12,719	50,554
188.32	12,732	50,681
188.33	12,744	50,809
188.34	12,757	50,936
188.35	12,769	51,064
188.36	12,782	51,192
188.37	12,794	51,319
188.38	12,806	51,448
188.39	12,819	51,576
188.40	12,831	51,704
188.41	12,844	51,832
188.42	12,856	51,961
188.43	12,869	52,089
188.44	12,881	52,218
188.45	12,894	52,347
188.46	12,906	52,476
188.47	12,919	52,605
188.48	12,931	52,734
188.49	12,944	52,864
188.50	12,956	52,993

Summary for Pond B-50: Basin #50

Inflow Area = 2.262 ac, 29.27% Impervious, Inflow Depth = 3.81" for Future 10 yr event
 Inflow = 8.95 cfs @ 12.17 hrs, Volume= 0.717 af
 Outflow = 2.40 cfs @ 12.54 hrs, Volume= 0.583 af, Atten= 73%, Lag= 22.1 min
 Primary = 2.40 cfs @ 12.54 hrs, Volume= 0.583 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 185.61' @ 12.54 hrs Surf.Area= 10,924 sf Storage= 15,862 cf

Plug-Flow detention time= 445.0 min calculated for 0.582 af (81% of inflow)
 Center-of-Mass det. time= 366.6 min (1,166.1 - 799.4)

Volume	Invert	Avail.Storage	Storage Description
#1	184.00'	53,209 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
184.00	8,805	0	0
185.00	10,108	9,457	9,457
186.00	11,448	10,778	20,235
187.00	12,826	12,137	32,372
188.00	14,244	13,535	45,907
188.50	14,966	7,303	53,209

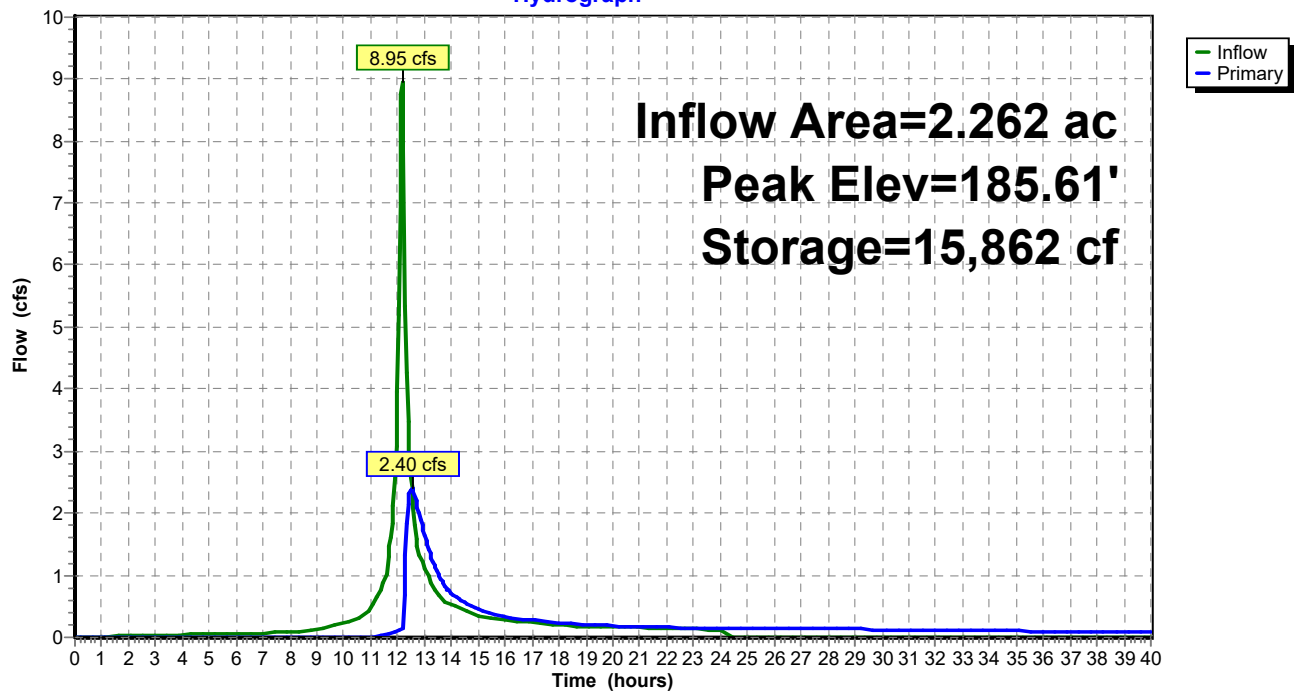
Device	Routing	Invert	Outlet Devices
#1	Primary	180.50'	18.0" Round Culvert L= 83.0' Ke= 0.500 Inlet / Outlet Invert= 180.50' / 179.67' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	184.32'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.30'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	188.45'	30.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.39 cfs @ 12.54 hrs HW=185.61' (Free Discharge)

1=Culvert (Passes 2.39 cfs of 17.20 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.18 cfs @ 5.24 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 2.21 cfs @ 1.82 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-50: Basin #50

Hydrograph



Stage-Discharge for Pond B-50: Basin #50

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
184.00	0.00	184.52	0.05	185.04	0.13	185.56	1.89
184.01	0.00	184.53	0.05	185.05	0.13	185.57	1.99
184.02	0.00	184.54	0.06	185.06	0.13	185.58	2.09
184.03	0.00	184.55	0.06	185.07	0.13	185.59	2.19
184.04	0.00	184.56	0.06	185.08	0.13	185.60	2.30
184.05	0.00	184.57	0.06	185.09	0.13	185.61	2.40
184.06	0.00	184.58	0.06	185.10	0.13	185.62	2.51
184.07	0.00	184.59	0.07	185.11	0.14	185.63	2.62
184.08	0.00	184.60	0.07	185.12	0.14	185.64	2.73
184.09	0.00	184.61	0.07	185.13	0.14	185.65	2.84
184.10	0.00	184.62	0.07	185.14	0.14	185.66	2.96
184.11	0.00	184.63	0.07	185.15	0.14	185.67	3.07
184.12	0.00	184.64	0.08	185.16	0.14	185.68	3.19
184.13	0.00	184.65	0.08	185.17	0.14	185.69	3.31
184.14	0.00	184.66	0.08	185.18	0.14	185.70	3.43
184.15	0.00	184.67	0.08	185.19	0.14	185.71	3.55
184.16	0.00	184.68	0.08	185.20	0.14	185.72	3.67
184.17	0.00	184.69	0.08	185.21	0.15	185.73	3.80
184.18	0.00	184.70	0.09	185.22	0.15	185.74	3.92
184.19	0.00	184.71	0.09	185.23	0.15	185.75	4.05
184.20	0.00	184.72	0.09	185.24	0.15	185.76	4.18
184.21	0.00	184.73	0.09	185.25	0.15	185.77	4.31
184.22	0.00	184.74	0.09	185.26	0.15	185.78	4.44
184.23	0.00	184.75	0.09	185.27	0.15	185.79	4.57
184.24	0.00	184.76	0.10	185.28	0.15	185.80	4.70
184.25	0.00	184.77	0.10	185.29	0.15	185.81	4.84
184.26	0.00	184.78	0.10	185.30	0.15	185.82	4.97
184.27	0.00	184.79	0.10	185.31	0.17	185.83	5.11
184.28	0.00	184.80	0.10	185.32	0.19	185.84	5.25
184.29	0.00	184.81	0.10	185.33	0.22	185.85	5.38
184.30	0.00	184.82	0.10	185.34	0.26	185.86	5.52
184.31	0.00	184.83	0.10	185.35	0.30	185.87	5.67
184.32	0.00	184.84	0.11	185.36	0.35	185.88	5.81
184.33	0.00	184.85	0.11	185.37	0.40	185.89	5.95
184.34	0.00	184.86	0.11	185.38	0.46	185.90	6.10
184.35	0.00	184.87	0.11	185.39	0.51	185.91	6.24
184.36	0.00	184.88	0.11	185.40	0.57	185.92	6.39
184.37	0.00	184.89	0.11	185.41	0.64	185.93	6.54
184.38	0.01	184.90	0.11	185.42	0.70	185.94	6.68
184.39	0.01	184.91	0.11	185.43	0.77	185.95	6.83
184.40	0.01	184.92	0.12	185.44	0.85	185.96	6.99
184.41	0.01	184.93	0.12	185.45	0.92	185.97	7.14
184.42	0.02	184.94	0.12	185.46	1.00	185.98	7.29
184.43	0.02	184.95	0.12	185.47	1.08	185.99	7.44
184.44	0.02	184.96	0.12	185.48	1.16	186.00	7.60
184.45	0.03	184.97	0.12	185.49	1.24	186.01	7.75
184.46	0.03	184.98	0.12	185.50	1.33	186.02	7.91
184.47	0.03	184.99	0.12	185.51	1.42	186.03	8.07
184.48	0.04	185.00	0.12	185.52	1.51	186.04	8.23
184.49	0.04	185.01	0.13	185.53	1.60	186.05	8.39
184.50	0.05	185.02	0.13	185.54	1.69	186.06	8.55
184.51	0.05	185.03	0.13	185.55	1.79	186.07	8.71

Stage-Discharge for Pond B-50: Basin #50 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.08	8.87	186.60	18.37	187.12	19.91	187.64	20.76
186.09	9.03	186.61	18.57	187.13	19.93	187.65	20.78
186.10	9.20	186.62	18.77	187.14	19.95	187.66	20.80
186.11	9.36	186.63	18.97	187.15	19.96	187.67	20.81
186.12	9.53	186.64	19.09	187.16	19.98	187.68	20.83
186.13	9.69	186.65	19.11	187.17	20.00	187.69	20.84
186.14	9.86	186.66	19.13	187.18	20.01	187.70	20.86
186.15	10.03	186.67	19.14	187.19	20.03	187.71	20.88
186.16	10.20	186.68	19.16	187.20	20.05	187.72	20.89
186.17	10.37	186.69	19.18	187.21	20.06	187.73	20.91
186.18	10.54	186.70	19.20	187.22	20.08	187.74	20.92
186.19	10.71	186.71	19.21	187.23	20.10	187.75	20.94
186.20	10.88	186.72	19.23	187.24	20.11	187.76	20.96
186.21	11.06	186.73	19.25	187.25	20.13	187.77	20.97
186.22	11.23	186.74	19.27	187.26	20.15	187.78	20.99
186.23	11.41	186.75	19.28	187.27	20.16	187.79	21.00
186.24	11.58	186.76	19.30	187.28	20.18	187.80	21.02
186.25	11.76	186.77	19.32	187.29	20.19	187.81	21.04
186.26	11.93	186.78	19.33	187.30	20.21	187.82	21.05
186.27	12.11	186.79	19.35	187.31	20.23	187.83	21.07
186.28	12.29	186.80	19.37	187.32	20.24	187.84	21.08
186.29	12.47	186.81	19.39	187.33	20.26	187.85	21.10
186.30	12.65	186.82	19.40	187.34	20.28	187.86	21.11
186.31	12.83	186.83	19.42	187.35	20.29	187.87	21.13
186.32	13.01	186.84	19.44	187.36	20.31	187.88	21.15
186.33	13.20	186.85	19.46	187.37	20.33	187.89	21.16
186.34	13.38	186.86	19.47	187.38	20.34	187.90	21.18
186.35	13.56	186.87	19.49	187.39	20.36	187.91	21.19
186.36	13.75	186.88	19.51	187.40	20.38	187.92	21.21
186.37	13.93	186.89	19.52	187.41	20.39	187.93	21.22
186.38	14.12	186.90	19.54	187.42	20.41	187.94	21.24
186.39	14.30	186.91	19.56	187.43	20.42	187.95	21.26
186.40	14.49	186.92	19.57	187.44	20.44	187.96	21.27
186.41	14.68	186.93	19.59	187.45	20.46	187.97	21.29
186.42	14.87	186.94	19.61	187.46	20.47	187.98	21.30
186.43	15.06	186.95	19.63	187.47	20.49	187.99	21.32
186.44	15.25	186.96	19.64	187.48	20.51	188.00	21.33
186.45	15.44	186.97	19.66	187.49	20.52	188.01	21.35
186.46	15.63	186.98	19.68	187.50	20.54	188.02	21.37
186.47	15.82	186.99	19.69	187.51	20.55	188.03	21.38
186.48	16.01	187.00	19.71	187.52	20.57	188.04	21.40
186.49	16.21	187.01	19.73	187.53	20.59	188.05	21.41
186.50	16.40	187.02	19.74	187.54	20.60	188.06	21.43
186.51	16.59	187.03	19.76	187.55	20.62	188.07	21.44
186.52	16.79	187.04	19.78	187.56	20.64	188.08	21.46
186.53	16.98	187.05	19.79	187.57	20.65	188.09	21.47
186.54	17.18	187.06	19.81	187.58	20.67	188.10	21.49
186.55	17.38	187.07	19.83	187.59	20.68	188.11	21.51
186.56	17.57	187.08	19.85	187.60	20.70	188.12	21.52
186.57	17.77	187.09	19.86	187.61	20.72	188.13	21.54
186.58	17.97	187.10	19.88	187.62	20.73	188.14	21.55
186.59	18.17	187.11	19.90	187.63	20.75	188.15	21.57

Stage-Discharge for Pond B-50: Basin #50 (continued)

Elevation (feet)	Primary (cfs)
188.16	21.58
188.17	21.60
188.18	21.61
188.19	21.63
188.20	21.64
188.21	21.66
188.22	21.67
188.23	21.69
188.24	21.71
188.25	21.72
188.26	21.74
188.27	21.75
188.28	21.77
188.29	21.78
188.30	21.80
188.31	21.81
188.32	21.83
188.33	21.84
188.34	21.86
188.35	21.87
188.36	21.89
188.37	21.90
188.38	21.92
188.39	21.93
188.40	21.95
188.41	21.97
188.42	21.98
188.43	22.00
188.44	22.01
188.45	22.03
188.46	22.11
188.47	22.25
188.48	22.44
188.49	22.65
188.50	22.89

Stage-Area-Storage for Pond B-50: Basin #50

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.00	8,805	0	184.52	9,483	4,755
184.01	8,818	88	184.53	9,496	4,850
184.02	8,831	176	184.54	9,509	4,945
184.03	8,844	265	184.55	9,522	5,040
184.04	8,857	353	184.56	9,535	5,135
184.05	8,870	442	184.57	9,548	5,231
184.06	8,883	531	184.58	9,561	5,326
184.07	8,896	620	184.59	9,574	5,422
184.08	8,909	709	184.60	9,587	5,518
184.09	8,922	798	184.61	9,600	5,613
184.10	8,935	887	184.62	9,613	5,710
184.11	8,948	976	184.63	9,626	5,806
184.12	8,961	1,066	184.64	9,639	5,902
184.13	8,974	1,156	184.65	9,652	5,999
184.14	8,987	1,245	184.66	9,665	6,095
184.15	9,000	1,335	184.67	9,678	6,192
184.16	9,013	1,425	184.68	9,691	6,289
184.17	9,027	1,516	184.69	9,704	6,386
184.18	9,040	1,606	184.70	9,717	6,483
184.19	9,053	1,696	184.71	9,730	6,580
184.20	9,066	1,787	184.72	9,743	6,677
184.21	9,079	1,878	184.73	9,756	6,775
184.22	9,092	1,969	184.74	9,769	6,872
184.23	9,105	2,060	184.75	9,782	6,970
184.24	9,118	2,151	184.76	9,795	7,068
184.25	9,131	2,242	184.77	9,808	7,166
184.26	9,144	2,333	184.78	9,821	7,264
184.27	9,157	2,425	184.79	9,834	7,363
184.28	9,170	2,516	184.80	9,847	7,461
184.29	9,183	2,608	184.81	9,860	7,559
184.30	9,196	2,700	184.82	9,873	7,658
184.31	9,209	2,792	184.83	9,886	7,757
184.32	9,222	2,884	184.84	9,900	7,856
184.33	9,235	2,977	184.85	9,913	7,955
184.34	9,248	3,069	184.86	9,926	8,054
184.35	9,261	3,162	184.87	9,939	8,153
184.36	9,274	3,254	184.88	9,952	8,253
184.37	9,287	3,347	184.89	9,965	8,353
184.38	9,300	3,440	184.90	9,978	8,452
184.39	9,313	3,533	184.91	9,991	8,552
184.40	9,326	3,626	184.92	10,004	8,652
184.41	9,339	3,720	184.93	10,017	8,752
184.42	9,352	3,813	184.94	10,030	8,852
184.43	9,365	3,907	184.95	10,043	8,953
184.44	9,378	4,000	184.96	10,056	9,053
184.45	9,391	4,094	184.97	10,069	9,154
184.46	9,404	4,188	184.98	10,082	9,255
184.47	9,417	4,282	184.99	10,095	9,355
184.48	9,430	4,377	185.00	10,108	9,457
184.49	9,443	4,471	185.01	10,121	9,558
184.50	9,457	4,565	185.02	10,135	9,659
184.51	9,470	4,660	185.03	10,148	9,760

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.04	10,162	9,862	185.56	10,858	15,327
185.05	10,175	9,964	185.57	10,872	15,436
185.06	10,188	10,065	185.58	10,885	15,545
185.07	10,202	10,167	185.59	10,899	15,653
185.08	10,215	10,269	185.60	10,912	15,762
185.09	10,229	10,372	185.61	10,925	15,872
185.10	10,242	10,474	185.62	10,939	15,981
185.11	10,255	10,576	185.63	10,952	16,090
185.12	10,269	10,679	185.64	10,966	16,200
185.13	10,282	10,782	185.65	10,979	16,310
185.14	10,296	10,885	185.66	10,992	16,420
185.15	10,309	10,988	185.67	11,006	16,530
185.16	10,322	11,091	185.68	11,019	16,640
185.17	10,336	11,194	185.69	11,033	16,750
185.18	10,349	11,298	185.70	11,046	16,860
185.19	10,363	11,401	185.71	11,059	16,971
185.20	10,376	11,505	185.72	11,073	17,082
185.21	10,389	11,609	185.73	11,086	17,192
185.22	10,403	11,713	185.74	11,100	17,303
185.23	10,416	11,817	185.75	11,113	17,414
185.24	10,430	11,921	185.76	11,126	17,526
185.25	10,443	12,025	185.77	11,140	17,637
185.26	10,456	12,130	185.78	11,153	17,748
185.27	10,470	12,235	185.79	11,167	17,860
185.28	10,483	12,339	185.80	11,180	17,972
185.29	10,497	12,444	185.81	11,193	18,084
185.30	10,510	12,549	185.82	11,207	18,196
185.31	10,523	12,654	185.83	11,220	18,308
185.32	10,537	12,760	185.84	11,234	18,420
185.33	10,550	12,865	185.85	11,247	18,532
185.34	10,564	12,971	185.86	11,260	18,645
185.35	10,577	13,076	185.87	11,274	18,758
185.36	10,590	13,182	185.88	11,287	18,870
185.37	10,604	13,288	185.89	11,301	18,983
185.38	10,617	13,394	185.90	11,314	19,096
185.39	10,631	13,501	185.91	11,327	19,210
185.40	10,644	13,607	185.92	11,341	19,323
185.41	10,657	13,713	185.93	11,354	19,436
185.42	10,671	13,820	185.94	11,368	19,550
185.43	10,684	13,927	185.95	11,381	19,664
185.44	10,698	14,034	185.96	11,394	19,778
185.45	10,711	14,141	185.97	11,408	19,892
185.46	10,724	14,248	185.98	11,421	20,006
185.47	10,738	14,355	185.99	11,435	20,120
185.48	10,751	14,463	186.00	11,448	20,235
185.49	10,765	14,570	186.01	11,462	20,349
185.50	10,778	14,678	186.02	11,476	20,464
185.51	10,791	14,786	186.03	11,489	20,579
185.52	10,805	14,894	186.04	11,503	20,694
185.53	10,818	15,002	186.05	11,517	20,809
185.54	10,832	15,110	186.06	11,531	20,924
185.55	10,845	15,219	186.07	11,544	21,039

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.08	11,558	21,155	186.60	12,275	27,351
186.09	11,572	21,270	186.61	12,289	27,474
186.10	11,586	21,386	186.62	12,302	27,597
186.11	11,600	21,502	186.63	12,316	27,720
186.12	11,613	21,618	186.64	12,330	27,843
186.13	11,627	21,734	186.65	12,344	27,967
186.14	11,641	21,851	186.66	12,357	28,090
186.15	11,655	21,967	186.67	12,371	28,214
186.16	11,668	22,084	186.68	12,385	28,338
186.17	11,682	22,201	186.69	12,399	28,462
186.18	11,696	22,317	186.70	12,413	28,586
186.19	11,710	22,434	186.71	12,426	28,710
186.20	11,724	22,552	186.72	12,440	28,834
186.21	11,737	22,669	186.73	12,454	28,959
186.22	11,751	22,786	186.74	12,468	29,083
186.23	11,765	22,904	186.75	12,482	29,208
186.24	11,779	23,022	186.76	12,495	29,333
186.25	11,793	23,140	186.77	12,509	29,458
186.26	11,806	23,258	186.78	12,523	29,583
186.27	11,820	23,376	186.79	12,537	29,708
186.28	11,834	23,494	186.80	12,550	29,834
186.29	11,848	23,612	186.81	12,564	29,959
186.30	11,861	23,731	186.82	12,578	30,085
186.31	11,875	23,850	186.83	12,592	30,211
186.32	11,889	23,968	186.84	12,606	30,337
186.33	11,903	24,087	186.85	12,619	30,463
186.34	11,917	24,206	186.86	12,633	30,589
186.35	11,930	24,326	186.87	12,647	30,716
186.36	11,944	24,445	186.88	12,661	30,842
186.37	11,958	24,565	186.89	12,674	30,969
186.38	11,972	24,684	186.90	12,688	31,096
186.39	11,985	24,804	186.91	12,702	31,223
186.40	11,999	24,924	186.92	12,716	31,350
186.41	12,013	25,044	186.93	12,730	31,477
186.42	12,027	25,164	186.94	12,743	31,604
186.43	12,041	25,285	186.95	12,757	31,732
186.44	12,054	25,405	186.96	12,771	31,860
186.45	12,068	25,526	186.97	12,785	31,987
186.46	12,082	25,646	186.98	12,798	32,115
186.47	12,096	25,767	186.99	12,812	32,243
186.48	12,109	25,888	187.00	12,826	32,372
186.49	12,123	26,009	187.01	12,840	32,500
186.50	12,137	26,131	187.02	12,854	32,628
186.51	12,151	26,252	187.03	12,869	32,757
186.52	12,165	26,374	187.04	12,883	32,886
186.53	12,178	26,495	187.05	12,897	33,015
186.54	12,192	26,617	187.06	12,911	33,144
186.55	12,206	26,739	187.07	12,925	33,273
186.56	12,220	26,861	187.08	12,939	33,402
186.57	12,233	26,984	187.09	12,954	33,532
186.58	12,247	27,106	187.10	12,968	33,661
186.59	12,261	27,229	187.11	12,982	33,791

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.12	12,996	33,921	187.64	13,734	40,871
187.13	13,010	34,051	187.65	13,748	41,008
187.14	13,025	34,181	187.66	13,762	41,146
187.15	13,039	34,311	187.67	13,776	41,283
187.16	13,053	34,442	187.68	13,790	41,421
187.17	13,067	34,572	187.69	13,804	41,559
187.18	13,081	34,703	187.70	13,819	41,697
187.19	13,095	34,834	187.71	13,833	41,835
187.20	13,110	34,965	187.72	13,847	41,974
187.21	13,124	35,096	187.73	13,861	42,112
187.22	13,138	35,228	187.74	13,875	42,251
187.23	13,152	35,359	187.75	13,890	42,390
187.24	13,166	35,491	187.76	13,904	42,529
187.25	13,181	35,622	187.77	13,918	42,668
187.26	13,195	35,754	187.78	13,932	42,807
187.27	13,209	35,886	187.79	13,946	42,947
187.28	13,223	36,018	187.80	13,960	43,086
187.29	13,237	36,151	187.81	13,975	43,226
187.30	13,251	36,283	187.82	13,989	43,366
187.31	13,266	36,416	187.83	14,003	43,506
187.32	13,280	36,548	187.84	14,017	43,646
187.33	13,294	36,681	187.85	14,031	43,786
187.34	13,308	36,814	187.86	14,045	43,926
187.35	13,322	36,947	187.87	14,060	44,067
187.36	13,336	37,081	187.88	14,074	44,207
187.37	13,351	37,214	187.89	14,088	44,348
187.38	13,365	37,348	187.90	14,102	44,489
187.39	13,379	37,481	187.91	14,116	44,630
187.40	13,393	37,615	187.92	14,131	44,772
187.41	13,407	37,749	187.93	14,145	44,913
187.42	13,422	37,883	187.94	14,159	45,054
187.43	13,436	38,018	187.95	14,173	45,196
187.44	13,450	38,152	187.96	14,187	45,338
187.45	13,464	38,287	187.97	14,201	45,480
187.46	13,478	38,421	187.98	14,216	45,622
187.47	13,492	38,556	187.99	14,230	45,764
187.48	13,507	38,691	188.00	14,244	45,907
187.49	13,521	38,826	188.01	14,258	46,049
187.50	13,535	38,962	188.02	14,273	46,192
187.51	13,549	39,097	188.03	14,287	46,334
187.52	13,563	39,233	188.04	14,302	46,477
187.53	13,578	39,368	188.05	14,316	46,621
187.54	13,592	39,504	188.06	14,331	46,764
187.55	13,606	39,640	188.07	14,345	46,907
187.56	13,620	39,776	188.08	14,360	47,051
187.57	13,634	39,913	188.09	14,374	47,194
187.58	13,648	40,049	188.10	14,388	47,338
187.59	13,663	40,186	188.11	14,403	47,482
187.60	13,677	40,322	188.12	14,417	47,626
187.61	13,691	40,459	188.13	14,432	47,770
187.62	13,705	40,596	188.14	14,446	47,915
187.63	13,719	40,733	188.15	14,461	48,059

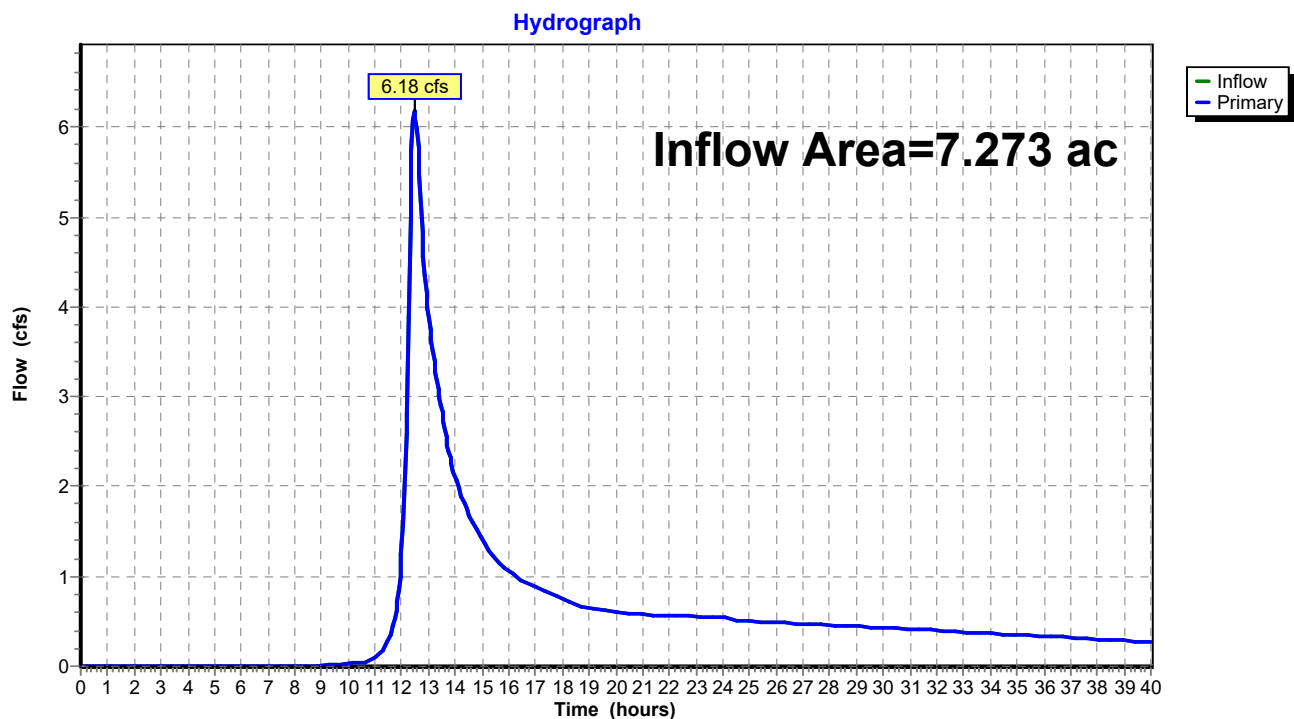
Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.16	14,475	48,204
188.17	14,489	48,349
188.18	14,504	48,494
188.19	14,518	48,639
188.20	14,533	48,784
188.21	14,547	48,930
188.22	14,562	49,075
188.23	14,576	49,221
188.24	14,591	49,367
188.25	14,605	49,513
188.26	14,619	49,659
188.27	14,634	49,805
188.28	14,648	49,951
188.29	14,663	50,098
188.30	14,677	50,245
188.31	14,692	50,392
188.32	14,706	50,539
188.33	14,721	50,686
188.34	14,735	50,833
188.35	14,749	50,980
188.36	14,764	51,128
188.37	14,778	51,276
188.38	14,793	51,423
188.39	14,807	51,571
188.40	14,822	51,720
188.41	14,836	51,868
188.42	14,850	52,016
188.43	14,865	52,165
188.44	14,879	52,314
188.45	14,894	52,463
188.46	14,908	52,612
188.47	14,923	52,761
188.48	14,937	52,910
188.49	14,952	53,059
188.50	14,966	53,209

Summary for Link PDA-5: Proposed Drainage Area #5

Inflow Area = 7.273 ac, 32.33% Impervious, Inflow Depth > 3.05" for Future 10 yr event
Inflow = 6.18 cfs @ 12.45 hrs, Volume= 1.851 af
Primary = 6.18 cfs @ 12.45 hrs, Volume= 1.851 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-5: Proposed Drainage Area #5

Summary for Subcatchment 48I: PDA-48 (impervious)

Runoff = 7.97 cfs @ 12.17 hrs, Volume= 0.711 af, Depth=10.99"
 Routed to Pond B-48 : Basin #48

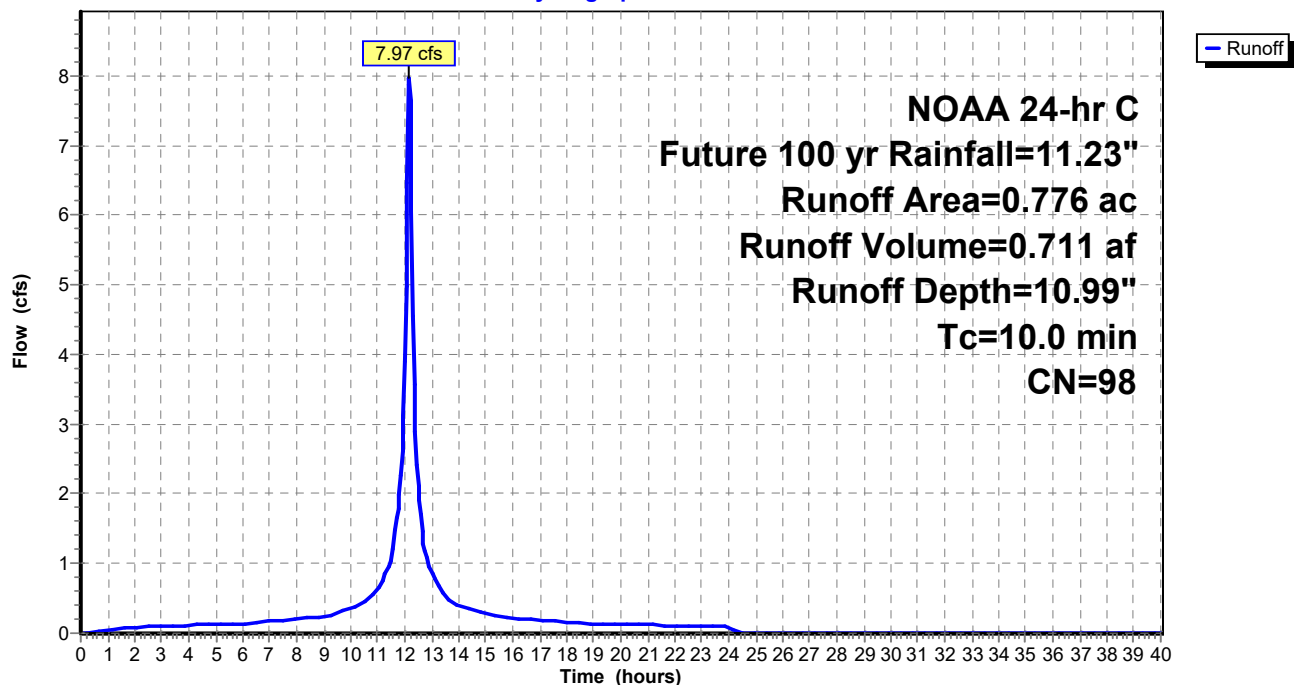
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
* 0.235	98	Pavement, HSG C
* 0.522	98	Roof, HSG C
* 0.019	98	Concrete, HSG C
0.776	98	Weighted Average
0.776		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 48I: PDA-48 (impervious)

Hydrograph



Summary for Subcatchment 48P: PDA-48 (pervious)

Runoff = 12.70 cfs @ 12.17 hrs, Volume= 0.979 af, Depth= 7.89"
 Routed to Pond B-48 : Basin #48

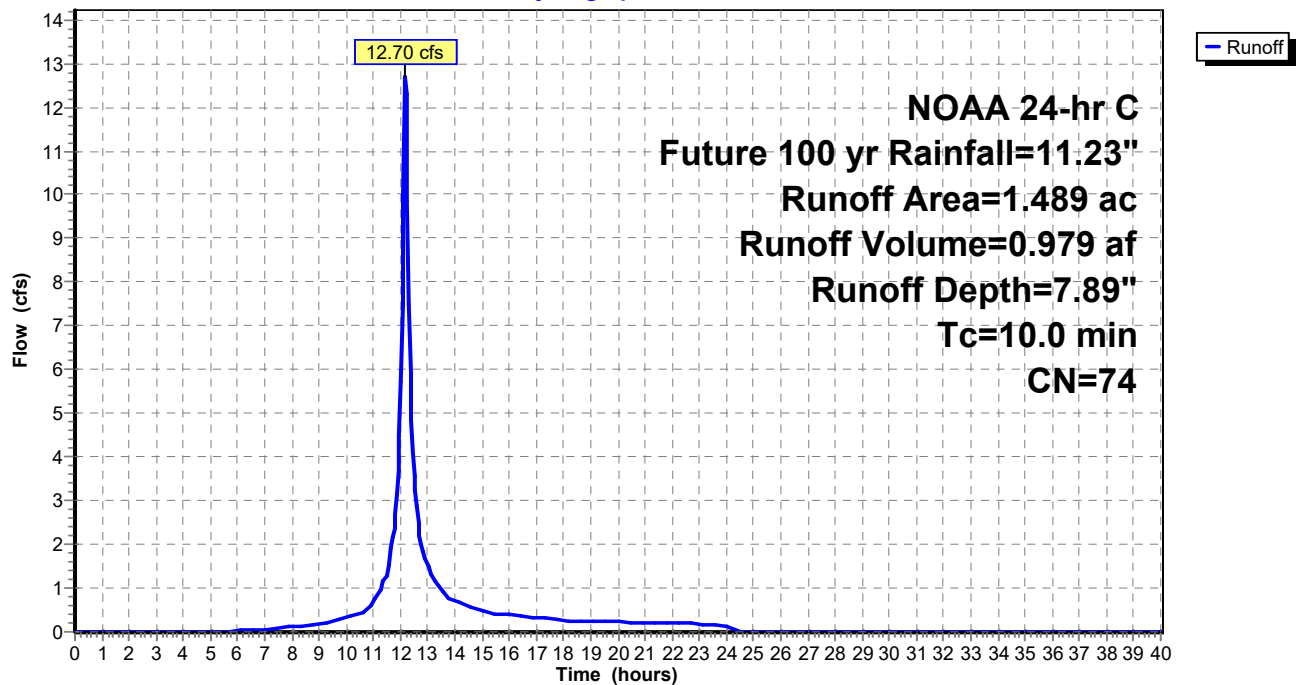
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.489	74	>75% Grass cover, Good, HSG C
1.489		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 48P: PDA-48 (pervious)

Hydrograph



Summary for Subcatchment 49I: PDA-49 (impervious)

Runoff = 9.38 cfs @ 12.17 hrs, Volume= 0.836 af, Depth=10.99"
 Routed to Pond B-49 : Basin #49

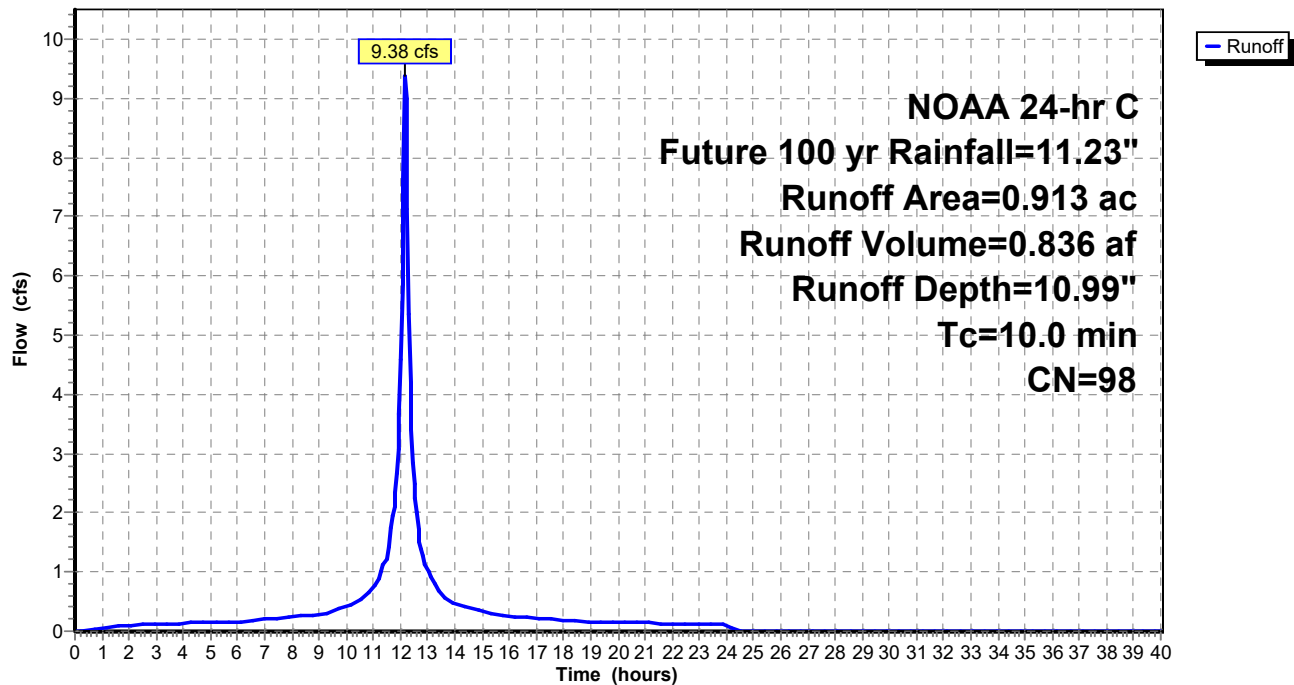
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
* 0.434	98	Pavement, HSG C
* 0.418	98	Roof, HSG C
* 0.061	98	Concrete, HSG C
0.913	98	Weighted Average
0.913		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 49I: PDA-49 (impervious)

Hydrograph



Summary for Subcatchment 49P: PDA-49 (pervious)

Runoff = 10.04 cfs @ 12.17 hrs, Volume= 0.774 af, Depth= 7.89"
 Routed to Pond B-49 : Basin #49

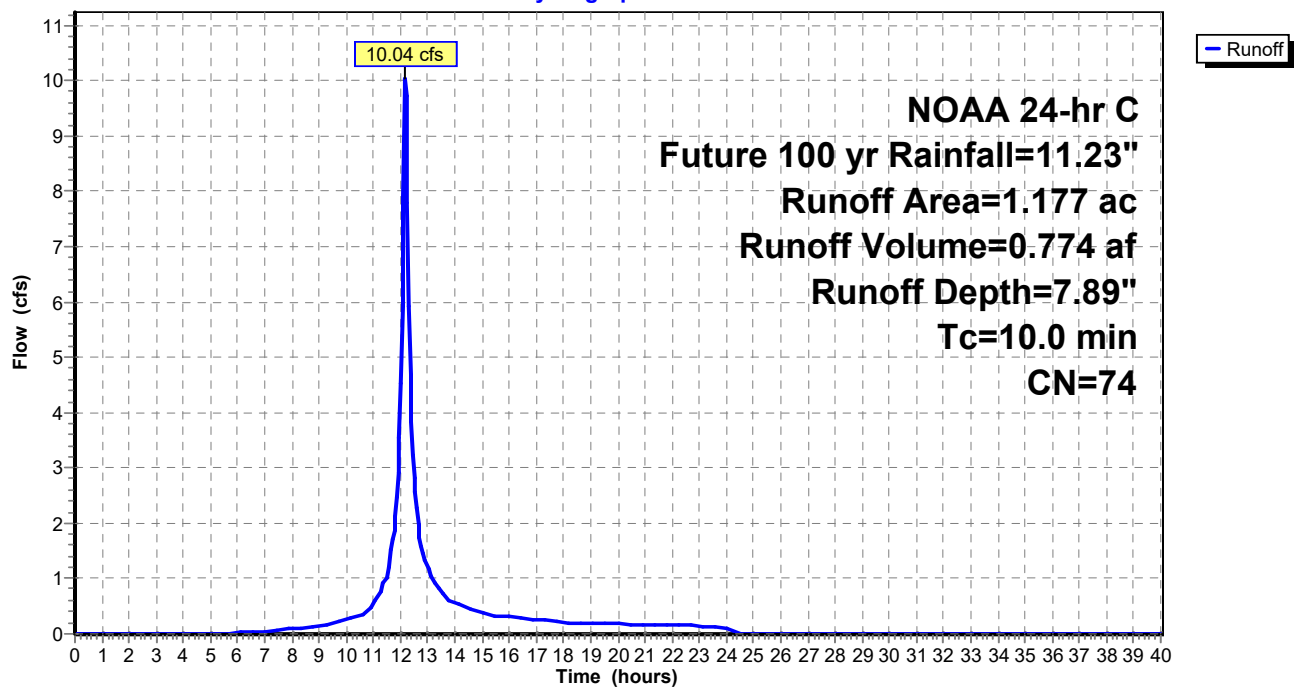
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.177	74	>75% Grass cover, Good, HSG C
1.177		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 49P: PDA-49 (pervious)

Hydrograph



Summary for Subcatchment 50I: PDA-50 (impervious)

Runoff = 6.80 cfs @ 12.17 hrs, Volume= 0.606 af, Depth=10.99"
 Routed to Pond B-50 : Basin #50

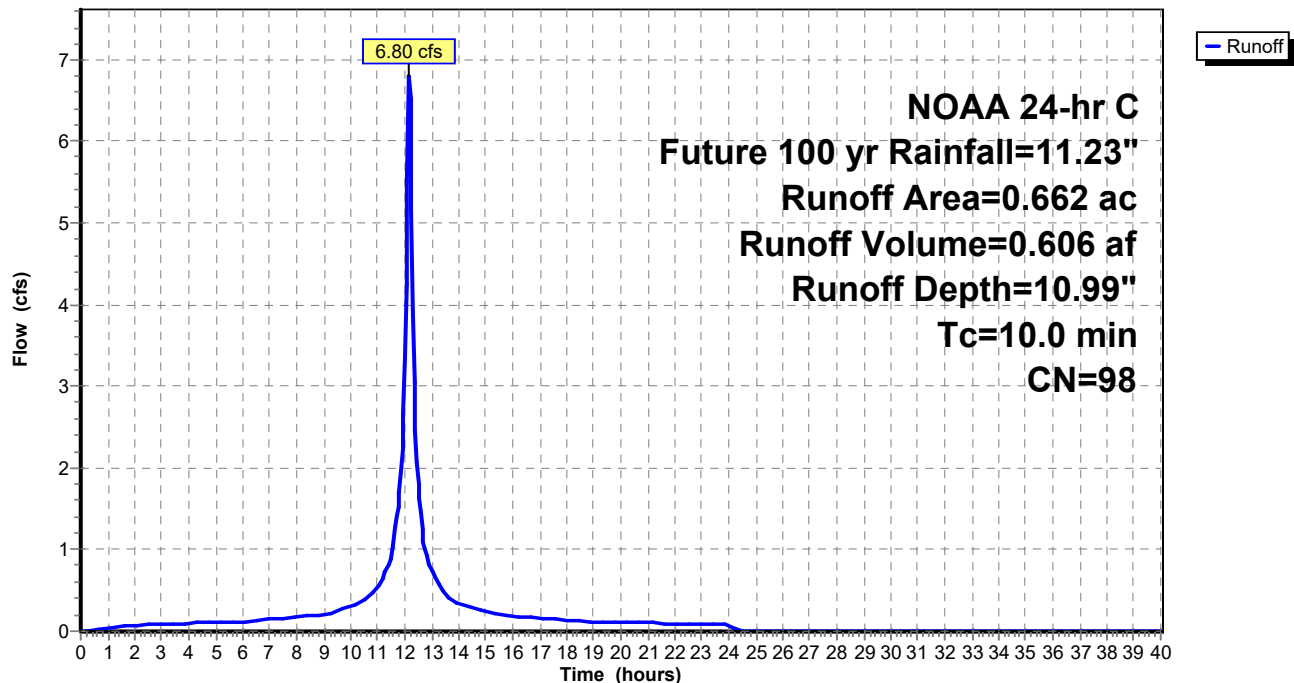
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
* 0.291	98	Pavement, HSG C
* 0.325	98	Roof, HSG C
* 0.046	98	Concrete, HSG C
0.662	98	Weighted Average
0.662		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 50I: PDA-50 (impervious)

Hydrograph



Summary for Subcatchment 50P: PDA-50 (pervious)

Runoff = 13.65 cfs @ 12.17 hrs, Volume= 1.052 af, Depth= 7.89"
 Routed to Pond B-50 : Basin #50

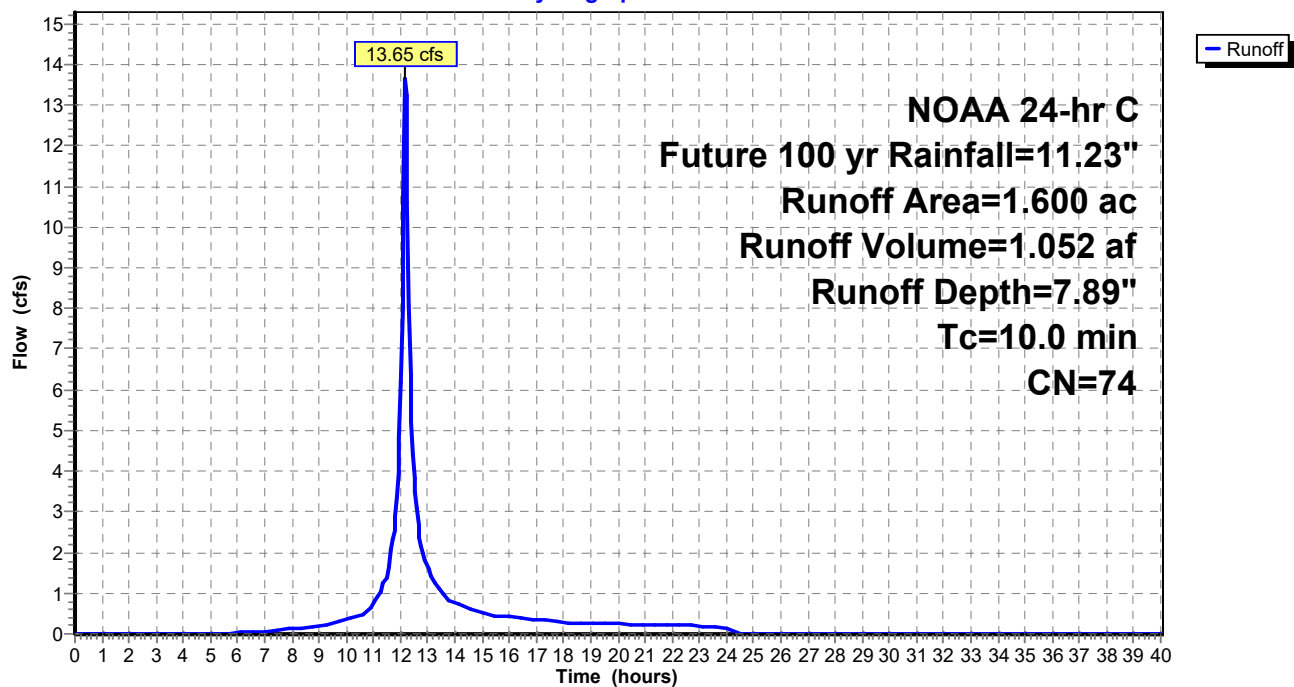
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.600	74	>75% Grass cover, Good, HSG C
1.600		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 50P: PDA-50 (pervious)

Hydrograph



Summary for Subcatchment UPDA-5: PDA-5 (undetained)

Runoff = 5.60 cfs @ 12.17 hrs, Volume= 0.431 af, Depth= 7.89"
 Routed to Link PDA-5 : Proposed Drainage Area #5

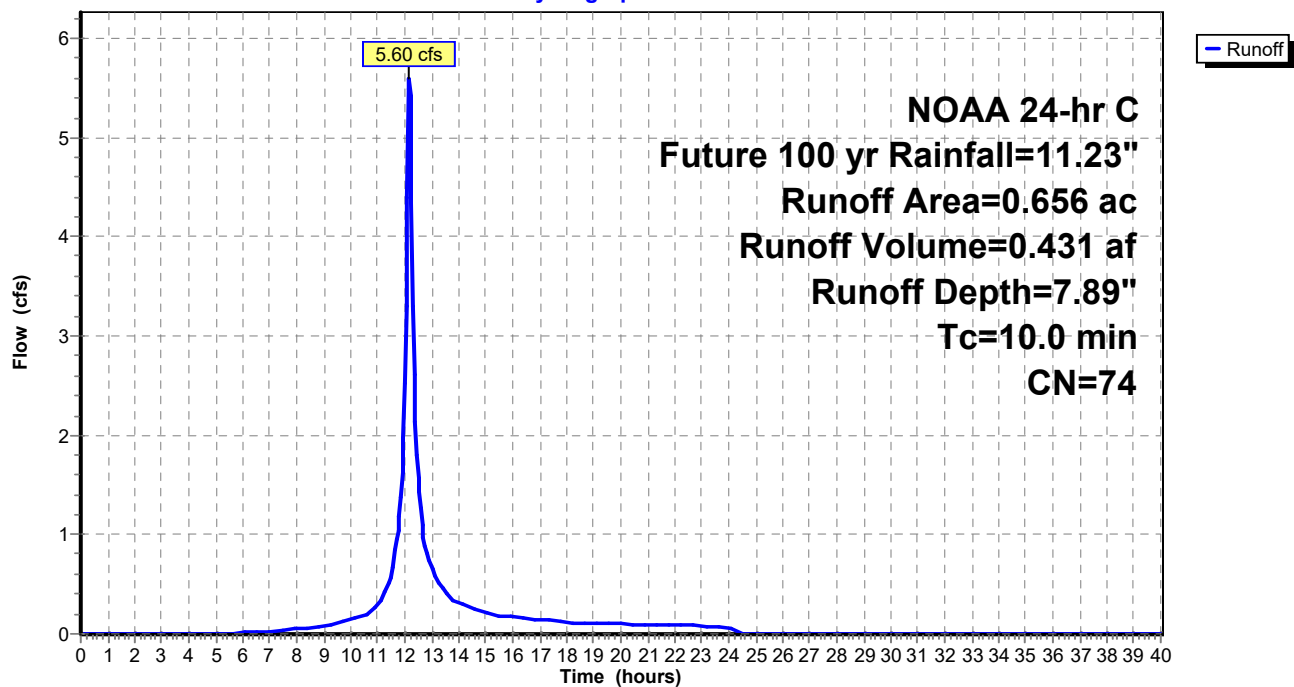
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.656	74	>75% Grass cover, Good, HSG C
0.656		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment UPDA-5: PDA-5 (undetained)

Hydrograph



Summary for Pond B-48: Basin #48

Inflow Area = 2.265 ac, 34.26% Impervious, Inflow Depth = 8.95" for Future 100 yr event
 Inflow = 20.67 cfs @ 12.17 hrs, Volume= 1.690 af
 Outflow = 11.54 cfs @ 12.32 hrs, Volume= 1.438 af, Atten= 44%, Lag= 8.7 min
 Primary = 11.54 cfs @ 12.32 hrs, Volume= 1.438 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 193.94' @ 12.32 hrs Surf.Area= 12,644 sf Storage= 31,469 cf

Plug-Flow detention time= 310.1 min calculated for 1.437 af (85% of inflow)
 Center-of-Mass det. time= 243.6 min (1,024.6 - 780.9)

Volume	Invert	Avail.Storage	Storage Description
#1	191.00'	32,287 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.00	8,869	0	0
192.00	10,100	9,485	9,485
193.00	11,387	10,744	20,228
194.00	12,731	12,059	32,287

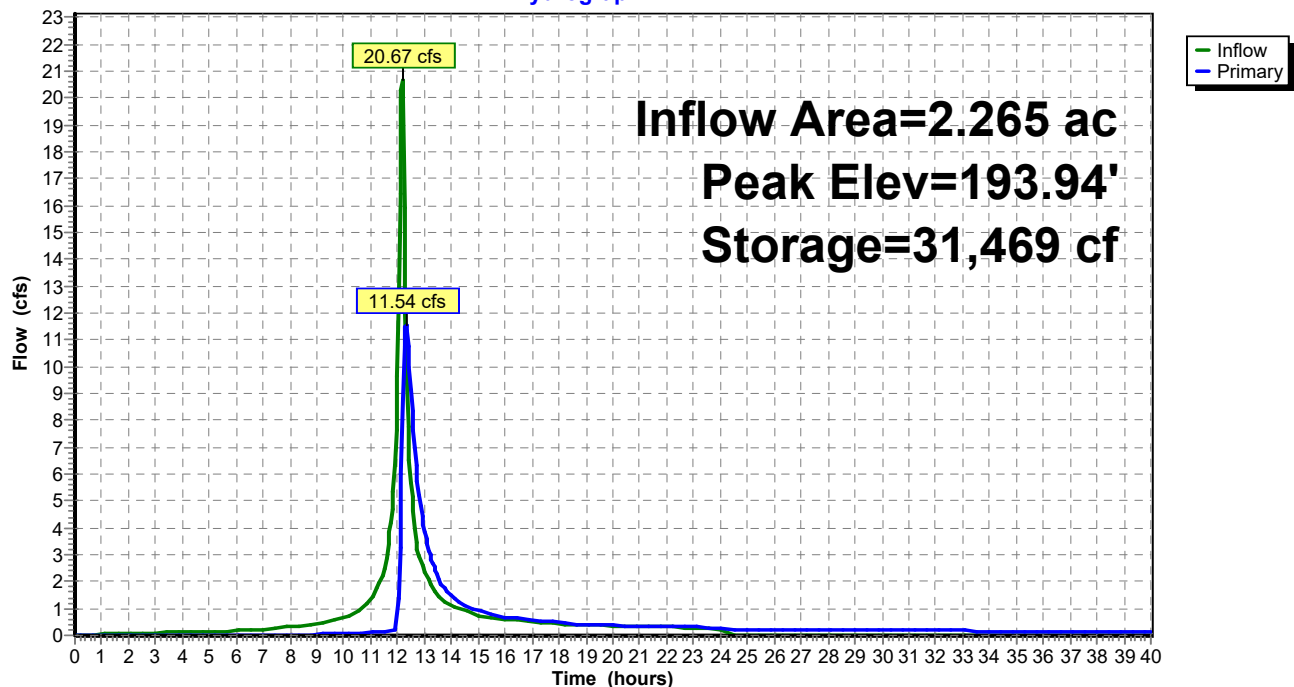
Device	Routing	Invert	Outlet Devices
#1	Primary	191.00'	18.0" Round Culvert L= 185.0' Ke= 0.500 Inlet / Outlet Invert= 191.00' / 188.45' S= 0.0138 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	191.40'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	193.99'	50.0' long + 3.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=11.44 cfs @ 12.32 hrs HW=193.93' (Free Discharge)

1=Culvert (Passes 11.44 cfs of 12.56 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.26 cfs @ 7.50 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 11.19 cfs @ 3.15 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-48: Basin #48

Hydrograph



Stage-Discharge for Pond B-48: Basin #48

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.00	0.00	191.52	0.02	192.04	0.12	192.56	0.17
191.01	0.00	191.53	0.03	192.05	0.12	192.57	0.17
191.02	0.00	191.54	0.03	192.06	0.12	192.58	0.17
191.03	0.00	191.55	0.03	192.07	0.12	192.59	0.17
191.04	0.00	191.56	0.04	192.08	0.12	192.60	0.17
191.05	0.00	191.57	0.04	192.09	0.13	192.61	0.17
191.06	0.00	191.58	0.05	192.10	0.13	192.62	0.17
191.07	0.00	191.59	0.05	192.11	0.13	192.63	0.17
191.08	0.00	191.60	0.05	192.12	0.13	192.64	0.17
191.09	0.00	191.61	0.05	192.13	0.13	192.65	0.18
191.10	0.00	191.62	0.06	192.14	0.13	192.66	0.18
191.11	0.00	191.63	0.06	192.15	0.13	192.67	0.18
191.12	0.00	191.64	0.06	192.16	0.13	192.68	0.18
191.13	0.00	191.65	0.06	192.17	0.13	192.69	0.18
191.14	0.00	191.66	0.06	192.18	0.13	192.70	0.18
191.15	0.00	191.67	0.07	192.19	0.14	192.71	0.18
191.16	0.00	191.68	0.07	192.20	0.14	192.72	0.18
191.17	0.00	191.69	0.07	192.21	0.14	192.73	0.18
191.18	0.00	191.70	0.07	192.22	0.14	192.74	0.18
191.19	0.00	191.71	0.07	192.23	0.14	192.75	0.18
191.20	0.00	191.72	0.08	192.24	0.14	192.76	0.18
191.21	0.00	191.73	0.08	192.25	0.14	192.77	0.18
191.22	0.00	191.74	0.08	192.26	0.14	192.78	0.19
191.23	0.00	191.75	0.08	192.27	0.14	192.79	0.19
191.24	0.00	191.76	0.08	192.28	0.14	192.80	0.19
191.25	0.00	191.77	0.08	192.29	0.15	192.81	0.19
191.26	0.00	191.78	0.09	192.30	0.15	192.82	0.19
191.27	0.00	191.79	0.09	192.31	0.15	192.83	0.19
191.28	0.00	191.80	0.09	192.32	0.15	192.84	0.19
191.29	0.00	191.81	0.09	192.33	0.15	192.85	0.19
191.30	0.00	191.82	0.09	192.34	0.15	192.86	0.19
191.31	0.00	191.83	0.09	192.35	0.15	192.87	0.19
191.32	0.00	191.84	0.10	192.36	0.15	192.88	0.19
191.33	0.00	191.85	0.10	192.37	0.15	192.89	0.19
191.34	0.00	191.86	0.10	192.38	0.15	192.90	0.19
191.35	0.00	191.87	0.10	192.39	0.15	192.91	0.19
191.36	0.00	191.88	0.10	192.40	0.16	192.92	0.20
191.37	0.00	191.89	0.10	192.41	0.16	192.93	0.20
191.38	0.00	191.90	0.10	192.42	0.16	192.94	0.20
191.39	0.00	191.91	0.10	192.43	0.16	192.95	0.20
191.40	0.00	191.92	0.11	192.44	0.16	192.96	0.20
191.41	0.00	191.93	0.11	192.45	0.16	192.97	0.20
191.42	0.00	191.94	0.11	192.46	0.16	192.98	0.20
191.43	0.00	191.95	0.11	192.47	0.16	192.99	0.20
191.44	0.00	191.96	0.11	192.48	0.16	193.00	0.20
191.45	0.00	191.97	0.11	192.49	0.16	193.01	0.21
191.46	0.01	191.98	0.11	192.50	0.16	193.02	0.24
191.47	0.01	191.99	0.11	192.51	0.16	193.03	0.27
191.48	0.01	192.00	0.12	192.52	0.17	193.04	0.31
191.49	0.01	192.01	0.12	192.53	0.17	193.05	0.35
191.50	0.02	192.02	0.12	192.54	0.17	193.06	0.40
191.51	0.02	192.03	0.12	192.55	0.17	193.07	0.45

Stage-Discharge for Pond B-48: Basin #48 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.08	0.50	193.60	6.13
193.09	0.56	193.61	6.28
193.10	0.62	193.62	6.43
193.11	0.68	193.63	6.57
193.12	0.75	193.64	6.72
193.13	0.82	193.65	6.87
193.14	0.89	193.66	7.02
193.15	0.96	193.67	7.17
193.16	1.04	193.68	7.33
193.17	1.12	193.69	7.48
193.18	1.20	193.70	7.64
193.19	1.29	193.71	7.79
193.20	1.37	193.72	7.95
193.21	1.46	193.73	8.11
193.22	1.55	193.74	8.26
193.23	1.64	193.75	8.42
193.24	1.74	193.76	8.58
193.25	1.83	193.77	8.74
193.26	1.93	193.78	8.91
193.27	2.03	193.79	9.07
193.28	2.13	193.80	9.23
193.29	2.23	193.81	9.40
193.30	2.34	193.82	9.56
193.31	2.44	193.83	9.73
193.32	2.55	193.84	9.90
193.33	2.66	193.85	10.07
193.34	2.77	193.86	10.24
193.35	2.88	193.87	10.40
193.36	3.00	193.88	10.58
193.37	3.11	193.89	10.75
193.38	3.23	193.90	10.92
193.39	3.35	193.91	11.09
193.40	3.47	193.92	11.27
193.41	3.59	193.93	11.44
193.42	3.71	193.94	11.62
193.43	3.84	193.95	11.79
193.44	3.96	193.96	11.97
193.45	4.09	193.97	12.15
193.46	4.22	193.98	12.33
193.47	4.35	193.99	12.51
193.48	4.48	194.00	12.81
193.49	4.61		
193.50	4.74		
193.51	4.87		
193.52	5.01		
193.53	5.15		
193.54	5.28		
193.55	5.42		
193.56	5.56		
193.57	5.70		
193.58	5.85		
193.59	5.99		

Stage-Area-Storage for Pond B-48: Basin #48

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.00	8,869	0	191.52	9,509	4,778
191.01	8,881	89	191.53	9,521	4,873
191.02	8,894	178	191.54	9,534	4,969
191.03	8,906	267	191.55	9,546	5,064
191.04	8,918	356	191.56	9,558	5,160
191.05	8,931	445	191.57	9,571	5,255
191.06	8,943	534	191.58	9,583	5,351
191.07	8,955	624	191.59	9,595	5,447
191.08	8,967	713	191.60	9,608	5,543
191.09	8,980	803	191.61	9,620	5,639
191.10	8,992	893	191.62	9,632	5,735
191.11	9,004	983	191.63	9,645	5,832
191.12	9,017	1,073	191.64	9,657	5,928
191.13	9,029	1,163	191.65	9,669	6,025
191.14	9,041	1,254	191.66	9,681	6,122
191.15	9,054	1,344	191.67	9,694	6,219
191.16	9,066	1,435	191.68	9,706	6,316
191.17	9,078	1,526	191.69	9,718	6,413
191.18	9,091	1,616	191.70	9,731	6,510
191.19	9,103	1,707	191.71	9,743	6,607
191.20	9,115	1,798	191.72	9,755	6,705
191.21	9,128	1,890	191.73	9,768	6,802
191.22	9,140	1,981	191.74	9,780	6,900
191.23	9,152	2,072	191.75	9,792	6,998
191.24	9,164	2,164	191.76	9,805	7,096
191.25	9,177	2,256	191.77	9,817	7,194
191.26	9,189	2,348	191.78	9,829	7,292
191.27	9,201	2,439	191.79	9,841	7,391
191.28	9,214	2,532	191.80	9,854	7,489
191.29	9,226	2,624	191.81	9,866	7,588
191.30	9,238	2,716	191.82	9,878	7,686
191.31	9,251	2,809	191.83	9,891	7,785
191.32	9,263	2,901	191.84	9,903	7,884
191.33	9,275	2,994	191.85	9,915	7,983
191.34	9,288	3,087	191.86	9,928	8,083
191.35	9,300	3,180	191.87	9,940	8,182
191.36	9,312	3,273	191.88	9,952	8,281
191.37	9,324	3,366	191.89	9,965	8,381
191.38	9,337	3,459	191.90	9,977	8,481
191.39	9,349	3,553	191.91	9,989	8,580
191.40	9,361	3,646	191.92	10,002	8,680
191.41	9,374	3,740	191.93	10,014	8,781
191.42	9,386	3,834	191.94	10,026	8,881
191.43	9,398	3,927	191.95	10,038	8,981
191.44	9,411	4,022	191.96	10,051	9,081
191.45	9,423	4,116	191.97	10,063	9,182
191.46	9,435	4,210	191.98	10,075	9,283
191.47	9,448	4,304	191.99	10,088	9,384
191.48	9,460	4,399	192.00	10,100	9,485
191.49	9,472	4,494	192.01	10,113	9,586
191.50	9,485	4,588	192.02	10,126	9,687
191.51	9,497	4,683	192.03	10,139	9,788

Stage-Area-Storage for Pond B-48: Basin #48 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.04	10,151	9,890	192.56	10,821	15,342
192.05	10,164	9,991	192.57	10,834	15,451
192.06	10,177	10,093	192.58	10,846	15,559
192.07	10,190	10,195	192.59	10,859	15,668
192.08	10,203	10,297	192.60	10,872	15,776
192.09	10,216	10,399	192.61	10,885	15,885
192.10	10,229	10,501	192.62	10,898	15,994
192.11	10,242	10,603	192.63	10,911	16,103
192.12	10,254	10,706	192.64	10,924	16,212
192.13	10,267	10,808	192.65	10,937	16,321
192.14	10,280	10,911	192.66	10,949	16,431
192.15	10,293	11,014	192.67	10,962	16,540
192.16	10,306	11,117	192.68	10,975	16,650
192.17	10,319	11,220	192.69	10,988	16,760
192.18	10,332	11,323	192.70	11,001	16,870
192.19	10,345	11,427	192.71	11,014	16,980
192.20	10,357	11,530	192.72	11,027	17,090
192.21	10,370	11,634	192.73	11,040	17,200
192.22	10,383	11,738	192.74	11,052	17,311
192.23	10,396	11,842	192.75	11,065	17,421
192.24	10,409	11,946	192.76	11,078	17,532
192.25	10,422	12,050	192.77	11,091	17,643
192.26	10,435	12,154	192.78	11,104	17,754
192.27	10,447	12,258	192.79	11,117	17,865
192.28	10,460	12,363	192.80	11,130	17,976
192.29	10,473	12,468	192.81	11,142	18,088
192.30	10,486	12,572	192.82	11,155	18,199
192.31	10,499	12,677	192.83	11,168	18,311
192.32	10,512	12,782	192.84	11,181	18,423
192.33	10,525	12,888	192.85	11,194	18,534
192.34	10,538	12,993	192.86	11,207	18,646
192.35	10,550	13,098	192.87	11,220	18,759
192.36	10,563	13,204	192.88	11,233	18,871
192.37	10,576	13,310	192.89	11,245	18,983
192.38	10,589	13,415	192.90	11,258	19,096
192.39	10,602	13,521	192.91	11,271	19,208
192.40	10,615	13,627	192.92	11,284	19,321
192.41	10,628	13,734	192.93	11,297	19,434
192.42	10,641	13,840	192.94	11,310	19,547
192.43	10,653	13,946	192.95	11,323	19,660
192.44	10,666	14,053	192.96	11,336	19,774
192.45	10,679	14,160	192.97	11,348	19,887
192.46	10,692	14,267	192.98	11,361	20,001
192.47	10,705	14,374	192.99	11,374	20,114
192.48	10,718	14,481	193.00	11,387	20,228
192.49	10,731	14,588	193.01	11,400	20,342
192.50	10,744	14,695	193.02	11,414	20,456
192.51	10,756	14,803	193.03	11,427	20,570
192.52	10,769	14,911	193.04	11,441	20,685
192.53	10,782	15,018	193.05	11,454	20,799
192.54	10,795	15,126	193.06	11,468	20,914
192.55	10,808	15,234	193.07	11,481	21,028

Stage-Area-Storage for Pond B-48: Basin #48 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.08	11,495	21,143	193.60	12,193	27,302
193.09	11,508	21,258	193.61	12,207	27,424
193.10	11,521	21,373	193.62	12,220	27,546
193.11	11,535	21,489	193.63	12,234	27,669
193.12	11,548	21,604	193.64	12,247	27,791
193.13	11,562	21,720	193.65	12,261	27,913
193.14	11,575	21,835	193.66	12,274	28,036
193.15	11,589	21,951	193.67	12,287	28,159
193.16	11,602	22,067	193.68	12,301	28,282
193.17	11,615	22,183	193.69	12,314	28,405
193.18	11,629	22,299	193.70	12,328	28,528
193.19	11,642	22,416	193.71	12,341	28,652
193.20	11,656	22,532	193.72	12,355	28,775
193.21	11,669	22,649	193.73	12,368	28,899
193.22	11,683	22,766	193.74	12,382	29,022
193.23	11,696	22,883	193.75	12,395	29,146
193.24	11,710	23,000	193.76	12,408	29,270
193.25	11,723	23,117	193.77	12,422	29,394
193.26	11,736	23,234	193.78	12,435	29,519
193.27	11,750	23,351	193.79	12,449	29,643
193.28	11,763	23,469	193.80	12,462	29,768
193.29	11,777	23,587	193.81	12,476	29,892
193.30	11,790	23,705	193.82	12,489	30,017
193.31	11,804	23,823	193.83	12,503	30,142
193.32	11,817	23,941	193.84	12,516	30,267
193.33	11,831	24,059	193.85	12,529	30,392
193.34	11,844	24,177	193.86	12,543	30,518
193.35	11,857	24,296	193.87	12,556	30,643
193.36	11,871	24,414	193.88	12,570	30,769
193.37	11,884	24,533	193.89	12,583	30,895
193.38	11,898	24,652	193.90	12,597	31,021
193.39	11,911	24,771	193.91	12,610	31,147
193.40	11,925	24,890	193.92	12,623	31,273
193.41	11,938	25,010	193.93	12,637	31,399
193.42	11,951	25,129	193.94	12,650	31,526
193.43	11,965	25,249	193.95	12,664	31,652
193.44	11,978	25,368	193.96	12,677	31,779
193.45	11,992	25,488	193.97	12,691	31,906
193.46	12,005	25,608	193.98	12,704	32,033
193.47	12,019	25,728	193.99	12,718	32,160
193.48	12,032	25,849	194.00	12,731	32,287
193.49	12,046	25,969			
193.50	12,059	26,090			
193.51	12,072	26,210			
193.52	12,086	26,331			
193.53	12,099	26,452			
193.54	12,113	26,573			
193.55	12,126	26,694			
193.56	12,140	26,815			
193.57	12,153	26,937			
193.58	12,167	27,059			
193.59	12,180	27,180			

Summary for Pond B-49: Basin #49

Inflow Area = 2.090 ac, 43.68% Impervious, Inflow Depth = 9.25" for Future 100 yr event
 Inflow = 19.42 cfs @ 12.17 hrs, Volume= 1.610 af
 Outflow = 9.25 cfs @ 12.35 hrs, Volume= 1.470 af, Atten= 52%, Lag= 10.6 min
 Primary = 9.25 cfs @ 12.35 hrs, Volume= 1.470 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 186.08' @ 12.35 hrs Surf.Area= 9,945 sf Storage= 25,324 cf

Plug-Flow detention time= 232.9 min calculated for 1.470 af (91% of inflow)
 Center-of-Mass det. time= 186.3 min (960.5 - 774.2)

Volume	Invert	Avail.Storage	Storage Description
#1	183.00'	52,993 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.00	6,565	0	0
184.00	7,625	7,095	7,095
185.00	8,717	8,171	15,266
186.00	9,853	9,285	24,551
187.00	11,027	10,440	34,991
188.00	12,333	11,680	46,671
188.50	12,956	6,322	52,993

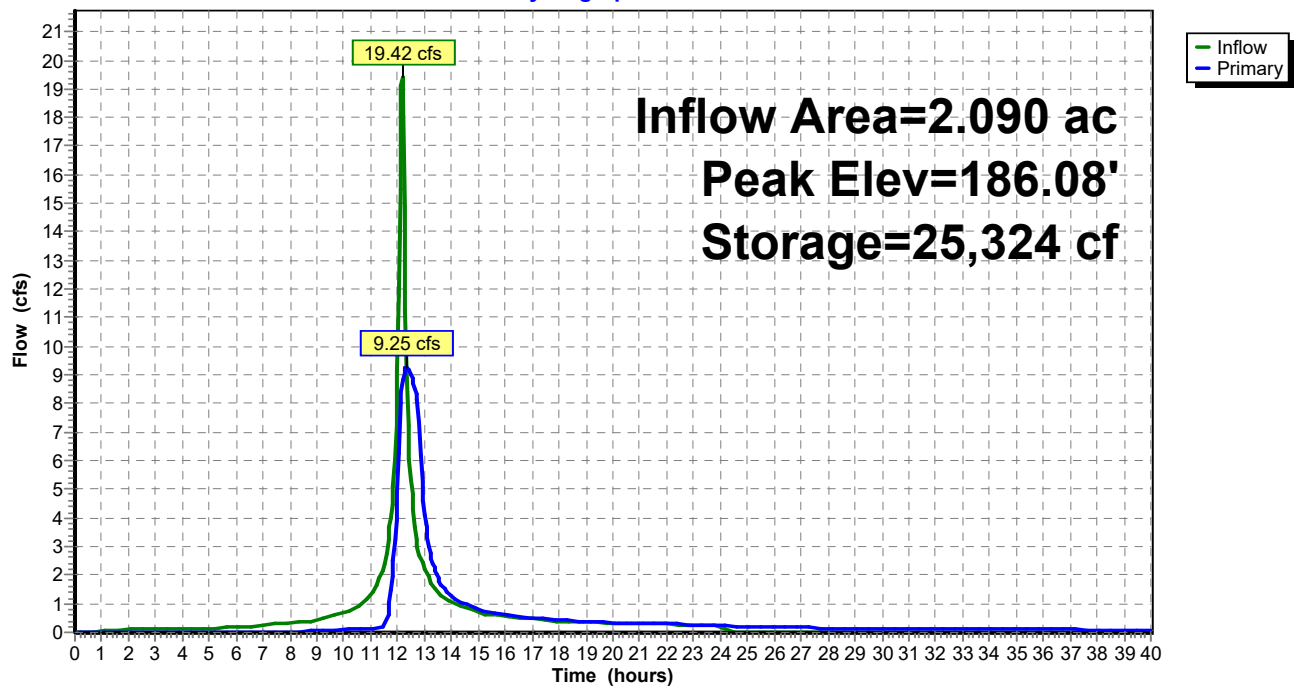
Device	Routing	Invert	Outlet Devices
#1	Primary	183.00'	15.0" Round Culvert L= 25.0' Ke= 0.500 Inlet / Outlet Invert= 183.00' / 182.81' S= 0.0076 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	183.55'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.74'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	187.75'	30.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)

Primary OutFlow Max=9.25 cfs @ 12.35 hrs HW=186.08' (Free Discharge)

1=Culvert (Inlet Controls 9.25 cfs @ 7.54 fps)
 2=Orifice/Grate (Passes < 0.26 cfs potential flow)
 3=Sharp-Crested Rectangular Weir (Passes < 18.87 cfs potential flow)
 4=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-49: Basin #49

Hydrograph



Stage-Discharge for Pond B-49: Basin #49

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.00	0.00	183.52	0.00	184.04	0.10	184.56	0.16
183.01	0.00	183.53	0.00	184.05	0.10	184.57	0.16
183.02	0.00	183.54	0.00	184.06	0.10	184.58	0.16
183.03	0.00	183.55	0.00	184.07	0.11	184.59	0.16
183.04	0.00	183.56	0.00	184.08	0.11	184.60	0.16
183.05	0.00	183.57	0.00	184.09	0.11	184.61	0.16
183.06	0.00	183.58	0.00	184.10	0.11	184.62	0.16
183.07	0.00	183.59	0.00	184.11	0.11	184.63	0.16
183.08	0.00	183.60	0.00	184.12	0.11	184.64	0.16
183.09	0.00	183.61	0.01	184.13	0.11	184.65	0.16
183.10	0.00	183.62	0.01	184.14	0.11	184.66	0.16
183.11	0.00	183.63	0.01	184.15	0.12	184.67	0.17
183.12	0.00	183.64	0.01	184.16	0.12	184.68	0.17
183.13	0.00	183.65	0.02	184.17	0.12	184.69	0.17
183.14	0.00	183.66	0.02	184.18	0.12	184.70	0.17
183.15	0.00	183.67	0.02	184.19	0.12	184.71	0.17
183.16	0.00	183.68	0.03	184.20	0.12	184.72	0.17
183.17	0.00	183.69	0.03	184.21	0.12	184.73	0.17
183.18	0.00	183.70	0.03	184.22	0.12	184.74	0.17
183.19	0.00	183.71	0.04	184.23	0.12	184.75	0.18
183.20	0.00	183.72	0.04	184.24	0.13	184.76	0.21
183.21	0.00	183.73	0.05	184.25	0.13	184.77	0.24
183.22	0.00	183.74	0.05	184.26	0.13	184.78	0.28
183.23	0.00	183.75	0.05	184.27	0.13	184.79	0.32
183.24	0.00	183.76	0.05	184.28	0.13	184.80	0.37
183.25	0.00	183.77	0.06	184.29	0.13	184.81	0.42
183.26	0.00	183.78	0.06	184.30	0.13	184.82	0.47
183.27	0.00	183.79	0.06	184.31	0.13	184.83	0.53
183.28	0.00	183.80	0.06	184.32	0.13	184.84	0.59
183.29	0.00	183.81	0.06	184.33	0.13	184.85	0.65
183.30	0.00	183.82	0.07	184.34	0.14	184.86	0.72
183.31	0.00	183.83	0.07	184.35	0.14	184.87	0.79
183.32	0.00	183.84	0.07	184.36	0.14	184.88	0.86
183.33	0.00	183.85	0.07	184.37	0.14	184.89	0.94
183.34	0.00	183.86	0.07	184.38	0.14	184.90	1.01
183.35	0.00	183.87	0.08	184.39	0.14	184.91	1.09
183.36	0.00	183.88	0.08	184.40	0.14	184.92	1.17
183.37	0.00	183.89	0.08	184.41	0.14	184.93	1.26
183.38	0.00	183.90	0.08	184.42	0.14	184.94	1.34
183.39	0.00	183.91	0.08	184.43	0.14	184.95	1.43
183.40	0.00	183.92	0.08	184.44	0.15	184.96	1.52
183.41	0.00	183.93	0.09	184.45	0.15	184.97	1.61
183.42	0.00	183.94	0.09	184.46	0.15	184.98	1.71
183.43	0.00	183.95	0.09	184.47	0.15	184.99	1.80
183.44	0.00	183.96	0.09	184.48	0.15	185.00	1.90
183.45	0.00	183.97	0.09	184.49	0.15	185.01	2.00
183.46	0.00	183.98	0.09	184.50	0.15	185.02	2.10
183.47	0.00	183.99	0.10	184.51	0.15	185.03	2.21
183.48	0.00	184.00	0.10	184.52	0.15	185.04	2.31
183.49	0.00	184.01	0.10	184.53	0.15	185.05	2.42
183.50	0.00	184.02	0.10	184.54	0.15	185.06	2.52
183.51	0.00	184.03	0.10	184.55	0.16	185.07	2.63

Stage-Discharge for Pond B-49: Basin #49 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.08	2.75	185.60	8.30	186.12	9.33	186.64	10.26
185.09	2.86	185.61	8.33	186.13	9.35	186.65	10.28
185.10	2.97	185.62	8.35	186.14	9.37	186.66	10.29
185.11	3.09	185.63	8.37	186.15	9.39	186.67	10.31
185.12	3.20	185.64	8.39	186.16	9.41	186.68	10.33
185.13	3.32	185.65	8.41	186.17	9.43	186.69	10.34
185.14	3.44	185.66	8.43	186.18	9.44	186.70	10.36
185.15	3.56	185.67	8.45	186.19	9.46	186.71	10.38
185.16	3.69	185.68	8.47	186.20	9.48	186.72	10.40
185.17	3.81	185.69	8.49	186.21	9.50	186.73	10.41
185.18	3.94	185.70	8.51	186.22	9.52	186.74	10.43
185.19	4.06	185.71	8.53	186.23	9.54	186.75	10.45
185.20	4.19	185.72	8.55	186.24	9.56	186.76	10.46
185.21	4.32	185.73	8.57	186.25	9.57	186.77	10.48
185.22	4.45	185.74	8.59	186.26	9.59	186.78	10.50
185.23	4.58	185.75	8.61	186.27	9.61	186.79	10.51
185.24	4.72	185.76	8.63	186.28	9.63	186.80	10.53
185.25	4.85	185.77	8.65	186.29	9.65	186.81	10.55
185.26	4.99	185.78	8.67	186.30	9.66	186.82	10.56
185.27	5.12	185.79	8.69	186.31	9.68	186.83	10.58
185.28	5.26	185.80	8.71	186.32	9.70	186.84	10.59
185.29	5.40	185.81	8.73	186.33	9.72	186.85	10.61
185.30	5.54	185.82	8.75	186.34	9.74	186.86	10.63
185.31	5.68	185.83	8.77	186.35	9.75	186.87	10.64
185.32	5.82	185.84	8.79	186.36	9.77	186.88	10.66
185.33	5.97	185.85	8.81	186.37	9.79	186.89	10.68
185.34	6.11	185.86	8.83	186.38	9.81	186.90	10.69
185.35	6.26	185.87	8.85	186.39	9.83	186.91	10.71
185.36	6.40	185.88	8.87	186.40	9.84	186.92	10.73
185.37	6.55	185.89	8.89	186.41	9.86	186.93	10.74
185.38	6.70	185.90	8.91	186.42	9.88	186.94	10.76
185.39	6.85	185.91	8.93	186.43	9.90	186.95	10.77
185.40	7.00	185.92	8.95	186.44	9.91	186.96	10.79
185.41	7.15	185.93	8.97	186.45	9.93	186.97	10.81
185.42	7.30	185.94	8.99	186.46	9.95	186.98	10.82
185.43	7.46	185.95	9.01	186.47	9.97	186.99	10.84
185.44	7.61	185.96	9.03	186.48	9.98	187.00	10.86
185.45	7.77	185.97	9.05	186.49	10.00	187.01	10.87
185.46	7.92	185.98	9.07	186.50	10.02	187.02	10.89
185.47	8.03	185.99	9.09	186.51	10.04	187.03	10.90
185.48	8.05	186.00	9.11	186.52	10.05	187.04	10.92
185.49	8.07	186.01	9.13	186.53	10.07	187.05	10.94
185.50	8.09	186.02	9.14	186.54	10.09	187.06	10.95
185.51	8.11	186.03	9.16	186.55	10.11	187.07	10.97
185.52	8.13	186.04	9.18	186.56	10.12	187.08	10.98
185.53	8.16	186.05	9.20	186.57	10.14	187.09	11.00
185.54	8.18	186.06	9.22	186.58	10.16	187.10	11.01
185.55	8.20	186.07	9.24	186.59	10.17	187.11	11.03
185.56	8.22	186.08	9.26	186.60	10.19	187.12	11.05
185.57	8.24	186.09	9.28	186.61	10.21	187.13	11.06
185.58	8.26	186.10	9.30	186.62	10.23	187.14	11.08
185.59	8.28	186.11	9.31	186.63	10.24	187.15	11.09

Stage-Discharge for Pond B-49: Basin #49 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
187.16	11.11	187.68	11.90	188.20	42.16
187.17	11.13	187.69	11.91	188.21	43.16
187.18	11.14	187.70	11.93	188.22	44.18
187.19	11.16	187.71	11.94	188.23	45.20
187.20	11.17	187.72	11.96	188.24	46.23
187.21	11.19	187.73	11.97	188.25	47.28
187.22	11.20	187.74	11.99	188.26	48.33
187.23	11.22	187.75	12.00	188.27	49.39
187.24	11.23	187.76	12.11	188.28	50.47
187.25	11.25	187.77	12.31	188.29	51.55
187.26	11.27	187.78	12.55	188.30	52.64
187.27	11.28	187.79	12.84	188.31	53.75
187.28	11.30	187.80	13.17	188.32	54.86
187.29	11.31	187.81	13.53	188.33	55.98
187.30	11.33	187.82	13.92	188.34	57.11
187.31	11.34	187.83	14.34	188.35	58.25
187.32	11.36	187.84	14.78	188.36	59.40
187.33	11.37	187.85	15.25	188.37	60.56
187.34	11.39	187.86	15.74	188.38	61.73
187.35	11.40	187.87	16.25	188.39	62.91
187.36	11.42	187.88	16.78	188.40	64.10
187.37	11.43	187.89	17.34	188.41	65.29
187.38	11.45	187.90	17.91	188.42	66.50
187.39	11.47	187.91	18.50	188.43	67.71
187.40	11.48	187.92	19.11	188.44	68.93
187.41	11.50	187.93	19.74	188.45	70.16
187.42	11.51	187.94	20.39	188.46	71.40
187.43	11.53	187.95	21.05	188.47	72.65
187.44	11.54	187.96	21.73	188.48	73.91
187.45	11.56	187.97	22.42	188.49	75.17
187.46	11.57	187.98	23.14	188.50	76.45
187.47	11.59	187.99	23.86		
187.48	11.60	188.00	24.60		
187.49	11.62	188.01	25.36		
187.50	11.63	188.02	26.13		
187.51	11.65	188.03	26.91		
187.52	11.66	188.04	27.71		
187.53	11.68	188.05	28.52		
187.54	11.69	188.06	29.34		
187.55	11.71	188.07	30.18		
187.56	11.72	188.08	31.03		
187.57	11.74	188.09	31.89		
187.58	11.75	188.10	32.77		
187.59	11.77	188.11	33.65		
187.60	11.78	188.12	34.55		
187.61	11.80	188.13	35.46		
187.62	11.81	188.14	36.39		
187.63	11.83	188.15	37.32		
187.64	11.84	188.16	38.27		
187.65	11.85	188.17	39.22		
187.66	11.87	188.18	40.19		
187.67	11.88	188.19	41.17		

Stage-Area-Storage for Pond B-49: Basin #49

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.00	6,565	0	183.52	7,116	3,557
183.01	6,576	66	183.53	7,127	3,628
183.02	6,586	132	183.54	7,137	3,700
183.03	6,597	197	183.55	7,148	3,771
183.04	6,607	263	183.56	7,159	3,843
183.05	6,618	330	183.57	7,169	3,914
183.06	6,629	396	183.58	7,180	3,986
183.07	6,639	462	183.59	7,190	4,058
183.08	6,650	529	183.60	7,201	4,130
183.09	6,660	595	183.61	7,212	4,202
183.10	6,671	662	183.62	7,222	4,274
183.11	6,682	729	183.63	7,233	4,346
183.12	6,692	795	183.64	7,243	4,419
183.13	6,703	862	183.65	7,254	4,491
183.14	6,713	929	183.66	7,265	4,564
183.15	6,724	997	183.67	7,275	4,636
183.16	6,735	1,064	183.68	7,286	4,709
183.17	6,745	1,131	183.69	7,296	4,782
183.18	6,756	1,199	183.70	7,307	4,855
183.19	6,766	1,266	183.71	7,318	4,928
183.20	6,777	1,334	183.72	7,328	5,002
183.21	6,788	1,402	183.73	7,339	5,075
183.22	6,798	1,470	183.74	7,349	5,148
183.23	6,809	1,538	183.75	7,360	5,222
183.24	6,819	1,606	183.76	7,371	5,296
183.25	6,830	1,674	183.77	7,381	5,369
183.26	6,841	1,743	183.78	7,392	5,443
183.27	6,851	1,811	183.79	7,402	5,517
183.28	6,862	1,880	183.80	7,413	5,591
183.29	6,872	1,948	183.81	7,424	5,665
183.30	6,883	2,017	183.82	7,434	5,740
183.31	6,894	2,086	183.83	7,445	5,814
183.32	6,904	2,155	183.84	7,455	5,889
183.33	6,915	2,224	183.85	7,466	5,963
183.34	6,925	2,293	183.86	7,477	6,038
183.35	6,936	2,363	183.87	7,487	6,113
183.36	6,947	2,432	183.88	7,498	6,188
183.37	6,957	2,502	183.89	7,508	6,263
183.38	6,968	2,571	183.90	7,519	6,338
183.39	6,978	2,641	183.91	7,530	6,413
183.40	6,989	2,711	183.92	7,540	6,488
183.41	7,000	2,781	183.93	7,551	6,564
183.42	7,010	2,851	183.94	7,561	6,639
183.43	7,021	2,921	183.95	7,572	6,715
183.44	7,031	2,991	183.96	7,583	6,791
183.45	7,042	3,062	183.97	7,593	6,867
183.46	7,053	3,132	183.98	7,604	6,943
183.47	7,063	3,203	183.99	7,614	7,019
183.48	7,074	3,273	184.00	7,625	7,095
183.49	7,084	3,344	184.01	7,636	7,171
183.50	7,095	3,415	184.02	7,647	7,248
183.51	7,106	3,486	184.03	7,658	7,324

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.04	7,669	7,401	184.56	8,237	11,536
184.05	7,680	7,478	184.57	8,247	11,619
184.06	7,691	7,554	184.58	8,258	11,701
184.07	7,701	7,631	184.59	8,269	11,784
184.08	7,712	7,708	184.60	8,280	11,867
184.09	7,723	7,786	184.61	8,291	11,949
184.10	7,734	7,863	184.62	8,302	12,032
184.11	7,745	7,940	184.63	8,313	12,115
184.12	7,756	8,018	184.64	8,324	12,199
184.13	7,767	8,095	184.65	8,335	12,282
184.14	7,778	8,173	184.66	8,346	12,365
184.15	7,789	8,251	184.67	8,357	12,449
184.16	7,800	8,329	184.68	8,368	12,532
184.17	7,811	8,407	184.69	8,378	12,616
184.18	7,822	8,485	184.70	8,389	12,700
184.19	7,832	8,563	184.71	8,400	12,784
184.20	7,843	8,642	184.72	8,411	12,868
184.21	7,854	8,720	184.73	8,422	12,952
184.22	7,865	8,799	184.74	8,433	13,036
184.23	7,876	8,878	184.75	8,444	13,121
184.24	7,887	8,956	184.76	8,455	13,205
184.25	7,898	9,035	184.77	8,466	13,290
184.26	7,909	9,114	184.78	8,477	13,375
184.27	7,920	9,194	184.79	8,488	13,460
184.28	7,931	9,273	184.80	8,499	13,544
184.29	7,942	9,352	184.81	8,510	13,629
184.30	7,953	9,432	184.82	8,520	13,715
184.31	7,964	9,511	184.83	8,531	13,800
184.32	7,974	9,591	184.84	8,542	13,885
184.33	7,985	9,671	184.85	8,553	13,971
184.34	7,996	9,751	184.86	8,564	14,056
184.35	8,007	9,831	184.87	8,575	14,142
184.36	8,018	9,911	184.88	8,586	14,228
184.37	8,029	9,991	184.89	8,597	14,314
184.38	8,040	10,071	184.90	8,608	14,400
184.39	8,051	10,152	184.91	8,619	14,486
184.40	8,062	10,232	184.92	8,630	14,572
184.41	8,073	10,313	184.93	8,641	14,658
184.42	8,084	10,394	184.94	8,651	14,745
184.43	8,095	10,475	184.95	8,662	14,832
184.44	8,105	10,556	184.96	8,673	14,918
184.45	8,116	10,637	184.97	8,684	15,005
184.46	8,127	10,718	184.98	8,695	15,092
184.47	8,138	10,799	184.99	8,706	15,179
184.48	8,149	10,881	185.00	8,717	15,266
184.49	8,160	10,962	185.01	8,728	15,353
184.50	8,171	11,044	185.02	8,740	15,441
184.51	8,182	11,126	185.03	8,751	15,528
184.52	8,193	11,208	185.04	8,762	15,616
184.53	8,204	11,290	185.05	8,774	15,703
184.54	8,215	11,372	185.06	8,785	15,791
184.55	8,226	11,454	185.07	8,797	15,879

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.08	8,808	15,967	185.60	9,399	20,701
185.09	8,819	16,055	185.61	9,410	20,795
185.10	8,831	16,143	185.62	9,421	20,889
185.11	8,842	16,232	185.63	9,433	20,983
185.12	8,853	16,320	185.64	9,444	21,078
185.13	8,865	16,409	185.65	9,455	21,172
185.14	8,876	16,498	185.66	9,467	21,267
185.15	8,887	16,586	185.67	9,478	21,361
185.16	8,899	16,675	185.68	9,489	21,456
185.17	8,910	16,764	185.69	9,501	21,551
185.18	8,921	16,853	185.70	9,512	21,646
185.19	8,933	16,943	185.71	9,524	21,741
185.20	8,944	17,032	185.72	9,535	21,837
185.21	8,956	17,122	185.73	9,546	21,932
185.22	8,967	17,211	185.74	9,558	22,028
185.23	8,978	17,301	185.75	9,569	22,123
185.24	8,990	17,391	185.76	9,580	22,219
185.25	9,001	17,481	185.77	9,592	22,315
185.26	9,012	17,571	185.78	9,603	22,411
185.27	9,024	17,661	185.79	9,614	22,507
185.28	9,035	17,751	185.80	9,626	22,603
185.29	9,046	17,842	185.81	9,637	22,699
185.30	9,058	17,932	185.82	9,649	22,796
185.31	9,069	18,023	185.83	9,660	22,892
185.32	9,081	18,114	185.84	9,671	22,989
185.33	9,092	18,204	185.85	9,683	23,086
185.34	9,103	18,295	185.86	9,694	23,183
185.35	9,115	18,387	185.87	9,705	23,280
185.36	9,126	18,478	185.88	9,717	23,377
185.37	9,137	18,569	185.89	9,728	23,474
185.38	9,149	18,660	185.90	9,739	23,571
185.39	9,160	18,752	185.91	9,751	23,669
185.40	9,171	18,844	185.92	9,762	23,766
185.41	9,183	18,935	185.93	9,773	23,864
185.42	9,194	19,027	185.94	9,785	23,962
185.43	9,205	19,119	185.95	9,796	24,060
185.44	9,217	19,211	185.96	9,808	24,158
185.45	9,228	19,304	185.97	9,819	24,256
185.46	9,240	19,396	185.98	9,830	24,354
185.47	9,251	19,488	185.99	9,842	24,453
185.48	9,262	19,581	186.00	9,853	24,551
185.49	9,274	19,674	186.01	9,865	24,650
185.50	9,285	19,767	186.02	9,876	24,748
185.51	9,296	19,859	186.03	9,888	24,847
185.52	9,308	19,952	186.04	9,900	24,946
185.53	9,319	20,046	186.05	9,912	25,045
185.54	9,330	20,139	186.06	9,923	25,144
185.55	9,342	20,232	186.07	9,935	25,244
185.56	9,353	20,326	186.08	9,947	25,343
185.57	9,365	20,419	186.09	9,959	25,443
185.58	9,376	20,513	186.10	9,970	25,542
185.59	9,387	20,607	186.11	9,982	25,642

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.12	9,994	25,742	186.64	10,604	31,097
186.13	10,006	25,842	186.65	10,616	31,203
186.14	10,017	25,942	186.66	10,628	31,310
186.15	10,029	26,042	186.67	10,640	31,416
186.16	10,041	26,143	186.68	10,651	31,522
186.17	10,053	26,243	186.69	10,663	31,629
186.18	10,064	26,344	186.70	10,675	31,736
186.19	10,076	26,444	186.71	10,687	31,843
186.20	10,088	26,545	186.72	10,698	31,949
186.21	10,100	26,646	186.73	10,710	32,057
186.22	10,111	26,747	186.74	10,722	32,164
186.23	10,123	26,848	186.75	10,734	32,271
186.24	10,135	26,950	186.76	10,745	32,378
186.25	10,147	27,051	186.77	10,757	32,486
186.26	10,158	27,152	186.78	10,769	32,593
186.27	10,170	27,254	186.79	10,780	32,701
186.28	10,182	27,356	186.80	10,792	32,809
186.29	10,193	27,458	186.81	10,804	32,917
186.30	10,205	27,560	186.82	10,816	33,025
186.31	10,217	27,662	186.83	10,827	33,133
186.32	10,229	27,764	186.84	10,839	33,242
186.33	10,240	27,866	186.85	10,851	33,350
186.34	10,252	27,969	186.86	10,863	33,459
186.35	10,264	28,071	186.87	10,874	33,567
186.36	10,276	28,174	186.88	10,886	33,676
186.37	10,287	28,277	186.89	10,898	33,785
186.38	10,299	28,380	186.90	10,910	33,894
186.39	10,311	28,483	186.91	10,921	34,003
186.40	10,323	28,586	186.92	10,933	34,113
186.41	10,334	28,689	186.93	10,945	34,222
186.42	10,346	28,793	186.94	10,957	34,331
186.43	10,358	28,896	186.95	10,968	34,441
186.44	10,370	29,000	186.96	10,980	34,551
186.45	10,381	29,104	186.97	10,992	34,661
186.46	10,393	29,208	186.98	11,004	34,771
186.47	10,405	29,312	186.99	11,015	34,881
186.48	10,417	29,416	187.00	11,027	34,991
186.49	10,428	29,520	187.01	11,040	35,101
186.50	10,440	29,624	187.02	11,053	35,212
186.51	10,452	29,729	187.03	11,066	35,322
186.52	10,463	29,833	187.04	11,079	35,433
186.53	10,475	29,938	187.05	11,092	35,544
186.54	10,487	30,043	187.06	11,105	35,655
186.55	10,499	30,148	187.07	11,118	35,766
186.56	10,510	30,253	187.08	11,131	35,877
186.57	10,522	30,358	187.09	11,145	35,989
186.58	10,534	30,463	187.10	11,158	36,100
186.59	10,546	30,569	187.11	11,171	36,212
186.60	10,557	30,674	187.12	11,184	36,324
186.61	10,569	30,780	187.13	11,197	36,436
186.62	10,581	30,886	187.14	11,210	36,548
186.63	10,593	30,991	187.15	11,223	36,660

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.16	11,236	36,772	187.68	11,915	42,791
187.17	11,249	36,884	187.69	11,928	42,911
187.18	11,262	36,997	187.70	11,941	43,030
187.19	11,275	37,110	187.71	11,954	43,149
187.20	11,288	37,223	187.72	11,967	43,269
187.21	11,301	37,335	187.73	11,980	43,389
187.22	11,314	37,449	187.74	11,993	43,509
187.23	11,327	37,562	187.75	12,007	43,629
187.24	11,340	37,675	187.76	12,020	43,749
187.25	11,354	37,789	187.77	12,033	43,869
187.26	11,367	37,902	187.78	12,046	43,989
187.27	11,380	38,016	187.79	12,059	44,110
187.28	11,393	38,130	187.80	12,072	44,231
187.29	11,406	38,244	187.81	12,085	44,351
187.30	11,419	38,358	187.82	12,098	44,472
187.31	11,432	38,472	187.83	12,111	44,593
187.32	11,445	38,587	187.84	12,124	44,714
187.33	11,458	38,701	187.85	12,137	44,836
187.34	11,471	38,816	187.86	12,150	44,957
187.35	11,484	38,930	187.87	12,163	45,079
187.36	11,497	39,045	187.88	12,176	45,200
187.37	11,510	39,160	187.89	12,189	45,322
187.38	11,523	39,276	187.90	12,202	45,444
187.39	11,536	39,391	187.91	12,215	45,566
187.40	11,549	39,506	187.92	12,229	45,689
187.41	11,562	39,622	187.93	12,242	45,811
187.42	11,576	39,738	187.94	12,255	45,933
187.43	11,589	39,853	187.95	12,268	46,056
187.44	11,602	39,969	187.96	12,281	46,179
187.45	11,615	40,085	187.97	12,294	46,302
187.46	11,628	40,202	187.98	12,307	46,425
187.47	11,641	40,318	187.99	12,320	46,548
187.48	11,654	40,434	188.00	12,333	46,671
187.49	11,667	40,551	188.01	12,345	46,794
187.50	11,680	40,668	188.02	12,358	46,918
187.51	11,693	40,785	188.03	12,370	47,042
187.52	11,706	40,902	188.04	12,383	47,165
187.53	11,719	41,019	188.05	12,395	47,289
187.54	11,732	41,136	188.06	12,408	47,413
187.55	11,745	41,253	188.07	12,420	47,537
187.56	11,758	41,371	188.08	12,433	47,662
187.57	11,771	41,489	188.09	12,445	47,786
187.58	11,784	41,606	188.10	12,458	47,911
187.59	11,798	41,724	188.11	12,470	48,035
187.60	11,811	41,842	188.12	12,483	48,160
187.61	11,824	41,960	188.13	12,495	48,285
187.62	11,837	42,079	188.14	12,507	48,410
187.63	11,850	42,197	188.15	12,520	48,535
187.64	11,863	42,316	188.16	12,532	48,660
187.65	11,876	42,434	188.17	12,545	48,786
187.66	11,889	42,553	188.18	12,557	48,911
187.67	11,902	42,672	188.19	12,570	49,037

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.20	12,582	49,163
188.21	12,595	49,288
188.22	12,607	49,414
188.23	12,620	49,541
188.24	12,632	49,667
188.25	12,645	49,793
188.26	12,657	49,920
188.27	12,669	50,046
188.28	12,682	50,173
188.29	12,694	50,300
188.30	12,707	50,427
188.31	12,719	50,554
188.32	12,732	50,681
188.33	12,744	50,809
188.34	12,757	50,936
188.35	12,769	51,064
188.36	12,782	51,192
188.37	12,794	51,319
188.38	12,806	51,448
188.39	12,819	51,576
188.40	12,831	51,704
188.41	12,844	51,832
188.42	12,856	51,961
188.43	12,869	52,089
188.44	12,881	52,218
188.45	12,894	52,347
188.46	12,906	52,476
188.47	12,919	52,605
188.48	12,931	52,734
188.49	12,944	52,864
188.50	12,956	52,993

Summary for Pond B-50: Basin #50

Inflow Area = 2.262 ac, 29.27% Impervious, Inflow Depth = 8.80" for Future 100 yr event
 Inflow = 20.45 cfs @ 12.17 hrs, Volume= 1.659 af
 Outflow = 13.64 cfs @ 12.28 hrs, Volume= 1.518 af, Atten= 33%, Lag= 6.6 min
 Primary = 13.64 cfs @ 12.28 hrs, Volume= 1.518 af
 Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 186.35' @ 12.28 hrs Surf.Area= 11,936 sf Storage= 24,379 cf

Plug-Flow detention time= 215.4 min calculated for 1.517 af (91% of inflow)
 Center-of-Mass det. time= 171.6 min (956.2 - 784.7)

Volume	Invert	Avail.Storage	Storage Description
#1	184.00'	53,209 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
184.00	8,805	0	0
185.00	10,108	9,457	9,457
186.00	11,448	10,778	20,235
187.00	12,826	12,137	32,372
188.00	14,244	13,535	45,907
188.50	14,966	7,303	53,209

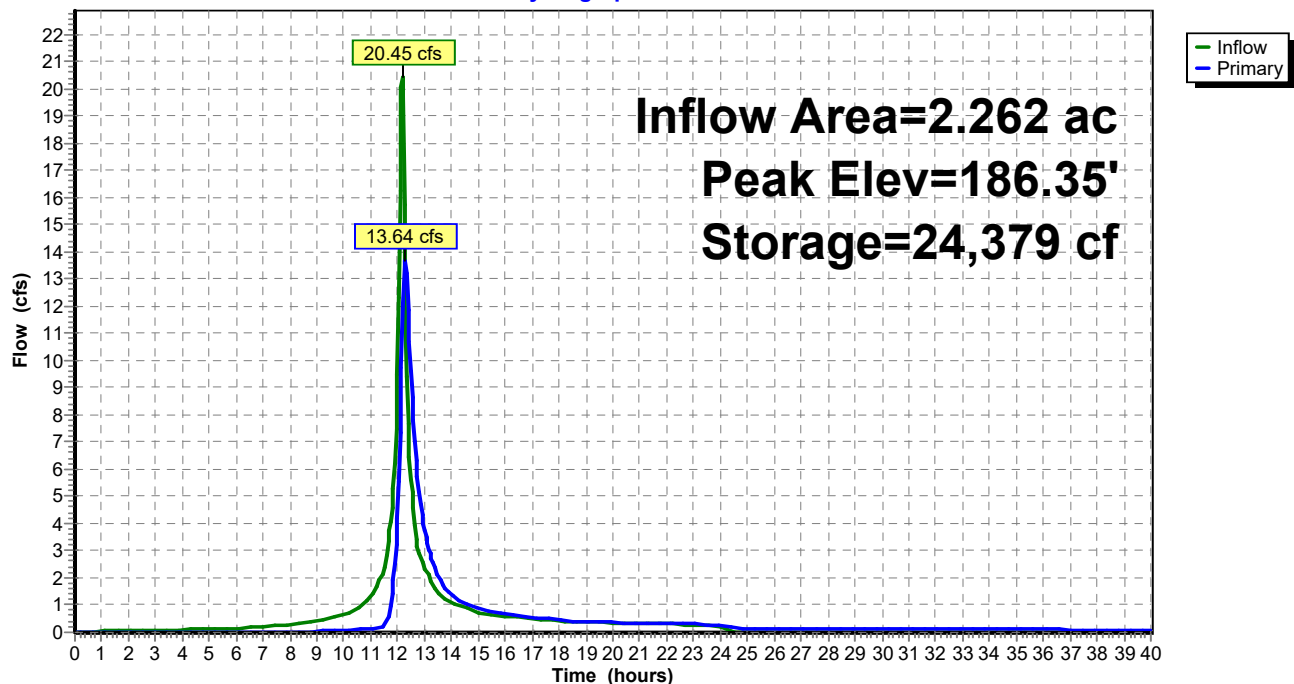
Device	Routing	Invert	Outlet Devices
#1	Primary	180.50'	18.0" Round Culvert L= 83.0' Ke= 0.500 Inlet / Outlet Invert= 180.50' / 179.67' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	184.32'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.30'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	188.45'	30.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=13.55 cfs @ 12.28 hrs HW=186.35' (Free Discharge)

1=Culvert (Passes 13.55 cfs of 18.58 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.23 cfs @ 6.68 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 13.32 cfs @ 3.35 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-50: Basin #50

Hydrograph



Stage-Discharge for Pond B-50: Basin #50

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
184.00	0.00	184.52	0.05	185.04	0.13	185.56	1.89
184.01	0.00	184.53	0.05	185.05	0.13	185.57	1.99
184.02	0.00	184.54	0.06	185.06	0.13	185.58	2.09
184.03	0.00	184.55	0.06	185.07	0.13	185.59	2.19
184.04	0.00	184.56	0.06	185.08	0.13	185.60	2.30
184.05	0.00	184.57	0.06	185.09	0.13	185.61	2.40
184.06	0.00	184.58	0.06	185.10	0.13	185.62	2.51
184.07	0.00	184.59	0.07	185.11	0.14	185.63	2.62
184.08	0.00	184.60	0.07	185.12	0.14	185.64	2.73
184.09	0.00	184.61	0.07	185.13	0.14	185.65	2.84
184.10	0.00	184.62	0.07	185.14	0.14	185.66	2.96
184.11	0.00	184.63	0.07	185.15	0.14	185.67	3.07
184.12	0.00	184.64	0.08	185.16	0.14	185.68	3.19
184.13	0.00	184.65	0.08	185.17	0.14	185.69	3.31
184.14	0.00	184.66	0.08	185.18	0.14	185.70	3.43
184.15	0.00	184.67	0.08	185.19	0.14	185.71	3.55
184.16	0.00	184.68	0.08	185.20	0.14	185.72	3.67
184.17	0.00	184.69	0.08	185.21	0.15	185.73	3.80
184.18	0.00	184.70	0.09	185.22	0.15	185.74	3.92
184.19	0.00	184.71	0.09	185.23	0.15	185.75	4.05
184.20	0.00	184.72	0.09	185.24	0.15	185.76	4.18
184.21	0.00	184.73	0.09	185.25	0.15	185.77	4.31
184.22	0.00	184.74	0.09	185.26	0.15	185.78	4.44
184.23	0.00	184.75	0.09	185.27	0.15	185.79	4.57
184.24	0.00	184.76	0.10	185.28	0.15	185.80	4.70
184.25	0.00	184.77	0.10	185.29	0.15	185.81	4.84
184.26	0.00	184.78	0.10	185.30	0.15	185.82	4.97
184.27	0.00	184.79	0.10	185.31	0.17	185.83	5.11
184.28	0.00	184.80	0.10	185.32	0.19	185.84	5.25
184.29	0.00	184.81	0.10	185.33	0.22	185.85	5.38
184.30	0.00	184.82	0.10	185.34	0.26	185.86	5.52
184.31	0.00	184.83	0.10	185.35	0.30	185.87	5.67
184.32	0.00	184.84	0.11	185.36	0.35	185.88	5.81
184.33	0.00	184.85	0.11	185.37	0.40	185.89	5.95
184.34	0.00	184.86	0.11	185.38	0.46	185.90	6.10
184.35	0.00	184.87	0.11	185.39	0.51	185.91	6.24
184.36	0.00	184.88	0.11	185.40	0.57	185.92	6.39
184.37	0.00	184.89	0.11	185.41	0.64	185.93	6.54
184.38	0.01	184.90	0.11	185.42	0.70	185.94	6.68
184.39	0.01	184.91	0.11	185.43	0.77	185.95	6.83
184.40	0.01	184.92	0.12	185.44	0.85	185.96	6.99
184.41	0.01	184.93	0.12	185.45	0.92	185.97	7.14
184.42	0.02	184.94	0.12	185.46	1.00	185.98	7.29
184.43	0.02	184.95	0.12	185.47	1.08	185.99	7.44
184.44	0.02	184.96	0.12	185.48	1.16	186.00	7.60
184.45	0.03	184.97	0.12	185.49	1.24	186.01	7.75
184.46	0.03	184.98	0.12	185.50	1.33	186.02	7.91
184.47	0.03	184.99	0.12	185.51	1.42	186.03	8.07
184.48	0.04	185.00	0.12	185.52	1.51	186.04	8.23
184.49	0.04	185.01	0.13	185.53	1.60	186.05	8.39
184.50	0.05	185.02	0.13	185.54	1.69	186.06	8.55
184.51	0.05	185.03	0.13	185.55	1.79	186.07	8.71

Stage-Discharge for Pond B-50: Basin #50 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.08	8.87	186.60	18.37	187.12	19.91	187.64	20.76
186.09	9.03	186.61	18.57	187.13	19.93	187.65	20.78
186.10	9.20	186.62	18.77	187.14	19.95	187.66	20.80
186.11	9.36	186.63	18.97	187.15	19.96	187.67	20.81
186.12	9.53	186.64	19.09	187.16	19.98	187.68	20.83
186.13	9.69	186.65	19.11	187.17	20.00	187.69	20.84
186.14	9.86	186.66	19.13	187.18	20.01	187.70	20.86
186.15	10.03	186.67	19.14	187.19	20.03	187.71	20.88
186.16	10.20	186.68	19.16	187.20	20.05	187.72	20.89
186.17	10.37	186.69	19.18	187.21	20.06	187.73	20.91
186.18	10.54	186.70	19.20	187.22	20.08	187.74	20.92
186.19	10.71	186.71	19.21	187.23	20.10	187.75	20.94
186.20	10.88	186.72	19.23	187.24	20.11	187.76	20.96
186.21	11.06	186.73	19.25	187.25	20.13	187.77	20.97
186.22	11.23	186.74	19.27	187.26	20.15	187.78	20.99
186.23	11.41	186.75	19.28	187.27	20.16	187.79	21.00
186.24	11.58	186.76	19.30	187.28	20.18	187.80	21.02
186.25	11.76	186.77	19.32	187.29	20.19	187.81	21.04
186.26	11.93	186.78	19.33	187.30	20.21	187.82	21.05
186.27	12.11	186.79	19.35	187.31	20.23	187.83	21.07
186.28	12.29	186.80	19.37	187.32	20.24	187.84	21.08
186.29	12.47	186.81	19.39	187.33	20.26	187.85	21.10
186.30	12.65	186.82	19.40	187.34	20.28	187.86	21.11
186.31	12.83	186.83	19.42	187.35	20.29	187.87	21.13
186.32	13.01	186.84	19.44	187.36	20.31	187.88	21.15
186.33	13.20	186.85	19.46	187.37	20.33	187.89	21.16
186.34	13.38	186.86	19.47	187.38	20.34	187.90	21.18
186.35	13.56	186.87	19.49	187.39	20.36	187.91	21.19
186.36	13.75	186.88	19.51	187.40	20.38	187.92	21.21
186.37	13.93	186.89	19.52	187.41	20.39	187.93	21.22
186.38	14.12	186.90	19.54	187.42	20.41	187.94	21.24
186.39	14.30	186.91	19.56	187.43	20.42	187.95	21.26
186.40	14.49	186.92	19.57	187.44	20.44	187.96	21.27
186.41	14.68	186.93	19.59	187.45	20.46	187.97	21.29
186.42	14.87	186.94	19.61	187.46	20.47	187.98	21.30
186.43	15.06	186.95	19.63	187.47	20.49	187.99	21.32
186.44	15.25	186.96	19.64	187.48	20.51	188.00	21.33
186.45	15.44	186.97	19.66	187.49	20.52	188.01	21.35
186.46	15.63	186.98	19.68	187.50	20.54	188.02	21.37
186.47	15.82	186.99	19.69	187.51	20.55	188.03	21.38
186.48	16.01	187.00	19.71	187.52	20.57	188.04	21.40
186.49	16.21	187.01	19.73	187.53	20.59	188.05	21.41
186.50	16.40	187.02	19.74	187.54	20.60	188.06	21.43
186.51	16.59	187.03	19.76	187.55	20.62	188.07	21.44
186.52	16.79	187.04	19.78	187.56	20.64	188.08	21.46
186.53	16.98	187.05	19.79	187.57	20.65	188.09	21.47
186.54	17.18	187.06	19.81	187.58	20.67	188.10	21.49
186.55	17.38	187.07	19.83	187.59	20.68	188.11	21.51
186.56	17.57	187.08	19.85	187.60	20.70	188.12	21.52
186.57	17.77	187.09	19.86	187.61	20.72	188.13	21.54
186.58	17.97	187.10	19.88	187.62	20.73	188.14	21.55
186.59	18.17	187.11	19.90	187.63	20.75	188.15	21.57

Stage-Discharge for Pond B-50: Basin #50 (continued)

Elevation (feet)	Primary (cfs)
188.16	21.58
188.17	21.60
188.18	21.61
188.19	21.63
188.20	21.64
188.21	21.66
188.22	21.67
188.23	21.69
188.24	21.71
188.25	21.72
188.26	21.74
188.27	21.75
188.28	21.77
188.29	21.78
188.30	21.80
188.31	21.81
188.32	21.83
188.33	21.84
188.34	21.86
188.35	21.87
188.36	21.89
188.37	21.90
188.38	21.92
188.39	21.93
188.40	21.95
188.41	21.97
188.42	21.98
188.43	22.00
188.44	22.01
188.45	22.03
188.46	22.11
188.47	22.25
188.48	22.44
188.49	22.65
188.50	22.89

Stage-Area-Storage for Pond B-50: Basin #50

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.00	8,805	0	184.52	9,483	4,755
184.01	8,818	88	184.53	9,496	4,850
184.02	8,831	176	184.54	9,509	4,945
184.03	8,844	265	184.55	9,522	5,040
184.04	8,857	353	184.56	9,535	5,135
184.05	8,870	442	184.57	9,548	5,231
184.06	8,883	531	184.58	9,561	5,326
184.07	8,896	620	184.59	9,574	5,422
184.08	8,909	709	184.60	9,587	5,518
184.09	8,922	798	184.61	9,600	5,613
184.10	8,935	887	184.62	9,613	5,710
184.11	8,948	976	184.63	9,626	5,806
184.12	8,961	1,066	184.64	9,639	5,902
184.13	8,974	1,156	184.65	9,652	5,999
184.14	8,987	1,245	184.66	9,665	6,095
184.15	9,000	1,335	184.67	9,678	6,192
184.16	9,013	1,425	184.68	9,691	6,289
184.17	9,027	1,516	184.69	9,704	6,386
184.18	9,040	1,606	184.70	9,717	6,483
184.19	9,053	1,696	184.71	9,730	6,580
184.20	9,066	1,787	184.72	9,743	6,677
184.21	9,079	1,878	184.73	9,756	6,775
184.22	9,092	1,969	184.74	9,769	6,872
184.23	9,105	2,060	184.75	9,782	6,970
184.24	9,118	2,151	184.76	9,795	7,068
184.25	9,131	2,242	184.77	9,808	7,166
184.26	9,144	2,333	184.78	9,821	7,264
184.27	9,157	2,425	184.79	9,834	7,363
184.28	9,170	2,516	184.80	9,847	7,461
184.29	9,183	2,608	184.81	9,860	7,559
184.30	9,196	2,700	184.82	9,873	7,658
184.31	9,209	2,792	184.83	9,886	7,757
184.32	9,222	2,884	184.84	9,900	7,856
184.33	9,235	2,977	184.85	9,913	7,955
184.34	9,248	3,069	184.86	9,926	8,054
184.35	9,261	3,162	184.87	9,939	8,153
184.36	9,274	3,254	184.88	9,952	8,253
184.37	9,287	3,347	184.89	9,965	8,353
184.38	9,300	3,440	184.90	9,978	8,452
184.39	9,313	3,533	184.91	9,991	8,552
184.40	9,326	3,626	184.92	10,004	8,652
184.41	9,339	3,720	184.93	10,017	8,752
184.42	9,352	3,813	184.94	10,030	8,852
184.43	9,365	3,907	184.95	10,043	8,953
184.44	9,378	4,000	184.96	10,056	9,053
184.45	9,391	4,094	184.97	10,069	9,154
184.46	9,404	4,188	184.98	10,082	9,255
184.47	9,417	4,282	184.99	10,095	9,355
184.48	9,430	4,377	185.00	10,108	9,457
184.49	9,443	4,471	185.01	10,121	9,558
184.50	9,457	4,565	185.02	10,135	9,659
184.51	9,470	4,660	185.03	10,148	9,760

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.04	10,162	9,862	185.56	10,858	15,327
185.05	10,175	9,964	185.57	10,872	15,436
185.06	10,188	10,065	185.58	10,885	15,545
185.07	10,202	10,167	185.59	10,899	15,653
185.08	10,215	10,269	185.60	10,912	15,762
185.09	10,229	10,372	185.61	10,925	15,872
185.10	10,242	10,474	185.62	10,939	15,981
185.11	10,255	10,576	185.63	10,952	16,090
185.12	10,269	10,679	185.64	10,966	16,200
185.13	10,282	10,782	185.65	10,979	16,310
185.14	10,296	10,885	185.66	10,992	16,420
185.15	10,309	10,988	185.67	11,006	16,530
185.16	10,322	11,091	185.68	11,019	16,640
185.17	10,336	11,194	185.69	11,033	16,750
185.18	10,349	11,298	185.70	11,046	16,860
185.19	10,363	11,401	185.71	11,059	16,971
185.20	10,376	11,505	185.72	11,073	17,082
185.21	10,389	11,609	185.73	11,086	17,192
185.22	10,403	11,713	185.74	11,100	17,303
185.23	10,416	11,817	185.75	11,113	17,414
185.24	10,430	11,921	185.76	11,126	17,526
185.25	10,443	12,025	185.77	11,140	17,637
185.26	10,456	12,130	185.78	11,153	17,748
185.27	10,470	12,235	185.79	11,167	17,860
185.28	10,483	12,339	185.80	11,180	17,972
185.29	10,497	12,444	185.81	11,193	18,084
185.30	10,510	12,549	185.82	11,207	18,196
185.31	10,523	12,654	185.83	11,220	18,308
185.32	10,537	12,760	185.84	11,234	18,420
185.33	10,550	12,865	185.85	11,247	18,532
185.34	10,564	12,971	185.86	11,260	18,645
185.35	10,577	13,076	185.87	11,274	18,758
185.36	10,590	13,182	185.88	11,287	18,870
185.37	10,604	13,288	185.89	11,301	18,983
185.38	10,617	13,394	185.90	11,314	19,096
185.39	10,631	13,501	185.91	11,327	19,210
185.40	10,644	13,607	185.92	11,341	19,323
185.41	10,657	13,713	185.93	11,354	19,436
185.42	10,671	13,820	185.94	11,368	19,550
185.43	10,684	13,927	185.95	11,381	19,664
185.44	10,698	14,034	185.96	11,394	19,778
185.45	10,711	14,141	185.97	11,408	19,892
185.46	10,724	14,248	185.98	11,421	20,006
185.47	10,738	14,355	185.99	11,435	20,120
185.48	10,751	14,463	186.00	11,448	20,235
185.49	10,765	14,570	186.01	11,462	20,349
185.50	10,778	14,678	186.02	11,476	20,464
185.51	10,791	14,786	186.03	11,489	20,579
185.52	10,805	14,894	186.04	11,503	20,694
185.53	10,818	15,002	186.05	11,517	20,809
185.54	10,832	15,110	186.06	11,531	20,924
185.55	10,845	15,219	186.07	11,544	21,039

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.08	11,558	21,155	186.60	12,275	27,351
186.09	11,572	21,270	186.61	12,289	27,474
186.10	11,586	21,386	186.62	12,302	27,597
186.11	11,600	21,502	186.63	12,316	27,720
186.12	11,613	21,618	186.64	12,330	27,843
186.13	11,627	21,734	186.65	12,344	27,967
186.14	11,641	21,851	186.66	12,357	28,090
186.15	11,655	21,967	186.67	12,371	28,214
186.16	11,668	22,084	186.68	12,385	28,338
186.17	11,682	22,201	186.69	12,399	28,462
186.18	11,696	22,317	186.70	12,413	28,586
186.19	11,710	22,434	186.71	12,426	28,710
186.20	11,724	22,552	186.72	12,440	28,834
186.21	11,737	22,669	186.73	12,454	28,959
186.22	11,751	22,786	186.74	12,468	29,083
186.23	11,765	22,904	186.75	12,482	29,208
186.24	11,779	23,022	186.76	12,495	29,333
186.25	11,793	23,140	186.77	12,509	29,458
186.26	11,806	23,258	186.78	12,523	29,583
186.27	11,820	23,376	186.79	12,537	29,708
186.28	11,834	23,494	186.80	12,550	29,834
186.29	11,848	23,612	186.81	12,564	29,959
186.30	11,861	23,731	186.82	12,578	30,085
186.31	11,875	23,850	186.83	12,592	30,211
186.32	11,889	23,968	186.84	12,606	30,337
186.33	11,903	24,087	186.85	12,619	30,463
186.34	11,917	24,206	186.86	12,633	30,589
186.35	11,930	24,326	186.87	12,647	30,716
186.36	11,944	24,445	186.88	12,661	30,842
186.37	11,958	24,565	186.89	12,674	30,969
186.38	11,972	24,684	186.90	12,688	31,096
186.39	11,985	24,804	186.91	12,702	31,223
186.40	11,999	24,924	186.92	12,716	31,350
186.41	12,013	25,044	186.93	12,730	31,477
186.42	12,027	25,164	186.94	12,743	31,604
186.43	12,041	25,285	186.95	12,757	31,732
186.44	12,054	25,405	186.96	12,771	31,860
186.45	12,068	25,526	186.97	12,785	31,987
186.46	12,082	25,646	186.98	12,798	32,115
186.47	12,096	25,767	186.99	12,812	32,243
186.48	12,109	25,888	187.00	12,826	32,372
186.49	12,123	26,009	187.01	12,840	32,500
186.50	12,137	26,131	187.02	12,854	32,628
186.51	12,151	26,252	187.03	12,869	32,757
186.52	12,165	26,374	187.04	12,883	32,886
186.53	12,178	26,495	187.05	12,897	33,015
186.54	12,192	26,617	187.06	12,911	33,144
186.55	12,206	26,739	187.07	12,925	33,273
186.56	12,220	26,861	187.08	12,939	33,402
186.57	12,233	26,984	187.09	12,954	33,532
186.58	12,247	27,106	187.10	12,968	33,661
186.59	12,261	27,229	187.11	12,982	33,791

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.12	12,996	33,921	187.64	13,734	40,871
187.13	13,010	34,051	187.65	13,748	41,008
187.14	13,025	34,181	187.66	13,762	41,146
187.15	13,039	34,311	187.67	13,776	41,283
187.16	13,053	34,442	187.68	13,790	41,421
187.17	13,067	34,572	187.69	13,804	41,559
187.18	13,081	34,703	187.70	13,819	41,697
187.19	13,095	34,834	187.71	13,833	41,835
187.20	13,110	34,965	187.72	13,847	41,974
187.21	13,124	35,096	187.73	13,861	42,112
187.22	13,138	35,228	187.74	13,875	42,251
187.23	13,152	35,359	187.75	13,890	42,390
187.24	13,166	35,491	187.76	13,904	42,529
187.25	13,181	35,622	187.77	13,918	42,668
187.26	13,195	35,754	187.78	13,932	42,807
187.27	13,209	35,886	187.79	13,946	42,947
187.28	13,223	36,018	187.80	13,960	43,086
187.29	13,237	36,151	187.81	13,975	43,226
187.30	13,251	36,283	187.82	13,989	43,366
187.31	13,266	36,416	187.83	14,003	43,506
187.32	13,280	36,548	187.84	14,017	43,646
187.33	13,294	36,681	187.85	14,031	43,786
187.34	13,308	36,814	187.86	14,045	43,926
187.35	13,322	36,947	187.87	14,060	44,067
187.36	13,336	37,081	187.88	14,074	44,207
187.37	13,351	37,214	187.89	14,088	44,348
187.38	13,365	37,348	187.90	14,102	44,489
187.39	13,379	37,481	187.91	14,116	44,630
187.40	13,393	37,615	187.92	14,131	44,772
187.41	13,407	37,749	187.93	14,145	44,913
187.42	13,422	37,883	187.94	14,159	45,054
187.43	13,436	38,018	187.95	14,173	45,196
187.44	13,450	38,152	187.96	14,187	45,338
187.45	13,464	38,287	187.97	14,201	45,480
187.46	13,478	38,421	187.98	14,216	45,622
187.47	13,492	38,556	187.99	14,230	45,764
187.48	13,507	38,691	188.00	14,244	45,907
187.49	13,521	38,826	188.01	14,258	46,049
187.50	13,535	38,962	188.02	14,273	46,192
187.51	13,549	39,097	188.03	14,287	46,334
187.52	13,563	39,233	188.04	14,302	46,477
187.53	13,578	39,368	188.05	14,316	46,621
187.54	13,592	39,504	188.06	14,331	46,764
187.55	13,606	39,640	188.07	14,345	46,907
187.56	13,620	39,776	188.08	14,360	47,051
187.57	13,634	39,913	188.09	14,374	47,194
187.58	13,648	40,049	188.10	14,388	47,338
187.59	13,663	40,186	188.11	14,403	47,482
187.60	13,677	40,322	188.12	14,417	47,626
187.61	13,691	40,459	188.13	14,432	47,770
187.62	13,705	40,596	188.14	14,446	47,915
187.63	13,719	40,733	188.15	14,461	48,059

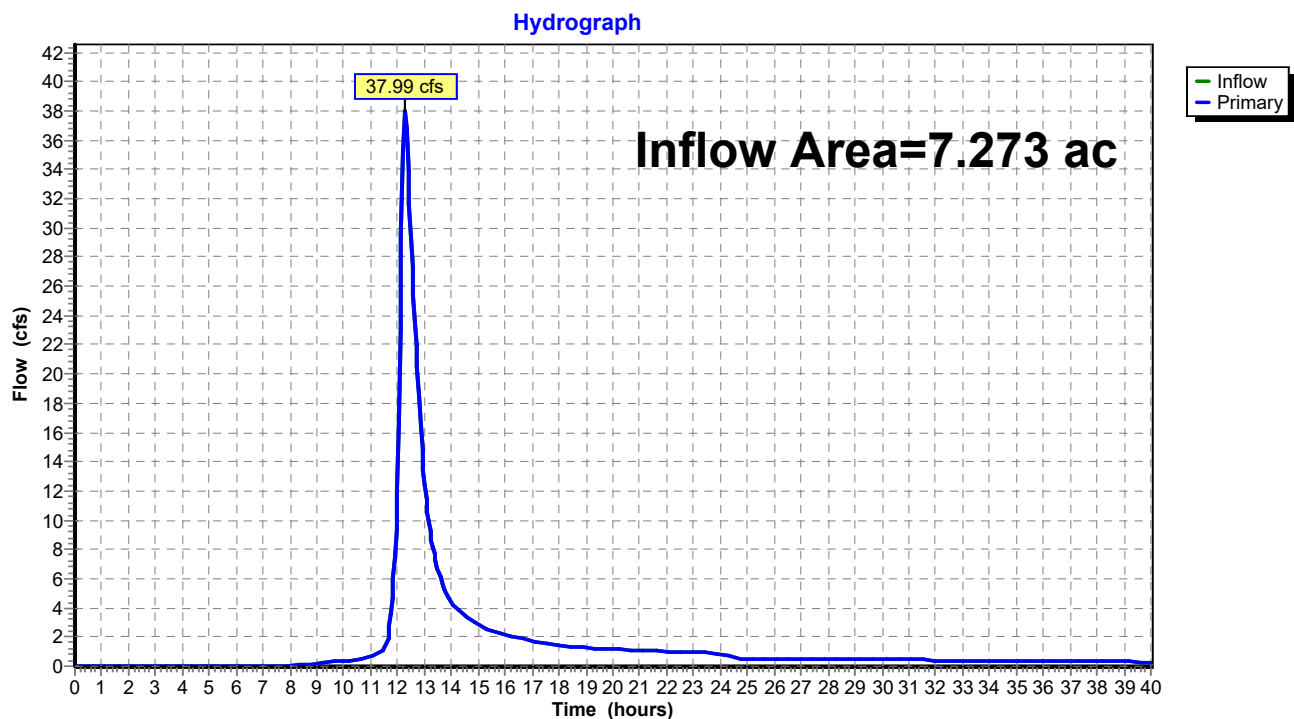
Stage-Area-Storage for Pond B-50: Basin #50 (continued)

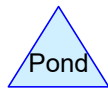
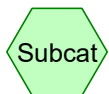
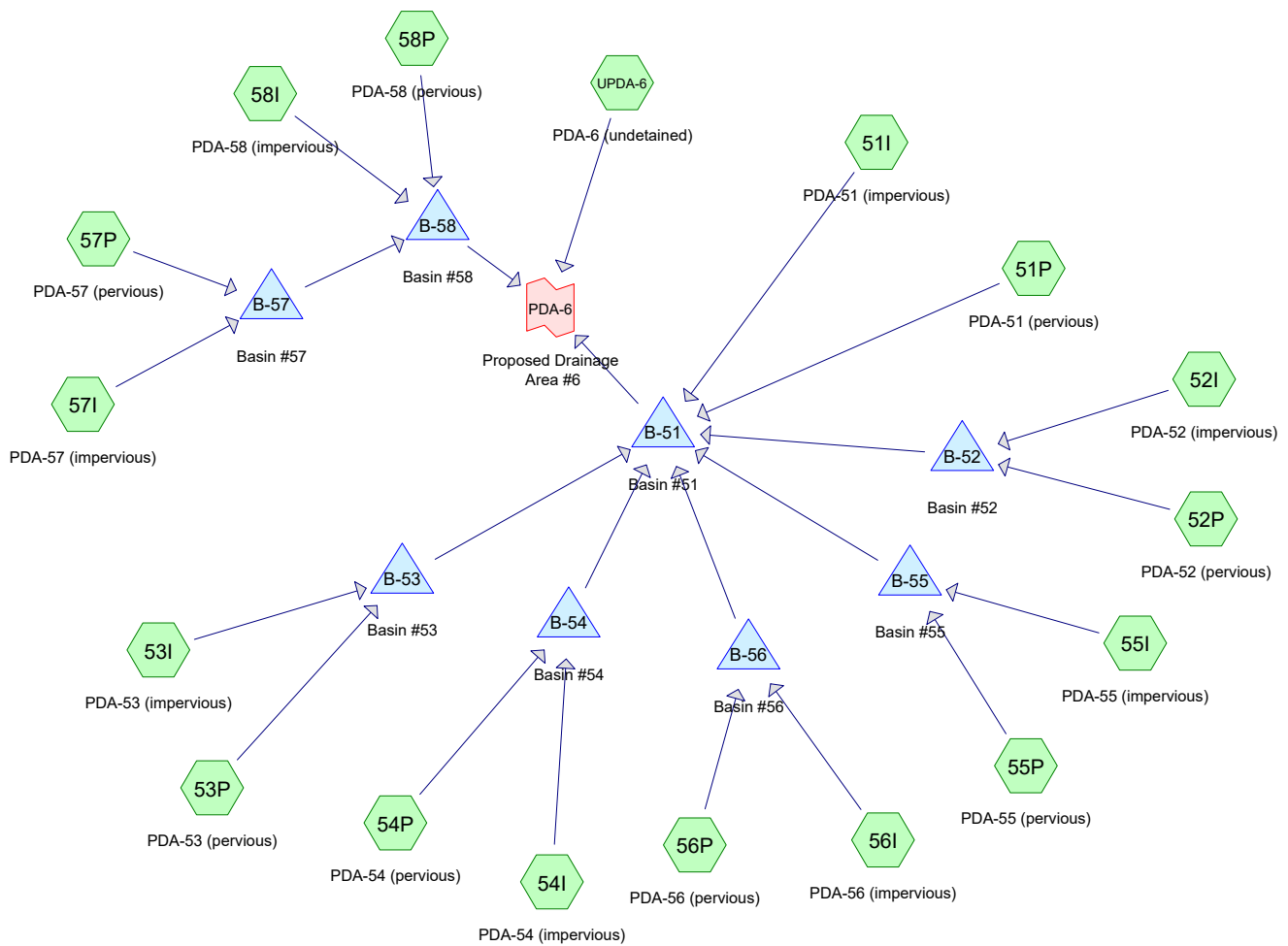
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.16	14,475	48,204
188.17	14,489	48,349
188.18	14,504	48,494
188.19	14,518	48,639
188.20	14,533	48,784
188.21	14,547	48,930
188.22	14,562	49,075
188.23	14,576	49,221
188.24	14,591	49,367
188.25	14,605	49,513
188.26	14,619	49,659
188.27	14,634	49,805
188.28	14,648	49,951
188.29	14,663	50,098
188.30	14,677	50,245
188.31	14,692	50,392
188.32	14,706	50,539
188.33	14,721	50,686
188.34	14,735	50,833
188.35	14,749	50,980
188.36	14,764	51,128
188.37	14,778	51,276
188.38	14,793	51,423
188.39	14,807	51,571
188.40	14,822	51,720
188.41	14,836	51,868
188.42	14,850	52,016
188.43	14,865	52,165
188.44	14,879	52,314
188.45	14,894	52,463
188.46	14,908	52,612
188.47	14,923	52,761
188.48	14,937	52,910
188.49	14,952	53,059
188.50	14,966	53,209

Summary for Link PDA-5: Proposed Drainage Area #5

Inflow Area = 7.273 ac, 32.33% Impervious, Inflow Depth > 8.02" for Future 100 yr event
Inflow = 37.99 cfs @ 12.27 hrs, Volume= 4.859 af
Primary = 37.99 cfs @ 12.27 hrs, Volume= 4.859 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-5: Proposed Drainage Area #5



Routing Diagram for 2025-04-04 Proposed- 081391_6
 Prepared by Bowman Consulting Group, Printed 4/1/2025
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2025-04-04 Proposed- 081391_6

Prepared by Bowman Consulting Group

Printed 4/1/2025

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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
47.070	74	>75% Grass cover, Good, HSG C (51P, 52P, 53P, 54P, 55P, 56P, 57P, 58P, UPDA-6)
0.463	98	Concrete, HSG C (52I, 53I, 54I, 55I, 57I)
2.464	98	Pavement, HSG C (52I, 53I, 54I, 55I, 57I)
3.014	98	Roof, HSG C (52I, 53I, 54I, 55I, 56I, 57I, 58I)
53.011	77	TOTAL AREA

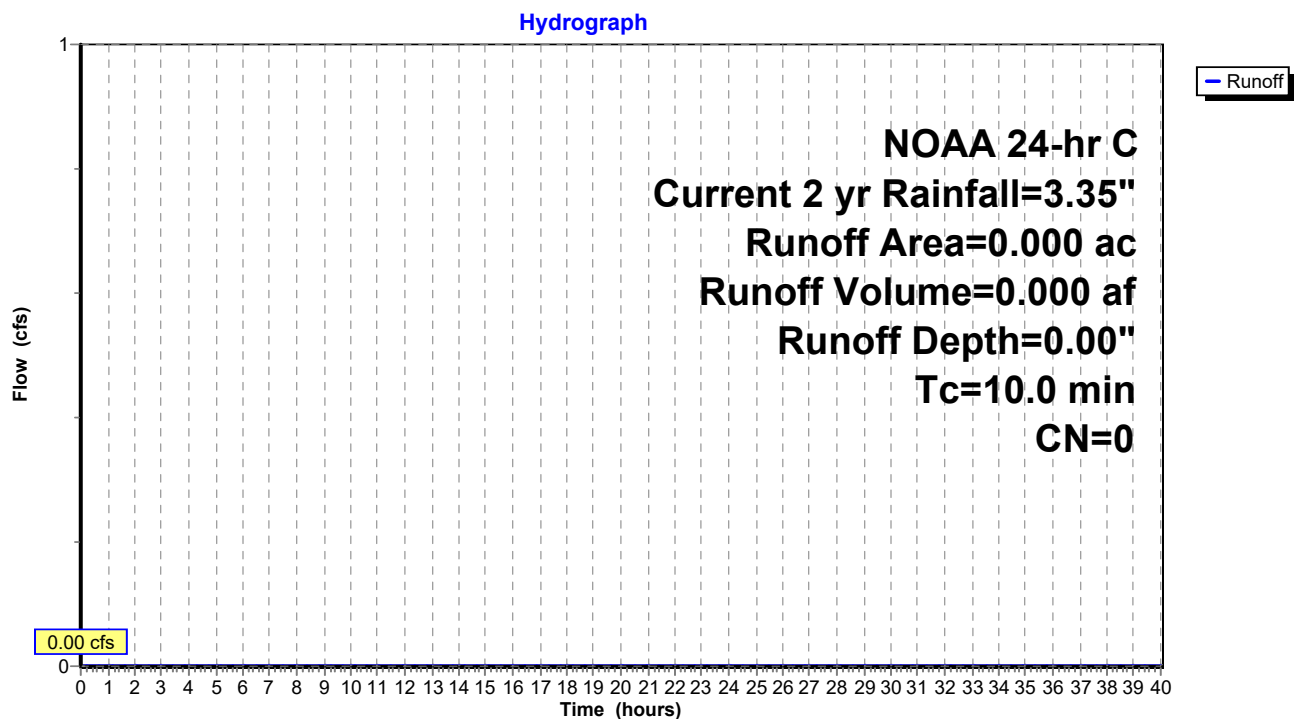
Summary for Subcatchment 51I: PDA-51 (impervious)

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
 Routed to Pond B-51 : Basin #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
* 0.000	98	Roof, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 51I: PDA-51 (impervious)

Summary for Subcatchment 51P: PDA-51 (pervious)

Runoff = 0.83 cfs @ 12.18 hrs, Volume= 0.065 af, Depth= 1.14"
 Routed to Pond B-51 : Basin #51

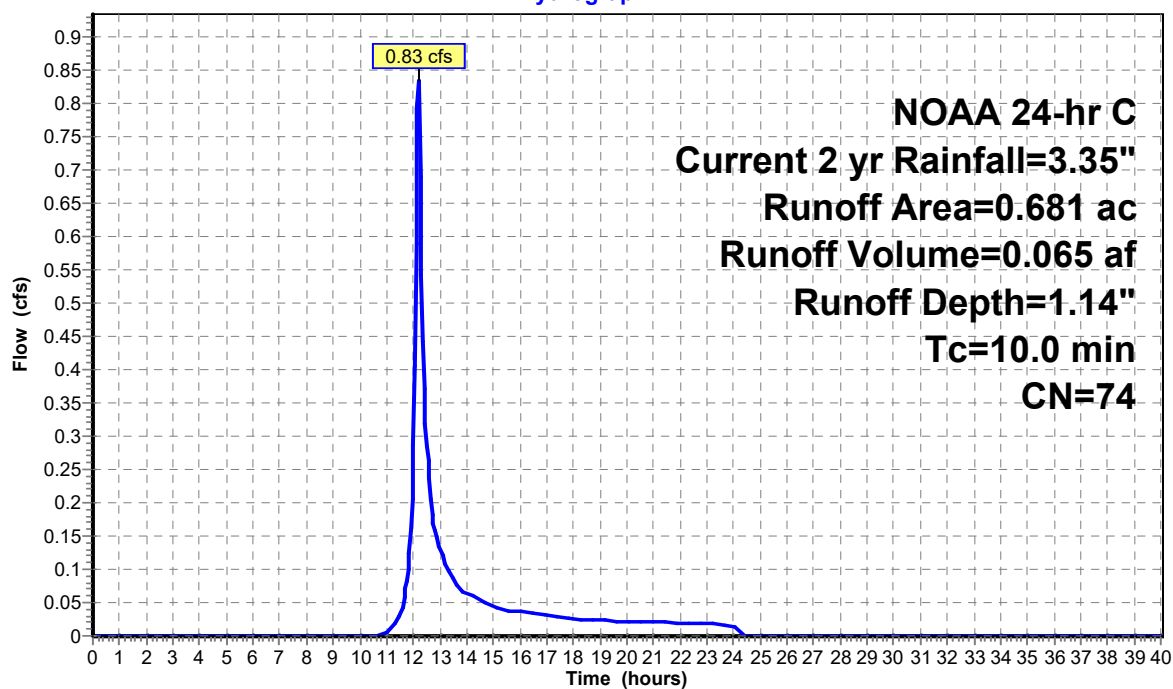
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.681	74	>75% Grass cover, Good, HSG C
0.681		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 51P: PDA-51 (pervious)

Hydrograph



Summary for Subcatchment 52I: PDA-52 (impervious)

Runoff = 1.49 cfs @ 12.17 hrs, Volume= 0.127 af, Depth= 3.12"
 Routed to Pond B-52 : Basin #52

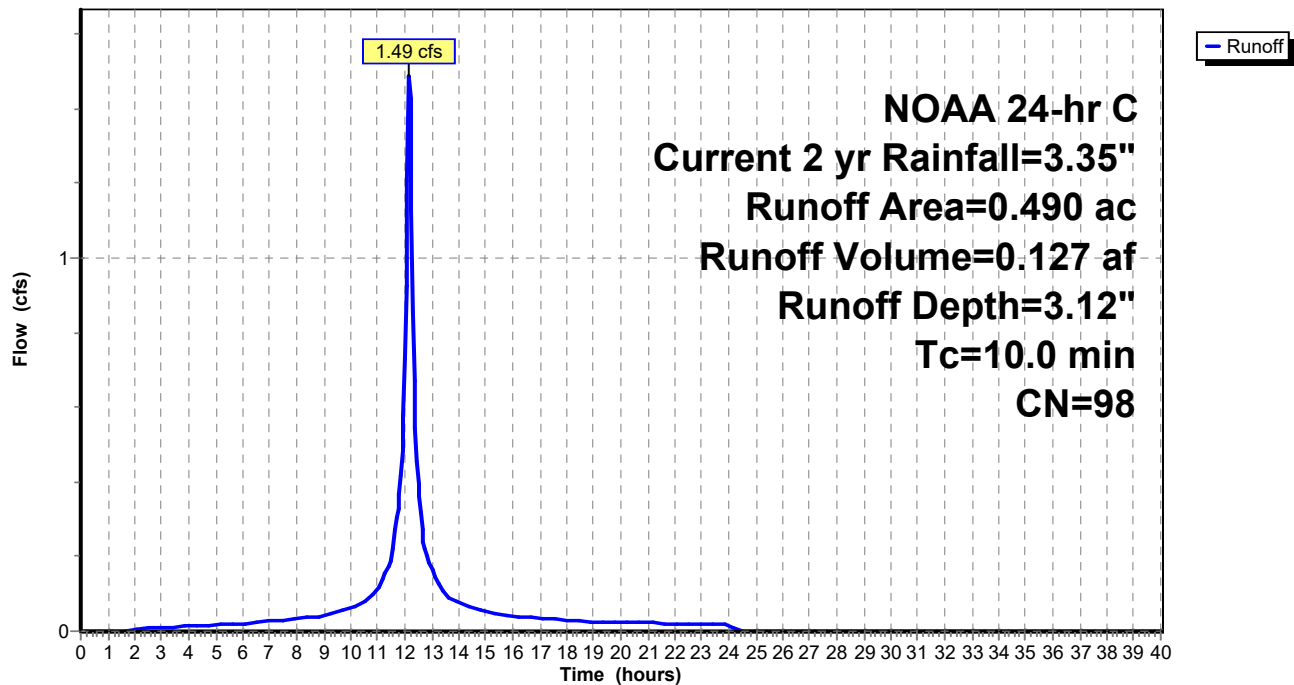
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
* 0.118	98	Pavement, HSG C
* 0.339	98	Roof, HSG C
* 0.033	98	Concrete, HSG C
0.490	98	Weighted Average
0.490		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 52I: PDA-52 (impervious)

Hydrograph



Summary for Subcatchment 52P: PDA-52 (pervious)

Runoff = 1.14 cfs @ 12.18 hrs, Volume= 0.088 af, Depth= 1.14"
 Routed to Pond B-52 : Basin #52

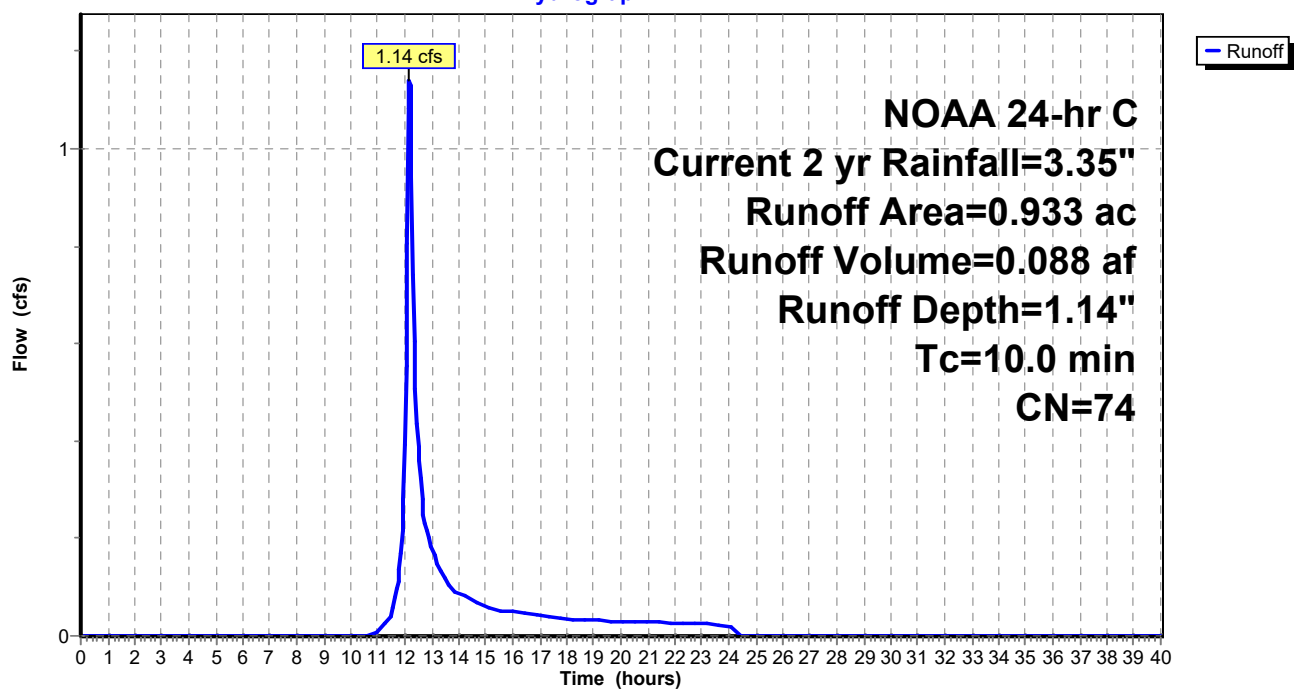
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.933	74	>75% Grass cover, Good, HSG C
0.933		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 52P: PDA-52 (pervious)

Hydrograph



Summary for Subcatchment 53I: PDA-53 (impervious)

Runoff = 3.68 cfs @ 12.17 hrs, Volume= 0.315 af, Depth= 3.12"
 Routed to Pond B-53 : Basin #53

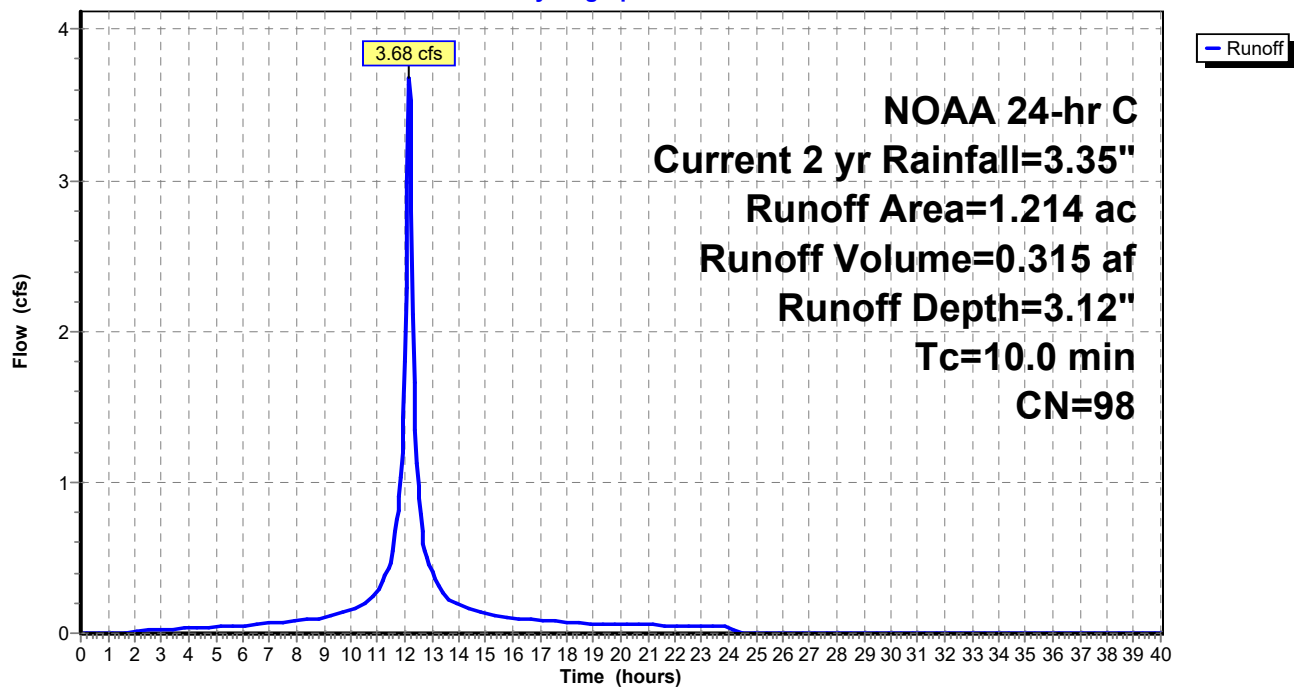
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
* 0.628	98	Pavement, HSG C
* 0.450	98	Roof, HSG C
* 0.136	98	Concrete, HSG C
1.214	98	Weighted Average
1.214		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 53I: PDA-53 (impervious)

Hydrograph



Summary for Subcatchment 53P: PDA-53 (pervious)

Runoff = 1.62 cfs @ 12.18 hrs, Volume= 0.126 af, Depth= 1.14"
 Routed to Pond B-53 : Basin #53

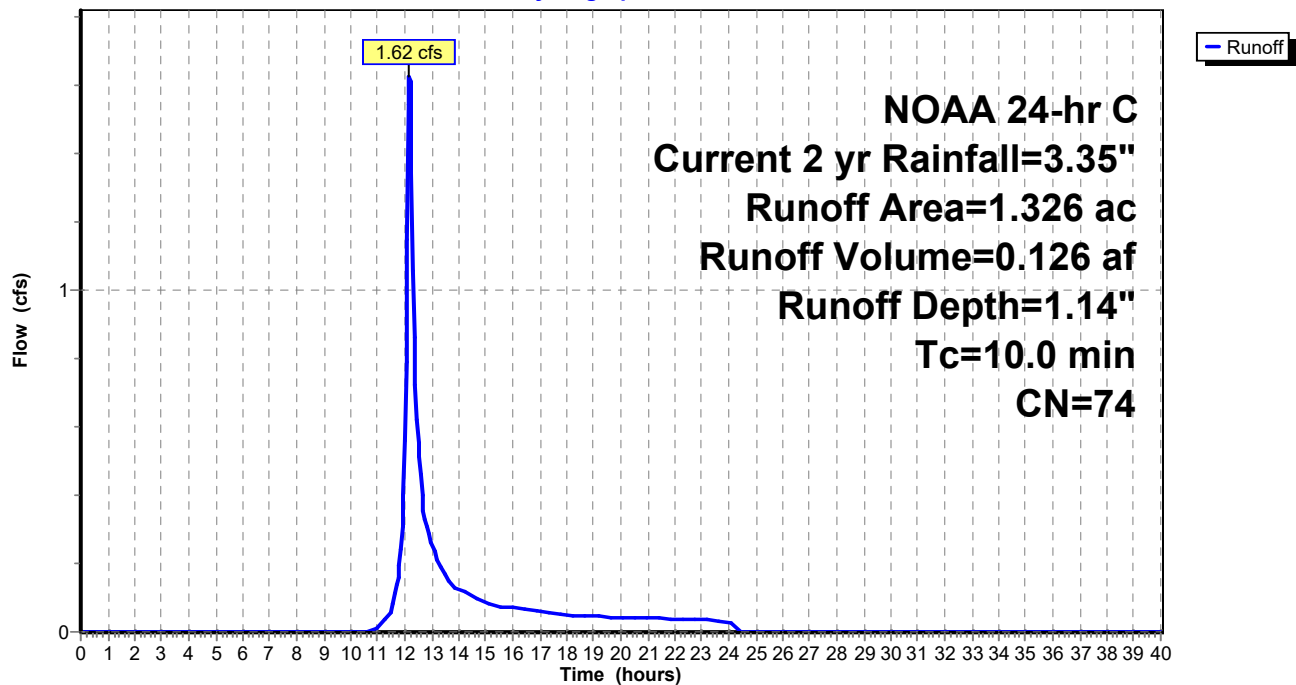
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.326	74	>75% Grass cover, Good, HSG C
1.326		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 53P: PDA-53 (pervious)

Hydrograph



Summary for Subcatchment 54I: PDA-54 (impervious)

Runoff = 4.71 cfs @ 12.17 hrs, Volume= 0.404 af, Depth= 3.12"
 Routed to Pond B-54 : Basin #54

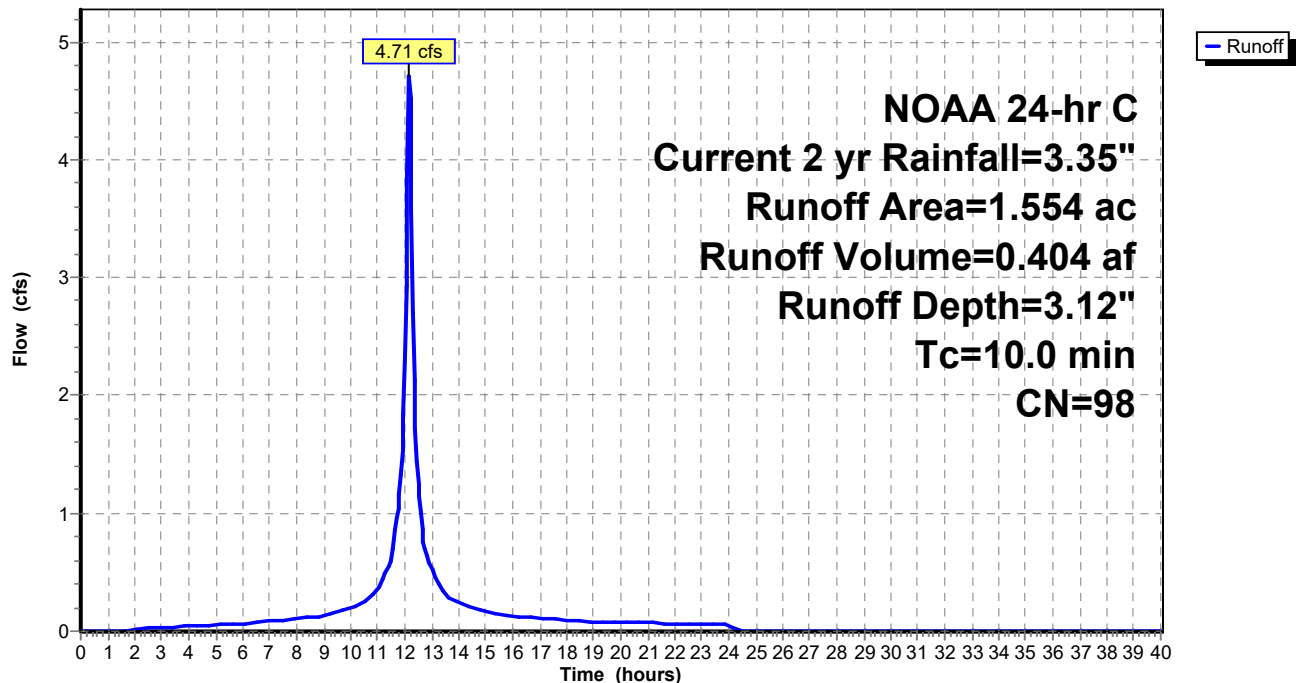
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
* 0.983	98	Pavement, HSG C
* 0.361	98	Roof, HSG C
* 0.210	98	Concrete, HSG C
1.554	98	Weighted Average
1.554		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 54I: PDA-54 (impervious)

Hydrograph



Summary for Subcatchment 54P: PDA-54 (pervious)

Runoff = 1.24 cfs @ 12.18 hrs, Volume= 0.096 af, Depth= 1.14"
 Routed to Pond B-54 : Basin #54

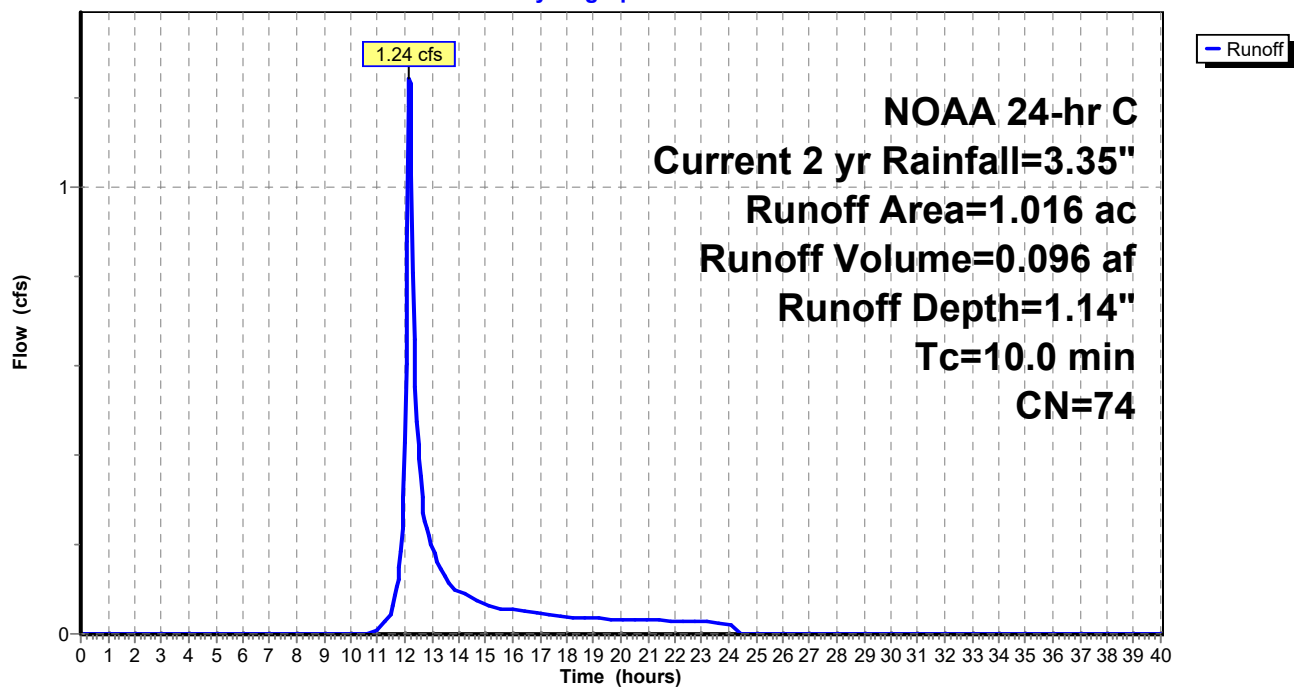
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.016	74	>75% Grass cover, Good, HSG C
1.016		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 54P: PDA-54 (pervious)

Hydrograph



Summary for Subcatchment 55I: PDA-55 (impervious)

Runoff = 3.30 cfs @ 12.17 hrs, Volume= 0.283 af, Depth= 3.12"
 Routed to Pond B-55 : Basin #55

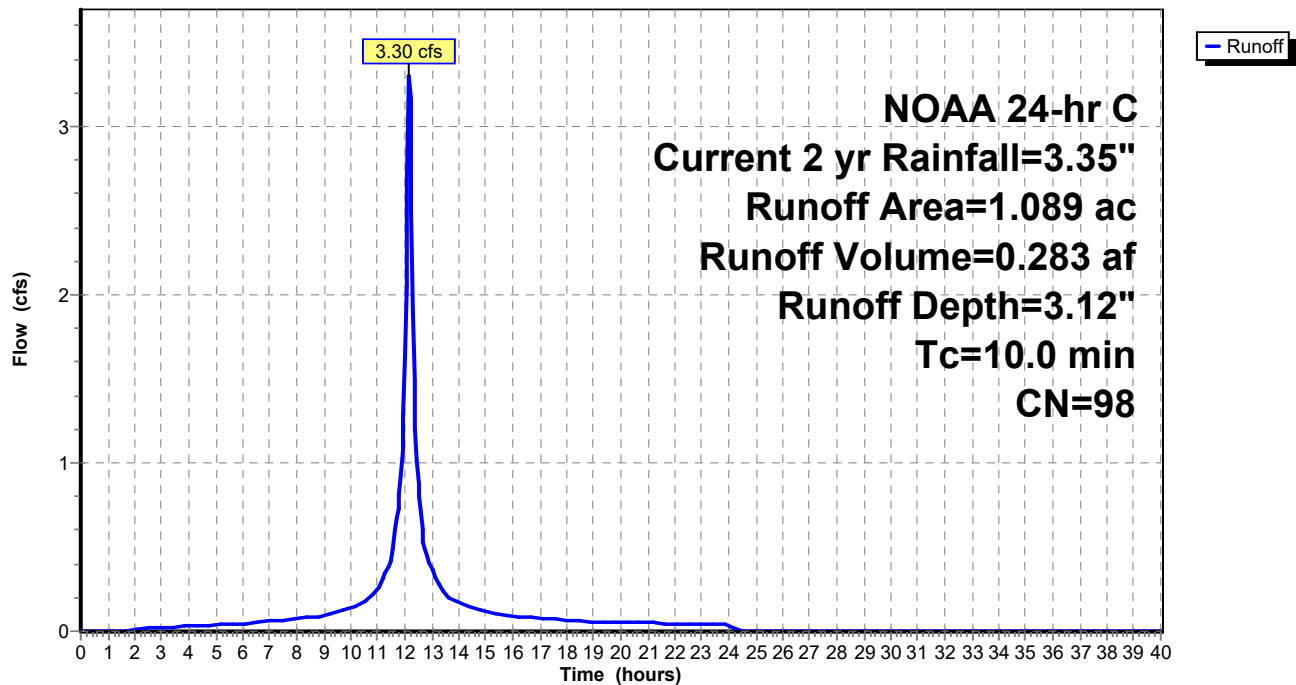
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
* 0.467	98	Pavement, HSG C
* 0.574	98	Roof, HSG C
* 0.048	98	Concrete, HSG C
1.089	98	Weighted Average
1.089		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 55I: PDA-55 (impervious)

Hydrograph



Summary for Subcatchment 55P: PDA-55 (pervious)

Runoff = 1.48 cfs @ 12.18 hrs, Volume= 0.115 af, Depth= 1.14"
 Routed to Pond B-55 : Basin #55

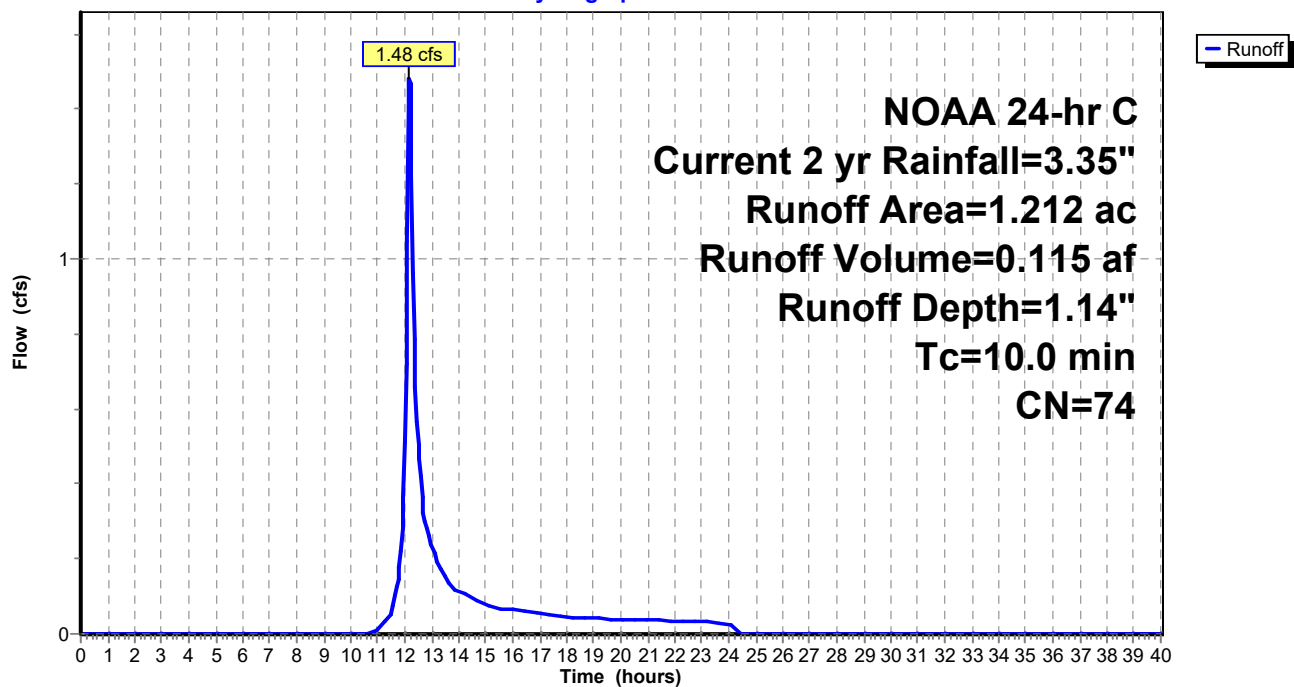
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.212	74	>75% Grass cover, Good, HSG C
1.212		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 55P: PDA-55 (pervious)

Hydrograph



Summary for Subcatchment 56I: PDA-56 (impervious)

Runoff = 1.42 cfs @ 12.17 hrs, Volume= 0.122 af, Depth= 3.12"
 Routed to Pond B-56 : Basin #56

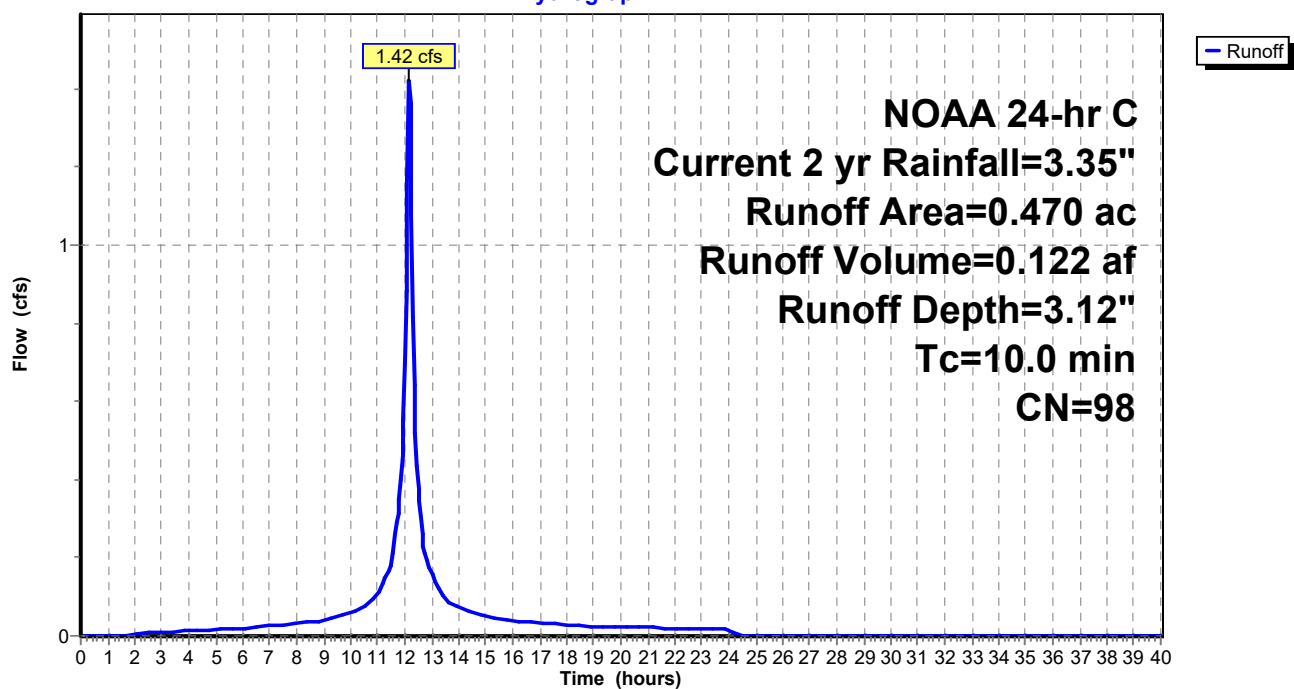
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
* 0.470	98	Roof, HSG C
0.470		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 56I: PDA-56 (impervious)

Hydrograph



Summary for Subcatchment 56P: PDA-56 (pervious)

Runoff = 1.27 cfs @ 12.18 hrs, Volume= 0.099 af, Depth= 1.14"
 Routed to Pond B-56 : Basin #56

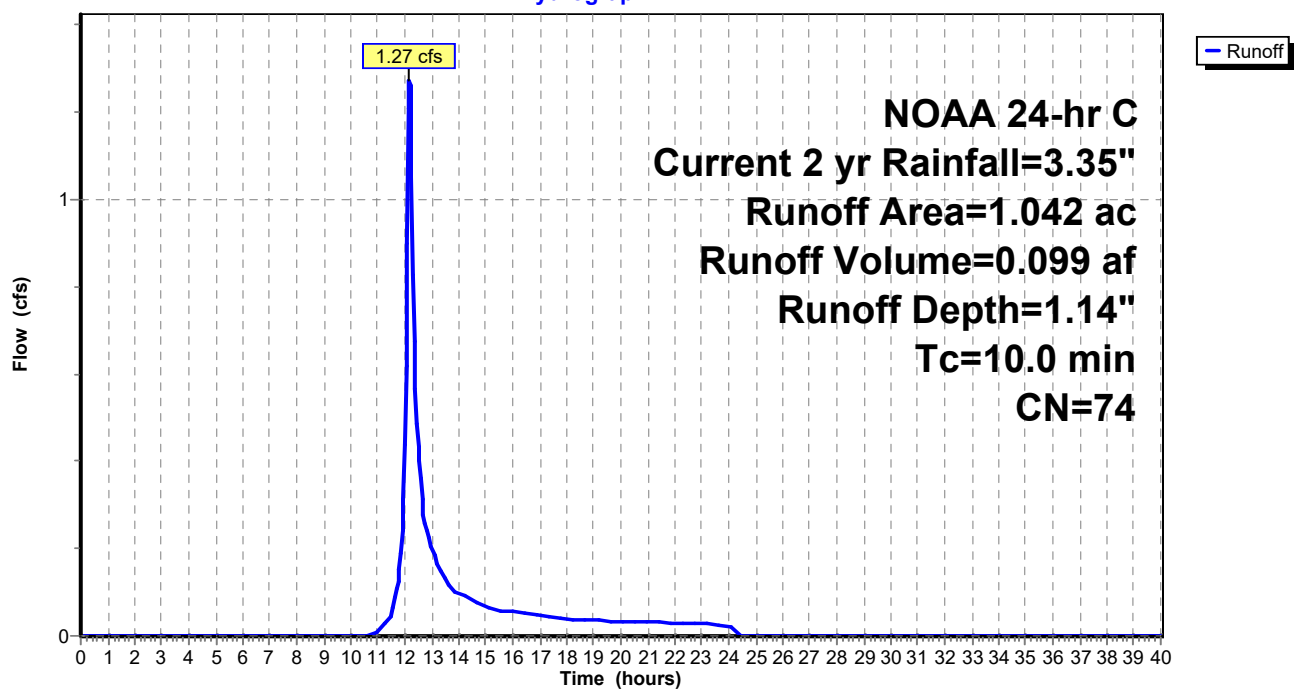
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.042	74	>75% Grass cover, Good, HSG C
1.042		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 56P: PDA-56 (pervious)

Hydrograph



Summary for Subcatchment 57I: PDA-57 (impervious)

Runoff = 2.07 cfs @ 12.17 hrs, Volume= 0.177 af, Depth= 3.12"
 Routed to Pond B-57 : Basin #57

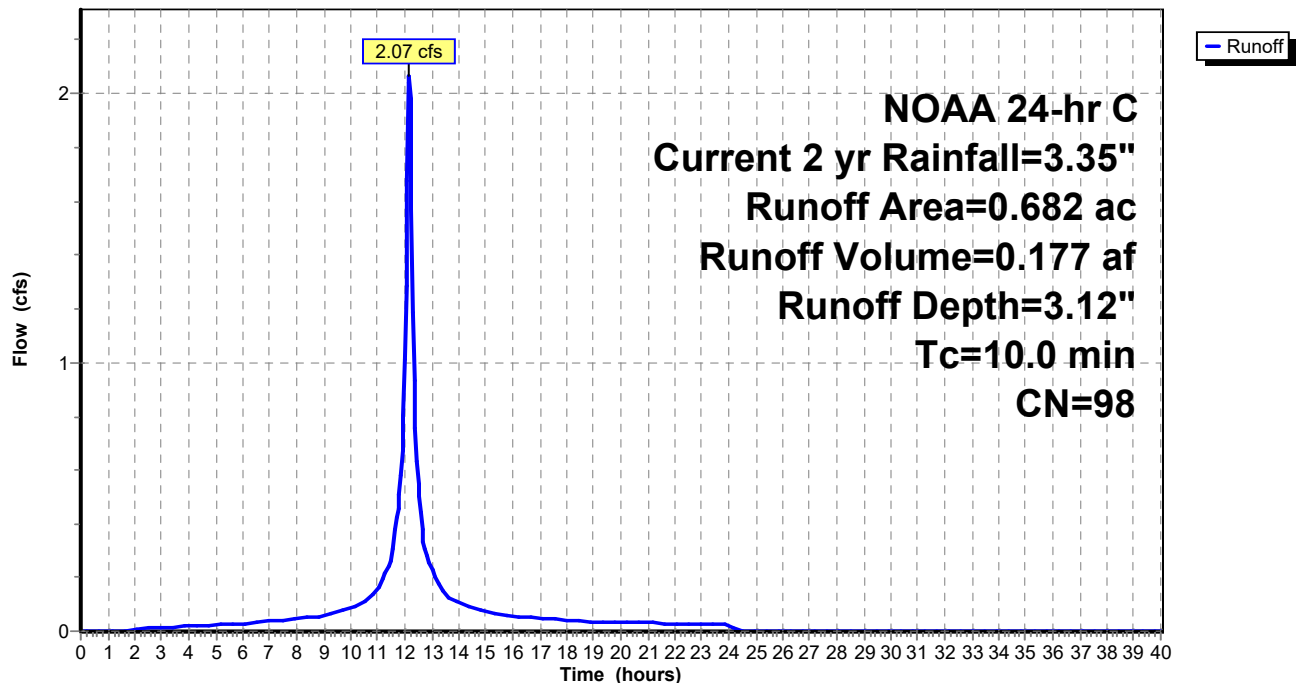
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
* 0.268	98	Pavement, HSG C
* 0.378	98	Roof, HSG C
* 0.036	98	Concrete, HSG C
0.682	98	Weighted Average
0.682		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 57I: PDA-57 (impervious)

Hydrograph



Summary for Subcatchment 57P: PDA-57 (pervious)

Runoff = 0.92 cfs @ 12.18 hrs, Volume= 0.071 af, Depth= 1.14"
 Routed to Pond B-57 : Basin #57

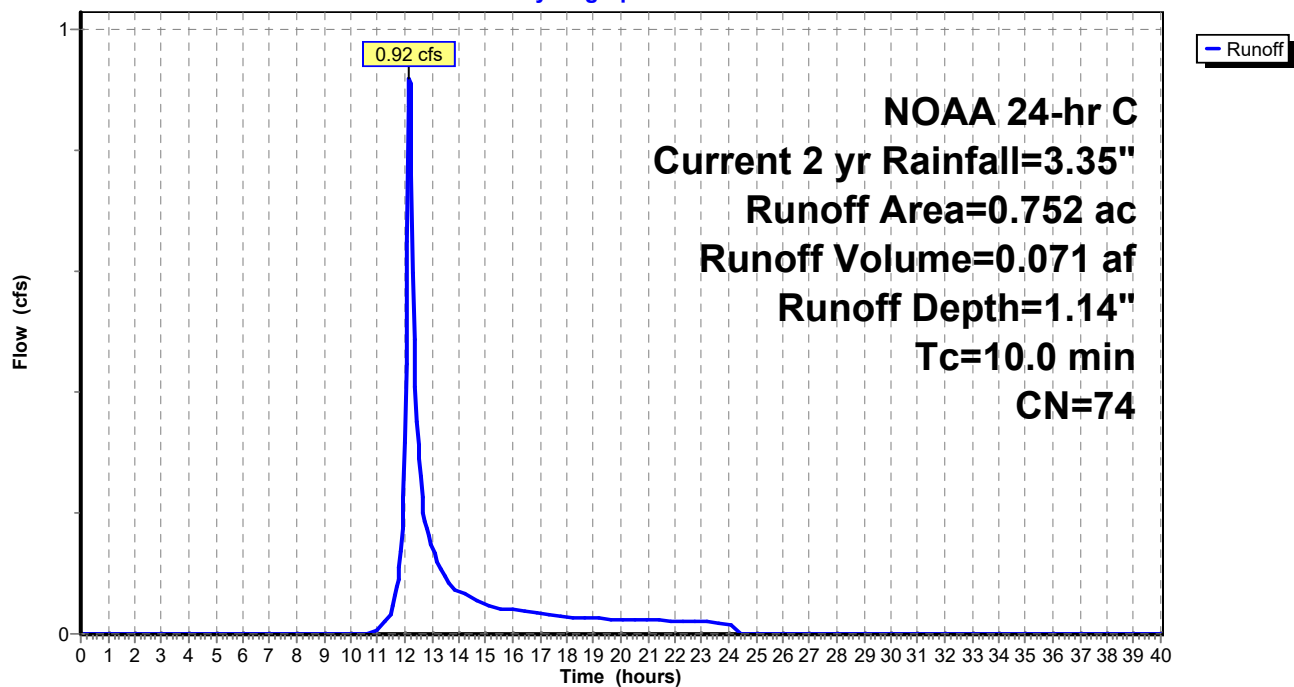
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.752	74	>75% Grass cover, Good, HSG C
0.752		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 57P: PDA-57 (pervious)

Hydrograph



Summary for Subcatchment 58I: PDA-58 (impervious)

Runoff = 1.34 cfs @ 12.17 hrs, Volume= 0.115 af, Depth= 3.12"
 Routed to Pond B-58 : Basin #58

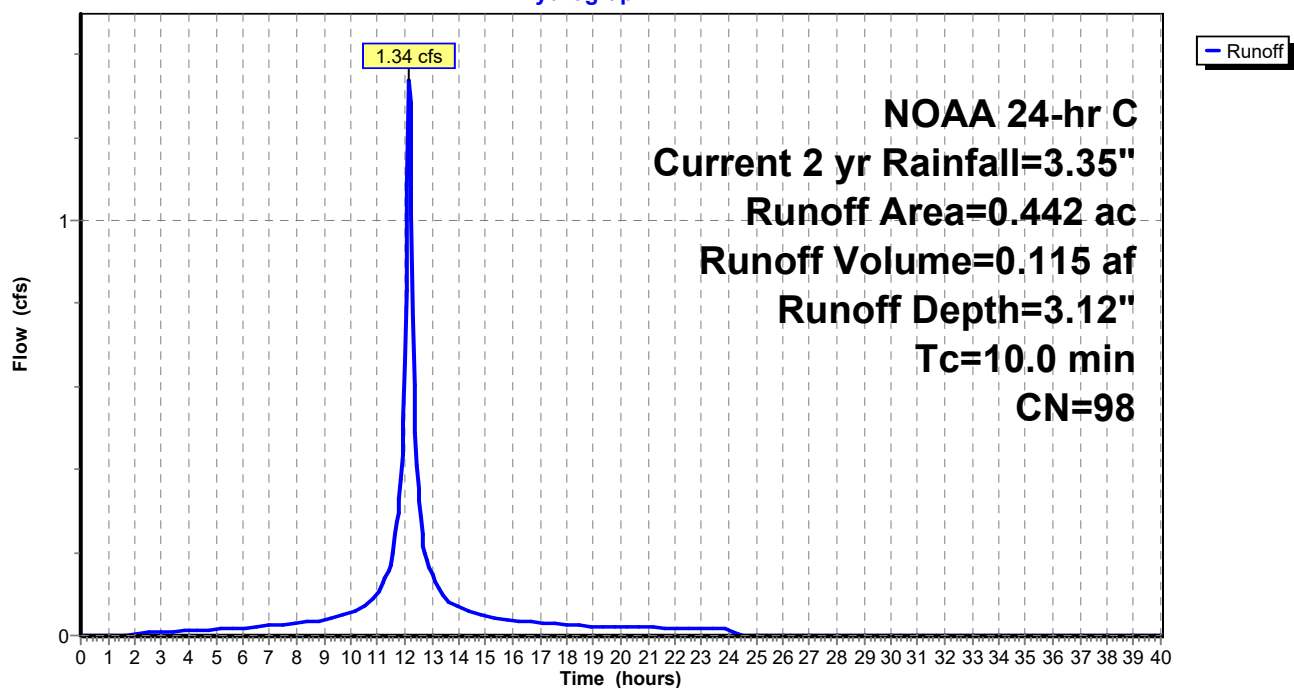
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
* 0.442	98	Roof, HSG C
* 0.000	98	Concrete, HSG C
0.442	98	Weighted Average
0.442		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 58I: PDA-58 (impervious)

Hydrograph



Summary for Subcatchment 58P: PDA-58 (pervious)

Runoff = 1.48 cfs @ 12.18 hrs, Volume= 0.114 af, Depth= 1.14"
 Routed to Pond B-58 : Basin #58

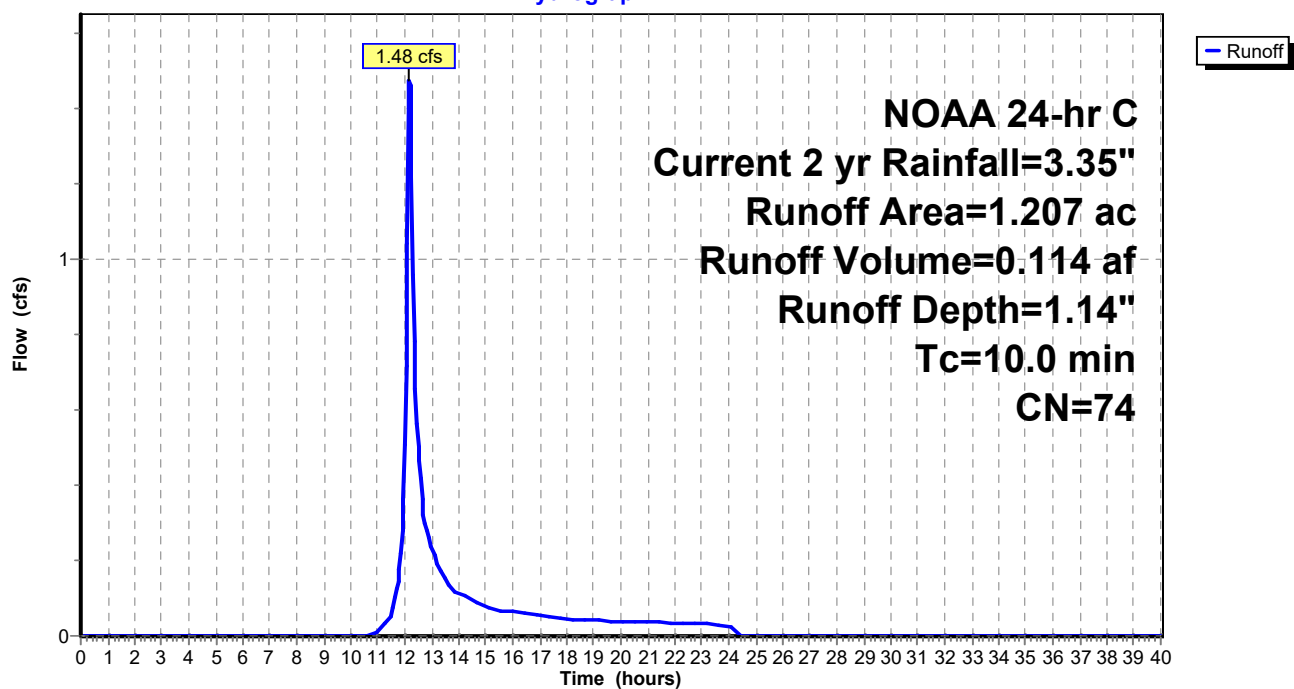
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.207	74	>75% Grass cover, Good, HSG C
1.207		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 58P: PDA-58 (pervious)

Hydrograph



Summary for Subcatchment UPDA-6: PDA-6 (undetained)

Runoff = 47.59 cfs @ 12.18 hrs, Volume= 3.688 af, Depth= 1.14"

Routed to Link PDA-6 : Proposed Drainage Area #6

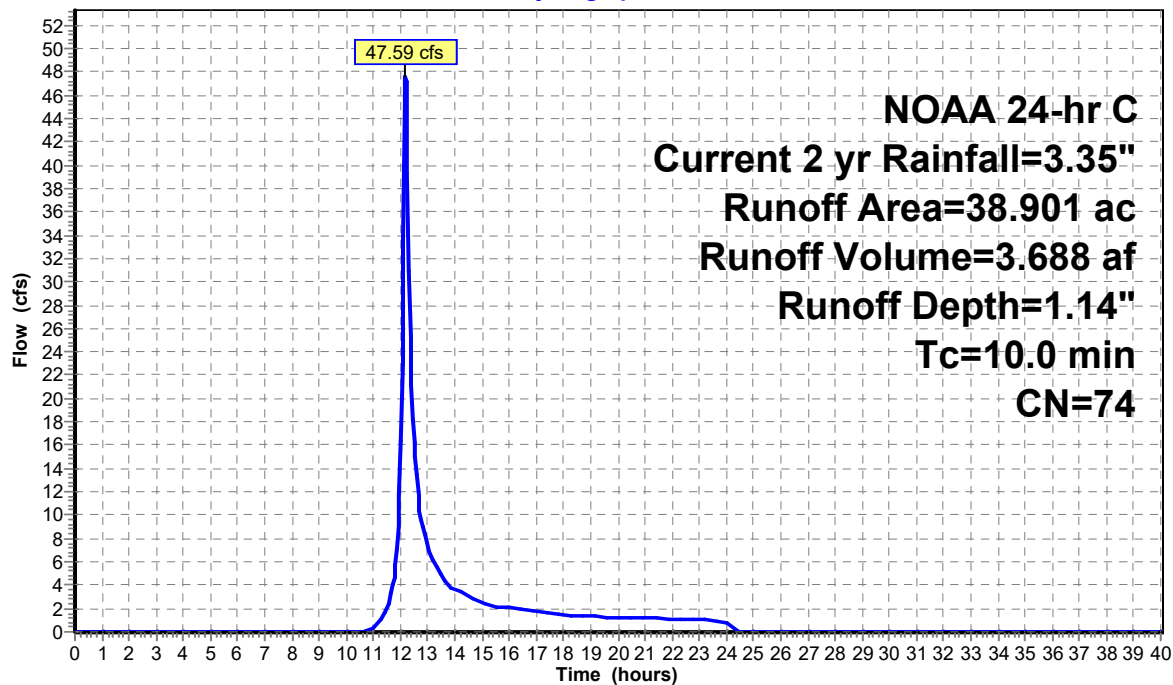
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
38.901	74	>75% Grass cover, Good, HSG C
38.901		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment UPDA-6: PDA-6 (undetained)

Hydrograph



Summary for Pond B-51: Basin #51

Inflow Area = 11.027 ac, 43.68% Impervious, Inflow Depth = 1.51" for Current 2 yr event
 Inflow = 9.90 cfs @ 12.28 hrs, Volume= 1.389 af
 Outflow = 8.02 cfs @ 12.56 hrs, Volume= 1.383 af, Atten= 19%, Lag= 16.7 min
 Primary = 8.02 cfs @ 12.56 hrs, Volume= 1.383 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 185.15' @ 12.56 hrs Surf.Area= 6,977 sf Storage= 6,995 cf

Plug-Flow detention time= 29.3 min calculated for 1.383 af (100% of inflow)
 Center-of-Mass det. time= 25.7 min (915.9 - 890.2)

Volume	Invert	Avail.Storage	Storage Description
#1	184.00'	58,347 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
184.00	5,243	0	0
185.00	6,727	5,985	5,985
186.00	8,424	7,576	13,561
187.00	10,085	9,255	22,815
188.00	11,802	10,944	33,759
189.00	13,576	12,689	46,448
189.83	15,098	11,900	58,347

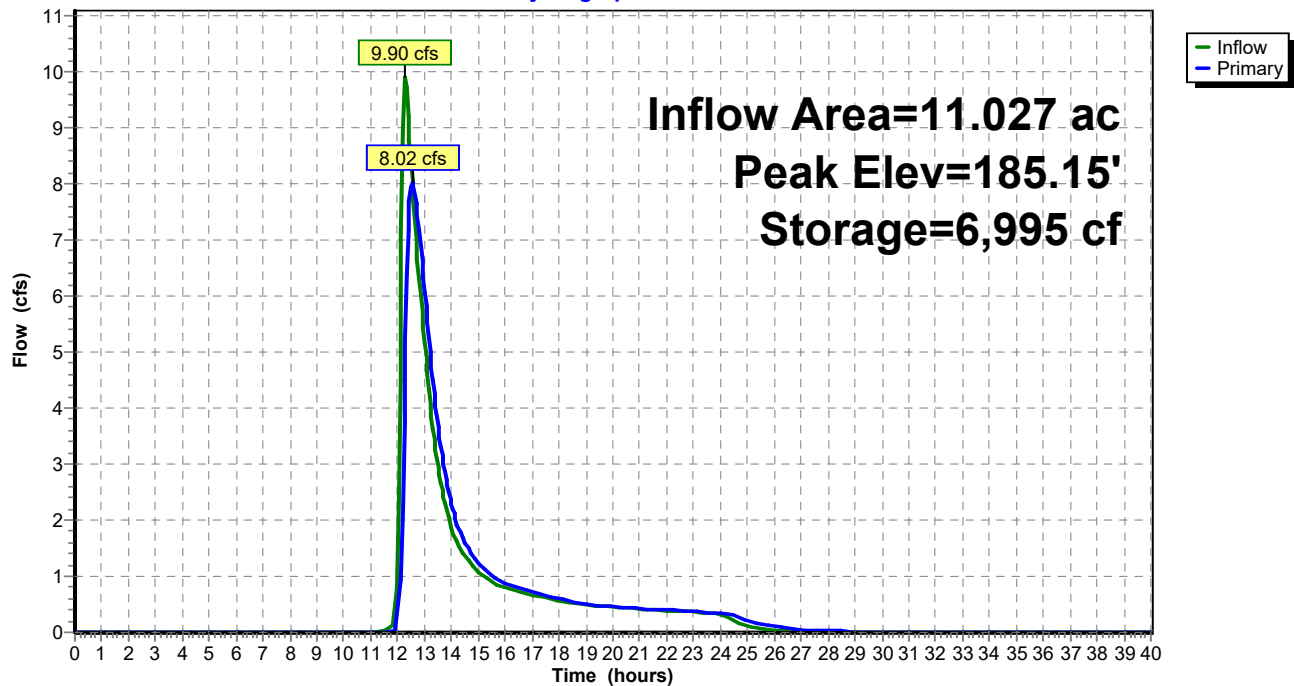
Device	Routing	Invert	Outlet Devices
#1	Primary	184.00'	30.0" Round Culvert L= 147.0' Ke= 0.500 Inlet / Outlet Invert= 184.00' / 182.00' S= 0.0136 '/' Cc= 0.900 n= 0.013, Flow Area= 4.91 sf
#2	Device 1	184.05'	48.0" W x 12.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	187.00'	8.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	189.80'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=8.01 cfs @ 12.56 hrs HW=185.15' (Free Discharge)

1=Culvert (Inlet Controls 8.01 cfs @ 3.65 fps)
 2=Orifice/Grate (Passes 8.01 cfs of 14.36 cfs potential flow)
 3=Sharp-Crested Rectangular Weir(Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs)

Pond B-51: Basin #51

Hydrograph



Stage-Discharge for Pond B-51: Basin #51

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
184.00	0.00	184.52	1.81	185.04	6.71	185.56	13.70
184.01	0.00	184.53	1.88	185.05	6.83	185.57	13.85
184.02	0.00	184.54	1.95	185.06	6.94	185.58	13.99
184.03	0.00	184.55	2.02	185.07	7.06	185.59	14.14
184.04	0.00	184.56	2.09	185.08	7.19	185.60	14.29
184.05	0.00	184.57	2.17	185.09	7.31	185.61	14.44
184.06	0.01	184.58	2.24	185.10	7.43	185.62	14.59
184.07	0.03	184.59	2.31	185.11	7.55	185.63	14.73
184.08	0.05	184.60	2.39	185.12	7.67	185.64	14.88
184.09	0.06	184.61	2.47	185.13	7.80	185.65	15.03
184.10	0.07	184.62	2.54	185.14	7.92	185.66	15.18
184.11	0.09	184.63	2.62	185.15	8.05	185.67	15.33
184.12	0.10	184.64	2.70	185.16	8.18	185.68	15.48
184.13	0.12	184.65	2.78	185.17	8.30	185.69	15.63
184.14	0.14	184.66	2.87	185.18	8.43	185.70	15.78
184.15	0.16	184.67	2.95	185.19	8.56	185.71	15.93
184.16	0.18	184.68	3.03	185.20	8.69	185.72	16.08
184.17	0.20	184.69	3.12	185.21	8.82	185.73	16.23
184.18	0.23	184.70	3.21	185.22	8.95	185.74	16.38
184.19	0.25	184.71	3.29	185.23	9.08	185.75	16.53
184.20	0.28	184.72	3.38	185.24	9.21	185.76	16.68
184.21	0.31	184.73	3.47	185.25	9.34	185.77	16.83
184.22	0.34	184.74	3.56	185.26	9.48	185.78	16.98
184.23	0.37	184.75	3.65	185.27	9.61	185.79	17.13
184.24	0.40	184.76	3.74	185.28	9.74	185.80	17.28
184.25	0.43	184.77	3.84	185.29	9.88	185.81	17.43
184.26	0.47	184.78	3.93	185.30	10.01	185.82	17.58
184.27	0.51	184.79	4.03	185.31	10.15	185.83	17.73
184.28	0.54	184.80	4.12	185.32	10.28	185.84	17.89
184.29	0.58	184.81	4.22	185.33	10.42	185.85	18.04
184.30	0.62	184.82	4.32	185.34	10.56	185.86	18.19
184.31	0.66	184.83	4.42	185.35	10.70	185.87	18.34
184.32	0.71	184.84	4.52	185.36	10.84	185.88	18.49
184.33	0.75	184.85	4.62	185.37	10.97	185.89	18.64
184.34	0.80	184.86	4.72	185.38	11.11	185.90	18.79
184.35	0.84	184.87	4.82	185.39	11.25	185.91	18.94
184.36	0.89	184.88	4.93	185.40	11.39	185.92	19.08
184.37	0.94	184.89	5.03	185.41	11.54	185.93	19.23
184.38	0.99	184.90	5.14	185.42	11.68	185.94	19.38
184.39	1.04	184.91	5.25	185.43	11.82	185.95	19.53
184.40	1.09	184.92	5.35	185.44	11.96	185.96	19.68
184.41	1.15	184.93	5.46	185.45	12.10	185.97	19.83
184.42	1.20	184.94	5.57	185.46	12.25	185.98	19.98
184.43	1.26	184.95	5.68	185.47	12.39	185.99	20.12
184.44	1.31	184.96	5.79	185.48	12.53	186.00	20.27
184.45	1.37	184.97	5.90	185.49	12.68	186.01	20.42
184.46	1.43	184.98	6.02	185.50	12.82	186.02	20.56
184.47	1.49	184.99	6.13	185.51	12.97	186.03	20.71
184.48	1.55	185.00	6.24	185.52	13.11	186.04	20.86
184.49	1.62	185.01	6.36	185.53	13.26	186.05	21.00
184.50	1.68	185.02	6.47	185.54	13.41	186.06	21.14
184.51	1.75	185.03	6.59	185.55	13.55	186.07	21.29

Stage-Discharge for Pond B-51: Basin #51 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.08	21.43	186.60	27.46	187.12	31.91	187.64	36.54
186.09	21.58	186.61	27.56	187.13	32.11	187.65	36.62
186.10	21.72	186.62	27.64	187.14	32.31	187.66	36.69
186.11	21.86	186.63	27.71	187.15	32.52	187.67	36.77
186.12	22.00	186.64	27.78	187.16	32.66	187.68	36.84
186.13	22.14	186.65	27.84	187.17	32.75	187.69	36.92
186.14	22.28	186.66	27.91	187.18	32.84	187.70	37.00
186.15	22.42	186.67	27.98	187.19	32.92	187.71	37.07
186.16	22.56	186.68	28.04	187.20	33.01	187.72	37.15
186.17	22.70	186.69	28.11	187.21	33.09	187.73	37.22
186.18	22.83	186.70	28.18	187.22	33.17	187.74	37.30
186.19	22.97	186.71	28.24	187.23	33.26	187.75	37.37
186.20	23.10	186.72	28.31	187.24	33.34	187.76	37.45
186.21	23.24	186.73	28.37	187.25	33.43	187.77	37.52
186.22	23.37	186.74	28.44	187.26	33.51	187.78	37.59
186.23	23.50	186.75	28.50	187.27	33.59	187.79	37.67
186.24	23.63	186.76	28.57	187.28	33.68	187.80	37.74
186.25	23.76	186.77	28.64	187.29	33.76	187.81	37.82
186.26	23.89	186.78	28.70	187.30	33.84	187.82	37.89
186.27	24.02	186.79	28.77	187.31	33.92	187.83	37.96
186.28	24.15	186.80	28.83	187.32	34.01	187.84	38.04
186.29	24.27	186.81	28.89	187.33	34.09	187.85	38.11
186.30	24.40	186.82	28.96	187.34	34.17	187.86	38.18
186.31	24.52	186.83	29.02	187.35	34.25	187.87	38.26
186.32	24.64	186.84	29.09	187.36	34.33	187.88	38.33
186.33	24.76	186.85	29.15	187.37	34.41	187.89	38.40
186.34	24.88	186.86	29.21	187.38	34.49	187.90	38.48
186.35	24.99	186.87	29.28	187.39	34.58	187.91	38.55
186.36	25.11	186.88	29.34	187.40	34.66	187.92	38.62
186.37	25.22	186.89	29.41	187.41	34.74	187.93	38.69
186.38	25.33	186.90	29.47	187.42	34.82	187.94	38.77
186.39	25.44	186.91	29.53	187.43	34.90	187.95	38.84
186.40	25.54	186.92	29.59	187.44	34.98	187.96	38.91
186.41	25.65	186.93	29.66	187.45	35.06	187.97	38.98
186.42	25.75	186.94	29.72	187.46	35.14	187.98	39.05
186.43	25.85	186.95	29.78	187.47	35.22	187.99	39.12
186.44	25.94	186.96	29.85	187.48	35.30	188.00	39.19
186.45	26.03	186.97	29.91	187.49	35.37	188.01	39.27
186.46	26.12	186.98	29.97	187.50	35.45	188.02	39.34
186.47	26.21	186.99	30.03	187.51	35.53	188.03	39.41
186.48	26.29	187.00	30.09	187.52	35.61	188.04	39.48
186.49	26.36	187.01	30.18	187.53	35.69	188.05	39.55
186.50	26.43	187.02	30.29	187.54	35.77	188.06	39.62
186.51	26.53	187.03	30.41	187.55	35.84	188.07	39.69
186.52	26.64	187.04	30.55	187.56	35.92	188.08	39.76
186.53	26.74	187.05	30.69	187.57	36.00	188.09	39.83
186.54	26.84	187.06	30.85	187.58	36.08	188.10	39.90
186.55	26.95	187.07	31.01	187.59	36.16	188.11	39.97
186.56	27.05	187.08	31.18	187.60	36.23	188.12	40.04
186.57	27.16	187.09	31.35	187.61	36.31	188.13	40.11
186.58	27.26	187.10	31.53	187.62	36.39	188.14	40.18
186.59	27.36	187.11	31.72	187.63	36.46	188.15	40.25

Stage-Discharge for Pond B-51: Basin #51 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
188.16	40.32	188.68	43.77	189.20	46.97	189.72	49.97
188.17	40.39	188.69	43.84	189.21	47.03	189.73	50.03
188.18	40.46	188.70	43.90	189.22	47.09	189.74	50.08
188.19	40.53	188.71	43.96	189.23	47.15	189.75	50.14
188.20	40.60	188.72	44.03	189.24	47.21	189.76	50.19
188.21	40.66	188.73	44.09	189.25	47.27	189.77	50.25
188.22	40.73	188.74	44.15	189.26	47.33	189.78	50.31
188.23	40.80	188.75	44.22	189.27	47.39	189.79	50.36
188.24	40.87	188.76	44.28	189.28	47.45	189.80	50.42
188.25	40.94	188.77	44.34	189.29	47.51	189.81	50.59
188.26	41.01	188.78	44.41	189.30	47.57	189.82	50.86
188.27	41.07	188.79	44.47	189.31	47.62	189.83	51.19
188.28	41.14	188.80	44.53	189.32	47.68		
188.29	41.21	188.81	44.60	189.33	47.74		
188.30	41.28	188.82	44.66	189.34	47.80		
188.31	41.35	188.83	44.72	189.35	47.86		
188.32	41.41	188.84	44.78	189.36	47.92		
188.33	41.48	188.85	44.85	189.37	47.97		
188.34	41.55	188.86	44.91	189.38	48.03		
188.35	41.61	188.87	44.97	189.39	48.09		
188.36	41.68	188.88	45.03	189.40	48.15		
188.37	41.75	188.89	45.09	189.41	48.21		
188.38	41.82	188.90	45.16	189.42	48.26		
188.39	41.88	188.91	45.22	189.43	48.32		
188.40	41.95	188.92	45.28	189.44	48.38		
188.41	42.02	188.93	45.34	189.45	48.44		
188.42	42.08	188.94	45.40	189.46	48.50		
188.43	42.15	188.95	45.46	189.47	48.55		
188.44	42.21	188.96	45.53	189.48	48.61		
188.45	42.28	188.97	45.59	189.49	48.67		
188.46	42.35	188.98	45.65	189.50	48.73		
188.47	42.41	188.99	45.71	189.51	48.78		
188.48	42.48	189.00	45.77	189.52	48.84		
188.49	42.54	189.01	45.83	189.53	48.90		
188.50	42.61	189.02	45.89	189.54	48.95		
188.51	42.67	189.03	45.95	189.55	49.01		
188.52	42.74	189.04	46.01	189.56	49.07		
188.53	42.81	189.05	46.07	189.57	49.13		
188.54	42.87	189.06	46.13	189.58	49.18		
188.55	42.94	189.07	46.20	189.59	49.24		
188.56	43.00	189.08	46.26	189.60	49.30		
188.57	43.07	189.09	46.32	189.61	49.35		
188.58	43.13	189.10	46.38	189.62	49.41		
188.59	43.20	189.11	46.44	189.63	49.47		
188.60	43.26	189.12	46.50	189.64	49.52		
188.61	43.32	189.13	46.56	189.65	49.58		
188.62	43.39	189.14	46.62	189.66	49.63		
188.63	43.45	189.15	46.68	189.67	49.69		
188.64	43.52	189.16	46.74	189.68	49.75		
188.65	43.58	189.17	46.80	189.69	49.80		
188.66	43.65	189.18	46.86	189.70	49.86		
188.67	43.71	189.19	46.92	189.71	49.92		

Stage-Area-Storage for Pond B-51: Basin #51

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.00	5,243	0	184.52	6,015	2,927
184.01	5,258	53	184.53	6,030	2,987
184.02	5,273	105	184.54	6,044	3,048
184.03	5,288	158	184.55	6,059	3,108
184.04	5,302	211	184.56	6,074	3,169
184.05	5,317	264	184.57	6,089	3,230
184.06	5,332	317	184.58	6,104	3,291
184.07	5,347	371	184.59	6,119	3,352
184.08	5,362	424	184.60	6,133	3,413
184.09	5,377	478	184.61	6,148	3,474
184.10	5,391	532	184.62	6,163	3,536
184.11	5,406	586	184.63	6,178	3,598
184.12	5,421	640	184.64	6,193	3,659
184.13	5,436	694	184.65	6,208	3,721
184.14	5,451	749	184.66	6,222	3,784
184.15	5,466	803	184.67	6,237	3,846
184.16	5,480	858	184.68	6,252	3,908
184.17	5,495	913	184.69	6,267	3,971
184.18	5,510	968	184.70	6,282	4,034
184.19	5,525	1,023	184.71	6,297	4,097
184.20	5,540	1,078	184.72	6,311	4,160
184.21	5,555	1,134	184.73	6,326	4,223
184.22	5,569	1,189	184.74	6,341	4,286
184.23	5,584	1,245	184.75	6,356	4,350
184.24	5,599	1,301	184.76	6,371	4,413
184.25	5,614	1,357	184.77	6,386	4,477
184.26	5,629	1,413	184.78	6,401	4,541
184.27	5,644	1,470	184.79	6,415	4,605
184.28	5,659	1,526	184.80	6,430	4,669
184.29	5,673	1,583	184.81	6,445	4,734
184.30	5,688	1,640	184.82	6,460	4,798
184.31	5,703	1,697	184.83	6,475	4,863
184.32	5,718	1,754	184.84	6,490	4,928
184.33	5,733	1,811	184.85	6,504	4,993
184.34	5,748	1,868	184.86	6,519	5,058
184.35	5,762	1,926	184.87	6,534	5,123
184.36	5,777	1,984	184.88	6,549	5,188
184.37	5,792	2,041	184.89	6,564	5,254
184.38	5,807	2,099	184.90	6,579	5,320
184.39	5,822	2,158	184.91	6,593	5,386
184.40	5,837	2,216	184.92	6,608	5,452
184.41	5,851	2,274	184.93	6,623	5,518
184.42	5,866	2,333	184.94	6,638	5,584
184.43	5,881	2,392	184.95	6,653	5,651
184.44	5,896	2,451	184.96	6,668	5,717
184.45	5,911	2,510	184.97	6,682	5,784
184.46	5,926	2,569	184.98	6,697	5,851
184.47	5,940	2,628	184.99	6,712	5,918
184.48	5,955	2,688	185.00	6,727	5,985
184.49	5,970	2,747	185.01	6,744	6,052
184.50	5,985	2,807	185.02	6,761	6,120
184.51	6,000	2,867	185.03	6,778	6,188

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.04	6,795	6,255	185.56	7,677	10,018
185.05	6,812	6,323	185.57	7,694	10,095
185.06	6,829	6,392	185.58	7,711	10,172
185.07	6,846	6,460	185.59	7,728	10,249
185.08	6,863	6,529	185.60	7,745	10,327
185.09	6,880	6,597	185.61	7,762	10,404
185.10	6,897	6,666	185.62	7,779	10,482
185.11	6,914	6,735	185.63	7,796	10,560
185.12	6,931	6,804	185.64	7,813	10,638
185.13	6,948	6,874	185.65	7,830	10,716
185.14	6,965	6,943	185.66	7,847	10,794
185.15	6,982	7,013	185.67	7,864	10,873
185.16	6,999	7,083	185.68	7,881	10,952
185.17	7,015	7,153	185.69	7,898	11,031
185.18	7,032	7,223	185.70	7,915	11,110
185.19	7,049	7,294	185.71	7,932	11,189
185.20	7,066	7,364	185.72	7,949	11,268
185.21	7,083	7,435	185.73	7,966	11,348
185.22	7,100	7,506	185.74	7,983	11,428
185.23	7,117	7,577	185.75	8,000	11,508
185.24	7,134	7,648	185.76	8,017	11,588
185.25	7,151	7,720	185.77	8,034	11,668
185.26	7,168	7,791	185.78	8,051	11,748
185.27	7,185	7,863	185.79	8,068	11,829
185.28	7,202	7,935	185.80	8,085	11,910
185.29	7,219	8,007	185.81	8,102	11,991
185.30	7,236	8,079	185.82	8,119	12,072
185.31	7,253	8,152	185.83	8,136	12,153
185.32	7,270	8,225	185.84	8,152	12,234
185.33	7,287	8,297	185.85	8,169	12,316
185.34	7,304	8,370	185.86	8,186	12,398
185.35	7,321	8,443	185.87	8,203	12,480
185.36	7,338	8,517	185.88	8,220	12,562
185.37	7,355	8,590	185.89	8,237	12,644
185.38	7,372	8,664	185.90	8,254	12,727
185.39	7,389	8,738	185.91	8,271	12,809
185.40	7,406	8,812	185.92	8,288	12,892
185.41	7,423	8,886	185.93	8,305	12,975
185.42	7,440	8,960	185.94	8,322	13,058
185.43	7,457	9,034	185.95	8,339	13,141
185.44	7,474	9,109	185.96	8,356	13,225
185.45	7,491	9,184	185.97	8,373	13,309
185.46	7,508	9,259	185.98	8,390	13,392
185.47	7,525	9,334	185.99	8,407	13,476
185.48	7,542	9,409	186.00	8,424	13,561
185.49	7,559	9,485	186.01	8,441	13,645
185.50	7,576	9,561	186.02	8,457	13,729
185.51	7,592	9,636	186.03	8,474	13,814
185.52	7,609	9,712	186.04	8,490	13,899
185.53	7,626	9,789	186.05	8,507	13,984
185.54	7,643	9,865	186.06	8,524	14,069
185.55	7,660	9,942	186.07	8,540	14,154

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.08	8,557	14,240	186.60	9,421	18,914
186.09	8,573	14,325	186.61	9,437	19,008
186.10	8,590	14,411	186.62	9,454	19,103
186.11	8,607	14,497	186.63	9,470	19,197
186.12	8,623	14,583	186.64	9,487	19,292
186.13	8,640	14,670	186.65	9,504	19,387
186.14	8,657	14,756	186.66	9,520	19,482
186.15	8,673	14,843	186.67	9,537	19,577
186.16	8,690	14,930	186.68	9,553	19,673
186.17	8,706	15,017	186.69	9,570	19,768
186.18	8,723	15,104	186.70	9,587	19,864
186.19	8,740	15,191	186.71	9,603	19,960
186.20	8,756	15,279	186.72	9,620	20,056
186.21	8,773	15,366	186.73	9,637	20,153
186.22	8,789	15,454	186.74	9,653	20,249
186.23	8,806	15,542	186.75	9,670	20,346
186.24	8,823	15,630	186.76	9,686	20,442
186.25	8,839	15,718	186.77	9,703	20,539
186.26	8,856	15,807	186.78	9,720	20,636
186.27	8,872	15,896	186.79	9,736	20,734
186.28	8,889	15,984	186.80	9,753	20,831
186.29	8,906	16,073	186.81	9,769	20,929
186.30	8,922	16,162	186.82	9,786	21,027
186.31	8,939	16,252	186.83	9,803	21,125
186.32	8,956	16,341	186.84	9,819	21,223
186.33	8,972	16,431	186.85	9,836	21,321
186.34	8,989	16,521	186.86	9,852	21,419
186.35	9,005	16,611	186.87	9,869	21,518
186.36	9,022	16,701	186.88	9,886	21,617
186.37	9,039	16,791	186.89	9,902	21,716
186.38	9,055	16,882	186.90	9,919	21,815
186.39	9,072	16,972	186.91	9,936	21,914
186.40	9,088	17,063	186.92	9,952	22,014
186.41	9,105	17,154	186.93	9,969	22,113
186.42	9,122	17,245	186.94	9,985	22,213
186.43	9,138	17,336	186.95	10,002	22,313
186.44	9,155	17,428	186.96	10,019	22,413
186.45	9,171	17,519	186.97	10,035	22,513
186.46	9,188	17,611	186.98	10,052	22,614
186.47	9,205	17,703	186.99	10,068	22,714
186.48	9,221	17,795	187.00	10,085	22,815
186.49	9,238	17,888	187.01	10,102	22,916
186.50	9,255	17,980	187.02	10,119	23,017
186.51	9,271	18,073	187.03	10,137	23,118
186.52	9,288	18,166	187.04	10,154	23,220
186.53	9,304	18,259	187.05	10,171	23,321
186.54	9,321	18,352	187.06	10,188	23,423
186.55	9,338	18,445	187.07	10,205	23,525
186.56	9,354	18,538	187.08	10,222	23,627
186.57	9,371	18,632	187.09	10,240	23,730
186.58	9,387	18,726	187.10	10,257	23,832
186.59	9,404	18,820	187.11	10,274	23,935

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.12	10,291	24,038	187.64	11,184	29,621
187.13	10,308	24,141	187.65	11,201	29,733
187.14	10,325	24,244	187.66	11,218	29,845
187.15	10,343	24,347	187.67	11,235	29,957
187.16	10,360	24,451	187.68	11,253	30,070
187.17	10,377	24,554	187.69	11,270	30,182
187.18	10,394	24,658	187.70	11,287	30,295
187.19	10,411	24,762	187.71	11,304	30,408
187.20	10,428	24,866	187.72	11,321	30,521
187.21	10,446	24,971	187.73	11,338	30,635
187.22	10,463	25,075	187.74	11,356	30,748
187.23	10,480	25,180	187.75	11,373	30,862
187.24	10,497	25,285	187.76	11,390	30,975
187.25	10,514	25,390	187.77	11,407	31,089
187.26	10,531	25,495	187.78	11,424	31,204
187.27	10,549	25,601	187.79	11,441	31,318
187.28	10,566	25,706	187.80	11,459	31,432
187.29	10,583	25,812	187.81	11,476	31,547
187.30	10,600	25,918	187.82	11,493	31,662
187.31	10,617	26,024	187.83	11,510	31,777
187.32	10,634	26,130	187.84	11,527	31,892
187.33	10,652	26,237	187.85	11,544	32,008
187.34	10,669	26,343	187.86	11,562	32,123
187.35	10,686	26,450	187.87	11,579	32,239
187.36	10,703	26,557	187.88	11,596	32,355
187.37	10,720	26,664	187.89	11,613	32,471
187.38	10,737	26,771	187.90	11,630	32,587
187.39	10,755	26,879	187.91	11,647	32,703
187.40	10,772	26,986	187.92	11,665	32,820
187.41	10,789	27,094	187.93	11,682	32,937
187.42	10,806	27,202	187.94	11,699	33,053
187.43	10,823	27,310	187.95	11,716	33,171
187.44	10,840	27,419	187.96	11,733	33,288
187.45	10,858	27,527	187.97	11,750	33,405
187.46	10,875	27,636	187.98	11,768	33,523
187.47	10,892	27,745	187.99	11,785	33,641
187.48	10,909	27,854	188.00	11,802	33,759
187.49	10,926	27,963	188.01	11,820	33,877
187.50	10,944	28,072	188.02	11,837	33,995
187.51	10,961	28,182	188.03	11,855	34,113
187.52	10,978	28,291	188.04	11,873	34,232
187.53	10,995	28,401	188.05	11,891	34,351
187.54	11,012	28,511	188.06	11,908	34,470
187.55	11,029	28,621	188.07	11,926	34,589
187.56	11,047	28,732	188.08	11,944	34,708
187.57	11,064	28,842	188.09	11,962	34,828
187.58	11,081	28,953	188.10	11,979	34,948
187.59	11,098	29,064	188.11	11,997	35,067
187.60	11,115	29,175	188.12	12,015	35,188
187.61	11,132	29,286	188.13	12,033	35,308
187.62	11,150	29,398	188.14	12,050	35,428
187.63	11,167	29,509	188.15	12,068	35,549

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.16	12,086	35,670	188.68	13,008	42,194
188.17	12,104	35,790	188.69	13,026	42,324
188.18	12,121	35,912	188.70	13,044	42,455
188.19	12,139	36,033	188.71	13,062	42,585
188.20	12,157	36,154	188.72	13,079	42,716
188.21	12,175	36,276	188.73	13,097	42,847
188.22	12,192	36,398	188.74	13,115	42,978
188.23	12,210	36,520	188.75	13,133	43,109
188.24	12,228	36,642	188.76	13,150	43,240
188.25	12,246	36,764	188.77	13,168	43,372
188.26	12,263	36,887	188.78	13,186	43,504
188.27	12,281	37,010	188.79	13,203	43,636
188.28	12,299	37,133	188.80	13,221	43,768
188.29	12,316	37,256	188.81	13,239	43,900
188.30	12,334	37,379	188.82	13,257	44,033
188.31	12,352	37,502	188.83	13,274	44,165
188.32	12,370	37,626	188.84	13,292	44,298
188.33	12,387	37,750	188.85	13,310	44,431
188.34	12,405	37,874	188.86	13,328	44,564
188.35	12,423	37,998	188.87	13,345	44,698
188.36	12,441	38,122	188.88	13,363	44,831
188.37	12,458	38,247	188.89	13,381	44,965
188.38	12,476	38,371	188.90	13,399	45,099
188.39	12,494	38,496	188.91	13,416	45,233
188.40	12,512	38,621	188.92	13,434	45,367
188.41	12,529	38,746	188.93	13,452	45,502
188.42	12,547	38,872	188.94	13,470	45,636
188.43	12,565	38,997	188.95	13,487	45,771
188.44	12,583	39,123	188.96	13,505	45,906
188.45	12,600	39,249	188.97	13,523	46,041
188.46	12,618	39,375	188.98	13,541	46,176
188.47	12,636	39,501	188.99	13,558	46,312
188.48	12,654	39,628	189.00	13,576	46,448
188.49	12,671	39,754	189.01	13,594	46,583
188.50	12,689	39,881	189.02	13,613	46,719
188.51	12,707	40,008	189.03	13,631	46,856
188.52	12,724	40,135	189.04	13,649	46,992
188.53	12,742	40,263	189.05	13,668	47,129
188.54	12,760	40,390	189.06	13,686	47,265
188.55	12,778	40,518	189.07	13,704	47,402
188.56	12,795	40,646	189.08	13,723	47,539
188.57	12,813	40,774	189.09	13,741	47,677
188.58	12,831	40,902	189.10	13,759	47,814
188.59	12,849	41,030	189.11	13,778	47,952
188.60	12,866	41,159	189.12	13,796	48,090
188.61	12,884	41,288	189.13	13,814	48,228
188.62	12,902	41,417	189.14	13,833	48,366
188.63	12,920	41,546	189.15	13,851	48,505
188.64	12,937	41,675	189.16	13,869	48,643
188.65	12,955	41,805	189.17	13,888	48,782
188.66	12,973	41,934	189.18	13,906	48,921
188.67	12,991	42,064	189.19	13,924	49,060

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.20	13,943	49,199	189.72	14,896	56,698
189.21	13,961	49,339	189.73	14,915	56,847
189.22	13,979	49,479	189.74	14,933	56,996
189.23	13,998	49,618	189.75	14,951	57,145
189.24	14,016	49,759	189.76	14,970	57,295
189.25	14,034	49,899	189.77	14,988	57,445
189.26	14,053	50,039	189.78	15,006	57,595
189.27	14,071	50,180	189.79	15,025	57,745
189.28	14,089	50,321	189.80	15,043	57,895
189.29	14,108	50,462	189.81	15,061	58,046
189.30	14,126	50,603	189.82	15,080	58,196
189.31	14,144	50,744	189.83	15,098	58,347
189.32	14,163	50,886			
189.33	14,181	51,027			
189.34	14,199	51,169			
189.35	14,218	51,311			
189.36	14,236	51,454			
189.37	14,254	51,596			
189.38	14,273	51,739			
189.39	14,291	51,882			
189.40	14,309	52,025			
189.41	14,328	52,168			
189.42	14,346	52,311			
189.43	14,365	52,455			
189.44	14,383	52,598			
189.45	14,401	52,742			
189.46	14,420	52,886			
189.47	14,438	53,031			
189.48	14,456	53,175			
189.49	14,475	53,320			
189.50	14,493	53,465			
189.51	14,511	53,610			
189.52	14,530	53,755			
189.53	14,548	53,900			
189.54	14,566	54,046			
189.55	14,585	54,192			
189.56	14,603	54,338			
189.57	14,621	54,484			
189.58	14,640	54,630			
189.59	14,658	54,777			
189.60	14,676	54,923			
189.61	14,695	55,070			
189.62	14,713	55,217			
189.63	14,731	55,364			
189.64	14,750	55,512			
189.65	14,768	55,659			
189.66	14,786	55,807			
189.67	14,805	55,955			
189.68	14,823	56,103			
189.69	14,841	56,251			
189.70	14,860	56,400			
189.71	14,878	56,549			

Summary for Pond B-52: Basin #52

Inflow Area = 1.423 ac, 34.43% Impervious, Inflow Depth = 1.82" for Current 2 yr event
 Inflow = 2.61 cfs @ 12.18 hrs, Volume= 0.216 af
 Outflow = 2.32 cfs @ 12.23 hrs, Volume= 0.168 af, Atten= 11%, Lag= 3.2 min
 Primary = 2.32 cfs @ 12.23 hrs, Volume= 0.168 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 195.47' @ 12.23 hrs Surf.Area= 1,808 sf Storage= 2,747 cf

Plug-Flow detention time= 157.8 min calculated for 0.168 af (78% of inflow)
 Center-of-Mass det. time= 67.5 min (871.4 - 803.8)

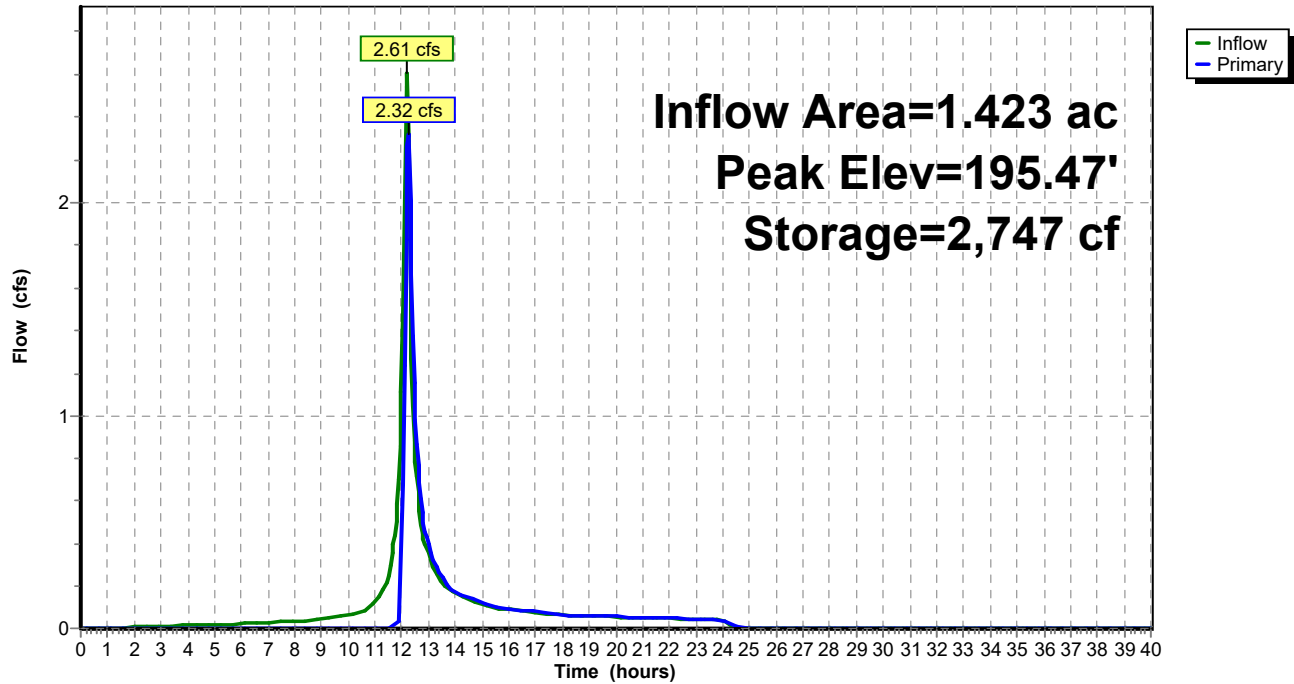
Volume	Invert	Avail.Storage	Storage Description
#1	193.00'	7,751 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
193.00	474	0	0
194.00	970	722	722
195.00	1,523	1,247	1,969
196.00	2,133	1,828	3,797
197.00	2,799	2,466	6,263
197.50	3,154	1,488	7,751

Device	Routing	Invert	Outlet Devices
#1	Primary	192.00'	15.0" Round Culvert L= 163.0' Ke= 0.500 Inlet / Outlet Invert= 192.00' / 191.00' S= 0.0061 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	195.08'	36.0" W x 6.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	195.72'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	197.25'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.28 cfs @ 12.23 hrs HW=195.46' (Free Discharge)

1=Culvert (Passes 2.28 cfs of 7.67 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 2.28 cfs @ 1.99 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-52: Basin #52**Hydrograph**

Stage-Discharge for Pond B-52: Basin #52

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.00	0.00	193.52	0.00	194.04	0.00	194.56	0.00
193.01	0.00	193.53	0.00	194.05	0.00	194.57	0.00
193.02	0.00	193.54	0.00	194.06	0.00	194.58	0.00
193.03	0.00	193.55	0.00	194.07	0.00	194.59	0.00
193.04	0.00	193.56	0.00	194.08	0.00	194.60	0.00
193.05	0.00	193.57	0.00	194.09	0.00	194.61	0.00
193.06	0.00	193.58	0.00	194.10	0.00	194.62	0.00
193.07	0.00	193.59	0.00	194.11	0.00	194.63	0.00
193.08	0.00	193.60	0.00	194.12	0.00	194.64	0.00
193.09	0.00	193.61	0.00	194.13	0.00	194.65	0.00
193.10	0.00	193.62	0.00	194.14	0.00	194.66	0.00
193.11	0.00	193.63	0.00	194.15	0.00	194.67	0.00
193.12	0.00	193.64	0.00	194.16	0.00	194.68	0.00
193.13	0.00	193.65	0.00	194.17	0.00	194.69	0.00
193.14	0.00	193.66	0.00	194.18	0.00	194.70	0.00
193.15	0.00	193.67	0.00	194.19	0.00	194.71	0.00
193.16	0.00	193.68	0.00	194.20	0.00	194.72	0.00
193.17	0.00	193.69	0.00	194.21	0.00	194.73	0.00
193.18	0.00	193.70	0.00	194.22	0.00	194.74	0.00
193.19	0.00	193.71	0.00	194.23	0.00	194.75	0.00
193.20	0.00	193.72	0.00	194.24	0.00	194.76	0.00
193.21	0.00	193.73	0.00	194.25	0.00	194.77	0.00
193.22	0.00	193.74	0.00	194.26	0.00	194.78	0.00
193.23	0.00	193.75	0.00	194.27	0.00	194.79	0.00
193.24	0.00	193.76	0.00	194.28	0.00	194.80	0.00
193.25	0.00	193.77	0.00	194.29	0.00	194.81	0.00
193.26	0.00	193.78	0.00	194.30	0.00	194.82	0.00
193.27	0.00	193.79	0.00	194.31	0.00	194.83	0.00
193.28	0.00	193.80	0.00	194.32	0.00	194.84	0.00
193.29	0.00	193.81	0.00	194.33	0.00	194.85	0.00
193.30	0.00	193.82	0.00	194.34	0.00	194.86	0.00
193.31	0.00	193.83	0.00	194.35	0.00	194.87	0.00
193.32	0.00	193.84	0.00	194.36	0.00	194.88	0.00
193.33	0.00	193.85	0.00	194.37	0.00	194.89	0.00
193.34	0.00	193.86	0.00	194.38	0.00	194.90	0.00
193.35	0.00	193.87	0.00	194.39	0.00	194.91	0.00
193.36	0.00	193.88	0.00	194.40	0.00	194.92	0.00
193.37	0.00	193.89	0.00	194.41	0.00	194.93	0.00
193.38	0.00	193.90	0.00	194.42	0.00	194.94	0.00
193.39	0.00	193.91	0.00	194.43	0.00	194.95	0.00
193.40	0.00	193.92	0.00	194.44	0.00	194.96	0.00
193.41	0.00	193.93	0.00	194.45	0.00	194.97	0.00
193.42	0.00	193.94	0.00	194.46	0.00	194.98	0.00
193.43	0.00	193.95	0.00	194.47	0.00	194.99	0.00
193.44	0.00	193.96	0.00	194.48	0.00	195.00	0.00
193.45	0.00	193.97	0.00	194.49	0.00	195.01	0.00
193.46	0.00	193.98	0.00	194.50	0.00	195.02	0.00
193.47	0.00	193.99	0.00	194.51	0.00	195.03	0.00
193.48	0.00	194.00	0.00	194.52	0.00	195.04	0.00
193.49	0.00	194.01	0.00	194.53	0.00	195.05	0.00
193.50	0.00	194.02	0.00	194.54	0.00	195.06	0.00
193.51	0.00	194.03	0.00	194.55	0.00	195.07	0.00

Stage-Discharge for Pond B-52: Basin #52 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
195.08	0.00	195.60	3.58	196.12	8.41	196.64	8.96
195.09	0.01	195.61	3.67	196.13	8.43	196.65	8.97
195.10	0.03	195.62	3.74	196.14	8.44	196.66	8.98
195.11	0.05	195.63	3.82	196.15	8.45	196.67	8.99
195.12	0.08	195.64	3.89	196.16	8.46	196.68	9.00
195.13	0.11	195.65	3.97	196.17	8.47	196.69	9.01
195.14	0.14	195.66	4.04	196.18	8.48	196.70	9.02
195.15	0.18	195.67	4.10	196.19	8.49	196.71	9.03
195.16	0.22	195.68	4.17	196.20	8.50	196.72	9.04
195.17	0.26	195.69	4.24	196.21	8.51	196.73	9.05
195.18	0.30	195.70	4.30	196.22	8.52	196.74	9.06
195.19	0.35	195.71	4.36	196.23	8.53	196.75	9.07
195.20	0.40	195.72	4.43	196.24	8.54	196.76	9.08
195.21	0.45	195.73	4.50	196.25	8.55	196.77	9.09
195.22	0.50	195.74	4.58	196.26	8.57	196.78	9.10
195.23	0.56	195.75	4.67	196.27	8.58	196.79	9.11
195.24	0.62	195.76	4.77	196.28	8.59	196.80	9.12
195.25	0.67	195.77	4.87	196.29	8.60	196.81	9.13
195.26	0.74	195.78	4.97	196.30	8.61	196.82	9.14
195.27	0.80	195.79	5.08	196.31	8.62	196.83	9.15
195.28	0.86	195.80	5.18	196.32	8.63	196.84	9.16
195.29	0.93	195.81	5.30	196.33	8.64	196.85	9.17
195.30	0.99	195.82	5.41	196.34	8.65	196.86	9.18
195.31	1.06	195.83	5.53	196.35	8.66	196.87	9.19
195.32	1.13	195.84	5.64	196.36	8.67	196.88	9.20
195.33	1.20	195.85	5.76	196.37	8.68	196.89	9.21
195.34	1.28	195.86	5.89	196.38	8.69	196.90	9.22
195.35	1.35	195.87	6.01	196.39	8.70	196.91	9.23
195.36	1.43	195.88	6.14	196.40	8.71	196.92	9.24
195.37	1.50	195.89	6.27	196.41	8.72	196.93	9.25
195.38	1.58	195.90	6.40	196.42	8.73	196.94	9.26
195.39	1.66	195.91	6.53	196.43	8.75	196.95	9.27
195.40	1.74	195.92	6.66	196.44	8.76	196.96	9.28
195.41	1.83	195.93	6.80	196.45	8.77	196.97	9.29
195.42	1.91	195.94	6.93	196.46	8.78	196.98	9.30
195.43	1.99	195.95	7.07	196.47	8.79	196.99	9.31
195.44	2.08	195.96	7.21	196.48	8.80	197.00	9.32
195.45	2.17	195.97	7.35	196.49	8.81	197.01	9.33
195.46	2.26	195.98	7.50	196.50	8.82	197.02	9.34
195.47	2.35	195.99	7.64	196.51	8.83	197.03	9.35
195.48	2.44	196.00	7.79	196.52	8.84	197.04	9.36
195.49	2.53	196.01	7.93	196.53	8.85	197.05	9.37
195.50	2.62	196.02	8.08	196.54	8.86	197.06	9.38
195.51	2.72	196.03	8.23	196.55	8.87	197.07	9.39
195.52	2.81	196.04	8.33	196.56	8.88	197.08	9.40
195.53	2.91	196.05	8.34	196.57	8.89	197.09	9.41
195.54	3.00	196.06	8.35	196.58	8.90	197.10	9.42
195.55	3.10	196.07	8.36	196.59	8.91	197.11	9.43
195.56	3.20	196.08	8.37	196.60	8.92	197.12	9.44
195.57	3.30	196.09	8.38	196.61	8.93	197.13	9.45
195.58	3.40	196.10	8.39	196.62	8.94	197.14	9.46
195.59	3.50	196.11	8.40	196.63	8.95	197.15	9.47

Stage-Discharge for Pond B-52: Basin #52 (continued)

Elevation (feet)	Primary (cfs)
197.16	9.48
197.17	9.49
197.18	9.50
197.19	9.51
197.20	9.52
197.21	9.53
197.22	9.54
197.23	9.55
197.24	9.55
197.25	9.56
197.26	9.69
197.27	9.91
197.28	10.20
197.29	10.54
197.30	10.92
197.31	11.35
197.32	11.81
197.33	12.30
197.34	12.82
197.35	13.38
197.36	13.96
197.37	14.57
197.38	15.21
197.39	15.87
197.40	16.55
197.41	17.26
197.42	17.99
197.43	18.75
197.44	19.52
197.45	20.32
197.46	21.17
197.47	22.06
197.48	22.96
197.49	23.90
197.50	24.85

Stage-Area-Storage for Pond B-52: Basin #52

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.00	474	0	193.52	732	314
193.01	479	5	193.53	737	321
193.02	484	10	193.54	742	328
193.03	489	14	193.55	747	336
193.04	494	19	193.56	752	343
193.05	499	24	193.57	757	351
193.06	504	29	193.58	762	358
193.07	509	34	193.59	767	366
193.08	514	40	193.60	772	374
193.09	519	45	193.61	777	381
193.10	524	50	193.62	782	389
193.11	529	55	193.63	786	397
193.12	534	60	193.64	791	405
193.13	538	66	193.65	796	413
193.14	543	71	193.66	801	421
193.15	548	77	193.67	806	429
193.16	553	82	193.68	811	437
193.17	558	88	193.69	816	445
193.18	563	93	193.70	821	453
193.19	568	99	193.71	826	462
193.20	573	105	193.72	831	470
193.21	578	110	193.73	836	478
193.22	583	116	193.74	841	487
193.23	588	122	193.75	846	495
193.24	593	128	193.76	851	503
193.25	598	134	193.77	856	512
193.26	603	140	193.78	861	521
193.27	608	146	193.79	866	529
193.28	613	152	193.80	871	538
193.29	618	158	193.81	876	547
193.30	623	165	193.82	881	555
193.31	628	171	193.83	886	564
193.32	633	177	193.84	891	573
193.33	638	183	193.85	896	582
193.34	643	190	193.86	901	591
193.35	648	196	193.87	906	600
193.36	653	203	193.88	910	609
193.37	658	209	193.89	915	618
193.38	662	216	193.90	920	627
193.39	667	223	193.91	925	637
193.40	672	229	193.92	930	646
193.41	677	236	193.93	935	655
193.42	682	243	193.94	940	665
193.43	687	250	193.95	945	674
193.44	692	257	193.96	950	684
193.45	697	264	193.97	955	693
193.46	702	271	193.98	960	703
193.47	707	278	193.99	965	712
193.48	712	285	194.00	970	722
193.49	717	292	194.01	976	732
193.50	722	299	194.02	981	742
193.51	727	306	194.03	987	751

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.04	992	761	194.56	1,280	1,352
194.05	998	771	194.57	1,285	1,365
194.06	1,003	781	194.58	1,291	1,378
194.07	1,009	791	194.59	1,296	1,391
194.08	1,014	801	194.60	1,302	1,404
194.09	1,020	812	194.61	1,307	1,417
194.10	1,025	822	194.62	1,313	1,430
194.11	1,031	832	194.63	1,318	1,443
194.12	1,036	842	194.64	1,324	1,456
194.13	1,042	853	194.65	1,329	1,469
194.14	1,047	863	194.66	1,335	1,483
194.15	1,053	874	194.67	1,341	1,496
194.16	1,058	884	194.68	1,346	1,509
194.17	1,064	895	194.69	1,352	1,523
194.18	1,070	906	194.70	1,357	1,536
194.19	1,075	916	194.71	1,363	1,550
194.20	1,081	927	194.72	1,368	1,564
194.21	1,086	938	194.73	1,374	1,577
194.22	1,092	949	194.74	1,379	1,591
194.23	1,097	960	194.75	1,385	1,605
194.24	1,103	971	194.76	1,390	1,619
194.25	1,108	982	194.77	1,396	1,633
194.26	1,114	993	194.78	1,401	1,647
194.27	1,119	1,004	194.79	1,407	1,661
194.28	1,125	1,015	194.80	1,412	1,675
194.29	1,130	1,027	194.81	1,418	1,689
194.30	1,136	1,038	194.82	1,423	1,703
194.31	1,141	1,049	194.83	1,429	1,718
194.32	1,147	1,061	194.84	1,435	1,732
194.33	1,152	1,072	194.85	1,440	1,746
194.34	1,158	1,084	194.86	1,446	1,761
194.35	1,164	1,095	194.87	1,451	1,775
194.36	1,169	1,107	194.88	1,457	1,790
194.37	1,175	1,119	194.89	1,462	1,804
194.38	1,180	1,131	194.90	1,468	1,819
194.39	1,186	1,142	194.91	1,473	1,834
194.40	1,191	1,154	194.92	1,479	1,848
194.41	1,197	1,166	194.93	1,484	1,863
194.42	1,202	1,178	194.94	1,490	1,878
194.43	1,208	1,190	194.95	1,495	1,893
194.44	1,213	1,202	194.96	1,501	1,908
194.45	1,219	1,214	194.97	1,506	1,923
194.46	1,224	1,227	194.98	1,512	1,938
194.47	1,230	1,239	194.99	1,517	1,953
194.48	1,235	1,251	195.00	1,523	1,969
194.49	1,241	1,264	195.01	1,529	1,984
194.50	1,247	1,276	195.02	1,535	1,999
194.51	1,252	1,289	195.03	1,541	2,014
194.52	1,258	1,301	195.04	1,547	2,030
194.53	1,263	1,314	195.05	1,554	2,045
194.54	1,269	1,326	195.06	1,560	2,061
194.55	1,274	1,339	195.07	1,566	2,077

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.08	1,572	2,092	195.60	1,889	2,992
195.09	1,578	2,108	195.61	1,895	3,011
195.10	1,584	2,124	195.62	1,901	3,030
195.11	1,590	2,140	195.63	1,907	3,049
195.12	1,596	2,156	195.64	1,913	3,068
195.13	1,602	2,172	195.65	1,920	3,087
195.14	1,608	2,188	195.66	1,926	3,107
195.15	1,615	2,204	195.67	1,932	3,126
195.16	1,621	2,220	195.68	1,938	3,145
195.17	1,627	2,236	195.69	1,944	3,165
195.18	1,633	2,253	195.70	1,950	3,184
195.19	1,639	2,269	195.71	1,956	3,204
195.20	1,645	2,285	195.72	1,962	3,223
195.21	1,651	2,302	195.73	1,968	3,243
195.22	1,657	2,318	195.74	1,974	3,263
195.23	1,663	2,335	195.75	1,981	3,282
195.24	1,669	2,352	195.76	1,987	3,302
195.25	1,676	2,368	195.77	1,993	3,322
195.26	1,682	2,385	195.78	1,999	3,342
195.27	1,688	2,402	195.79	2,005	3,362
195.28	1,694	2,419	195.80	2,011	3,382
195.29	1,700	2,436	195.81	2,017	3,402
195.30	1,706	2,453	195.82	2,023	3,422
195.31	1,712	2,470	195.83	2,029	3,443
195.32	1,718	2,487	195.84	2,035	3,463
195.33	1,724	2,504	195.85	2,041	3,483
195.34	1,730	2,522	195.86	2,048	3,504
195.35	1,736	2,539	195.87	2,054	3,524
195.36	1,743	2,556	195.88	2,060	3,545
195.37	1,749	2,574	195.89	2,066	3,566
195.38	1,755	2,591	195.90	2,072	3,586
195.39	1,761	2,609	195.91	2,078	3,607
195.40	1,767	2,627	195.92	2,084	3,628
195.41	1,773	2,644	195.93	2,090	3,649
195.42	1,779	2,662	195.94	2,096	3,670
195.43	1,785	2,680	195.95	2,102	3,691
195.44	1,791	2,698	195.96	2,109	3,712
195.45	1,797	2,716	195.97	2,115	3,733
195.46	1,804	2,734	195.98	2,121	3,754
195.47	1,810	2,752	195.99	2,127	3,775
195.48	1,816	2,770	196.00	2,133	3,797
195.49	1,822	2,788	196.01	2,140	3,818
195.50	1,828	2,806	196.02	2,146	3,839
195.51	1,834	2,825	196.03	2,153	3,861
195.52	1,840	2,843	196.04	2,160	3,882
195.53	1,846	2,861	196.05	2,166	3,904
195.54	1,852	2,880	196.06	2,173	3,926
195.55	1,859	2,898	196.07	2,180	3,947
195.56	1,865	2,917	196.08	2,186	3,969
195.57	1,871	2,936	196.09	2,193	3,991
195.58	1,877	2,954	196.10	2,200	4,013
195.59	1,883	2,973	196.11	2,206	4,035

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.12	2,213	4,057	196.64	2,559	5,298
196.13	2,220	4,079	196.65	2,566	5,324
196.14	2,226	4,102	196.66	2,573	5,349
196.15	2,233	4,124	196.67	2,579	5,375
196.16	2,240	4,146	196.68	2,586	5,401
196.17	2,246	4,169	196.69	2,593	5,427
196.18	2,253	4,191	196.70	2,599	5,453
196.19	2,260	4,214	196.71	2,606	5,479
196.20	2,266	4,236	196.72	2,613	5,505
196.21	2,273	4,259	196.73	2,619	5,531
196.22	2,280	4,282	196.74	2,626	5,557
196.23	2,286	4,305	196.75	2,633	5,584
196.24	2,293	4,328	196.76	2,639	5,610
196.25	2,300	4,351	196.77	2,646	5,636
196.26	2,306	4,374	196.78	2,652	5,663
196.27	2,313	4,397	196.79	2,659	5,689
196.28	2,319	4,420	196.80	2,666	5,716
196.29	2,326	4,443	196.81	2,672	5,743
196.30	2,333	4,466	196.82	2,679	5,769
196.31	2,339	4,490	196.83	2,686	5,796
196.32	2,346	4,513	196.84	2,692	5,823
196.33	2,353	4,537	196.85	2,699	5,850
196.34	2,359	4,560	196.86	2,706	5,877
196.35	2,366	4,584	196.87	2,712	5,904
196.36	2,373	4,608	196.88	2,719	5,931
196.37	2,379	4,631	196.89	2,726	5,959
196.38	2,386	4,655	196.90	2,732	5,986
196.39	2,393	4,679	196.91	2,739	6,013
196.40	2,399	4,703	196.92	2,746	6,041
196.41	2,406	4,727	196.93	2,752	6,068
196.42	2,413	4,751	196.94	2,759	6,096
196.43	2,419	4,775	196.95	2,766	6,123
196.44	2,426	4,799	196.96	2,772	6,151
196.45	2,433	4,824	196.97	2,779	6,179
196.46	2,439	4,848	196.98	2,786	6,207
196.47	2,446	4,873	196.99	2,792	6,235
196.48	2,453	4,897	197.00	2,799	6,263
196.49	2,459	4,922	197.01	2,806	6,291
196.50	2,466	4,946	197.02	2,813	6,319
196.51	2,473	4,971	197.03	2,820	6,347
196.52	2,479	4,996	197.04	2,827	6,375
196.53	2,486	5,021	197.05	2,835	6,403
196.54	2,493	5,045	197.06	2,842	6,432
196.55	2,499	5,070	197.07	2,849	6,460
196.56	2,506	5,095	197.08	2,856	6,489
196.57	2,513	5,121	197.09	2,863	6,517
196.58	2,519	5,146	197.10	2,870	6,546
196.59	2,526	5,171	197.11	2,877	6,575
196.60	2,533	5,196	197.12	2,884	6,603
196.61	2,539	5,222	197.13	2,891	6,632
196.62	2,546	5,247	197.14	2,898	6,661
196.63	2,553	5,272	197.15	2,906	6,690

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.16	2,913	6,719
197.17	2,920	6,749
197.18	2,927	6,778
197.19	2,934	6,807
197.20	2,941	6,836
197.21	2,948	6,866
197.22	2,955	6,895
197.23	2,962	6,925
197.24	2,969	6,955
197.25	2,977	6,984
197.26	2,984	7,014
197.27	2,991	7,044
197.28	2,998	7,074
197.29	3,005	7,104
197.30	3,012	7,134
197.31	3,019	7,164
197.32	3,026	7,195
197.33	3,033	7,225
197.34	3,040	7,255
197.35	3,047	7,286
197.36	3,055	7,316
197.37	3,062	7,347
197.38	3,069	7,377
197.39	3,076	7,408
197.40	3,083	7,439
197.41	3,090	7,470
197.42	3,097	7,501
197.43	3,104	7,532
197.44	3,111	7,563
197.45	3,118	7,594
197.46	3,126	7,625
197.47	3,133	7,656
197.48	3,140	7,688
197.49	3,147	7,719
197.50	3,154	7,751

Summary for Pond B-53: Basin #53

Inflow Area = 2.540 ac, 47.80% Impervious, Inflow Depth = 2.08" for Current 2 yr event
 Inflow = 5.29 cfs @ 12.17 hrs, Volume= 0.441 af
 Outflow = 2.15 cfs @ 12.39 hrs, Volume= 0.328 af, Atten= 59%, Lag= 13.2 min
 Primary = 2.15 cfs @ 12.39 hrs, Volume= 0.328 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 202.57' @ 12.39 hrs Surf.Area= 5,874 sf Storage= 8,491 cf

Plug-Flow detention time= 200.5 min calculated for 0.328 af (74% of inflow)
 Center-of-Mass det. time= 105.2 min (895.8 - 790.6)

Volume	Invert	Avail.Storage	Storage Description
#1	201.00'	24,392 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.00	4,695	0	0
202.00	5,685	5,190	5,190
203.00	6,015	5,850	11,040
204.00	6,676	6,346	17,386
205.00	7,336	7,006	24,392

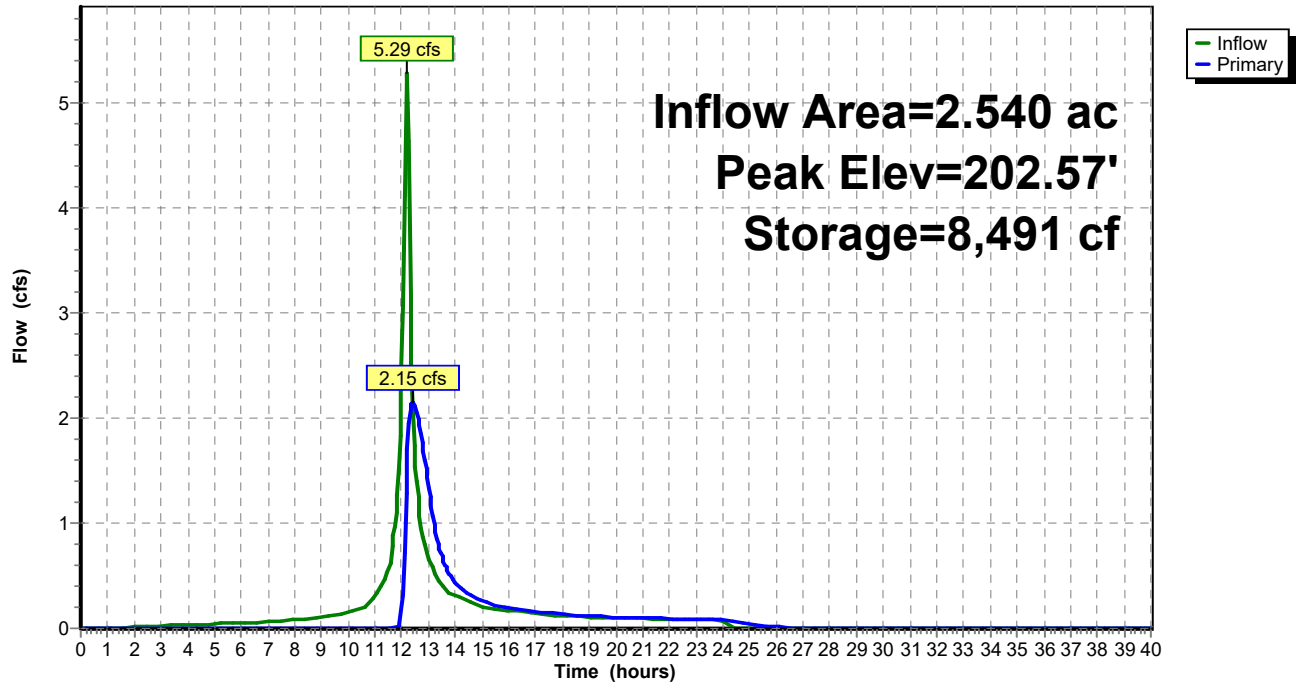
Device	Routing	Invert	Outlet Devices
#1	Primary	201.00'	24.0" Round Culvert L= 39.0' Ke= 0.500 Inlet / Outlet Invert= 201.00' / 200.10' S= 0.0231 ' / Cc= 0.900 n= 0.013, Flow Area= 3.14 sf
#2	Device 1	201.95'	24.0" W x 4.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	204.43'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.15 cfs @ 12.39 hrs HW=202.57' (Free Discharge)

1=Culvert (Passes 2.15 cfs of 11.29 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 2.15 cfs @ 3.23 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-53: Basin #53

Hydrograph



Stage-Discharge for Pond B-53: Basin #53

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.00	0.00	201.52	0.00	202.04	0.17	202.56	2.12
201.01	0.00	201.53	0.00	202.05	0.20	202.57	2.15
201.02	0.00	201.54	0.00	202.06	0.23	202.58	2.17
201.03	0.00	201.55	0.00	202.07	0.27	202.59	2.20
201.04	0.00	201.56	0.00	202.08	0.30	202.60	2.22
201.05	0.00	201.57	0.00	202.09	0.34	202.61	2.24
201.06	0.00	201.58	0.00	202.10	0.37	202.62	2.27
201.07	0.00	201.59	0.00	202.11	0.41	202.63	2.29
201.08	0.00	201.60	0.00	202.12	0.45	202.64	2.31
201.09	0.00	201.61	0.00	202.13	0.49	202.65	2.33
201.10	0.00	201.62	0.00	202.14	0.53	202.66	2.36
201.11	0.00	201.63	0.00	202.15	0.57	202.67	2.38
201.12	0.00	201.64	0.00	202.16	0.62	202.68	2.40
201.13	0.00	201.65	0.00	202.17	0.66	202.69	2.42
201.14	0.00	201.66	0.00	202.18	0.71	202.70	2.44
201.15	0.00	201.67	0.00	202.19	0.75	202.71	2.46
201.16	0.00	201.68	0.00	202.20	0.80	202.72	2.49
201.17	0.00	201.69	0.00	202.21	0.85	202.73	2.51
201.18	0.00	201.70	0.00	202.22	0.90	202.74	2.53
201.19	0.00	201.71	0.00	202.23	0.95	202.75	2.55
201.20	0.00	201.72	0.00	202.24	1.00	202.76	2.57
201.21	0.00	201.73	0.00	202.25	1.05	202.77	2.59
201.22	0.00	201.74	0.00	202.26	1.11	202.78	2.61
201.23	0.00	201.75	0.00	202.27	1.16	202.79	2.63
201.24	0.00	201.76	0.00	202.28	1.22	202.80	2.65
201.25	0.00	201.77	0.00	202.29	1.27	202.81	2.67
201.26	0.00	201.78	0.00	202.30	1.32	202.82	2.69
201.27	0.00	201.79	0.00	202.31	1.36	202.83	2.70
201.28	0.00	201.80	0.00	202.32	1.40	202.84	2.72
201.29	0.00	201.81	0.00	202.33	1.44	202.85	2.74
201.30	0.00	201.82	0.00	202.34	1.48	202.86	2.76
201.31	0.00	201.83	0.00	202.35	1.51	202.87	2.78
201.32	0.00	201.84	0.00	202.36	1.55	202.88	2.80
201.33	0.00	201.85	0.00	202.37	1.58	202.89	2.82
201.34	0.00	201.86	0.00	202.38	1.62	202.90	2.84
201.35	0.00	201.87	0.00	202.39	1.65	202.91	2.85
201.36	0.00	201.88	0.00	202.40	1.68	202.92	2.87
201.37	0.00	201.89	0.00	202.41	1.71	202.93	2.89
201.38	0.00	201.90	0.00	202.42	1.74	202.94	2.91
201.39	0.00	201.91	0.00	202.43	1.77	202.95	2.93
201.40	0.00	201.92	0.00	202.44	1.80	202.96	2.94
201.41	0.00	201.93	0.00	202.45	1.83	202.97	2.96
201.42	0.00	201.94	0.00	202.46	1.86	202.98	2.98
201.43	0.00	201.95	0.00	202.47	1.89	202.99	3.00
201.44	0.00	201.96	0.01	202.48	1.92	203.00	3.01
201.45	0.00	201.97	0.02	202.49	1.94	203.01	3.04
201.46	0.00	201.98	0.03	202.50	1.97	203.02	3.08
201.47	0.00	201.99	0.05	202.51	2.00	203.03	3.13
201.48	0.00	202.00	0.07	202.52	2.02	203.04	3.18
201.49	0.00	202.01	0.09	202.53	2.05	203.05	3.24
201.50	0.00	202.02	0.12	202.54	2.07	203.06	3.31
201.51	0.00	202.03	0.15	202.55	2.10	203.07	3.37

Stage-Discharge for Pond B-53: Basin #53 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.08	3.44	203.60	9.80	204.12	19.18	204.64	35.99
203.09	3.51	203.61	9.96	204.13	19.38	204.65	36.91
203.10	3.59	203.62	10.12	204.14	19.58	204.66	37.85
203.11	3.67	203.63	10.28	204.15	19.78	204.67	38.82
203.12	3.75	203.64	10.44	204.16	19.98	204.68	39.82
203.13	3.84	203.65	10.60	204.17	20.18	204.69	40.84
203.14	3.92	203.66	10.77	204.18	20.39	204.70	41.88
203.15	4.01	203.67	10.93	204.19	20.59	204.71	42.95
203.16	4.11	203.68	11.10	204.20	20.79	204.72	44.04
203.17	4.20	203.69	11.26	204.21	21.00	204.73	45.16
203.18	4.30	203.70	11.43	204.22	21.20	204.74	46.30
203.19	4.40	203.71	11.60	204.23	21.41	204.75	47.47
203.20	4.50	203.72	11.77	204.24	21.62	204.76	48.66
203.21	4.60	203.73	11.94	204.25	21.82	204.77	49.88
203.22	4.70	203.74	12.11	204.26	22.03	204.78	51.12
203.23	4.81	203.75	12.28	204.27	22.24	204.79	52.38
203.24	4.92	203.76	12.45	204.28	22.45	204.80	53.67
203.25	5.03	203.77	12.62	204.29	22.66	204.81	54.98
203.26	5.14	203.78	12.80	204.30	22.87	204.82	56.32
203.27	5.25	203.79	12.97	204.31	22.99	204.83	57.68
203.28	5.37	203.80	13.15	204.32	23.04	204.84	59.09
203.29	5.49	203.81	13.32	204.33	23.09	204.85	60.52
203.30	5.61	203.82	13.50	204.34	23.14	204.86	61.99
203.31	5.73	203.83	13.68	204.35	23.19	204.87	63.48
203.32	5.85	203.84	13.86	204.36	23.24	204.88	64.99
203.33	5.97	203.85	14.04	204.37	23.29	204.89	66.53
203.34	6.10	203.86	14.22	204.38	23.34	204.90	68.10
203.35	6.22	203.87	14.40	204.39	23.39	204.91	69.69
203.36	6.35	203.88	14.58	204.40	23.43	204.92	71.31
203.37	6.48	203.89	14.77	204.41	23.48	204.93	72.96
203.38	6.61	203.90	14.95	204.42	23.53	204.94	74.63
203.39	6.74	203.91	15.14	204.43	23.58	204.95	76.33
203.40	6.88	203.92	15.32	204.44	23.75	204.96	78.05
203.41	7.01	203.93	15.51	204.45	24.01	204.97	79.81
203.42	7.15	203.94	15.69	204.46	24.33	204.98	81.59
203.43	7.29	203.95	15.88	204.47	24.71	204.99	83.39
203.44	7.42	203.96	16.07	204.48	25.13	205.00	85.22
203.45	7.56	203.97	16.26	204.49	25.59		
203.46	7.70	203.98	16.45	204.50	26.09		
203.47	7.85	203.99	16.64	204.51	26.62		
203.48	7.99	204.00	16.83	204.52	27.19		
203.49	8.14	204.01	17.02	204.53	27.78		
203.50	8.28	204.02	17.21	204.54	28.40		
203.51	8.43	204.03	17.41	204.55	29.05		
203.52	8.58	204.04	17.60	204.56	29.72		
203.53	8.73	204.05	17.80	204.57	30.42		
203.54	8.88	204.06	17.99	204.58	31.14		
203.55	9.03	204.07	18.19	204.59	31.89		
203.56	9.18	204.08	18.38	204.60	32.66		
203.57	9.34	204.09	18.58	204.61	33.45		
203.58	9.49	204.10	18.78	204.62	34.26		
203.59	9.65	204.11	18.98	204.63	35.10		

Stage-Area-Storage for Pond B-53: Basin #53

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.00	4,695	0	201.52	5,210	2,575
201.01	4,705	47	201.53	5,220	2,627
201.02	4,715	94	201.54	5,230	2,680
201.03	4,725	141	201.55	5,240	2,732
201.04	4,735	189	201.56	5,249	2,784
201.05	4,745	236	201.57	5,259	2,837
201.06	4,754	283	201.58	5,269	2,890
201.07	4,764	331	201.59	5,279	2,942
201.08	4,774	379	201.60	5,289	2,995
201.09	4,784	427	201.61	5,299	3,048
201.10	4,794	474	201.62	5,309	3,101
201.11	4,804	522	201.63	5,319	3,154
201.12	4,814	571	201.64	5,329	3,208
201.13	4,824	619	201.65	5,339	3,261
201.14	4,834	667	201.66	5,348	3,314
201.15	4,844	715	201.67	5,358	3,368
201.16	4,853	764	201.68	5,368	3,421
201.17	4,863	812	201.69	5,378	3,475
201.18	4,873	861	201.70	5,388	3,529
201.19	4,883	910	201.71	5,398	3,583
201.20	4,893	959	201.72	5,408	3,637
201.21	4,903	1,008	201.73	5,418	3,691
201.22	4,913	1,057	201.74	5,428	3,745
201.23	4,923	1,106	201.75	5,438	3,800
201.24	4,933	1,155	201.76	5,447	3,854
201.25	4,943	1,205	201.77	5,457	3,909
201.26	4,952	1,254	201.78	5,467	3,963
201.27	4,962	1,304	201.79	5,477	4,018
201.28	4,972	1,353	201.80	5,487	4,073
201.29	4,982	1,403	201.81	5,497	4,128
201.30	4,992	1,453	201.82	5,507	4,183
201.31	5,002	1,503	201.83	5,517	4,238
201.32	5,012	1,553	201.84	5,527	4,293
201.33	5,022	1,603	201.85	5,536	4,348
201.34	5,032	1,654	201.86	5,546	4,404
201.35	5,041	1,704	201.87	5,556	4,459
201.36	5,051	1,754	201.88	5,566	4,515
201.37	5,061	1,805	201.89	5,576	4,571
201.38	5,071	1,856	201.90	5,586	4,626
201.39	5,081	1,906	201.91	5,596	4,682
201.40	5,091	1,957	201.92	5,606	4,738
201.41	5,101	2,008	201.93	5,616	4,794
201.42	5,111	2,059	201.94	5,626	4,851
201.43	5,121	2,110	201.95	5,635	4,907
201.44	5,131	2,162	201.96	5,645	4,963
201.45	5,140	2,213	201.97	5,655	5,020
201.46	5,150	2,264	201.98	5,665	5,076
201.47	5,160	2,316	201.99	5,675	5,133
201.48	5,170	2,368	202.00	5,685	5,190
201.49	5,180	2,419	202.01	5,688	5,247
201.50	5,190	2,471	202.02	5,692	5,304
201.51	5,200	2,523	202.03	5,695	5,361

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.04	5,698	5,418	202.56	5,870	8,425
202.05	5,702	5,475	202.57	5,873	8,484
202.06	5,705	5,532	202.58	5,876	8,543
202.07	5,708	5,589	202.59	5,880	8,602
202.08	5,711	5,646	202.60	5,883	8,660
202.09	5,715	5,703	202.61	5,886	8,719
202.10	5,718	5,760	202.62	5,890	8,778
202.11	5,721	5,817	202.63	5,893	8,837
202.12	5,725	5,875	202.64	5,896	8,896
202.13	5,728	5,932	202.65	5,900	8,955
202.14	5,731	5,989	202.66	5,903	9,014
202.15	5,735	6,046	202.67	5,906	9,073
202.16	5,738	6,104	202.68	5,909	9,132
202.17	5,741	6,161	202.69	5,913	9,191
202.18	5,744	6,219	202.70	5,916	9,250
202.19	5,748	6,276	202.71	5,919	9,310
202.20	5,751	6,334	202.72	5,923	9,369
202.21	5,754	6,391	202.73	5,926	9,428
202.22	5,758	6,449	202.74	5,929	9,487
202.23	5,761	6,506	202.75	5,933	9,547
202.24	5,764	6,564	202.76	5,936	9,606
202.25	5,768	6,622	202.77	5,939	9,665
202.26	5,771	6,679	202.78	5,942	9,725
202.27	5,774	6,737	202.79	5,946	9,784
202.28	5,777	6,795	202.80	5,949	9,844
202.29	5,781	6,853	202.81	5,952	9,903
202.30	5,784	6,910	202.82	5,956	9,963
202.31	5,787	6,968	202.83	5,959	10,022
202.32	5,791	7,026	202.84	5,962	10,082
202.33	5,794	7,084	202.85	5,965	10,141
202.34	5,797	7,142	202.86	5,969	10,201
202.35	5,800	7,200	202.87	5,972	10,261
202.36	5,804	7,258	202.88	5,975	10,321
202.37	5,807	7,316	202.89	5,979	10,380
202.38	5,810	7,374	202.90	5,982	10,440
202.39	5,814	7,432	202.91	5,985	10,500
202.40	5,817	7,490	202.92	5,989	10,560
202.41	5,820	7,549	202.93	5,992	10,620
202.42	5,824	7,607	202.94	5,995	10,680
202.43	5,827	7,665	202.95	5,998	10,740
202.44	5,830	7,723	202.96	6,002	10,800
202.45	5,833	7,782	202.97	6,005	10,860
202.46	5,837	7,840	202.98	6,008	10,920
202.47	5,840	7,898	202.99	6,012	10,980
202.48	5,843	7,957	203.00	6,015	11,040
202.49	5,847	8,015	203.01	6,022	11,100
202.50	5,850	8,074	203.02	6,028	11,160
202.51	5,853	8,132	203.03	6,035	11,221
202.52	5,857	8,191	203.04	6,041	11,281
202.53	5,860	8,249	203.05	6,048	11,342
202.54	5,863	8,308	203.06	6,055	11,402
202.55	5,867	8,367	203.07	6,061	11,463

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.08	6,068	11,523	203.60	6,412	14,768
203.09	6,074	11,584	203.61	6,418	14,832
203.10	6,081	11,645	203.62	6,425	14,896
203.11	6,088	11,706	203.63	6,431	14,961
203.12	6,094	11,767	203.64	6,438	15,025
203.13	6,101	11,828	203.65	6,445	15,089
203.14	6,108	11,889	203.66	6,451	15,154
203.15	6,114	11,950	203.67	6,458	15,218
203.16	6,121	12,011	203.68	6,464	15,283
203.17	6,127	12,072	203.69	6,471	15,348
203.18	6,134	12,133	203.70	6,478	15,412
203.19	6,141	12,195	203.71	6,484	15,477
203.20	6,147	12,256	203.72	6,491	15,542
203.21	6,154	12,318	203.73	6,498	15,607
203.22	6,160	12,379	203.74	6,504	15,672
203.23	6,167	12,441	203.75	6,511	15,737
203.24	6,174	12,503	203.76	6,517	15,802
203.25	6,180	12,564	203.77	6,524	15,868
203.26	6,187	12,626	203.78	6,531	15,933
203.27	6,193	12,688	203.79	6,537	15,998
203.28	6,200	12,750	203.80	6,544	16,064
203.29	6,207	12,812	203.81	6,550	16,129
203.30	6,213	12,874	203.82	6,557	16,195
203.31	6,220	12,936	203.83	6,564	16,260
203.32	6,227	12,999	203.84	6,570	16,326
203.33	6,233	13,061	203.85	6,577	16,392
203.34	6,240	13,123	203.86	6,583	16,457
203.35	6,246	13,186	203.87	6,590	16,523
203.36	6,253	13,248	203.88	6,597	16,589
203.37	6,260	13,311	203.89	6,603	16,655
203.38	6,266	13,373	203.90	6,610	16,721
203.39	6,273	13,436	203.91	6,617	16,787
203.40	6,279	13,499	203.92	6,623	16,854
203.41	6,286	13,562	203.93	6,630	16,920
203.42	6,293	13,625	203.94	6,636	16,986
203.43	6,299	13,688	203.95	6,643	17,053
203.44	6,306	13,751	203.96	6,650	17,119
203.45	6,312	13,814	203.97	6,656	17,186
203.46	6,319	13,877	203.98	6,663	17,252
203.47	6,326	13,940	203.99	6,669	17,319
203.48	6,332	14,003	204.00	6,676	17,386
203.49	6,339	14,067	204.01	6,683	17,452
203.50	6,346	14,130	204.02	6,689	17,519
203.51	6,352	14,194	204.03	6,696	17,586
203.52	6,359	14,257	204.04	6,702	17,653
203.53	6,365	14,321	204.05	6,709	17,720
203.54	6,372	14,384	204.06	6,716	17,787
203.55	6,379	14,448	204.07	6,722	17,854
203.56	6,385	14,512	204.08	6,729	17,922
203.57	6,392	14,576	204.09	6,735	17,989
203.58	6,398	14,640	204.10	6,742	18,056
203.59	6,405	14,704	204.11	6,749	18,124

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.12	6,755	18,191	204.64	7,098	21,793
204.13	6,762	18,259	204.65	7,105	21,864
204.14	6,768	18,327	204.66	7,112	21,935
204.15	6,775	18,394	204.67	7,118	22,007
204.16	6,782	18,462	204.68	7,125	22,078
204.17	6,788	18,530	204.69	7,131	22,149
204.18	6,795	18,598	204.70	7,138	22,220
204.19	6,801	18,666	204.71	7,145	22,292
204.20	6,808	18,734	204.72	7,151	22,363
204.21	6,815	18,802	204.73	7,158	22,435
204.22	6,821	18,870	204.74	7,164	22,506
204.23	6,828	18,938	204.75	7,171	22,578
204.24	6,834	19,007	204.76	7,178	22,650
204.25	6,841	19,075	204.77	7,184	22,722
204.26	6,848	19,144	204.78	7,191	22,794
204.27	6,854	19,212	204.79	7,197	22,865
204.28	6,861	19,281	204.80	7,204	22,938
204.29	6,867	19,349	204.81	7,211	23,010
204.30	6,874	19,418	204.82	7,217	23,082
204.31	6,881	19,487	204.83	7,224	23,154
204.32	6,887	19,556	204.84	7,230	23,226
204.33	6,894	19,625	204.85	7,237	23,299
204.34	6,900	19,693	204.86	7,244	23,371
204.35	6,907	19,763	204.87	7,250	23,443
204.36	6,914	19,832	204.88	7,257	23,516
204.37	6,920	19,901	204.89	7,263	23,589
204.38	6,927	19,970	204.90	7,270	23,661
204.39	6,933	20,039	204.91	7,277	23,734
204.40	6,940	20,109	204.92	7,283	23,807
204.41	6,947	20,178	204.93	7,290	23,880
204.42	6,953	20,248	204.94	7,296	23,953
204.43	6,960	20,317	204.95	7,303	24,026
204.44	6,966	20,387	204.96	7,310	24,099
204.45	6,973	20,457	204.97	7,316	24,172
204.46	6,980	20,526	204.98	7,323	24,245
204.47	6,986	20,596	204.99	7,329	24,318
204.48	6,993	20,666	205.00	7,336	24,392
204.49	6,999	20,736			
204.50	7,006	20,806			
204.51	7,013	20,876			
204.52	7,019	20,946			
204.53	7,026	21,016			
204.54	7,032	21,087			
204.55	7,039	21,157			
204.56	7,046	21,228			
204.57	7,052	21,298			
204.58	7,059	21,369			
204.59	7,065	21,439			
204.60	7,072	21,510			
204.61	7,079	21,581			
204.62	7,085	21,651			
204.63	7,092	21,722			

Summary for Pond B-54: Basin #54

Inflow Area = 2.570 ac, 60.47% Impervious, Inflow Depth = 2.33" for Current 2 yr event
 Inflow = 5.94 cfs @ 12.17 hrs, Volume= 0.500 af
 Outflow = 2.38 cfs @ 12.39 hrs, Volume= 0.360 af, Atten= 60%, Lag= 13.2 min
 Primary = 2.38 cfs @ 12.39 hrs, Volume= 0.360 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 202.98' @ 12.39 hrs Surf.Area= 5,748 sf Storage= 10,099 cf

Plug-Flow detention time= 207.0 min calculated for 0.360 af (72% of inflow)
 Center-of-Mass det. time= 109.1 min (889.8 - 780.7)

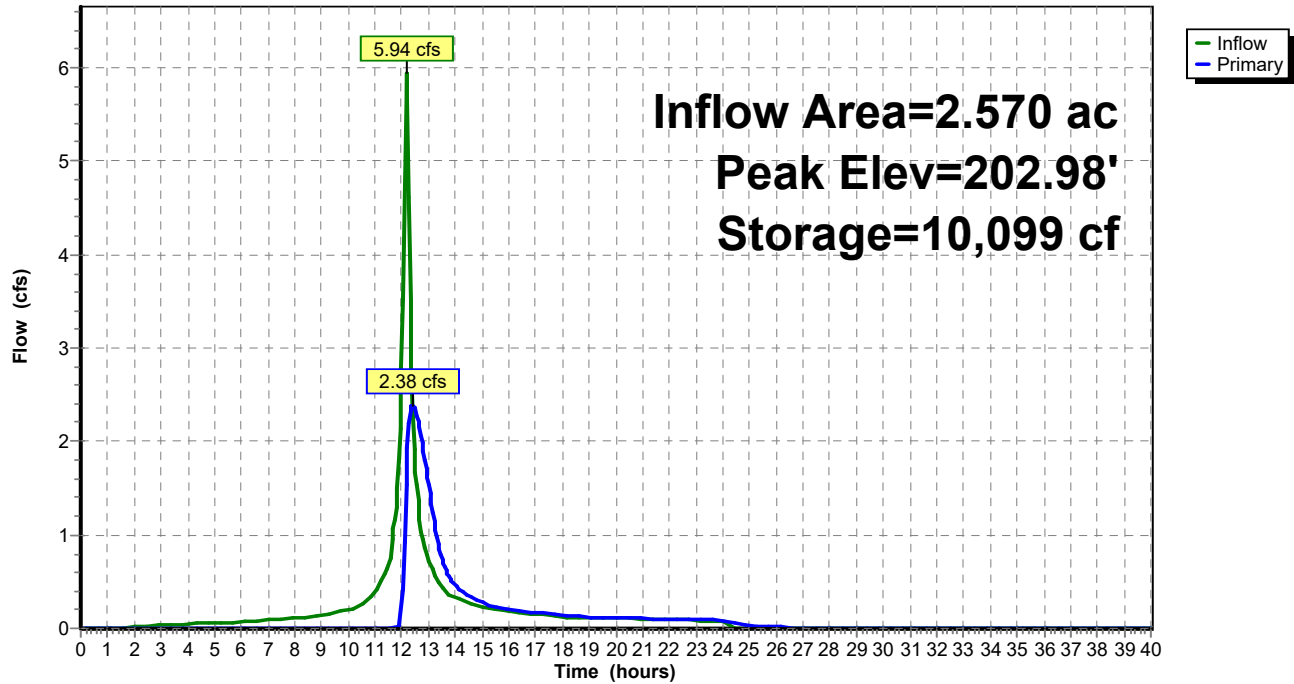
Volume	Invert	Avail.Storage	Storage Description
#1	201.00'	23,042 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.00	4,440	0	0
202.00	5,100	4,770	4,770
203.00	5,760	5,430	10,200
204.00	6,421	6,091	16,291
205.00	7,081	6,751	23,042

Device	Routing	Invert	Outlet Devices
#1	Primary	201.00'	24.0" Round Culvert L= 73.0' Ke= 0.500 Inlet / Outlet Invert= 201.00' / 200.10' S= 0.0123 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf
#2	Device 1	202.26'	24.0" W x 4.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	204.75'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.38 cfs @ 12.39 hrs HW=202.98' (Free Discharge)

1=Culvert (Passes 2.38 cfs of 15.03 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 2.38 cfs @ 3.57 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-54: Basin #54**Hydrograph**

Stage-Discharge for Pond B-54: Basin #54

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.00	0.00	201.52	0.00	202.04	0.00	202.56	1.05
201.01	0.00	201.53	0.00	202.05	0.00	202.57	1.11
201.02	0.00	201.54	0.00	202.06	0.00	202.58	1.16
201.03	0.00	201.55	0.00	202.07	0.00	202.59	1.22
201.04	0.00	201.56	0.00	202.08	0.00	202.60	1.27
201.05	0.00	201.57	0.00	202.09	0.00	202.61	1.32
201.06	0.00	201.58	0.00	202.10	0.00	202.62	1.36
201.07	0.00	201.59	0.00	202.11	0.00	202.63	1.40
201.08	0.00	201.60	0.00	202.12	0.00	202.64	1.44
201.09	0.00	201.61	0.00	202.13	0.00	202.65	1.48
201.10	0.00	201.62	0.00	202.14	0.00	202.66	1.51
201.11	0.00	201.63	0.00	202.15	0.00	202.67	1.55
201.12	0.00	201.64	0.00	202.16	0.00	202.68	1.58
201.13	0.00	201.65	0.00	202.17	0.00	202.69	1.62
201.14	0.00	201.66	0.00	202.18	0.00	202.70	1.65
201.15	0.00	201.67	0.00	202.19	0.00	202.71	1.68
201.16	0.00	201.68	0.00	202.20	0.00	202.72	1.71
201.17	0.00	201.69	0.00	202.21	0.00	202.73	1.74
201.18	0.00	201.70	0.00	202.22	0.00	202.74	1.77
201.19	0.00	201.71	0.00	202.23	0.00	202.75	1.80
201.20	0.00	201.72	0.00	202.24	0.00	202.76	1.83
201.21	0.00	201.73	0.00	202.25	0.00	202.77	1.86
201.22	0.00	201.74	0.00	202.26	0.00	202.78	1.89
201.23	0.00	201.75	0.00	202.27	0.01	202.79	1.92
201.24	0.00	201.76	0.00	202.28	0.02	202.80	1.94
201.25	0.00	201.77	0.00	202.29	0.03	202.81	1.97
201.26	0.00	201.78	0.00	202.30	0.05	202.82	2.00
201.27	0.00	201.79	0.00	202.31	0.07	202.83	2.02
201.28	0.00	201.80	0.00	202.32	0.09	202.84	2.05
201.29	0.00	201.81	0.00	202.33	0.12	202.85	2.07
201.30	0.00	201.82	0.00	202.34	0.15	202.86	2.10
201.31	0.00	201.83	0.00	202.35	0.17	202.87	2.12
201.32	0.00	201.84	0.00	202.36	0.20	202.88	2.15
201.33	0.00	201.85	0.00	202.37	0.23	202.89	2.17
201.34	0.00	201.86	0.00	202.38	0.27	202.90	2.20
201.35	0.00	201.87	0.00	202.39	0.30	202.91	2.22
201.36	0.00	201.88	0.00	202.40	0.34	202.92	2.24
201.37	0.00	201.89	0.00	202.41	0.37	202.93	2.27
201.38	0.00	201.90	0.00	202.42	0.41	202.94	2.29
201.39	0.00	201.91	0.00	202.43	0.45	202.95	2.31
201.40	0.00	201.92	0.00	202.44	0.49	202.96	2.33
201.41	0.00	201.93	0.00	202.45	0.53	202.97	2.36
201.42	0.00	201.94	0.00	202.46	0.57	202.98	2.38
201.43	0.00	201.95	0.00	202.47	0.62	202.99	2.40
201.44	0.00	201.96	0.00	202.48	0.66	203.00	2.42
201.45	0.00	201.97	0.00	202.49	0.71	203.01	2.46
201.46	0.00	201.98	0.00	202.50	0.75	203.02	2.50
201.47	0.00	201.99	0.00	202.51	0.80	203.03	2.55
201.48	0.00	202.00	0.00	202.52	0.85	203.04	2.61
201.49	0.00	202.01	0.00	202.53	0.90	203.05	2.67
201.50	0.00	202.02	0.00	202.54	0.95	203.06	2.74
201.51	0.00	202.03	0.00	202.55	1.00	203.07	2.81

Stage-Discharge for Pond B-54: Basin #54 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.08	2.88	203.60	9.37	204.12	18.81	204.64	24.58
203.09	2.96	203.61	9.53	204.13	19.01	204.65	24.62
203.10	3.04	203.62	9.69	204.14	19.21	204.66	24.67
203.11	3.12	203.63	9.85	204.15	19.42	204.67	24.72
203.12	3.21	203.64	10.02	204.16	19.62	204.68	24.76
203.13	3.29	203.65	10.18	204.17	19.82	204.69	24.81
203.14	3.39	203.66	10.34	204.18	20.03	204.70	24.86
203.15	3.48	203.67	10.51	204.19	20.23	204.71	24.90
203.16	3.57	203.68	10.68	204.20	20.44	204.72	24.95
203.17	3.67	203.69	10.84	204.21	20.64	204.73	24.99
203.18	3.77	203.70	11.01	204.22	20.85	204.74	25.04
203.19	3.87	203.71	11.18	204.23	21.05	204.75	25.08
203.20	3.98	203.72	11.35	204.24	21.26	204.76	25.25
203.21	4.08	203.73	11.52	204.25	21.47	204.77	25.51
203.22	4.19	203.74	11.69	204.26	21.68	204.78	25.83
203.23	4.30	203.75	11.87	204.27	21.89	204.79	26.20
203.24	4.41	203.76	12.04	204.28	22.10	204.80	26.62
203.25	4.52	203.77	12.22	204.29	22.31	204.81	27.08
203.26	4.64	203.78	12.39	204.30	22.52	204.82	27.58
203.27	4.75	203.79	12.57	204.31	22.73	204.83	28.10
203.28	4.87	203.80	12.74	204.32	22.94	204.84	28.66
203.29	4.99	203.81	12.92	204.33	23.09	204.85	29.25
203.30	5.11	203.82	13.10	204.34	23.14	204.86	29.87
203.31	5.24	203.83	13.28	204.35	23.19	204.87	30.52
203.32	5.36	203.84	13.46	204.36	23.24	204.88	31.19
203.33	5.49	203.85	13.64	204.37	23.29	204.89	31.89
203.34	5.61	203.86	13.82	204.38	23.34	204.90	32.61
203.35	5.74	203.87	14.01	204.39	23.39	204.91	33.35
203.36	5.87	203.88	14.19	204.40	23.43	204.92	34.12
203.37	6.00	203.89	14.37	204.41	23.48	204.93	34.90
203.38	6.14	203.90	14.56	204.42	23.53	204.94	35.72
203.39	6.27	203.91	14.75	204.43	23.58	204.95	36.55
203.40	6.41	203.92	14.93	204.44	23.63	204.96	37.44
203.41	6.54	203.93	15.12	204.45	23.68	204.97	38.35
203.42	6.68	203.94	15.31	204.46	23.73	204.98	39.29
203.43	6.82	203.95	15.50	204.47	23.77	204.99	40.26
203.44	6.96	203.96	15.69	204.48	23.82	205.00	41.25
203.45	7.10	203.97	15.88	204.49	23.87		
203.46	7.25	203.98	16.07	204.50	23.92		
203.47	7.39	203.99	16.26	204.51	23.97		
203.48	7.54	204.00	16.45	204.52	24.01		
203.49	7.68	204.01	16.64	204.53	24.06		
203.50	7.83	204.02	16.84	204.54	24.11		
203.51	7.98	204.03	17.03	204.55	24.16		
203.52	8.13	204.04	17.23	204.56	24.20		
203.53	8.28	204.05	17.42	204.57	24.25		
203.54	8.43	204.06	17.62	204.58	24.30		
203.55	8.59	204.07	17.82	204.59	24.34		
203.56	8.74	204.08	18.01	204.60	24.39		
203.57	8.90	204.09	18.21	204.61	24.44		
203.58	9.05	204.10	18.41	204.62	24.48		
203.59	9.21	204.11	18.61	204.63	24.53		

Stage-Area-Storage for Pond B-54: Basin #54

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.00	4,440	0	201.52	4,783	2,398
201.01	4,447	44	201.53	4,790	2,446
201.02	4,453	89	201.54	4,796	2,494
201.03	4,460	133	201.55	4,803	2,542
201.04	4,466	178	201.56	4,810	2,590
201.05	4,473	223	201.57	4,816	2,638
201.06	4,480	268	201.58	4,823	2,686
201.07	4,486	312	201.59	4,829	2,734
201.08	4,493	357	201.60	4,836	2,783
201.09	4,499	402	201.61	4,843	2,831
201.10	4,506	447	201.62	4,849	2,880
201.11	4,513	492	201.63	4,856	2,928
201.12	4,519	538	201.64	4,862	2,977
201.13	4,526	583	201.65	4,869	3,025
201.14	4,532	628	201.66	4,876	3,074
201.15	4,539	673	201.67	4,882	3,123
201.16	4,546	719	201.68	4,889	3,172
201.17	4,552	764	201.69	4,895	3,221
201.18	4,559	810	201.70	4,902	3,270
201.19	4,565	856	201.71	4,909	3,319
201.20	4,572	901	201.72	4,915	3,368
201.21	4,579	947	201.73	4,922	3,417
201.22	4,585	993	201.74	4,928	3,466
201.23	4,592	1,039	201.75	4,935	3,516
201.24	4,598	1,085	201.76	4,942	3,565
201.25	4,605	1,131	201.77	4,948	3,614
201.26	4,612	1,177	201.78	4,955	3,664
201.27	4,618	1,223	201.79	4,961	3,714
201.28	4,625	1,269	201.80	4,968	3,763
201.29	4,631	1,315	201.81	4,975	3,813
201.30	4,638	1,362	201.82	4,981	3,863
201.31	4,645	1,408	201.83	4,988	3,913
201.32	4,651	1,455	201.84	4,994	3,962
201.33	4,658	1,501	201.85	5,001	4,012
201.34	4,664	1,548	201.86	5,008	4,062
201.35	4,671	1,594	201.87	5,014	4,113
201.36	4,678	1,641	201.88	5,021	4,163
201.37	4,684	1,688	201.89	5,027	4,213
201.38	4,691	1,735	201.90	5,034	4,263
201.39	4,697	1,782	201.91	5,041	4,314
201.40	4,704	1,829	201.92	5,047	4,364
201.41	4,711	1,876	201.93	5,054	4,415
201.42	4,717	1,923	201.94	5,060	4,465
201.43	4,724	1,970	201.95	5,067	4,516
201.44	4,730	2,017	201.96	5,074	4,567
201.45	4,737	2,065	201.97	5,080	4,617
201.46	4,744	2,112	201.98	5,087	4,668
201.47	4,750	2,160	201.99	5,093	4,719
201.48	4,757	2,207	202.00	5,100	4,770
201.49	4,763	2,255	202.01	5,107	4,821
201.50	4,770	2,303	202.02	5,113	4,872
201.51	4,777	2,350	202.03	5,120	4,923

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.04	5,126	4,975	202.56	5,470	7,729
202.05	5,133	5,026	202.57	5,476	7,784
202.06	5,140	5,077	202.58	5,483	7,839
202.07	5,146	5,129	202.59	5,489	7,894
202.08	5,153	5,180	202.60	5,496	7,949
202.09	5,159	5,232	202.61	5,503	8,004
202.10	5,166	5,283	202.62	5,509	8,059
202.11	5,173	5,335	202.63	5,516	8,114
202.12	5,179	5,387	202.64	5,522	8,169
202.13	5,186	5,439	202.65	5,529	8,224
202.14	5,192	5,490	202.66	5,536	8,280
202.15	5,199	5,542	202.67	5,542	8,335
202.16	5,206	5,594	202.68	5,549	8,391
202.17	5,212	5,647	202.69	5,555	8,446
202.18	5,219	5,699	202.70	5,562	8,502
202.19	5,225	5,751	202.71	5,569	8,557
202.20	5,232	5,803	202.72	5,575	8,613
202.21	5,239	5,856	202.73	5,582	8,669
202.22	5,245	5,908	202.74	5,588	8,725
202.23	5,252	5,960	202.75	5,595	8,781
202.24	5,258	6,013	202.76	5,602	8,837
202.25	5,265	6,066	202.77	5,608	8,893
202.26	5,272	6,118	202.78	5,615	8,949
202.27	5,278	6,171	202.79	5,621	9,005
202.28	5,285	6,224	202.80	5,628	9,061
202.29	5,291	6,277	202.81	5,635	9,118
202.30	5,298	6,330	202.82	5,641	9,174
202.31	5,305	6,383	202.83	5,648	9,230
202.32	5,311	6,436	202.84	5,654	9,287
202.33	5,318	6,489	202.85	5,661	9,343
202.34	5,324	6,542	202.86	5,668	9,400
202.35	5,331	6,595	202.87	5,674	9,457
202.36	5,338	6,649	202.88	5,681	9,514
202.37	5,344	6,702	202.89	5,687	9,570
202.38	5,351	6,756	202.90	5,694	9,627
202.39	5,357	6,809	202.91	5,701	9,684
202.40	5,364	6,863	202.92	5,707	9,741
202.41	5,371	6,916	202.93	5,714	9,798
202.42	5,377	6,970	202.94	5,720	9,856
202.43	5,384	7,024	202.95	5,727	9,913
202.44	5,390	7,078	202.96	5,734	9,970
202.45	5,397	7,132	202.97	5,740	10,027
202.46	5,404	7,186	202.98	5,747	10,085
202.47	5,410	7,240	202.99	5,753	10,142
202.48	5,417	7,294	203.00	5,760	10,200
202.49	5,423	7,348	203.01	5,767	10,258
202.50	5,430	7,403	203.02	5,773	10,315
202.51	5,437	7,457	203.03	5,780	10,373
202.52	5,443	7,511	203.04	5,786	10,431
202.53	5,450	7,566	203.05	5,793	10,489
202.54	5,456	7,620	203.06	5,800	10,547
202.55	5,463	7,675	203.07	5,806	10,605

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.08	5,813	10,663	203.60	6,157	13,775
203.09	5,819	10,721	203.61	6,163	13,837
203.10	5,826	10,779	203.62	6,170	13,898
203.11	5,833	10,838	203.63	6,176	13,960
203.12	5,839	10,896	203.64	6,183	14,022
203.13	5,846	10,954	203.65	6,190	14,084
203.14	5,853	11,013	203.66	6,196	14,146
203.15	5,859	11,071	203.67	6,203	14,208
203.16	5,866	11,130	203.68	6,209	14,270
203.17	5,872	11,189	203.69	6,216	14,332
203.18	5,879	11,248	203.70	6,223	14,394
203.19	5,886	11,306	203.71	6,229	14,456
203.20	5,892	11,365	203.72	6,236	14,519
203.21	5,899	11,424	203.73	6,243	14,581
203.22	5,905	11,483	203.74	6,249	14,643
203.23	5,912	11,542	203.75	6,256	14,706
203.24	5,919	11,601	203.76	6,262	14,768
203.25	5,925	11,661	203.77	6,269	14,831
203.26	5,932	11,720	203.78	6,276	14,894
203.27	5,938	11,779	203.79	6,282	14,957
203.28	5,945	11,839	203.80	6,289	15,020
203.29	5,952	11,898	203.81	6,295	15,082
203.30	5,958	11,958	203.82	6,302	15,145
203.31	5,965	12,017	203.83	6,309	15,208
203.32	5,972	12,077	203.84	6,315	15,272
203.33	5,978	12,137	203.85	6,322	15,335
203.34	5,985	12,197	203.86	6,328	15,398
203.35	5,991	12,256	203.87	6,335	15,461
203.36	5,998	12,316	203.88	6,342	15,525
203.37	6,005	12,376	203.89	6,348	15,588
203.38	6,011	12,437	203.90	6,355	15,652
203.39	6,018	12,497	203.91	6,362	15,715
203.40	6,024	12,557	203.92	6,368	15,779
203.41	6,031	12,617	203.93	6,375	15,843
203.42	6,038	12,678	203.94	6,381	15,906
203.43	6,044	12,738	203.95	6,388	15,970
203.44	6,051	12,798	203.96	6,395	16,034
203.45	6,057	12,859	203.97	6,401	16,098
203.46	6,064	12,920	203.98	6,408	16,162
203.47	6,071	12,980	203.99	6,414	16,226
203.48	6,077	13,041	204.00	6,421	16,291
203.49	6,084	13,102	204.01	6,428	16,355
203.50	6,091	13,163	204.02	6,434	16,419
203.51	6,097	13,224	204.03	6,441	16,483
203.52	6,104	13,285	204.04	6,447	16,548
203.53	6,110	13,346	204.05	6,454	16,612
203.54	6,117	13,407	204.06	6,461	16,677
203.55	6,124	13,468	204.07	6,467	16,742
203.56	6,130	13,529	204.08	6,474	16,806
203.57	6,137	13,591	204.09	6,480	16,871
203.58	6,143	13,652	204.10	6,487	16,936
203.59	6,150	13,713	204.11	6,494	17,001

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.12	6,500	17,066	204.64	6,843	20,535
204.13	6,507	17,131	204.65	6,850	20,604
204.14	6,513	17,196	204.66	6,857	20,672
204.15	6,520	17,261	204.67	6,863	20,741
204.16	6,527	17,326	204.68	6,870	20,809
204.17	6,533	17,392	204.69	6,876	20,878
204.18	6,540	17,457	204.70	6,883	20,947
204.19	6,546	17,522	204.71	6,890	21,016
204.20	6,553	17,588	204.72	6,896	21,085
204.21	6,560	17,653	204.73	6,903	21,154
204.22	6,566	17,719	204.74	6,909	21,223
204.23	6,573	17,785	204.75	6,916	21,292
204.24	6,579	17,851	204.76	6,923	21,361
204.25	6,586	17,916	204.77	6,929	21,430
204.26	6,593	17,982	204.78	6,936	21,500
204.27	6,599	18,048	204.79	6,942	21,569
204.28	6,606	18,114	204.80	6,949	21,639
204.29	6,612	18,180	204.81	6,956	21,708
204.30	6,619	18,247	204.82	6,962	21,778
204.31	6,626	18,313	204.83	6,969	21,847
204.32	6,632	18,379	204.84	6,975	21,917
204.33	6,639	18,445	204.85	6,982	21,987
204.34	6,645	18,512	204.86	6,989	22,057
204.35	6,652	18,578	204.87	6,995	22,127
204.36	6,659	18,645	204.88	7,002	22,197
204.37	6,665	18,711	204.89	7,008	22,267
204.38	6,672	18,778	204.90	7,015	22,337
204.39	6,678	18,845	204.91	7,022	22,407
204.40	6,685	18,912	204.92	7,028	22,477
204.41	6,692	18,979	204.93	7,035	22,547
204.42	6,698	19,046	204.94	7,041	22,618
204.43	6,705	19,113	204.95	7,048	22,688
204.44	6,711	19,180	204.96	7,055	22,759
204.45	6,718	19,247	204.97	7,061	22,829
204.46	6,725	19,314	204.98	7,068	22,900
204.47	6,731	19,381	204.99	7,074	22,971
204.48	6,738	19,449	205.00	7,081	23,042
204.49	6,744	19,516			
204.50	6,751	19,584			
204.51	6,758	19,651			
204.52	6,764	19,719			
204.53	6,771	19,786			
204.54	6,777	19,854			
204.55	6,784	19,922			
204.56	6,791	19,990			
204.57	6,797	20,058			
204.58	6,804	20,126			
204.59	6,810	20,194			
204.60	6,817	20,262			
204.61	6,824	20,330			
204.62	6,830	20,398			
204.63	6,837	20,467			

Summary for Pond B-55: Basin #55

Inflow Area = 2.301 ac, 47.33% Impervious, Inflow Depth = 2.07" for Current 2 yr event
 Inflow = 4.77 cfs @ 12.17 hrs, Volume= 0.398 af
 Outflow = 1.47 cfs @ 12.48 hrs, Volume= 0.295 af, Atten= 69%, Lag= 18.1 min
 Primary = 1.47 cfs @ 12.48 hrs, Volume= 0.295 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 193.55' @ 12.48 hrs Surf.Area= 5,026 sf Storage= 8,111 cf

Plug-Flow detention time= 204.3 min calculated for 0.295 af (74% of inflow)
 Center-of-Mass det. time= 108.2 min (899.2 - 791.0)

Volume	Invert	Avail.Storage	Storage Description
#1	191.56'	22,010 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.56	0	0	0
192.00	4,250	935	935
193.00	4,746	4,498	5,433
194.00	5,257	5,002	10,434
195.00	5,784	5,521	15,955
196.00	6,327	6,056	22,010

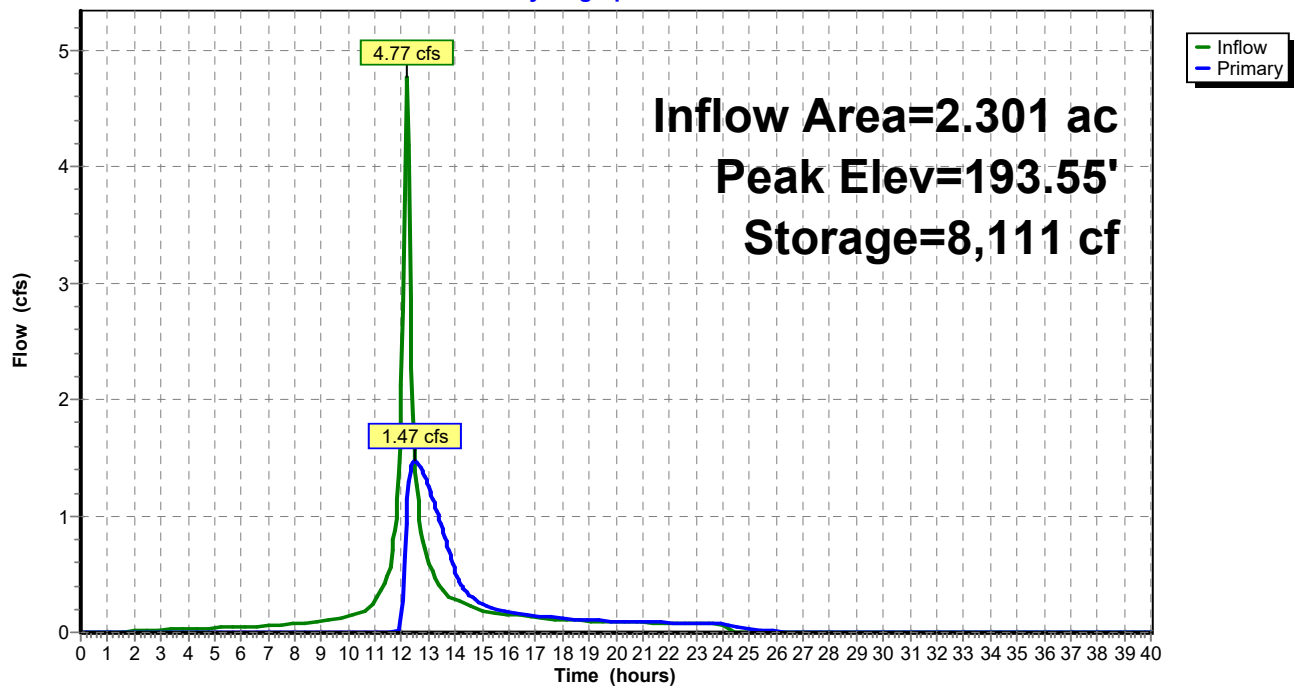
Device	Routing	Invert	Outlet Devices
#1	Primary	191.65'	18.0" Round Culvert L= 112.0' Ke= 0.500 Inlet / Outlet Invert= 191.65' / 191.00' S= 0.0058 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.80'	22.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.82'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	195.45'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.47 cfs @ 12.48 hrs HW=193.55' (Free Discharge)

1=Culvert (Passes 1.47 cfs of 8.24 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 1.47 cfs @ 3.86 fps)
 3=Sharp-Crested Rectangular Weir(Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs)

Pond B-55: Basin #55

Hydrograph



Stage-Discharge for Pond B-55: Basin #55

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.56	0.00	192.08	0.00	192.60	0.00	193.12	0.85
191.57	0.00	192.09	0.00	192.61	0.00	193.13	0.87
191.58	0.00	192.10	0.00	192.62	0.00	193.14	0.89
191.59	0.00	192.11	0.00	192.63	0.00	193.15	0.90
191.60	0.00	192.12	0.00	192.64	0.00	193.16	0.92
191.61	0.00	192.13	0.00	192.65	0.00	193.17	0.94
191.62	0.00	192.14	0.00	192.66	0.00	193.18	0.96
191.63	0.00	192.15	0.00	192.67	0.00	193.19	0.98
191.64	0.00	192.16	0.00	192.68	0.00	193.20	0.99
191.65	0.00	192.17	0.00	192.69	0.00	193.21	1.01
191.66	0.00	192.18	0.00	192.70	0.00	193.22	1.03
191.67	0.00	192.19	0.00	192.71	0.00	193.23	1.05
191.68	0.00	192.20	0.00	192.72	0.00	193.24	1.06
191.69	0.00	192.21	0.00	192.73	0.00	193.25	1.08
191.70	0.00	192.22	0.00	192.74	0.00	193.26	1.09
191.71	0.00	192.23	0.00	192.75	0.00	193.27	1.11
191.72	0.00	192.24	0.00	192.76	0.00	193.28	1.12
191.73	0.00	192.25	0.00	192.77	0.00	193.29	1.14
191.74	0.00	192.26	0.00	192.78	0.00	193.30	1.15
191.75	0.00	192.27	0.00	192.79	0.00	193.31	1.17
191.76	0.00	192.28	0.00	192.80	0.00	193.32	1.18
191.77	0.00	192.29	0.00	192.81	0.01	193.33	1.20
191.78	0.00	192.30	0.00	192.82	0.02	193.34	1.21
191.79	0.00	192.31	0.00	192.83	0.03	193.35	1.23
191.80	0.00	192.32	0.00	192.84	0.05	193.36	1.24
191.81	0.00	192.33	0.00	192.85	0.07	193.37	1.25
191.82	0.00	192.34	0.00	192.86	0.09	193.38	1.27
191.83	0.00	192.35	0.00	192.87	0.11	193.39	1.28
191.84	0.00	192.36	0.00	192.88	0.13	193.40	1.29
191.85	0.00	192.37	0.00	192.89	0.16	193.41	1.31
191.86	0.00	192.38	0.00	192.90	0.19	193.42	1.32
191.87	0.00	192.39	0.00	192.91	0.21	193.43	1.33
191.88	0.00	192.40	0.00	192.92	0.24	193.44	1.34
191.89	0.00	192.41	0.00	192.93	0.28	193.45	1.36
191.90	0.00	192.42	0.00	192.94	0.31	193.46	1.37
191.91	0.00	192.43	0.00	192.95	0.34	193.47	1.38
191.92	0.00	192.44	0.00	192.96	0.38	193.48	1.39
191.93	0.00	192.45	0.00	192.97	0.41	193.49	1.41
191.94	0.00	192.46	0.00	192.98	0.45	193.50	1.42
191.95	0.00	192.47	0.00	192.99	0.49	193.51	1.43
191.96	0.00	192.48	0.00	193.00	0.53	193.52	1.44
191.97	0.00	192.49	0.00	193.01	0.57	193.53	1.45
191.98	0.00	192.50	0.00	193.02	0.60	193.54	1.46
191.99	0.00	192.51	0.00	193.03	0.63	193.55	1.48
192.00	0.00	192.52	0.00	193.04	0.66	193.56	1.49
192.01	0.00	192.53	0.00	193.05	0.69	193.57	1.50
192.02	0.00	192.54	0.00	193.06	0.71	193.58	1.51
192.03	0.00	192.55	0.00	193.07	0.74	193.59	1.52
192.04	0.00	192.56	0.00	193.08	0.76	193.60	1.53
192.05	0.00	192.57	0.00	193.09	0.78	193.61	1.54
192.06	0.00	192.58	0.00	193.10	0.80	193.62	1.55
192.07	0.00	192.59	0.00	193.11	0.82	193.63	1.57

Stage-Discharge for Pond B-55: Basin #55 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.64	1.58	194.16	4.61	194.68	11.12	195.20	12.37
193.65	1.59	194.17	4.73	194.69	11.14	195.21	12.39
193.66	1.60	194.18	4.85	194.70	11.17	195.22	12.42
193.67	1.61	194.19	4.97	194.71	11.19	195.23	12.44
193.68	1.62	194.20	5.10	194.72	11.22	195.24	12.46
193.69	1.63	194.21	5.22	194.73	11.24	195.25	12.48
193.70	1.64	194.22	5.35	194.74	11.27	195.26	12.51
193.71	1.65	194.23	5.48	194.75	11.29	195.27	12.53
193.72	1.66	194.24	5.61	194.76	11.32	195.28	12.55
193.73	1.67	194.25	5.74	194.77	11.34	195.29	12.58
193.74	1.68	194.26	5.87	194.78	11.37	195.30	12.60
193.75	1.69	194.27	6.01	194.79	11.39	195.31	12.62
193.76	1.70	194.28	6.14	194.80	11.42	195.32	12.64
193.77	1.71	194.29	6.28	194.81	11.44	195.33	12.66
193.78	1.72	194.30	6.42	194.82	11.47	195.34	12.69
193.79	1.73	194.31	6.56	194.83	11.49	195.35	12.71
193.80	1.74	194.32	6.70	194.84	11.52	195.36	12.73
193.81	1.75	194.33	6.84	194.85	11.54	195.37	12.75
193.82	1.76	194.34	6.98	194.86	11.57	195.38	12.78
193.83	1.78	194.35	7.12	194.87	11.59	195.39	12.80
193.84	1.82	194.36	7.27	194.88	11.61	195.40	12.82
193.85	1.86	194.37	7.41	194.89	11.64	195.41	12.84
193.86	1.90	194.38	7.56	194.90	11.66	195.42	12.86
193.87	1.95	194.39	7.71	194.91	11.69	195.43	12.89
193.88	2.01	194.40	7.86	194.92	11.71	195.44	12.91
193.89	2.07	194.41	8.01	194.93	11.74	195.45	12.93
193.90	2.13	194.42	8.16	194.94	11.76	195.46	13.07
193.91	2.20	194.43	8.31	194.95	11.78	195.47	13.31
193.92	2.26	194.44	8.47	194.96	11.81	195.48	13.61
193.93	2.34	194.45	8.62	194.97	11.83	195.49	13.96
193.94	2.41	194.46	8.78	194.98	11.86	195.50	14.35
193.95	2.49	194.47	8.93	194.99	11.88	195.51	14.79
193.96	2.57	194.48	9.09	195.00	11.90	195.52	15.26
193.97	2.65	194.49	9.25	195.01	11.93	195.53	15.76
193.98	2.74	194.50	9.41	195.02	11.95	195.54	16.30
193.99	2.82	194.51	9.57	195.03	11.97	195.55	16.87
194.00	2.91	194.52	9.73	195.04	12.00	195.56	17.46
194.01	3.01	194.53	9.89	195.05	12.02	195.57	18.08
194.02	3.10	194.54	10.06	195.06	12.05	195.58	18.73
194.03	3.20	194.55	10.22	195.07	12.07	195.59	19.40
194.04	3.29	194.56	10.38	195.08	12.09	195.60	20.10
194.05	3.39	194.57	10.55	195.09	12.12	195.61	20.82
194.06	3.50	194.58	10.72	195.10	12.14	195.62	21.57
194.07	3.60	194.59	10.88	195.11	12.16	195.63	22.33
194.08	3.71	194.60	10.91	195.12	12.19	195.64	23.12
194.09	3.81	194.61	10.94	195.13	12.21	195.65	23.93
194.10	3.92	194.62	10.96	195.14	12.23	195.66	24.79
194.11	4.03	194.63	10.99	195.15	12.26	195.67	25.69
194.12	4.14	194.64	11.01	195.16	12.28	195.68	26.61
194.13	4.26	194.65	11.04	195.17	12.30	195.69	27.55
194.14	4.37	194.66	11.06	195.18	12.32	195.70	28.52
194.15	4.49	194.67	11.09	195.19	12.35	195.71	29.52

Stage-Discharge for Pond B-55: Basin #55 (continued)

Elevation (feet)	Primary (cfs)
195.72	30.53
195.73	31.58
195.74	32.65
195.75	33.74
195.76	34.86
195.77	36.00
195.78	37.17
195.79	38.36
195.80	39.57
195.81	40.81
195.82	42.08
195.83	43.36
195.84	44.67
195.85	46.01
195.86	47.40
195.87	48.81
195.88	50.25
195.89	51.71
195.90	53.20
195.91	54.72
195.92	56.26
195.93	57.83
195.94	59.43
195.95	61.05
195.96	62.70
195.97	64.37
195.98	66.07
195.99	67.80
196.00	69.56

Stage-Area-Storage for Pond B-55: Basin #55

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.56	0	0	192.08	4,290	1,277
191.57	97	0	192.09	4,295	1,320
191.58	193	2	192.10	4,300	1,362
191.59	290	4	192.11	4,305	1,406
191.60	386	8	192.12	4,310	1,449
191.61	483	12	192.13	4,314	1,492
191.62	580	17	192.14	4,319	1,535
191.63	676	24	192.15	4,324	1,578
191.64	773	31	192.16	4,329	1,621
191.65	869	39	192.17	4,334	1,665
191.66	966	48	192.18	4,339	1,708
191.67	1,063	58	192.19	4,344	1,751
191.68	1,159	70	192.20	4,349	1,795
191.69	1,256	82	192.21	4,354	1,838
191.70	1,352	95	192.22	4,359	1,882
191.71	1,449	109	192.23	4,364	1,926
191.72	1,545	124	192.24	4,369	1,969
191.73	1,642	140	192.25	4,374	2,013
191.74	1,739	156	192.26	4,379	2,057
191.75	1,835	174	192.27	4,384	2,101
191.76	1,932	193	192.28	4,389	2,144
191.77	2,028	213	192.29	4,394	2,188
191.78	2,125	234	192.30	4,399	2,232
191.79	2,222	255	192.31	4,404	2,276
191.80	2,318	278	192.32	4,409	2,320
191.81	2,415	302	192.33	4,414	2,365
191.82	2,511	326	192.34	4,419	2,409
191.83	2,608	352	192.35	4,424	2,453
191.84	2,705	379	192.36	4,429	2,497
191.85	2,801	406	192.37	4,434	2,541
191.86	2,898	435	192.38	4,438	2,586
191.87	2,994	464	192.39	4,443	2,630
191.88	3,091	495	192.40	4,448	2,675
191.89	3,188	526	192.41	4,453	2,719
191.90	3,284	558	192.42	4,458	2,764
191.91	3,381	592	192.43	4,463	2,808
191.92	3,477	626	192.44	4,468	2,853
191.93	3,574	661	192.45	4,473	2,898
191.94	3,670	697	192.46	4,478	2,942
191.95	3,767	735	192.47	4,483	2,987
191.96	3,864	773	192.48	4,488	3,032
191.97	3,960	812	192.49	4,493	3,077
191.98	4,057	852	192.50	4,498	3,122
191.99	4,153	893	192.51	4,503	3,167
192.00	4,250	935	192.52	4,508	3,212
192.01	4,255	978	192.53	4,513	3,257
192.02	4,260	1,020	192.54	4,518	3,302
192.03	4,265	1,063	192.55	4,523	3,348
192.04	4,270	1,105	192.56	4,528	3,393
192.05	4,275	1,148	192.57	4,533	3,438
192.06	4,280	1,191	192.58	4,538	3,483
192.07	4,285	1,234	192.59	4,543	3,529

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.60	4,548	3,574	193.12	4,807	6,006
192.61	4,553	3,620	193.13	4,812	6,054
192.62	4,558	3,665	193.14	4,818	6,102
192.63	4,562	3,711	193.15	4,823	6,151
192.64	4,567	3,757	193.16	4,828	6,199
192.65	4,572	3,802	193.17	4,833	6,247
192.66	4,577	3,848	193.18	4,838	6,296
192.67	4,582	3,894	193.19	4,843	6,344
192.68	4,587	3,940	193.20	4,848	6,392
192.69	4,592	3,986	193.21	4,853	6,441
192.70	4,597	4,032	193.22	4,858	6,489
192.71	4,602	4,078	193.23	4,864	6,538
192.72	4,607	4,124	193.24	4,869	6,587
192.73	4,612	4,170	193.25	4,874	6,635
192.74	4,617	4,216	193.26	4,879	6,684
192.75	4,622	4,262	193.27	4,884	6,733
192.76	4,627	4,308	193.28	4,889	6,782
192.77	4,632	4,355	193.29	4,894	6,831
192.78	4,637	4,401	193.30	4,899	6,880
192.79	4,642	4,447	193.31	4,904	6,929
192.80	4,647	4,494	193.32	4,910	6,978
192.81	4,652	4,540	193.33	4,915	7,027
192.82	4,657	4,587	193.34	4,920	7,076
192.83	4,662	4,633	193.35	4,925	7,125
192.84	4,667	4,680	193.36	4,930	7,175
192.85	4,672	4,727	193.37	4,935	7,224
192.86	4,677	4,773	193.38	4,940	7,273
192.87	4,682	4,820	193.39	4,945	7,323
192.88	4,686	4,867	193.40	4,950	7,372
192.89	4,691	4,914	193.41	4,956	7,422
192.90	4,696	4,961	193.42	4,961	7,471
192.91	4,701	5,008	193.43	4,966	7,521
192.92	4,706	5,055	193.44	4,971	7,571
192.93	4,711	5,102	193.45	4,976	7,620
192.94	4,716	5,149	193.46	4,981	7,670
192.95	4,721	5,196	193.47	4,986	7,720
192.96	4,726	5,244	193.48	4,991	7,770
192.97	4,731	5,291	193.49	4,996	7,820
192.98	4,736	5,338	193.50	5,002	7,870
192.99	4,741	5,386	193.51	5,007	7,920
193.00	4,746	5,433	193.52	5,012	7,970
193.01	4,751	5,480	193.53	5,017	8,020
193.02	4,756	5,528	193.54	5,022	8,070
193.03	4,761	5,576	193.55	5,027	8,121
193.04	4,766	5,623	193.56	5,032	8,171
193.05	4,772	5,671	193.57	5,037	8,221
193.06	4,777	5,719	193.58	5,042	8,272
193.07	4,782	5,766	193.59	5,047	8,322
193.08	4,787	5,814	193.60	5,053	8,373
193.09	4,792	5,862	193.61	5,058	8,423
193.10	4,797	5,910	193.62	5,063	8,474
193.11	4,802	5,958	193.63	5,068	8,524

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.64	5,073	8,575	194.16	5,341	11,282
193.65	5,078	8,626	194.17	5,347	11,336
193.66	5,083	8,677	194.18	5,352	11,389
193.67	5,088	8,728	194.19	5,357	11,443
193.68	5,093	8,778	194.20	5,362	11,496
193.69	5,099	8,829	194.21	5,368	11,550
193.70	5,104	8,880	194.22	5,373	11,604
193.71	5,109	8,931	194.23	5,378	11,658
193.72	5,114	8,983	194.24	5,383	11,711
193.73	5,119	9,034	194.25	5,389	11,765
193.74	5,124	9,085	194.26	5,394	11,819
193.75	5,129	9,136	194.27	5,399	11,873
193.76	5,134	9,188	194.28	5,405	11,927
193.77	5,139	9,239	194.29	5,410	11,981
193.78	5,145	9,290	194.30	5,415	12,035
193.79	5,150	9,342	194.31	5,420	12,089
193.80	5,155	9,393	194.32	5,426	12,144
193.81	5,160	9,445	194.33	5,431	12,198
193.82	5,165	9,497	194.34	5,436	12,252
193.83	5,170	9,548	194.35	5,441	12,307
193.84	5,175	9,600	194.36	5,447	12,361
193.85	5,180	9,652	194.37	5,452	12,416
193.86	5,185	9,704	194.38	5,457	12,470
193.87	5,191	9,755	194.39	5,463	12,525
193.88	5,196	9,807	194.40	5,468	12,579
193.89	5,201	9,859	194.41	5,473	12,634
193.90	5,206	9,911	194.42	5,478	12,689
193.91	5,211	9,963	194.43	5,484	12,744
193.92	5,216	10,016	194.44	5,489	12,799
193.93	5,221	10,068	194.45	5,494	12,854
193.94	5,226	10,120	194.46	5,499	12,908
193.95	5,231	10,172	194.47	5,505	12,963
193.96	5,237	10,225	194.48	5,510	13,019
193.97	5,242	10,277	194.49	5,515	13,074
193.98	5,247	10,329	194.50	5,521	13,129
193.99	5,252	10,382	194.51	5,526	13,184
194.00	5,257	10,434	194.52	5,531	13,239
194.01	5,262	10,487	194.53	5,536	13,295
194.02	5,268	10,540	194.54	5,542	13,350
194.03	5,273	10,592	194.55	5,547	13,406
194.04	5,278	10,645	194.56	5,552	13,461
194.05	5,283	10,698	194.57	5,557	13,517
194.06	5,289	10,751	194.58	5,563	13,572
194.07	5,294	10,804	194.59	5,568	13,628
194.08	5,299	10,857	194.60	5,573	13,684
194.09	5,304	10,910	194.61	5,578	13,739
194.10	5,310	10,963	194.62	5,584	13,795
194.11	5,315	11,016	194.63	5,589	13,851
194.12	5,320	11,069	194.64	5,594	13,907
194.13	5,326	11,122	194.65	5,600	13,963
194.14	5,331	11,176	194.66	5,605	14,019
194.15	5,336	11,229	194.67	5,610	14,075

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.68	5,615	14,131	195.20	5,893	17,123
194.69	5,621	14,187	195.21	5,898	17,182
194.70	5,626	14,244	195.22	5,903	17,241
194.71	5,631	14,300	195.23	5,909	17,300
194.72	5,636	14,356	195.24	5,914	17,359
194.73	5,642	14,413	195.25	5,920	17,418
194.74	5,647	14,469	195.26	5,925	17,477
194.75	5,652	14,525	195.27	5,931	17,536
194.76	5,658	14,582	195.28	5,936	17,596
194.77	5,663	14,639	195.29	5,941	17,655
194.78	5,668	14,695	195.30	5,947	17,715
194.79	5,673	14,752	195.31	5,952	17,774
194.80	5,679	14,809	195.32	5,958	17,834
194.81	5,684	14,866	195.33	5,963	17,893
194.82	5,689	14,922	195.34	5,969	17,953
194.83	5,694	14,979	195.35	5,974	18,013
194.84	5,700	15,036	195.36	5,979	18,072
194.85	5,705	15,093	195.37	5,985	18,132
194.86	5,710	15,150	195.38	5,990	18,192
194.87	5,715	15,208	195.39	5,996	18,252
194.88	5,721	15,265	195.40	6,001	18,312
194.89	5,726	15,322	195.41	6,007	18,372
194.90	5,731	15,379	195.42	6,012	18,432
194.91	5,737	15,437	195.43	6,017	18,492
194.92	5,742	15,494	195.44	6,023	18,553
194.93	5,747	15,551	195.45	6,028	18,613
194.94	5,752	15,609	195.46	6,034	18,673
194.95	5,758	15,666	195.47	6,039	18,733
194.96	5,763	15,724	195.48	6,045	18,794
194.97	5,768	15,782	195.49	6,050	18,854
194.98	5,773	15,839	195.50	6,056	18,915
194.99	5,779	15,897	195.51	6,061	18,975
195.00	5,784	15,955	195.52	6,066	19,036
195.01	5,789	16,013	195.53	6,072	19,097
195.02	5,795	16,071	195.54	6,077	19,158
195.03	5,800	16,129	195.55	6,083	19,218
195.04	5,806	16,187	195.56	6,088	19,279
195.05	5,811	16,245	195.57	6,094	19,340
195.06	5,817	16,303	195.58	6,099	19,401
195.07	5,822	16,361	195.59	6,104	19,462
195.08	5,827	16,419	195.60	6,110	19,523
195.09	5,833	16,478	195.61	6,115	19,584
195.10	5,838	16,536	195.62	6,121	19,645
195.11	5,844	16,595	195.63	6,126	19,707
195.12	5,849	16,653	195.64	6,132	19,768
195.13	5,855	16,712	195.65	6,137	19,829
195.14	5,860	16,770	195.66	6,142	19,891
195.15	5,865	16,829	195.67	6,148	19,952
195.16	5,871	16,887	195.68	6,153	20,014
195.17	5,876	16,946	195.69	6,159	20,075
195.18	5,882	17,005	195.70	6,164	20,137
195.19	5,887	17,064	195.71	6,170	20,199

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.72	6,175	20,260
195.73	6,180	20,322
195.74	6,186	20,384
195.75	6,191	20,446
195.76	6,197	20,508
195.77	6,202	20,570
195.78	6,208	20,632
195.79	6,213	20,694
195.80	6,218	20,756
195.81	6,224	20,818
195.82	6,229	20,880
195.83	6,235	20,943
195.84	6,240	21,005
195.85	6,246	21,068
195.86	6,251	21,130
195.87	6,256	21,193
195.88	6,262	21,255
195.89	6,267	21,318
195.90	6,273	21,381
195.91	6,278	21,443
195.92	6,284	21,506
195.93	6,289	21,569
195.94	6,294	21,632
195.95	6,300	21,695
195.96	6,305	21,758
195.97	6,311	21,821
195.98	6,316	21,884
195.99	6,322	21,947
196.00	6,327	22,010

Summary for Pond B-56: Basin #56

Inflow Area = 1.512 ac, 31.08% Impervious, Inflow Depth = 1.75" for Current 2 yr event
 Inflow = 2.69 cfs @ 12.18 hrs, Volume= 0.221 af
 Outflow = 1.54 cfs @ 12.32 hrs, Volume= 0.174 af, Atten= 43%, Lag= 8.6 min
 Primary = 1.54 cfs @ 12.32 hrs, Volume= 0.174 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 192.48' @ 12.32 hrs Surf.Area= 5,248 sf Storage= 3,566 cf

Plug-Flow detention time= 172.7 min calculated for 0.174 af (79% of inflow)
 Center-of-Mass det. time= 84.2 min (892.0 - 807.8)

Volume	Invert	Avail.Storage	Storage Description
#1	191.57'	25,032 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.57	0	0	0
192.00	5,021	1,080	1,080
193.00	5,490	5,256	6,335
194.00	5,976	5,733	12,068
195.00	6,478	6,227	18,295
196.00	6,995	6,737	25,032

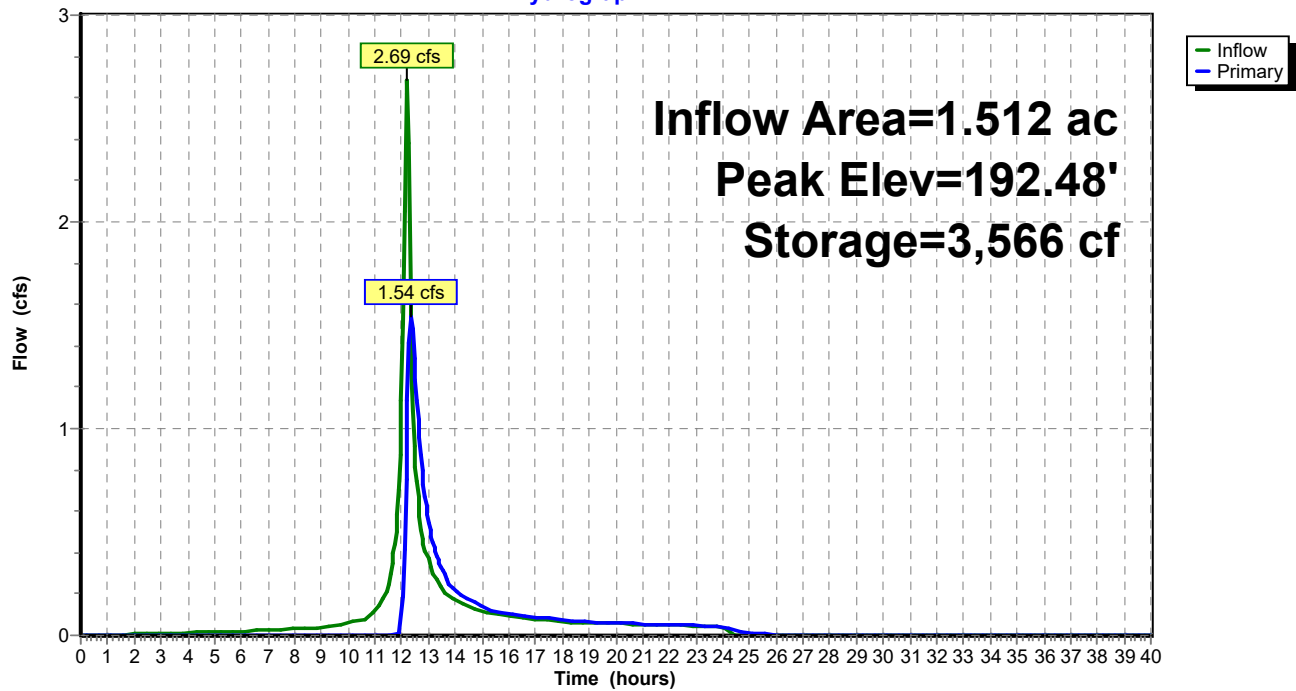
Device	Routing	Invert	Outlet Devices
#1	Primary	191.57'	18.0" Round Culvert L= 29.0' Ke= 0.500 Inlet / Outlet Invert= 191.57' / 191.42' S= 0.0052 ' / Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.19'	36.0" W x 6.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.62'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	194.99'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.52 cfs @ 12.32 hrs HW=192.48' (Free Discharge)

1=Culvert (Passes 1.52 cfs of 2.69 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 1.52 cfs @ 1.74 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-56: Basin #56

Hydrograph



Stage-Discharge for Pond B-56: Basin #56

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.57	0.00	192.09	0.00	192.61	2.62	193.13	5.97
191.58	0.00	192.10	0.00	192.62	2.72	193.14	6.01
191.59	0.00	192.11	0.00	192.63	2.81	193.15	6.05
191.60	0.00	192.12	0.00	192.64	2.91	193.16	6.10
191.61	0.00	192.13	0.00	192.65	3.00	193.17	6.14
191.62	0.00	192.14	0.00	192.66	3.10	193.18	6.18
191.63	0.00	192.15	0.00	192.67	3.20	193.19	6.23
191.64	0.00	192.16	0.00	192.68	3.30	193.20	6.27
191.65	0.00	192.17	0.00	192.69	3.40	193.21	6.31
191.66	0.00	192.18	0.00	192.70	3.50	193.22	6.35
191.67	0.00	192.19	0.00	192.71	3.58	193.23	6.39
191.68	0.00	192.20	0.01	192.72	3.67	193.24	6.43
191.69	0.00	192.21	0.03	192.73	3.74	193.25	6.47
191.70	0.00	192.22	0.05	192.74	3.82	193.26	6.51
191.71	0.00	192.23	0.08	192.75	3.89	193.27	6.55
191.72	0.00	192.24	0.11	192.76	3.97	193.28	6.59
191.73	0.00	192.25	0.14	192.77	4.04	193.29	6.63
191.74	0.00	192.26	0.18	192.78	4.10	193.30	6.67
191.75	0.00	192.27	0.22	192.79	4.17	193.31	6.71
191.76	0.00	192.28	0.26	192.80	4.24	193.32	6.75
191.77	0.00	192.29	0.30	192.81	4.30	193.33	6.79
191.78	0.00	192.30	0.35	192.82	4.36	193.34	6.83
191.79	0.00	192.31	0.40	192.83	4.43	193.35	6.87
191.80	0.00	192.32	0.45	192.84	4.49	193.36	6.91
191.81	0.00	192.33	0.50	192.85	4.55	193.37	6.94
191.82	0.00	192.34	0.56	192.86	4.61	193.38	6.98
191.83	0.00	192.35	0.62	192.87	4.66	193.39	7.02
191.84	0.00	192.36	0.67	192.88	4.72	193.40	7.06
191.85	0.00	192.37	0.74	192.89	4.78	193.41	7.09
191.86	0.00	192.38	0.80	192.90	4.83	193.42	7.13
191.87	0.00	192.39	0.86	192.91	4.89	193.43	7.17
191.88	0.00	192.40	0.93	192.92	4.94	193.44	7.20
191.89	0.00	192.41	0.99	192.93	5.00	193.45	7.24
191.90	0.00	192.42	1.06	192.94	5.05	193.46	7.28
191.91	0.00	192.43	1.13	192.95	5.10	193.47	7.31
191.92	0.00	192.44	1.20	192.96	5.16	193.48	7.35
191.93	0.00	192.45	1.28	192.97	5.21	193.49	7.38
191.94	0.00	192.46	1.35	192.98	5.26	193.50	7.42
191.95	0.00	192.47	1.43	192.99	5.31	193.51	7.45
191.96	0.00	192.48	1.50	193.00	5.36	193.52	7.49
191.97	0.00	192.49	1.58	193.01	5.41	193.53	7.52
191.98	0.00	192.50	1.66	193.02	5.46	193.54	7.56
191.99	0.00	192.51	1.74	193.03	5.50	193.55	7.59
192.00	0.00	192.52	1.83	193.04	5.55	193.56	7.63
192.01	0.00	192.53	1.91	193.05	5.60	193.57	7.66
192.02	0.00	192.54	1.99	193.06	5.65	193.58	7.70
192.03	0.00	192.55	2.08	193.07	5.69	193.59	7.73
192.04	0.00	192.56	2.17	193.08	5.74	193.60	7.76
192.05	0.00	192.57	2.26	193.09	5.79	193.61	7.80
192.06	0.00	192.58	2.35	193.10	5.83	193.62	7.83
192.07	0.00	192.59	2.44	193.11	5.88	193.63	7.88
192.08	0.00	192.60	2.53	193.12	5.92	193.64	7.93

Stage-Discharge for Pond B-56: Basin #56 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.65	8.00	194.17	11.13	194.69	13.10	195.21	26.75
193.66	8.07	194.18	11.17	194.70	13.13	195.22	27.67
193.67	8.14	194.19	11.22	194.71	13.15	195.23	28.62
193.68	8.22	194.20	11.26	194.72	13.18	195.24	29.59
193.69	8.30	194.21	11.30	194.73	13.21	195.25	30.59
193.70	8.39	194.22	11.35	194.74	13.24	195.26	31.61
193.71	8.48	194.23	11.39	194.75	13.26	195.27	32.66
193.72	8.57	194.24	11.43	194.76	13.29	195.28	33.74
193.73	8.66	194.25	11.48	194.77	13.32	195.29	34.83
193.74	8.76	194.26	11.52	194.78	13.35	195.30	35.95
193.75	8.86	194.27	11.56	194.79	13.37	195.31	37.10
193.76	8.97	194.28	11.61	194.80	13.40	195.32	38.27
193.77	9.07	194.29	11.65	194.81	13.43	195.33	39.46
193.78	9.18	194.30	11.69	194.82	13.45	195.34	40.68
193.79	9.28	194.31	11.73	194.83	13.48	195.35	41.93
193.80	9.34	194.32	11.78	194.84	13.51	195.36	43.19
193.81	9.39	194.33	11.82	194.85	13.53	195.37	44.48
193.82	9.44	194.34	11.86	194.86	13.56	195.38	45.80
193.83	9.49	194.35	11.90	194.87	13.59	195.39	47.14
193.84	9.55	194.36	11.94	194.88	13.61	195.40	48.53
193.85	9.60	194.37	11.98	194.89	13.64	195.41	49.94
193.86	9.65	194.38	12.03	194.90	13.67	195.42	51.39
193.87	9.70	194.39	12.07	194.91	13.69	195.43	52.85
193.88	9.75	194.40	12.11	194.92	13.72	195.44	54.35
193.89	9.80	194.41	12.15	194.93	13.75	195.45	55.87
193.90	9.85	194.42	12.19	194.94	13.77	195.46	57.42
193.91	9.90	194.43	12.23	194.95	13.80	195.47	58.99
193.92	9.95	194.44	12.27	194.96	13.83	195.48	60.59
193.93	10.00	194.45	12.31	194.97	13.85	195.49	62.21
193.94	10.05	194.46	12.35	194.98	13.88	195.50	63.87
193.95	10.10	194.47	12.39	194.99	13.90	195.51	65.55
193.96	10.15	194.48	12.43	195.00	14.05	195.52	67.25
193.97	10.20	194.49	12.47	195.01	14.29	195.53	68.98
193.98	10.25	194.50	12.51	195.02	14.59	195.54	70.74
193.99	10.29	194.51	12.55	195.03	14.94	195.55	72.53
194.00	10.34	194.52	12.59	195.04	15.34	195.56	74.34
194.01	10.39	194.53	12.63	195.05	15.78	195.57	76.18
194.02	10.44	194.54	12.67	195.06	16.26	195.58	78.04
194.03	10.49	194.55	12.71	195.07	16.77	195.59	79.94
194.04	10.53	194.56	12.73	195.08	17.31	195.60	81.59
194.05	10.58	194.57	12.76	195.09	17.88	195.61	83.25
194.06	10.63	194.58	12.79	195.10	18.48	195.62	84.93
194.07	10.67	194.59	12.82	195.11	19.10	195.63	86.62
194.08	10.72	194.60	12.85	195.12	19.76	195.64	88.32
194.09	10.77	194.61	12.88	195.13	20.43	195.65	90.04
194.10	10.81	194.62	12.90	195.14	21.13	195.66	91.77
194.11	10.86	194.63	12.93	195.15	21.86	195.67	93.51
194.12	10.90	194.64	12.96	195.16	22.61	195.68	95.27
194.13	10.95	194.65	12.99	195.17	23.38	195.69	97.04
194.14	10.99	194.66	13.02	195.18	24.17	195.70	98.82
194.15	11.04	194.67	13.04	195.19	24.98	195.71	100.61
194.16	11.08	194.68	13.07	195.20	25.85	195.72	102.42

Stage-Discharge for Pond B-56: Basin #56 (continued)

Elevation (feet)	Primary (cfs)
195.73	104.24
195.74	106.07
195.75	107.92
195.76	109.77
195.77	111.64
195.78	113.52
195.79	115.41
195.80	117.36
195.81	119.31
195.82	121.28
195.83	123.26
195.84	125.26
195.85	127.27
195.86	129.29
195.87	131.32
195.88	133.37
195.89	135.43
195.90	137.50
195.91	139.59
195.92	141.69
195.93	143.80
195.94	145.92
195.95	148.06
195.96	150.21
195.97	152.37
195.98	154.55
195.99	156.73
196.00	158.88

Stage-Area-Storage for Pond B-56: Basin #56

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.57	0	0	192.09	5,063	1,533
191.58	117	1	192.10	5,068	1,584
191.59	234	2	192.11	5,073	1,635
191.60	350	5	192.12	5,077	1,685
191.61	467	9	192.13	5,082	1,736
191.62	584	15	192.14	5,087	1,787
191.63	701	21	192.15	5,091	1,838
191.64	817	29	192.16	5,096	1,889
191.65	934	37	192.17	5,101	1,940
191.66	1,051	47	192.18	5,105	1,991
191.67	1,168	58	192.19	5,110	2,042
191.68	1,284	71	192.20	5,115	2,093
191.69	1,401	84	192.21	5,119	2,144
191.70	1,518	99	192.22	5,124	2,195
191.71	1,635	114	192.23	5,129	2,247
191.72	1,752	131	192.24	5,134	2,298
191.73	1,868	149	192.25	5,138	2,349
191.74	1,985	169	192.26	5,143	2,401
191.75	2,102	189	192.27	5,148	2,452
191.76	2,219	211	192.28	5,152	2,504
191.77	2,335	234	192.29	5,157	2,555
191.78	2,452	257	192.30	5,162	2,607
191.79	2,569	283	192.31	5,166	2,659
191.80	2,686	309	192.32	5,171	2,710
191.81	2,802	336	192.33	5,176	2,762
191.82	2,919	365	192.34	5,180	2,814
191.83	3,036	395	192.35	5,185	2,866
191.84	3,153	426	192.36	5,190	2,917
191.85	3,269	458	192.37	5,195	2,969
191.86	3,386	491	192.38	5,199	3,021
191.87	3,503	525	192.39	5,204	3,073
191.88	3,620	561	192.40	5,209	3,125
191.89	3,737	598	192.41	5,213	3,178
191.90	3,853	636	192.42	5,218	3,230
191.91	3,970	675	192.43	5,223	3,282
191.92	4,087	715	192.44	5,227	3,334
191.93	4,204	757	192.45	5,232	3,386
191.94	4,320	799	192.46	5,237	3,439
191.95	4,437	843	192.47	5,241	3,491
191.96	4,554	888	192.48	5,246	3,544
191.97	4,671	934	192.49	5,251	3,596
191.98	4,787	981	192.50	5,256	3,649
191.99	4,904	1,030	192.51	5,260	3,701
192.00	5,021	1,080	192.52	5,265	3,754
192.01	5,026	1,130	192.53	5,270	3,807
192.02	5,030	1,180	192.54	5,274	3,859
192.03	5,035	1,230	192.55	5,279	3,912
192.04	5,040	1,281	192.56	5,284	3,965
192.05	5,044	1,331	192.57	5,288	4,018
192.06	5,049	1,382	192.58	5,293	4,071
192.07	5,054	1,432	192.59	5,298	4,124
192.08	5,059	1,483	192.60	5,302	4,177

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.61	5,307	4,230	193.13	5,553	7,053
192.62	5,312	4,283	193.14	5,558	7,108
192.63	5,316	4,336	193.15	5,563	7,164
192.64	5,321	4,389	193.16	5,568	7,220
192.65	5,326	4,442	193.17	5,573	7,275
192.66	5,331	4,496	193.18	5,577	7,331
192.67	5,335	4,549	193.19	5,582	7,387
192.68	5,340	4,602	193.20	5,587	7,443
192.69	5,345	4,656	193.21	5,592	7,499
192.70	5,349	4,709	193.22	5,597	7,555
192.71	5,354	4,763	193.23	5,602	7,611
192.72	5,359	4,816	193.24	5,607	7,667
192.73	5,363	4,870	193.25	5,612	7,723
192.74	5,368	4,923	193.26	5,616	7,779
192.75	5,373	4,977	193.27	5,621	7,835
192.76	5,377	5,031	193.28	5,626	7,891
192.77	5,382	5,085	193.29	5,631	7,948
192.78	5,387	5,139	193.30	5,636	8,004
192.79	5,392	5,192	193.31	5,641	8,060
192.80	5,396	5,246	193.32	5,646	8,117
192.81	5,401	5,300	193.33	5,650	8,173
192.82	5,406	5,354	193.34	5,655	8,230
192.83	5,410	5,408	193.35	5,660	8,286
192.84	5,415	5,463	193.36	5,665	8,343
192.85	5,420	5,517	193.37	5,670	8,400
192.86	5,424	5,571	193.38	5,675	8,456
192.87	5,429	5,625	193.39	5,680	8,513
192.88	5,434	5,680	193.40	5,684	8,570
192.89	5,438	5,734	193.41	5,689	8,627
192.90	5,443	5,788	193.42	5,694	8,684
192.91	5,448	5,843	193.43	5,699	8,741
192.92	5,452	5,897	193.44	5,704	8,798
192.93	5,457	5,952	193.45	5,709	8,855
192.94	5,462	6,006	193.46	5,714	8,912
192.95	5,467	6,061	193.47	5,718	8,969
192.96	5,471	6,116	193.48	5,723	9,026
192.97	5,476	6,171	193.49	5,728	9,083
192.98	5,481	6,225	193.50	5,733	9,141
192.99	5,485	6,280	193.51	5,738	9,198
193.00	5,490	6,335	193.52	5,743	9,256
193.01	5,495	6,390	193.53	5,748	9,313
193.02	5,500	6,445	193.54	5,752	9,370
193.03	5,505	6,500	193.55	5,757	9,428
193.04	5,509	6,555	193.56	5,762	9,486
193.05	5,514	6,610	193.57	5,767	9,543
193.06	5,519	6,665	193.58	5,772	9,601
193.07	5,524	6,721	193.59	5,777	9,659
193.08	5,529	6,776	193.60	5,782	9,716
193.09	5,534	6,831	193.61	5,786	9,774
193.10	5,539	6,886	193.62	5,791	9,832
193.11	5,543	6,942	193.63	5,796	9,890
193.12	5,548	6,997	193.64	5,801	9,948

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.65	5,806	10,006	194.17	6,061	13,091
193.66	5,811	10,064	194.18	6,066	13,152
193.67	5,816	10,122	194.19	6,071	13,213
193.68	5,820	10,181	194.20	6,076	13,273
193.69	5,825	10,239	194.21	6,081	13,334
193.70	5,830	10,297	194.22	6,086	13,395
193.71	5,835	10,355	194.23	6,091	13,456
193.72	5,840	10,414	194.24	6,096	13,517
193.73	5,845	10,472	194.25	6,102	13,578
193.74	5,850	10,531	194.26	6,107	13,639
193.75	5,855	10,589	194.27	6,112	13,700
193.76	5,859	10,648	194.28	6,117	13,761
193.77	5,864	10,706	194.29	6,122	13,822
193.78	5,869	10,765	194.30	6,127	13,883
193.79	5,874	10,824	194.31	6,132	13,945
193.80	5,879	10,883	194.32	6,137	14,006
193.81	5,884	10,941	194.33	6,142	14,067
193.82	5,889	11,000	194.34	6,147	14,129
193.83	5,893	11,059	194.35	6,152	14,190
193.84	5,898	11,118	194.36	6,157	14,252
193.85	5,903	11,177	194.37	6,162	14,313
193.86	5,908	11,236	194.38	6,167	14,375
193.87	5,913	11,295	194.39	6,172	14,437
193.88	5,918	11,354	194.40	6,177	14,499
193.89	5,923	11,414	194.41	6,182	14,560
193.90	5,927	11,473	194.42	6,187	14,622
193.91	5,932	11,532	194.43	6,192	14,684
193.92	5,937	11,591	194.44	6,197	14,746
193.93	5,942	11,651	194.45	6,202	14,808
193.94	5,947	11,710	194.46	6,207	14,870
193.95	5,952	11,770	194.47	6,212	14,932
193.96	5,957	11,829	194.48	6,217	14,994
193.97	5,961	11,889	194.49	6,222	15,057
193.98	5,966	11,949	194.50	6,227	15,119
193.99	5,971	12,008	194.51	6,232	15,181
194.00	5,976	12,068	194.52	6,237	15,243
194.01	5,981	12,128	194.53	6,242	15,306
194.02	5,986	12,188	194.54	6,247	15,368
194.03	5,991	12,248	194.55	6,252	15,431
194.04	5,996	12,307	194.56	6,257	15,493
194.05	6,001	12,367	194.57	6,262	15,556
194.06	6,006	12,427	194.58	6,267	15,619
194.07	6,011	12,488	194.59	6,272	15,681
194.08	6,016	12,548	194.60	6,277	15,744
194.09	6,021	12,608	194.61	6,282	15,807
194.10	6,026	12,668	194.62	6,287	15,870
194.11	6,031	12,728	194.63	6,292	15,933
194.12	6,036	12,789	194.64	6,297	15,995
194.13	6,041	12,849	194.65	6,302	16,058
194.14	6,046	12,910	194.66	6,307	16,122
194.15	6,051	12,970	194.67	6,312	16,185
194.16	6,056	13,031	194.68	6,317	16,248

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.69	6,322	16,311	195.21	6,587	19,667
194.70	6,327	16,374	195.22	6,592	19,733
194.71	6,332	16,438	195.23	6,597	19,799
194.72	6,337	16,501	195.24	6,602	19,865
194.73	6,342	16,564	195.25	6,607	19,931
194.74	6,347	16,628	195.26	6,612	19,997
194.75	6,353	16,691	195.27	6,618	20,063
194.76	6,358	16,755	195.28	6,623	20,129
194.77	6,363	16,818	195.29	6,628	20,195
194.78	6,368	16,882	195.30	6,633	20,262
194.79	6,373	16,946	195.31	6,638	20,328
194.80	6,378	17,009	195.32	6,643	20,394
194.81	6,383	17,073	195.33	6,649	20,461
194.82	6,388	17,137	195.34	6,654	20,527
194.83	6,393	17,201	195.35	6,659	20,594
194.84	6,398	17,265	195.36	6,664	20,661
194.85	6,403	17,329	195.37	6,669	20,727
194.86	6,408	17,393	195.38	6,674	20,794
194.87	6,413	17,457	195.39	6,680	20,861
194.88	6,418	17,521	195.40	6,685	20,928
194.89	6,423	17,585	195.41	6,690	20,994
194.90	6,428	17,650	195.42	6,695	21,061
194.91	6,433	17,714	195.43	6,700	21,128
194.92	6,438	17,778	195.44	6,705	21,195
194.93	6,443	17,843	195.45	6,711	21,262
194.94	6,448	17,907	195.46	6,716	21,330
194.95	6,453	17,972	195.47	6,721	21,397
194.96	6,458	18,036	195.48	6,726	21,464
194.97	6,463	18,101	195.49	6,731	21,531
194.98	6,468	18,166	195.50	6,737	21,599
194.99	6,473	18,230	195.51	6,742	21,666
195.00	6,478	18,295	195.52	6,747	21,733
195.01	6,483	18,360	195.53	6,752	21,801
195.02	6,488	18,425	195.54	6,757	21,869
195.03	6,494	18,490	195.55	6,762	21,936
195.04	6,499	18,555	195.56	6,768	22,004
195.05	6,504	18,620	195.57	6,773	22,071
195.06	6,509	18,685	195.58	6,778	22,139
195.07	6,514	18,750	195.59	6,783	22,207
195.08	6,519	18,815	195.60	6,788	22,275
195.09	6,525	18,880	195.61	6,793	22,343
195.10	6,530	18,945	195.62	6,799	22,411
195.11	6,535	19,011	195.63	6,804	22,479
195.12	6,540	19,076	195.64	6,809	22,547
195.13	6,545	19,142	195.65	6,814	22,615
195.14	6,550	19,207	195.66	6,819	22,683
195.15	6,556	19,273	195.67	6,824	22,751
195.16	6,561	19,338	195.68	6,830	22,820
195.17	6,566	19,404	195.69	6,835	22,888
195.18	6,571	19,469	195.70	6,840	22,956
195.19	6,576	19,535	195.71	6,845	23,025
195.20	6,581	19,601	195.72	6,850	23,093

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.73	6,855	23,162
195.74	6,861	23,230
195.75	6,866	23,299
195.76	6,871	23,368
195.77	6,876	23,436
195.78	6,881	23,505
195.79	6,886	23,574
195.80	6,892	23,643
195.81	6,897	23,712
195.82	6,902	23,781
195.83	6,907	23,850
195.84	6,912	23,919
195.85	6,917	23,988
195.86	6,923	24,057
195.87	6,928	24,127
195.88	6,933	24,196
195.89	6,938	24,265
195.90	6,943	24,335
195.91	6,948	24,404
195.92	6,954	24,474
195.93	6,959	24,543
195.94	6,964	24,613
195.95	6,969	24,682
195.96	6,974	24,752
195.97	6,979	24,822
195.98	6,985	24,892
195.99	6,990	24,962
196.00	6,995	25,032

Summary for Pond B-57: Basin #57

Inflow Area = 1.434 ac, 47.56% Impervious, Inflow Depth = 2.08" for Current 2 yr event
 Inflow = 2.98 cfs @ 12.17 hrs, Volume= 0.248 af
 Outflow = 0.61 cfs @ 12.65 hrs, Volume= 0.181 af, Atten= 79%, Lag= 28.7 min
 Primary = 0.61 cfs @ 12.65 hrs, Volume= 0.181 af
 Routed to Pond B-58 : Basin #58

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 203.11' @ 12.65 hrs Surf.Area= 4,548 sf Storage= 6,118 cf

Plug-Flow detention time= 415.6 min calculated for 0.181 af (73% of inflow)
 Center-of-Mass det. time= 319.3 min (1,110.0 - 790.8)

Volume	Invert	Avail.Storage	Storage Description
#1	201.30'	13,039 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.30	0	0	0
202.00	3,969	1,389	1,389
203.00	4,488	4,229	5,618
204.00	5,034	4,761	10,379
204.50	5,608	2,661	13,039

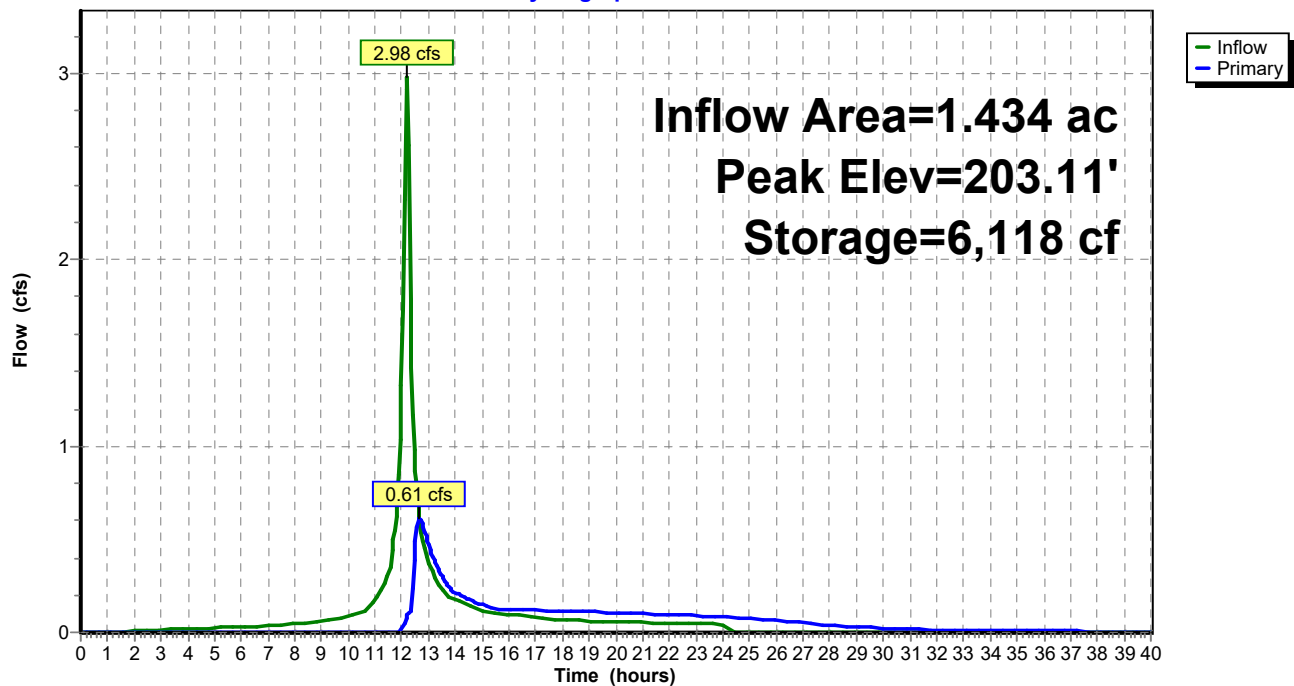
Device	Routing	Invert	Outlet Devices
#1	Primary	202.00'	36.0" Round Culvert L= 252.0' Ke= 0.500 Inlet / Outlet Invert= 202.00' / 199.00' S= 0.0119 '/' Cc= 0.900 n= 0.013, Flow Area= 7.07 sf
#2	Device 1	202.34'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	204.25'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.61 cfs @ 12.65 hrs HW=203.11' (Free Discharge)

1=Culvert (Passes 0.61 cfs of 8.54 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.13 cfs @ 3.93 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 0.48 cfs @ 1.09 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-57: Basin #57

Hydrograph



Stage-Discharge for Pond B-57: Basin #57

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.30	0.00	201.82	0.00	202.34	0.00	202.86	0.11
201.31	0.00	201.83	0.00	202.35	0.00	202.87	0.11
201.32	0.00	201.84	0.00	202.36	0.00	202.88	0.11
201.33	0.00	201.85	0.00	202.37	0.00	202.89	0.11
201.34	0.00	201.86	0.00	202.38	0.00	202.90	0.11
201.35	0.00	201.87	0.00	202.39	0.00	202.91	0.11
201.36	0.00	201.88	0.00	202.40	0.01	202.92	0.11
201.37	0.00	201.89	0.00	202.41	0.01	202.93	0.11
201.38	0.00	201.90	0.00	202.42	0.01	202.94	0.12
201.39	0.00	201.91	0.00	202.43	0.01	202.95	0.12
201.40	0.00	201.92	0.00	202.44	0.02	202.96	0.12
201.41	0.00	201.93	0.00	202.45	0.02	202.97	0.12
201.42	0.00	201.94	0.00	202.46	0.02	202.98	0.12
201.43	0.00	201.95	0.00	202.47	0.03	202.99	0.12
201.44	0.00	201.96	0.00	202.48	0.03	203.00	0.12
201.45	0.00	201.97	0.00	202.49	0.03	203.01	0.14
201.46	0.00	201.98	0.00	202.50	0.04	203.02	0.16
201.47	0.00	201.99	0.00	202.51	0.04	203.03	0.19
201.48	0.00	202.00	0.00	202.52	0.05	203.04	0.23
201.49	0.00	202.01	0.00	202.53	0.05	203.05	0.27
201.50	0.00	202.02	0.00	202.54	0.05	203.06	0.32
201.51	0.00	202.03	0.00	202.55	0.05	203.07	0.37
201.52	0.00	202.04	0.00	202.56	0.06	203.08	0.43
201.53	0.00	202.05	0.00	202.57	0.06	203.09	0.48
201.54	0.00	202.06	0.00	202.58	0.06	203.10	0.54
201.55	0.00	202.07	0.00	202.59	0.06	203.11	0.61
201.56	0.00	202.08	0.00	202.60	0.06	203.12	0.68
201.57	0.00	202.09	0.00	202.61	0.07	203.13	0.75
201.58	0.00	202.10	0.00	202.62	0.07	203.14	0.82
201.59	0.00	202.11	0.00	202.63	0.07	203.15	0.89
201.60	0.00	202.12	0.00	202.64	0.07	203.16	0.97
201.61	0.00	202.13	0.00	202.65	0.07	203.17	1.05
201.62	0.00	202.14	0.00	202.66	0.08	203.18	1.13
201.63	0.00	202.15	0.00	202.67	0.08	203.19	1.21
201.64	0.00	202.16	0.00	202.68	0.08	203.20	1.30
201.65	0.00	202.17	0.00	202.69	0.08	203.21	1.39
201.66	0.00	202.18	0.00	202.70	0.08	203.22	1.48
201.67	0.00	202.19	0.00	202.71	0.08	203.23	1.57
201.68	0.00	202.20	0.00	202.72	0.09	203.24	1.67
201.69	0.00	202.21	0.00	202.73	0.09	203.25	1.76
201.70	0.00	202.22	0.00	202.74	0.09	203.26	1.86
201.71	0.00	202.23	0.00	202.75	0.09	203.27	1.96
201.72	0.00	202.24	0.00	202.76	0.09	203.28	2.06
201.73	0.00	202.25	0.00	202.77	0.09	203.29	2.16
201.74	0.00	202.26	0.00	202.78	0.10	203.30	2.27
201.75	0.00	202.27	0.00	202.79	0.10	203.31	2.38
201.76	0.00	202.28	0.00	202.80	0.10	203.32	2.48
201.77	0.00	202.29	0.00	202.81	0.10	203.33	2.59
201.78	0.00	202.30	0.00	202.82	0.10	203.34	2.70
201.79	0.00	202.31	0.00	202.83	0.10	203.35	2.82
201.80	0.00	202.32	0.00	202.84	0.10	203.36	2.93
201.81	0.00	202.33	0.00	202.85	0.10	203.37	3.05

Stage-Discharge for Pond B-57: Basin #57 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.38	3.16	203.90	10.86	204.42	29.06	204.94	111.85
203.39	3.28	203.91	11.04	204.43	30.01	204.95	113.82
203.40	3.40	203.92	11.21	204.44	30.98	204.96	115.81
203.41	3.52	203.93	11.39	204.45	31.98	204.97	117.81
203.42	3.65	203.94	11.56	204.46	33.04	204.98	119.83
203.43	3.77	203.95	11.74	204.47	34.12	204.99	121.86
203.44	3.90	203.96	11.91	204.48	35.22	205.00	123.90
203.45	4.02	203.97	12.09	204.49	36.36		
203.46	4.15	203.98	12.27	204.50	37.52		
203.47	4.28	203.99	12.45	204.51	38.70		
203.48	4.41	204.00	12.63	204.52	39.91		
203.49	4.54	204.01	12.81	204.53	41.15		
203.50	4.68	204.02	12.99	204.54	42.41		
203.51	4.81	204.03	13.18	204.55	43.69		
203.52	4.95	204.04	13.36	204.56	45.00		
203.53	5.08	204.05	13.54	204.57	46.34		
203.54	5.22	204.06	13.73	204.58	47.70		
203.55	5.36	204.07	13.91	204.59	49.08		
203.56	5.50	204.08	14.10	204.60	50.49		
203.57	5.64	204.09	14.28	204.61	51.93		
203.58	5.79	204.10	14.47	204.62	53.39		
203.59	5.93	204.11	14.66	204.63	54.87		
203.60	6.07	204.12	14.85	204.64	56.38		
203.61	6.22	204.13	15.04	204.65	57.91		
203.62	6.37	204.14	15.23	204.66	59.49		
203.63	6.51	204.15	15.42	204.67	61.10		
203.64	6.66	204.16	15.61	204.68	62.74		
203.65	6.81	204.17	15.80	204.69	64.40		
203.66	6.96	204.18	15.99	204.70	66.09		
203.67	7.11	204.19	16.19	204.71	67.81		
203.68	7.27	204.20	16.38	204.72	69.55		
203.69	7.42	204.21	16.57	204.73	71.32		
203.70	7.58	204.22	16.77	204.74	73.12		
203.71	7.73	204.23	16.96	204.75	74.95		
203.72	7.89	204.24	17.16	204.76	76.80		
203.73	8.05	204.25	17.36	204.77	78.67		
203.74	8.21	204.26	17.67	204.78	80.58		
203.75	8.36	204.27	18.08	204.79	82.51		
203.76	8.53	204.28	18.56	204.80	84.47		
203.77	8.69	204.29	19.09	204.81	86.46		
203.78	8.85	204.30	19.66	204.82	88.47		
203.79	9.01	204.31	20.28	204.83	90.51		
203.80	9.18	204.32	20.93	204.84	92.58		
203.81	9.34	204.33	21.61	204.85	94.67		
203.82	9.51	204.34	22.33	204.86	96.53		
203.83	9.67	204.35	23.08	204.87	98.39		
203.84	9.84	204.36	23.85	204.88	100.27		
203.85	10.01	204.37	24.66	204.89	102.17		
203.86	10.18	204.38	25.49	204.90	104.08		
203.87	10.35	204.39	26.34	204.91	106.00		
203.88	10.52	204.40	27.23	204.92	107.94		
203.89	10.69	204.41	28.13	204.93	109.88		

Stage-Area-Storage for Pond B-57: Basin #57

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.30	0	0	201.82	2,948	767
201.31	57	0	201.83	3,005	796
201.32	113	1	201.84	3,062	827
201.33	170	3	201.85	3,119	858
201.34	227	5	201.86	3,175	889
201.35	284	7	201.87	3,232	921
201.36	340	10	201.88	3,289	954
201.37	397	14	201.89	3,345	987
201.38	454	18	201.90	3,402	1,021
201.39	510	23	201.91	3,459	1,055
201.40	567	28	201.92	3,515	1,090
201.41	624	34	201.93	3,572	1,125
201.42	680	41	201.94	3,629	1,161
201.43	737	48	201.95	3,686	1,198
201.44	794	56	201.96	3,742	1,235
201.45	851	64	201.97	3,799	1,273
201.46	907	73	201.98	3,856	1,311
201.47	964	82	201.99	3,912	1,350
201.48	1,021	92	202.00	3,969	1,389
201.49	1,077	102	202.01	3,974	1,429
201.50	1,134	113	202.02	3,979	1,469
201.51	1,191	125	202.03	3,985	1,508
201.52	1,247	137	202.04	3,990	1,548
201.53	1,304	150	202.05	3,995	1,588
201.54	1,361	163	202.06	4,000	1,628
201.55	1,418	177	202.07	4,005	1,668
201.56	1,474	192	202.08	4,011	1,708
201.57	1,531	207	202.09	4,016	1,748
201.58	1,588	222	202.10	4,021	1,789
201.59	1,644	238	202.11	4,026	1,829
201.60	1,701	255	202.12	4,031	1,869
201.61	1,758	272	202.13	4,036	1,910
201.62	1,814	290	202.14	4,042	1,950
201.63	1,871	309	202.15	4,047	1,990
201.64	1,928	328	202.16	4,052	2,031
201.65	1,985	347	202.17	4,057	2,071
201.66	2,041	367	202.18	4,062	2,112
201.67	2,098	388	202.19	4,068	2,153
201.68	2,155	409	202.20	4,073	2,193
201.69	2,211	431	202.21	4,078	2,234
201.70	2,268	454	202.22	4,083	2,275
201.71	2,325	477	202.23	4,088	2,316
201.72	2,381	500	202.24	4,094	2,357
201.73	2,438	524	202.25	4,099	2,398
201.74	2,495	549	202.26	4,104	2,439
201.75	2,551	574	202.27	4,109	2,480
201.76	2,608	600	202.28	4,114	2,521
201.77	2,665	626	202.29	4,120	2,562
201.78	2,722	653	202.30	4,125	2,603
201.79	2,778	681	202.31	4,130	2,644
201.80	2,835	709	202.32	4,135	2,686
201.81	2,892	737	202.33	4,140	2,727

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.34	4,145	2,769	202.86	4,415	4,994
202.35	4,151	2,810	202.87	4,421	5,039
202.36	4,156	2,852	202.88	4,426	5,083
202.37	4,161	2,893	202.89	4,431	5,127
202.38	4,166	2,935	202.90	4,436	5,171
202.39	4,171	2,977	202.91	4,441	5,216
202.40	4,177	3,018	202.92	4,446	5,260
202.41	4,182	3,060	202.93	4,452	5,305
202.42	4,187	3,102	202.94	4,457	5,349
202.43	4,192	3,144	202.95	4,462	5,394
202.44	4,197	3,186	202.96	4,467	5,439
202.45	4,203	3,228	202.97	4,472	5,483
202.46	4,208	3,270	202.98	4,478	5,528
202.47	4,213	3,312	202.99	4,483	5,573
202.48	4,218	3,354	203.00	4,488	5,618
202.49	4,223	3,396	203.01	4,493	5,663
202.50	4,229	3,439	203.02	4,499	5,708
202.51	4,234	3,481	203.03	4,504	5,753
202.52	4,239	3,523	203.04	4,510	5,798
202.53	4,244	3,566	203.05	4,515	5,843
202.54	4,249	3,608	203.06	4,521	5,888
202.55	4,254	3,651	203.07	4,526	5,933
202.56	4,260	3,693	203.08	4,532	5,978
202.57	4,265	3,736	203.09	4,537	6,024
202.58	4,270	3,778	203.10	4,543	6,069
202.59	4,275	3,821	203.11	4,548	6,115
202.60	4,280	3,864	203.12	4,554	6,160
202.61	4,286	3,907	203.13	4,559	6,206
202.62	4,291	3,950	203.14	4,564	6,251
202.63	4,296	3,993	203.15	4,570	6,297
202.64	4,301	4,036	203.16	4,575	6,343
202.65	4,306	4,079	203.17	4,581	6,388
202.66	4,312	4,122	203.18	4,586	6,434
202.67	4,317	4,165	203.19	4,592	6,480
202.68	4,322	4,208	203.20	4,597	6,526
202.69	4,327	4,251	203.21	4,603	6,572
202.70	4,332	4,295	203.22	4,608	6,618
202.71	4,337	4,338	203.23	4,614	6,664
202.72	4,343	4,381	203.24	4,619	6,710
202.73	4,348	4,425	203.25	4,625	6,757
202.74	4,353	4,468	203.26	4,630	6,803
202.75	4,358	4,512	203.27	4,635	6,849
202.76	4,363	4,555	203.28	4,641	6,896
202.77	4,369	4,599	203.29	4,646	6,942
202.78	4,374	4,643	203.30	4,652	6,989
202.79	4,379	4,687	203.31	4,657	7,035
202.80	4,384	4,730	203.32	4,663	7,082
202.81	4,389	4,774	203.33	4,668	7,128
202.82	4,395	4,818	203.34	4,674	7,175
202.83	4,400	4,862	203.35	4,679	7,222
202.84	4,405	4,906	203.36	4,685	7,269
202.85	4,410	4,950	203.37	4,690	7,316

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.38	4,695	7,363	203.90	4,979	9,878
203.39	4,701	7,409	203.91	4,985	9,928
203.40	4,706	7,457	203.92	4,990	9,978
203.41	4,712	7,504	203.93	4,996	10,028
203.42	4,717	7,551	203.94	5,001	10,078
203.43	4,723	7,598	203.95	5,007	10,128
203.44	4,728	7,645	203.96	5,012	10,178
203.45	4,734	7,693	203.97	5,018	10,228
203.46	4,739	7,740	203.98	5,023	10,278
203.47	4,745	7,787	203.99	5,029	10,328
203.48	4,750	7,835	204.00	5,034	10,379
203.49	4,756	7,882	204.01	5,045	10,429
203.50	4,761	7,930	204.02	5,057	10,480
203.51	4,766	7,978	204.03	5,068	10,530
203.52	4,772	8,025	204.04	5,080	10,581
203.53	4,777	8,073	204.05	5,091	10,632
203.54	4,783	8,121	204.06	5,103	10,683
203.55	4,788	8,169	204.07	5,114	10,734
203.56	4,794	8,217	204.08	5,126	10,785
203.57	4,799	8,265	204.09	5,137	10,836
203.58	4,805	8,313	204.10	5,149	10,888
203.59	4,810	8,361	204.11	5,160	10,939
203.60	4,816	8,409	204.12	5,172	10,991
203.61	4,821	8,457	204.13	5,183	11,043
203.62	4,827	8,505	204.14	5,195	11,095
203.63	4,832	8,553	204.15	5,206	11,147
203.64	4,837	8,602	204.16	5,218	11,199
203.65	4,843	8,650	204.17	5,229	11,251
203.66	4,848	8,699	204.18	5,241	11,303
203.67	4,854	8,747	204.19	5,252	11,356
203.68	4,859	8,796	204.20	5,264	11,408
203.69	4,865	8,844	204.21	5,275	11,461
203.70	4,870	8,893	204.22	5,287	11,514
203.71	4,876	8,942	204.23	5,298	11,567
203.72	4,881	8,991	204.24	5,310	11,620
203.73	4,887	9,039	204.25	5,321	11,673
203.74	4,892	9,088	204.26	5,332	11,726
203.75	4,898	9,137	204.27	5,344	11,780
203.76	4,903	9,186	204.28	5,355	11,833
203.77	4,908	9,235	204.29	5,367	11,887
203.78	4,914	9,284	204.30	5,378	11,941
203.79	4,919	9,334	204.31	5,390	11,994
203.80	4,925	9,383	204.32	5,401	12,048
203.81	4,930	9,432	204.33	5,413	12,102
203.82	4,936	9,481	204.34	5,424	12,157
203.83	4,941	9,531	204.35	5,436	12,211
203.84	4,947	9,580	204.36	5,447	12,265
203.85	4,952	9,630	204.37	5,459	12,320
203.86	4,958	9,679	204.38	5,470	12,374
203.87	4,963	9,729	204.39	5,482	12,429
203.88	4,968	9,779	204.40	5,493	12,484
203.89	4,974	9,828	204.41	5,505	12,539

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.42	5,516	12,594	204.94	5,608	13,039
204.43	5,528	12,649	204.95	5,608	13,039
204.44	5,539	12,705	204.96	5,608	13,039
204.45	5,551	12,760	204.97	5,608	13,039
204.46	5,562	12,816	204.98	5,608	13,039
204.47	5,574	12,871	204.99	5,608	13,039
204.48	5,585	12,927	205.00	5,608	13,039
204.49	5,597	12,983			
204.50	5,608	13,039			
204.51	5,608	13,039			
204.52	5,608	13,039			
204.53	5,608	13,039			
204.54	5,608	13,039			
204.55	5,608	13,039			
204.56	5,608	13,039			
204.57	5,608	13,039			
204.58	5,608	13,039			
204.59	5,608	13,039			
204.60	5,608	13,039			
204.61	5,608	13,039			
204.62	5,608	13,039			
204.63	5,608	13,039			
204.64	5,608	13,039			
204.65	5,608	13,039			
204.66	5,608	13,039			
204.67	5,608	13,039			
204.68	5,608	13,039			
204.69	5,608	13,039			
204.70	5,608	13,039			
204.71	5,608	13,039			
204.72	5,608	13,039			
204.73	5,608	13,039			
204.74	5,608	13,039			
204.75	5,608	13,039			
204.76	5,608	13,039			
204.77	5,608	13,039			
204.78	5,608	13,039			
204.79	5,608	13,039			
204.80	5,608	13,039			
204.81	5,608	13,039			
204.82	5,608	13,039			
204.83	5,608	13,039			
204.84	5,608	13,039			
204.85	5,608	13,039			
204.86	5,608	13,039			
204.87	5,608	13,039			
204.88	5,608	13,039			
204.89	5,608	13,039			
204.90	5,608	13,039			
204.91	5,608	13,039			
204.92	5,608	13,039			
204.93	5,608	13,039			

Summary for Pond B-58: Basin #58

Inflow Area = 3.083 ac, 36.46% Impervious, Inflow Depth > 1.60" for Current 2 yr event
 Inflow = 2.89 cfs @ 12.18 hrs, Volume= 0.410 af
 Outflow = 1.17 cfs @ 12.69 hrs, Volume= 0.357 af, Atten= 60%, Lag= 30.4 min
 Primary = 1.17 cfs @ 12.69 hrs, Volume= 0.357 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 199.39' @ 12.69 hrs Surf.Area= 6,506 sf Storage= 4,683 cf

Plug-Flow detention time= 201.6 min calculated for 0.357 af (87% of inflow)
 Center-of-Mass det. time= 110.8 min (1,055.1 - 944.3)

Volume	Invert	Avail.Storage	Storage Description
#1	198.30'	32,924 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
198.30	0	0	0
199.00	6,230	2,180	2,180
200.00	6,932	6,581	8,761
201.00	7,670	7,301	16,062
202.00	8,426	8,048	24,110
203.00	9,201	8,814	32,924

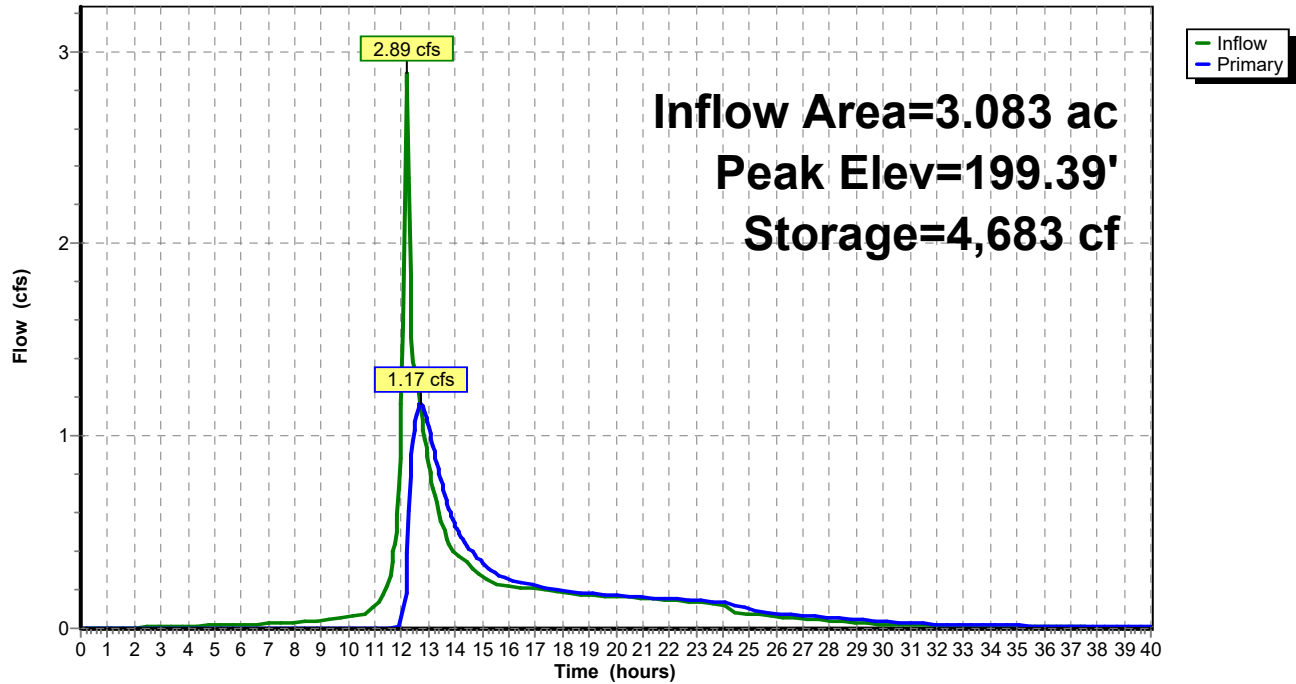
Device	Routing	Invert	Outlet Devices
#1	Primary	199.00'	36.0" Round Culvert L= 87.0' Ke= 0.500 Inlet / Outlet Invert= 199.00' / 198.00' S= 0.0115 '/' Cc= 0.900 n= 0.013, Flow Area= 7.07 sf
#2	Device 1	198.97'	24.0" W x 6.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	201.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	202.75'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.16 cfs @ 12.69 hrs HW=199.39' (Free Discharge)

1=Culvert (Inlet Controls 1.16 cfs @ 2.13 fps)
 2=Orifice/Grate (Passes 1.16 cfs of 1.76 cfs potential flow)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-58: Basin #58

Hydrograph



Stage-Discharge for Pond B-58: Basin #58

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
198.30	0.00	198.82	0.00	199.34	0.88	199.86	3.82
198.31	0.00	198.83	0.00	199.35	0.93	199.87	3.86
198.32	0.00	198.84	0.00	199.36	0.98	199.88	3.89
198.33	0.00	198.85	0.00	199.37	1.04	199.89	3.92
198.34	0.00	198.86	0.00	199.38	1.09	199.90	3.95
198.35	0.00	198.87	0.00	199.39	1.15	199.91	3.97
198.36	0.00	198.88	0.00	199.40	1.21	199.92	4.00
198.37	0.00	198.89	0.00	199.41	1.27	199.93	4.03
198.38	0.00	198.90	0.00	199.42	1.33	199.94	4.06
198.39	0.00	198.91	0.00	199.43	1.39	199.95	4.09
198.40	0.00	198.92	0.00	199.44	1.45	199.96	4.12
198.41	0.00	198.93	0.00	199.45	1.52	199.97	4.15
198.42	0.00	198.94	0.00	199.46	1.59	199.98	4.18
198.43	0.00	198.95	0.00	199.47	1.65	199.99	4.20
198.44	0.00	198.96	0.00	199.48	1.72	200.00	4.23
198.45	0.00	198.97	0.00	199.49	1.79	200.01	4.26
198.46	0.00	198.98	0.00	199.50	1.86	200.02	4.29
198.47	0.00	198.99	0.00	199.51	1.94	200.03	4.31
198.48	0.00	199.00	0.00	199.52	2.01	200.04	4.34
198.49	0.00	199.01	0.00	199.53	2.09	200.05	4.37
198.50	0.00	199.02	0.00	199.54	2.16	200.06	4.39
198.51	0.00	199.03	0.01	199.55	2.24	200.07	4.42
198.52	0.00	199.04	0.01	199.56	2.32	200.08	4.45
198.53	0.00	199.05	0.02	199.57	2.40	200.09	4.47
198.54	0.00	199.06	0.03	199.58	2.49	200.10	4.50
198.55	0.00	199.07	0.04	199.59	2.57	200.11	4.53
198.56	0.00	199.08	0.05	199.60	2.65	200.12	4.55
198.57	0.00	199.09	0.06	199.61	2.74	200.13	4.58
198.58	0.00	199.10	0.08	199.62	2.83	200.14	4.60
198.59	0.00	199.11	0.09	199.63	2.92	200.15	4.63
198.60	0.00	199.12	0.11	199.64	3.01	200.16	4.65
198.61	0.00	199.13	0.13	199.65	3.10	200.17	4.68
198.62	0.00	199.14	0.15	199.66	3.15	200.18	4.70
198.63	0.00	199.15	0.17	199.67	3.18	200.19	4.73
198.64	0.00	199.16	0.20	199.68	3.22	200.20	4.75
198.65	0.00	199.17	0.22	199.69	3.26	200.21	4.78
198.66	0.00	199.18	0.25	199.70	3.29	200.22	4.80
198.67	0.00	199.19	0.28	199.71	3.33	200.23	4.82
198.68	0.00	199.20	0.31	199.72	3.36	200.24	4.85
198.69	0.00	199.21	0.34	199.73	3.40	200.25	4.87
198.70	0.00	199.22	0.37	199.74	3.43	200.26	4.90
198.71	0.00	199.23	0.41	199.75	3.47	200.27	4.92
198.72	0.00	199.24	0.44	199.76	3.50	200.28	4.94
198.73	0.00	199.25	0.48	199.77	3.54	200.29	4.97
198.74	0.00	199.26	0.52	199.78	3.57	200.30	4.99
198.75	0.00	199.27	0.56	199.79	3.60	200.31	5.01
198.76	0.00	199.28	0.60	199.80	3.64	200.32	5.04
198.77	0.00	199.29	0.64	199.81	3.67	200.33	5.06
198.78	0.00	199.30	0.69	199.82	3.70	200.34	5.08
198.79	0.00	199.31	0.73	199.83	3.73	200.35	5.11
198.80	0.00	199.32	0.78	199.84	3.76	200.36	5.13
198.81	0.00	199.33	0.83	199.85	3.79	200.37	5.15

Stage-Discharge for Pond B-58: Basin #58 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.38	5.17	200.90	6.23	201.42	10.62	201.94	19.30
200.39	5.20	200.91	6.25	201.43	10.76	201.95	19.49
200.40	5.22	200.92	6.27	201.44	10.90	201.96	19.68
200.41	5.24	200.93	6.29	201.45	11.04	201.97	19.87
200.42	5.26	200.94	6.31	201.46	11.19	201.98	20.06
200.43	5.29	200.95	6.33	201.47	11.33	201.99	20.26
200.44	5.31	200.96	6.34	201.48	11.48	202.00	20.45
200.45	5.33	200.97	6.36	201.49	11.63	202.01	20.64
200.46	5.35	200.98	6.38	201.50	11.77	202.02	20.84
200.47	5.37	200.99	6.40	201.51	11.92	202.03	21.04
200.48	5.39	201.00	6.42	201.52	12.07	202.04	21.23
200.49	5.42	201.01	6.45	201.53	12.23	202.05	21.43
200.50	5.44	201.02	6.49	201.54	12.38	202.06	21.63
200.51	5.46	201.03	6.54	201.55	12.53	202.07	21.83
200.52	5.48	201.04	6.59	201.56	12.69	202.08	22.03
200.53	5.50	201.05	6.65	201.57	12.84	202.09	22.23
200.54	5.52	201.06	6.72	201.58	13.00	202.10	22.43
200.55	5.54	201.07	6.78	201.59	13.16	202.11	22.63
200.56	5.56	201.08	6.86	201.60	13.32	202.12	22.83
200.57	5.58	201.09	6.93	201.61	13.48	202.13	23.03
200.58	5.61	201.10	7.01	201.62	13.64	202.14	23.24
200.59	5.63	201.11	7.09	201.63	13.80	202.15	23.44
200.60	5.65	201.12	7.17	201.64	13.97	202.16	23.65
200.61	5.67	201.13	7.26	201.65	14.13	202.17	23.85
200.62	5.69	201.14	7.35	201.66	14.30	202.18	24.06
200.63	5.71	201.15	7.44	201.67	14.47	202.19	24.26
200.64	5.73	201.16	7.53	201.68	14.63	202.20	24.47
200.65	5.75	201.17	7.63	201.69	14.80	202.21	24.68
200.66	5.77	201.18	7.72	201.70	14.97	202.22	24.89
200.67	5.79	201.19	7.83	201.71	15.14	202.23	25.10
200.68	5.81	201.20	7.93	201.72	15.31	202.24	25.31
200.69	5.83	201.21	8.03	201.73	15.48	202.25	25.52
200.70	5.85	201.22	8.14	201.74	15.66	202.26	25.73
200.71	5.87	201.23	8.25	201.75	15.83	202.27	25.94
200.72	5.89	201.24	8.36	201.76	16.01	202.28	26.15
200.73	5.91	201.25	8.47	201.77	16.18	202.29	26.36
200.74	5.93	201.26	8.58	201.78	16.36	202.30	26.57
200.75	5.95	201.27	8.70	201.79	16.54	202.31	26.79
200.76	5.97	201.28	8.82	201.80	16.71	202.32	27.00
200.77	5.99	201.29	8.93	201.81	16.89	202.33	27.22
200.78	6.01	201.30	9.06	201.82	17.07	202.34	27.43
200.79	6.03	201.31	9.18	201.83	17.25	202.35	27.65
200.80	6.04	201.32	9.30	201.84	17.44	202.36	27.86
200.81	6.06	201.33	9.43	201.85	17.62	202.37	28.08
200.82	6.08	201.34	9.55	201.86	17.80	202.38	28.30
200.83	6.10	201.35	9.68	201.87	17.99	202.39	28.51
200.84	6.12	201.36	9.81	201.88	18.17	202.40	28.73
200.85	6.14	201.37	9.94	201.89	18.36	202.41	28.95
200.86	6.16	201.38	10.08	201.90	18.54	202.42	29.17
200.87	6.18	201.39	10.21	201.91	18.73	202.43	29.39
200.88	6.20	201.40	10.35	201.92	18.92	202.44	29.61
200.89	6.21	201.41	10.48	201.93	19.11	202.45	29.83

Stage-Discharge for Pond B-58: Basin #58 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
202.46	30.05	202.98	55.35
202.47	30.28	202.99	56.52
202.48	30.50	203.00	57.71
202.49	30.72		
202.50	30.94		
202.51	31.17		
202.52	31.39		
202.53	31.62		
202.54	31.84		
202.55	32.07		
202.56	32.29		
202.57	32.52		
202.58	32.75		
202.59	32.98		
202.60	33.20		
202.61	33.43		
202.62	33.66		
202.63	33.89		
202.64	34.12		
202.65	34.35		
202.66	34.58		
202.67	34.81		
202.68	35.04		
202.69	35.27		
202.70	35.51		
202.71	35.74		
202.72	35.97		
202.73	36.21		
202.74	36.44		
202.75	36.67		
202.76	37.03		
202.77	37.48		
202.78	37.99		
202.79	38.55		
202.80	39.16		
202.81	39.81		
202.82	40.50		
202.83	41.22		
202.84	41.97		
202.85	42.76		
202.86	43.57		
202.87	44.41		
202.88	45.27		
202.89	46.17		
202.90	47.08		
202.91	48.02		
202.92	48.98		
202.93	49.97		
202.94	50.98		
202.95	52.01		
202.96	53.09		
202.97	54.21		

Stage-Area-Storage for Pond B-58: Basin #58

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
198.30	0	0	198.82	4,628	1,203
198.31	89	0	198.83	4,717	1,250
198.32	178	2	198.84	4,806	1,298
198.33	267	4	198.85	4,895	1,346
198.34	356	7	198.86	4,984	1,396
198.35	445	11	198.87	5,073	1,446
198.36	534	16	198.88	5,162	1,497
198.37	623	22	198.89	5,251	1,549
198.38	712	28	198.90	5,340	1,602
198.39	801	36	198.91	5,429	1,656
198.40	890	44	198.92	5,518	1,711
198.41	979	54	198.93	5,607	1,766
198.42	1,068	64	198.94	5,696	1,823
198.43	1,157	75	198.95	5,785	1,880
198.44	1,246	87	198.96	5,874	1,938
198.45	1,335	100	198.97	5,963	1,998
198.46	1,424	114	198.98	6,052	2,058
198.47	1,513	129	198.99	6,141	2,119
198.48	1,602	144	199.00	6,230	2,180
198.49	1,691	161	199.01	6,237	2,243
198.50	1,780	178	199.02	6,244	2,305
198.51	1,869	196	199.03	6,251	2,368
198.52	1,958	215	199.04	6,258	2,430
198.53	2,047	235	199.05	6,265	2,493
198.54	2,136	256	199.06	6,272	2,556
198.55	2,225	278	199.07	6,279	2,618
198.56	2,314	301	199.08	6,286	2,681
198.57	2,403	324	199.09	6,293	2,744
198.58	2,492	349	199.10	6,300	2,807
198.59	2,581	374	199.11	6,307	2,870
198.60	2,670	401	199.12	6,314	2,933
198.61	2,759	428	199.13	6,321	2,996
198.62	2,848	456	199.14	6,328	3,060
198.63	2,937	485	199.15	6,335	3,123
198.64	3,026	514	199.16	6,342	3,186
198.65	3,115	545	199.17	6,349	3,250
198.66	3,204	577	199.18	6,356	3,313
198.67	3,293	609	199.19	6,363	3,377
198.68	3,382	643	199.20	6,370	3,441
198.69	3,471	677	199.21	6,377	3,504
198.70	3,560	712	199.22	6,384	3,568
198.71	3,649	748	199.23	6,391	3,632
198.72	3,738	785	199.24	6,398	3,696
198.73	3,827	823	199.25	6,406	3,760
198.74	3,916	862	199.26	6,413	3,824
198.75	4,005	901	199.27	6,420	3,888
198.76	4,094	942	199.28	6,427	3,952
198.77	4,183	983	199.29	6,434	4,017
198.78	4,272	1,025	199.30	6,441	4,081
198.79	4,361	1,068	199.31	6,448	4,146
198.80	4,450	1,113	199.32	6,455	4,210
198.81	4,539	1,157	199.33	6,462	4,275

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
199.34	6,469	4,339	199.86	6,834	7,798
199.35	6,476	4,404	199.87	6,841	7,866
199.36	6,483	4,469	199.88	6,848	7,935
199.37	6,490	4,534	199.89	6,855	8,003
199.38	6,497	4,599	199.90	6,862	8,072
199.39	6,504	4,664	199.91	6,869	8,140
199.40	6,511	4,729	199.92	6,876	8,209
199.41	6,518	4,794	199.93	6,883	8,278
199.42	6,525	4,859	199.94	6,890	8,347
199.43	6,532	4,924	199.95	6,897	8,416
199.44	6,539	4,990	199.96	6,904	8,485
199.45	6,546	5,055	199.97	6,911	8,554
199.46	6,553	5,121	199.98	6,918	8,623
199.47	6,560	5,186	199.99	6,925	8,692
199.48	6,567	5,252	200.00	6,932	8,761
199.49	6,574	5,317	200.01	6,939	8,831
199.50	6,581	5,383	200.02	6,947	8,900
199.51	6,588	5,449	200.03	6,954	8,970
199.52	6,595	5,515	200.04	6,962	9,039
199.53	6,602	5,581	200.05	6,969	9,109
199.54	6,609	5,647	200.06	6,976	9,179
199.55	6,616	5,713	200.07	6,984	9,249
199.56	6,623	5,779	200.08	6,991	9,318
199.57	6,630	5,846	200.09	6,998	9,388
199.58	6,637	5,912	200.10	7,006	9,458
199.59	6,644	5,978	200.11	7,013	9,528
199.60	6,651	6,045	200.12	7,021	9,599
199.61	6,658	6,111	200.13	7,028	9,669
199.62	6,665	6,178	200.14	7,035	9,739
199.63	6,672	6,245	200.15	7,043	9,810
199.64	6,679	6,311	200.16	7,050	9,880
199.65	6,686	6,378	200.17	7,057	9,951
199.66	6,693	6,445	200.18	7,065	10,021
199.67	6,700	6,512	200.19	7,072	10,092
199.68	6,707	6,579	200.20	7,080	10,163
199.69	6,714	6,646	200.21	7,087	10,233
199.70	6,721	6,713	200.22	7,094	10,304
199.71	6,728	6,781	200.23	7,102	10,375
199.72	6,735	6,848	200.24	7,109	10,446
199.73	6,742	6,915	200.25	7,117	10,518
199.74	6,749	6,983	200.26	7,124	10,589
199.75	6,757	7,050	200.27	7,131	10,660
199.76	6,764	7,118	200.28	7,139	10,731
199.77	6,771	7,186	200.29	7,146	10,803
199.78	6,778	7,253	200.30	7,153	10,874
199.79	6,785	7,321	200.31	7,161	10,946
199.80	6,792	7,389	200.32	7,168	11,018
199.81	6,799	7,457	200.33	7,176	11,089
199.82	6,806	7,525	200.34	7,183	11,161
199.83	6,813	7,593	200.35	7,190	11,233
199.84	6,820	7,661	200.36	7,198	11,305
199.85	6,827	7,730	200.37	7,205	11,377

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.38	7,212	11,449	200.90	7,596	15,299
200.39	7,220	11,521	200.91	7,604	15,375
200.40	7,227	11,593	200.92	7,611	15,451
200.41	7,235	11,666	200.93	7,618	15,527
200.42	7,242	11,738	200.94	7,626	15,604
200.43	7,249	11,810	200.95	7,633	15,680
200.44	7,257	11,883	200.96	7,640	15,756
200.45	7,264	11,956	200.97	7,648	15,833
200.46	7,271	12,028	200.98	7,655	15,909
200.47	7,279	12,101	200.99	7,663	15,986
200.48	7,286	12,174	201.00	7,670	16,062
200.49	7,294	12,247	201.01	7,678	16,139
200.50	7,301	12,320	201.02	7,685	16,216
200.51	7,308	12,393	201.03	7,693	16,293
200.52	7,316	12,466	201.04	7,700	16,370
200.53	7,323	12,539	201.05	7,708	16,447
200.54	7,331	12,612	201.06	7,715	16,524
200.55	7,338	12,686	201.07	7,723	16,601
200.56	7,345	12,759	201.08	7,730	16,679
200.57	7,353	12,833	201.09	7,738	16,756
200.58	7,360	12,906	201.10	7,746	16,833
200.59	7,367	12,980	201.11	7,753	16,911
200.60	7,375	13,054	201.12	7,761	16,988
200.61	7,382	13,127	201.13	7,768	17,066
200.62	7,390	13,201	201.14	7,776	17,144
200.63	7,397	13,275	201.15	7,783	17,222
200.64	7,404	13,349	201.16	7,791	17,299
200.65	7,412	13,423	201.17	7,799	17,377
200.66	7,419	13,497	201.18	7,806	17,455
200.67	7,426	13,572	201.19	7,814	17,533
200.68	7,434	13,646	201.20	7,821	17,612
200.69	7,441	13,720	201.21	7,829	17,690
200.70	7,449	13,795	201.22	7,836	17,768
200.71	7,456	13,869	201.23	7,844	17,847
200.72	7,463	13,944	201.24	7,851	17,925
200.73	7,471	14,019	201.25	7,859	18,004
200.74	7,478	14,093	201.26	7,867	18,082
200.75	7,486	14,168	201.27	7,874	18,161
200.76	7,493	14,243	201.28	7,882	18,240
200.77	7,500	14,318	201.29	7,889	18,319
200.78	7,508	14,393	201.30	7,897	18,398
200.79	7,515	14,468	201.31	7,904	18,477
200.80	7,522	14,543	201.32	7,912	18,556
200.81	7,530	14,619	201.33	7,919	18,635
200.82	7,537	14,694	201.34	7,927	18,714
200.83	7,545	14,769	201.35	7,935	18,793
200.84	7,552	14,845	201.36	7,942	18,873
200.85	7,559	14,920	201.37	7,950	18,952
200.86	7,567	14,996	201.38	7,957	19,032
200.87	7,574	15,072	201.39	7,965	19,111
200.88	7,581	15,147	201.40	7,972	19,191
200.89	7,589	15,223	201.41	7,980	19,271

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.42	7,988	19,351	201.94	8,381	23,606
201.43	7,995	19,430	201.95	8,388	23,690
201.44	8,003	19,510	201.96	8,396	23,774
201.45	8,010	19,591	201.97	8,403	23,858
201.46	8,018	19,671	201.98	8,411	23,942
201.47	8,025	19,751	201.99	8,418	24,026
201.48	8,033	19,831	202.00	8,426	24,110
201.49	8,040	19,912	202.01	8,434	24,195
201.50	8,048	19,992	202.02	8,442	24,279
201.51	8,056	20,073	202.03	8,449	24,364
201.52	8,063	20,153	202.04	8,457	24,448
201.53	8,071	20,234	202.05	8,465	24,533
201.54	8,078	20,315	202.06	8,473	24,617
201.55	8,086	20,395	202.07	8,480	24,702
201.56	8,093	20,476	202.08	8,488	24,787
201.57	8,101	20,557	202.09	8,496	24,872
201.58	8,108	20,638	202.10	8,504	24,957
201.59	8,116	20,719	202.11	8,511	25,042
201.60	8,124	20,801	202.12	8,519	25,127
201.61	8,131	20,882	202.13	8,527	25,212
201.62	8,139	20,963	202.14	8,535	25,298
201.63	8,146	21,045	202.15	8,542	25,383
201.64	8,154	21,126	202.16	8,550	25,469
201.65	8,161	21,208	202.17	8,558	25,554
201.66	8,169	21,289	202.18	8,566	25,640
201.67	8,177	21,371	202.19	8,573	25,725
201.68	8,184	21,453	202.20	8,581	25,811
201.69	8,192	21,535	202.21	8,589	25,897
201.70	8,199	21,617	202.22	8,597	25,983
201.71	8,207	21,699	202.23	8,604	26,069
201.72	8,214	21,781	202.24	8,612	26,155
201.73	8,222	21,863	202.25	8,620	26,241
201.74	8,229	21,945	202.26	8,628	26,327
201.75	8,237	22,028	202.27	8,635	26,414
201.76	8,245	22,110	202.28	8,643	26,500
201.77	8,252	22,193	202.29	8,651	26,587
201.78	8,260	22,275	202.30	8,659	26,673
201.79	8,267	22,358	202.31	8,666	26,760
201.80	8,275	22,440	202.32	8,674	26,847
201.81	8,282	22,523	202.33	8,682	26,933
201.82	8,290	22,606	202.34	8,690	27,020
201.83	8,297	22,689	202.35	8,697	27,107
201.84	8,305	22,772	202.36	8,705	27,194
201.85	8,313	22,855	202.37	8,713	27,281
201.86	8,320	22,938	202.38	8,721	27,368
201.87	8,328	23,022	202.39	8,728	27,456
201.88	8,335	23,105	202.40	8,736	27,543
201.89	8,343	23,188	202.41	8,744	27,630
201.90	8,350	23,272	202.42	8,752	27,718
201.91	8,358	23,355	202.43	8,759	27,805
201.92	8,366	23,439	202.44	8,767	27,893
201.93	8,373	23,523	202.45	8,775	27,981

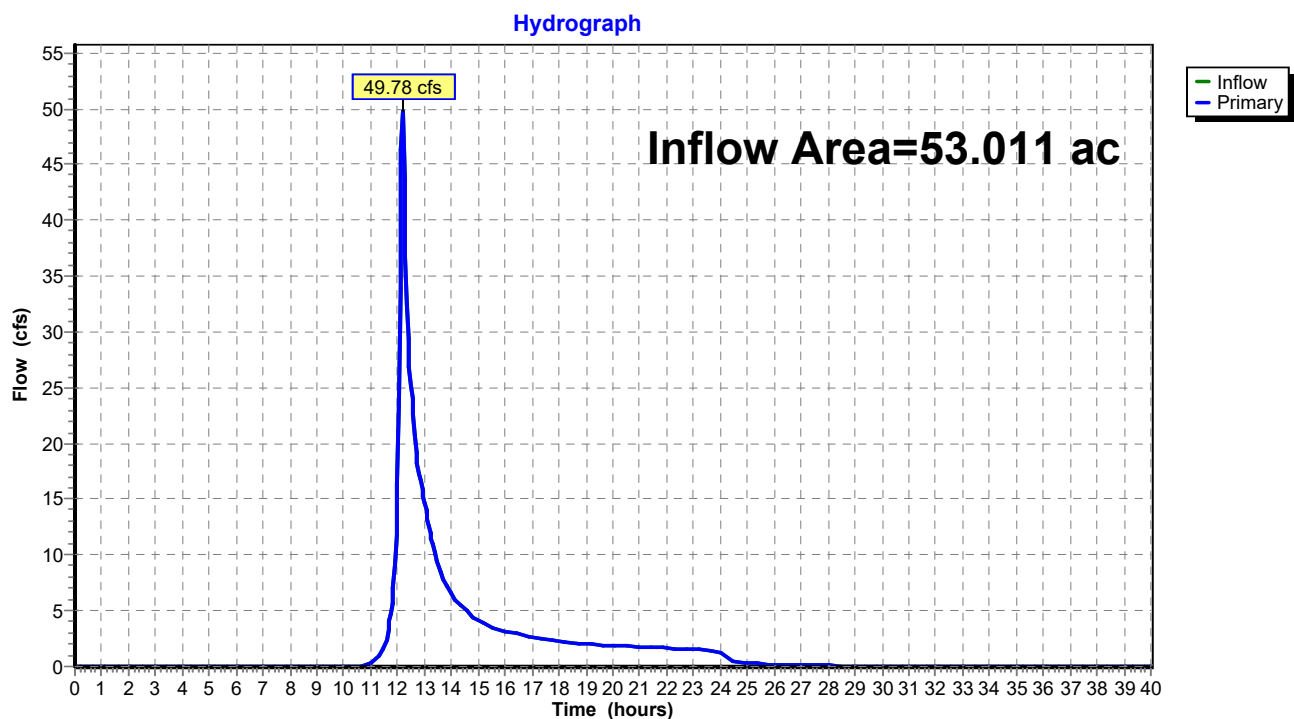
Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.46	8,783	28,068	202.98	9,186	32,740
202.47	8,790	28,156	202.99	9,193	32,832
202.48	8,798	28,244	203.00	9,201	32,924
202.49	8,806	28,332			
202.50	8,814	28,420			
202.51	8,821	28,509			
202.52	8,829	28,597			
202.53	8,837	28,685			
202.54	8,845	28,774			
202.55	8,852	28,862			
202.56	8,860	28,951			
202.57	8,868	29,039			
202.58	8,876	29,128			
202.59	8,883	29,217			
202.60	8,891	29,306			
202.61	8,899	29,395			
202.62	8,907	29,484			
202.63	8,914	29,573			
202.64	8,922	29,662			
202.65	8,930	29,751			
202.66	8,938	29,840			
202.67	8,945	29,930			
202.68	8,953	30,019			
202.69	8,961	30,109			
202.70	8,969	30,199			
202.71	8,976	30,288			
202.72	8,984	30,378			
202.73	8,992	30,468			
202.74	9,000	30,558			
202.75	9,007	30,648			
202.76	9,015	30,738			
202.77	9,023	30,828			
202.78	9,031	30,919			
202.79	9,038	31,009			
202.80	9,046	31,099			
202.81	9,054	31,190			
202.82	9,062	31,280			
202.83	9,069	31,371			
202.84	9,077	31,462			
202.85	9,085	31,553			
202.86	9,093	31,643			
202.87	9,100	31,734			
202.88	9,108	31,825			
202.89	9,116	31,917			
202.90	9,124	32,008			
202.91	9,131	32,099			
202.92	9,139	32,190			
202.93	9,147	32,282			
202.94	9,154	32,373			
202.95	9,162	32,465			
202.96	9,170	32,557			
202.97	9,178	32,648			

Summary for Link PDA-6: Proposed Drainage Area #6

Inflow Area = 53.011 ac, 11.21% Impervious, Inflow Depth > 1.23" for Current 2 yr event
Inflow = 49.78 cfs @ 12.19 hrs, Volume= 5.427 af
Primary = 49.78 cfs @ 12.19 hrs, Volume= 5.427 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-6: Proposed Drainage Area #6

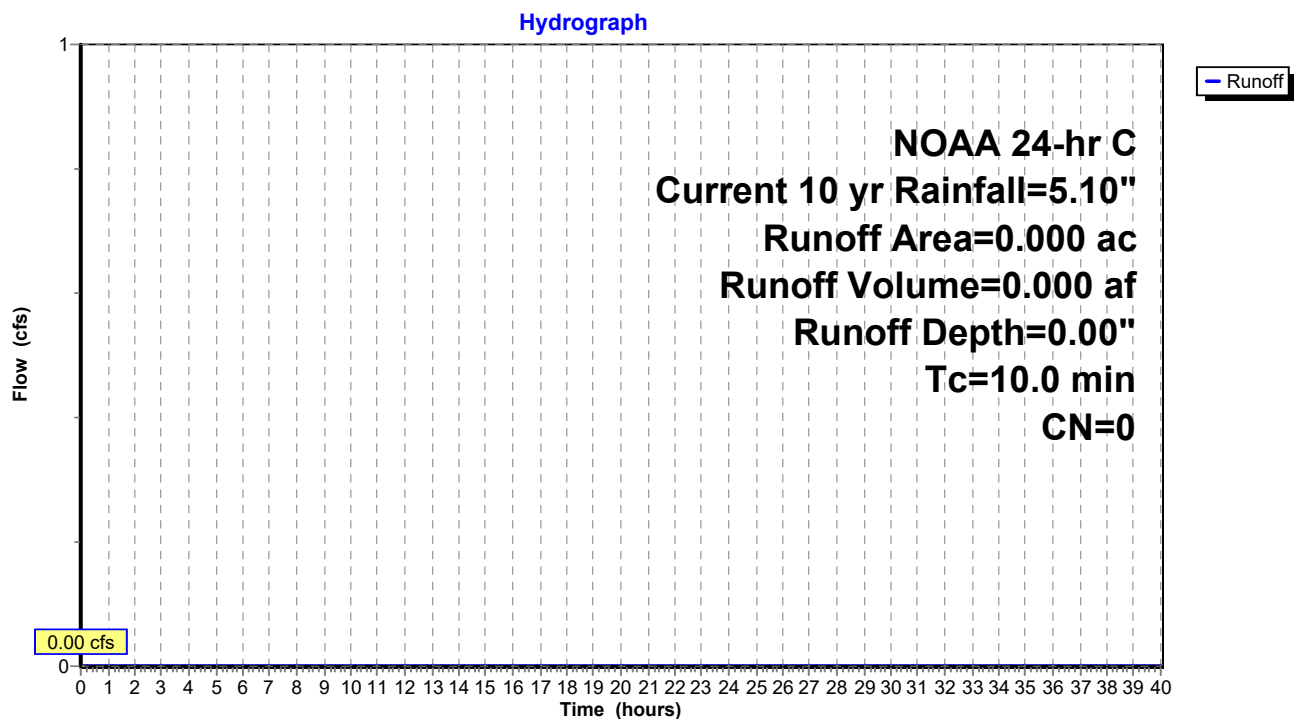
Summary for Subcatchment 51I: PDA-51 (impervious)

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
 Routed to Pond B-51 : Basin #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
* 0.000	98	Roof, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 51I: PDA-51 (impervious)

Summary for Subcatchment 51P: PDA-51 (pervious)

Runoff = 1.84 cfs @ 12.18 hrs, Volume= 0.139 af, Depth= 2.44"
 Routed to Pond B-51 : Basin #51

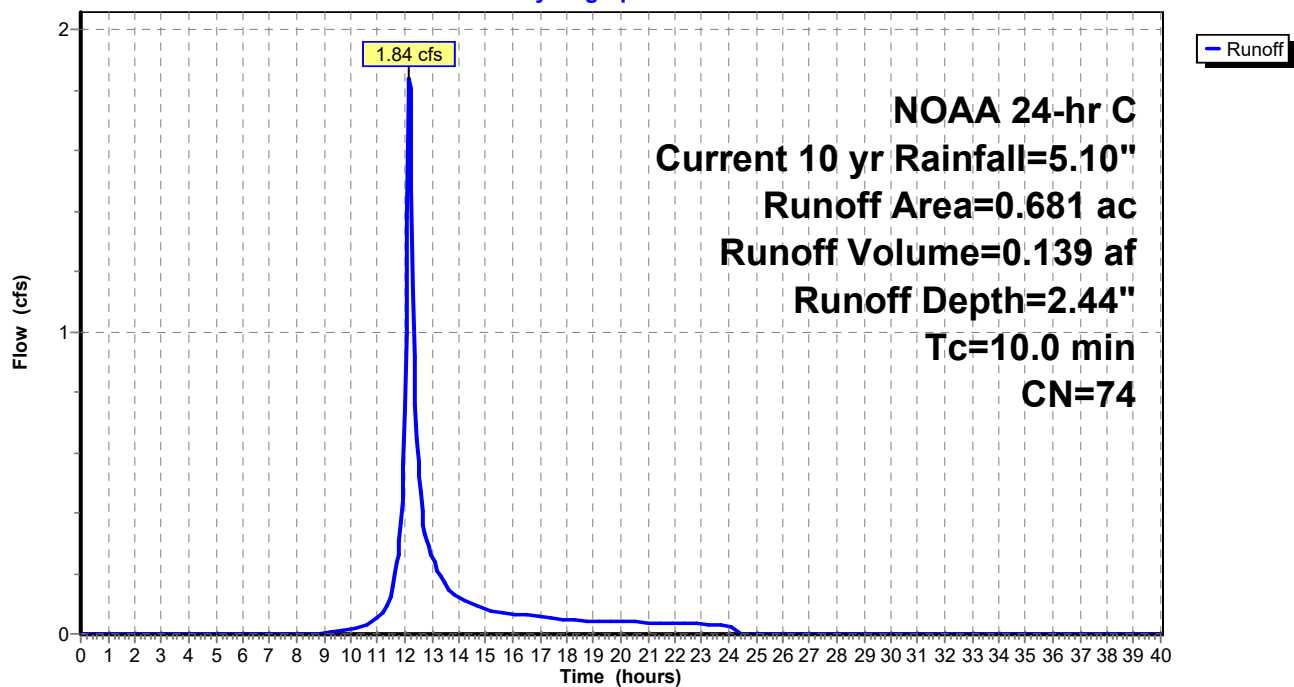
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.681	74	>75% Grass cover, Good, HSG C
0.681		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 51P: PDA-51 (pervious)

Hydrograph



Summary for Subcatchment 52I: PDA-52 (impervious)

Runoff = 2.28 cfs @ 12.17 hrs, Volume= 0.199 af, Depth= 4.86"
 Routed to Pond B-52 : Basin #52

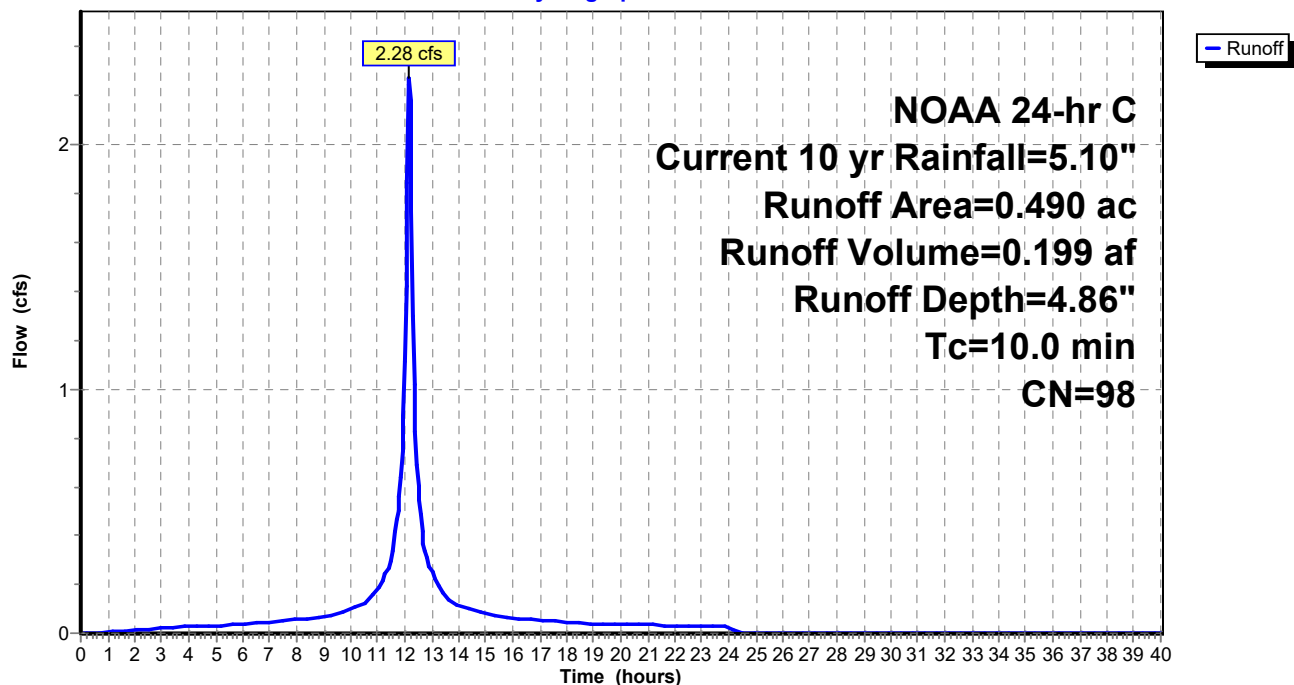
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
* 0.118	98	Pavement, HSG C
* 0.339	98	Roof, HSG C
* 0.033	98	Concrete, HSG C
0.490	98	Weighted Average
0.490		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 52I: PDA-52 (impervious)

Hydrograph



Summary for Subcatchment 52P: PDA-52 (pervious)

Runoff = 2.52 cfs @ 12.18 hrs, Volume= 0.190 af, Depth= 2.44"
 Routed to Pond B-52 : Basin #52

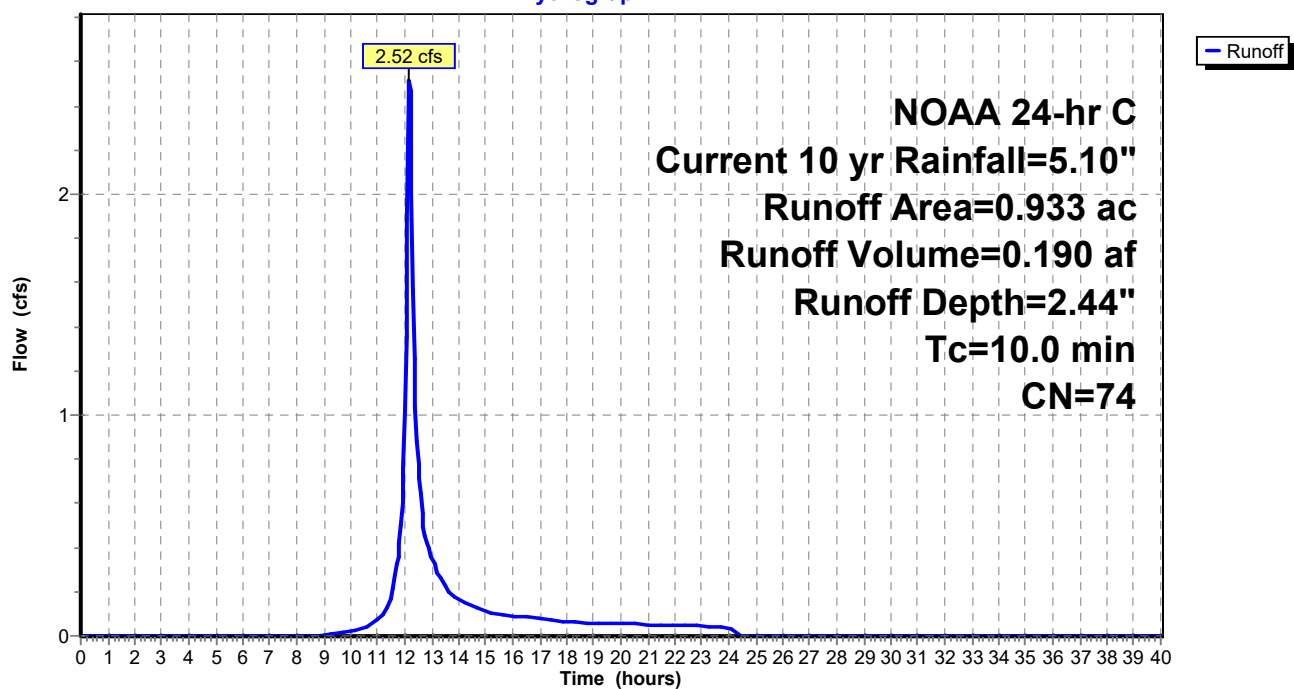
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.933	74	>75% Grass cover, Good, HSG C
0.933		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 52P: PDA-52 (pervious)

Hydrograph



Summary for Subcatchment 53I: PDA-53 (impervious)

Runoff = 5.64 cfs @ 12.17 hrs, Volume= 0.492 af, Depth= 4.86"
 Routed to Pond B-53 : Basin #53

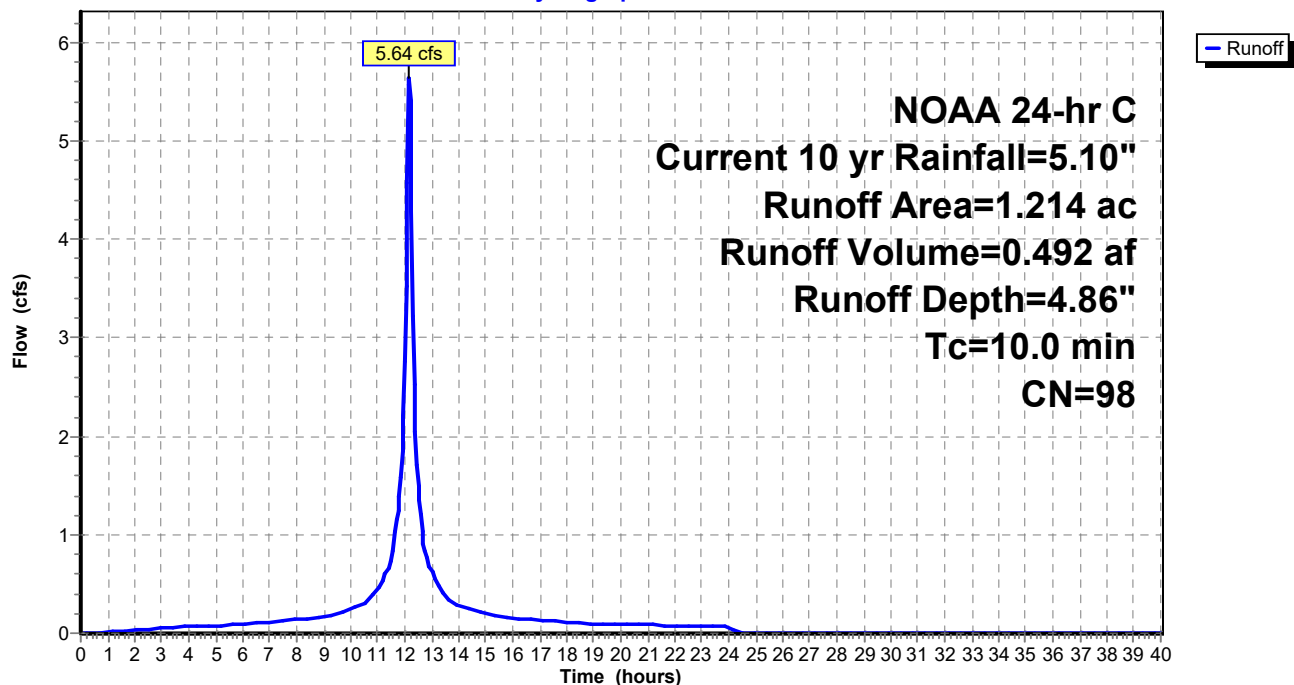
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
* 0.628	98	Pavement, HSG C
* 0.450	98	Roof, HSG C
* 0.136	98	Concrete, HSG C
1.214	98	Weighted Average
1.214		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 53I: PDA-53 (impervious)

Hydrograph



Summary for Subcatchment 53P: PDA-53 (pervious)

Runoff = 3.58 cfs @ 12.18 hrs, Volume= 0.270 af, Depth= 2.44"
 Routed to Pond B-53 : Basin #53

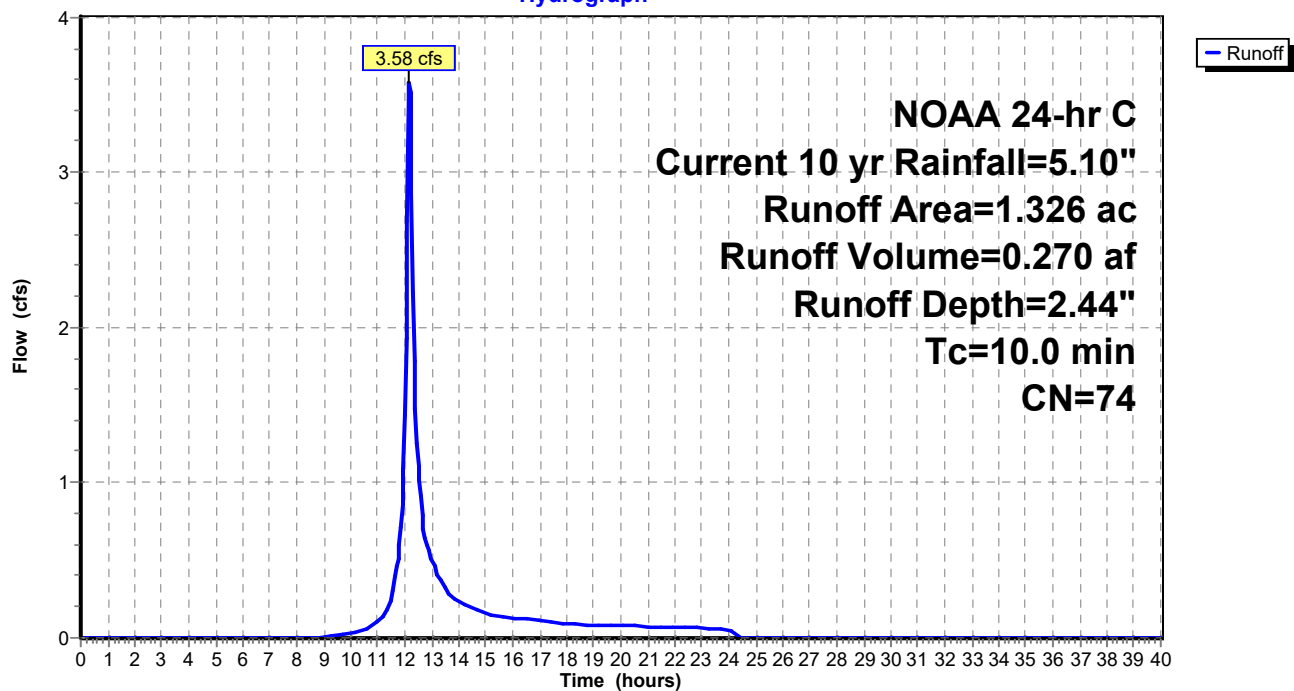
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.326	74	>75% Grass cover, Good, HSG C
1.326		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 53P: PDA-53 (pervious)

Hydrograph



Summary for Subcatchment 54I: PDA-54 (impervious)

Runoff = 7.22 cfs @ 12.17 hrs, Volume= 0.630 af, Depth= 4.86"
 Routed to Pond B-54 : Basin #54

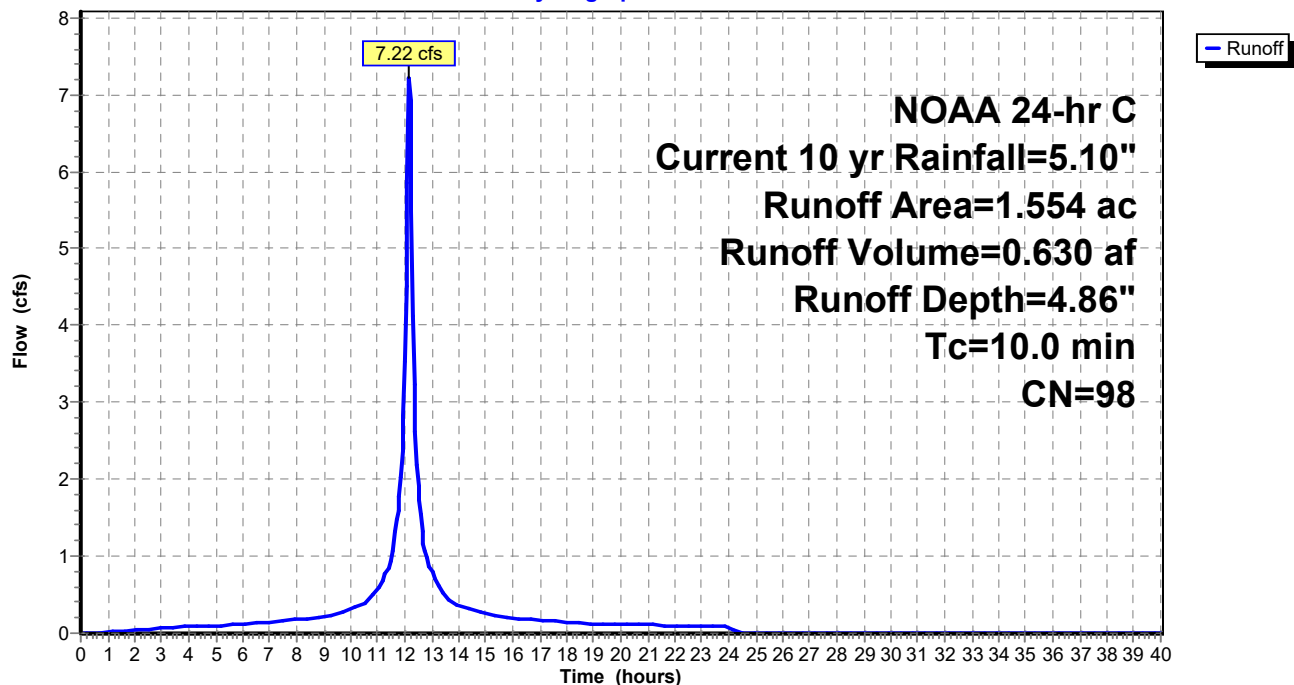
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
* 0.983	98	Pavement, HSG C
* 0.361	98	Roof, HSG C
* 0.210	98	Concrete, HSG C
1.554	98	Weighted Average
1.554		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 54I: PDA-54 (impervious)

Hydrograph



Summary for Subcatchment 54P: PDA-54 (pervious)

Runoff = 2.74 cfs @ 12.18 hrs, Volume= 0.207 af, Depth= 2.44"
 Routed to Pond B-54 : Basin #54

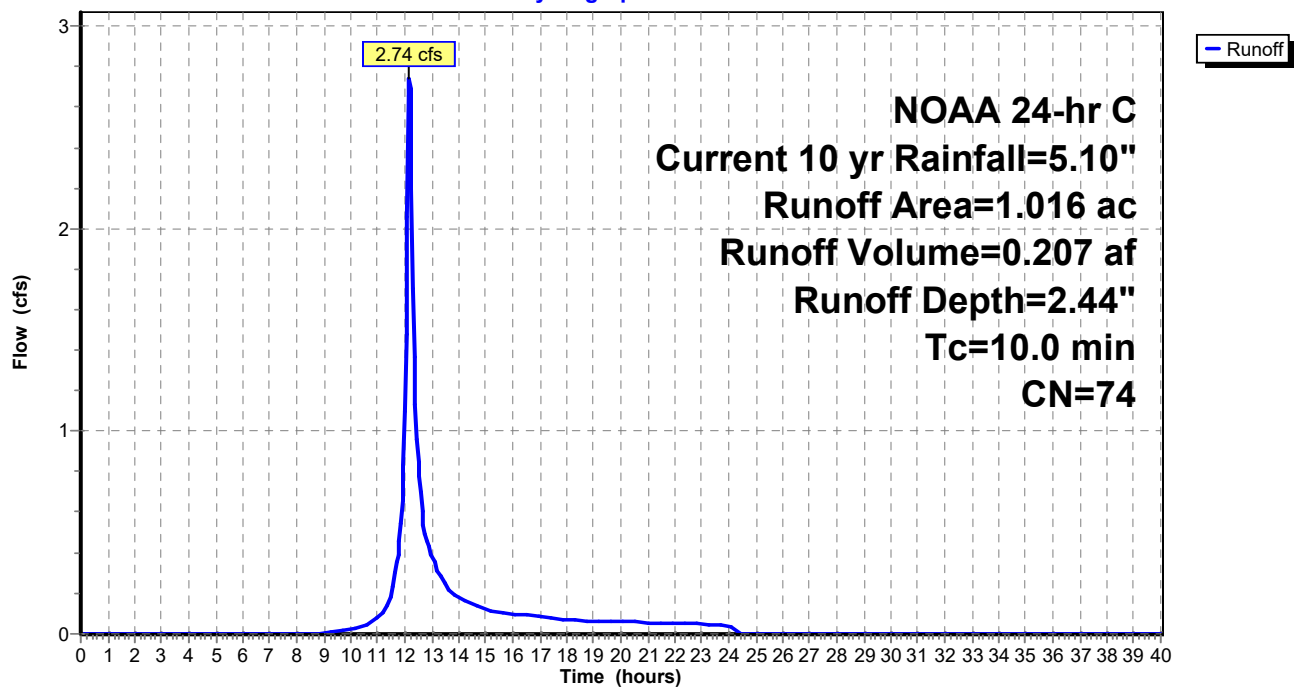
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.016	74	>75% Grass cover, Good, HSG C
1.016		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 54P: PDA-54 (pervious)

Hydrograph



Summary for Subcatchment 55I: PDA-55 (impervious)

Runoff = 5.06 cfs @ 12.17 hrs, Volume= 0.441 af, Depth= 4.86"
 Routed to Pond B-55 : Basin #55

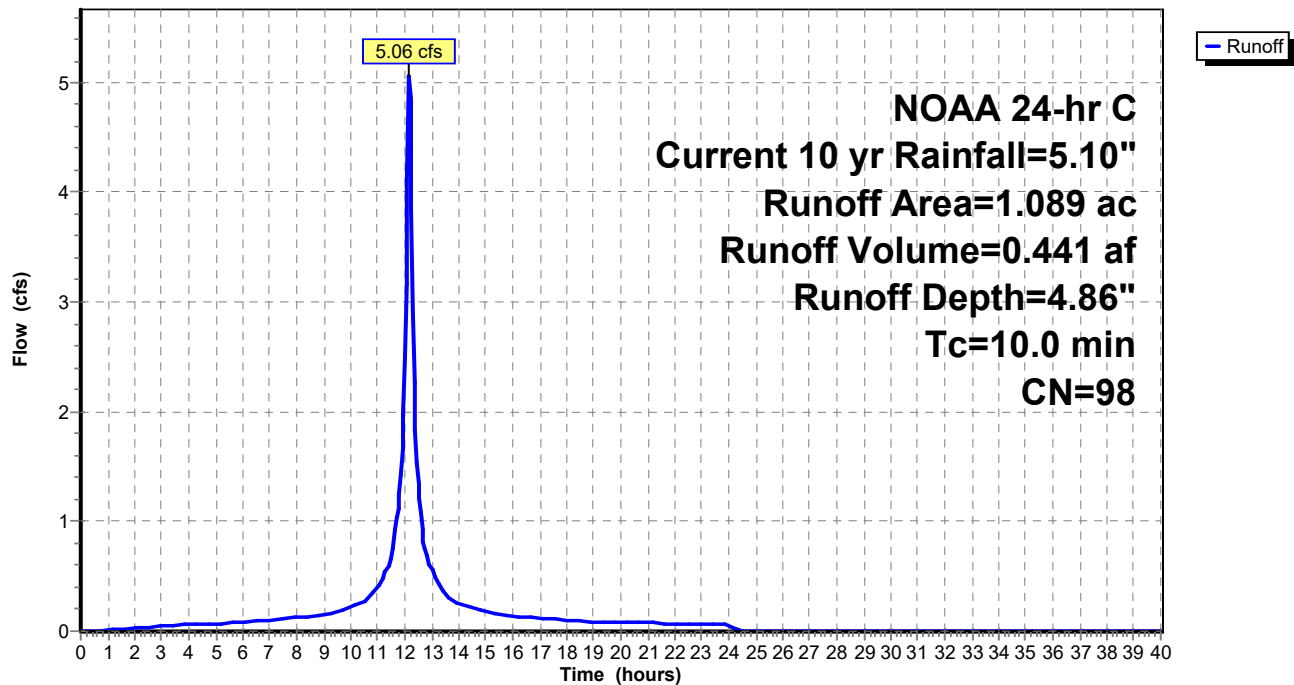
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
* 0.467	98	Pavement, HSG C
* 0.574	98	Roof, HSG C
* 0.048	98	Concrete, HSG C
1.089	98	Weighted Average
1.089		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 55I: PDA-55 (impervious)

Hydrograph



Summary for Subcatchment 55P: PDA-55 (pervious)

Runoff = 3.27 cfs @ 12.18 hrs, Volume= 0.247 af, Depth= 2.44"
 Routed to Pond B-55 : Basin #55

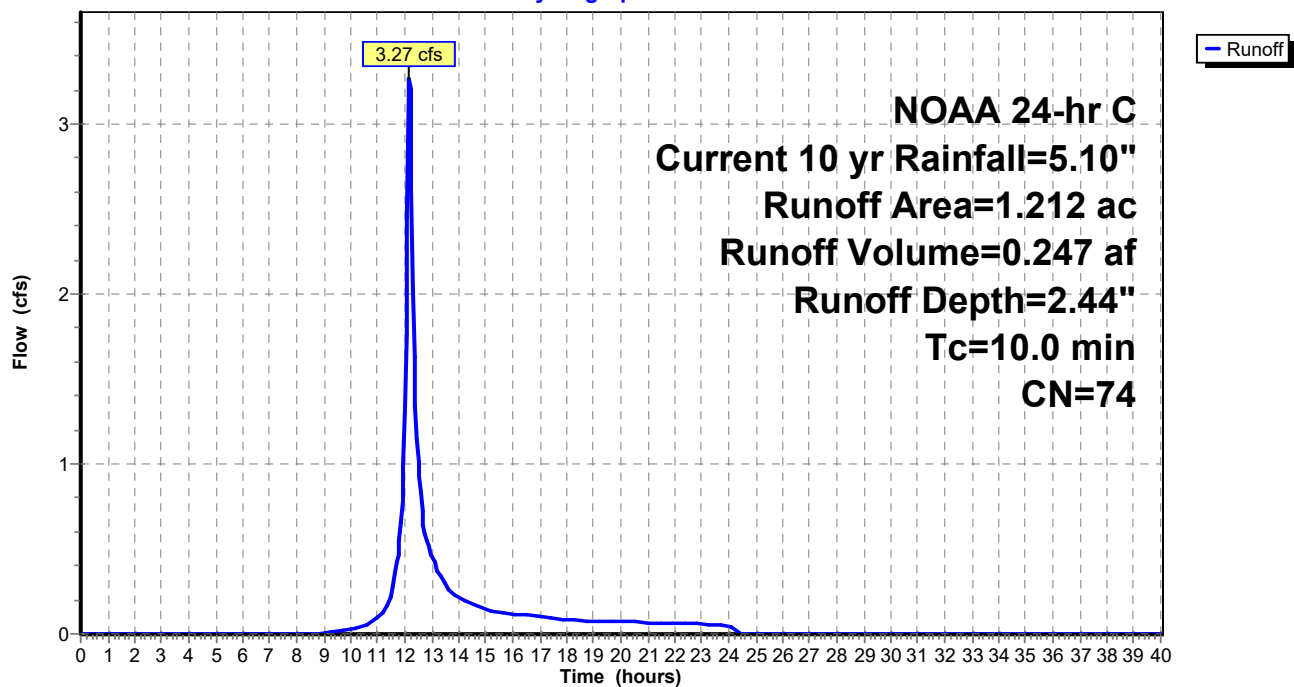
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.212	74	>75% Grass cover, Good, HSG C
1.212		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 55P: PDA-55 (pervious)

Hydrograph



Summary for Subcatchment 56I: PDA-56 (impervious)

Runoff = 2.18 cfs @ 12.17 hrs, Volume= 0.190 af, Depth= 4.86"
 Routed to Pond B-56 : Basin #56

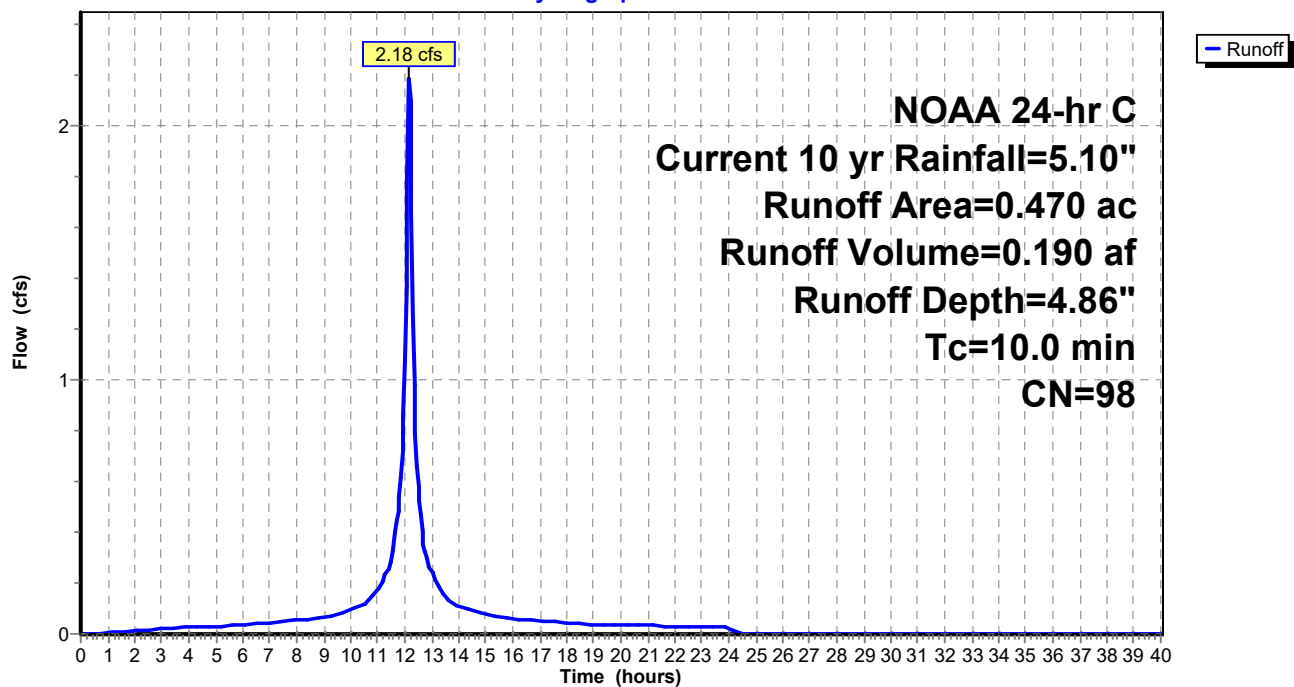
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
* 0.470	98	Roof, HSG C
0.470		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 56I: PDA-56 (impervious)

Hydrograph



Summary for Subcatchment 56P: PDA-56 (pervious)

Runoff = 2.81 cfs @ 12.18 hrs, Volume= 0.212 af, Depth= 2.44"
 Routed to Pond B-56 : Basin #56

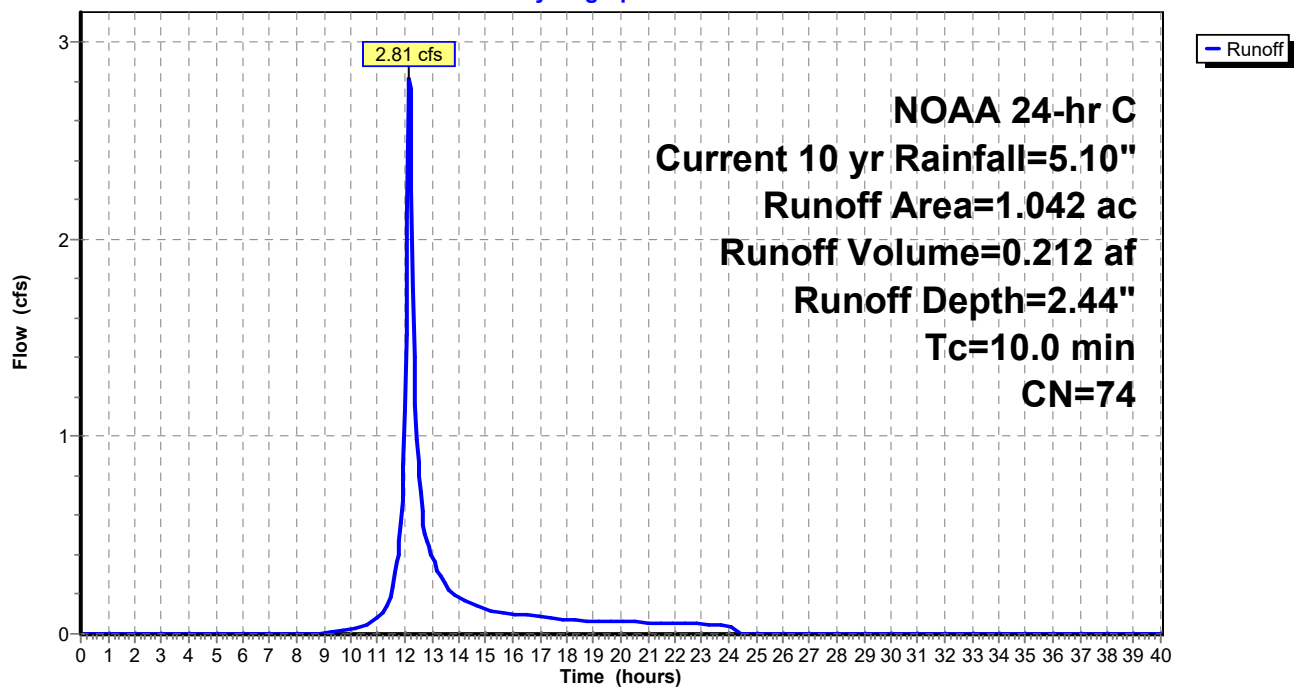
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.042	74	>75% Grass cover, Good, HSG C
1.042		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 56P: PDA-56 (pervious)

Hydrograph



Summary for Subcatchment 57I: PDA-57 (impervious)

Runoff = 3.17 cfs @ 12.17 hrs, Volume= 0.276 af, Depth= 4.86"
 Routed to Pond B-57 : Basin #57

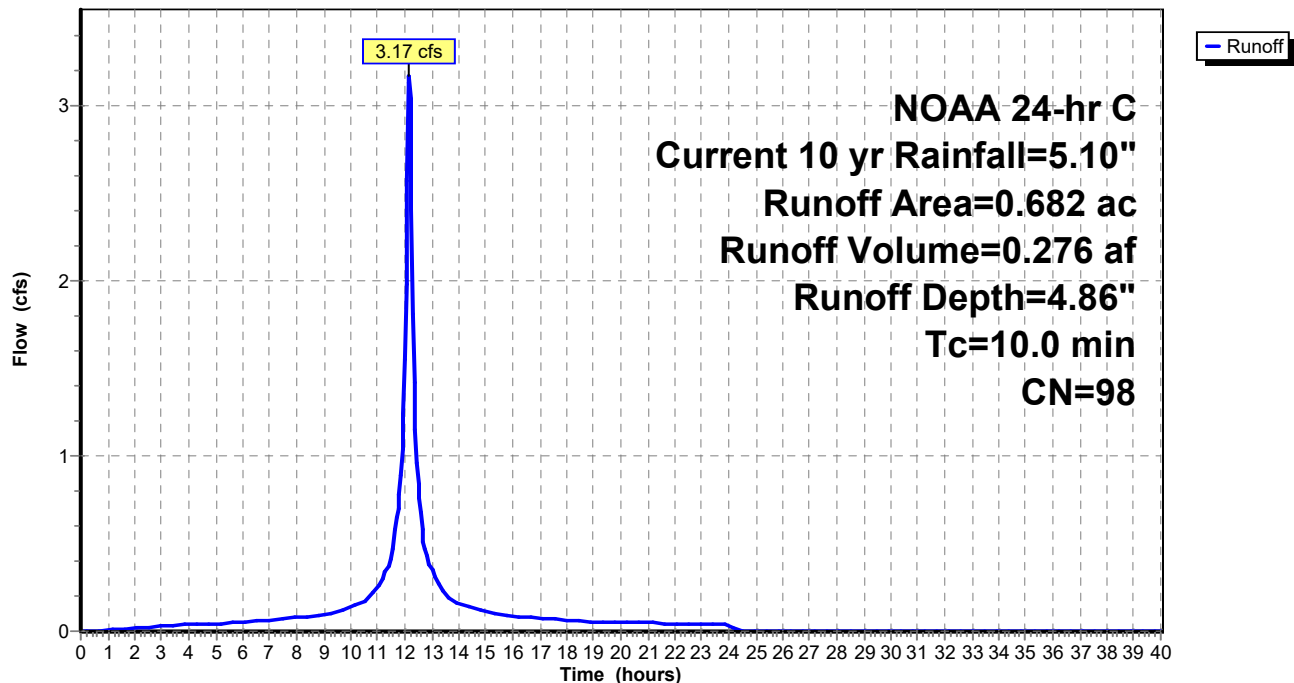
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
* 0.268	98	Pavement, HSG C
* 0.378	98	Roof, HSG C
* 0.036	98	Concrete, HSG C
0.682	98	Weighted Average
0.682		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 57I: PDA-57 (impervious)

Hydrograph



Summary for Subcatchment 57P: PDA-57 (pervious)

Runoff = 2.03 cfs @ 12.18 hrs, Volume= 0.153 af, Depth= 2.44"
 Routed to Pond B-57 : Basin #57

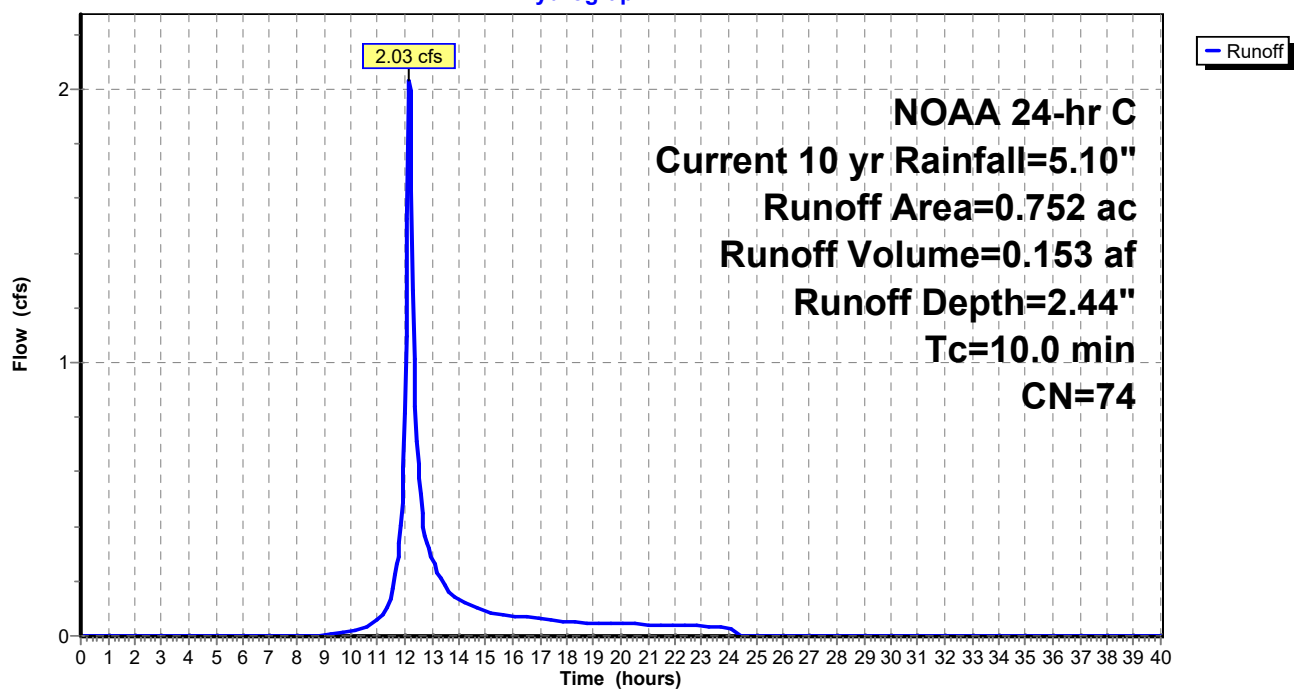
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.752	74	>75% Grass cover, Good, HSG C
0.752		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 57P: PDA-57 (pervious)

Hydrograph



Summary for Subcatchment 58I: PDA-58 (impervious)

Runoff = 2.05 cfs @ 12.17 hrs, Volume= 0.179 af, Depth= 4.86"
 Routed to Pond B-58 : Basin #58

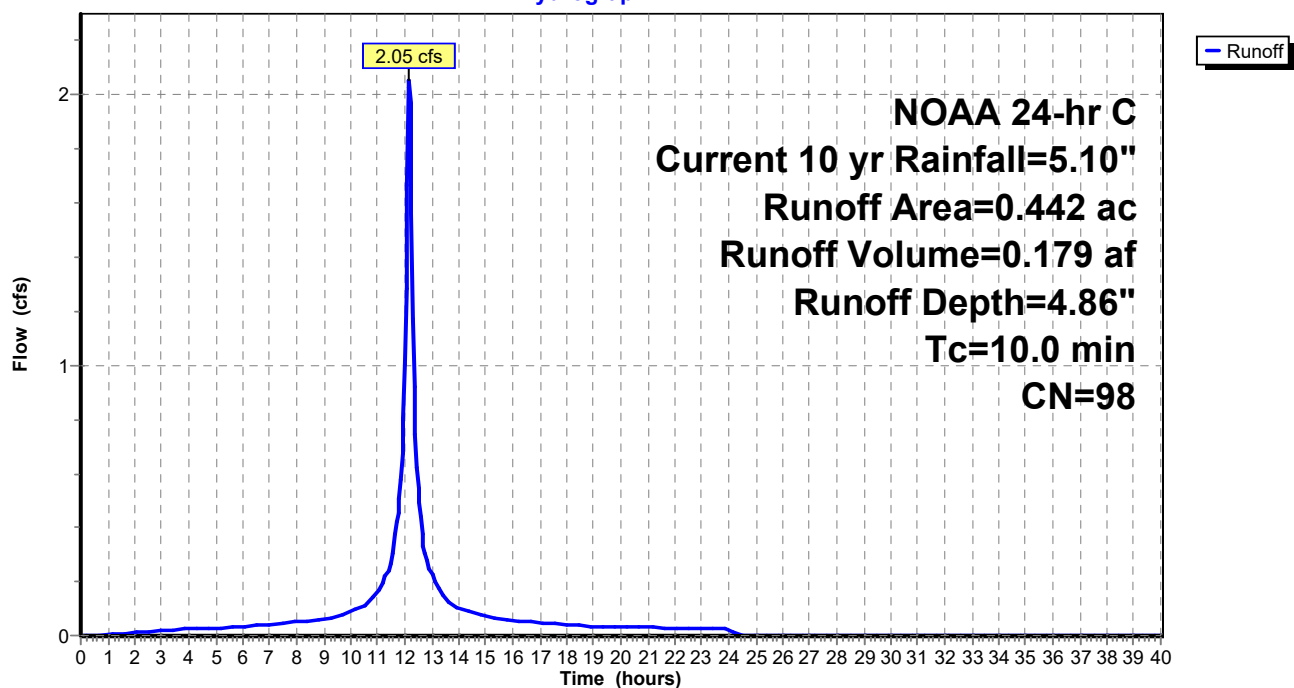
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
* 0.442	98	Roof, HSG C
* 0.000	98	Concrete, HSG C
0.442	98	Weighted Average
0.442		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 58I: PDA-58 (impervious)

Hydrograph



Summary for Subcatchment 58P: PDA-58 (pervious)

Runoff = 3.26 cfs @ 12.18 hrs, Volume= 0.246 af, Depth= 2.44"
 Routed to Pond B-58 : Basin #58

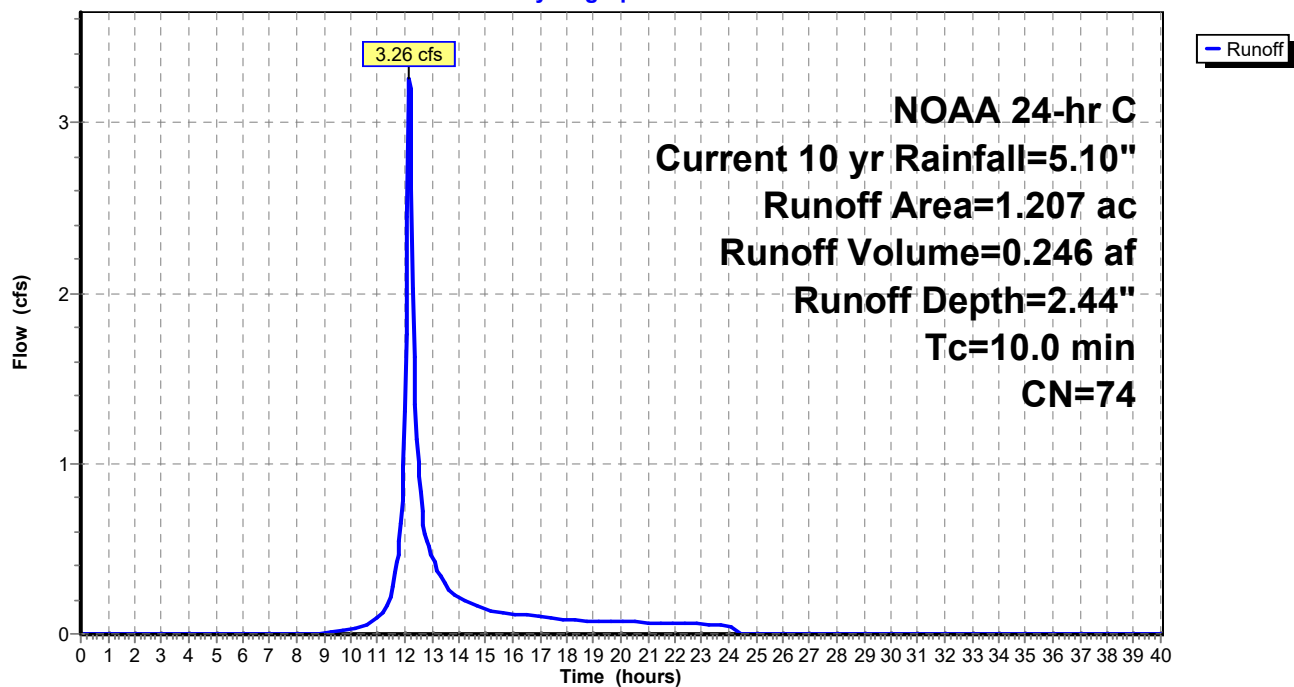
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.207	74	>75% Grass cover, Good, HSG C
1.207		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 58P: PDA-58 (pervious)

Hydrograph



Summary for Subcatchment UPDA-6: PDA-6 (undetained)

Runoff = 105.05 cfs @ 12.18 hrs, Volume= 7.924 af, Depth= 2.44"
 Routed to Link PDA-6 : Proposed Drainage Area #6

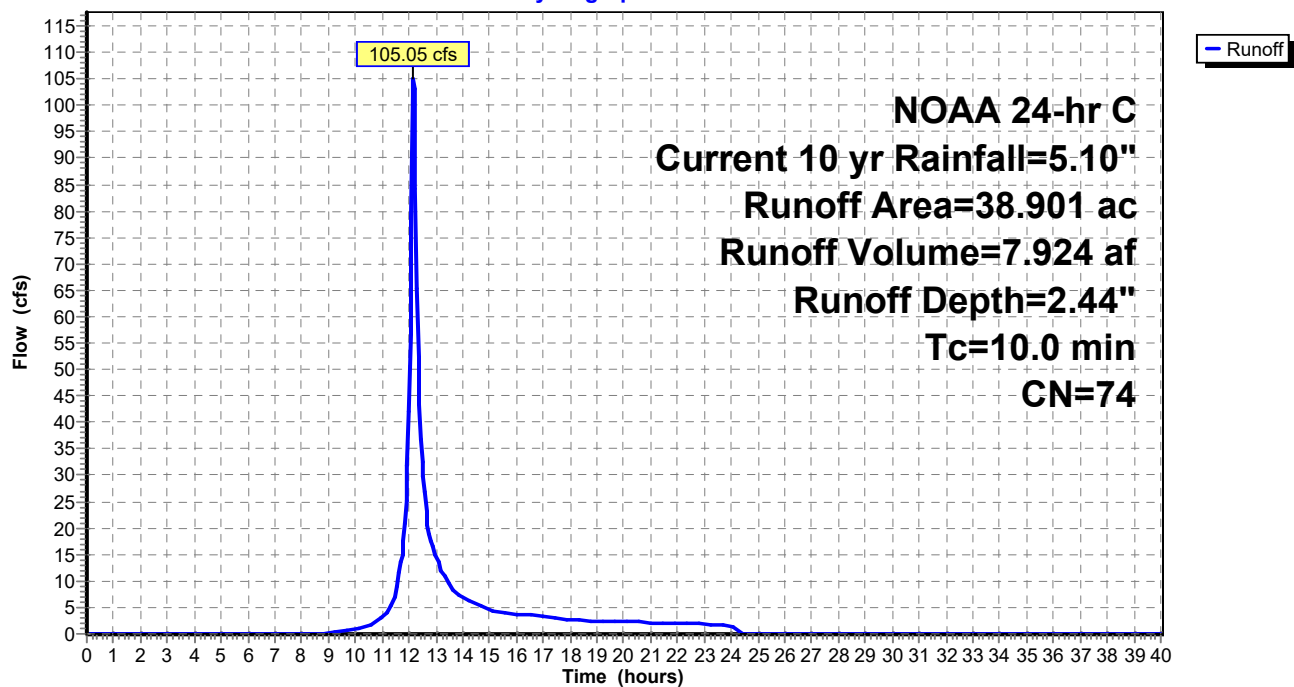
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
38.901	74	>75% Grass cover, Good, HSG C
38.901		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment UPDA-6: PDA-6 (undetained)

Hydrograph



Summary for Pond B-51: Basin #51

Inflow Area = 11.027 ac, 43.68% Impervious, Inflow Depth = 3.01" for Current 10 yr event
 Inflow = 24.49 cfs @ 12.28 hrs, Volume= 2.766 af
 Outflow = 20.04 cfs @ 12.41 hrs, Volume= 2.760 af, Atten= 18%, Lag= 7.8 min
 Primary = 20.04 cfs @ 12.41 hrs, Volume= 2.760 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 185.98' @ 12.41 hrs Surf.Area= 8,398 sf Storage= 13,430 cf

Plug-Flow detention time= 21.1 min calculated for 2.756 af (100% of inflow)
 Center-of-Mass det. time= 19.7 min (881.1 - 861.4)

Volume	Invert	Avail.Storage	Storage Description
#1	184.00'	58,347 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
184.00	5,243	0	0
185.00	6,727	5,985	5,985
186.00	8,424	7,576	13,561
187.00	10,085	9,255	22,815
188.00	11,802	10,944	33,759
189.00	13,576	12,689	46,448
189.83	15,098	11,900	58,347

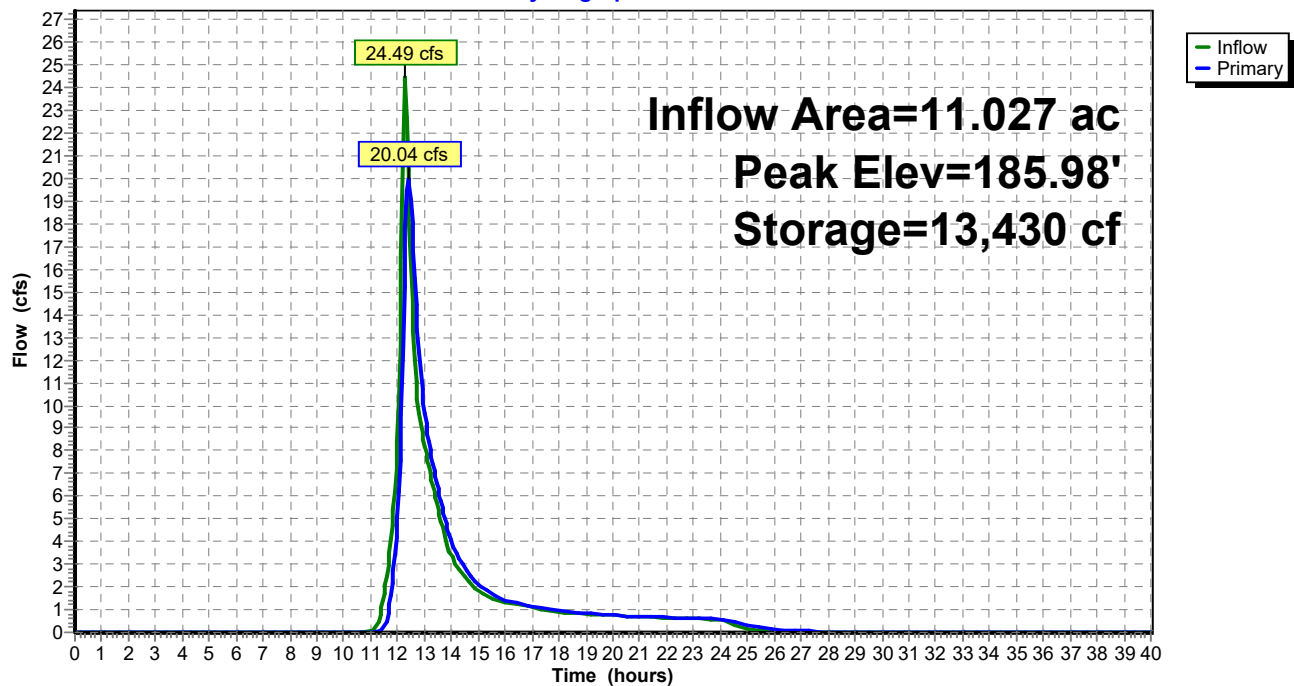
Device	Routing	Invert	Outlet Devices
#1	Primary	184.00'	30.0" Round Culvert L= 147.0' Ke= 0.500 Inlet / Outlet Invert= 184.00' / 182.00' S= 0.0136 '/' Cc= 0.900 n= 0.013, Flow Area= 4.91 sf
#2	Device 1	184.05'	48.0" W x 12.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	187.00'	8.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	189.80'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=19.97 cfs @ 12.41 hrs HW=185.98' (Free Discharge)

1=Culvert (Inlet Controls 19.97 cfs @ 4.79 fps)
 2=Orifice/Grate (Passes 19.97 cfs of 22.91 cfs potential flow)
 3=Sharp-Crested Rectangular Weir(Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs)

Pond B-51: Basin #51

Hydrograph



Stage-Discharge for Pond B-51: Basin #51

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
184.00	0.00	184.52	1.81	185.04	6.71	185.56	13.70
184.01	0.00	184.53	1.88	185.05	6.83	185.57	13.85
184.02	0.00	184.54	1.95	185.06	6.94	185.58	13.99
184.03	0.00	184.55	2.02	185.07	7.06	185.59	14.14
184.04	0.00	184.56	2.09	185.08	7.19	185.60	14.29
184.05	0.00	184.57	2.17	185.09	7.31	185.61	14.44
184.06	0.01	184.58	2.24	185.10	7.43	185.62	14.59
184.07	0.03	184.59	2.31	185.11	7.55	185.63	14.73
184.08	0.05	184.60	2.39	185.12	7.67	185.64	14.88
184.09	0.06	184.61	2.47	185.13	7.80	185.65	15.03
184.10	0.07	184.62	2.54	185.14	7.92	185.66	15.18
184.11	0.09	184.63	2.62	185.15	8.05	185.67	15.33
184.12	0.10	184.64	2.70	185.16	8.18	185.68	15.48
184.13	0.12	184.65	2.78	185.17	8.30	185.69	15.63
184.14	0.14	184.66	2.87	185.18	8.43	185.70	15.78
184.15	0.16	184.67	2.95	185.19	8.56	185.71	15.93
184.16	0.18	184.68	3.03	185.20	8.69	185.72	16.08
184.17	0.20	184.69	3.12	185.21	8.82	185.73	16.23
184.18	0.23	184.70	3.21	185.22	8.95	185.74	16.38
184.19	0.25	184.71	3.29	185.23	9.08	185.75	16.53
184.20	0.28	184.72	3.38	185.24	9.21	185.76	16.68
184.21	0.31	184.73	3.47	185.25	9.34	185.77	16.83
184.22	0.34	184.74	3.56	185.26	9.48	185.78	16.98
184.23	0.37	184.75	3.65	185.27	9.61	185.79	17.13
184.24	0.40	184.76	3.74	185.28	9.74	185.80	17.28
184.25	0.43	184.77	3.84	185.29	9.88	185.81	17.43
184.26	0.47	184.78	3.93	185.30	10.01	185.82	17.58
184.27	0.51	184.79	4.03	185.31	10.15	185.83	17.73
184.28	0.54	184.80	4.12	185.32	10.28	185.84	17.89
184.29	0.58	184.81	4.22	185.33	10.42	185.85	18.04
184.30	0.62	184.82	4.32	185.34	10.56	185.86	18.19
184.31	0.66	184.83	4.42	185.35	10.70	185.87	18.34
184.32	0.71	184.84	4.52	185.36	10.84	185.88	18.49
184.33	0.75	184.85	4.62	185.37	10.97	185.89	18.64
184.34	0.80	184.86	4.72	185.38	11.11	185.90	18.79
184.35	0.84	184.87	4.82	185.39	11.25	185.91	18.94
184.36	0.89	184.88	4.93	185.40	11.39	185.92	19.08
184.37	0.94	184.89	5.03	185.41	11.54	185.93	19.23
184.38	0.99	184.90	5.14	185.42	11.68	185.94	19.38
184.39	1.04	184.91	5.25	185.43	11.82	185.95	19.53
184.40	1.09	184.92	5.35	185.44	11.96	185.96	19.68
184.41	1.15	184.93	5.46	185.45	12.10	185.97	19.83
184.42	1.20	184.94	5.57	185.46	12.25	185.98	19.98
184.43	1.26	184.95	5.68	185.47	12.39	185.99	20.12
184.44	1.31	184.96	5.79	185.48	12.53	186.00	20.27
184.45	1.37	184.97	5.90	185.49	12.68	186.01	20.42
184.46	1.43	184.98	6.02	185.50	12.82	186.02	20.56
184.47	1.49	184.99	6.13	185.51	12.97	186.03	20.71
184.48	1.55	185.00	6.24	185.52	13.11	186.04	20.86
184.49	1.62	185.01	6.36	185.53	13.26	186.05	21.00
184.50	1.68	185.02	6.47	185.54	13.41	186.06	21.14
184.51	1.75	185.03	6.59	185.55	13.55	186.07	21.29

Stage-Discharge for Pond B-51: Basin #51 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.08	21.43	186.60	27.46	187.12	31.91	187.64	36.54
186.09	21.58	186.61	27.56	187.13	32.11	187.65	36.62
186.10	21.72	186.62	27.64	187.14	32.31	187.66	36.69
186.11	21.86	186.63	27.71	187.15	32.52	187.67	36.77
186.12	22.00	186.64	27.78	187.16	32.66	187.68	36.84
186.13	22.14	186.65	27.84	187.17	32.75	187.69	36.92
186.14	22.28	186.66	27.91	187.18	32.84	187.70	37.00
186.15	22.42	186.67	27.98	187.19	32.92	187.71	37.07
186.16	22.56	186.68	28.04	187.20	33.01	187.72	37.15
186.17	22.70	186.69	28.11	187.21	33.09	187.73	37.22
186.18	22.83	186.70	28.18	187.22	33.17	187.74	37.30
186.19	22.97	186.71	28.24	187.23	33.26	187.75	37.37
186.20	23.10	186.72	28.31	187.24	33.34	187.76	37.45
186.21	23.24	186.73	28.37	187.25	33.43	187.77	37.52
186.22	23.37	186.74	28.44	187.26	33.51	187.78	37.59
186.23	23.50	186.75	28.50	187.27	33.59	187.79	37.67
186.24	23.63	186.76	28.57	187.28	33.68	187.80	37.74
186.25	23.76	186.77	28.64	187.29	33.76	187.81	37.82
186.26	23.89	186.78	28.70	187.30	33.84	187.82	37.89
186.27	24.02	186.79	28.77	187.31	33.92	187.83	37.96
186.28	24.15	186.80	28.83	187.32	34.01	187.84	38.04
186.29	24.27	186.81	28.89	187.33	34.09	187.85	38.11
186.30	24.40	186.82	28.96	187.34	34.17	187.86	38.18
186.31	24.52	186.83	29.02	187.35	34.25	187.87	38.26
186.32	24.64	186.84	29.09	187.36	34.33	187.88	38.33
186.33	24.76	186.85	29.15	187.37	34.41	187.89	38.40
186.34	24.88	186.86	29.21	187.38	34.49	187.90	38.48
186.35	24.99	186.87	29.28	187.39	34.58	187.91	38.55
186.36	25.11	186.88	29.34	187.40	34.66	187.92	38.62
186.37	25.22	186.89	29.41	187.41	34.74	187.93	38.69
186.38	25.33	186.90	29.47	187.42	34.82	187.94	38.77
186.39	25.44	186.91	29.53	187.43	34.90	187.95	38.84
186.40	25.54	186.92	29.59	187.44	34.98	187.96	38.91
186.41	25.65	186.93	29.66	187.45	35.06	187.97	38.98
186.42	25.75	186.94	29.72	187.46	35.14	187.98	39.05
186.43	25.85	186.95	29.78	187.47	35.22	187.99	39.12
186.44	25.94	186.96	29.85	187.48	35.30	188.00	39.19
186.45	26.03	186.97	29.91	187.49	35.37	188.01	39.27
186.46	26.12	186.98	29.97	187.50	35.45	188.02	39.34
186.47	26.21	186.99	30.03	187.51	35.53	188.03	39.41
186.48	26.29	187.00	30.09	187.52	35.61	188.04	39.48
186.49	26.36	187.01	30.18	187.53	35.69	188.05	39.55
186.50	26.43	187.02	30.29	187.54	35.77	188.06	39.62
186.51	26.53	187.03	30.41	187.55	35.84	188.07	39.69
186.52	26.64	187.04	30.55	187.56	35.92	188.08	39.76
186.53	26.74	187.05	30.69	187.57	36.00	188.09	39.83
186.54	26.84	187.06	30.85	187.58	36.08	188.10	39.90
186.55	26.95	187.07	31.01	187.59	36.16	188.11	39.97
186.56	27.05	187.08	31.18	187.60	36.23	188.12	40.04
186.57	27.16	187.09	31.35	187.61	36.31	188.13	40.11
186.58	27.26	187.10	31.53	187.62	36.39	188.14	40.18
186.59	27.36	187.11	31.72	187.63	36.46	188.15	40.25

Stage-Discharge for Pond B-51: Basin #51 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
188.16	40.32	188.68	43.77	189.20	46.97	189.72	49.97
188.17	40.39	188.69	43.84	189.21	47.03	189.73	50.03
188.18	40.46	188.70	43.90	189.22	47.09	189.74	50.08
188.19	40.53	188.71	43.96	189.23	47.15	189.75	50.14
188.20	40.60	188.72	44.03	189.24	47.21	189.76	50.19
188.21	40.66	188.73	44.09	189.25	47.27	189.77	50.25
188.22	40.73	188.74	44.15	189.26	47.33	189.78	50.31
188.23	40.80	188.75	44.22	189.27	47.39	189.79	50.36
188.24	40.87	188.76	44.28	189.28	47.45	189.80	50.42
188.25	40.94	188.77	44.34	189.29	47.51	189.81	50.59
188.26	41.01	188.78	44.41	189.30	47.57	189.82	50.86
188.27	41.07	188.79	44.47	189.31	47.62	189.83	51.19
188.28	41.14	188.80	44.53	189.32	47.68		
188.29	41.21	188.81	44.60	189.33	47.74		
188.30	41.28	188.82	44.66	189.34	47.80		
188.31	41.35	188.83	44.72	189.35	47.86		
188.32	41.41	188.84	44.78	189.36	47.92		
188.33	41.48	188.85	44.85	189.37	47.97		
188.34	41.55	188.86	44.91	189.38	48.03		
188.35	41.61	188.87	44.97	189.39	48.09		
188.36	41.68	188.88	45.03	189.40	48.15		
188.37	41.75	188.89	45.09	189.41	48.21		
188.38	41.82	188.90	45.16	189.42	48.26		
188.39	41.88	188.91	45.22	189.43	48.32		
188.40	41.95	188.92	45.28	189.44	48.38		
188.41	42.02	188.93	45.34	189.45	48.44		
188.42	42.08	188.94	45.40	189.46	48.50		
188.43	42.15	188.95	45.46	189.47	48.55		
188.44	42.21	188.96	45.53	189.48	48.61		
188.45	42.28	188.97	45.59	189.49	48.67		
188.46	42.35	188.98	45.65	189.50	48.73		
188.47	42.41	188.99	45.71	189.51	48.78		
188.48	42.48	189.00	45.77	189.52	48.84		
188.49	42.54	189.01	45.83	189.53	48.90		
188.50	42.61	189.02	45.89	189.54	48.95		
188.51	42.67	189.03	45.95	189.55	49.01		
188.52	42.74	189.04	46.01	189.56	49.07		
188.53	42.81	189.05	46.07	189.57	49.13		
188.54	42.87	189.06	46.13	189.58	49.18		
188.55	42.94	189.07	46.20	189.59	49.24		
188.56	43.00	189.08	46.26	189.60	49.30		
188.57	43.07	189.09	46.32	189.61	49.35		
188.58	43.13	189.10	46.38	189.62	49.41		
188.59	43.20	189.11	46.44	189.63	49.47		
188.60	43.26	189.12	46.50	189.64	49.52		
188.61	43.32	189.13	46.56	189.65	49.58		
188.62	43.39	189.14	46.62	189.66	49.63		
188.63	43.45	189.15	46.68	189.67	49.69		
188.64	43.52	189.16	46.74	189.68	49.75		
188.65	43.58	189.17	46.80	189.69	49.80		
188.66	43.65	189.18	46.86	189.70	49.86		
188.67	43.71	189.19	46.92	189.71	49.92		

Stage-Area-Storage for Pond B-51: Basin #51

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.00	5,243	0	184.52	6,015	2,927
184.01	5,258	53	184.53	6,030	2,987
184.02	5,273	105	184.54	6,044	3,048
184.03	5,288	158	184.55	6,059	3,108
184.04	5,302	211	184.56	6,074	3,169
184.05	5,317	264	184.57	6,089	3,230
184.06	5,332	317	184.58	6,104	3,291
184.07	5,347	371	184.59	6,119	3,352
184.08	5,362	424	184.60	6,133	3,413
184.09	5,377	478	184.61	6,148	3,474
184.10	5,391	532	184.62	6,163	3,536
184.11	5,406	586	184.63	6,178	3,598
184.12	5,421	640	184.64	6,193	3,659
184.13	5,436	694	184.65	6,208	3,721
184.14	5,451	749	184.66	6,222	3,784
184.15	5,466	803	184.67	6,237	3,846
184.16	5,480	858	184.68	6,252	3,908
184.17	5,495	913	184.69	6,267	3,971
184.18	5,510	968	184.70	6,282	4,034
184.19	5,525	1,023	184.71	6,297	4,097
184.20	5,540	1,078	184.72	6,311	4,160
184.21	5,555	1,134	184.73	6,326	4,223
184.22	5,569	1,189	184.74	6,341	4,286
184.23	5,584	1,245	184.75	6,356	4,350
184.24	5,599	1,301	184.76	6,371	4,413
184.25	5,614	1,357	184.77	6,386	4,477
184.26	5,629	1,413	184.78	6,401	4,541
184.27	5,644	1,470	184.79	6,415	4,605
184.28	5,659	1,526	184.80	6,430	4,669
184.29	5,673	1,583	184.81	6,445	4,734
184.30	5,688	1,640	184.82	6,460	4,798
184.31	5,703	1,697	184.83	6,475	4,863
184.32	5,718	1,754	184.84	6,490	4,928
184.33	5,733	1,811	184.85	6,504	4,993
184.34	5,748	1,868	184.86	6,519	5,058
184.35	5,762	1,926	184.87	6,534	5,123
184.36	5,777	1,984	184.88	6,549	5,188
184.37	5,792	2,041	184.89	6,564	5,254
184.38	5,807	2,099	184.90	6,579	5,320
184.39	5,822	2,158	184.91	6,593	5,386
184.40	5,837	2,216	184.92	6,608	5,452
184.41	5,851	2,274	184.93	6,623	5,518
184.42	5,866	2,333	184.94	6,638	5,584
184.43	5,881	2,392	184.95	6,653	5,651
184.44	5,896	2,451	184.96	6,668	5,717
184.45	5,911	2,510	184.97	6,682	5,784
184.46	5,926	2,569	184.98	6,697	5,851
184.47	5,940	2,628	184.99	6,712	5,918
184.48	5,955	2,688	185.00	6,727	5,985
184.49	5,970	2,747	185.01	6,744	6,052
184.50	5,985	2,807	185.02	6,761	6,120
184.51	6,000	2,867	185.03	6,778	6,188

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.04	6,795	6,255	185.56	7,677	10,018
185.05	6,812	6,323	185.57	7,694	10,095
185.06	6,829	6,392	185.58	7,711	10,172
185.07	6,846	6,460	185.59	7,728	10,249
185.08	6,863	6,529	185.60	7,745	10,327
185.09	6,880	6,597	185.61	7,762	10,404
185.10	6,897	6,666	185.62	7,779	10,482
185.11	6,914	6,735	185.63	7,796	10,560
185.12	6,931	6,804	185.64	7,813	10,638
185.13	6,948	6,874	185.65	7,830	10,716
185.14	6,965	6,943	185.66	7,847	10,794
185.15	6,982	7,013	185.67	7,864	10,873
185.16	6,999	7,083	185.68	7,881	10,952
185.17	7,015	7,153	185.69	7,898	11,031
185.18	7,032	7,223	185.70	7,915	11,110
185.19	7,049	7,294	185.71	7,932	11,189
185.20	7,066	7,364	185.72	7,949	11,268
185.21	7,083	7,435	185.73	7,966	11,348
185.22	7,100	7,506	185.74	7,983	11,428
185.23	7,117	7,577	185.75	8,000	11,508
185.24	7,134	7,648	185.76	8,017	11,588
185.25	7,151	7,720	185.77	8,034	11,668
185.26	7,168	7,791	185.78	8,051	11,748
185.27	7,185	7,863	185.79	8,068	11,829
185.28	7,202	7,935	185.80	8,085	11,910
185.29	7,219	8,007	185.81	8,102	11,991
185.30	7,236	8,079	185.82	8,119	12,072
185.31	7,253	8,152	185.83	8,136	12,153
185.32	7,270	8,225	185.84	8,152	12,234
185.33	7,287	8,297	185.85	8,169	12,316
185.34	7,304	8,370	185.86	8,186	12,398
185.35	7,321	8,443	185.87	8,203	12,480
185.36	7,338	8,517	185.88	8,220	12,562
185.37	7,355	8,590	185.89	8,237	12,644
185.38	7,372	8,664	185.90	8,254	12,727
185.39	7,389	8,738	185.91	8,271	12,809
185.40	7,406	8,812	185.92	8,288	12,892
185.41	7,423	8,886	185.93	8,305	12,975
185.42	7,440	8,960	185.94	8,322	13,058
185.43	7,457	9,034	185.95	8,339	13,141
185.44	7,474	9,109	185.96	8,356	13,225
185.45	7,491	9,184	185.97	8,373	13,309
185.46	7,508	9,259	185.98	8,390	13,392
185.47	7,525	9,334	185.99	8,407	13,476
185.48	7,542	9,409	186.00	8,424	13,561
185.49	7,559	9,485	186.01	8,441	13,645
185.50	7,576	9,561	186.02	8,457	13,729
185.51	7,592	9,636	186.03	8,474	13,814
185.52	7,609	9,712	186.04	8,490	13,899
185.53	7,626	9,789	186.05	8,507	13,984
185.54	7,643	9,865	186.06	8,524	14,069
185.55	7,660	9,942	186.07	8,540	14,154

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.08	8,557	14,240	186.60	9,421	18,914
186.09	8,573	14,325	186.61	9,437	19,008
186.10	8,590	14,411	186.62	9,454	19,103
186.11	8,607	14,497	186.63	9,470	19,197
186.12	8,623	14,583	186.64	9,487	19,292
186.13	8,640	14,670	186.65	9,504	19,387
186.14	8,657	14,756	186.66	9,520	19,482
186.15	8,673	14,843	186.67	9,537	19,577
186.16	8,690	14,930	186.68	9,553	19,673
186.17	8,706	15,017	186.69	9,570	19,768
186.18	8,723	15,104	186.70	9,587	19,864
186.19	8,740	15,191	186.71	9,603	19,960
186.20	8,756	15,279	186.72	9,620	20,056
186.21	8,773	15,366	186.73	9,637	20,153
186.22	8,789	15,454	186.74	9,653	20,249
186.23	8,806	15,542	186.75	9,670	20,346
186.24	8,823	15,630	186.76	9,686	20,442
186.25	8,839	15,718	186.77	9,703	20,539
186.26	8,856	15,807	186.78	9,720	20,636
186.27	8,872	15,896	186.79	9,736	20,734
186.28	8,889	15,984	186.80	9,753	20,831
186.29	8,906	16,073	186.81	9,769	20,929
186.30	8,922	16,162	186.82	9,786	21,027
186.31	8,939	16,252	186.83	9,803	21,125
186.32	8,956	16,341	186.84	9,819	21,223
186.33	8,972	16,431	186.85	9,836	21,321
186.34	8,989	16,521	186.86	9,852	21,419
186.35	9,005	16,611	186.87	9,869	21,518
186.36	9,022	16,701	186.88	9,886	21,617
186.37	9,039	16,791	186.89	9,902	21,716
186.38	9,055	16,882	186.90	9,919	21,815
186.39	9,072	16,972	186.91	9,936	21,914
186.40	9,088	17,063	186.92	9,952	22,014
186.41	9,105	17,154	186.93	9,969	22,113
186.42	9,122	17,245	186.94	9,985	22,213
186.43	9,138	17,336	186.95	10,002	22,313
186.44	9,155	17,428	186.96	10,019	22,413
186.45	9,171	17,519	186.97	10,035	22,513
186.46	9,188	17,611	186.98	10,052	22,614
186.47	9,205	17,703	186.99	10,068	22,714
186.48	9,221	17,795	187.00	10,085	22,815
186.49	9,238	17,888	187.01	10,102	22,916
186.50	9,255	17,980	187.02	10,119	23,017
186.51	9,271	18,073	187.03	10,137	23,118
186.52	9,288	18,166	187.04	10,154	23,220
186.53	9,304	18,259	187.05	10,171	23,321
186.54	9,321	18,352	187.06	10,188	23,423
186.55	9,338	18,445	187.07	10,205	23,525
186.56	9,354	18,538	187.08	10,222	23,627
186.57	9,371	18,632	187.09	10,240	23,730
186.58	9,387	18,726	187.10	10,257	23,832
186.59	9,404	18,820	187.11	10,274	23,935

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.12	10,291	24,038	187.64	11,184	29,621
187.13	10,308	24,141	187.65	11,201	29,733
187.14	10,325	24,244	187.66	11,218	29,845
187.15	10,343	24,347	187.67	11,235	29,957
187.16	10,360	24,451	187.68	11,253	30,070
187.17	10,377	24,554	187.69	11,270	30,182
187.18	10,394	24,658	187.70	11,287	30,295
187.19	10,411	24,762	187.71	11,304	30,408
187.20	10,428	24,866	187.72	11,321	30,521
187.21	10,446	24,971	187.73	11,338	30,635
187.22	10,463	25,075	187.74	11,356	30,748
187.23	10,480	25,180	187.75	11,373	30,862
187.24	10,497	25,285	187.76	11,390	30,975
187.25	10,514	25,390	187.77	11,407	31,089
187.26	10,531	25,495	187.78	11,424	31,204
187.27	10,549	25,601	187.79	11,441	31,318
187.28	10,566	25,706	187.80	11,459	31,432
187.29	10,583	25,812	187.81	11,476	31,547
187.30	10,600	25,918	187.82	11,493	31,662
187.31	10,617	26,024	187.83	11,510	31,777
187.32	10,634	26,130	187.84	11,527	31,892
187.33	10,652	26,237	187.85	11,544	32,008
187.34	10,669	26,343	187.86	11,562	32,123
187.35	10,686	26,450	187.87	11,579	32,239
187.36	10,703	26,557	187.88	11,596	32,355
187.37	10,720	26,664	187.89	11,613	32,471
187.38	10,737	26,771	187.90	11,630	32,587
187.39	10,755	26,879	187.91	11,647	32,703
187.40	10,772	26,986	187.92	11,665	32,820
187.41	10,789	27,094	187.93	11,682	32,937
187.42	10,806	27,202	187.94	11,699	33,053
187.43	10,823	27,310	187.95	11,716	33,171
187.44	10,840	27,419	187.96	11,733	33,288
187.45	10,858	27,527	187.97	11,750	33,405
187.46	10,875	27,636	187.98	11,768	33,523
187.47	10,892	27,745	187.99	11,785	33,641
187.48	10,909	27,854	188.00	11,802	33,759
187.49	10,926	27,963	188.01	11,820	33,877
187.50	10,944	28,072	188.02	11,837	33,995
187.51	10,961	28,182	188.03	11,855	34,113
187.52	10,978	28,291	188.04	11,873	34,232
187.53	10,995	28,401	188.05	11,891	34,351
187.54	11,012	28,511	188.06	11,908	34,470
187.55	11,029	28,621	188.07	11,926	34,589
187.56	11,047	28,732	188.08	11,944	34,708
187.57	11,064	28,842	188.09	11,962	34,828
187.58	11,081	28,953	188.10	11,979	34,948
187.59	11,098	29,064	188.11	11,997	35,067
187.60	11,115	29,175	188.12	12,015	35,188
187.61	11,132	29,286	188.13	12,033	35,308
187.62	11,150	29,398	188.14	12,050	35,428
187.63	11,167	29,509	188.15	12,068	35,549

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.16	12,086	35,670	188.68	13,008	42,194
188.17	12,104	35,790	188.69	13,026	42,324
188.18	12,121	35,912	188.70	13,044	42,455
188.19	12,139	36,033	188.71	13,062	42,585
188.20	12,157	36,154	188.72	13,079	42,716
188.21	12,175	36,276	188.73	13,097	42,847
188.22	12,192	36,398	188.74	13,115	42,978
188.23	12,210	36,520	188.75	13,133	43,109
188.24	12,228	36,642	188.76	13,150	43,240
188.25	12,246	36,764	188.77	13,168	43,372
188.26	12,263	36,887	188.78	13,186	43,504
188.27	12,281	37,010	188.79	13,203	43,636
188.28	12,299	37,133	188.80	13,221	43,768
188.29	12,316	37,256	188.81	13,239	43,900
188.30	12,334	37,379	188.82	13,257	44,033
188.31	12,352	37,502	188.83	13,274	44,165
188.32	12,370	37,626	188.84	13,292	44,298
188.33	12,387	37,750	188.85	13,310	44,431
188.34	12,405	37,874	188.86	13,328	44,564
188.35	12,423	37,998	188.87	13,345	44,698
188.36	12,441	38,122	188.88	13,363	44,831
188.37	12,458	38,247	188.89	13,381	44,965
188.38	12,476	38,371	188.90	13,399	45,099
188.39	12,494	38,496	188.91	13,416	45,233
188.40	12,512	38,621	188.92	13,434	45,367
188.41	12,529	38,746	188.93	13,452	45,502
188.42	12,547	38,872	188.94	13,470	45,636
188.43	12,565	38,997	188.95	13,487	45,771
188.44	12,583	39,123	188.96	13,505	45,906
188.45	12,600	39,249	188.97	13,523	46,041
188.46	12,618	39,375	188.98	13,541	46,176
188.47	12,636	39,501	188.99	13,558	46,312
188.48	12,654	39,628	189.00	13,576	46,448
188.49	12,671	39,754	189.01	13,594	46,583
188.50	12,689	39,881	189.02	13,613	46,719
188.51	12,707	40,008	189.03	13,631	46,856
188.52	12,724	40,135	189.04	13,649	46,992
188.53	12,742	40,263	189.05	13,668	47,129
188.54	12,760	40,390	189.06	13,686	47,265
188.55	12,778	40,518	189.07	13,704	47,402
188.56	12,795	40,646	189.08	13,723	47,539
188.57	12,813	40,774	189.09	13,741	47,677
188.58	12,831	40,902	189.10	13,759	47,814
188.59	12,849	41,030	189.11	13,778	47,952
188.60	12,866	41,159	189.12	13,796	48,090
188.61	12,884	41,288	189.13	13,814	48,228
188.62	12,902	41,417	189.14	13,833	48,366
188.63	12,920	41,546	189.15	13,851	48,505
188.64	12,937	41,675	189.16	13,869	48,643
188.65	12,955	41,805	189.17	13,888	48,782
188.66	12,973	41,934	189.18	13,906	48,921
188.67	12,991	42,064	189.19	13,924	49,060

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.20	13,943	49,199	189.72	14,896	56,698
189.21	13,961	49,339	189.73	14,915	56,847
189.22	13,979	49,479	189.74	14,933	56,996
189.23	13,998	49,618	189.75	14,951	57,145
189.24	14,016	49,759	189.76	14,970	57,295
189.25	14,034	49,899	189.77	14,988	57,445
189.26	14,053	50,039	189.78	15,006	57,595
189.27	14,071	50,180	189.79	15,025	57,745
189.28	14,089	50,321	189.80	15,043	57,895
189.29	14,108	50,462	189.81	15,061	58,046
189.30	14,126	50,603	189.82	15,080	58,196
189.31	14,144	50,744	189.83	15,098	58,347
189.32	14,163	50,886			
189.33	14,181	51,027			
189.34	14,199	51,169			
189.35	14,218	51,311			
189.36	14,236	51,454			
189.37	14,254	51,596			
189.38	14,273	51,739			
189.39	14,291	51,882			
189.40	14,309	52,025			
189.41	14,328	52,168			
189.42	14,346	52,311			
189.43	14,365	52,455			
189.44	14,383	52,598			
189.45	14,401	52,742			
189.46	14,420	52,886			
189.47	14,438	53,031			
189.48	14,456	53,175			
189.49	14,475	53,320			
189.50	14,493	53,465			
189.51	14,511	53,610			
189.52	14,530	53,755			
189.53	14,548	53,900			
189.54	14,566	54,046			
189.55	14,585	54,192			
189.56	14,603	54,338			
189.57	14,621	54,484			
189.58	14,640	54,630			
189.59	14,658	54,777			
189.60	14,676	54,923			
189.61	14,695	55,070			
189.62	14,713	55,217			
189.63	14,731	55,364			
189.64	14,750	55,512			
189.65	14,768	55,659			
189.66	14,786	55,807			
189.67	14,805	55,955			
189.68	14,823	56,103			
189.69	14,841	56,251			
189.70	14,860	56,400			
189.71	14,878	56,549			

Summary for Pond B-52: Basin #52

Inflow Area = 1.423 ac, 34.43% Impervious, Inflow Depth = 3.28" for Current 10 yr event
 Inflow = 4.79 cfs @ 12.17 hrs, Volume= 0.389 af
 Outflow = 4.24 cfs @ 12.23 hrs, Volume= 0.341 af, Atten= 11%, Lag= 3.2 min
 Primary = 4.24 cfs @ 12.23 hrs, Volume= 0.341 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 195.69' @ 12.23 hrs Surf.Area= 1,945 sf Storage= 3,167 cf

Plug-Flow detention time= 108.2 min calculated for 0.340 af (88% of inflow)
 Center-of-Mass det. time= 47.8 min (844.7 - 796.9)

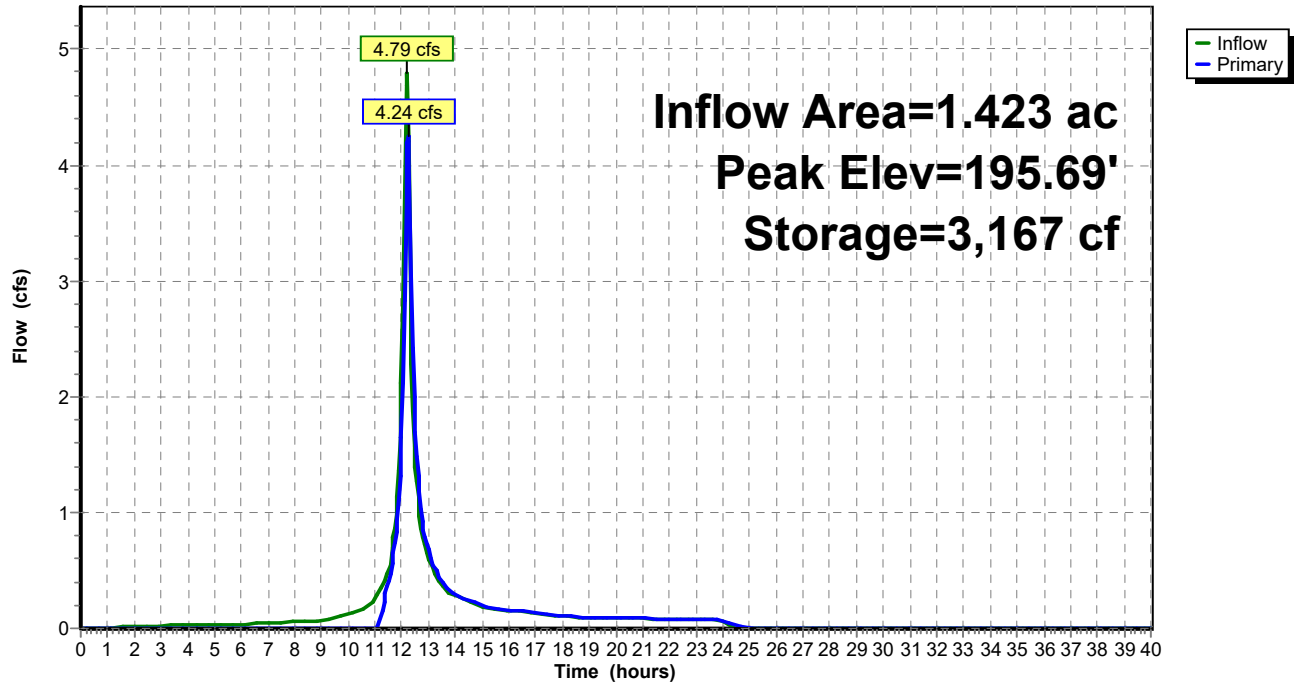
Volume	Invert	Avail.Storage	Storage Description
#1	193.00'	7,751 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
193.00	474	0	0
194.00	970	722	722
195.00	1,523	1,247	1,969
196.00	2,133	1,828	3,797
197.00	2,799	2,466	6,263
197.50	3,154	1,488	7,751

Device	Routing	Invert	Outlet Devices
#1	Primary	192.00'	15.0" Round Culvert L= 163.0' Ke= 0.500 Inlet / Outlet Invert= 192.00' / 191.00' S= 0.0061 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	195.08'	36.0" W x 6.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	195.72'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	197.25'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.19 cfs @ 12.23 hrs HW=195.68' (Free Discharge)

1=Culvert (Passes 4.19 cfs of 7.93 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 4.19 cfs @ 2.79 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-52: Basin #52**Hydrograph**

Stage-Discharge for Pond B-52: Basin #52

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.00	0.00	193.52	0.00	194.04	0.00	194.56	0.00
193.01	0.00	193.53	0.00	194.05	0.00	194.57	0.00
193.02	0.00	193.54	0.00	194.06	0.00	194.58	0.00
193.03	0.00	193.55	0.00	194.07	0.00	194.59	0.00
193.04	0.00	193.56	0.00	194.08	0.00	194.60	0.00
193.05	0.00	193.57	0.00	194.09	0.00	194.61	0.00
193.06	0.00	193.58	0.00	194.10	0.00	194.62	0.00
193.07	0.00	193.59	0.00	194.11	0.00	194.63	0.00
193.08	0.00	193.60	0.00	194.12	0.00	194.64	0.00
193.09	0.00	193.61	0.00	194.13	0.00	194.65	0.00
193.10	0.00	193.62	0.00	194.14	0.00	194.66	0.00
193.11	0.00	193.63	0.00	194.15	0.00	194.67	0.00
193.12	0.00	193.64	0.00	194.16	0.00	194.68	0.00
193.13	0.00	193.65	0.00	194.17	0.00	194.69	0.00
193.14	0.00	193.66	0.00	194.18	0.00	194.70	0.00
193.15	0.00	193.67	0.00	194.19	0.00	194.71	0.00
193.16	0.00	193.68	0.00	194.20	0.00	194.72	0.00
193.17	0.00	193.69	0.00	194.21	0.00	194.73	0.00
193.18	0.00	193.70	0.00	194.22	0.00	194.74	0.00
193.19	0.00	193.71	0.00	194.23	0.00	194.75	0.00
193.20	0.00	193.72	0.00	194.24	0.00	194.76	0.00
193.21	0.00	193.73	0.00	194.25	0.00	194.77	0.00
193.22	0.00	193.74	0.00	194.26	0.00	194.78	0.00
193.23	0.00	193.75	0.00	194.27	0.00	194.79	0.00
193.24	0.00	193.76	0.00	194.28	0.00	194.80	0.00
193.25	0.00	193.77	0.00	194.29	0.00	194.81	0.00
193.26	0.00	193.78	0.00	194.30	0.00	194.82	0.00
193.27	0.00	193.79	0.00	194.31	0.00	194.83	0.00
193.28	0.00	193.80	0.00	194.32	0.00	194.84	0.00
193.29	0.00	193.81	0.00	194.33	0.00	194.85	0.00
193.30	0.00	193.82	0.00	194.34	0.00	194.86	0.00
193.31	0.00	193.83	0.00	194.35	0.00	194.87	0.00
193.32	0.00	193.84	0.00	194.36	0.00	194.88	0.00
193.33	0.00	193.85	0.00	194.37	0.00	194.89	0.00
193.34	0.00	193.86	0.00	194.38	0.00	194.90	0.00
193.35	0.00	193.87	0.00	194.39	0.00	194.91	0.00
193.36	0.00	193.88	0.00	194.40	0.00	194.92	0.00
193.37	0.00	193.89	0.00	194.41	0.00	194.93	0.00
193.38	0.00	193.90	0.00	194.42	0.00	194.94	0.00
193.39	0.00	193.91	0.00	194.43	0.00	194.95	0.00
193.40	0.00	193.92	0.00	194.44	0.00	194.96	0.00
193.41	0.00	193.93	0.00	194.45	0.00	194.97	0.00
193.42	0.00	193.94	0.00	194.46	0.00	194.98	0.00
193.43	0.00	193.95	0.00	194.47	0.00	194.99	0.00
193.44	0.00	193.96	0.00	194.48	0.00	195.00	0.00
193.45	0.00	193.97	0.00	194.49	0.00	195.01	0.00
193.46	0.00	193.98	0.00	194.50	0.00	195.02	0.00
193.47	0.00	193.99	0.00	194.51	0.00	195.03	0.00
193.48	0.00	194.00	0.00	194.52	0.00	195.04	0.00
193.49	0.00	194.01	0.00	194.53	0.00	195.05	0.00
193.50	0.00	194.02	0.00	194.54	0.00	195.06	0.00
193.51	0.00	194.03	0.00	194.55	0.00	195.07	0.00

Stage-Discharge for Pond B-52: Basin #52 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
195.08	0.00	195.60	3.58	196.12	8.41	196.64	8.96
195.09	0.01	195.61	3.67	196.13	8.43	196.65	8.97
195.10	0.03	195.62	3.74	196.14	8.44	196.66	8.98
195.11	0.05	195.63	3.82	196.15	8.45	196.67	8.99
195.12	0.08	195.64	3.89	196.16	8.46	196.68	9.00
195.13	0.11	195.65	3.97	196.17	8.47	196.69	9.01
195.14	0.14	195.66	4.04	196.18	8.48	196.70	9.02
195.15	0.18	195.67	4.10	196.19	8.49	196.71	9.03
195.16	0.22	195.68	4.17	196.20	8.50	196.72	9.04
195.17	0.26	195.69	4.24	196.21	8.51	196.73	9.05
195.18	0.30	195.70	4.30	196.22	8.52	196.74	9.06
195.19	0.35	195.71	4.36	196.23	8.53	196.75	9.07
195.20	0.40	195.72	4.43	196.24	8.54	196.76	9.08
195.21	0.45	195.73	4.50	196.25	8.55	196.77	9.09
195.22	0.50	195.74	4.58	196.26	8.57	196.78	9.10
195.23	0.56	195.75	4.67	196.27	8.58	196.79	9.11
195.24	0.62	195.76	4.77	196.28	8.59	196.80	9.12
195.25	0.67	195.77	4.87	196.29	8.60	196.81	9.13
195.26	0.74	195.78	4.97	196.30	8.61	196.82	9.14
195.27	0.80	195.79	5.08	196.31	8.62	196.83	9.15
195.28	0.86	195.80	5.18	196.32	8.63	196.84	9.16
195.29	0.93	195.81	5.30	196.33	8.64	196.85	9.17
195.30	0.99	195.82	5.41	196.34	8.65	196.86	9.18
195.31	1.06	195.83	5.53	196.35	8.66	196.87	9.19
195.32	1.13	195.84	5.64	196.36	8.67	196.88	9.20
195.33	1.20	195.85	5.76	196.37	8.68	196.89	9.21
195.34	1.28	195.86	5.89	196.38	8.69	196.90	9.22
195.35	1.35	195.87	6.01	196.39	8.70	196.91	9.23
195.36	1.43	195.88	6.14	196.40	8.71	196.92	9.24
195.37	1.50	195.89	6.27	196.41	8.72	196.93	9.25
195.38	1.58	195.90	6.40	196.42	8.73	196.94	9.26
195.39	1.66	195.91	6.53	196.43	8.75	196.95	9.27
195.40	1.74	195.92	6.66	196.44	8.76	196.96	9.28
195.41	1.83	195.93	6.80	196.45	8.77	196.97	9.29
195.42	1.91	195.94	6.93	196.46	8.78	196.98	9.30
195.43	1.99	195.95	7.07	196.47	8.79	196.99	9.31
195.44	2.08	195.96	7.21	196.48	8.80	197.00	9.32
195.45	2.17	195.97	7.35	196.49	8.81	197.01	9.33
195.46	2.26	195.98	7.50	196.50	8.82	197.02	9.34
195.47	2.35	195.99	7.64	196.51	8.83	197.03	9.35
195.48	2.44	196.00	7.79	196.52	8.84	197.04	9.36
195.49	2.53	196.01	7.93	196.53	8.85	197.05	9.37
195.50	2.62	196.02	8.08	196.54	8.86	197.06	9.38
195.51	2.72	196.03	8.23	196.55	8.87	197.07	9.39
195.52	2.81	196.04	8.33	196.56	8.88	197.08	9.40
195.53	2.91	196.05	8.34	196.57	8.89	197.09	9.41
195.54	3.00	196.06	8.35	196.58	8.90	197.10	9.42
195.55	3.10	196.07	8.36	196.59	8.91	197.11	9.43
195.56	3.20	196.08	8.37	196.60	8.92	197.12	9.44
195.57	3.30	196.09	8.38	196.61	8.93	197.13	9.45
195.58	3.40	196.10	8.39	196.62	8.94	197.14	9.46
195.59	3.50	196.11	8.40	196.63	8.95	197.15	9.47

Stage-Discharge for Pond B-52: Basin #52 (continued)

Elevation (feet)	Primary (cfs)
197.16	9.48
197.17	9.49
197.18	9.50
197.19	9.51
197.20	9.52
197.21	9.53
197.22	9.54
197.23	9.55
197.24	9.55
197.25	9.56
197.26	9.69
197.27	9.91
197.28	10.20
197.29	10.54
197.30	10.92
197.31	11.35
197.32	11.81
197.33	12.30
197.34	12.82
197.35	13.38
197.36	13.96
197.37	14.57
197.38	15.21
197.39	15.87
197.40	16.55
197.41	17.26
197.42	17.99
197.43	18.75
197.44	19.52
197.45	20.32
197.46	21.17
197.47	22.06
197.48	22.96
197.49	23.90
197.50	24.85

Stage-Area-Storage for Pond B-52: Basin #52

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.00	474	0	193.52	732	314
193.01	479	5	193.53	737	321
193.02	484	10	193.54	742	328
193.03	489	14	193.55	747	336
193.04	494	19	193.56	752	343
193.05	499	24	193.57	757	351
193.06	504	29	193.58	762	358
193.07	509	34	193.59	767	366
193.08	514	40	193.60	772	374
193.09	519	45	193.61	777	381
193.10	524	50	193.62	782	389
193.11	529	55	193.63	786	397
193.12	534	60	193.64	791	405
193.13	538	66	193.65	796	413
193.14	543	71	193.66	801	421
193.15	548	77	193.67	806	429
193.16	553	82	193.68	811	437
193.17	558	88	193.69	816	445
193.18	563	93	193.70	821	453
193.19	568	99	193.71	826	462
193.20	573	105	193.72	831	470
193.21	578	110	193.73	836	478
193.22	583	116	193.74	841	487
193.23	588	122	193.75	846	495
193.24	593	128	193.76	851	503
193.25	598	134	193.77	856	512
193.26	603	140	193.78	861	521
193.27	608	146	193.79	866	529
193.28	613	152	193.80	871	538
193.29	618	158	193.81	876	547
193.30	623	165	193.82	881	555
193.31	628	171	193.83	886	564
193.32	633	177	193.84	891	573
193.33	638	183	193.85	896	582
193.34	643	190	193.86	901	591
193.35	648	196	193.87	906	600
193.36	653	203	193.88	910	609
193.37	658	209	193.89	915	618
193.38	662	216	193.90	920	627
193.39	667	223	193.91	925	637
193.40	672	229	193.92	930	646
193.41	677	236	193.93	935	655
193.42	682	243	193.94	940	665
193.43	687	250	193.95	945	674
193.44	692	257	193.96	950	684
193.45	697	264	193.97	955	693
193.46	702	271	193.98	960	703
193.47	707	278	193.99	965	712
193.48	712	285	194.00	970	722
193.49	717	292	194.01	976	732
193.50	722	299	194.02	981	742
193.51	727	306	194.03	987	751

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.04	992	761	194.56	1,280	1,352
194.05	998	771	194.57	1,285	1,365
194.06	1,003	781	194.58	1,291	1,378
194.07	1,009	791	194.59	1,296	1,391
194.08	1,014	801	194.60	1,302	1,404
194.09	1,020	812	194.61	1,307	1,417
194.10	1,025	822	194.62	1,313	1,430
194.11	1,031	832	194.63	1,318	1,443
194.12	1,036	842	194.64	1,324	1,456
194.13	1,042	853	194.65	1,329	1,469
194.14	1,047	863	194.66	1,335	1,483
194.15	1,053	874	194.67	1,341	1,496
194.16	1,058	884	194.68	1,346	1,509
194.17	1,064	895	194.69	1,352	1,523
194.18	1,070	906	194.70	1,357	1,536
194.19	1,075	916	194.71	1,363	1,550
194.20	1,081	927	194.72	1,368	1,564
194.21	1,086	938	194.73	1,374	1,577
194.22	1,092	949	194.74	1,379	1,591
194.23	1,097	960	194.75	1,385	1,605
194.24	1,103	971	194.76	1,390	1,619
194.25	1,108	982	194.77	1,396	1,633
194.26	1,114	993	194.78	1,401	1,647
194.27	1,119	1,004	194.79	1,407	1,661
194.28	1,125	1,015	194.80	1,412	1,675
194.29	1,130	1,027	194.81	1,418	1,689
194.30	1,136	1,038	194.82	1,423	1,703
194.31	1,141	1,049	194.83	1,429	1,718
194.32	1,147	1,061	194.84	1,435	1,732
194.33	1,152	1,072	194.85	1,440	1,746
194.34	1,158	1,084	194.86	1,446	1,761
194.35	1,164	1,095	194.87	1,451	1,775
194.36	1,169	1,107	194.88	1,457	1,790
194.37	1,175	1,119	194.89	1,462	1,804
194.38	1,180	1,131	194.90	1,468	1,819
194.39	1,186	1,142	194.91	1,473	1,834
194.40	1,191	1,154	194.92	1,479	1,848
194.41	1,197	1,166	194.93	1,484	1,863
194.42	1,202	1,178	194.94	1,490	1,878
194.43	1,208	1,190	194.95	1,495	1,893
194.44	1,213	1,202	194.96	1,501	1,908
194.45	1,219	1,214	194.97	1,506	1,923
194.46	1,224	1,227	194.98	1,512	1,938
194.47	1,230	1,239	194.99	1,517	1,953
194.48	1,235	1,251	195.00	1,523	1,969
194.49	1,241	1,264	195.01	1,529	1,984
194.50	1,247	1,276	195.02	1,535	1,999
194.51	1,252	1,289	195.03	1,541	2,014
194.52	1,258	1,301	195.04	1,547	2,030
194.53	1,263	1,314	195.05	1,554	2,045
194.54	1,269	1,326	195.06	1,560	2,061
194.55	1,274	1,339	195.07	1,566	2,077

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.08	1,572	2,092	195.60	1,889	2,992
195.09	1,578	2,108	195.61	1,895	3,011
195.10	1,584	2,124	195.62	1,901	3,030
195.11	1,590	2,140	195.63	1,907	3,049
195.12	1,596	2,156	195.64	1,913	3,068
195.13	1,602	2,172	195.65	1,920	3,087
195.14	1,608	2,188	195.66	1,926	3,107
195.15	1,615	2,204	195.67	1,932	3,126
195.16	1,621	2,220	195.68	1,938	3,145
195.17	1,627	2,236	195.69	1,944	3,165
195.18	1,633	2,253	195.70	1,950	3,184
195.19	1,639	2,269	195.71	1,956	3,204
195.20	1,645	2,285	195.72	1,962	3,223
195.21	1,651	2,302	195.73	1,968	3,243
195.22	1,657	2,318	195.74	1,974	3,263
195.23	1,663	2,335	195.75	1,981	3,282
195.24	1,669	2,352	195.76	1,987	3,302
195.25	1,676	2,368	195.77	1,993	3,322
195.26	1,682	2,385	195.78	1,999	3,342
195.27	1,688	2,402	195.79	2,005	3,362
195.28	1,694	2,419	195.80	2,011	3,382
195.29	1,700	2,436	195.81	2,017	3,402
195.30	1,706	2,453	195.82	2,023	3,422
195.31	1,712	2,470	195.83	2,029	3,443
195.32	1,718	2,487	195.84	2,035	3,463
195.33	1,724	2,504	195.85	2,041	3,483
195.34	1,730	2,522	195.86	2,048	3,504
195.35	1,736	2,539	195.87	2,054	3,524
195.36	1,743	2,556	195.88	2,060	3,545
195.37	1,749	2,574	195.89	2,066	3,566
195.38	1,755	2,591	195.90	2,072	3,586
195.39	1,761	2,609	195.91	2,078	3,607
195.40	1,767	2,627	195.92	2,084	3,628
195.41	1,773	2,644	195.93	2,090	3,649
195.42	1,779	2,662	195.94	2,096	3,670
195.43	1,785	2,680	195.95	2,102	3,691
195.44	1,791	2,698	195.96	2,109	3,712
195.45	1,797	2,716	195.97	2,115	3,733
195.46	1,804	2,734	195.98	2,121	3,754
195.47	1,810	2,752	195.99	2,127	3,775
195.48	1,816	2,770	196.00	2,133	3,797
195.49	1,822	2,788	196.01	2,140	3,818
195.50	1,828	2,806	196.02	2,146	3,839
195.51	1,834	2,825	196.03	2,153	3,861
195.52	1,840	2,843	196.04	2,160	3,882
195.53	1,846	2,861	196.05	2,166	3,904
195.54	1,852	2,880	196.06	2,173	3,926
195.55	1,859	2,898	196.07	2,180	3,947
195.56	1,865	2,917	196.08	2,186	3,969
195.57	1,871	2,936	196.09	2,193	3,991
195.58	1,877	2,954	196.10	2,200	4,013
195.59	1,883	2,973	196.11	2,206	4,035

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.12	2,213	4,057	196.64	2,559	5,298
196.13	2,220	4,079	196.65	2,566	5,324
196.14	2,226	4,102	196.66	2,573	5,349
196.15	2,233	4,124	196.67	2,579	5,375
196.16	2,240	4,146	196.68	2,586	5,401
196.17	2,246	4,169	196.69	2,593	5,427
196.18	2,253	4,191	196.70	2,599	5,453
196.19	2,260	4,214	196.71	2,606	5,479
196.20	2,266	4,236	196.72	2,613	5,505
196.21	2,273	4,259	196.73	2,619	5,531
196.22	2,280	4,282	196.74	2,626	5,557
196.23	2,286	4,305	196.75	2,633	5,584
196.24	2,293	4,328	196.76	2,639	5,610
196.25	2,300	4,351	196.77	2,646	5,636
196.26	2,306	4,374	196.78	2,652	5,663
196.27	2,313	4,397	196.79	2,659	5,689
196.28	2,319	4,420	196.80	2,666	5,716
196.29	2,326	4,443	196.81	2,672	5,743
196.30	2,333	4,466	196.82	2,679	5,769
196.31	2,339	4,490	196.83	2,686	5,796
196.32	2,346	4,513	196.84	2,692	5,823
196.33	2,353	4,537	196.85	2,699	5,850
196.34	2,359	4,560	196.86	2,706	5,877
196.35	2,366	4,584	196.87	2,712	5,904
196.36	2,373	4,608	196.88	2,719	5,931
196.37	2,379	4,631	196.89	2,726	5,959
196.38	2,386	4,655	196.90	2,732	5,986
196.39	2,393	4,679	196.91	2,739	6,013
196.40	2,399	4,703	196.92	2,746	6,041
196.41	2,406	4,727	196.93	2,752	6,068
196.42	2,413	4,751	196.94	2,759	6,096
196.43	2,419	4,775	196.95	2,766	6,123
196.44	2,426	4,799	196.96	2,772	6,151
196.45	2,433	4,824	196.97	2,779	6,179
196.46	2,439	4,848	196.98	2,786	6,207
196.47	2,446	4,873	196.99	2,792	6,235
196.48	2,453	4,897	197.00	2,799	6,263
196.49	2,459	4,922	197.01	2,806	6,291
196.50	2,466	4,946	197.02	2,813	6,319
196.51	2,473	4,971	197.03	2,820	6,347
196.52	2,479	4,996	197.04	2,827	6,375
196.53	2,486	5,021	197.05	2,835	6,403
196.54	2,493	5,045	197.06	2,842	6,432
196.55	2,499	5,070	197.07	2,849	6,460
196.56	2,506	5,095	197.08	2,856	6,489
196.57	2,513	5,121	197.09	2,863	6,517
196.58	2,519	5,146	197.10	2,870	6,546
196.59	2,526	5,171	197.11	2,877	6,575
196.60	2,533	5,196	197.12	2,884	6,603
196.61	2,539	5,222	197.13	2,891	6,632
196.62	2,546	5,247	197.14	2,898	6,661
196.63	2,553	5,272	197.15	2,906	6,690

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.16	2,913	6,719
197.17	2,920	6,749
197.18	2,927	6,778
197.19	2,934	6,807
197.20	2,941	6,836
197.21	2,948	6,866
197.22	2,955	6,895
197.23	2,962	6,925
197.24	2,969	6,955
197.25	2,977	6,984
197.26	2,984	7,014
197.27	2,991	7,044
197.28	2,998	7,074
197.29	3,005	7,104
197.30	3,012	7,134
197.31	3,019	7,164
197.32	3,026	7,195
197.33	3,033	7,225
197.34	3,040	7,255
197.35	3,047	7,286
197.36	3,055	7,316
197.37	3,062	7,347
197.38	3,069	7,377
197.39	3,076	7,408
197.40	3,083	7,439
197.41	3,090	7,470
197.42	3,097	7,501
197.43	3,104	7,532
197.44	3,111	7,563
197.45	3,118	7,594
197.46	3,126	7,625
197.47	3,133	7,656
197.48	3,140	7,688
197.49	3,147	7,719
197.50	3,154	7,751

Summary for Pond B-53: Basin #53

Inflow Area = 2.540 ac, 47.80% Impervious, Inflow Depth = 3.60" for Current 10 yr event
 Inflow = 9.22 cfs @ 12.17 hrs, Volume= 0.762 af
 Outflow = 4.58 cfs @ 12.34 hrs, Volume= 0.649 af, Atten= 50%, Lag= 10.4 min
 Primary = 4.58 cfs @ 12.34 hrs, Volume= 0.649 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 203.21' @ 12.34 hrs Surf.Area= 6,153 sf Storage= 12,306 cf

Plug-Flow detention time= 152.2 min calculated for 0.649 af (85% of inflow)
 Center-of-Mass det. time= 83.2 min (867.8 - 784.6)

Volume	Invert	Avail.Storage	Storage Description
#1	201.00'	24,392 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.00	4,695	0	0
202.00	5,685	5,190	5,190
203.00	6,015	5,850	11,040
204.00	6,676	6,346	17,386
205.00	7,336	7,006	24,392

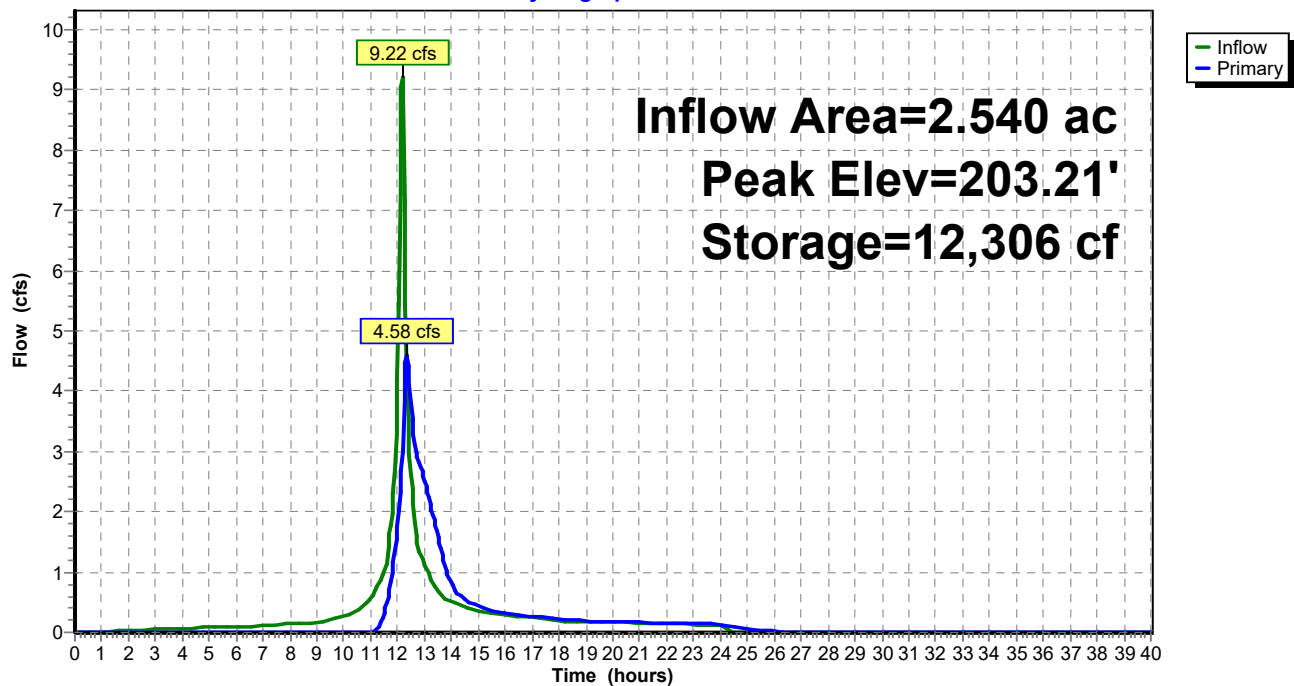
Device	Routing	Invert	Outlet Devices
#1	Primary	201.00'	24.0" Round Culvert L= 39.0' Ke= 0.500 Inlet / Outlet Invert= 201.00' / 200.10' S= 0.0231 ' / Cc= 0.900 n= 0.013, Flow Area= 3.14 sf
#2	Device 1	201.95'	24.0" W x 4.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	204.43'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.57 cfs @ 12.34 hrs HW=203.21' (Free Discharge)

1=Culvert (Passes 4.57 cfs of 16.62 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 3.35 cfs @ 5.02 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 1.22 cfs @ 1.49 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-53: Basin #53

Hydrograph



Stage-Discharge for Pond B-53: Basin #53

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.00	0.00	201.52	0.00	202.04	0.17	202.56	2.12
201.01	0.00	201.53	0.00	202.05	0.20	202.57	2.15
201.02	0.00	201.54	0.00	202.06	0.23	202.58	2.17
201.03	0.00	201.55	0.00	202.07	0.27	202.59	2.20
201.04	0.00	201.56	0.00	202.08	0.30	202.60	2.22
201.05	0.00	201.57	0.00	202.09	0.34	202.61	2.24
201.06	0.00	201.58	0.00	202.10	0.37	202.62	2.27
201.07	0.00	201.59	0.00	202.11	0.41	202.63	2.29
201.08	0.00	201.60	0.00	202.12	0.45	202.64	2.31
201.09	0.00	201.61	0.00	202.13	0.49	202.65	2.33
201.10	0.00	201.62	0.00	202.14	0.53	202.66	2.36
201.11	0.00	201.63	0.00	202.15	0.57	202.67	2.38
201.12	0.00	201.64	0.00	202.16	0.62	202.68	2.40
201.13	0.00	201.65	0.00	202.17	0.66	202.69	2.42
201.14	0.00	201.66	0.00	202.18	0.71	202.70	2.44
201.15	0.00	201.67	0.00	202.19	0.75	202.71	2.46
201.16	0.00	201.68	0.00	202.20	0.80	202.72	2.49
201.17	0.00	201.69	0.00	202.21	0.85	202.73	2.51
201.18	0.00	201.70	0.00	202.22	0.90	202.74	2.53
201.19	0.00	201.71	0.00	202.23	0.95	202.75	2.55
201.20	0.00	201.72	0.00	202.24	1.00	202.76	2.57
201.21	0.00	201.73	0.00	202.25	1.05	202.77	2.59
201.22	0.00	201.74	0.00	202.26	1.11	202.78	2.61
201.23	0.00	201.75	0.00	202.27	1.16	202.79	2.63
201.24	0.00	201.76	0.00	202.28	1.22	202.80	2.65
201.25	0.00	201.77	0.00	202.29	1.27	202.81	2.67
201.26	0.00	201.78	0.00	202.30	1.32	202.82	2.69
201.27	0.00	201.79	0.00	202.31	1.36	202.83	2.70
201.28	0.00	201.80	0.00	202.32	1.40	202.84	2.72
201.29	0.00	201.81	0.00	202.33	1.44	202.85	2.74
201.30	0.00	201.82	0.00	202.34	1.48	202.86	2.76
201.31	0.00	201.83	0.00	202.35	1.51	202.87	2.78
201.32	0.00	201.84	0.00	202.36	1.55	202.88	2.80
201.33	0.00	201.85	0.00	202.37	1.58	202.89	2.82
201.34	0.00	201.86	0.00	202.38	1.62	202.90	2.84
201.35	0.00	201.87	0.00	202.39	1.65	202.91	2.85
201.36	0.00	201.88	0.00	202.40	1.68	202.92	2.87
201.37	0.00	201.89	0.00	202.41	1.71	202.93	2.89
201.38	0.00	201.90	0.00	202.42	1.74	202.94	2.91
201.39	0.00	201.91	0.00	202.43	1.77	202.95	2.93
201.40	0.00	201.92	0.00	202.44	1.80	202.96	2.94
201.41	0.00	201.93	0.00	202.45	1.83	202.97	2.96
201.42	0.00	201.94	0.00	202.46	1.86	202.98	2.98
201.43	0.00	201.95	0.00	202.47	1.89	202.99	3.00
201.44	0.00	201.96	0.01	202.48	1.92	203.00	3.01
201.45	0.00	201.97	0.02	202.49	1.94	203.01	3.04
201.46	0.00	201.98	0.03	202.50	1.97	203.02	3.08
201.47	0.00	201.99	0.05	202.51	2.00	203.03	3.13
201.48	0.00	202.00	0.07	202.52	2.02	203.04	3.18
201.49	0.00	202.01	0.09	202.53	2.05	203.05	3.24
201.50	0.00	202.02	0.12	202.54	2.07	203.06	3.31
201.51	0.00	202.03	0.15	202.55	2.10	203.07	3.37

Stage-Discharge for Pond B-53: Basin #53 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.08	3.44	203.60	9.80	204.12	19.18	204.64	35.99
203.09	3.51	203.61	9.96	204.13	19.38	204.65	36.91
203.10	3.59	203.62	10.12	204.14	19.58	204.66	37.85
203.11	3.67	203.63	10.28	204.15	19.78	204.67	38.82
203.12	3.75	203.64	10.44	204.16	19.98	204.68	39.82
203.13	3.84	203.65	10.60	204.17	20.18	204.69	40.84
203.14	3.92	203.66	10.77	204.18	20.39	204.70	41.88
203.15	4.01	203.67	10.93	204.19	20.59	204.71	42.95
203.16	4.11	203.68	11.10	204.20	20.79	204.72	44.04
203.17	4.20	203.69	11.26	204.21	21.00	204.73	45.16
203.18	4.30	203.70	11.43	204.22	21.20	204.74	46.30
203.19	4.40	203.71	11.60	204.23	21.41	204.75	47.47
203.20	4.50	203.72	11.77	204.24	21.62	204.76	48.66
203.21	4.60	203.73	11.94	204.25	21.82	204.77	49.88
203.22	4.70	203.74	12.11	204.26	22.03	204.78	51.12
203.23	4.81	203.75	12.28	204.27	22.24	204.79	52.38
203.24	4.92	203.76	12.45	204.28	22.45	204.80	53.67
203.25	5.03	203.77	12.62	204.29	22.66	204.81	54.98
203.26	5.14	203.78	12.80	204.30	22.87	204.82	56.32
203.27	5.25	203.79	12.97	204.31	22.99	204.83	57.68
203.28	5.37	203.80	13.15	204.32	23.04	204.84	59.09
203.29	5.49	203.81	13.32	204.33	23.09	204.85	60.52
203.30	5.61	203.82	13.50	204.34	23.14	204.86	61.99
203.31	5.73	203.83	13.68	204.35	23.19	204.87	63.48
203.32	5.85	203.84	13.86	204.36	23.24	204.88	64.99
203.33	5.97	203.85	14.04	204.37	23.29	204.89	66.53
203.34	6.10	203.86	14.22	204.38	23.34	204.90	68.10
203.35	6.22	203.87	14.40	204.39	23.39	204.91	69.69
203.36	6.35	203.88	14.58	204.40	23.43	204.92	71.31
203.37	6.48	203.89	14.77	204.41	23.48	204.93	72.96
203.38	6.61	203.90	14.95	204.42	23.53	204.94	74.63
203.39	6.74	203.91	15.14	204.43	23.58	204.95	76.33
203.40	6.88	203.92	15.32	204.44	23.75	204.96	78.05
203.41	7.01	203.93	15.51	204.45	24.01	204.97	79.81
203.42	7.15	203.94	15.69	204.46	24.33	204.98	81.59
203.43	7.29	203.95	15.88	204.47	24.71	204.99	83.39
203.44	7.42	203.96	16.07	204.48	25.13	205.00	85.22
203.45	7.56	203.97	16.26	204.49	25.59		
203.46	7.70	203.98	16.45	204.50	26.09		
203.47	7.85	203.99	16.64	204.51	26.62		
203.48	7.99	204.00	16.83	204.52	27.19		
203.49	8.14	204.01	17.02	204.53	27.78		
203.50	8.28	204.02	17.21	204.54	28.40		
203.51	8.43	204.03	17.41	204.55	29.05		
203.52	8.58	204.04	17.60	204.56	29.72		
203.53	8.73	204.05	17.80	204.57	30.42		
203.54	8.88	204.06	17.99	204.58	31.14		
203.55	9.03	204.07	18.19	204.59	31.89		
203.56	9.18	204.08	18.38	204.60	32.66		
203.57	9.34	204.09	18.58	204.61	33.45		
203.58	9.49	204.10	18.78	204.62	34.26		
203.59	9.65	204.11	18.98	204.63	35.10		

Stage-Area-Storage for Pond B-53: Basin #53

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.00	4,695	0	201.52	5,210	2,575
201.01	4,705	47	201.53	5,220	2,627
201.02	4,715	94	201.54	5,230	2,680
201.03	4,725	141	201.55	5,240	2,732
201.04	4,735	189	201.56	5,249	2,784
201.05	4,745	236	201.57	5,259	2,837
201.06	4,754	283	201.58	5,269	2,890
201.07	4,764	331	201.59	5,279	2,942
201.08	4,774	379	201.60	5,289	2,995
201.09	4,784	427	201.61	5,299	3,048
201.10	4,794	474	201.62	5,309	3,101
201.11	4,804	522	201.63	5,319	3,154
201.12	4,814	571	201.64	5,329	3,208
201.13	4,824	619	201.65	5,339	3,261
201.14	4,834	667	201.66	5,348	3,314
201.15	4,844	715	201.67	5,358	3,368
201.16	4,853	764	201.68	5,368	3,421
201.17	4,863	812	201.69	5,378	3,475
201.18	4,873	861	201.70	5,388	3,529
201.19	4,883	910	201.71	5,398	3,583
201.20	4,893	959	201.72	5,408	3,637
201.21	4,903	1,008	201.73	5,418	3,691
201.22	4,913	1,057	201.74	5,428	3,745
201.23	4,923	1,106	201.75	5,438	3,800
201.24	4,933	1,155	201.76	5,447	3,854
201.25	4,943	1,205	201.77	5,457	3,909
201.26	4,952	1,254	201.78	5,467	3,963
201.27	4,962	1,304	201.79	5,477	4,018
201.28	4,972	1,353	201.80	5,487	4,073
201.29	4,982	1,403	201.81	5,497	4,128
201.30	4,992	1,453	201.82	5,507	4,183
201.31	5,002	1,503	201.83	5,517	4,238
201.32	5,012	1,553	201.84	5,527	4,293
201.33	5,022	1,603	201.85	5,536	4,348
201.34	5,032	1,654	201.86	5,546	4,404
201.35	5,041	1,704	201.87	5,556	4,459
201.36	5,051	1,754	201.88	5,566	4,515
201.37	5,061	1,805	201.89	5,576	4,571
201.38	5,071	1,856	201.90	5,586	4,626
201.39	5,081	1,906	201.91	5,596	4,682
201.40	5,091	1,957	201.92	5,606	4,738
201.41	5,101	2,008	201.93	5,616	4,794
201.42	5,111	2,059	201.94	5,626	4,851
201.43	5,121	2,110	201.95	5,635	4,907
201.44	5,131	2,162	201.96	5,645	4,963
201.45	5,140	2,213	201.97	5,655	5,020
201.46	5,150	2,264	201.98	5,665	5,076
201.47	5,160	2,316	201.99	5,675	5,133
201.48	5,170	2,368	202.00	5,685	5,190
201.49	5,180	2,419	202.01	5,688	5,247
201.50	5,190	2,471	202.02	5,692	5,304
201.51	5,200	2,523	202.03	5,695	5,361

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.04	5,698	5,418	202.56	5,870	8,425
202.05	5,702	5,475	202.57	5,873	8,484
202.06	5,705	5,532	202.58	5,876	8,543
202.07	5,708	5,589	202.59	5,880	8,602
202.08	5,711	5,646	202.60	5,883	8,660
202.09	5,715	5,703	202.61	5,886	8,719
202.10	5,718	5,760	202.62	5,890	8,778
202.11	5,721	5,817	202.63	5,893	8,837
202.12	5,725	5,875	202.64	5,896	8,896
202.13	5,728	5,932	202.65	5,900	8,955
202.14	5,731	5,989	202.66	5,903	9,014
202.15	5,735	6,046	202.67	5,906	9,073
202.16	5,738	6,104	202.68	5,909	9,132
202.17	5,741	6,161	202.69	5,913	9,191
202.18	5,744	6,219	202.70	5,916	9,250
202.19	5,748	6,276	202.71	5,919	9,310
202.20	5,751	6,334	202.72	5,923	9,369
202.21	5,754	6,391	202.73	5,926	9,428
202.22	5,758	6,449	202.74	5,929	9,487
202.23	5,761	6,506	202.75	5,933	9,547
202.24	5,764	6,564	202.76	5,936	9,606
202.25	5,768	6,622	202.77	5,939	9,665
202.26	5,771	6,679	202.78	5,942	9,725
202.27	5,774	6,737	202.79	5,946	9,784
202.28	5,777	6,795	202.80	5,949	9,844
202.29	5,781	6,853	202.81	5,952	9,903
202.30	5,784	6,910	202.82	5,956	9,963
202.31	5,787	6,968	202.83	5,959	10,022
202.32	5,791	7,026	202.84	5,962	10,082
202.33	5,794	7,084	202.85	5,965	10,141
202.34	5,797	7,142	202.86	5,969	10,201
202.35	5,800	7,200	202.87	5,972	10,261
202.36	5,804	7,258	202.88	5,975	10,321
202.37	5,807	7,316	202.89	5,979	10,380
202.38	5,810	7,374	202.90	5,982	10,440
202.39	5,814	7,432	202.91	5,985	10,500
202.40	5,817	7,490	202.92	5,989	10,560
202.41	5,820	7,549	202.93	5,992	10,620
202.42	5,824	7,607	202.94	5,995	10,680
202.43	5,827	7,665	202.95	5,998	10,740
202.44	5,830	7,723	202.96	6,002	10,800
202.45	5,833	7,782	202.97	6,005	10,860
202.46	5,837	7,840	202.98	6,008	10,920
202.47	5,840	7,898	202.99	6,012	10,980
202.48	5,843	7,957	203.00	6,015	11,040
202.49	5,847	8,015	203.01	6,022	11,100
202.50	5,850	8,074	203.02	6,028	11,160
202.51	5,853	8,132	203.03	6,035	11,221
202.52	5,857	8,191	203.04	6,041	11,281
202.53	5,860	8,249	203.05	6,048	11,342
202.54	5,863	8,308	203.06	6,055	11,402
202.55	5,867	8,367	203.07	6,061	11,463

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.08	6,068	11,523	203.60	6,412	14,768
203.09	6,074	11,584	203.61	6,418	14,832
203.10	6,081	11,645	203.62	6,425	14,896
203.11	6,088	11,706	203.63	6,431	14,961
203.12	6,094	11,767	203.64	6,438	15,025
203.13	6,101	11,828	203.65	6,445	15,089
203.14	6,108	11,889	203.66	6,451	15,154
203.15	6,114	11,950	203.67	6,458	15,218
203.16	6,121	12,011	203.68	6,464	15,283
203.17	6,127	12,072	203.69	6,471	15,348
203.18	6,134	12,133	203.70	6,478	15,412
203.19	6,141	12,195	203.71	6,484	15,477
203.20	6,147	12,256	203.72	6,491	15,542
203.21	6,154	12,318	203.73	6,498	15,607
203.22	6,160	12,379	203.74	6,504	15,672
203.23	6,167	12,441	203.75	6,511	15,737
203.24	6,174	12,503	203.76	6,517	15,802
203.25	6,180	12,564	203.77	6,524	15,868
203.26	6,187	12,626	203.78	6,531	15,933
203.27	6,193	12,688	203.79	6,537	15,998
203.28	6,200	12,750	203.80	6,544	16,064
203.29	6,207	12,812	203.81	6,550	16,129
203.30	6,213	12,874	203.82	6,557	16,195
203.31	6,220	12,936	203.83	6,564	16,260
203.32	6,227	12,999	203.84	6,570	16,326
203.33	6,233	13,061	203.85	6,577	16,392
203.34	6,240	13,123	203.86	6,583	16,457
203.35	6,246	13,186	203.87	6,590	16,523
203.36	6,253	13,248	203.88	6,597	16,589
203.37	6,260	13,311	203.89	6,603	16,655
203.38	6,266	13,373	203.90	6,610	16,721
203.39	6,273	13,436	203.91	6,617	16,787
203.40	6,279	13,499	203.92	6,623	16,854
203.41	6,286	13,562	203.93	6,630	16,920
203.42	6,293	13,625	203.94	6,636	16,986
203.43	6,299	13,688	203.95	6,643	17,053
203.44	6,306	13,751	203.96	6,650	17,119
203.45	6,312	13,814	203.97	6,656	17,186
203.46	6,319	13,877	203.98	6,663	17,252
203.47	6,326	13,940	203.99	6,669	17,319
203.48	6,332	14,003	204.00	6,676	17,386
203.49	6,339	14,067	204.01	6,683	17,452
203.50	6,346	14,130	204.02	6,689	17,519
203.51	6,352	14,194	204.03	6,696	17,586
203.52	6,359	14,257	204.04	6,702	17,653
203.53	6,365	14,321	204.05	6,709	17,720
203.54	6,372	14,384	204.06	6,716	17,787
203.55	6,379	14,448	204.07	6,722	17,854
203.56	6,385	14,512	204.08	6,729	17,922
203.57	6,392	14,576	204.09	6,735	17,989
203.58	6,398	14,640	204.10	6,742	18,056
203.59	6,405	14,704	204.11	6,749	18,124

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.12	6,755	18,191	204.64	7,098	21,793
204.13	6,762	18,259	204.65	7,105	21,864
204.14	6,768	18,327	204.66	7,112	21,935
204.15	6,775	18,394	204.67	7,118	22,007
204.16	6,782	18,462	204.68	7,125	22,078
204.17	6,788	18,530	204.69	7,131	22,149
204.18	6,795	18,598	204.70	7,138	22,220
204.19	6,801	18,666	204.71	7,145	22,292
204.20	6,808	18,734	204.72	7,151	22,363
204.21	6,815	18,802	204.73	7,158	22,435
204.22	6,821	18,870	204.74	7,164	22,506
204.23	6,828	18,938	204.75	7,171	22,578
204.24	6,834	19,007	204.76	7,178	22,650
204.25	6,841	19,075	204.77	7,184	22,722
204.26	6,848	19,144	204.78	7,191	22,794
204.27	6,854	19,212	204.79	7,197	22,865
204.28	6,861	19,281	204.80	7,204	22,938
204.29	6,867	19,349	204.81	7,211	23,010
204.30	6,874	19,418	204.82	7,217	23,082
204.31	6,881	19,487	204.83	7,224	23,154
204.32	6,887	19,556	204.84	7,230	23,226
204.33	6,894	19,625	204.85	7,237	23,299
204.34	6,900	19,693	204.86	7,244	23,371
204.35	6,907	19,763	204.87	7,250	23,443
204.36	6,914	19,832	204.88	7,257	23,516
204.37	6,920	19,901	204.89	7,263	23,589
204.38	6,927	19,970	204.90	7,270	23,661
204.39	6,933	20,039	204.91	7,277	23,734
204.40	6,940	20,109	204.92	7,283	23,807
204.41	6,947	20,178	204.93	7,290	23,880
204.42	6,953	20,248	204.94	7,296	23,953
204.43	6,960	20,317	204.95	7,303	24,026
204.44	6,966	20,387	204.96	7,310	24,099
204.45	6,973	20,457	204.97	7,316	24,172
204.46	6,980	20,526	204.98	7,323	24,245
204.47	6,986	20,596	204.99	7,329	24,318
204.48	6,993	20,666	205.00	7,336	24,392
204.49	6,999	20,736			
204.50	7,006	20,806			
204.51	7,013	20,876			
204.52	7,019	20,946			
204.53	7,026	21,016			
204.54	7,032	21,087			
204.55	7,039	21,157			
204.56	7,046	21,228			
204.57	7,052	21,298			
204.58	7,059	21,369			
204.59	7,065	21,439			
204.60	7,072	21,510			
204.61	7,079	21,581			
204.62	7,085	21,651			
204.63	7,092	21,722			

Summary for Pond B-54: Basin #54

Inflow Area = 2.570 ac, 60.47% Impervious, Inflow Depth = 3.91" for Current 10 yr event
 Inflow = 9.96 cfs @ 12.17 hrs, Volume= 0.837 af
 Outflow = 6.89 cfs @ 12.27 hrs, Volume= 0.696 af, Atten= 31%, Lag= 6.2 min
 Primary = 6.89 cfs @ 12.27 hrs, Volume= 0.696 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 203.43' @ 12.27 hrs Surf.Area= 6,047 sf Storage= 12,768 cf

Plug-Flow detention time= 157.5 min calculated for 0.695 af (83% of inflow)
 Center-of-Mass det. time= 84.2 min (859.0 - 774.8)

Volume	Invert	Avail.Storage	Storage Description
#1	201.00'	23,042 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.00	4,440	0	0
202.00	5,100	4,770	4,770
203.00	5,760	5,430	10,200
204.00	6,421	6,091	16,291
205.00	7,081	6,751	23,042

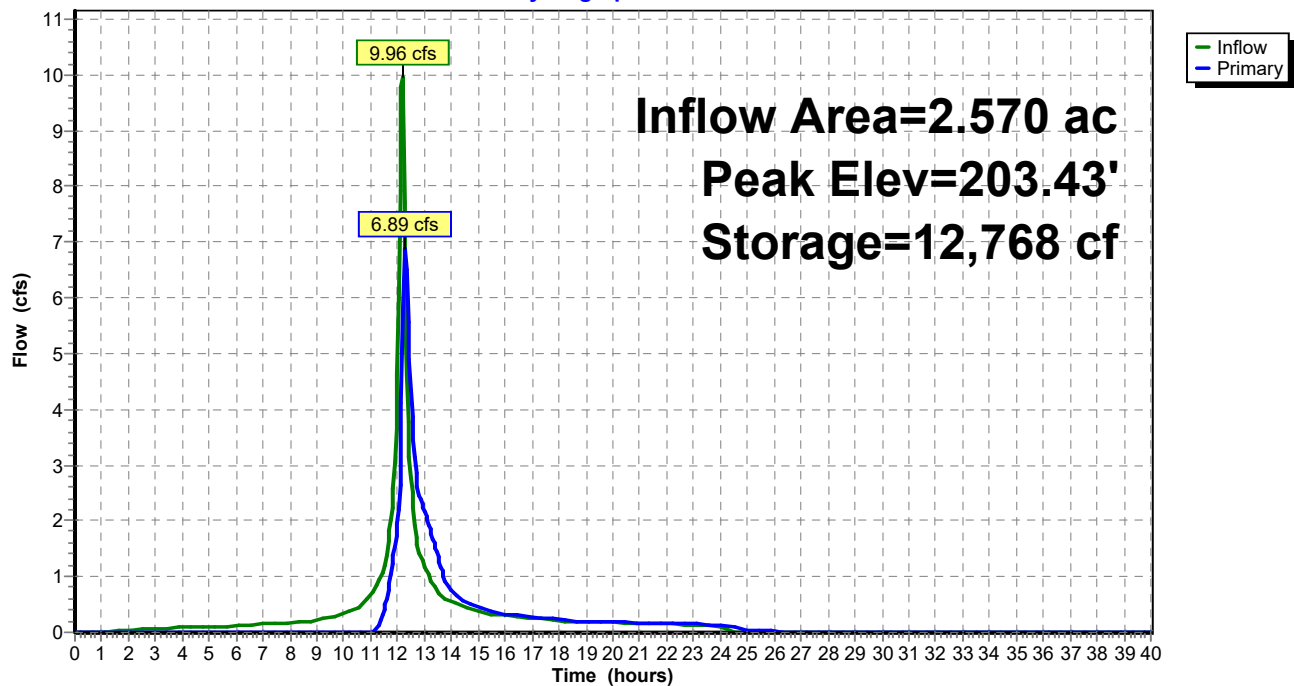
Device	Routing	Invert	Outlet Devices
#1	Primary	201.00'	24.0" Round Culvert L= 73.0' Ke= 0.500 Inlet / Outlet Invert= 201.00' / 200.10' S= 0.0123 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf
#2	Device 1	202.26'	24.0" W x 4.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	204.75'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=6.77 cfs @ 12.27 hrs HW=203.43' (Free Discharge)

1=Culvert (Passes 6.77 cfs of 18.06 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 3.21 cfs @ 4.81 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 3.56 cfs @ 2.13 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-54: Basin #54

Hydrograph



Stage-Discharge for Pond B-54: Basin #54

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.00	0.00	201.52	0.00	202.04	0.00	202.56	1.05
201.01	0.00	201.53	0.00	202.05	0.00	202.57	1.11
201.02	0.00	201.54	0.00	202.06	0.00	202.58	1.16
201.03	0.00	201.55	0.00	202.07	0.00	202.59	1.22
201.04	0.00	201.56	0.00	202.08	0.00	202.60	1.27
201.05	0.00	201.57	0.00	202.09	0.00	202.61	1.32
201.06	0.00	201.58	0.00	202.10	0.00	202.62	1.36
201.07	0.00	201.59	0.00	202.11	0.00	202.63	1.40
201.08	0.00	201.60	0.00	202.12	0.00	202.64	1.44
201.09	0.00	201.61	0.00	202.13	0.00	202.65	1.48
201.10	0.00	201.62	0.00	202.14	0.00	202.66	1.51
201.11	0.00	201.63	0.00	202.15	0.00	202.67	1.55
201.12	0.00	201.64	0.00	202.16	0.00	202.68	1.58
201.13	0.00	201.65	0.00	202.17	0.00	202.69	1.62
201.14	0.00	201.66	0.00	202.18	0.00	202.70	1.65
201.15	0.00	201.67	0.00	202.19	0.00	202.71	1.68
201.16	0.00	201.68	0.00	202.20	0.00	202.72	1.71
201.17	0.00	201.69	0.00	202.21	0.00	202.73	1.74
201.18	0.00	201.70	0.00	202.22	0.00	202.74	1.77
201.19	0.00	201.71	0.00	202.23	0.00	202.75	1.80
201.20	0.00	201.72	0.00	202.24	0.00	202.76	1.83
201.21	0.00	201.73	0.00	202.25	0.00	202.77	1.86
201.22	0.00	201.74	0.00	202.26	0.00	202.78	1.89
201.23	0.00	201.75	0.00	202.27	0.01	202.79	1.92
201.24	0.00	201.76	0.00	202.28	0.02	202.80	1.94
201.25	0.00	201.77	0.00	202.29	0.03	202.81	1.97
201.26	0.00	201.78	0.00	202.30	0.05	202.82	2.00
201.27	0.00	201.79	0.00	202.31	0.07	202.83	2.02
201.28	0.00	201.80	0.00	202.32	0.09	202.84	2.05
201.29	0.00	201.81	0.00	202.33	0.12	202.85	2.07
201.30	0.00	201.82	0.00	202.34	0.15	202.86	2.10
201.31	0.00	201.83	0.00	202.35	0.17	202.87	2.12
201.32	0.00	201.84	0.00	202.36	0.20	202.88	2.15
201.33	0.00	201.85	0.00	202.37	0.23	202.89	2.17
201.34	0.00	201.86	0.00	202.38	0.27	202.90	2.20
201.35	0.00	201.87	0.00	202.39	0.30	202.91	2.22
201.36	0.00	201.88	0.00	202.40	0.34	202.92	2.24
201.37	0.00	201.89	0.00	202.41	0.37	202.93	2.27
201.38	0.00	201.90	0.00	202.42	0.41	202.94	2.29
201.39	0.00	201.91	0.00	202.43	0.45	202.95	2.31
201.40	0.00	201.92	0.00	202.44	0.49	202.96	2.33
201.41	0.00	201.93	0.00	202.45	0.53	202.97	2.36
201.42	0.00	201.94	0.00	202.46	0.57	202.98	2.38
201.43	0.00	201.95	0.00	202.47	0.62	202.99	2.40
201.44	0.00	201.96	0.00	202.48	0.66	203.00	2.42
201.45	0.00	201.97	0.00	202.49	0.71	203.01	2.46
201.46	0.00	201.98	0.00	202.50	0.75	203.02	2.50
201.47	0.00	201.99	0.00	202.51	0.80	203.03	2.55
201.48	0.00	202.00	0.00	202.52	0.85	203.04	2.61
201.49	0.00	202.01	0.00	202.53	0.90	203.05	2.67
201.50	0.00	202.02	0.00	202.54	0.95	203.06	2.74
201.51	0.00	202.03	0.00	202.55	1.00	203.07	2.81

Stage-Discharge for Pond B-54: Basin #54 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.08	2.88	203.60	9.37	204.12	18.81	204.64	24.58
203.09	2.96	203.61	9.53	204.13	19.01	204.65	24.62
203.10	3.04	203.62	9.69	204.14	19.21	204.66	24.67
203.11	3.12	203.63	9.85	204.15	19.42	204.67	24.72
203.12	3.21	203.64	10.02	204.16	19.62	204.68	24.76
203.13	3.29	203.65	10.18	204.17	19.82	204.69	24.81
203.14	3.39	203.66	10.34	204.18	20.03	204.70	24.86
203.15	3.48	203.67	10.51	204.19	20.23	204.71	24.90
203.16	3.57	203.68	10.68	204.20	20.44	204.72	24.95
203.17	3.67	203.69	10.84	204.21	20.64	204.73	24.99
203.18	3.77	203.70	11.01	204.22	20.85	204.74	25.04
203.19	3.87	203.71	11.18	204.23	21.05	204.75	25.08
203.20	3.98	203.72	11.35	204.24	21.26	204.76	25.25
203.21	4.08	203.73	11.52	204.25	21.47	204.77	25.51
203.22	4.19	203.74	11.69	204.26	21.68	204.78	25.83
203.23	4.30	203.75	11.87	204.27	21.89	204.79	26.20
203.24	4.41	203.76	12.04	204.28	22.10	204.80	26.62
203.25	4.52	203.77	12.22	204.29	22.31	204.81	27.08
203.26	4.64	203.78	12.39	204.30	22.52	204.82	27.58
203.27	4.75	203.79	12.57	204.31	22.73	204.83	28.10
203.28	4.87	203.80	12.74	204.32	22.94	204.84	28.66
203.29	4.99	203.81	12.92	204.33	23.09	204.85	29.25
203.30	5.11	203.82	13.10	204.34	23.14	204.86	29.87
203.31	5.24	203.83	13.28	204.35	23.19	204.87	30.52
203.32	5.36	203.84	13.46	204.36	23.24	204.88	31.19
203.33	5.49	203.85	13.64	204.37	23.29	204.89	31.89
203.34	5.61	203.86	13.82	204.38	23.34	204.90	32.61
203.35	5.74	203.87	14.01	204.39	23.39	204.91	33.35
203.36	5.87	203.88	14.19	204.40	23.43	204.92	34.12
203.37	6.00	203.89	14.37	204.41	23.48	204.93	34.90
203.38	6.14	203.90	14.56	204.42	23.53	204.94	35.72
203.39	6.27	203.91	14.75	204.43	23.58	204.95	36.55
203.40	6.41	203.92	14.93	204.44	23.63	204.96	37.44
203.41	6.54	203.93	15.12	204.45	23.68	204.97	38.35
203.42	6.68	203.94	15.31	204.46	23.73	204.98	39.29
203.43	6.82	203.95	15.50	204.47	23.77	204.99	40.26
203.44	6.96	203.96	15.69	204.48	23.82	205.00	41.25
203.45	7.10	203.97	15.88	204.49	23.87		
203.46	7.25	203.98	16.07	204.50	23.92		
203.47	7.39	203.99	16.26	204.51	23.97		
203.48	7.54	204.00	16.45	204.52	24.01		
203.49	7.68	204.01	16.64	204.53	24.06		
203.50	7.83	204.02	16.84	204.54	24.11		
203.51	7.98	204.03	17.03	204.55	24.16		
203.52	8.13	204.04	17.23	204.56	24.20		
203.53	8.28	204.05	17.42	204.57	24.25		
203.54	8.43	204.06	17.62	204.58	24.30		
203.55	8.59	204.07	17.82	204.59	24.34		
203.56	8.74	204.08	18.01	204.60	24.39		
203.57	8.90	204.09	18.21	204.61	24.44		
203.58	9.05	204.10	18.41	204.62	24.48		
203.59	9.21	204.11	18.61	204.63	24.53		

Stage-Area-Storage for Pond B-54: Basin #54

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.00	4,440	0	201.52	4,783	2,398
201.01	4,447	44	201.53	4,790	2,446
201.02	4,453	89	201.54	4,796	2,494
201.03	4,460	133	201.55	4,803	2,542
201.04	4,466	178	201.56	4,810	2,590
201.05	4,473	223	201.57	4,816	2,638
201.06	4,480	268	201.58	4,823	2,686
201.07	4,486	312	201.59	4,829	2,734
201.08	4,493	357	201.60	4,836	2,783
201.09	4,499	402	201.61	4,843	2,831
201.10	4,506	447	201.62	4,849	2,880
201.11	4,513	492	201.63	4,856	2,928
201.12	4,519	538	201.64	4,862	2,977
201.13	4,526	583	201.65	4,869	3,025
201.14	4,532	628	201.66	4,876	3,074
201.15	4,539	673	201.67	4,882	3,123
201.16	4,546	719	201.68	4,889	3,172
201.17	4,552	764	201.69	4,895	3,221
201.18	4,559	810	201.70	4,902	3,270
201.19	4,565	856	201.71	4,909	3,319
201.20	4,572	901	201.72	4,915	3,368
201.21	4,579	947	201.73	4,922	3,417
201.22	4,585	993	201.74	4,928	3,466
201.23	4,592	1,039	201.75	4,935	3,516
201.24	4,598	1,085	201.76	4,942	3,565
201.25	4,605	1,131	201.77	4,948	3,614
201.26	4,612	1,177	201.78	4,955	3,664
201.27	4,618	1,223	201.79	4,961	3,714
201.28	4,625	1,269	201.80	4,968	3,763
201.29	4,631	1,315	201.81	4,975	3,813
201.30	4,638	1,362	201.82	4,981	3,863
201.31	4,645	1,408	201.83	4,988	3,913
201.32	4,651	1,455	201.84	4,994	3,962
201.33	4,658	1,501	201.85	5,001	4,012
201.34	4,664	1,548	201.86	5,008	4,062
201.35	4,671	1,594	201.87	5,014	4,113
201.36	4,678	1,641	201.88	5,021	4,163
201.37	4,684	1,688	201.89	5,027	4,213
201.38	4,691	1,735	201.90	5,034	4,263
201.39	4,697	1,782	201.91	5,041	4,314
201.40	4,704	1,829	201.92	5,047	4,364
201.41	4,711	1,876	201.93	5,054	4,415
201.42	4,717	1,923	201.94	5,060	4,465
201.43	4,724	1,970	201.95	5,067	4,516
201.44	4,730	2,017	201.96	5,074	4,567
201.45	4,737	2,065	201.97	5,080	4,617
201.46	4,744	2,112	201.98	5,087	4,668
201.47	4,750	2,160	201.99	5,093	4,719
201.48	4,757	2,207	202.00	5,100	4,770
201.49	4,763	2,255	202.01	5,107	4,821
201.50	4,770	2,303	202.02	5,113	4,872
201.51	4,777	2,350	202.03	5,120	4,923

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.04	5,126	4,975	202.56	5,470	7,729
202.05	5,133	5,026	202.57	5,476	7,784
202.06	5,140	5,077	202.58	5,483	7,839
202.07	5,146	5,129	202.59	5,489	7,894
202.08	5,153	5,180	202.60	5,496	7,949
202.09	5,159	5,232	202.61	5,503	8,004
202.10	5,166	5,283	202.62	5,509	8,059
202.11	5,173	5,335	202.63	5,516	8,114
202.12	5,179	5,387	202.64	5,522	8,169
202.13	5,186	5,439	202.65	5,529	8,224
202.14	5,192	5,490	202.66	5,536	8,280
202.15	5,199	5,542	202.67	5,542	8,335
202.16	5,206	5,594	202.68	5,549	8,391
202.17	5,212	5,647	202.69	5,555	8,446
202.18	5,219	5,699	202.70	5,562	8,502
202.19	5,225	5,751	202.71	5,569	8,557
202.20	5,232	5,803	202.72	5,575	8,613
202.21	5,239	5,856	202.73	5,582	8,669
202.22	5,245	5,908	202.74	5,588	8,725
202.23	5,252	5,960	202.75	5,595	8,781
202.24	5,258	6,013	202.76	5,602	8,837
202.25	5,265	6,066	202.77	5,608	8,893
202.26	5,272	6,118	202.78	5,615	8,949
202.27	5,278	6,171	202.79	5,621	9,005
202.28	5,285	6,224	202.80	5,628	9,061
202.29	5,291	6,277	202.81	5,635	9,118
202.30	5,298	6,330	202.82	5,641	9,174
202.31	5,305	6,383	202.83	5,648	9,230
202.32	5,311	6,436	202.84	5,654	9,287
202.33	5,318	6,489	202.85	5,661	9,343
202.34	5,324	6,542	202.86	5,668	9,400
202.35	5,331	6,595	202.87	5,674	9,457
202.36	5,338	6,649	202.88	5,681	9,514
202.37	5,344	6,702	202.89	5,687	9,570
202.38	5,351	6,756	202.90	5,694	9,627
202.39	5,357	6,809	202.91	5,701	9,684
202.40	5,364	6,863	202.92	5,707	9,741
202.41	5,371	6,916	202.93	5,714	9,798
202.42	5,377	6,970	202.94	5,720	9,856
202.43	5,384	7,024	202.95	5,727	9,913
202.44	5,390	7,078	202.96	5,734	9,970
202.45	5,397	7,132	202.97	5,740	10,027
202.46	5,404	7,186	202.98	5,747	10,085
202.47	5,410	7,240	202.99	5,753	10,142
202.48	5,417	7,294	203.00	5,760	10,200
202.49	5,423	7,348	203.01	5,767	10,258
202.50	5,430	7,403	203.02	5,773	10,315
202.51	5,437	7,457	203.03	5,780	10,373
202.52	5,443	7,511	203.04	5,786	10,431
202.53	5,450	7,566	203.05	5,793	10,489
202.54	5,456	7,620	203.06	5,800	10,547
202.55	5,463	7,675	203.07	5,806	10,605

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.08	5,813	10,663	203.60	6,157	13,775
203.09	5,819	10,721	203.61	6,163	13,837
203.10	5,826	10,779	203.62	6,170	13,898
203.11	5,833	10,838	203.63	6,176	13,960
203.12	5,839	10,896	203.64	6,183	14,022
203.13	5,846	10,954	203.65	6,190	14,084
203.14	5,853	11,013	203.66	6,196	14,146
203.15	5,859	11,071	203.67	6,203	14,208
203.16	5,866	11,130	203.68	6,209	14,270
203.17	5,872	11,189	203.69	6,216	14,332
203.18	5,879	11,248	203.70	6,223	14,394
203.19	5,886	11,306	203.71	6,229	14,456
203.20	5,892	11,365	203.72	6,236	14,519
203.21	5,899	11,424	203.73	6,243	14,581
203.22	5,905	11,483	203.74	6,249	14,643
203.23	5,912	11,542	203.75	6,256	14,706
203.24	5,919	11,601	203.76	6,262	14,768
203.25	5,925	11,661	203.77	6,269	14,831
203.26	5,932	11,720	203.78	6,276	14,894
203.27	5,938	11,779	203.79	6,282	14,957
203.28	5,945	11,839	203.80	6,289	15,020
203.29	5,952	11,898	203.81	6,295	15,082
203.30	5,958	11,958	203.82	6,302	15,145
203.31	5,965	12,017	203.83	6,309	15,208
203.32	5,972	12,077	203.84	6,315	15,272
203.33	5,978	12,137	203.85	6,322	15,335
203.34	5,985	12,197	203.86	6,328	15,398
203.35	5,991	12,256	203.87	6,335	15,461
203.36	5,998	12,316	203.88	6,342	15,525
203.37	6,005	12,376	203.89	6,348	15,588
203.38	6,011	12,437	203.90	6,355	15,652
203.39	6,018	12,497	203.91	6,362	15,715
203.40	6,024	12,557	203.92	6,368	15,779
203.41	6,031	12,617	203.93	6,375	15,843
203.42	6,038	12,678	203.94	6,381	15,906
203.43	6,044	12,738	203.95	6,388	15,970
203.44	6,051	12,798	203.96	6,395	16,034
203.45	6,057	12,859	203.97	6,401	16,098
203.46	6,064	12,920	203.98	6,408	16,162
203.47	6,071	12,980	203.99	6,414	16,226
203.48	6,077	13,041	204.00	6,421	16,291
203.49	6,084	13,102	204.01	6,428	16,355
203.50	6,091	13,163	204.02	6,434	16,419
203.51	6,097	13,224	204.03	6,441	16,483
203.52	6,104	13,285	204.04	6,447	16,548
203.53	6,110	13,346	204.05	6,454	16,612
203.54	6,117	13,407	204.06	6,461	16,677
203.55	6,124	13,468	204.07	6,467	16,742
203.56	6,130	13,529	204.08	6,474	16,806
203.57	6,137	13,591	204.09	6,480	16,871
203.58	6,143	13,652	204.10	6,487	16,936
203.59	6,150	13,713	204.11	6,494	17,001

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.12	6,500	17,066	204.64	6,843	20,535
204.13	6,507	17,131	204.65	6,850	20,604
204.14	6,513	17,196	204.66	6,857	20,672
204.15	6,520	17,261	204.67	6,863	20,741
204.16	6,527	17,326	204.68	6,870	20,809
204.17	6,533	17,392	204.69	6,876	20,878
204.18	6,540	17,457	204.70	6,883	20,947
204.19	6,546	17,522	204.71	6,890	21,016
204.20	6,553	17,588	204.72	6,896	21,085
204.21	6,560	17,653	204.73	6,903	21,154
204.22	6,566	17,719	204.74	6,909	21,223
204.23	6,573	17,785	204.75	6,916	21,292
204.24	6,579	17,851	204.76	6,923	21,361
204.25	6,586	17,916	204.77	6,929	21,430
204.26	6,593	17,982	204.78	6,936	21,500
204.27	6,599	18,048	204.79	6,942	21,569
204.28	6,606	18,114	204.80	6,949	21,639
204.29	6,612	18,180	204.81	6,956	21,708
204.30	6,619	18,247	204.82	6,962	21,778
204.31	6,626	18,313	204.83	6,969	21,847
204.32	6,632	18,379	204.84	6,975	21,917
204.33	6,639	18,445	204.85	6,982	21,987
204.34	6,645	18,512	204.86	6,989	22,057
204.35	6,652	18,578	204.87	6,995	22,127
204.36	6,659	18,645	204.88	7,002	22,197
204.37	6,665	18,711	204.89	7,008	22,267
204.38	6,672	18,778	204.90	7,015	22,337
204.39	6,678	18,845	204.91	7,022	22,407
204.40	6,685	18,912	204.92	7,028	22,477
204.41	6,692	18,979	204.93	7,035	22,547
204.42	6,698	19,046	204.94	7,041	22,618
204.43	6,705	19,113	204.95	7,048	22,688
204.44	6,711	19,180	204.96	7,055	22,759
204.45	6,718	19,247	204.97	7,061	22,829
204.46	6,725	19,314	204.98	7,068	22,900
204.47	6,731	19,381	204.99	7,074	22,971
204.48	6,738	19,449	205.00	7,081	23,042
204.49	6,744	19,516			
204.50	6,751	19,584			
204.51	6,758	19,651			
204.52	6,764	19,719			
204.53	6,771	19,786			
204.54	6,777	19,854			
204.55	6,784	19,922			
204.56	6,791	19,990			
204.57	6,797	20,058			
204.58	6,804	20,126			
204.59	6,810	20,194			
204.60	6,817	20,262			
204.61	6,824	20,330			
204.62	6,830	20,398			
204.63	6,837	20,467			

Summary for Pond B-55: Basin #55

Inflow Area = 2.301 ac, 47.33% Impervious, Inflow Depth = 3.59" for Current 10 yr event
 Inflow = 8.33 cfs @ 12.17 hrs, Volume= 0.688 af
 Outflow = 4.75 cfs @ 12.32 hrs, Volume= 0.585 af, Atten= 43%, Lag= 8.6 min
 Primary = 4.75 cfs @ 12.32 hrs, Volume= 0.585 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 194.17' @ 12.32 hrs Surf.Area= 5,347 sf Storage= 11,345 cf

Plug-Flow detention time= 155.6 min calculated for 0.585 af (85% of inflow)
 Center-of-Mass det. time= 86.0 min (870.9 - 785.0)

Volume	Invert	Avail.Storage	Storage Description
#1	191.56'	22,010 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.56	0	0	0
192.00	4,250	935	935
193.00	4,746	4,498	5,433
194.00	5,257	5,002	10,434
195.00	5,784	5,521	15,955
196.00	6,327	6,056	22,010

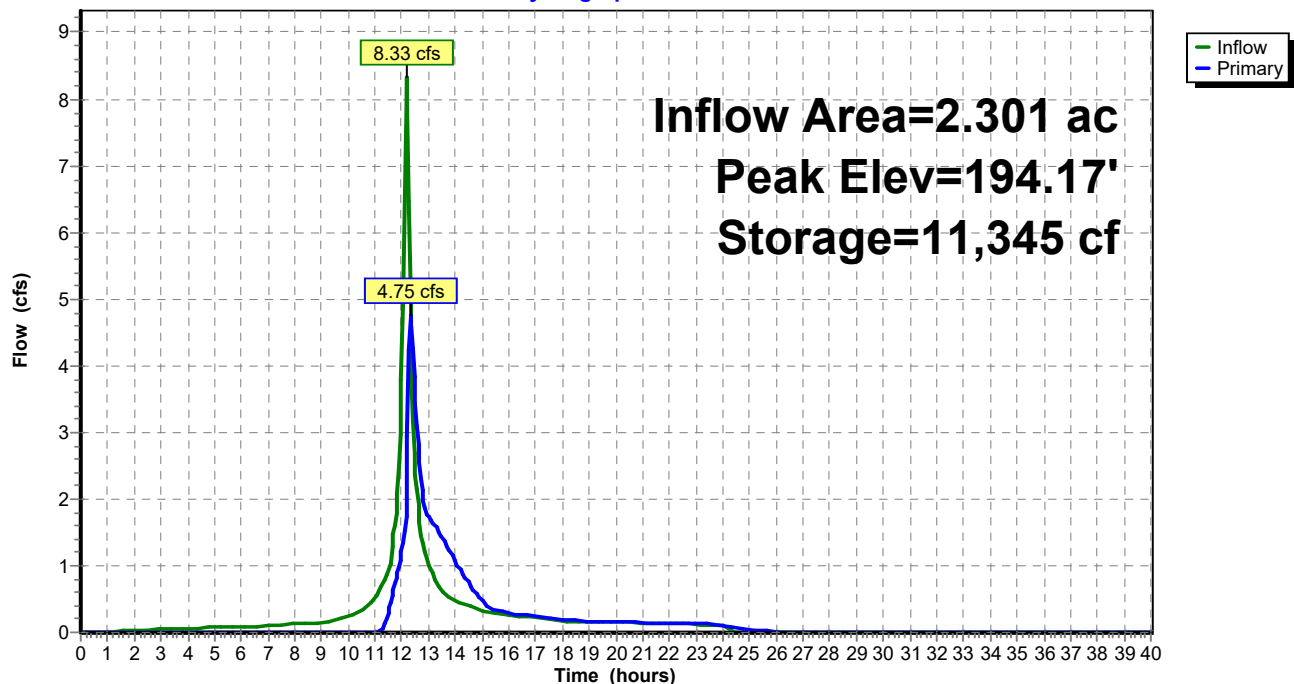
Device	Routing	Invert	Outlet Devices
#1	Primary	191.65'	18.0" Round Culvert L= 112.0' Ke= 0.500 Inlet / Outlet Invert= 191.65' / 191.00' S= 0.0058 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.80'	22.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.82'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	195.45'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.68 cfs @ 12.32 hrs HW=194.17' (Free Discharge)

1=Culvert (Passes 4.68 cfs of 9.72 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 2.07 cfs @ 5.41 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 2.62 cfs @ 1.92 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-55: Basin #55

Hydrograph



Stage-Discharge for Pond B-55: Basin #55

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.56	0.00	192.08	0.00	192.60	0.00	193.12	0.85
191.57	0.00	192.09	0.00	192.61	0.00	193.13	0.87
191.58	0.00	192.10	0.00	192.62	0.00	193.14	0.89
191.59	0.00	192.11	0.00	192.63	0.00	193.15	0.90
191.60	0.00	192.12	0.00	192.64	0.00	193.16	0.92
191.61	0.00	192.13	0.00	192.65	0.00	193.17	0.94
191.62	0.00	192.14	0.00	192.66	0.00	193.18	0.96
191.63	0.00	192.15	0.00	192.67	0.00	193.19	0.98
191.64	0.00	192.16	0.00	192.68	0.00	193.20	0.99
191.65	0.00	192.17	0.00	192.69	0.00	193.21	1.01
191.66	0.00	192.18	0.00	192.70	0.00	193.22	1.03
191.67	0.00	192.19	0.00	192.71	0.00	193.23	1.05
191.68	0.00	192.20	0.00	192.72	0.00	193.24	1.06
191.69	0.00	192.21	0.00	192.73	0.00	193.25	1.08
191.70	0.00	192.22	0.00	192.74	0.00	193.26	1.09
191.71	0.00	192.23	0.00	192.75	0.00	193.27	1.11
191.72	0.00	192.24	0.00	192.76	0.00	193.28	1.12
191.73	0.00	192.25	0.00	192.77	0.00	193.29	1.14
191.74	0.00	192.26	0.00	192.78	0.00	193.30	1.15
191.75	0.00	192.27	0.00	192.79	0.00	193.31	1.17
191.76	0.00	192.28	0.00	192.80	0.00	193.32	1.18
191.77	0.00	192.29	0.00	192.81	0.01	193.33	1.20
191.78	0.00	192.30	0.00	192.82	0.02	193.34	1.21
191.79	0.00	192.31	0.00	192.83	0.03	193.35	1.23
191.80	0.00	192.32	0.00	192.84	0.05	193.36	1.24
191.81	0.00	192.33	0.00	192.85	0.07	193.37	1.25
191.82	0.00	192.34	0.00	192.86	0.09	193.38	1.27
191.83	0.00	192.35	0.00	192.87	0.11	193.39	1.28
191.84	0.00	192.36	0.00	192.88	0.13	193.40	1.29
191.85	0.00	192.37	0.00	192.89	0.16	193.41	1.31
191.86	0.00	192.38	0.00	192.90	0.19	193.42	1.32
191.87	0.00	192.39	0.00	192.91	0.21	193.43	1.33
191.88	0.00	192.40	0.00	192.92	0.24	193.44	1.34
191.89	0.00	192.41	0.00	192.93	0.28	193.45	1.36
191.90	0.00	192.42	0.00	192.94	0.31	193.46	1.37
191.91	0.00	192.43	0.00	192.95	0.34	193.47	1.38
191.92	0.00	192.44	0.00	192.96	0.38	193.48	1.39
191.93	0.00	192.45	0.00	192.97	0.41	193.49	1.41
191.94	0.00	192.46	0.00	192.98	0.45	193.50	1.42
191.95	0.00	192.47	0.00	192.99	0.49	193.51	1.43
191.96	0.00	192.48	0.00	193.00	0.53	193.52	1.44
191.97	0.00	192.49	0.00	193.01	0.57	193.53	1.45
191.98	0.00	192.50	0.00	193.02	0.60	193.54	1.46
191.99	0.00	192.51	0.00	193.03	0.63	193.55	1.48
192.00	0.00	192.52	0.00	193.04	0.66	193.56	1.49
192.01	0.00	192.53	0.00	193.05	0.69	193.57	1.50
192.02	0.00	192.54	0.00	193.06	0.71	193.58	1.51
192.03	0.00	192.55	0.00	193.07	0.74	193.59	1.52
192.04	0.00	192.56	0.00	193.08	0.76	193.60	1.53
192.05	0.00	192.57	0.00	193.09	0.78	193.61	1.54
192.06	0.00	192.58	0.00	193.10	0.80	193.62	1.55
192.07	0.00	192.59	0.00	193.11	0.82	193.63	1.57

Stage-Discharge for Pond B-55: Basin #55 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.64	1.58	194.16	4.61	194.68	11.12	195.20	12.37
193.65	1.59	194.17	4.73	194.69	11.14	195.21	12.39
193.66	1.60	194.18	4.85	194.70	11.17	195.22	12.42
193.67	1.61	194.19	4.97	194.71	11.19	195.23	12.44
193.68	1.62	194.20	5.10	194.72	11.22	195.24	12.46
193.69	1.63	194.21	5.22	194.73	11.24	195.25	12.48
193.70	1.64	194.22	5.35	194.74	11.27	195.26	12.51
193.71	1.65	194.23	5.48	194.75	11.29	195.27	12.53
193.72	1.66	194.24	5.61	194.76	11.32	195.28	12.55
193.73	1.67	194.25	5.74	194.77	11.34	195.29	12.58
193.74	1.68	194.26	5.87	194.78	11.37	195.30	12.60
193.75	1.69	194.27	6.01	194.79	11.39	195.31	12.62
193.76	1.70	194.28	6.14	194.80	11.42	195.32	12.64
193.77	1.71	194.29	6.28	194.81	11.44	195.33	12.66
193.78	1.72	194.30	6.42	194.82	11.47	195.34	12.69
193.79	1.73	194.31	6.56	194.83	11.49	195.35	12.71
193.80	1.74	194.32	6.70	194.84	11.52	195.36	12.73
193.81	1.75	194.33	6.84	194.85	11.54	195.37	12.75
193.82	1.76	194.34	6.98	194.86	11.57	195.38	12.78
193.83	1.78	194.35	7.12	194.87	11.59	195.39	12.80
193.84	1.82	194.36	7.27	194.88	11.61	195.40	12.82
193.85	1.86	194.37	7.41	194.89	11.64	195.41	12.84
193.86	1.90	194.38	7.56	194.90	11.66	195.42	12.86
193.87	1.95	194.39	7.71	194.91	11.69	195.43	12.89
193.88	2.01	194.40	7.86	194.92	11.71	195.44	12.91
193.89	2.07	194.41	8.01	194.93	11.74	195.45	12.93
193.90	2.13	194.42	8.16	194.94	11.76	195.46	13.07
193.91	2.20	194.43	8.31	194.95	11.78	195.47	13.31
193.92	2.26	194.44	8.47	194.96	11.81	195.48	13.61
193.93	2.34	194.45	8.62	194.97	11.83	195.49	13.96
193.94	2.41	194.46	8.78	194.98	11.86	195.50	14.35
193.95	2.49	194.47	8.93	194.99	11.88	195.51	14.79
193.96	2.57	194.48	9.09	195.00	11.90	195.52	15.26
193.97	2.65	194.49	9.25	195.01	11.93	195.53	15.76
193.98	2.74	194.50	9.41	195.02	11.95	195.54	16.30
193.99	2.82	194.51	9.57	195.03	11.97	195.55	16.87
194.00	2.91	194.52	9.73	195.04	12.00	195.56	17.46
194.01	3.01	194.53	9.89	195.05	12.02	195.57	18.08
194.02	3.10	194.54	10.06	195.06	12.05	195.58	18.73
194.03	3.20	194.55	10.22	195.07	12.07	195.59	19.40
194.04	3.29	194.56	10.38	195.08	12.09	195.60	20.10
194.05	3.39	194.57	10.55	195.09	12.12	195.61	20.82
194.06	3.50	194.58	10.72	195.10	12.14	195.62	21.57
194.07	3.60	194.59	10.88	195.11	12.16	195.63	22.33
194.08	3.71	194.60	10.91	195.12	12.19	195.64	23.12
194.09	3.81	194.61	10.94	195.13	12.21	195.65	23.93
194.10	3.92	194.62	10.96	195.14	12.23	195.66	24.79
194.11	4.03	194.63	10.99	195.15	12.26	195.67	25.69
194.12	4.14	194.64	11.01	195.16	12.28	195.68	26.61
194.13	4.26	194.65	11.04	195.17	12.30	195.69	27.55
194.14	4.37	194.66	11.06	195.18	12.32	195.70	28.52
194.15	4.49	194.67	11.09	195.19	12.35	195.71	29.52

Stage-Discharge for Pond B-55: Basin #55 (continued)

Elevation (feet)	Primary (cfs)
195.72	30.53
195.73	31.58
195.74	32.65
195.75	33.74
195.76	34.86
195.77	36.00
195.78	37.17
195.79	38.36
195.80	39.57
195.81	40.81
195.82	42.08
195.83	43.36
195.84	44.67
195.85	46.01
195.86	47.40
195.87	48.81
195.88	50.25
195.89	51.71
195.90	53.20
195.91	54.72
195.92	56.26
195.93	57.83
195.94	59.43
195.95	61.05
195.96	62.70
195.97	64.37
195.98	66.07
195.99	67.80
196.00	69.56

Stage-Area-Storage for Pond B-55: Basin #55

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.56	0	0	192.08	4,290	1,277
191.57	97	0	192.09	4,295	1,320
191.58	193	2	192.10	4,300	1,362
191.59	290	4	192.11	4,305	1,406
191.60	386	8	192.12	4,310	1,449
191.61	483	12	192.13	4,314	1,492
191.62	580	17	192.14	4,319	1,535
191.63	676	24	192.15	4,324	1,578
191.64	773	31	192.16	4,329	1,621
191.65	869	39	192.17	4,334	1,665
191.66	966	48	192.18	4,339	1,708
191.67	1,063	58	192.19	4,344	1,751
191.68	1,159	70	192.20	4,349	1,795
191.69	1,256	82	192.21	4,354	1,838
191.70	1,352	95	192.22	4,359	1,882
191.71	1,449	109	192.23	4,364	1,926
191.72	1,545	124	192.24	4,369	1,969
191.73	1,642	140	192.25	4,374	2,013
191.74	1,739	156	192.26	4,379	2,057
191.75	1,835	174	192.27	4,384	2,101
191.76	1,932	193	192.28	4,389	2,144
191.77	2,028	213	192.29	4,394	2,188
191.78	2,125	234	192.30	4,399	2,232
191.79	2,222	255	192.31	4,404	2,276
191.80	2,318	278	192.32	4,409	2,320
191.81	2,415	302	192.33	4,414	2,365
191.82	2,511	326	192.34	4,419	2,409
191.83	2,608	352	192.35	4,424	2,453
191.84	2,705	379	192.36	4,429	2,497
191.85	2,801	406	192.37	4,434	2,541
191.86	2,898	435	192.38	4,438	2,586
191.87	2,994	464	192.39	4,443	2,630
191.88	3,091	495	192.40	4,448	2,675
191.89	3,188	526	192.41	4,453	2,719
191.90	3,284	558	192.42	4,458	2,764
191.91	3,381	592	192.43	4,463	2,808
191.92	3,477	626	192.44	4,468	2,853
191.93	3,574	661	192.45	4,473	2,898
191.94	3,670	697	192.46	4,478	2,942
191.95	3,767	735	192.47	4,483	2,987
191.96	3,864	773	192.48	4,488	3,032
191.97	3,960	812	192.49	4,493	3,077
191.98	4,057	852	192.50	4,498	3,122
191.99	4,153	893	192.51	4,503	3,167
192.00	4,250	935	192.52	4,508	3,212
192.01	4,255	978	192.53	4,513	3,257
192.02	4,260	1,020	192.54	4,518	3,302
192.03	4,265	1,063	192.55	4,523	3,348
192.04	4,270	1,105	192.56	4,528	3,393
192.05	4,275	1,148	192.57	4,533	3,438
192.06	4,280	1,191	192.58	4,538	3,483
192.07	4,285	1,234	192.59	4,543	3,529

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.60	4,548	3,574	193.12	4,807	6,006
192.61	4,553	3,620	193.13	4,812	6,054
192.62	4,558	3,665	193.14	4,818	6,102
192.63	4,562	3,711	193.15	4,823	6,151
192.64	4,567	3,757	193.16	4,828	6,199
192.65	4,572	3,802	193.17	4,833	6,247
192.66	4,577	3,848	193.18	4,838	6,296
192.67	4,582	3,894	193.19	4,843	6,344
192.68	4,587	3,940	193.20	4,848	6,392
192.69	4,592	3,986	193.21	4,853	6,441
192.70	4,597	4,032	193.22	4,858	6,489
192.71	4,602	4,078	193.23	4,864	6,538
192.72	4,607	4,124	193.24	4,869	6,587
192.73	4,612	4,170	193.25	4,874	6,635
192.74	4,617	4,216	193.26	4,879	6,684
192.75	4,622	4,262	193.27	4,884	6,733
192.76	4,627	4,308	193.28	4,889	6,782
192.77	4,632	4,355	193.29	4,894	6,831
192.78	4,637	4,401	193.30	4,899	6,880
192.79	4,642	4,447	193.31	4,904	6,929
192.80	4,647	4,494	193.32	4,910	6,978
192.81	4,652	4,540	193.33	4,915	7,027
192.82	4,657	4,587	193.34	4,920	7,076
192.83	4,662	4,633	193.35	4,925	7,125
192.84	4,667	4,680	193.36	4,930	7,175
192.85	4,672	4,727	193.37	4,935	7,224
192.86	4,677	4,773	193.38	4,940	7,273
192.87	4,682	4,820	193.39	4,945	7,323
192.88	4,686	4,867	193.40	4,950	7,372
192.89	4,691	4,914	193.41	4,956	7,422
192.90	4,696	4,961	193.42	4,961	7,471
192.91	4,701	5,008	193.43	4,966	7,521
192.92	4,706	5,055	193.44	4,971	7,571
192.93	4,711	5,102	193.45	4,976	7,620
192.94	4,716	5,149	193.46	4,981	7,670
192.95	4,721	5,196	193.47	4,986	7,720
192.96	4,726	5,244	193.48	4,991	7,770
192.97	4,731	5,291	193.49	4,996	7,820
192.98	4,736	5,338	193.50	5,002	7,870
192.99	4,741	5,386	193.51	5,007	7,920
193.00	4,746	5,433	193.52	5,012	7,970
193.01	4,751	5,480	193.53	5,017	8,020
193.02	4,756	5,528	193.54	5,022	8,070
193.03	4,761	5,576	193.55	5,027	8,121
193.04	4,766	5,623	193.56	5,032	8,171
193.05	4,772	5,671	193.57	5,037	8,221
193.06	4,777	5,719	193.58	5,042	8,272
193.07	4,782	5,766	193.59	5,047	8,322
193.08	4,787	5,814	193.60	5,053	8,373
193.09	4,792	5,862	193.61	5,058	8,423
193.10	4,797	5,910	193.62	5,063	8,474
193.11	4,802	5,958	193.63	5,068	8,524

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.64	5,073	8,575	194.16	5,341	11,282
193.65	5,078	8,626	194.17	5,347	11,336
193.66	5,083	8,677	194.18	5,352	11,389
193.67	5,088	8,728	194.19	5,357	11,443
193.68	5,093	8,778	194.20	5,362	11,496
193.69	5,099	8,829	194.21	5,368	11,550
193.70	5,104	8,880	194.22	5,373	11,604
193.71	5,109	8,931	194.23	5,378	11,658
193.72	5,114	8,983	194.24	5,383	11,711
193.73	5,119	9,034	194.25	5,389	11,765
193.74	5,124	9,085	194.26	5,394	11,819
193.75	5,129	9,136	194.27	5,399	11,873
193.76	5,134	9,188	194.28	5,405	11,927
193.77	5,139	9,239	194.29	5,410	11,981
193.78	5,145	9,290	194.30	5,415	12,035
193.79	5,150	9,342	194.31	5,420	12,089
193.80	5,155	9,393	194.32	5,426	12,144
193.81	5,160	9,445	194.33	5,431	12,198
193.82	5,165	9,497	194.34	5,436	12,252
193.83	5,170	9,548	194.35	5,441	12,307
193.84	5,175	9,600	194.36	5,447	12,361
193.85	5,180	9,652	194.37	5,452	12,416
193.86	5,185	9,704	194.38	5,457	12,470
193.87	5,191	9,755	194.39	5,463	12,525
193.88	5,196	9,807	194.40	5,468	12,579
193.89	5,201	9,859	194.41	5,473	12,634
193.90	5,206	9,911	194.42	5,478	12,689
193.91	5,211	9,963	194.43	5,484	12,744
193.92	5,216	10,016	194.44	5,489	12,799
193.93	5,221	10,068	194.45	5,494	12,854
193.94	5,226	10,120	194.46	5,499	12,908
193.95	5,231	10,172	194.47	5,505	12,963
193.96	5,237	10,225	194.48	5,510	13,019
193.97	5,242	10,277	194.49	5,515	13,074
193.98	5,247	10,329	194.50	5,521	13,129
193.99	5,252	10,382	194.51	5,526	13,184
194.00	5,257	10,434	194.52	5,531	13,239
194.01	5,262	10,487	194.53	5,536	13,295
194.02	5,268	10,540	194.54	5,542	13,350
194.03	5,273	10,592	194.55	5,547	13,406
194.04	5,278	10,645	194.56	5,552	13,461
194.05	5,283	10,698	194.57	5,557	13,517
194.06	5,289	10,751	194.58	5,563	13,572
194.07	5,294	10,804	194.59	5,568	13,628
194.08	5,299	10,857	194.60	5,573	13,684
194.09	5,304	10,910	194.61	5,578	13,739
194.10	5,310	10,963	194.62	5,584	13,795
194.11	5,315	11,016	194.63	5,589	13,851
194.12	5,320	11,069	194.64	5,594	13,907
194.13	5,326	11,122	194.65	5,600	13,963
194.14	5,331	11,176	194.66	5,605	14,019
194.15	5,336	11,229	194.67	5,610	14,075

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.68	5,615	14,131	195.20	5,893	17,123
194.69	5,621	14,187	195.21	5,898	17,182
194.70	5,626	14,244	195.22	5,903	17,241
194.71	5,631	14,300	195.23	5,909	17,300
194.72	5,636	14,356	195.24	5,914	17,359
194.73	5,642	14,413	195.25	5,920	17,418
194.74	5,647	14,469	195.26	5,925	17,477
194.75	5,652	14,525	195.27	5,931	17,536
194.76	5,658	14,582	195.28	5,936	17,596
194.77	5,663	14,639	195.29	5,941	17,655
194.78	5,668	14,695	195.30	5,947	17,715
194.79	5,673	14,752	195.31	5,952	17,774
194.80	5,679	14,809	195.32	5,958	17,834
194.81	5,684	14,866	195.33	5,963	17,893
194.82	5,689	14,922	195.34	5,969	17,953
194.83	5,694	14,979	195.35	5,974	18,013
194.84	5,700	15,036	195.36	5,979	18,072
194.85	5,705	15,093	195.37	5,985	18,132
194.86	5,710	15,150	195.38	5,990	18,192
194.87	5,715	15,208	195.39	5,996	18,252
194.88	5,721	15,265	195.40	6,001	18,312
194.89	5,726	15,322	195.41	6,007	18,372
194.90	5,731	15,379	195.42	6,012	18,432
194.91	5,737	15,437	195.43	6,017	18,492
194.92	5,742	15,494	195.44	6,023	18,553
194.93	5,747	15,551	195.45	6,028	18,613
194.94	5,752	15,609	195.46	6,034	18,673
194.95	5,758	15,666	195.47	6,039	18,733
194.96	5,763	15,724	195.48	6,045	18,794
194.97	5,768	15,782	195.49	6,050	18,854
194.98	5,773	15,839	195.50	6,056	18,915
194.99	5,779	15,897	195.51	6,061	18,975
195.00	5,784	15,955	195.52	6,066	19,036
195.01	5,789	16,013	195.53	6,072	19,097
195.02	5,795	16,071	195.54	6,077	19,158
195.03	5,800	16,129	195.55	6,083	19,218
195.04	5,806	16,187	195.56	6,088	19,279
195.05	5,811	16,245	195.57	6,094	19,340
195.06	5,817	16,303	195.58	6,099	19,401
195.07	5,822	16,361	195.59	6,104	19,462
195.08	5,827	16,419	195.60	6,110	19,523
195.09	5,833	16,478	195.61	6,115	19,584
195.10	5,838	16,536	195.62	6,121	19,645
195.11	5,844	16,595	195.63	6,126	19,707
195.12	5,849	16,653	195.64	6,132	19,768
195.13	5,855	16,712	195.65	6,137	19,829
195.14	5,860	16,770	195.66	6,142	19,891
195.15	5,865	16,829	195.67	6,148	19,952
195.16	5,871	16,887	195.68	6,153	20,014
195.17	5,876	16,946	195.69	6,159	20,075
195.18	5,882	17,005	195.70	6,164	20,137
195.19	5,887	17,064	195.71	6,170	20,199

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.72	6,175	20,260
195.73	6,180	20,322
195.74	6,186	20,384
195.75	6,191	20,446
195.76	6,197	20,508
195.77	6,202	20,570
195.78	6,208	20,632
195.79	6,213	20,694
195.80	6,218	20,756
195.81	6,224	20,818
195.82	6,229	20,880
195.83	6,235	20,943
195.84	6,240	21,005
195.85	6,246	21,068
195.86	6,251	21,130
195.87	6,256	21,193
195.88	6,262	21,255
195.89	6,267	21,318
195.90	6,273	21,381
195.91	6,278	21,443
195.92	6,284	21,506
195.93	6,289	21,569
195.94	6,294	21,632
195.95	6,300	21,695
195.96	6,305	21,758
195.97	6,311	21,821
195.98	6,316	21,884
195.99	6,322	21,947
196.00	6,327	22,010

Summary for Pond B-56: Basin #56

Inflow Area = 1.512 ac, 31.08% Impervious, Inflow Depth = 3.20" for Current 10 yr event
 Inflow = 5.00 cfs @ 12.17 hrs, Volume= 0.403 af
 Outflow = 3.56 cfs @ 12.27 hrs, Volume= 0.356 af, Atten= 29%, Lag= 5.9 min
 Primary = 3.56 cfs @ 12.27 hrs, Volume= 0.356 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 192.71' @ 12.27 hrs Surf.Area= 5,353 sf Storage= 4,755 cf

Plug-Flow detention time= 119.9 min calculated for 0.356 af (88% of inflow)
 Center-of-Mass det. time= 61.3 min (861.6 - 800.3)

Volume	Invert	Avail.Storage	Storage Description
#1	191.57'	25,032 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.57	0	0	0
192.00	5,021	1,080	1,080
193.00	5,490	5,256	6,335
194.00	5,976	5,733	12,068
195.00	6,478	6,227	18,295
196.00	6,995	6,737	25,032

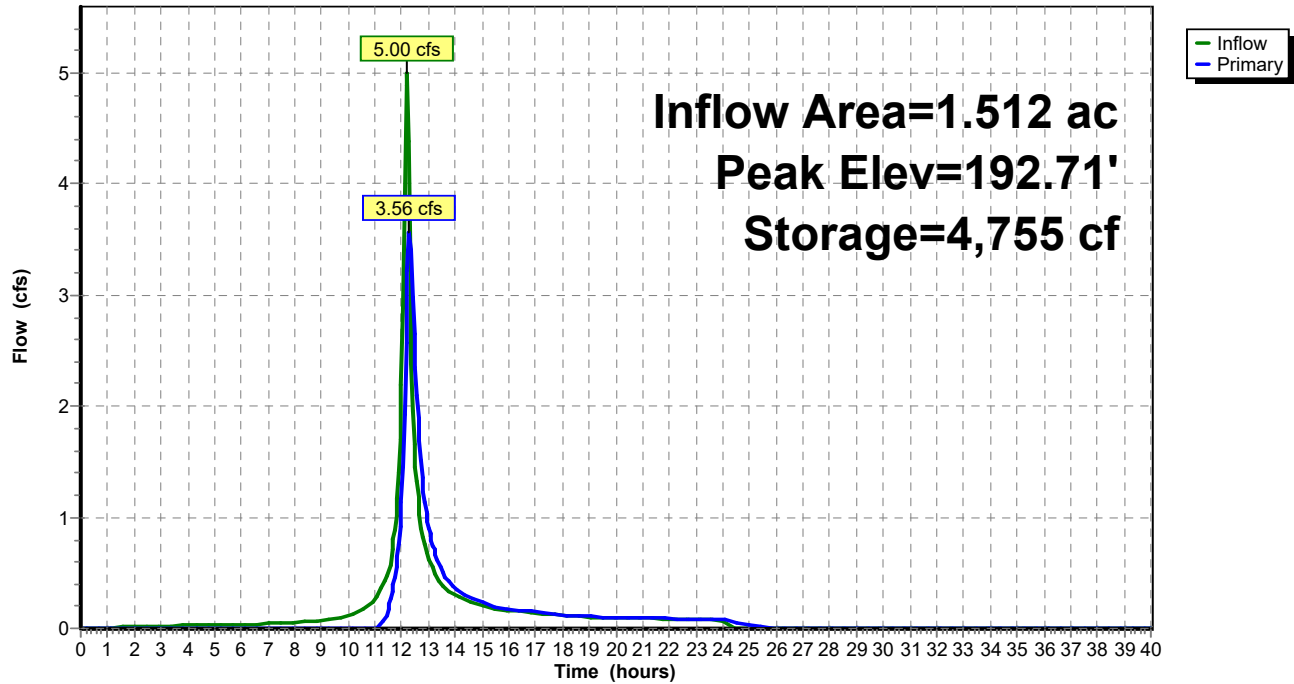
Device	Routing	Invert	Outlet Devices
#1	Primary	191.57'	18.0" Round Culvert L= 29.0' Ke= 0.500 Inlet / Outlet Invert= 191.57' / 191.42' S= 0.0052 ' / Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.19'	36.0" W x 6.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.62'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	194.99'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.53 cfs @ 12.27 hrs HW=192.70' (Free Discharge)

1=Culvert (Passes 3.53 cfs of 3.88 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 3.53 cfs @ 2.36 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-56: Basin #56

Hydrograph



Stage-Discharge for Pond B-56: Basin #56

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.57	0.00	192.09	0.00	192.61	2.62	193.13	5.97
191.58	0.00	192.10	0.00	192.62	2.72	193.14	6.01
191.59	0.00	192.11	0.00	192.63	2.81	193.15	6.05
191.60	0.00	192.12	0.00	192.64	2.91	193.16	6.10
191.61	0.00	192.13	0.00	192.65	3.00	193.17	6.14
191.62	0.00	192.14	0.00	192.66	3.10	193.18	6.18
191.63	0.00	192.15	0.00	192.67	3.20	193.19	6.23
191.64	0.00	192.16	0.00	192.68	3.30	193.20	6.27
191.65	0.00	192.17	0.00	192.69	3.40	193.21	6.31
191.66	0.00	192.18	0.00	192.70	3.50	193.22	6.35
191.67	0.00	192.19	0.00	192.71	3.58	193.23	6.39
191.68	0.00	192.20	0.01	192.72	3.67	193.24	6.43
191.69	0.00	192.21	0.03	192.73	3.74	193.25	6.47
191.70	0.00	192.22	0.05	192.74	3.82	193.26	6.51
191.71	0.00	192.23	0.08	192.75	3.89	193.27	6.55
191.72	0.00	192.24	0.11	192.76	3.97	193.28	6.59
191.73	0.00	192.25	0.14	192.77	4.04	193.29	6.63
191.74	0.00	192.26	0.18	192.78	4.10	193.30	6.67
191.75	0.00	192.27	0.22	192.79	4.17	193.31	6.71
191.76	0.00	192.28	0.26	192.80	4.24	193.32	6.75
191.77	0.00	192.29	0.30	192.81	4.30	193.33	6.79
191.78	0.00	192.30	0.35	192.82	4.36	193.34	6.83
191.79	0.00	192.31	0.40	192.83	4.43	193.35	6.87
191.80	0.00	192.32	0.45	192.84	4.49	193.36	6.91
191.81	0.00	192.33	0.50	192.85	4.55	193.37	6.94
191.82	0.00	192.34	0.56	192.86	4.61	193.38	6.98
191.83	0.00	192.35	0.62	192.87	4.66	193.39	7.02
191.84	0.00	192.36	0.67	192.88	4.72	193.40	7.06
191.85	0.00	192.37	0.74	192.89	4.78	193.41	7.09
191.86	0.00	192.38	0.80	192.90	4.83	193.42	7.13
191.87	0.00	192.39	0.86	192.91	4.89	193.43	7.17
191.88	0.00	192.40	0.93	192.92	4.94	193.44	7.20
191.89	0.00	192.41	0.99	192.93	5.00	193.45	7.24
191.90	0.00	192.42	1.06	192.94	5.05	193.46	7.28
191.91	0.00	192.43	1.13	192.95	5.10	193.47	7.31
191.92	0.00	192.44	1.20	192.96	5.16	193.48	7.35
191.93	0.00	192.45	1.28	192.97	5.21	193.49	7.38
191.94	0.00	192.46	1.35	192.98	5.26	193.50	7.42
191.95	0.00	192.47	1.43	192.99	5.31	193.51	7.45
191.96	0.00	192.48	1.50	193.00	5.36	193.52	7.49
191.97	0.00	192.49	1.58	193.01	5.41	193.53	7.52
191.98	0.00	192.50	1.66	193.02	5.46	193.54	7.56
191.99	0.00	192.51	1.74	193.03	5.50	193.55	7.59
192.00	0.00	192.52	1.83	193.04	5.55	193.56	7.63
192.01	0.00	192.53	1.91	193.05	5.60	193.57	7.66
192.02	0.00	192.54	1.99	193.06	5.65	193.58	7.70
192.03	0.00	192.55	2.08	193.07	5.69	193.59	7.73
192.04	0.00	192.56	2.17	193.08	5.74	193.60	7.76
192.05	0.00	192.57	2.26	193.09	5.79	193.61	7.80
192.06	0.00	192.58	2.35	193.10	5.83	193.62	7.83
192.07	0.00	192.59	2.44	193.11	5.88	193.63	7.88
192.08	0.00	192.60	2.53	193.12	5.92	193.64	7.93

Stage-Discharge for Pond B-56: Basin #56 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.65	8.00	194.17	11.13	194.69	13.10	195.21	26.75
193.66	8.07	194.18	11.17	194.70	13.13	195.22	27.67
193.67	8.14	194.19	11.22	194.71	13.15	195.23	28.62
193.68	8.22	194.20	11.26	194.72	13.18	195.24	29.59
193.69	8.30	194.21	11.30	194.73	13.21	195.25	30.59
193.70	8.39	194.22	11.35	194.74	13.24	195.26	31.61
193.71	8.48	194.23	11.39	194.75	13.26	195.27	32.66
193.72	8.57	194.24	11.43	194.76	13.29	195.28	33.74
193.73	8.66	194.25	11.48	194.77	13.32	195.29	34.83
193.74	8.76	194.26	11.52	194.78	13.35	195.30	35.95
193.75	8.86	194.27	11.56	194.79	13.37	195.31	37.10
193.76	8.97	194.28	11.61	194.80	13.40	195.32	38.27
193.77	9.07	194.29	11.65	194.81	13.43	195.33	39.46
193.78	9.18	194.30	11.69	194.82	13.45	195.34	40.68
193.79	9.28	194.31	11.73	194.83	13.48	195.35	41.93
193.80	9.34	194.32	11.78	194.84	13.51	195.36	43.19
193.81	9.39	194.33	11.82	194.85	13.53	195.37	44.48
193.82	9.44	194.34	11.86	194.86	13.56	195.38	45.80
193.83	9.49	194.35	11.90	194.87	13.59	195.39	47.14
193.84	9.55	194.36	11.94	194.88	13.61	195.40	48.53
193.85	9.60	194.37	11.98	194.89	13.64	195.41	49.94
193.86	9.65	194.38	12.03	194.90	13.67	195.42	51.39
193.87	9.70	194.39	12.07	194.91	13.69	195.43	52.85
193.88	9.75	194.40	12.11	194.92	13.72	195.44	54.35
193.89	9.80	194.41	12.15	194.93	13.75	195.45	55.87
193.90	9.85	194.42	12.19	194.94	13.77	195.46	57.42
193.91	9.90	194.43	12.23	194.95	13.80	195.47	58.99
193.92	9.95	194.44	12.27	194.96	13.83	195.48	60.59
193.93	10.00	194.45	12.31	194.97	13.85	195.49	62.21
193.94	10.05	194.46	12.35	194.98	13.88	195.50	63.87
193.95	10.10	194.47	12.39	194.99	13.90	195.51	65.55
193.96	10.15	194.48	12.43	195.00	14.05	195.52	67.25
193.97	10.20	194.49	12.47	195.01	14.29	195.53	68.98
193.98	10.25	194.50	12.51	195.02	14.59	195.54	70.74
193.99	10.29	194.51	12.55	195.03	14.94	195.55	72.53
194.00	10.34	194.52	12.59	195.04	15.34	195.56	74.34
194.01	10.39	194.53	12.63	195.05	15.78	195.57	76.18
194.02	10.44	194.54	12.67	195.06	16.26	195.58	78.04
194.03	10.49	194.55	12.71	195.07	16.77	195.59	79.94
194.04	10.53	194.56	12.73	195.08	17.31	195.60	81.59
194.05	10.58	194.57	12.76	195.09	17.88	195.61	83.25
194.06	10.63	194.58	12.79	195.10	18.48	195.62	84.93
194.07	10.67	194.59	12.82	195.11	19.10	195.63	86.62
194.08	10.72	194.60	12.85	195.12	19.76	195.64	88.32
194.09	10.77	194.61	12.88	195.13	20.43	195.65	90.04
194.10	10.81	194.62	12.90	195.14	21.13	195.66	91.77
194.11	10.86	194.63	12.93	195.15	21.86	195.67	93.51
194.12	10.90	194.64	12.96	195.16	22.61	195.68	95.27
194.13	10.95	194.65	12.99	195.17	23.38	195.69	97.04
194.14	10.99	194.66	13.02	195.18	24.17	195.70	98.82
194.15	11.04	194.67	13.04	195.19	24.98	195.71	100.61
194.16	11.08	194.68	13.07	195.20	25.85	195.72	102.42

Stage-Discharge for Pond B-56: Basin #56 (continued)

Elevation (feet)	Primary (cfs)
195.73	104.24
195.74	106.07
195.75	107.92
195.76	109.77
195.77	111.64
195.78	113.52
195.79	115.41
195.80	117.36
195.81	119.31
195.82	121.28
195.83	123.26
195.84	125.26
195.85	127.27
195.86	129.29
195.87	131.32
195.88	133.37
195.89	135.43
195.90	137.50
195.91	139.59
195.92	141.69
195.93	143.80
195.94	145.92
195.95	148.06
195.96	150.21
195.97	152.37
195.98	154.55
195.99	156.73
196.00	158.88

Stage-Area-Storage for Pond B-56: Basin #56

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.57	0	0	192.09	5,063	1,533
191.58	117	1	192.10	5,068	1,584
191.59	234	2	192.11	5,073	1,635
191.60	350	5	192.12	5,077	1,685
191.61	467	9	192.13	5,082	1,736
191.62	584	15	192.14	5,087	1,787
191.63	701	21	192.15	5,091	1,838
191.64	817	29	192.16	5,096	1,889
191.65	934	37	192.17	5,101	1,940
191.66	1,051	47	192.18	5,105	1,991
191.67	1,168	58	192.19	5,110	2,042
191.68	1,284	71	192.20	5,115	2,093
191.69	1,401	84	192.21	5,119	2,144
191.70	1,518	99	192.22	5,124	2,195
191.71	1,635	114	192.23	5,129	2,247
191.72	1,752	131	192.24	5,134	2,298
191.73	1,868	149	192.25	5,138	2,349
191.74	1,985	169	192.26	5,143	2,401
191.75	2,102	189	192.27	5,148	2,452
191.76	2,219	211	192.28	5,152	2,504
191.77	2,335	234	192.29	5,157	2,555
191.78	2,452	257	192.30	5,162	2,607
191.79	2,569	283	192.31	5,166	2,659
191.80	2,686	309	192.32	5,171	2,710
191.81	2,802	336	192.33	5,176	2,762
191.82	2,919	365	192.34	5,180	2,814
191.83	3,036	395	192.35	5,185	2,866
191.84	3,153	426	192.36	5,190	2,917
191.85	3,269	458	192.37	5,195	2,969
191.86	3,386	491	192.38	5,199	3,021
191.87	3,503	525	192.39	5,204	3,073
191.88	3,620	561	192.40	5,209	3,125
191.89	3,737	598	192.41	5,213	3,178
191.90	3,853	636	192.42	5,218	3,230
191.91	3,970	675	192.43	5,223	3,282
191.92	4,087	715	192.44	5,227	3,334
191.93	4,204	757	192.45	5,232	3,386
191.94	4,320	799	192.46	5,237	3,439
191.95	4,437	843	192.47	5,241	3,491
191.96	4,554	888	192.48	5,246	3,544
191.97	4,671	934	192.49	5,251	3,596
191.98	4,787	981	192.50	5,256	3,649
191.99	4,904	1,030	192.51	5,260	3,701
192.00	5,021	1,080	192.52	5,265	3,754
192.01	5,026	1,130	192.53	5,270	3,807
192.02	5,030	1,180	192.54	5,274	3,859
192.03	5,035	1,230	192.55	5,279	3,912
192.04	5,040	1,281	192.56	5,284	3,965
192.05	5,044	1,331	192.57	5,288	4,018
192.06	5,049	1,382	192.58	5,293	4,071
192.07	5,054	1,432	192.59	5,298	4,124
192.08	5,059	1,483	192.60	5,302	4,177

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.61	5,307	4,230	193.13	5,553	7,053
192.62	5,312	4,283	193.14	5,558	7,108
192.63	5,316	4,336	193.15	5,563	7,164
192.64	5,321	4,389	193.16	5,568	7,220
192.65	5,326	4,442	193.17	5,573	7,275
192.66	5,331	4,496	193.18	5,577	7,331
192.67	5,335	4,549	193.19	5,582	7,387
192.68	5,340	4,602	193.20	5,587	7,443
192.69	5,345	4,656	193.21	5,592	7,499
192.70	5,349	4,709	193.22	5,597	7,555
192.71	5,354	4,763	193.23	5,602	7,611
192.72	5,359	4,816	193.24	5,607	7,667
192.73	5,363	4,870	193.25	5,612	7,723
192.74	5,368	4,923	193.26	5,616	7,779
192.75	5,373	4,977	193.27	5,621	7,835
192.76	5,377	5,031	193.28	5,626	7,891
192.77	5,382	5,085	193.29	5,631	7,948
192.78	5,387	5,139	193.30	5,636	8,004
192.79	5,392	5,192	193.31	5,641	8,060
192.80	5,396	5,246	193.32	5,646	8,117
192.81	5,401	5,300	193.33	5,650	8,173
192.82	5,406	5,354	193.34	5,655	8,230
192.83	5,410	5,408	193.35	5,660	8,286
192.84	5,415	5,463	193.36	5,665	8,343
192.85	5,420	5,517	193.37	5,670	8,400
192.86	5,424	5,571	193.38	5,675	8,456
192.87	5,429	5,625	193.39	5,680	8,513
192.88	5,434	5,680	193.40	5,684	8,570
192.89	5,438	5,734	193.41	5,689	8,627
192.90	5,443	5,788	193.42	5,694	8,684
192.91	5,448	5,843	193.43	5,699	8,741
192.92	5,452	5,897	193.44	5,704	8,798
192.93	5,457	5,952	193.45	5,709	8,855
192.94	5,462	6,006	193.46	5,714	8,912
192.95	5,467	6,061	193.47	5,718	8,969
192.96	5,471	6,116	193.48	5,723	9,026
192.97	5,476	6,171	193.49	5,728	9,083
192.98	5,481	6,225	193.50	5,733	9,141
192.99	5,485	6,280	193.51	5,738	9,198
193.00	5,490	6,335	193.52	5,743	9,256
193.01	5,495	6,390	193.53	5,748	9,313
193.02	5,500	6,445	193.54	5,752	9,370
193.03	5,505	6,500	193.55	5,757	9,428
193.04	5,509	6,555	193.56	5,762	9,486
193.05	5,514	6,610	193.57	5,767	9,543
193.06	5,519	6,665	193.58	5,772	9,601
193.07	5,524	6,721	193.59	5,777	9,659
193.08	5,529	6,776	193.60	5,782	9,716
193.09	5,534	6,831	193.61	5,786	9,774
193.10	5,539	6,886	193.62	5,791	9,832
193.11	5,543	6,942	193.63	5,796	9,890
193.12	5,548	6,997	193.64	5,801	9,948

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.65	5,806	10,006	194.17	6,061	13,091
193.66	5,811	10,064	194.18	6,066	13,152
193.67	5,816	10,122	194.19	6,071	13,213
193.68	5,820	10,181	194.20	6,076	13,273
193.69	5,825	10,239	194.21	6,081	13,334
193.70	5,830	10,297	194.22	6,086	13,395
193.71	5,835	10,355	194.23	6,091	13,456
193.72	5,840	10,414	194.24	6,096	13,517
193.73	5,845	10,472	194.25	6,102	13,578
193.74	5,850	10,531	194.26	6,107	13,639
193.75	5,855	10,589	194.27	6,112	13,700
193.76	5,859	10,648	194.28	6,117	13,761
193.77	5,864	10,706	194.29	6,122	13,822
193.78	5,869	10,765	194.30	6,127	13,883
193.79	5,874	10,824	194.31	6,132	13,945
193.80	5,879	10,883	194.32	6,137	14,006
193.81	5,884	10,941	194.33	6,142	14,067
193.82	5,889	11,000	194.34	6,147	14,129
193.83	5,893	11,059	194.35	6,152	14,190
193.84	5,898	11,118	194.36	6,157	14,252
193.85	5,903	11,177	194.37	6,162	14,313
193.86	5,908	11,236	194.38	6,167	14,375
193.87	5,913	11,295	194.39	6,172	14,437
193.88	5,918	11,354	194.40	6,177	14,499
193.89	5,923	11,414	194.41	6,182	14,560
193.90	5,927	11,473	194.42	6,187	14,622
193.91	5,932	11,532	194.43	6,192	14,684
193.92	5,937	11,591	194.44	6,197	14,746
193.93	5,942	11,651	194.45	6,202	14,808
193.94	5,947	11,710	194.46	6,207	14,870
193.95	5,952	11,770	194.47	6,212	14,932
193.96	5,957	11,829	194.48	6,217	14,994
193.97	5,961	11,889	194.49	6,222	15,057
193.98	5,966	11,949	194.50	6,227	15,119
193.99	5,971	12,008	194.51	6,232	15,181
194.00	5,976	12,068	194.52	6,237	15,243
194.01	5,981	12,128	194.53	6,242	15,306
194.02	5,986	12,188	194.54	6,247	15,368
194.03	5,991	12,248	194.55	6,252	15,431
194.04	5,996	12,307	194.56	6,257	15,493
194.05	6,001	12,367	194.57	6,262	15,556
194.06	6,006	12,427	194.58	6,267	15,619
194.07	6,011	12,488	194.59	6,272	15,681
194.08	6,016	12,548	194.60	6,277	15,744
194.09	6,021	12,608	194.61	6,282	15,807
194.10	6,026	12,668	194.62	6,287	15,870
194.11	6,031	12,728	194.63	6,292	15,933
194.12	6,036	12,789	194.64	6,297	15,995
194.13	6,041	12,849	194.65	6,302	16,058
194.14	6,046	12,910	194.66	6,307	16,122
194.15	6,051	12,970	194.67	6,312	16,185
194.16	6,056	13,031	194.68	6,317	16,248

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.69	6,322	16,311	195.21	6,587	19,667
194.70	6,327	16,374	195.22	6,592	19,733
194.71	6,332	16,438	195.23	6,597	19,799
194.72	6,337	16,501	195.24	6,602	19,865
194.73	6,342	16,564	195.25	6,607	19,931
194.74	6,347	16,628	195.26	6,612	19,997
194.75	6,353	16,691	195.27	6,618	20,063
194.76	6,358	16,755	195.28	6,623	20,129
194.77	6,363	16,818	195.29	6,628	20,195
194.78	6,368	16,882	195.30	6,633	20,262
194.79	6,373	16,946	195.31	6,638	20,328
194.80	6,378	17,009	195.32	6,643	20,394
194.81	6,383	17,073	195.33	6,649	20,461
194.82	6,388	17,137	195.34	6,654	20,527
194.83	6,393	17,201	195.35	6,659	20,594
194.84	6,398	17,265	195.36	6,664	20,661
194.85	6,403	17,329	195.37	6,669	20,727
194.86	6,408	17,393	195.38	6,674	20,794
194.87	6,413	17,457	195.39	6,680	20,861
194.88	6,418	17,521	195.40	6,685	20,928
194.89	6,423	17,585	195.41	6,690	20,994
194.90	6,428	17,650	195.42	6,695	21,061
194.91	6,433	17,714	195.43	6,700	21,128
194.92	6,438	17,778	195.44	6,705	21,195
194.93	6,443	17,843	195.45	6,711	21,262
194.94	6,448	17,907	195.46	6,716	21,330
194.95	6,453	17,972	195.47	6,721	21,397
194.96	6,458	18,036	195.48	6,726	21,464
194.97	6,463	18,101	195.49	6,731	21,531
194.98	6,468	18,166	195.50	6,737	21,599
194.99	6,473	18,230	195.51	6,742	21,666
195.00	6,478	18,295	195.52	6,747	21,733
195.01	6,483	18,360	195.53	6,752	21,801
195.02	6,488	18,425	195.54	6,757	21,869
195.03	6,494	18,490	195.55	6,762	21,936
195.04	6,499	18,555	195.56	6,768	22,004
195.05	6,504	18,620	195.57	6,773	22,071
195.06	6,509	18,685	195.58	6,778	22,139
195.07	6,514	18,750	195.59	6,783	22,207
195.08	6,519	18,815	195.60	6,788	22,275
195.09	6,525	18,880	195.61	6,793	22,343
195.10	6,530	18,945	195.62	6,799	22,411
195.11	6,535	19,011	195.63	6,804	22,479
195.12	6,540	19,076	195.64	6,809	22,547
195.13	6,545	19,142	195.65	6,814	22,615
195.14	6,550	19,207	195.66	6,819	22,683
195.15	6,556	19,273	195.67	6,824	22,751
195.16	6,561	19,338	195.68	6,830	22,820
195.17	6,566	19,404	195.69	6,835	22,888
195.18	6,571	19,469	195.70	6,840	22,956
195.19	6,576	19,535	195.71	6,845	23,025
195.20	6,581	19,601	195.72	6,850	23,093

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.73	6,855	23,162
195.74	6,861	23,230
195.75	6,866	23,299
195.76	6,871	23,368
195.77	6,876	23,436
195.78	6,881	23,505
195.79	6,886	23,574
195.80	6,892	23,643
195.81	6,897	23,712
195.82	6,902	23,781
195.83	6,907	23,850
195.84	6,912	23,919
195.85	6,917	23,988
195.86	6,923	24,057
195.87	6,928	24,127
195.88	6,933	24,196
195.89	6,938	24,265
195.90	6,943	24,335
195.91	6,948	24,404
195.92	6,954	24,474
195.93	6,959	24,543
195.94	6,964	24,613
195.95	6,969	24,682
195.96	6,974	24,752
195.97	6,979	24,822
195.98	6,985	24,892
195.99	6,990	24,962
196.00	6,995	25,032

Summary for Pond B-57: Basin #57

Inflow Area = 1.434 ac, 47.56% Impervious, Inflow Depth = 3.59" for Current 10 yr event
 Inflow = 5.20 cfs @ 12.17 hrs, Volume= 0.430 af
 Outflow = 3.58 cfs @ 12.28 hrs, Volume= 0.362 af, Atten= 31%, Lag= 6.3 min
 Primary = 3.58 cfs @ 12.28 hrs, Volume= 0.362 af
 Routed to Pond B-58 : Basin #58

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 203.41' @ 12.28 hrs Surf.Area= 4,714 sf Storage= 7,523 cf

Plug-Flow detention time= 280.8 min calculated for 0.362 af (84% of inflow)
 Center-of-Mass det. time= 209.1 min (993.9 - 784.8)

Volume	Invert	Avail.Storage	Storage Description
#1	201.30'	13,039 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.30	0	0	0
202.00	3,969	1,389	1,389
203.00	4,488	4,229	5,618
204.00	5,034	4,761	10,379
204.50	5,608	2,661	13,039

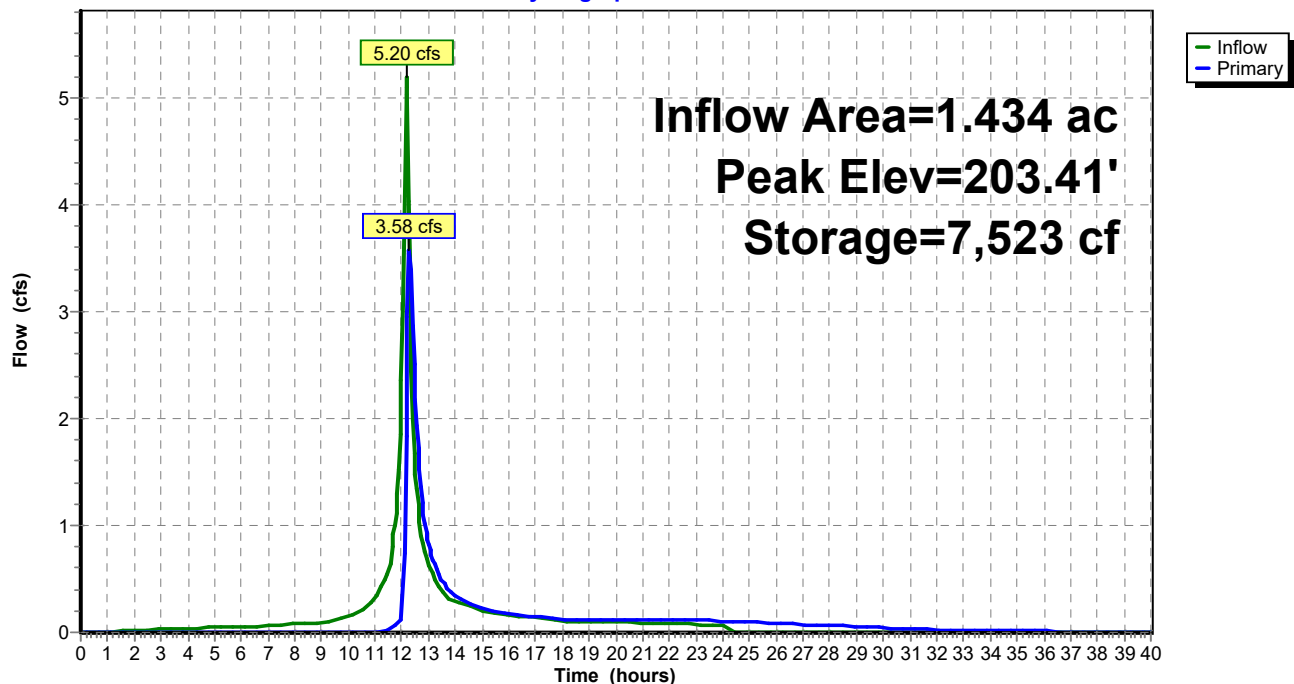
Device	Routing	Invert	Outlet Devices
#1	Primary	202.00'	36.0" Round Culvert L= 252.0' Ke= 0.500 Inlet / Outlet Invert= 202.00' / 199.00' S= 0.0119 '/' Cc= 0.900 n= 0.013, Flow Area= 7.07 sf
#2	Device 1	202.34'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	204.25'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.54 cfs @ 12.28 hrs HW=203.41' (Free Discharge)

1=Culvert (Passes 3.54 cfs of 13.22 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.16 cfs @ 4.73 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 3.38 cfs @ 2.10 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-57: Basin #57

Hydrograph



Stage-Discharge for Pond B-57: Basin #57

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.30	0.00	201.82	0.00	202.34	0.00	202.86	0.11
201.31	0.00	201.83	0.00	202.35	0.00	202.87	0.11
201.32	0.00	201.84	0.00	202.36	0.00	202.88	0.11
201.33	0.00	201.85	0.00	202.37	0.00	202.89	0.11
201.34	0.00	201.86	0.00	202.38	0.00	202.90	0.11
201.35	0.00	201.87	0.00	202.39	0.00	202.91	0.11
201.36	0.00	201.88	0.00	202.40	0.01	202.92	0.11
201.37	0.00	201.89	0.00	202.41	0.01	202.93	0.11
201.38	0.00	201.90	0.00	202.42	0.01	202.94	0.12
201.39	0.00	201.91	0.00	202.43	0.01	202.95	0.12
201.40	0.00	201.92	0.00	202.44	0.02	202.96	0.12
201.41	0.00	201.93	0.00	202.45	0.02	202.97	0.12
201.42	0.00	201.94	0.00	202.46	0.02	202.98	0.12
201.43	0.00	201.95	0.00	202.47	0.03	202.99	0.12
201.44	0.00	201.96	0.00	202.48	0.03	203.00	0.12
201.45	0.00	201.97	0.00	202.49	0.03	203.01	0.14
201.46	0.00	201.98	0.00	202.50	0.04	203.02	0.16
201.47	0.00	201.99	0.00	202.51	0.04	203.03	0.19
201.48	0.00	202.00	0.00	202.52	0.05	203.04	0.23
201.49	0.00	202.01	0.00	202.53	0.05	203.05	0.27
201.50	0.00	202.02	0.00	202.54	0.05	203.06	0.32
201.51	0.00	202.03	0.00	202.55	0.05	203.07	0.37
201.52	0.00	202.04	0.00	202.56	0.06	203.08	0.43
201.53	0.00	202.05	0.00	202.57	0.06	203.09	0.48
201.54	0.00	202.06	0.00	202.58	0.06	203.10	0.54
201.55	0.00	202.07	0.00	202.59	0.06	203.11	0.61
201.56	0.00	202.08	0.00	202.60	0.06	203.12	0.68
201.57	0.00	202.09	0.00	202.61	0.07	203.13	0.75
201.58	0.00	202.10	0.00	202.62	0.07	203.14	0.82
201.59	0.00	202.11	0.00	202.63	0.07	203.15	0.89
201.60	0.00	202.12	0.00	202.64	0.07	203.16	0.97
201.61	0.00	202.13	0.00	202.65	0.07	203.17	1.05
201.62	0.00	202.14	0.00	202.66	0.08	203.18	1.13
201.63	0.00	202.15	0.00	202.67	0.08	203.19	1.21
201.64	0.00	202.16	0.00	202.68	0.08	203.20	1.30
201.65	0.00	202.17	0.00	202.69	0.08	203.21	1.39
201.66	0.00	202.18	0.00	202.70	0.08	203.22	1.48
201.67	0.00	202.19	0.00	202.71	0.08	203.23	1.57
201.68	0.00	202.20	0.00	202.72	0.09	203.24	1.67
201.69	0.00	202.21	0.00	202.73	0.09	203.25	1.76
201.70	0.00	202.22	0.00	202.74	0.09	203.26	1.86
201.71	0.00	202.23	0.00	202.75	0.09	203.27	1.96
201.72	0.00	202.24	0.00	202.76	0.09	203.28	2.06
201.73	0.00	202.25	0.00	202.77	0.09	203.29	2.16
201.74	0.00	202.26	0.00	202.78	0.10	203.30	2.27
201.75	0.00	202.27	0.00	202.79	0.10	203.31	2.38
201.76	0.00	202.28	0.00	202.80	0.10	203.32	2.48
201.77	0.00	202.29	0.00	202.81	0.10	203.33	2.59
201.78	0.00	202.30	0.00	202.82	0.10	203.34	2.70
201.79	0.00	202.31	0.00	202.83	0.10	203.35	2.82
201.80	0.00	202.32	0.00	202.84	0.10	203.36	2.93
201.81	0.00	202.33	0.00	202.85	0.10	203.37	3.05

Stage-Discharge for Pond B-57: Basin #57 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.38	3.16	203.90	10.86	204.42	29.06	204.94	111.85
203.39	3.28	203.91	11.04	204.43	30.01	204.95	113.82
203.40	3.40	203.92	11.21	204.44	30.98	204.96	115.81
203.41	3.52	203.93	11.39	204.45	31.98	204.97	117.81
203.42	3.65	203.94	11.56	204.46	33.04	204.98	119.83
203.43	3.77	203.95	11.74	204.47	34.12	204.99	121.86
203.44	3.90	203.96	11.91	204.48	35.22	205.00	123.90
203.45	4.02	203.97	12.09	204.49	36.36		
203.46	4.15	203.98	12.27	204.50	37.52		
203.47	4.28	203.99	12.45	204.51	38.70		
203.48	4.41	204.00	12.63	204.52	39.91		
203.49	4.54	204.01	12.81	204.53	41.15		
203.50	4.68	204.02	12.99	204.54	42.41		
203.51	4.81	204.03	13.18	204.55	43.69		
203.52	4.95	204.04	13.36	204.56	45.00		
203.53	5.08	204.05	13.54	204.57	46.34		
203.54	5.22	204.06	13.73	204.58	47.70		
203.55	5.36	204.07	13.91	204.59	49.08		
203.56	5.50	204.08	14.10	204.60	50.49		
203.57	5.64	204.09	14.28	204.61	51.93		
203.58	5.79	204.10	14.47	204.62	53.39		
203.59	5.93	204.11	14.66	204.63	54.87		
203.60	6.07	204.12	14.85	204.64	56.38		
203.61	6.22	204.13	15.04	204.65	57.91		
203.62	6.37	204.14	15.23	204.66	59.49		
203.63	6.51	204.15	15.42	204.67	61.10		
203.64	6.66	204.16	15.61	204.68	62.74		
203.65	6.81	204.17	15.80	204.69	64.40		
203.66	6.96	204.18	15.99	204.70	66.09		
203.67	7.11	204.19	16.19	204.71	67.81		
203.68	7.27	204.20	16.38	204.72	69.55		
203.69	7.42	204.21	16.57	204.73	71.32		
203.70	7.58	204.22	16.77	204.74	73.12		
203.71	7.73	204.23	16.96	204.75	74.95		
203.72	7.89	204.24	17.16	204.76	76.80		
203.73	8.05	204.25	17.36	204.77	78.67		
203.74	8.21	204.26	17.67	204.78	80.58		
203.75	8.36	204.27	18.08	204.79	82.51		
203.76	8.53	204.28	18.56	204.80	84.47		
203.77	8.69	204.29	19.09	204.81	86.46		
203.78	8.85	204.30	19.66	204.82	88.47		
203.79	9.01	204.31	20.28	204.83	90.51		
203.80	9.18	204.32	20.93	204.84	92.58		
203.81	9.34	204.33	21.61	204.85	94.67		
203.82	9.51	204.34	22.33	204.86	96.53		
203.83	9.67	204.35	23.08	204.87	98.39		
203.84	9.84	204.36	23.85	204.88	100.27		
203.85	10.01	204.37	24.66	204.89	102.17		
203.86	10.18	204.38	25.49	204.90	104.08		
203.87	10.35	204.39	26.34	204.91	106.00		
203.88	10.52	204.40	27.23	204.92	107.94		
203.89	10.69	204.41	28.13	204.93	109.88		

Stage-Area-Storage for Pond B-57: Basin #57

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.30	0	0	201.82	2,948	767
201.31	57	0	201.83	3,005	796
201.32	113	1	201.84	3,062	827
201.33	170	3	201.85	3,119	858
201.34	227	5	201.86	3,175	889
201.35	284	7	201.87	3,232	921
201.36	340	10	201.88	3,289	954
201.37	397	14	201.89	3,345	987
201.38	454	18	201.90	3,402	1,021
201.39	510	23	201.91	3,459	1,055
201.40	567	28	201.92	3,515	1,090
201.41	624	34	201.93	3,572	1,125
201.42	680	41	201.94	3,629	1,161
201.43	737	48	201.95	3,686	1,198
201.44	794	56	201.96	3,742	1,235
201.45	851	64	201.97	3,799	1,273
201.46	907	73	201.98	3,856	1,311
201.47	964	82	201.99	3,912	1,350
201.48	1,021	92	202.00	3,969	1,389
201.49	1,077	102	202.01	3,974	1,429
201.50	1,134	113	202.02	3,979	1,469
201.51	1,191	125	202.03	3,985	1,508
201.52	1,247	137	202.04	3,990	1,548
201.53	1,304	150	202.05	3,995	1,588
201.54	1,361	163	202.06	4,000	1,628
201.55	1,418	177	202.07	4,005	1,668
201.56	1,474	192	202.08	4,011	1,708
201.57	1,531	207	202.09	4,016	1,748
201.58	1,588	222	202.10	4,021	1,789
201.59	1,644	238	202.11	4,026	1,829
201.60	1,701	255	202.12	4,031	1,869
201.61	1,758	272	202.13	4,036	1,910
201.62	1,814	290	202.14	4,042	1,950
201.63	1,871	309	202.15	4,047	1,990
201.64	1,928	328	202.16	4,052	2,031
201.65	1,985	347	202.17	4,057	2,071
201.66	2,041	367	202.18	4,062	2,112
201.67	2,098	388	202.19	4,068	2,153
201.68	2,155	409	202.20	4,073	2,193
201.69	2,211	431	202.21	4,078	2,234
201.70	2,268	454	202.22	4,083	2,275
201.71	2,325	477	202.23	4,088	2,316
201.72	2,381	500	202.24	4,094	2,357
201.73	2,438	524	202.25	4,099	2,398
201.74	2,495	549	202.26	4,104	2,439
201.75	2,551	574	202.27	4,109	2,480
201.76	2,608	600	202.28	4,114	2,521
201.77	2,665	626	202.29	4,120	2,562
201.78	2,722	653	202.30	4,125	2,603
201.79	2,778	681	202.31	4,130	2,644
201.80	2,835	709	202.32	4,135	2,686
201.81	2,892	737	202.33	4,140	2,727

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.34	4,145	2,769	202.86	4,415	4,994
202.35	4,151	2,810	202.87	4,421	5,039
202.36	4,156	2,852	202.88	4,426	5,083
202.37	4,161	2,893	202.89	4,431	5,127
202.38	4,166	2,935	202.90	4,436	5,171
202.39	4,171	2,977	202.91	4,441	5,216
202.40	4,177	3,018	202.92	4,446	5,260
202.41	4,182	3,060	202.93	4,452	5,305
202.42	4,187	3,102	202.94	4,457	5,349
202.43	4,192	3,144	202.95	4,462	5,394
202.44	4,197	3,186	202.96	4,467	5,439
202.45	4,203	3,228	202.97	4,472	5,483
202.46	4,208	3,270	202.98	4,478	5,528
202.47	4,213	3,312	202.99	4,483	5,573
202.48	4,218	3,354	203.00	4,488	5,618
202.49	4,223	3,396	203.01	4,493	5,663
202.50	4,229	3,439	203.02	4,499	5,708
202.51	4,234	3,481	203.03	4,504	5,753
202.52	4,239	3,523	203.04	4,510	5,798
202.53	4,244	3,566	203.05	4,515	5,843
202.54	4,249	3,608	203.06	4,521	5,888
202.55	4,254	3,651	203.07	4,526	5,933
202.56	4,260	3,693	203.08	4,532	5,978
202.57	4,265	3,736	203.09	4,537	6,024
202.58	4,270	3,778	203.10	4,543	6,069
202.59	4,275	3,821	203.11	4,548	6,115
202.60	4,280	3,864	203.12	4,554	6,160
202.61	4,286	3,907	203.13	4,559	6,206
202.62	4,291	3,950	203.14	4,564	6,251
202.63	4,296	3,993	203.15	4,570	6,297
202.64	4,301	4,036	203.16	4,575	6,343
202.65	4,306	4,079	203.17	4,581	6,388
202.66	4,312	4,122	203.18	4,586	6,434
202.67	4,317	4,165	203.19	4,592	6,480
202.68	4,322	4,208	203.20	4,597	6,526
202.69	4,327	4,251	203.21	4,603	6,572
202.70	4,332	4,295	203.22	4,608	6,618
202.71	4,337	4,338	203.23	4,614	6,664
202.72	4,343	4,381	203.24	4,619	6,710
202.73	4,348	4,425	203.25	4,625	6,757
202.74	4,353	4,468	203.26	4,630	6,803
202.75	4,358	4,512	203.27	4,635	6,849
202.76	4,363	4,555	203.28	4,641	6,896
202.77	4,369	4,599	203.29	4,646	6,942
202.78	4,374	4,643	203.30	4,652	6,989
202.79	4,379	4,687	203.31	4,657	7,035
202.80	4,384	4,730	203.32	4,663	7,082
202.81	4,389	4,774	203.33	4,668	7,128
202.82	4,395	4,818	203.34	4,674	7,175
202.83	4,400	4,862	203.35	4,679	7,222
202.84	4,405	4,906	203.36	4,685	7,269
202.85	4,410	4,950	203.37	4,690	7,316

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.38	4,695	7,363	203.90	4,979	9,878
203.39	4,701	7,409	203.91	4,985	9,928
203.40	4,706	7,457	203.92	4,990	9,978
203.41	4,712	7,504	203.93	4,996	10,028
203.42	4,717	7,551	203.94	5,001	10,078
203.43	4,723	7,598	203.95	5,007	10,128
203.44	4,728	7,645	203.96	5,012	10,178
203.45	4,734	7,693	203.97	5,018	10,228
203.46	4,739	7,740	203.98	5,023	10,278
203.47	4,745	7,787	203.99	5,029	10,328
203.48	4,750	7,835	204.00	5,034	10,379
203.49	4,756	7,882	204.01	5,045	10,429
203.50	4,761	7,930	204.02	5,057	10,480
203.51	4,766	7,978	204.03	5,068	10,530
203.52	4,772	8,025	204.04	5,080	10,581
203.53	4,777	8,073	204.05	5,091	10,632
203.54	4,783	8,121	204.06	5,103	10,683
203.55	4,788	8,169	204.07	5,114	10,734
203.56	4,794	8,217	204.08	5,126	10,785
203.57	4,799	8,265	204.09	5,137	10,836
203.58	4,805	8,313	204.10	5,149	10,888
203.59	4,810	8,361	204.11	5,160	10,939
203.60	4,816	8,409	204.12	5,172	10,991
203.61	4,821	8,457	204.13	5,183	11,043
203.62	4,827	8,505	204.14	5,195	11,095
203.63	4,832	8,553	204.15	5,206	11,147
203.64	4,837	8,602	204.16	5,218	11,199
203.65	4,843	8,650	204.17	5,229	11,251
203.66	4,848	8,699	204.18	5,241	11,303
203.67	4,854	8,747	204.19	5,252	11,356
203.68	4,859	8,796	204.20	5,264	11,408
203.69	4,865	8,844	204.21	5,275	11,461
203.70	4,870	8,893	204.22	5,287	11,514
203.71	4,876	8,942	204.23	5,298	11,567
203.72	4,881	8,991	204.24	5,310	11,620
203.73	4,887	9,039	204.25	5,321	11,673
203.74	4,892	9,088	204.26	5,332	11,726
203.75	4,898	9,137	204.27	5,344	11,780
203.76	4,903	9,186	204.28	5,355	11,833
203.77	4,908	9,235	204.29	5,367	11,887
203.78	4,914	9,284	204.30	5,378	11,941
203.79	4,919	9,334	204.31	5,390	11,994
203.80	4,925	9,383	204.32	5,401	12,048
203.81	4,930	9,432	204.33	5,413	12,102
203.82	4,936	9,481	204.34	5,424	12,157
203.83	4,941	9,531	204.35	5,436	12,211
203.84	4,947	9,580	204.36	5,447	12,265
203.85	4,952	9,630	204.37	5,459	12,320
203.86	4,958	9,679	204.38	5,470	12,374
203.87	4,963	9,729	204.39	5,482	12,429
203.88	4,968	9,779	204.40	5,493	12,484
203.89	4,974	9,828	204.41	5,505	12,539

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.42	5,516	12,594	204.94	5,608	13,039
204.43	5,528	12,649	204.95	5,608	13,039
204.44	5,539	12,705	204.96	5,608	13,039
204.45	5,551	12,760	204.97	5,608	13,039
204.46	5,562	12,816	204.98	5,608	13,039
204.47	5,574	12,871	204.99	5,608	13,039
204.48	5,585	12,927	205.00	5,608	13,039
204.49	5,597	12,983			
204.50	5,608	13,039			
204.51	5,608	13,039			
204.52	5,608	13,039			
204.53	5,608	13,039			
204.54	5,608	13,039			
204.55	5,608	13,039			
204.56	5,608	13,039			
204.57	5,608	13,039			
204.58	5,608	13,039			
204.59	5,608	13,039			
204.60	5,608	13,039			
204.61	5,608	13,039			
204.62	5,608	13,039			
204.63	5,608	13,039			
204.64	5,608	13,039			
204.65	5,608	13,039			
204.66	5,608	13,039			
204.67	5,608	13,039			
204.68	5,608	13,039			
204.69	5,608	13,039			
204.70	5,608	13,039			
204.71	5,608	13,039			
204.72	5,608	13,039			
204.73	5,608	13,039			
204.74	5,608	13,039			
204.75	5,608	13,039			
204.76	5,608	13,039			
204.77	5,608	13,039			
204.78	5,608	13,039			
204.79	5,608	13,039			
204.80	5,608	13,039			
204.81	5,608	13,039			
204.82	5,608	13,039			
204.83	5,608	13,039			
204.84	5,608	13,039			
204.85	5,608	13,039			
204.86	5,608	13,039			
204.87	5,608	13,039			
204.88	5,608	13,039			
204.89	5,608	13,039			
204.90	5,608	13,039			
204.91	5,608	13,039			
204.92	5,608	13,039			
204.93	5,608	13,039			

Summary for Pond B-58: Basin #58

Inflow Area = 3.083 ac, 36.46% Impervious, Inflow Depth > 3.06" for Current 10 yr event
 Inflow = 8.16 cfs @ 12.21 hrs, Volume= 0.787 af
 Outflow = 4.21 cfs @ 12.46 hrs, Volume= 0.732 af, Atten= 48%, Lag= 14.9 min
 Primary = 4.21 cfs @ 12.46 hrs, Volume= 0.732 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 199.99' @ 12.46 hrs Surf.Area= 6,926 sf Storage= 8,703 cf

Plug-Flow detention time= 125.2 min calculated for 0.732 af (93% of inflow)
 Center-of-Mass det. time= 68.6 min (960.5 - 891.9)

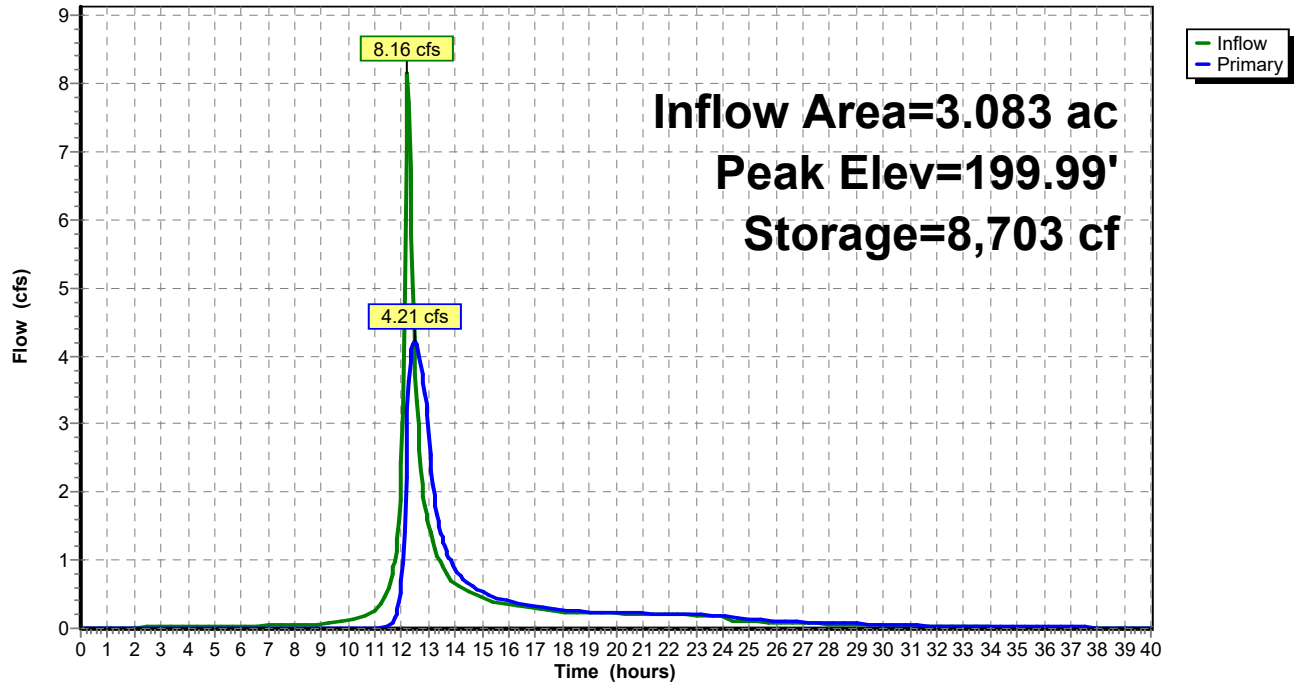
Volume	Invert	Avail.Storage	Storage Description
#1	198.30'	32,924 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
198.30	0	0	0
199.00	6,230	2,180	2,180
200.00	6,932	6,581	8,761
201.00	7,670	7,301	16,062
202.00	8,426	8,048	24,110
203.00	9,201	8,814	32,924

Device	Routing	Invert	Outlet Devices
#1	Primary	199.00'	36.0" Round Culvert L= 87.0' Ke= 0.500 Inlet / Outlet Invert= 199.00' / 198.00' S= 0.0115 '/' Cc= 0.900 n= 0.013, Flow Area= 7.07 sf
#2	Device 1	198.97'	24.0" W x 6.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	201.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	202.75'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.21 cfs @ 12.46 hrs HW=199.99' (Free Discharge)

1=Culvert (Passes 4.21 cfs of 6.90 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 4.21 cfs @ 4.21 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-58: Basin #58**Hydrograph**

Stage-Discharge for Pond B-58: Basin #58

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
198.30	0.00	198.82	0.00	199.34	0.88	199.86	3.82
198.31	0.00	198.83	0.00	199.35	0.93	199.87	3.86
198.32	0.00	198.84	0.00	199.36	0.98	199.88	3.89
198.33	0.00	198.85	0.00	199.37	1.04	199.89	3.92
198.34	0.00	198.86	0.00	199.38	1.09	199.90	3.95
198.35	0.00	198.87	0.00	199.39	1.15	199.91	3.97
198.36	0.00	198.88	0.00	199.40	1.21	199.92	4.00
198.37	0.00	198.89	0.00	199.41	1.27	199.93	4.03
198.38	0.00	198.90	0.00	199.42	1.33	199.94	4.06
198.39	0.00	198.91	0.00	199.43	1.39	199.95	4.09
198.40	0.00	198.92	0.00	199.44	1.45	199.96	4.12
198.41	0.00	198.93	0.00	199.45	1.52	199.97	4.15
198.42	0.00	198.94	0.00	199.46	1.59	199.98	4.18
198.43	0.00	198.95	0.00	199.47	1.65	199.99	4.20
198.44	0.00	198.96	0.00	199.48	1.72	200.00	4.23
198.45	0.00	198.97	0.00	199.49	1.79	200.01	4.26
198.46	0.00	198.98	0.00	199.50	1.86	200.02	4.29
198.47	0.00	198.99	0.00	199.51	1.94	200.03	4.31
198.48	0.00	199.00	0.00	199.52	2.01	200.04	4.34
198.49	0.00	199.01	0.00	199.53	2.09	200.05	4.37
198.50	0.00	199.02	0.00	199.54	2.16	200.06	4.39
198.51	0.00	199.03	0.01	199.55	2.24	200.07	4.42
198.52	0.00	199.04	0.01	199.56	2.32	200.08	4.45
198.53	0.00	199.05	0.02	199.57	2.40	200.09	4.47
198.54	0.00	199.06	0.03	199.58	2.49	200.10	4.50
198.55	0.00	199.07	0.04	199.59	2.57	200.11	4.53
198.56	0.00	199.08	0.05	199.60	2.65	200.12	4.55
198.57	0.00	199.09	0.06	199.61	2.74	200.13	4.58
198.58	0.00	199.10	0.08	199.62	2.83	200.14	4.60
198.59	0.00	199.11	0.09	199.63	2.92	200.15	4.63
198.60	0.00	199.12	0.11	199.64	3.01	200.16	4.65
198.61	0.00	199.13	0.13	199.65	3.10	200.17	4.68
198.62	0.00	199.14	0.15	199.66	3.15	200.18	4.70
198.63	0.00	199.15	0.17	199.67	3.18	200.19	4.73
198.64	0.00	199.16	0.20	199.68	3.22	200.20	4.75
198.65	0.00	199.17	0.22	199.69	3.26	200.21	4.78
198.66	0.00	199.18	0.25	199.70	3.29	200.22	4.80
198.67	0.00	199.19	0.28	199.71	3.33	200.23	4.82
198.68	0.00	199.20	0.31	199.72	3.36	200.24	4.85
198.69	0.00	199.21	0.34	199.73	3.40	200.25	4.87
198.70	0.00	199.22	0.37	199.74	3.43	200.26	4.90
198.71	0.00	199.23	0.41	199.75	3.47	200.27	4.92
198.72	0.00	199.24	0.44	199.76	3.50	200.28	4.94
198.73	0.00	199.25	0.48	199.77	3.54	200.29	4.97
198.74	0.00	199.26	0.52	199.78	3.57	200.30	4.99
198.75	0.00	199.27	0.56	199.79	3.60	200.31	5.01
198.76	0.00	199.28	0.60	199.80	3.64	200.32	5.04
198.77	0.00	199.29	0.64	199.81	3.67	200.33	5.06
198.78	0.00	199.30	0.69	199.82	3.70	200.34	5.08
198.79	0.00	199.31	0.73	199.83	3.73	200.35	5.11
198.80	0.00	199.32	0.78	199.84	3.76	200.36	5.13
198.81	0.00	199.33	0.83	199.85	3.79	200.37	5.15

Stage-Discharge for Pond B-58: Basin #58 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.38	5.17	200.90	6.23	201.42	10.62	201.94	19.30
200.39	5.20	200.91	6.25	201.43	10.76	201.95	19.49
200.40	5.22	200.92	6.27	201.44	10.90	201.96	19.68
200.41	5.24	200.93	6.29	201.45	11.04	201.97	19.87
200.42	5.26	200.94	6.31	201.46	11.19	201.98	20.06
200.43	5.29	200.95	6.33	201.47	11.33	201.99	20.26
200.44	5.31	200.96	6.34	201.48	11.48	202.00	20.45
200.45	5.33	200.97	6.36	201.49	11.63	202.01	20.64
200.46	5.35	200.98	6.38	201.50	11.77	202.02	20.84
200.47	5.37	200.99	6.40	201.51	11.92	202.03	21.04
200.48	5.39	201.00	6.42	201.52	12.07	202.04	21.23
200.49	5.42	201.01	6.45	201.53	12.23	202.05	21.43
200.50	5.44	201.02	6.49	201.54	12.38	202.06	21.63
200.51	5.46	201.03	6.54	201.55	12.53	202.07	21.83
200.52	5.48	201.04	6.59	201.56	12.69	202.08	22.03
200.53	5.50	201.05	6.65	201.57	12.84	202.09	22.23
200.54	5.52	201.06	6.72	201.58	13.00	202.10	22.43
200.55	5.54	201.07	6.78	201.59	13.16	202.11	22.63
200.56	5.56	201.08	6.86	201.60	13.32	202.12	22.83
200.57	5.58	201.09	6.93	201.61	13.48	202.13	23.03
200.58	5.61	201.10	7.01	201.62	13.64	202.14	23.24
200.59	5.63	201.11	7.09	201.63	13.80	202.15	23.44
200.60	5.65	201.12	7.17	201.64	13.97	202.16	23.65
200.61	5.67	201.13	7.26	201.65	14.13	202.17	23.85
200.62	5.69	201.14	7.35	201.66	14.30	202.18	24.06
200.63	5.71	201.15	7.44	201.67	14.47	202.19	24.26
200.64	5.73	201.16	7.53	201.68	14.63	202.20	24.47
200.65	5.75	201.17	7.63	201.69	14.80	202.21	24.68
200.66	5.77	201.18	7.72	201.70	14.97	202.22	24.89
200.67	5.79	201.19	7.83	201.71	15.14	202.23	25.10
200.68	5.81	201.20	7.93	201.72	15.31	202.24	25.31
200.69	5.83	201.21	8.03	201.73	15.48	202.25	25.52
200.70	5.85	201.22	8.14	201.74	15.66	202.26	25.73
200.71	5.87	201.23	8.25	201.75	15.83	202.27	25.94
200.72	5.89	201.24	8.36	201.76	16.01	202.28	26.15
200.73	5.91	201.25	8.47	201.77	16.18	202.29	26.36
200.74	5.93	201.26	8.58	201.78	16.36	202.30	26.57
200.75	5.95	201.27	8.70	201.79	16.54	202.31	26.79
200.76	5.97	201.28	8.82	201.80	16.71	202.32	27.00
200.77	5.99	201.29	8.93	201.81	16.89	202.33	27.22
200.78	6.01	201.30	9.06	201.82	17.07	202.34	27.43
200.79	6.03	201.31	9.18	201.83	17.25	202.35	27.65
200.80	6.04	201.32	9.30	201.84	17.44	202.36	27.86
200.81	6.06	201.33	9.43	201.85	17.62	202.37	28.08
200.82	6.08	201.34	9.55	201.86	17.80	202.38	28.30
200.83	6.10	201.35	9.68	201.87	17.99	202.39	28.51
200.84	6.12	201.36	9.81	201.88	18.17	202.40	28.73
200.85	6.14	201.37	9.94	201.89	18.36	202.41	28.95
200.86	6.16	201.38	10.08	201.90	18.54	202.42	29.17
200.87	6.18	201.39	10.21	201.91	18.73	202.43	29.39
200.88	6.20	201.40	10.35	201.92	18.92	202.44	29.61
200.89	6.21	201.41	10.48	201.93	19.11	202.45	29.83

Stage-Discharge for Pond B-58: Basin #58 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
202.46	30.05	202.98	55.35
202.47	30.28	202.99	56.52
202.48	30.50	203.00	57.71
202.49	30.72		
202.50	30.94		
202.51	31.17		
202.52	31.39		
202.53	31.62		
202.54	31.84		
202.55	32.07		
202.56	32.29		
202.57	32.52		
202.58	32.75		
202.59	32.98		
202.60	33.20		
202.61	33.43		
202.62	33.66		
202.63	33.89		
202.64	34.12		
202.65	34.35		
202.66	34.58		
202.67	34.81		
202.68	35.04		
202.69	35.27		
202.70	35.51		
202.71	35.74		
202.72	35.97		
202.73	36.21		
202.74	36.44		
202.75	36.67		
202.76	37.03		
202.77	37.48		
202.78	37.99		
202.79	38.55		
202.80	39.16		
202.81	39.81		
202.82	40.50		
202.83	41.22		
202.84	41.97		
202.85	42.76		
202.86	43.57		
202.87	44.41		
202.88	45.27		
202.89	46.17		
202.90	47.08		
202.91	48.02		
202.92	48.98		
202.93	49.97		
202.94	50.98		
202.95	52.01		
202.96	53.09		
202.97	54.21		

Stage-Area-Storage for Pond B-58: Basin #58

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
198.30	0	0	198.82	4,628	1,203
198.31	89	0	198.83	4,717	1,250
198.32	178	2	198.84	4,806	1,298
198.33	267	4	198.85	4,895	1,346
198.34	356	7	198.86	4,984	1,396
198.35	445	11	198.87	5,073	1,446
198.36	534	16	198.88	5,162	1,497
198.37	623	22	198.89	5,251	1,549
198.38	712	28	198.90	5,340	1,602
198.39	801	36	198.91	5,429	1,656
198.40	890	44	198.92	5,518	1,711
198.41	979	54	198.93	5,607	1,766
198.42	1,068	64	198.94	5,696	1,823
198.43	1,157	75	198.95	5,785	1,880
198.44	1,246	87	198.96	5,874	1,938
198.45	1,335	100	198.97	5,963	1,998
198.46	1,424	114	198.98	6,052	2,058
198.47	1,513	129	198.99	6,141	2,119
198.48	1,602	144	199.00	6,230	2,180
198.49	1,691	161	199.01	6,237	2,243
198.50	1,780	178	199.02	6,244	2,305
198.51	1,869	196	199.03	6,251	2,368
198.52	1,958	215	199.04	6,258	2,430
198.53	2,047	235	199.05	6,265	2,493
198.54	2,136	256	199.06	6,272	2,556
198.55	2,225	278	199.07	6,279	2,618
198.56	2,314	301	199.08	6,286	2,681
198.57	2,403	324	199.09	6,293	2,744
198.58	2,492	349	199.10	6,300	2,807
198.59	2,581	374	199.11	6,307	2,870
198.60	2,670	401	199.12	6,314	2,933
198.61	2,759	428	199.13	6,321	2,996
198.62	2,848	456	199.14	6,328	3,060
198.63	2,937	485	199.15	6,335	3,123
198.64	3,026	514	199.16	6,342	3,186
198.65	3,115	545	199.17	6,349	3,250
198.66	3,204	577	199.18	6,356	3,313
198.67	3,293	609	199.19	6,363	3,377
198.68	3,382	643	199.20	6,370	3,441
198.69	3,471	677	199.21	6,377	3,504
198.70	3,560	712	199.22	6,384	3,568
198.71	3,649	748	199.23	6,391	3,632
198.72	3,738	785	199.24	6,398	3,696
198.73	3,827	823	199.25	6,406	3,760
198.74	3,916	862	199.26	6,413	3,824
198.75	4,005	901	199.27	6,420	3,888
198.76	4,094	942	199.28	6,427	3,952
198.77	4,183	983	199.29	6,434	4,017
198.78	4,272	1,025	199.30	6,441	4,081
198.79	4,361	1,068	199.31	6,448	4,146
198.80	4,450	1,113	199.32	6,455	4,210
198.81	4,539	1,157	199.33	6,462	4,275

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
199.34	6,469	4,339	199.86	6,834	7,798
199.35	6,476	4,404	199.87	6,841	7,866
199.36	6,483	4,469	199.88	6,848	7,935
199.37	6,490	4,534	199.89	6,855	8,003
199.38	6,497	4,599	199.90	6,862	8,072
199.39	6,504	4,664	199.91	6,869	8,140
199.40	6,511	4,729	199.92	6,876	8,209
199.41	6,518	4,794	199.93	6,883	8,278
199.42	6,525	4,859	199.94	6,890	8,347
199.43	6,532	4,924	199.95	6,897	8,416
199.44	6,539	4,990	199.96	6,904	8,485
199.45	6,546	5,055	199.97	6,911	8,554
199.46	6,553	5,121	199.98	6,918	8,623
199.47	6,560	5,186	199.99	6,925	8,692
199.48	6,567	5,252	200.00	6,932	8,761
199.49	6,574	5,317	200.01	6,939	8,831
199.50	6,581	5,383	200.02	6,947	8,900
199.51	6,588	5,449	200.03	6,954	8,970
199.52	6,595	5,515	200.04	6,962	9,039
199.53	6,602	5,581	200.05	6,969	9,109
199.54	6,609	5,647	200.06	6,976	9,179
199.55	6,616	5,713	200.07	6,984	9,249
199.56	6,623	5,779	200.08	6,991	9,318
199.57	6,630	5,846	200.09	6,998	9,388
199.58	6,637	5,912	200.10	7,006	9,458
199.59	6,644	5,978	200.11	7,013	9,528
199.60	6,651	6,045	200.12	7,021	9,599
199.61	6,658	6,111	200.13	7,028	9,669
199.62	6,665	6,178	200.14	7,035	9,739
199.63	6,672	6,245	200.15	7,043	9,810
199.64	6,679	6,311	200.16	7,050	9,880
199.65	6,686	6,378	200.17	7,057	9,951
199.66	6,693	6,445	200.18	7,065	10,021
199.67	6,700	6,512	200.19	7,072	10,092
199.68	6,707	6,579	200.20	7,080	10,163
199.69	6,714	6,646	200.21	7,087	10,233
199.70	6,721	6,713	200.22	7,094	10,304
199.71	6,728	6,781	200.23	7,102	10,375
199.72	6,735	6,848	200.24	7,109	10,446
199.73	6,742	6,915	200.25	7,117	10,518
199.74	6,749	6,983	200.26	7,124	10,589
199.75	6,757	7,050	200.27	7,131	10,660
199.76	6,764	7,118	200.28	7,139	10,731
199.77	6,771	7,186	200.29	7,146	10,803
199.78	6,778	7,253	200.30	7,153	10,874
199.79	6,785	7,321	200.31	7,161	10,946
199.80	6,792	7,389	200.32	7,168	11,018
199.81	6,799	7,457	200.33	7,176	11,089
199.82	6,806	7,525	200.34	7,183	11,161
199.83	6,813	7,593	200.35	7,190	11,233
199.84	6,820	7,661	200.36	7,198	11,305
199.85	6,827	7,730	200.37	7,205	11,377

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.38	7,212	11,449	200.90	7,596	15,299
200.39	7,220	11,521	200.91	7,604	15,375
200.40	7,227	11,593	200.92	7,611	15,451
200.41	7,235	11,666	200.93	7,618	15,527
200.42	7,242	11,738	200.94	7,626	15,604
200.43	7,249	11,810	200.95	7,633	15,680
200.44	7,257	11,883	200.96	7,640	15,756
200.45	7,264	11,956	200.97	7,648	15,833
200.46	7,271	12,028	200.98	7,655	15,909
200.47	7,279	12,101	200.99	7,663	15,986
200.48	7,286	12,174	201.00	7,670	16,062
200.49	7,294	12,247	201.01	7,678	16,139
200.50	7,301	12,320	201.02	7,685	16,216
200.51	7,308	12,393	201.03	7,693	16,293
200.52	7,316	12,466	201.04	7,700	16,370
200.53	7,323	12,539	201.05	7,708	16,447
200.54	7,331	12,612	201.06	7,715	16,524
200.55	7,338	12,686	201.07	7,723	16,601
200.56	7,345	12,759	201.08	7,730	16,679
200.57	7,353	12,833	201.09	7,738	16,756
200.58	7,360	12,906	201.10	7,746	16,833
200.59	7,367	12,980	201.11	7,753	16,911
200.60	7,375	13,054	201.12	7,761	16,988
200.61	7,382	13,127	201.13	7,768	17,066
200.62	7,390	13,201	201.14	7,776	17,144
200.63	7,397	13,275	201.15	7,783	17,222
200.64	7,404	13,349	201.16	7,791	17,299
200.65	7,412	13,423	201.17	7,799	17,377
200.66	7,419	13,497	201.18	7,806	17,455
200.67	7,426	13,572	201.19	7,814	17,533
200.68	7,434	13,646	201.20	7,821	17,612
200.69	7,441	13,720	201.21	7,829	17,690
200.70	7,449	13,795	201.22	7,836	17,768
200.71	7,456	13,869	201.23	7,844	17,847
200.72	7,463	13,944	201.24	7,851	17,925
200.73	7,471	14,019	201.25	7,859	18,004
200.74	7,478	14,093	201.26	7,867	18,082
200.75	7,486	14,168	201.27	7,874	18,161
200.76	7,493	14,243	201.28	7,882	18,240
200.77	7,500	14,318	201.29	7,889	18,319
200.78	7,508	14,393	201.30	7,897	18,398
200.79	7,515	14,468	201.31	7,904	18,477
200.80	7,522	14,543	201.32	7,912	18,556
200.81	7,530	14,619	201.33	7,919	18,635
200.82	7,537	14,694	201.34	7,927	18,714
200.83	7,545	14,769	201.35	7,935	18,793
200.84	7,552	14,845	201.36	7,942	18,873
200.85	7,559	14,920	201.37	7,950	18,952
200.86	7,567	14,996	201.38	7,957	19,032
200.87	7,574	15,072	201.39	7,965	19,111
200.88	7,581	15,147	201.40	7,972	19,191
200.89	7,589	15,223	201.41	7,980	19,271

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.42	7,988	19,351	201.94	8,381	23,606
201.43	7,995	19,430	201.95	8,388	23,690
201.44	8,003	19,510	201.96	8,396	23,774
201.45	8,010	19,591	201.97	8,403	23,858
201.46	8,018	19,671	201.98	8,411	23,942
201.47	8,025	19,751	201.99	8,418	24,026
201.48	8,033	19,831	202.00	8,426	24,110
201.49	8,040	19,912	202.01	8,434	24,195
201.50	8,048	19,992	202.02	8,442	24,279
201.51	8,056	20,073	202.03	8,449	24,364
201.52	8,063	20,153	202.04	8,457	24,448
201.53	8,071	20,234	202.05	8,465	24,533
201.54	8,078	20,315	202.06	8,473	24,617
201.55	8,086	20,395	202.07	8,480	24,702
201.56	8,093	20,476	202.08	8,488	24,787
201.57	8,101	20,557	202.09	8,496	24,872
201.58	8,108	20,638	202.10	8,504	24,957
201.59	8,116	20,719	202.11	8,511	25,042
201.60	8,124	20,801	202.12	8,519	25,127
201.61	8,131	20,882	202.13	8,527	25,212
201.62	8,139	20,963	202.14	8,535	25,298
201.63	8,146	21,045	202.15	8,542	25,383
201.64	8,154	21,126	202.16	8,550	25,469
201.65	8,161	21,208	202.17	8,558	25,554
201.66	8,169	21,289	202.18	8,566	25,640
201.67	8,177	21,371	202.19	8,573	25,725
201.68	8,184	21,453	202.20	8,581	25,811
201.69	8,192	21,535	202.21	8,589	25,897
201.70	8,199	21,617	202.22	8,597	25,983
201.71	8,207	21,699	202.23	8,604	26,069
201.72	8,214	21,781	202.24	8,612	26,155
201.73	8,222	21,863	202.25	8,620	26,241
201.74	8,229	21,945	202.26	8,628	26,327
201.75	8,237	22,028	202.27	8,635	26,414
201.76	8,245	22,110	202.28	8,643	26,500
201.77	8,252	22,193	202.29	8,651	26,587
201.78	8,260	22,275	202.30	8,659	26,673
201.79	8,267	22,358	202.31	8,666	26,760
201.80	8,275	22,440	202.32	8,674	26,847
201.81	8,282	22,523	202.33	8,682	26,933
201.82	8,290	22,606	202.34	8,690	27,020
201.83	8,297	22,689	202.35	8,697	27,107
201.84	8,305	22,772	202.36	8,705	27,194
201.85	8,313	22,855	202.37	8,713	27,281
201.86	8,320	22,938	202.38	8,721	27,368
201.87	8,328	23,022	202.39	8,728	27,456
201.88	8,335	23,105	202.40	8,736	27,543
201.89	8,343	23,188	202.41	8,744	27,630
201.90	8,350	23,272	202.42	8,752	27,718
201.91	8,358	23,355	202.43	8,759	27,805
201.92	8,366	23,439	202.44	8,767	27,893
201.93	8,373	23,523	202.45	8,775	27,981

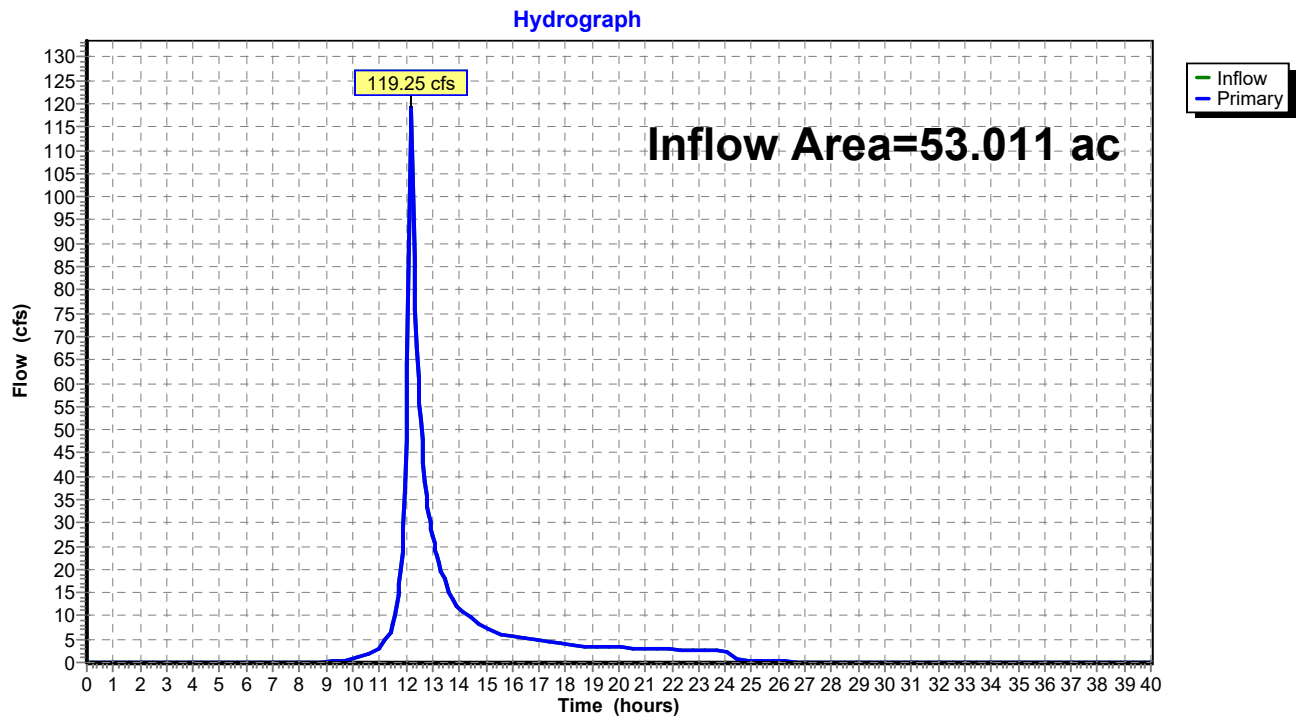
Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.46	8,783	28,068	202.98	9,186	32,740
202.47	8,790	28,156	202.99	9,193	32,832
202.48	8,798	28,244	203.00	9,201	32,924
202.49	8,806	28,332			
202.50	8,814	28,420			
202.51	8,821	28,509			
202.52	8,829	28,597			
202.53	8,837	28,685			
202.54	8,845	28,774			
202.55	8,852	28,862			
202.56	8,860	28,951			
202.57	8,868	29,039			
202.58	8,876	29,128			
202.59	8,883	29,217			
202.60	8,891	29,306			
202.61	8,899	29,395			
202.62	8,907	29,484			
202.63	8,914	29,573			
202.64	8,922	29,662			
202.65	8,930	29,751			
202.66	8,938	29,840			
202.67	8,945	29,930			
202.68	8,953	30,019			
202.69	8,961	30,109			
202.70	8,969	30,199			
202.71	8,976	30,288			
202.72	8,984	30,378			
202.73	8,992	30,468			
202.74	9,000	30,558			
202.75	9,007	30,648			
202.76	9,015	30,738			
202.77	9,023	30,828			
202.78	9,031	30,919			
202.79	9,038	31,009			
202.80	9,046	31,099			
202.81	9,054	31,190			
202.82	9,062	31,280			
202.83	9,069	31,371			
202.84	9,077	31,462			
202.85	9,085	31,553			
202.86	9,093	31,643			
202.87	9,100	31,734			
202.88	9,108	31,825			
202.89	9,116	31,917			
202.90	9,124	32,008			
202.91	9,131	32,099			
202.92	9,139	32,190			
202.93	9,147	32,282			
202.94	9,154	32,373			
202.95	9,162	32,465			
202.96	9,170	32,557			
202.97	9,178	32,648			

Summary for Link PDA-6: Proposed Drainage Area #6

Inflow Area = 53.011 ac, 11.21% Impervious, Inflow Depth = 2.58" for Current 10 yr event
Inflow = 119.25 cfs @ 12.19 hrs, Volume= 11.416 af
Primary = 119.25 cfs @ 12.19 hrs, Volume= 11.416 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-6: Proposed Drainage Area #6

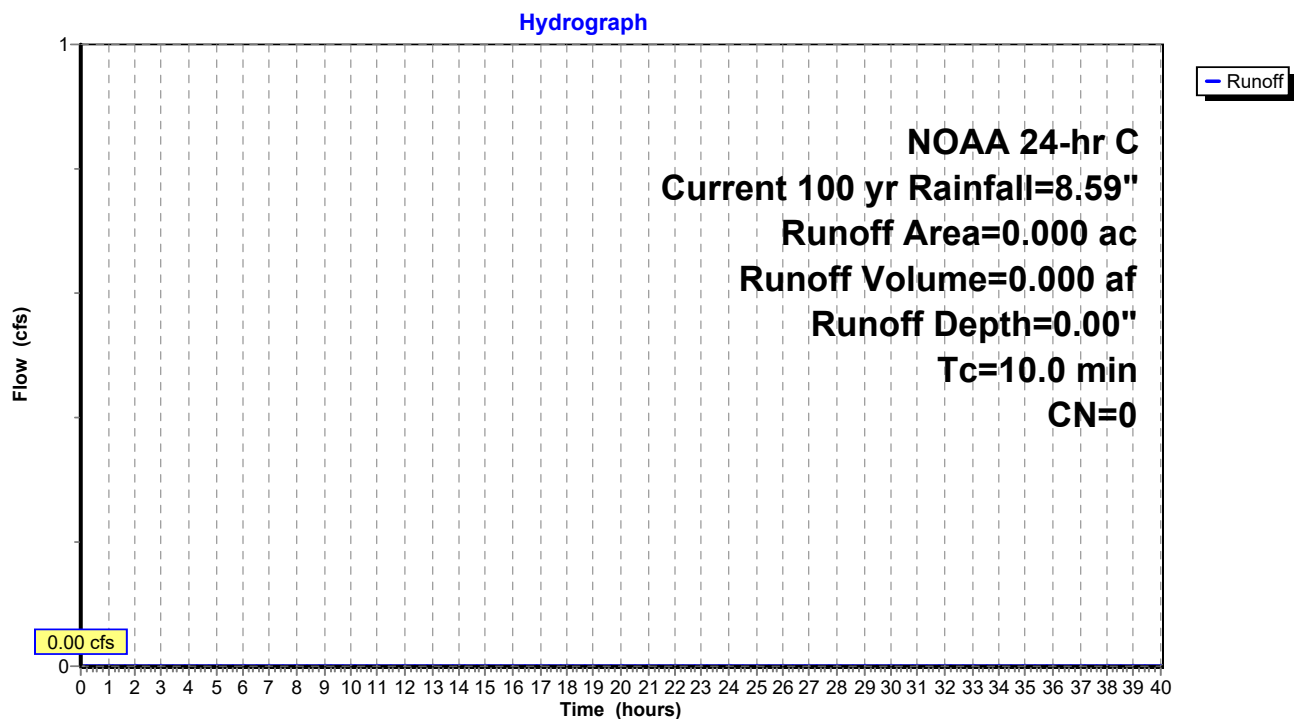
Summary for Subcatchment 51I: PDA-51 (impervious)

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
 Routed to Pond B-51 : Basin #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
* 0.000	98	Roof, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 51I: PDA-51 (impervious)

Summary for Subcatchment 51P: PDA-51 (pervious)

Runoff = 4.07 cfs @ 12.17 hrs, Volume= 0.310 af, Depth= 5.46"
 Routed to Pond B-51 : Basin #51

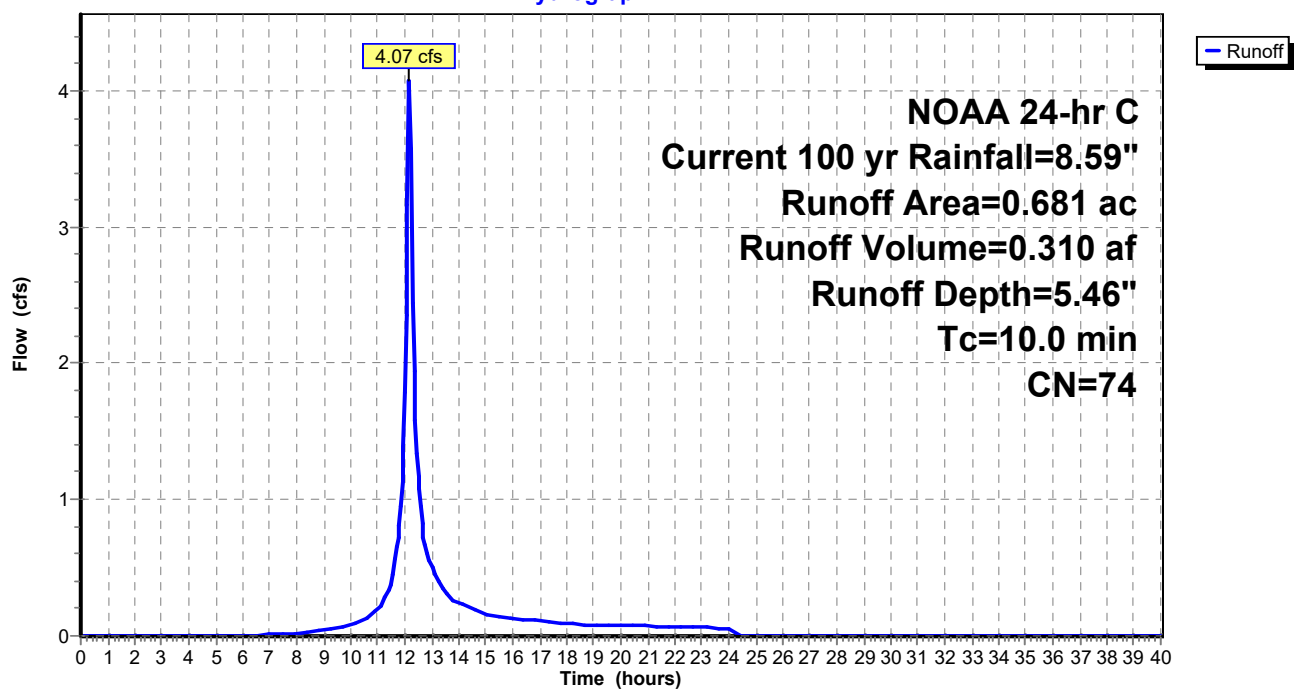
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.681	74	>75% Grass cover, Good, HSG C
0.681		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 51P: PDA-51 (pervious)

Hydrograph



Summary for Subcatchment 52I: PDA-52 (impervious)

Runoff = 3.85 cfs @ 12.17 hrs, Volume= 0.341 af, Depth= 8.35"
 Routed to Pond B-52 : Basin #52

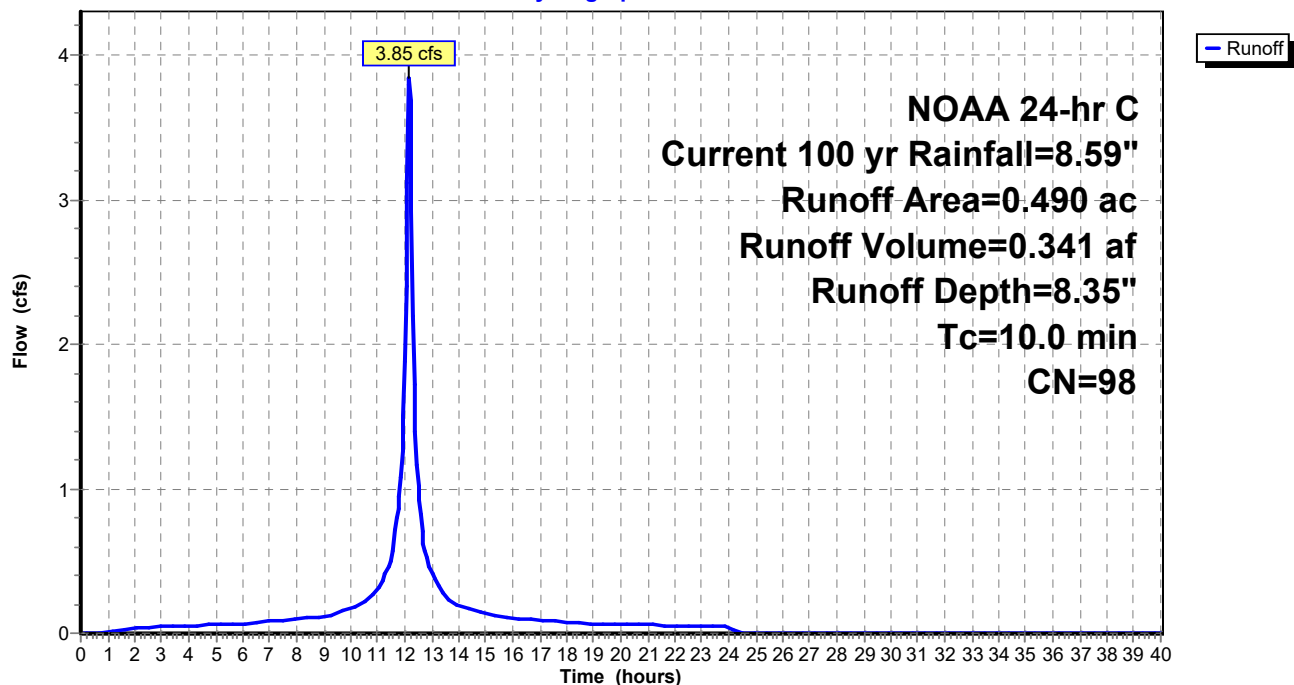
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
* 0.118	98	Pavement, HSG C
* 0.339	98	Roof, HSG C
* 0.033	98	Concrete, HSG C
0.490	98	Weighted Average
0.490		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 52I: PDA-52 (impervious)

Hydrograph



Summary for Subcatchment 52P: PDA-52 (pervious)

Runoff = 5.58 cfs @ 12.17 hrs, Volume= 0.424 af, Depth= 5.46"
 Routed to Pond B-52 : Basin #52

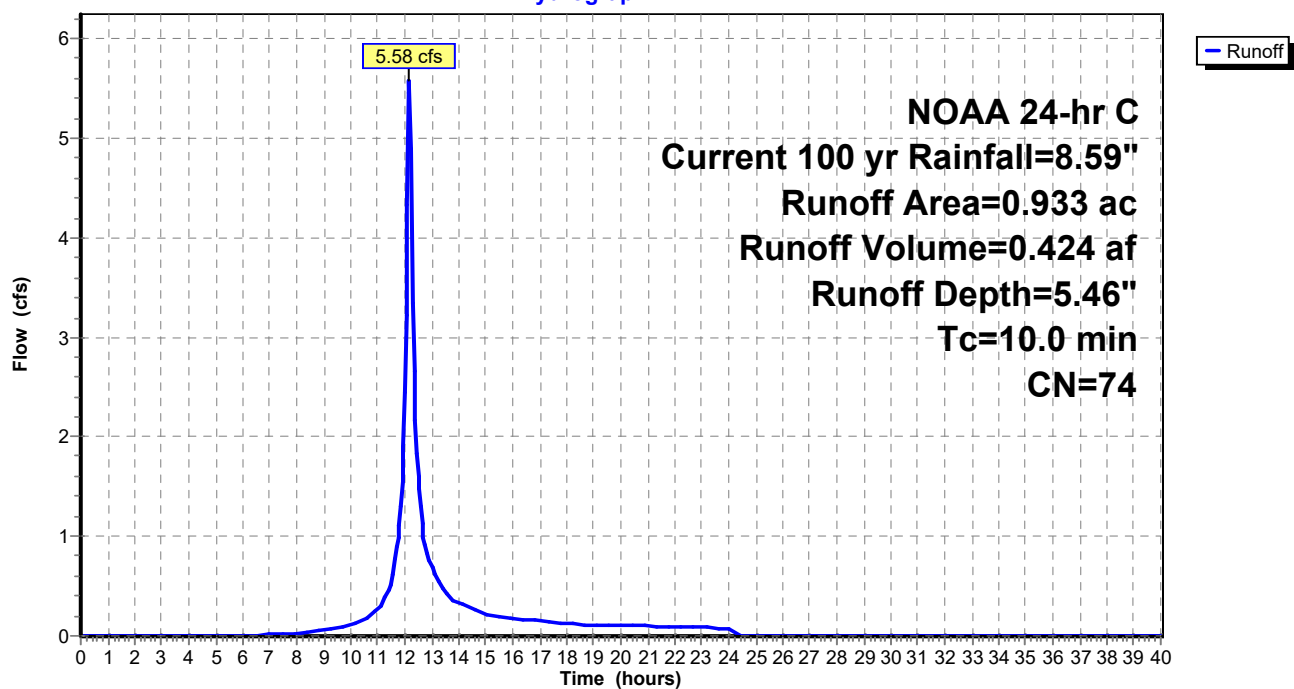
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.933	74	>75% Grass cover, Good, HSG C
0.933		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 52P: PDA-52 (pervious)

Hydrograph



Summary for Subcatchment 53I: PDA-53 (impervious)

Runoff = 9.53 cfs @ 12.17 hrs, Volume= 0.845 af, Depth= 8.35"
 Routed to Pond B-53 : Basin #53

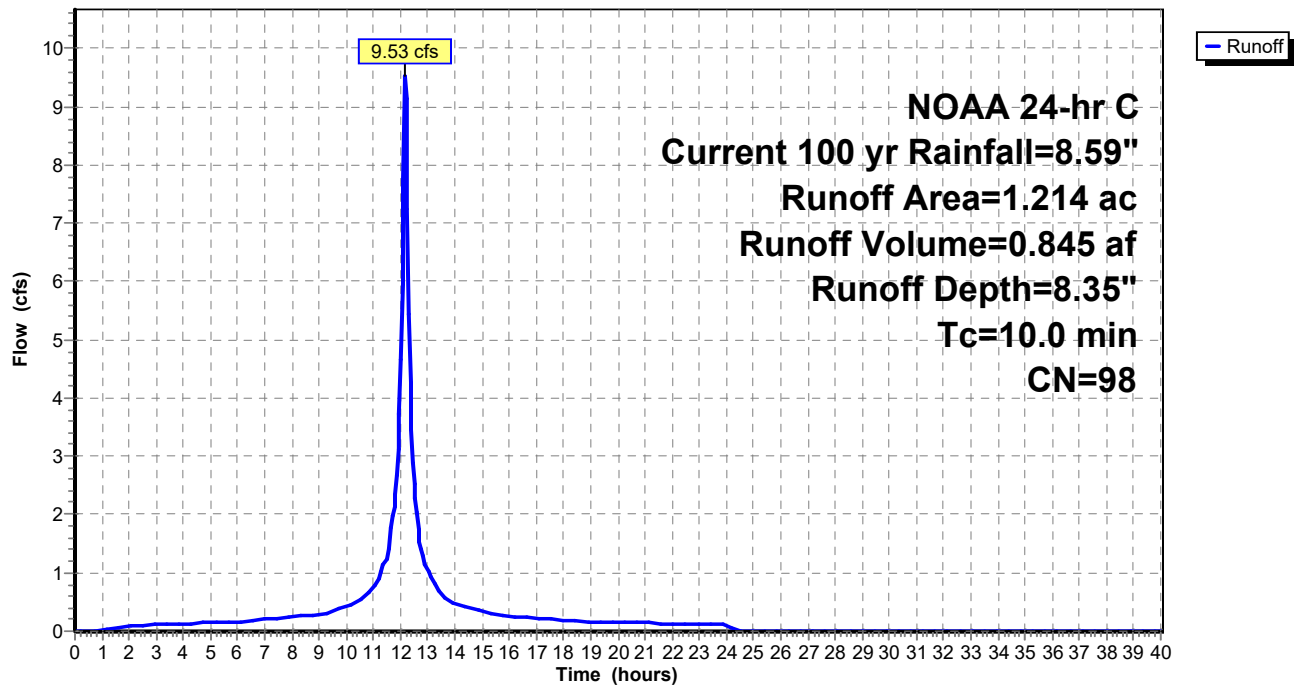
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
* 0.628	98	Pavement, HSG C
* 0.450	98	Roof, HSG C
* 0.136	98	Concrete, HSG C
1.214	98	Weighted Average
1.214		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 53I: PDA-53 (impervious)

Hydrograph



Summary for Subcatchment 53P: PDA-53 (pervious)

Runoff = 7.93 cfs @ 12.17 hrs, Volume= 0.603 af, Depth= 5.46"
 Routed to Pond B-53 : Basin #53

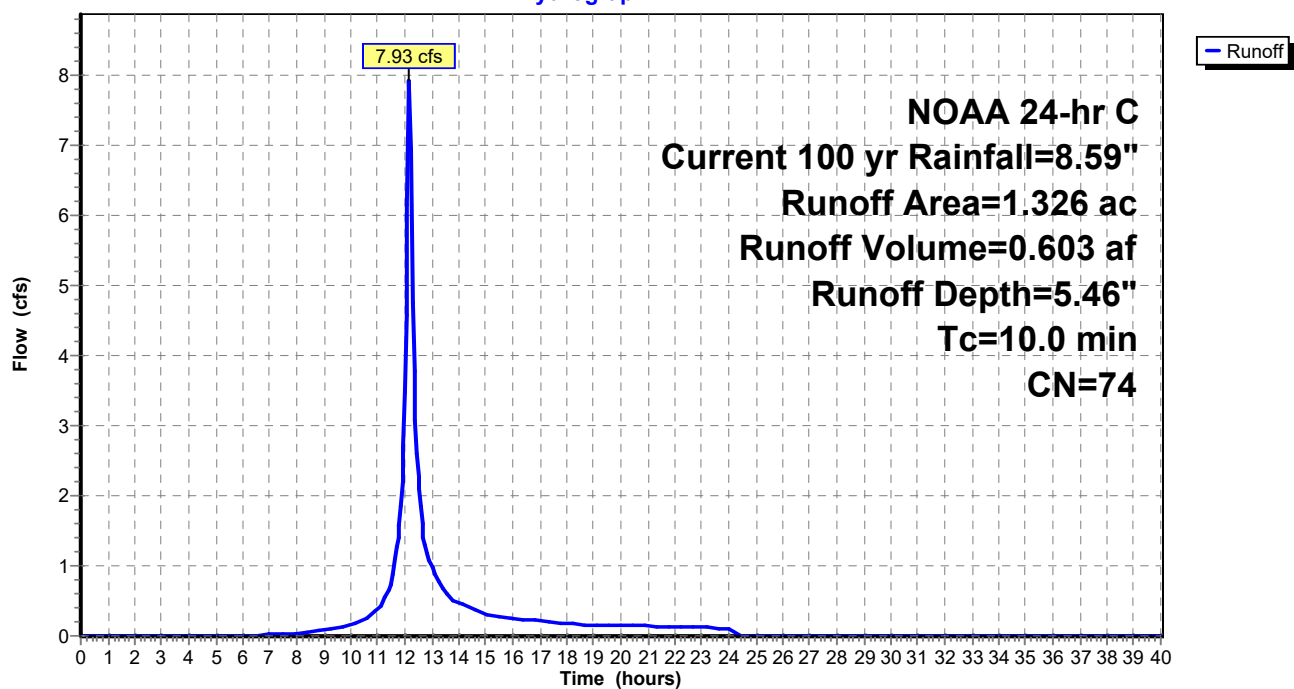
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.326	74	>75% Grass cover, Good, HSG C
1.326		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 53P: PDA-53 (pervious)

Hydrograph



Summary for Subcatchment 54I: PDA-54 (impervious)

Runoff = 12.20 cfs @ 12.17 hrs, Volume= 1.081 af, Depth= 8.35"
 Routed to Pond B-54 : Basin #54

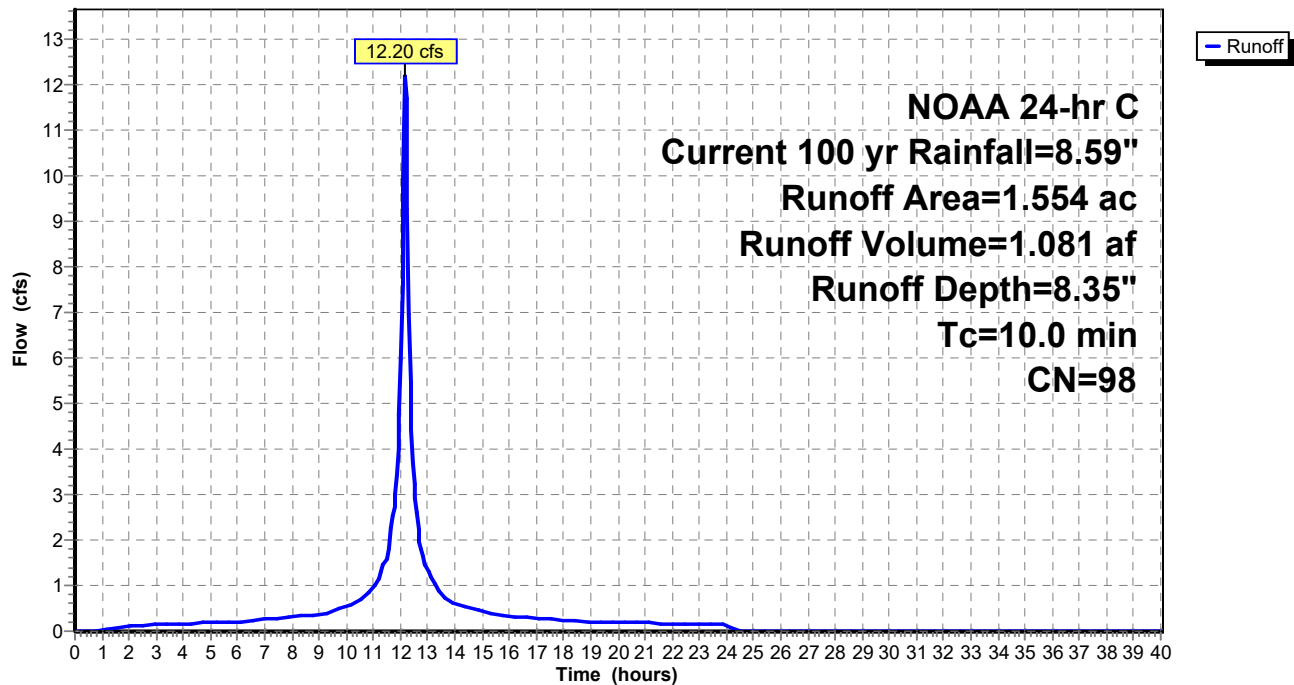
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
* 0.983	98	Pavement, HSG C
* 0.361	98	Roof, HSG C
* 0.210	98	Concrete, HSG C
1.554	98	Weighted Average
1.554		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 54I: PDA-54 (impervious)

Hydrograph



Summary for Subcatchment 54P: PDA-54 (pervious)

Runoff = 6.08 cfs @ 12.17 hrs, Volume= 0.462 af, Depth= 5.46"
 Routed to Pond B-54 : Basin #54

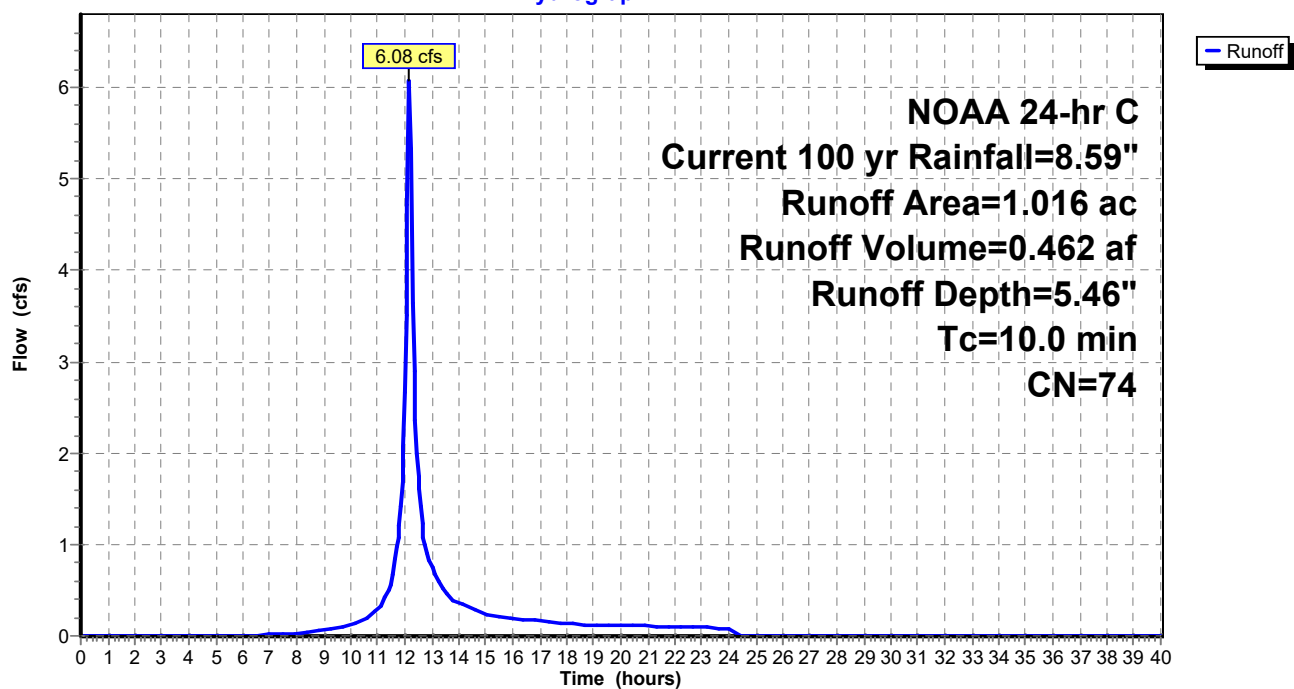
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.016	74	>75% Grass cover, Good, HSG C
1.016		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 54P: PDA-54 (pervious)

Hydrograph



Summary for Subcatchment 55I: PDA-55 (impervious)

Runoff = 8.55 cfs @ 12.17 hrs, Volume= 0.758 af, Depth= 8.35"
 Routed to Pond B-55 : Basin #55

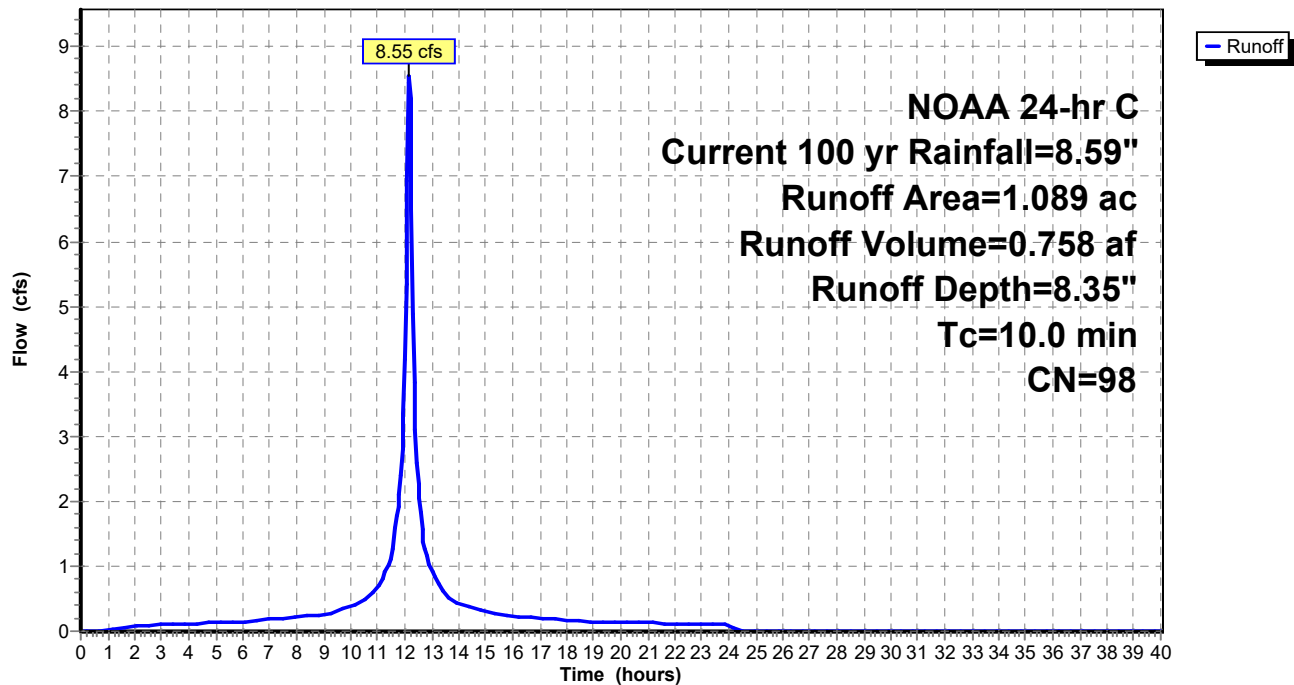
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
* 0.467	98	Pavement, HSG C
* 0.574	98	Roof, HSG C
* 0.048	98	Concrete, HSG C
1.089	98	Weighted Average
1.089		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 55I: PDA-55 (impervious)

Hydrograph



Summary for Subcatchment 55P: PDA-55 (pervious)

Runoff = 7.25 cfs @ 12.17 hrs, Volume= 0.551 af, Depth= 5.46"
 Routed to Pond B-55 : Basin #55

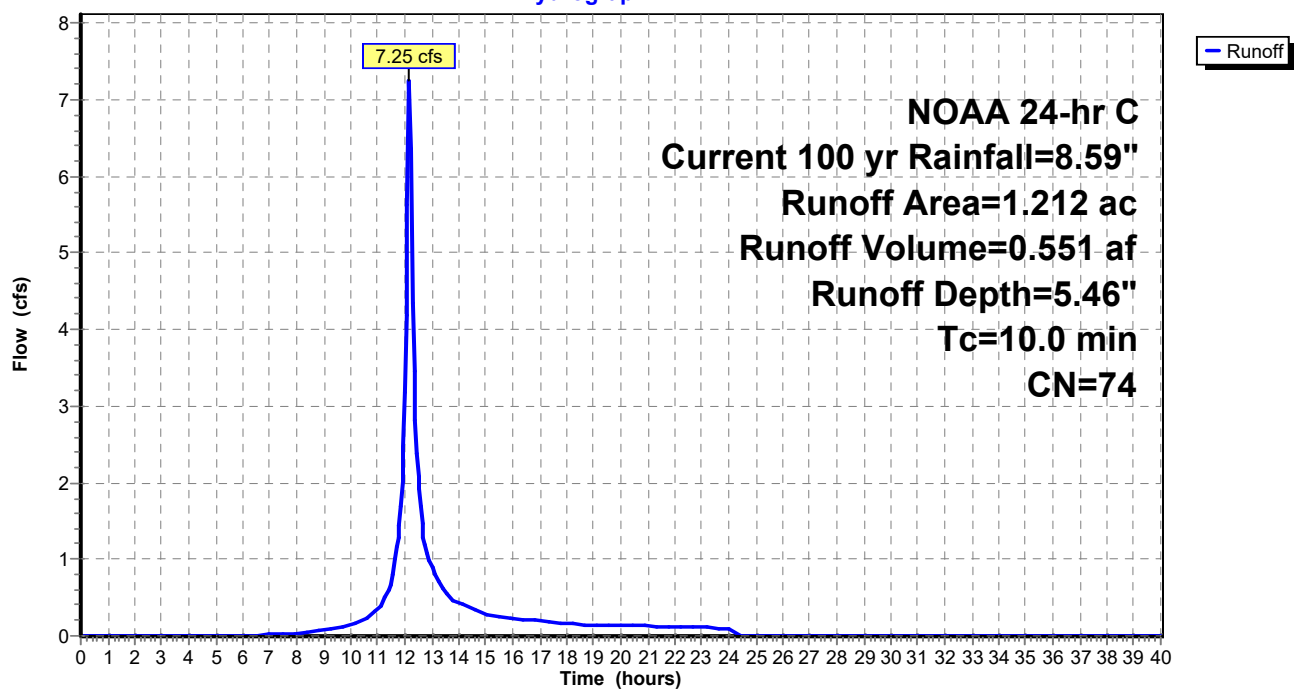
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.212	74	>75% Grass cover, Good, HSG C
1.212		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 55P: PDA-55 (pervious)

Hydrograph



Summary for Subcatchment 56I: PDA-56 (impervious)

Runoff = 3.69 cfs @ 12.17 hrs, Volume= 0.327 af, Depth= 8.35"
 Routed to Pond B-56 : Basin #56

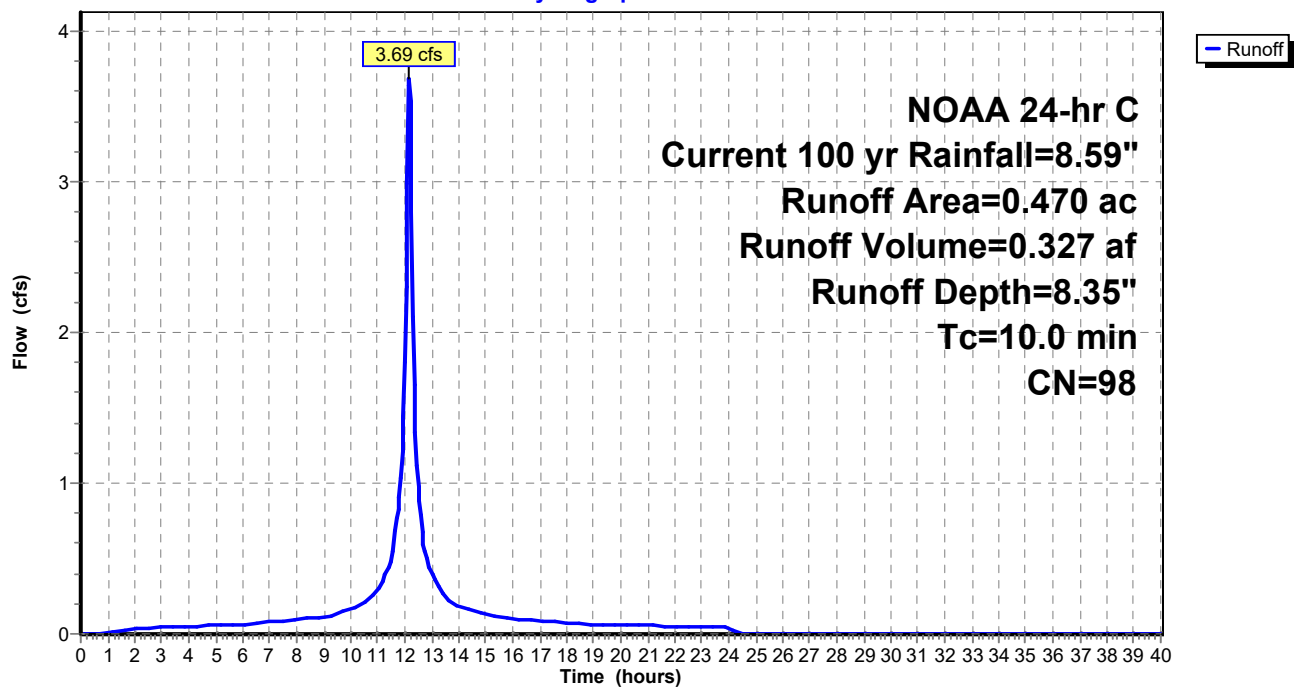
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
* 0.470	98	Roof, HSG C
0.470		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 56I: PDA-56 (impervious)

Hydrograph



Summary for Subcatchment 56P: PDA-56 (pervious)

Runoff = 6.23 cfs @ 12.17 hrs, Volume= 0.474 af, Depth= 5.46"
 Routed to Pond B-56 : Basin #56

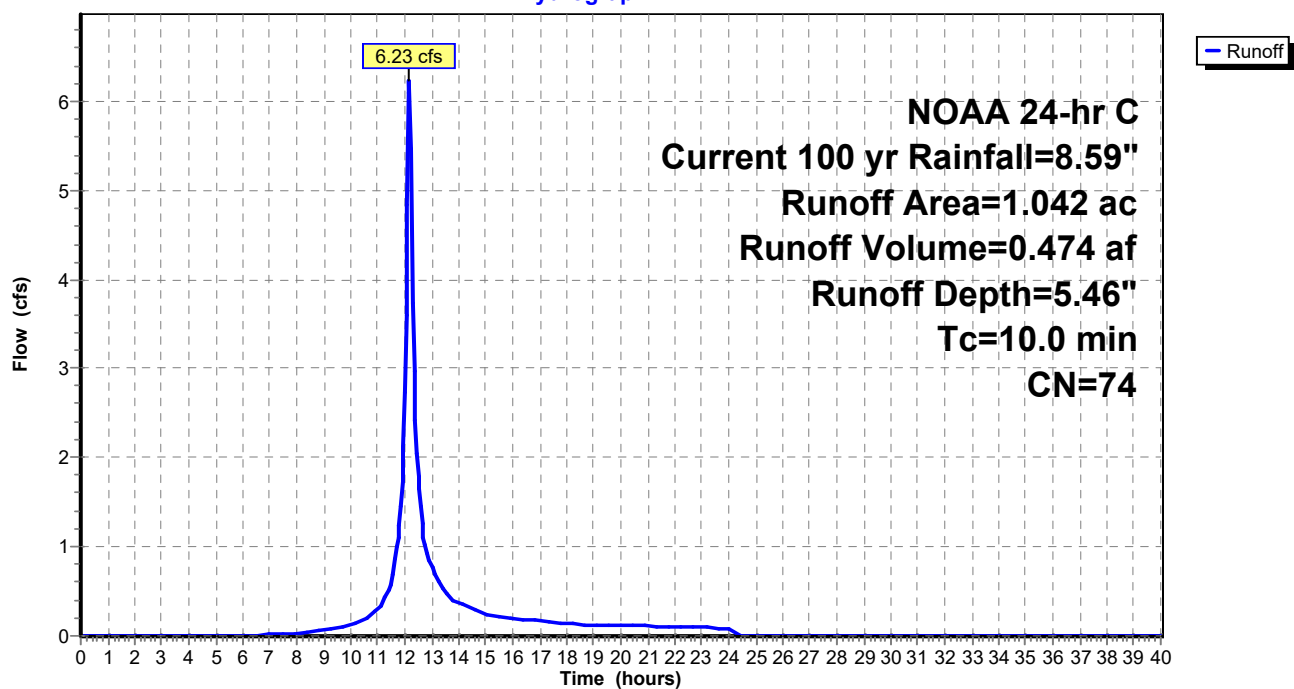
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.042	74	>75% Grass cover, Good, HSG C
1.042		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 56P: PDA-56 (pervious)

Hydrograph



Summary for Subcatchment 57I: PDA-57 (impervious)

Runoff = 5.35 cfs @ 12.17 hrs, Volume= 0.475 af, Depth= 8.35"
 Routed to Pond B-57 : Basin #57

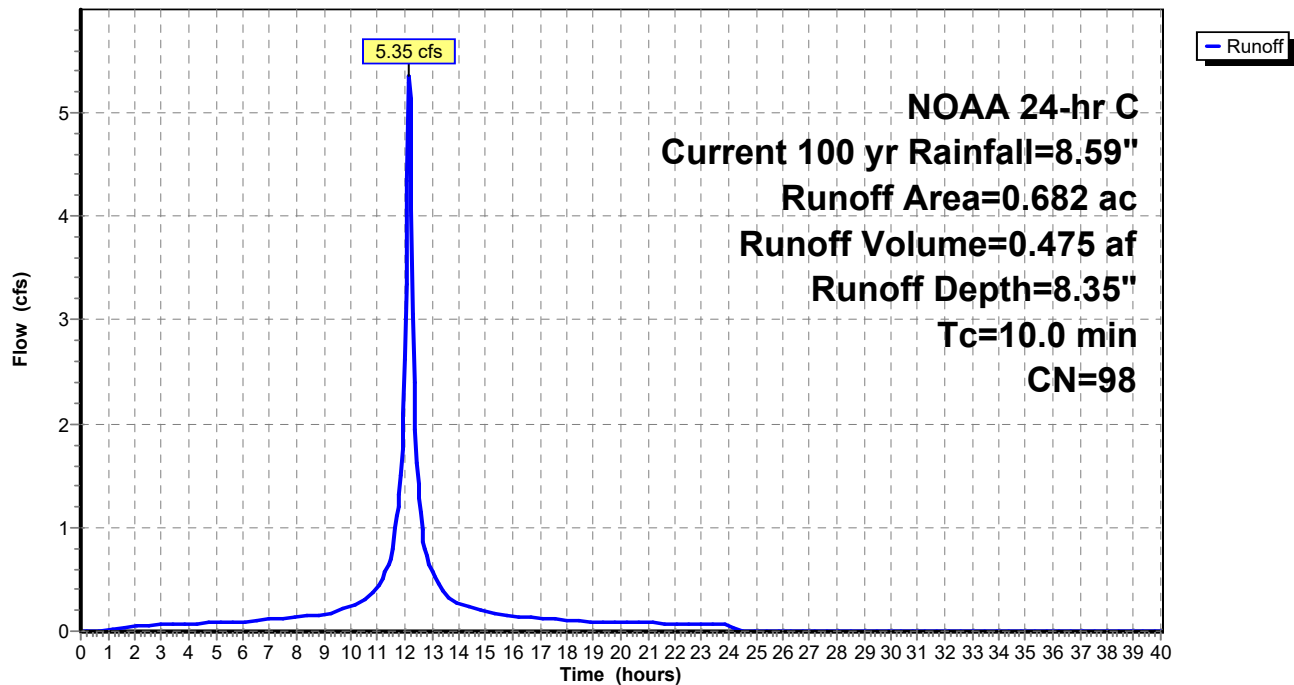
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
* 0.268	98	Pavement, HSG C
* 0.378	98	Roof, HSG C
* 0.036	98	Concrete, HSG C
0.682	98	Weighted Average
0.682		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 57I: PDA-57 (impervious)

Hydrograph



Summary for Subcatchment 57P: PDA-57 (pervious)

Runoff = 4.50 cfs @ 12.17 hrs, Volume= 0.342 af, Depth= 5.46"
 Routed to Pond B-57 : Basin #57

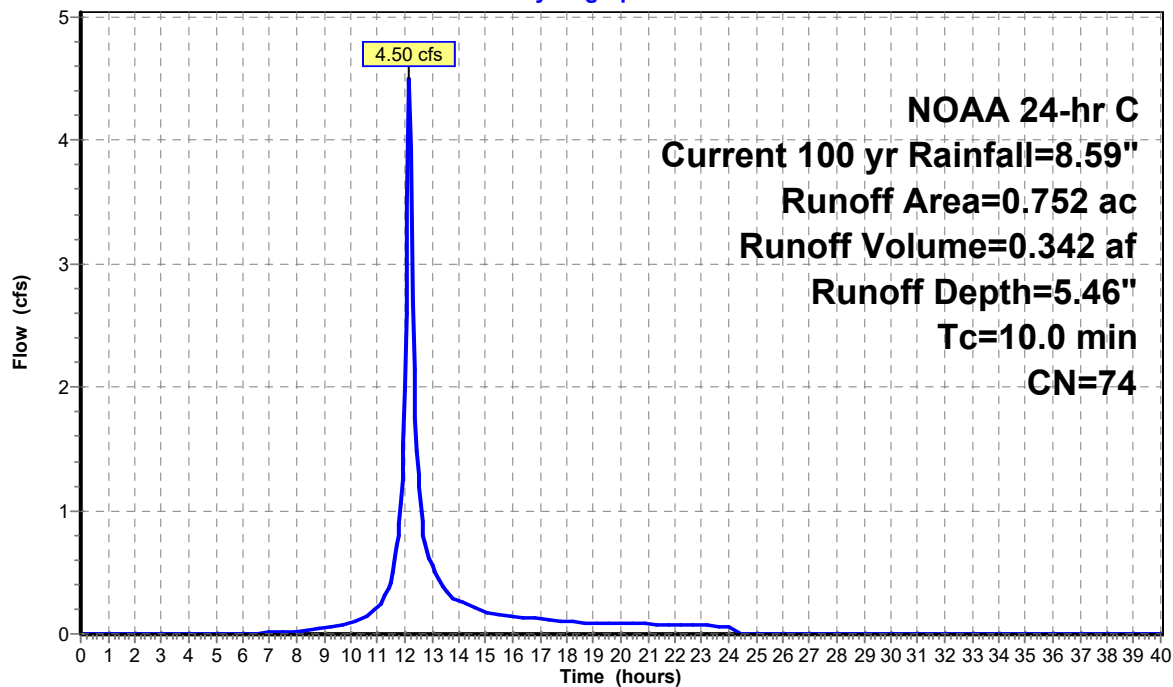
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.752	74	>75% Grass cover, Good, HSG C
0.752		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 57P: PDA-57 (pervious)

Hydrograph



Summary for Subcatchment 58I: PDA-58 (impervious)

Runoff = 3.47 cfs @ 12.17 hrs, Volume= 0.308 af, Depth= 8.35"
 Routed to Pond B-58 : Basin #58

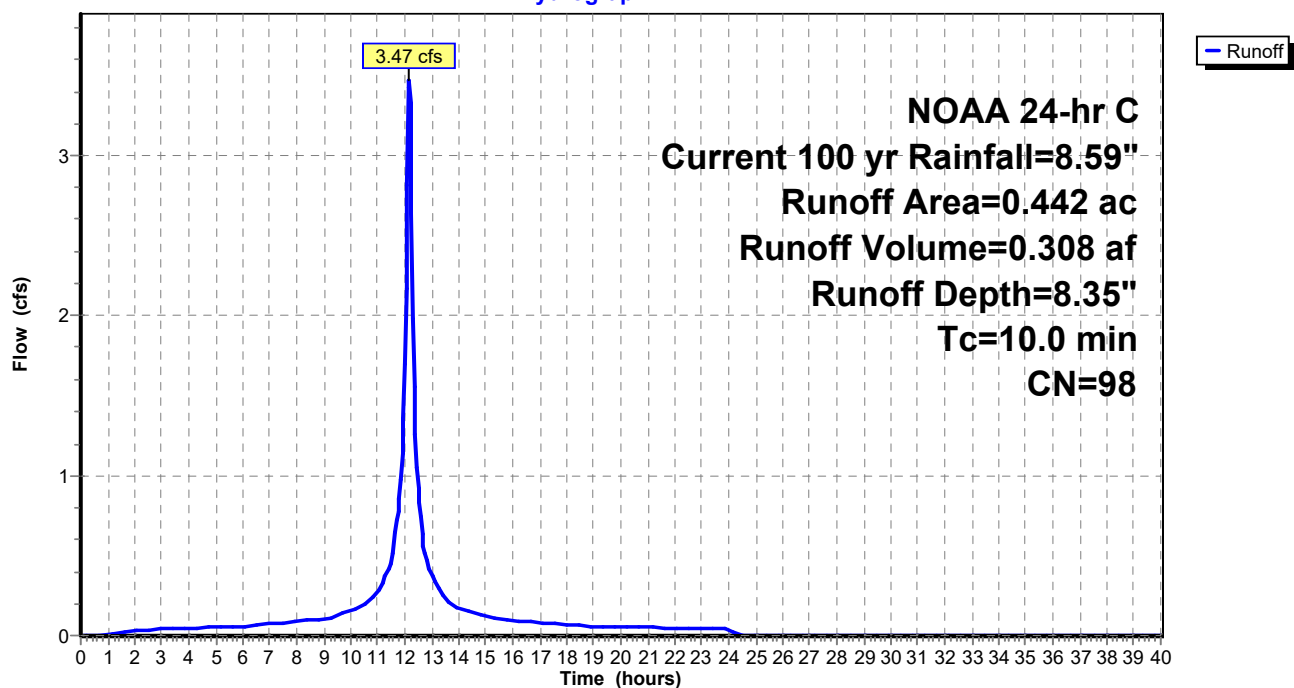
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
* 0.442	98	Roof, HSG C
* 0.000	98	Concrete, HSG C
0.442	98	Weighted Average
0.442		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 58I: PDA-58 (impervious)

Hydrograph



Summary for Subcatchment 58P: PDA-58 (pervious)

Runoff = 7.22 cfs @ 12.17 hrs, Volume= 0.549 af, Depth= 5.46"
 Routed to Pond B-58 : Basin #58

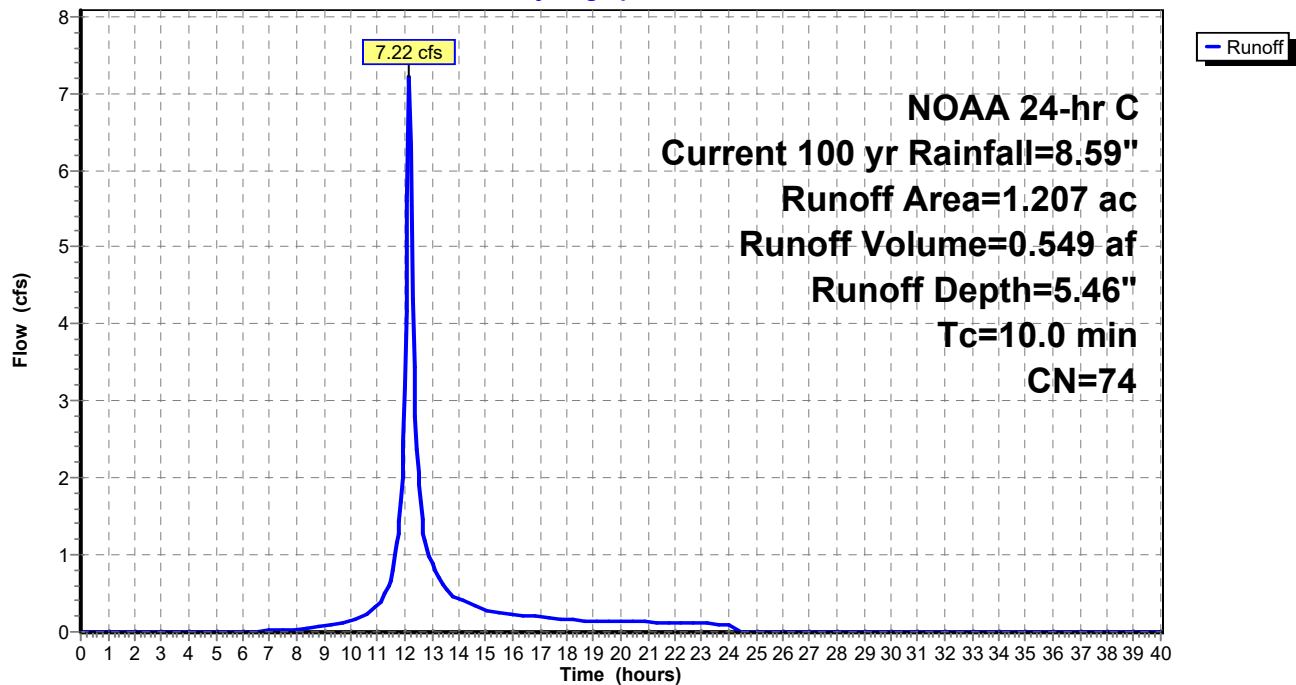
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.207	74	>75% Grass cover, Good, HSG C
1.207		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 58P: PDA-58 (pervious)

Hydrograph



Summary for Subcatchment UPDA-6: PDA-6 (undetained)

Runoff = 232.69 cfs @ 12.17 hrs, Volume= 17.689 af, Depth= 5.46"

Routed to Link PDA-6 : Proposed Drainage Area #6

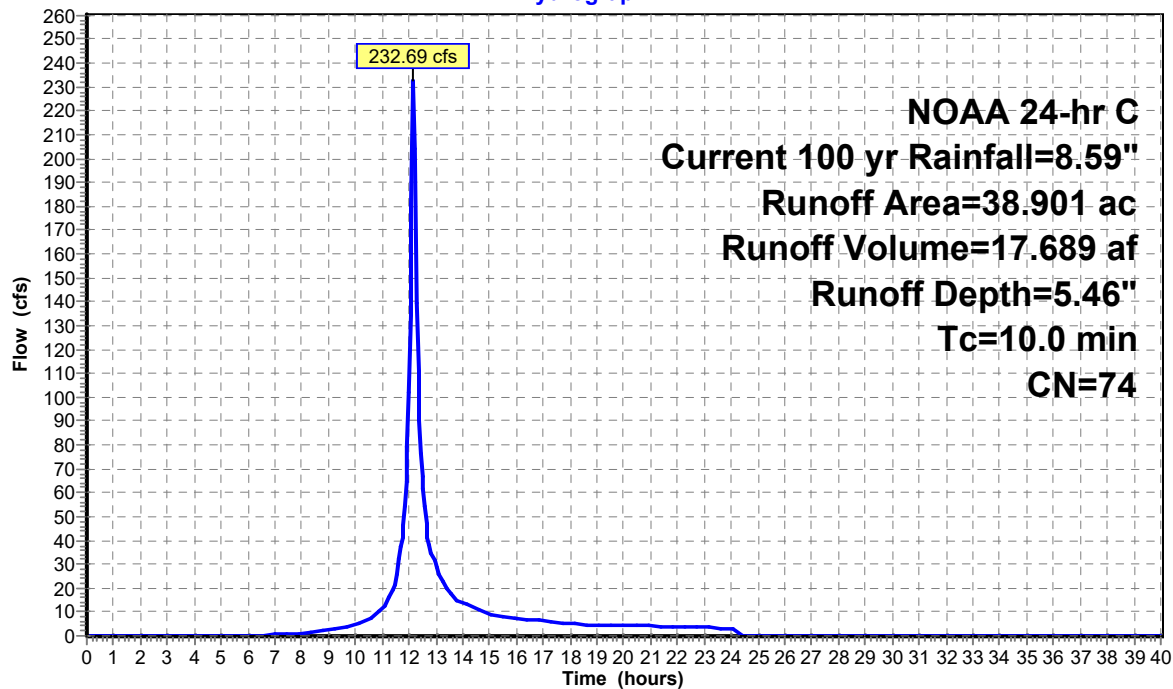
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
38.901	74	>75% Grass cover, Good, HSG C
38.901		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment UPDA-6: PDA-6 (undetained)

Hydrograph



Summary for Pond B-51: Basin #51

Inflow Area = 11.027 ac, 43.68% Impervious, Inflow Depth = 6.23" for Current 100 yr event
 Inflow = 57.12 cfs @ 12.24 hrs, Volume= 5.724 af
 Outflow = 38.67 cfs @ 12.43 hrs, Volume= 5.718 af, Atten= 32%, Lag= 11.2 min
 Primary = 38.67 cfs @ 12.43 hrs, Volume= 5.718 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 187.93' @ 12.43 hrs Surf.Area= 11,676 sf Storage= 32,895 cf

Plug-Flow detention time= 17.7 min calculated for 5.711 af (100% of inflow)
 Center-of-Mass det. time= 17.1 min (850.2 - 833.1)

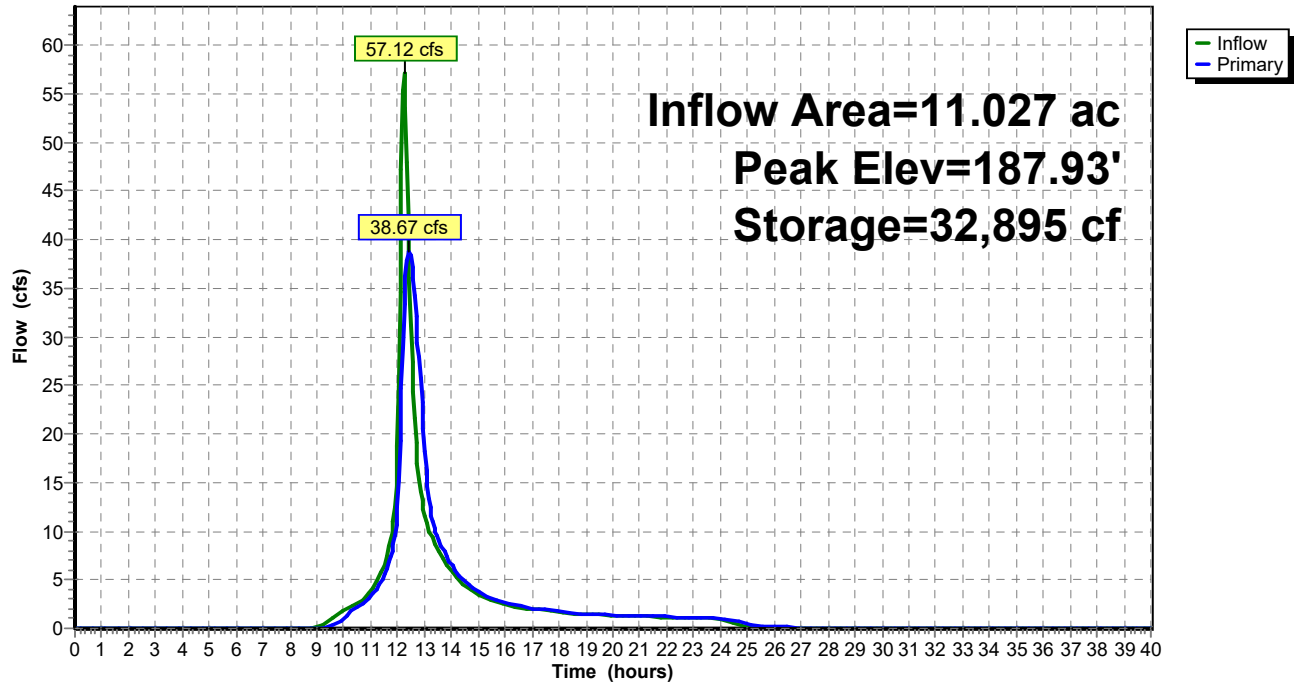
Volume	Invert	Avail.Storage	Storage Description
#1	184.00'	58,347 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
184.00	5,243	0	0
185.00	6,727	5,985	5,985
186.00	8,424	7,576	13,561
187.00	10,085	9,255	22,815
188.00	11,802	10,944	33,759
189.00	13,576	12,689	46,448
189.83	15,098	11,900	58,347

Device	Routing	Invert	Outlet Devices
#1	Primary	184.00'	30.0" Round Culvert L= 147.0' Ke= 0.500 Inlet / Outlet Invert= 184.00' / 182.00' S= 0.0136 '/' Cc= 0.900 n= 0.013, Flow Area= 4.91 sf
#2	Device 1	184.05'	48.0" W x 12.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	187.00'	8.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	189.80'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=38.60 cfs @ 12.43 hrs HW=187.92' (Free Discharge)

1=Culvert (Inlet Controls 38.60 cfs @ 7.86 fps)
 2=Orifice/Grate (Passes < 35.31 cfs potential flow)
 3=Sharp-Crested Rectangular Weir (Passes < 22.43 cfs potential flow)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-51: Basin #51**Hydrograph**

Stage-Discharge for Pond B-51: Basin #51

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
184.00	0.00	184.52	1.81	185.04	6.71	185.56	13.70
184.01	0.00	184.53	1.88	185.05	6.83	185.57	13.85
184.02	0.00	184.54	1.95	185.06	6.94	185.58	13.99
184.03	0.00	184.55	2.02	185.07	7.06	185.59	14.14
184.04	0.00	184.56	2.09	185.08	7.19	185.60	14.29
184.05	0.00	184.57	2.17	185.09	7.31	185.61	14.44
184.06	0.01	184.58	2.24	185.10	7.43	185.62	14.59
184.07	0.03	184.59	2.31	185.11	7.55	185.63	14.73
184.08	0.05	184.60	2.39	185.12	7.67	185.64	14.88
184.09	0.06	184.61	2.47	185.13	7.80	185.65	15.03
184.10	0.07	184.62	2.54	185.14	7.92	185.66	15.18
184.11	0.09	184.63	2.62	185.15	8.05	185.67	15.33
184.12	0.10	184.64	2.70	185.16	8.18	185.68	15.48
184.13	0.12	184.65	2.78	185.17	8.30	185.69	15.63
184.14	0.14	184.66	2.87	185.18	8.43	185.70	15.78
184.15	0.16	184.67	2.95	185.19	8.56	185.71	15.93
184.16	0.18	184.68	3.03	185.20	8.69	185.72	16.08
184.17	0.20	184.69	3.12	185.21	8.82	185.73	16.23
184.18	0.23	184.70	3.21	185.22	8.95	185.74	16.38
184.19	0.25	184.71	3.29	185.23	9.08	185.75	16.53
184.20	0.28	184.72	3.38	185.24	9.21	185.76	16.68
184.21	0.31	184.73	3.47	185.25	9.34	185.77	16.83
184.22	0.34	184.74	3.56	185.26	9.48	185.78	16.98
184.23	0.37	184.75	3.65	185.27	9.61	185.79	17.13
184.24	0.40	184.76	3.74	185.28	9.74	185.80	17.28
184.25	0.43	184.77	3.84	185.29	9.88	185.81	17.43
184.26	0.47	184.78	3.93	185.30	10.01	185.82	17.58
184.27	0.51	184.79	4.03	185.31	10.15	185.83	17.73
184.28	0.54	184.80	4.12	185.32	10.28	185.84	17.89
184.29	0.58	184.81	4.22	185.33	10.42	185.85	18.04
184.30	0.62	184.82	4.32	185.34	10.56	185.86	18.19
184.31	0.66	184.83	4.42	185.35	10.70	185.87	18.34
184.32	0.71	184.84	4.52	185.36	10.84	185.88	18.49
184.33	0.75	184.85	4.62	185.37	10.97	185.89	18.64
184.34	0.80	184.86	4.72	185.38	11.11	185.90	18.79
184.35	0.84	184.87	4.82	185.39	11.25	185.91	18.94
184.36	0.89	184.88	4.93	185.40	11.39	185.92	19.08
184.37	0.94	184.89	5.03	185.41	11.54	185.93	19.23
184.38	0.99	184.90	5.14	185.42	11.68	185.94	19.38
184.39	1.04	184.91	5.25	185.43	11.82	185.95	19.53
184.40	1.09	184.92	5.35	185.44	11.96	185.96	19.68
184.41	1.15	184.93	5.46	185.45	12.10	185.97	19.83
184.42	1.20	184.94	5.57	185.46	12.25	185.98	19.98
184.43	1.26	184.95	5.68	185.47	12.39	185.99	20.12
184.44	1.31	184.96	5.79	185.48	12.53	186.00	20.27
184.45	1.37	184.97	5.90	185.49	12.68	186.01	20.42
184.46	1.43	184.98	6.02	185.50	12.82	186.02	20.56
184.47	1.49	184.99	6.13	185.51	12.97	186.03	20.71
184.48	1.55	185.00	6.24	185.52	13.11	186.04	20.86
184.49	1.62	185.01	6.36	185.53	13.26	186.05	21.00
184.50	1.68	185.02	6.47	185.54	13.41	186.06	21.14
184.51	1.75	185.03	6.59	185.55	13.55	186.07	21.29

Stage-Discharge for Pond B-51: Basin #51 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.08	21.43	186.60	27.46	187.12	31.91	187.64	36.54
186.09	21.58	186.61	27.56	187.13	32.11	187.65	36.62
186.10	21.72	186.62	27.64	187.14	32.31	187.66	36.69
186.11	21.86	186.63	27.71	187.15	32.52	187.67	36.77
186.12	22.00	186.64	27.78	187.16	32.66	187.68	36.84
186.13	22.14	186.65	27.84	187.17	32.75	187.69	36.92
186.14	22.28	186.66	27.91	187.18	32.84	187.70	37.00
186.15	22.42	186.67	27.98	187.19	32.92	187.71	37.07
186.16	22.56	186.68	28.04	187.20	33.01	187.72	37.15
186.17	22.70	186.69	28.11	187.21	33.09	187.73	37.22
186.18	22.83	186.70	28.18	187.22	33.17	187.74	37.30
186.19	22.97	186.71	28.24	187.23	33.26	187.75	37.37
186.20	23.10	186.72	28.31	187.24	33.34	187.76	37.45
186.21	23.24	186.73	28.37	187.25	33.43	187.77	37.52
186.22	23.37	186.74	28.44	187.26	33.51	187.78	37.59
186.23	23.50	186.75	28.50	187.27	33.59	187.79	37.67
186.24	23.63	186.76	28.57	187.28	33.68	187.80	37.74
186.25	23.76	186.77	28.64	187.29	33.76	187.81	37.82
186.26	23.89	186.78	28.70	187.30	33.84	187.82	37.89
186.27	24.02	186.79	28.77	187.31	33.92	187.83	37.96
186.28	24.15	186.80	28.83	187.32	34.01	187.84	38.04
186.29	24.27	186.81	28.89	187.33	34.09	187.85	38.11
186.30	24.40	186.82	28.96	187.34	34.17	187.86	38.18
186.31	24.52	186.83	29.02	187.35	34.25	187.87	38.26
186.32	24.64	186.84	29.09	187.36	34.33	187.88	38.33
186.33	24.76	186.85	29.15	187.37	34.41	187.89	38.40
186.34	24.88	186.86	29.21	187.38	34.49	187.90	38.48
186.35	24.99	186.87	29.28	187.39	34.58	187.91	38.55
186.36	25.11	186.88	29.34	187.40	34.66	187.92	38.62
186.37	25.22	186.89	29.41	187.41	34.74	187.93	38.69
186.38	25.33	186.90	29.47	187.42	34.82	187.94	38.77
186.39	25.44	186.91	29.53	187.43	34.90	187.95	38.84
186.40	25.54	186.92	29.59	187.44	34.98	187.96	38.91
186.41	25.65	186.93	29.66	187.45	35.06	187.97	38.98
186.42	25.75	186.94	29.72	187.46	35.14	187.98	39.05
186.43	25.85	186.95	29.78	187.47	35.22	187.99	39.12
186.44	25.94	186.96	29.85	187.48	35.30	188.00	39.19
186.45	26.03	186.97	29.91	187.49	35.37	188.01	39.27
186.46	26.12	186.98	29.97	187.50	35.45	188.02	39.34
186.47	26.21	186.99	30.03	187.51	35.53	188.03	39.41
186.48	26.29	187.00	30.09	187.52	35.61	188.04	39.48
186.49	26.36	187.01	30.18	187.53	35.69	188.05	39.55
186.50	26.43	187.02	30.29	187.54	35.77	188.06	39.62
186.51	26.53	187.03	30.41	187.55	35.84	188.07	39.69
186.52	26.64	187.04	30.55	187.56	35.92	188.08	39.76
186.53	26.74	187.05	30.69	187.57	36.00	188.09	39.83
186.54	26.84	187.06	30.85	187.58	36.08	188.10	39.90
186.55	26.95	187.07	31.01	187.59	36.16	188.11	39.97
186.56	27.05	187.08	31.18	187.60	36.23	188.12	40.04
186.57	27.16	187.09	31.35	187.61	36.31	188.13	40.11
186.58	27.26	187.10	31.53	187.62	36.39	188.14	40.18
186.59	27.36	187.11	31.72	187.63	36.46	188.15	40.25

Stage-Discharge for Pond B-51: Basin #51 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
188.16	40.32	188.68	43.77	189.20	46.97	189.72	49.97
188.17	40.39	188.69	43.84	189.21	47.03	189.73	50.03
188.18	40.46	188.70	43.90	189.22	47.09	189.74	50.08
188.19	40.53	188.71	43.96	189.23	47.15	189.75	50.14
188.20	40.60	188.72	44.03	189.24	47.21	189.76	50.19
188.21	40.66	188.73	44.09	189.25	47.27	189.77	50.25
188.22	40.73	188.74	44.15	189.26	47.33	189.78	50.31
188.23	40.80	188.75	44.22	189.27	47.39	189.79	50.36
188.24	40.87	188.76	44.28	189.28	47.45	189.80	50.42
188.25	40.94	188.77	44.34	189.29	47.51	189.81	50.59
188.26	41.01	188.78	44.41	189.30	47.57	189.82	50.86
188.27	41.07	188.79	44.47	189.31	47.62	189.83	51.19
188.28	41.14	188.80	44.53	189.32	47.68		
188.29	41.21	188.81	44.60	189.33	47.74		
188.30	41.28	188.82	44.66	189.34	47.80		
188.31	41.35	188.83	44.72	189.35	47.86		
188.32	41.41	188.84	44.78	189.36	47.92		
188.33	41.48	188.85	44.85	189.37	47.97		
188.34	41.55	188.86	44.91	189.38	48.03		
188.35	41.61	188.87	44.97	189.39	48.09		
188.36	41.68	188.88	45.03	189.40	48.15		
188.37	41.75	188.89	45.09	189.41	48.21		
188.38	41.82	188.90	45.16	189.42	48.26		
188.39	41.88	188.91	45.22	189.43	48.32		
188.40	41.95	188.92	45.28	189.44	48.38		
188.41	42.02	188.93	45.34	189.45	48.44		
188.42	42.08	188.94	45.40	189.46	48.50		
188.43	42.15	188.95	45.46	189.47	48.55		
188.44	42.21	188.96	45.53	189.48	48.61		
188.45	42.28	188.97	45.59	189.49	48.67		
188.46	42.35	188.98	45.65	189.50	48.73		
188.47	42.41	188.99	45.71	189.51	48.78		
188.48	42.48	189.00	45.77	189.52	48.84		
188.49	42.54	189.01	45.83	189.53	48.90		
188.50	42.61	189.02	45.89	189.54	48.95		
188.51	42.67	189.03	45.95	189.55	49.01		
188.52	42.74	189.04	46.01	189.56	49.07		
188.53	42.81	189.05	46.07	189.57	49.13		
188.54	42.87	189.06	46.13	189.58	49.18		
188.55	42.94	189.07	46.20	189.59	49.24		
188.56	43.00	189.08	46.26	189.60	49.30		
188.57	43.07	189.09	46.32	189.61	49.35		
188.58	43.13	189.10	46.38	189.62	49.41		
188.59	43.20	189.11	46.44	189.63	49.47		
188.60	43.26	189.12	46.50	189.64	49.52		
188.61	43.32	189.13	46.56	189.65	49.58		
188.62	43.39	189.14	46.62	189.66	49.63		
188.63	43.45	189.15	46.68	189.67	49.69		
188.64	43.52	189.16	46.74	189.68	49.75		
188.65	43.58	189.17	46.80	189.69	49.80		
188.66	43.65	189.18	46.86	189.70	49.86		
188.67	43.71	189.19	46.92	189.71	49.92		

Stage-Area-Storage for Pond B-51: Basin #51

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.00	5,243	0	184.52	6,015	2,927
184.01	5,258	53	184.53	6,030	2,987
184.02	5,273	105	184.54	6,044	3,048
184.03	5,288	158	184.55	6,059	3,108
184.04	5,302	211	184.56	6,074	3,169
184.05	5,317	264	184.57	6,089	3,230
184.06	5,332	317	184.58	6,104	3,291
184.07	5,347	371	184.59	6,119	3,352
184.08	5,362	424	184.60	6,133	3,413
184.09	5,377	478	184.61	6,148	3,474
184.10	5,391	532	184.62	6,163	3,536
184.11	5,406	586	184.63	6,178	3,598
184.12	5,421	640	184.64	6,193	3,659
184.13	5,436	694	184.65	6,208	3,721
184.14	5,451	749	184.66	6,222	3,784
184.15	5,466	803	184.67	6,237	3,846
184.16	5,480	858	184.68	6,252	3,908
184.17	5,495	913	184.69	6,267	3,971
184.18	5,510	968	184.70	6,282	4,034
184.19	5,525	1,023	184.71	6,297	4,097
184.20	5,540	1,078	184.72	6,311	4,160
184.21	5,555	1,134	184.73	6,326	4,223
184.22	5,569	1,189	184.74	6,341	4,286
184.23	5,584	1,245	184.75	6,356	4,350
184.24	5,599	1,301	184.76	6,371	4,413
184.25	5,614	1,357	184.77	6,386	4,477
184.26	5,629	1,413	184.78	6,401	4,541
184.27	5,644	1,470	184.79	6,415	4,605
184.28	5,659	1,526	184.80	6,430	4,669
184.29	5,673	1,583	184.81	6,445	4,734
184.30	5,688	1,640	184.82	6,460	4,798
184.31	5,703	1,697	184.83	6,475	4,863
184.32	5,718	1,754	184.84	6,490	4,928
184.33	5,733	1,811	184.85	6,504	4,993
184.34	5,748	1,868	184.86	6,519	5,058
184.35	5,762	1,926	184.87	6,534	5,123
184.36	5,777	1,984	184.88	6,549	5,188
184.37	5,792	2,041	184.89	6,564	5,254
184.38	5,807	2,099	184.90	6,579	5,320
184.39	5,822	2,158	184.91	6,593	5,386
184.40	5,837	2,216	184.92	6,608	5,452
184.41	5,851	2,274	184.93	6,623	5,518
184.42	5,866	2,333	184.94	6,638	5,584
184.43	5,881	2,392	184.95	6,653	5,651
184.44	5,896	2,451	184.96	6,668	5,717
184.45	5,911	2,510	184.97	6,682	5,784
184.46	5,926	2,569	184.98	6,697	5,851
184.47	5,940	2,628	184.99	6,712	5,918
184.48	5,955	2,688	185.00	6,727	5,985
184.49	5,970	2,747	185.01	6,744	6,052
184.50	5,985	2,807	185.02	6,761	6,120
184.51	6,000	2,867	185.03	6,778	6,188

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.04	6,795	6,255	185.56	7,677	10,018
185.05	6,812	6,323	185.57	7,694	10,095
185.06	6,829	6,392	185.58	7,711	10,172
185.07	6,846	6,460	185.59	7,728	10,249
185.08	6,863	6,529	185.60	7,745	10,327
185.09	6,880	6,597	185.61	7,762	10,404
185.10	6,897	6,666	185.62	7,779	10,482
185.11	6,914	6,735	185.63	7,796	10,560
185.12	6,931	6,804	185.64	7,813	10,638
185.13	6,948	6,874	185.65	7,830	10,716
185.14	6,965	6,943	185.66	7,847	10,794
185.15	6,982	7,013	185.67	7,864	10,873
185.16	6,999	7,083	185.68	7,881	10,952
185.17	7,015	7,153	185.69	7,898	11,031
185.18	7,032	7,223	185.70	7,915	11,110
185.19	7,049	7,294	185.71	7,932	11,189
185.20	7,066	7,364	185.72	7,949	11,268
185.21	7,083	7,435	185.73	7,966	11,348
185.22	7,100	7,506	185.74	7,983	11,428
185.23	7,117	7,577	185.75	8,000	11,508
185.24	7,134	7,648	185.76	8,017	11,588
185.25	7,151	7,720	185.77	8,034	11,668
185.26	7,168	7,791	185.78	8,051	11,748
185.27	7,185	7,863	185.79	8,068	11,829
185.28	7,202	7,935	185.80	8,085	11,910
185.29	7,219	8,007	185.81	8,102	11,991
185.30	7,236	8,079	185.82	8,119	12,072
185.31	7,253	8,152	185.83	8,136	12,153
185.32	7,270	8,225	185.84	8,152	12,234
185.33	7,287	8,297	185.85	8,169	12,316
185.34	7,304	8,370	185.86	8,186	12,398
185.35	7,321	8,443	185.87	8,203	12,480
185.36	7,338	8,517	185.88	8,220	12,562
185.37	7,355	8,590	185.89	8,237	12,644
185.38	7,372	8,664	185.90	8,254	12,727
185.39	7,389	8,738	185.91	8,271	12,809
185.40	7,406	8,812	185.92	8,288	12,892
185.41	7,423	8,886	185.93	8,305	12,975
185.42	7,440	8,960	185.94	8,322	13,058
185.43	7,457	9,034	185.95	8,339	13,141
185.44	7,474	9,109	185.96	8,356	13,225
185.45	7,491	9,184	185.97	8,373	13,309
185.46	7,508	9,259	185.98	8,390	13,392
185.47	7,525	9,334	185.99	8,407	13,476
185.48	7,542	9,409	186.00	8,424	13,561
185.49	7,559	9,485	186.01	8,441	13,645
185.50	7,576	9,561	186.02	8,457	13,729
185.51	7,592	9,636	186.03	8,474	13,814
185.52	7,609	9,712	186.04	8,490	13,899
185.53	7,626	9,789	186.05	8,507	13,984
185.54	7,643	9,865	186.06	8,524	14,069
185.55	7,660	9,942	186.07	8,540	14,154

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.08	8,557	14,240	186.60	9,421	18,914
186.09	8,573	14,325	186.61	9,437	19,008
186.10	8,590	14,411	186.62	9,454	19,103
186.11	8,607	14,497	186.63	9,470	19,197
186.12	8,623	14,583	186.64	9,487	19,292
186.13	8,640	14,670	186.65	9,504	19,387
186.14	8,657	14,756	186.66	9,520	19,482
186.15	8,673	14,843	186.67	9,537	19,577
186.16	8,690	14,930	186.68	9,553	19,673
186.17	8,706	15,017	186.69	9,570	19,768
186.18	8,723	15,104	186.70	9,587	19,864
186.19	8,740	15,191	186.71	9,603	19,960
186.20	8,756	15,279	186.72	9,620	20,056
186.21	8,773	15,366	186.73	9,637	20,153
186.22	8,789	15,454	186.74	9,653	20,249
186.23	8,806	15,542	186.75	9,670	20,346
186.24	8,823	15,630	186.76	9,686	20,442
186.25	8,839	15,718	186.77	9,703	20,539
186.26	8,856	15,807	186.78	9,720	20,636
186.27	8,872	15,896	186.79	9,736	20,734
186.28	8,889	15,984	186.80	9,753	20,831
186.29	8,906	16,073	186.81	9,769	20,929
186.30	8,922	16,162	186.82	9,786	21,027
186.31	8,939	16,252	186.83	9,803	21,125
186.32	8,956	16,341	186.84	9,819	21,223
186.33	8,972	16,431	186.85	9,836	21,321
186.34	8,989	16,521	186.86	9,852	21,419
186.35	9,005	16,611	186.87	9,869	21,518
186.36	9,022	16,701	186.88	9,886	21,617
186.37	9,039	16,791	186.89	9,902	21,716
186.38	9,055	16,882	186.90	9,919	21,815
186.39	9,072	16,972	186.91	9,936	21,914
186.40	9,088	17,063	186.92	9,952	22,014
186.41	9,105	17,154	186.93	9,969	22,113
186.42	9,122	17,245	186.94	9,985	22,213
186.43	9,138	17,336	186.95	10,002	22,313
186.44	9,155	17,428	186.96	10,019	22,413
186.45	9,171	17,519	186.97	10,035	22,513
186.46	9,188	17,611	186.98	10,052	22,614
186.47	9,205	17,703	186.99	10,068	22,714
186.48	9,221	17,795	187.00	10,085	22,815
186.49	9,238	17,888	187.01	10,102	22,916
186.50	9,255	17,980	187.02	10,119	23,017
186.51	9,271	18,073	187.03	10,137	23,118
186.52	9,288	18,166	187.04	10,154	23,220
186.53	9,304	18,259	187.05	10,171	23,321
186.54	9,321	18,352	187.06	10,188	23,423
186.55	9,338	18,445	187.07	10,205	23,525
186.56	9,354	18,538	187.08	10,222	23,627
186.57	9,371	18,632	187.09	10,240	23,730
186.58	9,387	18,726	187.10	10,257	23,832
186.59	9,404	18,820	187.11	10,274	23,935

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.12	10,291	24,038	187.64	11,184	29,621
187.13	10,308	24,141	187.65	11,201	29,733
187.14	10,325	24,244	187.66	11,218	29,845
187.15	10,343	24,347	187.67	11,235	29,957
187.16	10,360	24,451	187.68	11,253	30,070
187.17	10,377	24,554	187.69	11,270	30,182
187.18	10,394	24,658	187.70	11,287	30,295
187.19	10,411	24,762	187.71	11,304	30,408
187.20	10,428	24,866	187.72	11,321	30,521
187.21	10,446	24,971	187.73	11,338	30,635
187.22	10,463	25,075	187.74	11,356	30,748
187.23	10,480	25,180	187.75	11,373	30,862
187.24	10,497	25,285	187.76	11,390	30,975
187.25	10,514	25,390	187.77	11,407	31,089
187.26	10,531	25,495	187.78	11,424	31,204
187.27	10,549	25,601	187.79	11,441	31,318
187.28	10,566	25,706	187.80	11,459	31,432
187.29	10,583	25,812	187.81	11,476	31,547
187.30	10,600	25,918	187.82	11,493	31,662
187.31	10,617	26,024	187.83	11,510	31,777
187.32	10,634	26,130	187.84	11,527	31,892
187.33	10,652	26,237	187.85	11,544	32,008
187.34	10,669	26,343	187.86	11,562	32,123
187.35	10,686	26,450	187.87	11,579	32,239
187.36	10,703	26,557	187.88	11,596	32,355
187.37	10,720	26,664	187.89	11,613	32,471
187.38	10,737	26,771	187.90	11,630	32,587
187.39	10,755	26,879	187.91	11,647	32,703
187.40	10,772	26,986	187.92	11,665	32,820
187.41	10,789	27,094	187.93	11,682	32,937
187.42	10,806	27,202	187.94	11,699	33,053
187.43	10,823	27,310	187.95	11,716	33,171
187.44	10,840	27,419	187.96	11,733	33,288
187.45	10,858	27,527	187.97	11,750	33,405
187.46	10,875	27,636	187.98	11,768	33,523
187.47	10,892	27,745	187.99	11,785	33,641
187.48	10,909	27,854	188.00	11,802	33,759
187.49	10,926	27,963	188.01	11,820	33,877
187.50	10,944	28,072	188.02	11,837	33,995
187.51	10,961	28,182	188.03	11,855	34,113
187.52	10,978	28,291	188.04	11,873	34,232
187.53	10,995	28,401	188.05	11,891	34,351
187.54	11,012	28,511	188.06	11,908	34,470
187.55	11,029	28,621	188.07	11,926	34,589
187.56	11,047	28,732	188.08	11,944	34,708
187.57	11,064	28,842	188.09	11,962	34,828
187.58	11,081	28,953	188.10	11,979	34,948
187.59	11,098	29,064	188.11	11,997	35,067
187.60	11,115	29,175	188.12	12,015	35,188
187.61	11,132	29,286	188.13	12,033	35,308
187.62	11,150	29,398	188.14	12,050	35,428
187.63	11,167	29,509	188.15	12,068	35,549

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.16	12,086	35,670	188.68	13,008	42,194
188.17	12,104	35,790	188.69	13,026	42,324
188.18	12,121	35,912	188.70	13,044	42,455
188.19	12,139	36,033	188.71	13,062	42,585
188.20	12,157	36,154	188.72	13,079	42,716
188.21	12,175	36,276	188.73	13,097	42,847
188.22	12,192	36,398	188.74	13,115	42,978
188.23	12,210	36,520	188.75	13,133	43,109
188.24	12,228	36,642	188.76	13,150	43,240
188.25	12,246	36,764	188.77	13,168	43,372
188.26	12,263	36,887	188.78	13,186	43,504
188.27	12,281	37,010	188.79	13,203	43,636
188.28	12,299	37,133	188.80	13,221	43,768
188.29	12,316	37,256	188.81	13,239	43,900
188.30	12,334	37,379	188.82	13,257	44,033
188.31	12,352	37,502	188.83	13,274	44,165
188.32	12,370	37,626	188.84	13,292	44,298
188.33	12,387	37,750	188.85	13,310	44,431
188.34	12,405	37,874	188.86	13,328	44,564
188.35	12,423	37,998	188.87	13,345	44,698
188.36	12,441	38,122	188.88	13,363	44,831
188.37	12,458	38,247	188.89	13,381	44,965
188.38	12,476	38,371	188.90	13,399	45,099
188.39	12,494	38,496	188.91	13,416	45,233
188.40	12,512	38,621	188.92	13,434	45,367
188.41	12,529	38,746	188.93	13,452	45,502
188.42	12,547	38,872	188.94	13,470	45,636
188.43	12,565	38,997	188.95	13,487	45,771
188.44	12,583	39,123	188.96	13,505	45,906
188.45	12,600	39,249	188.97	13,523	46,041
188.46	12,618	39,375	188.98	13,541	46,176
188.47	12,636	39,501	188.99	13,558	46,312
188.48	12,654	39,628	189.00	13,576	46,448
188.49	12,671	39,754	189.01	13,594	46,583
188.50	12,689	39,881	189.02	13,613	46,719
188.51	12,707	40,008	189.03	13,631	46,856
188.52	12,724	40,135	189.04	13,649	46,992
188.53	12,742	40,263	189.05	13,668	47,129
188.54	12,760	40,390	189.06	13,686	47,265
188.55	12,778	40,518	189.07	13,704	47,402
188.56	12,795	40,646	189.08	13,723	47,539
188.57	12,813	40,774	189.09	13,741	47,677
188.58	12,831	40,902	189.10	13,759	47,814
188.59	12,849	41,030	189.11	13,778	47,952
188.60	12,866	41,159	189.12	13,796	48,090
188.61	12,884	41,288	189.13	13,814	48,228
188.62	12,902	41,417	189.14	13,833	48,366
188.63	12,920	41,546	189.15	13,851	48,505
188.64	12,937	41,675	189.16	13,869	48,643
188.65	12,955	41,805	189.17	13,888	48,782
188.66	12,973	41,934	189.18	13,906	48,921
188.67	12,991	42,064	189.19	13,924	49,060

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.20	13,943	49,199	189.72	14,896	56,698
189.21	13,961	49,339	189.73	14,915	56,847
189.22	13,979	49,479	189.74	14,933	56,996
189.23	13,998	49,618	189.75	14,951	57,145
189.24	14,016	49,759	189.76	14,970	57,295
189.25	14,034	49,899	189.77	14,988	57,445
189.26	14,053	50,039	189.78	15,006	57,595
189.27	14,071	50,180	189.79	15,025	57,745
189.28	14,089	50,321	189.80	15,043	57,895
189.29	14,108	50,462	189.81	15,061	58,046
189.30	14,126	50,603	189.82	15,080	58,196
189.31	14,144	50,744	189.83	15,098	58,347
189.32	14,163	50,886			
189.33	14,181	51,027			
189.34	14,199	51,169			
189.35	14,218	51,311			
189.36	14,236	51,454			
189.37	14,254	51,596			
189.38	14,273	51,739			
189.39	14,291	51,882			
189.40	14,309	52,025			
189.41	14,328	52,168			
189.42	14,346	52,311			
189.43	14,365	52,455			
189.44	14,383	52,598			
189.45	14,401	52,742			
189.46	14,420	52,886			
189.47	14,438	53,031			
189.48	14,456	53,175			
189.49	14,475	53,320			
189.50	14,493	53,465			
189.51	14,511	53,610			
189.52	14,530	53,755			
189.53	14,548	53,900			
189.54	14,566	54,046			
189.55	14,585	54,192			
189.56	14,603	54,338			
189.57	14,621	54,484			
189.58	14,640	54,630			
189.59	14,658	54,777			
189.60	14,676	54,923			
189.61	14,695	55,070			
189.62	14,713	55,217			
189.63	14,731	55,364			
189.64	14,750	55,512			
189.65	14,768	55,659			
189.66	14,786	55,807			
189.67	14,805	55,955			
189.68	14,823	56,103			
189.69	14,841	56,251			
189.70	14,860	56,400			
189.71	14,878	56,549			

Summary for Pond B-52: Basin #52

Inflow Area = 1.423 ac, 34.43% Impervious, Inflow Depth = 6.45" for Current 100 yr event
 Inflow = 9.43 cfs @ 12.17 hrs, Volume= 0.765 af
 Outflow = 8.47 cfs @ 12.22 hrs, Volume= 0.717 af, Atten= 10%, Lag= 3.2 min
 Primary = 8.47 cfs @ 12.22 hrs, Volume= 0.717 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 196.09' @ 12.22 hrs Surf.Area= 2,196 sf Storage= 4,001 cf

Plug-Flow detention time= 68.9 min calculated for 0.716 af (94% of inflow)
 Center-of-Mass det. time= 33.7 min (820.2 - 786.5)

Volume	Invert	Avail.Storage	Storage Description
#1	193.00'	7,751 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
193.00	474	0	0
194.00	970	722	722
195.00	1,523	1,247	1,969
196.00	2,133	1,828	3,797
197.00	2,799	2,466	6,263
197.50	3,154	1,488	7,751

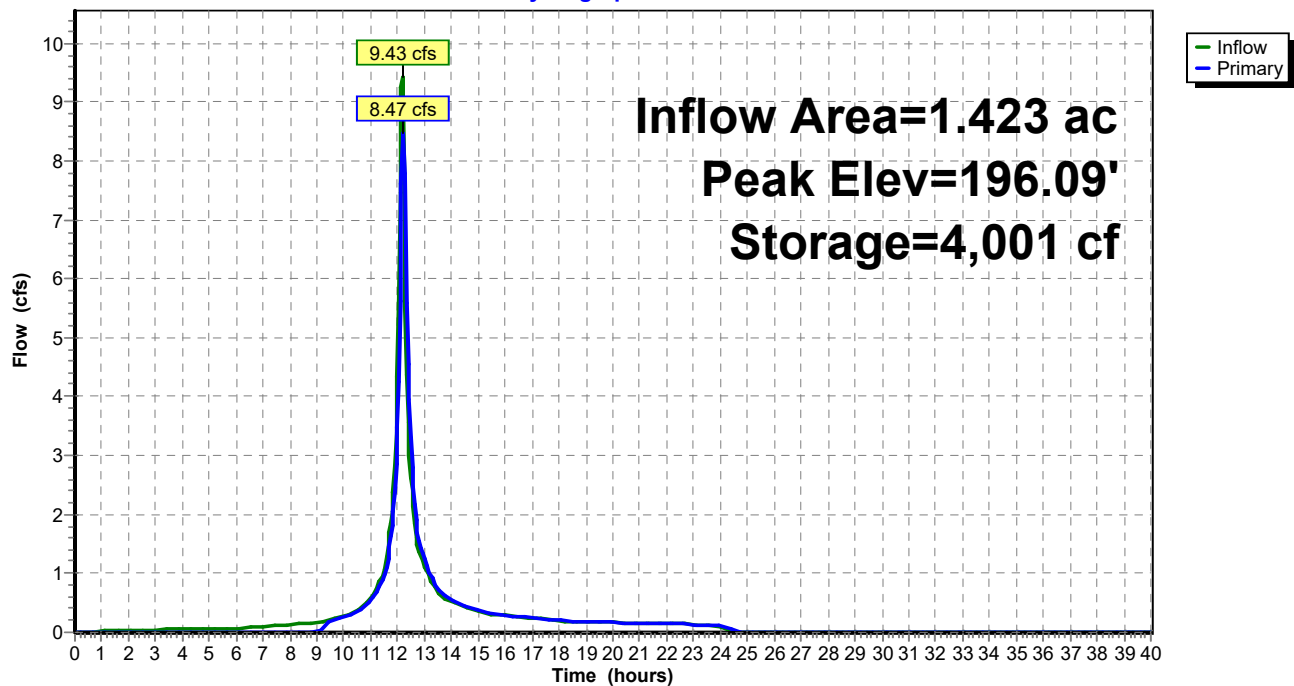
Device	Routing	Invert	Outlet Devices
#1	Primary	192.00'	15.0" Round Culvert L= 163.0' Ke= 0.500 Inlet / Outlet Invert= 192.00' / 191.00' S= 0.0061 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	195.08'	36.0" W x 6.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	195.72'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	197.25'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=8.37 cfs @ 12.22 hrs HW=196.08' (Free Discharge)

1=Culvert (Barrel Controls 8.37 cfs @ 6.82 fps)
 2=Orifice/Grate (Passes < 6.23 cfs potential flow)
 3=Sharp-Crested Rectangular Weir (Passes < 2.77 cfs potential flow)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-52: Basin #52

Hydrograph



Stage-Discharge for Pond B-52: Basin #52

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.00	0.00	193.52	0.00	194.04	0.00	194.56	0.00
193.01	0.00	193.53	0.00	194.05	0.00	194.57	0.00
193.02	0.00	193.54	0.00	194.06	0.00	194.58	0.00
193.03	0.00	193.55	0.00	194.07	0.00	194.59	0.00
193.04	0.00	193.56	0.00	194.08	0.00	194.60	0.00
193.05	0.00	193.57	0.00	194.09	0.00	194.61	0.00
193.06	0.00	193.58	0.00	194.10	0.00	194.62	0.00
193.07	0.00	193.59	0.00	194.11	0.00	194.63	0.00
193.08	0.00	193.60	0.00	194.12	0.00	194.64	0.00
193.09	0.00	193.61	0.00	194.13	0.00	194.65	0.00
193.10	0.00	193.62	0.00	194.14	0.00	194.66	0.00
193.11	0.00	193.63	0.00	194.15	0.00	194.67	0.00
193.12	0.00	193.64	0.00	194.16	0.00	194.68	0.00
193.13	0.00	193.65	0.00	194.17	0.00	194.69	0.00
193.14	0.00	193.66	0.00	194.18	0.00	194.70	0.00
193.15	0.00	193.67	0.00	194.19	0.00	194.71	0.00
193.16	0.00	193.68	0.00	194.20	0.00	194.72	0.00
193.17	0.00	193.69	0.00	194.21	0.00	194.73	0.00
193.18	0.00	193.70	0.00	194.22	0.00	194.74	0.00
193.19	0.00	193.71	0.00	194.23	0.00	194.75	0.00
193.20	0.00	193.72	0.00	194.24	0.00	194.76	0.00
193.21	0.00	193.73	0.00	194.25	0.00	194.77	0.00
193.22	0.00	193.74	0.00	194.26	0.00	194.78	0.00
193.23	0.00	193.75	0.00	194.27	0.00	194.79	0.00
193.24	0.00	193.76	0.00	194.28	0.00	194.80	0.00
193.25	0.00	193.77	0.00	194.29	0.00	194.81	0.00
193.26	0.00	193.78	0.00	194.30	0.00	194.82	0.00
193.27	0.00	193.79	0.00	194.31	0.00	194.83	0.00
193.28	0.00	193.80	0.00	194.32	0.00	194.84	0.00
193.29	0.00	193.81	0.00	194.33	0.00	194.85	0.00
193.30	0.00	193.82	0.00	194.34	0.00	194.86	0.00
193.31	0.00	193.83	0.00	194.35	0.00	194.87	0.00
193.32	0.00	193.84	0.00	194.36	0.00	194.88	0.00
193.33	0.00	193.85	0.00	194.37	0.00	194.89	0.00
193.34	0.00	193.86	0.00	194.38	0.00	194.90	0.00
193.35	0.00	193.87	0.00	194.39	0.00	194.91	0.00
193.36	0.00	193.88	0.00	194.40	0.00	194.92	0.00
193.37	0.00	193.89	0.00	194.41	0.00	194.93	0.00
193.38	0.00	193.90	0.00	194.42	0.00	194.94	0.00
193.39	0.00	193.91	0.00	194.43	0.00	194.95	0.00
193.40	0.00	193.92	0.00	194.44	0.00	194.96	0.00
193.41	0.00	193.93	0.00	194.45	0.00	194.97	0.00
193.42	0.00	193.94	0.00	194.46	0.00	194.98	0.00
193.43	0.00	193.95	0.00	194.47	0.00	194.99	0.00
193.44	0.00	193.96	0.00	194.48	0.00	195.00	0.00
193.45	0.00	193.97	0.00	194.49	0.00	195.01	0.00
193.46	0.00	193.98	0.00	194.50	0.00	195.02	0.00
193.47	0.00	193.99	0.00	194.51	0.00	195.03	0.00
193.48	0.00	194.00	0.00	194.52	0.00	195.04	0.00
193.49	0.00	194.01	0.00	194.53	0.00	195.05	0.00
193.50	0.00	194.02	0.00	194.54	0.00	195.06	0.00
193.51	0.00	194.03	0.00	194.55	0.00	195.07	0.00

Stage-Discharge for Pond B-52: Basin #52 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
195.08	0.00	195.60	3.58	196.12	8.41	196.64	8.96
195.09	0.01	195.61	3.67	196.13	8.43	196.65	8.97
195.10	0.03	195.62	3.74	196.14	8.44	196.66	8.98
195.11	0.05	195.63	3.82	196.15	8.45	196.67	8.99
195.12	0.08	195.64	3.89	196.16	8.46	196.68	9.00
195.13	0.11	195.65	3.97	196.17	8.47	196.69	9.01
195.14	0.14	195.66	4.04	196.18	8.48	196.70	9.02
195.15	0.18	195.67	4.10	196.19	8.49	196.71	9.03
195.16	0.22	195.68	4.17	196.20	8.50	196.72	9.04
195.17	0.26	195.69	4.24	196.21	8.51	196.73	9.05
195.18	0.30	195.70	4.30	196.22	8.52	196.74	9.06
195.19	0.35	195.71	4.36	196.23	8.53	196.75	9.07
195.20	0.40	195.72	4.43	196.24	8.54	196.76	9.08
195.21	0.45	195.73	4.50	196.25	8.55	196.77	9.09
195.22	0.50	195.74	4.58	196.26	8.57	196.78	9.10
195.23	0.56	195.75	4.67	196.27	8.58	196.79	9.11
195.24	0.62	195.76	4.77	196.28	8.59	196.80	9.12
195.25	0.67	195.77	4.87	196.29	8.60	196.81	9.13
195.26	0.74	195.78	4.97	196.30	8.61	196.82	9.14
195.27	0.80	195.79	5.08	196.31	8.62	196.83	9.15
195.28	0.86	195.80	5.18	196.32	8.63	196.84	9.16
195.29	0.93	195.81	5.30	196.33	8.64	196.85	9.17
195.30	0.99	195.82	5.41	196.34	8.65	196.86	9.18
195.31	1.06	195.83	5.53	196.35	8.66	196.87	9.19
195.32	1.13	195.84	5.64	196.36	8.67	196.88	9.20
195.33	1.20	195.85	5.76	196.37	8.68	196.89	9.21
195.34	1.28	195.86	5.89	196.38	8.69	196.90	9.22
195.35	1.35	195.87	6.01	196.39	8.70	196.91	9.23
195.36	1.43	195.88	6.14	196.40	8.71	196.92	9.24
195.37	1.50	195.89	6.27	196.41	8.72	196.93	9.25
195.38	1.58	195.90	6.40	196.42	8.73	196.94	9.26
195.39	1.66	195.91	6.53	196.43	8.75	196.95	9.27
195.40	1.74	195.92	6.66	196.44	8.76	196.96	9.28
195.41	1.83	195.93	6.80	196.45	8.77	196.97	9.29
195.42	1.91	195.94	6.93	196.46	8.78	196.98	9.30
195.43	1.99	195.95	7.07	196.47	8.79	196.99	9.31
195.44	2.08	195.96	7.21	196.48	8.80	197.00	9.32
195.45	2.17	195.97	7.35	196.49	8.81	197.01	9.33
195.46	2.26	195.98	7.50	196.50	8.82	197.02	9.34
195.47	2.35	195.99	7.64	196.51	8.83	197.03	9.35
195.48	2.44	196.00	7.79	196.52	8.84	197.04	9.36
195.49	2.53	196.01	7.93	196.53	8.85	197.05	9.37
195.50	2.62	196.02	8.08	196.54	8.86	197.06	9.38
195.51	2.72	196.03	8.23	196.55	8.87	197.07	9.39
195.52	2.81	196.04	8.33	196.56	8.88	197.08	9.40
195.53	2.91	196.05	8.34	196.57	8.89	197.09	9.41
195.54	3.00	196.06	8.35	196.58	8.90	197.10	9.42
195.55	3.10	196.07	8.36	196.59	8.91	197.11	9.43
195.56	3.20	196.08	8.37	196.60	8.92	197.12	9.44
195.57	3.30	196.09	8.38	196.61	8.93	197.13	9.45
195.58	3.40	196.10	8.39	196.62	8.94	197.14	9.46
195.59	3.50	196.11	8.40	196.63	8.95	197.15	9.47

Stage-Discharge for Pond B-52: Basin #52 (continued)

Elevation (feet)	Primary (cfs)
197.16	9.48
197.17	9.49
197.18	9.50
197.19	9.51
197.20	9.52
197.21	9.53
197.22	9.54
197.23	9.55
197.24	9.55
197.25	9.56
197.26	9.69
197.27	9.91
197.28	10.20
197.29	10.54
197.30	10.92
197.31	11.35
197.32	11.81
197.33	12.30
197.34	12.82
197.35	13.38
197.36	13.96
197.37	14.57
197.38	15.21
197.39	15.87
197.40	16.55
197.41	17.26
197.42	17.99
197.43	18.75
197.44	19.52
197.45	20.32
197.46	21.17
197.47	22.06
197.48	22.96
197.49	23.90
197.50	24.85

Stage-Area-Storage for Pond B-52: Basin #52

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.00	474	0	193.52	732	314
193.01	479	5	193.53	737	321
193.02	484	10	193.54	742	328
193.03	489	14	193.55	747	336
193.04	494	19	193.56	752	343
193.05	499	24	193.57	757	351
193.06	504	29	193.58	762	358
193.07	509	34	193.59	767	366
193.08	514	40	193.60	772	374
193.09	519	45	193.61	777	381
193.10	524	50	193.62	782	389
193.11	529	55	193.63	786	397
193.12	534	60	193.64	791	405
193.13	538	66	193.65	796	413
193.14	543	71	193.66	801	421
193.15	548	77	193.67	806	429
193.16	553	82	193.68	811	437
193.17	558	88	193.69	816	445
193.18	563	93	193.70	821	453
193.19	568	99	193.71	826	462
193.20	573	105	193.72	831	470
193.21	578	110	193.73	836	478
193.22	583	116	193.74	841	487
193.23	588	122	193.75	846	495
193.24	593	128	193.76	851	503
193.25	598	134	193.77	856	512
193.26	603	140	193.78	861	521
193.27	608	146	193.79	866	529
193.28	613	152	193.80	871	538
193.29	618	158	193.81	876	547
193.30	623	165	193.82	881	555
193.31	628	171	193.83	886	564
193.32	633	177	193.84	891	573
193.33	638	183	193.85	896	582
193.34	643	190	193.86	901	591
193.35	648	196	193.87	906	600
193.36	653	203	193.88	910	609
193.37	658	209	193.89	915	618
193.38	662	216	193.90	920	627
193.39	667	223	193.91	925	637
193.40	672	229	193.92	930	646
193.41	677	236	193.93	935	655
193.42	682	243	193.94	940	665
193.43	687	250	193.95	945	674
193.44	692	257	193.96	950	684
193.45	697	264	193.97	955	693
193.46	702	271	193.98	960	703
193.47	707	278	193.99	965	712
193.48	712	285	194.00	970	722
193.49	717	292	194.01	976	732
193.50	722	299	194.02	981	742
193.51	727	306	194.03	987	751

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.04	992	761	194.56	1,280	1,352
194.05	998	771	194.57	1,285	1,365
194.06	1,003	781	194.58	1,291	1,378
194.07	1,009	791	194.59	1,296	1,391
194.08	1,014	801	194.60	1,302	1,404
194.09	1,020	812	194.61	1,307	1,417
194.10	1,025	822	194.62	1,313	1,430
194.11	1,031	832	194.63	1,318	1,443
194.12	1,036	842	194.64	1,324	1,456
194.13	1,042	853	194.65	1,329	1,469
194.14	1,047	863	194.66	1,335	1,483
194.15	1,053	874	194.67	1,341	1,496
194.16	1,058	884	194.68	1,346	1,509
194.17	1,064	895	194.69	1,352	1,523
194.18	1,070	906	194.70	1,357	1,536
194.19	1,075	916	194.71	1,363	1,550
194.20	1,081	927	194.72	1,368	1,564
194.21	1,086	938	194.73	1,374	1,577
194.22	1,092	949	194.74	1,379	1,591
194.23	1,097	960	194.75	1,385	1,605
194.24	1,103	971	194.76	1,390	1,619
194.25	1,108	982	194.77	1,396	1,633
194.26	1,114	993	194.78	1,401	1,647
194.27	1,119	1,004	194.79	1,407	1,661
194.28	1,125	1,015	194.80	1,412	1,675
194.29	1,130	1,027	194.81	1,418	1,689
194.30	1,136	1,038	194.82	1,423	1,703
194.31	1,141	1,049	194.83	1,429	1,718
194.32	1,147	1,061	194.84	1,435	1,732
194.33	1,152	1,072	194.85	1,440	1,746
194.34	1,158	1,084	194.86	1,446	1,761
194.35	1,164	1,095	194.87	1,451	1,775
194.36	1,169	1,107	194.88	1,457	1,790
194.37	1,175	1,119	194.89	1,462	1,804
194.38	1,180	1,131	194.90	1,468	1,819
194.39	1,186	1,142	194.91	1,473	1,834
194.40	1,191	1,154	194.92	1,479	1,848
194.41	1,197	1,166	194.93	1,484	1,863
194.42	1,202	1,178	194.94	1,490	1,878
194.43	1,208	1,190	194.95	1,495	1,893
194.44	1,213	1,202	194.96	1,501	1,908
194.45	1,219	1,214	194.97	1,506	1,923
194.46	1,224	1,227	194.98	1,512	1,938
194.47	1,230	1,239	194.99	1,517	1,953
194.48	1,235	1,251	195.00	1,523	1,969
194.49	1,241	1,264	195.01	1,529	1,984
194.50	1,247	1,276	195.02	1,535	1,999
194.51	1,252	1,289	195.03	1,541	2,014
194.52	1,258	1,301	195.04	1,547	2,030
194.53	1,263	1,314	195.05	1,554	2,045
194.54	1,269	1,326	195.06	1,560	2,061
194.55	1,274	1,339	195.07	1,566	2,077

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.08	1,572	2,092	195.60	1,889	2,992
195.09	1,578	2,108	195.61	1,895	3,011
195.10	1,584	2,124	195.62	1,901	3,030
195.11	1,590	2,140	195.63	1,907	3,049
195.12	1,596	2,156	195.64	1,913	3,068
195.13	1,602	2,172	195.65	1,920	3,087
195.14	1,608	2,188	195.66	1,926	3,107
195.15	1,615	2,204	195.67	1,932	3,126
195.16	1,621	2,220	195.68	1,938	3,145
195.17	1,627	2,236	195.69	1,944	3,165
195.18	1,633	2,253	195.70	1,950	3,184
195.19	1,639	2,269	195.71	1,956	3,204
195.20	1,645	2,285	195.72	1,962	3,223
195.21	1,651	2,302	195.73	1,968	3,243
195.22	1,657	2,318	195.74	1,974	3,263
195.23	1,663	2,335	195.75	1,981	3,282
195.24	1,669	2,352	195.76	1,987	3,302
195.25	1,676	2,368	195.77	1,993	3,322
195.26	1,682	2,385	195.78	1,999	3,342
195.27	1,688	2,402	195.79	2,005	3,362
195.28	1,694	2,419	195.80	2,011	3,382
195.29	1,700	2,436	195.81	2,017	3,402
195.30	1,706	2,453	195.82	2,023	3,422
195.31	1,712	2,470	195.83	2,029	3,443
195.32	1,718	2,487	195.84	2,035	3,463
195.33	1,724	2,504	195.85	2,041	3,483
195.34	1,730	2,522	195.86	2,048	3,504
195.35	1,736	2,539	195.87	2,054	3,524
195.36	1,743	2,556	195.88	2,060	3,545
195.37	1,749	2,574	195.89	2,066	3,566
195.38	1,755	2,591	195.90	2,072	3,586
195.39	1,761	2,609	195.91	2,078	3,607
195.40	1,767	2,627	195.92	2,084	3,628
195.41	1,773	2,644	195.93	2,090	3,649
195.42	1,779	2,662	195.94	2,096	3,670
195.43	1,785	2,680	195.95	2,102	3,691
195.44	1,791	2,698	195.96	2,109	3,712
195.45	1,797	2,716	195.97	2,115	3,733
195.46	1,804	2,734	195.98	2,121	3,754
195.47	1,810	2,752	195.99	2,127	3,775
195.48	1,816	2,770	196.00	2,133	3,797
195.49	1,822	2,788	196.01	2,140	3,818
195.50	1,828	2,806	196.02	2,146	3,839
195.51	1,834	2,825	196.03	2,153	3,861
195.52	1,840	2,843	196.04	2,160	3,882
195.53	1,846	2,861	196.05	2,166	3,904
195.54	1,852	2,880	196.06	2,173	3,926
195.55	1,859	2,898	196.07	2,180	3,947
195.56	1,865	2,917	196.08	2,186	3,969
195.57	1,871	2,936	196.09	2,193	3,991
195.58	1,877	2,954	196.10	2,200	4,013
195.59	1,883	2,973	196.11	2,206	4,035

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.12	2,213	4,057	196.64	2,559	5,298
196.13	2,220	4,079	196.65	2,566	5,324
196.14	2,226	4,102	196.66	2,573	5,349
196.15	2,233	4,124	196.67	2,579	5,375
196.16	2,240	4,146	196.68	2,586	5,401
196.17	2,246	4,169	196.69	2,593	5,427
196.18	2,253	4,191	196.70	2,599	5,453
196.19	2,260	4,214	196.71	2,606	5,479
196.20	2,266	4,236	196.72	2,613	5,505
196.21	2,273	4,259	196.73	2,619	5,531
196.22	2,280	4,282	196.74	2,626	5,557
196.23	2,286	4,305	196.75	2,633	5,584
196.24	2,293	4,328	196.76	2,639	5,610
196.25	2,300	4,351	196.77	2,646	5,636
196.26	2,306	4,374	196.78	2,652	5,663
196.27	2,313	4,397	196.79	2,659	5,689
196.28	2,319	4,420	196.80	2,666	5,716
196.29	2,326	4,443	196.81	2,672	5,743
196.30	2,333	4,466	196.82	2,679	5,769
196.31	2,339	4,490	196.83	2,686	5,796
196.32	2,346	4,513	196.84	2,692	5,823
196.33	2,353	4,537	196.85	2,699	5,850
196.34	2,359	4,560	196.86	2,706	5,877
196.35	2,366	4,584	196.87	2,712	5,904
196.36	2,373	4,608	196.88	2,719	5,931
196.37	2,379	4,631	196.89	2,726	5,959
196.38	2,386	4,655	196.90	2,732	5,986
196.39	2,393	4,679	196.91	2,739	6,013
196.40	2,399	4,703	196.92	2,746	6,041
196.41	2,406	4,727	196.93	2,752	6,068
196.42	2,413	4,751	196.94	2,759	6,096
196.43	2,419	4,775	196.95	2,766	6,123
196.44	2,426	4,799	196.96	2,772	6,151
196.45	2,433	4,824	196.97	2,779	6,179
196.46	2,439	4,848	196.98	2,786	6,207
196.47	2,446	4,873	196.99	2,792	6,235
196.48	2,453	4,897	197.00	2,799	6,263
196.49	2,459	4,922	197.01	2,806	6,291
196.50	2,466	4,946	197.02	2,813	6,319
196.51	2,473	4,971	197.03	2,820	6,347
196.52	2,479	4,996	197.04	2,827	6,375
196.53	2,486	5,021	197.05	2,835	6,403
196.54	2,493	5,045	197.06	2,842	6,432
196.55	2,499	5,070	197.07	2,849	6,460
196.56	2,506	5,095	197.08	2,856	6,489
196.57	2,513	5,121	197.09	2,863	6,517
196.58	2,519	5,146	197.10	2,870	6,546
196.59	2,526	5,171	197.11	2,877	6,575
196.60	2,533	5,196	197.12	2,884	6,603
196.61	2,539	5,222	197.13	2,891	6,632
196.62	2,546	5,247	197.14	2,898	6,661
196.63	2,553	5,272	197.15	2,906	6,690

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.16	2,913	6,719
197.17	2,920	6,749
197.18	2,927	6,778
197.19	2,934	6,807
197.20	2,941	6,836
197.21	2,948	6,866
197.22	2,955	6,895
197.23	2,962	6,925
197.24	2,969	6,955
197.25	2,977	6,984
197.26	2,984	7,014
197.27	2,991	7,044
197.28	2,998	7,074
197.29	3,005	7,104
197.30	3,012	7,134
197.31	3,019	7,164
197.32	3,026	7,195
197.33	3,033	7,225
197.34	3,040	7,255
197.35	3,047	7,286
197.36	3,055	7,316
197.37	3,062	7,347
197.38	3,069	7,377
197.39	3,076	7,408
197.40	3,083	7,439
197.41	3,090	7,470
197.42	3,097	7,501
197.43	3,104	7,532
197.44	3,111	7,563
197.45	3,118	7,594
197.46	3,126	7,625
197.47	3,133	7,656
197.48	3,140	7,688
197.49	3,147	7,719
197.50	3,154	7,751

Summary for Pond B-53: Basin #53

Inflow Area = 2.540 ac, 47.80% Impervious, Inflow Depth = 6.84" for Current 100 yr event
 Inflow = 17.46 cfs @ 12.17 hrs, Volume= 1.448 af
 Outflow = 13.26 cfs @ 12.26 hrs, Volume= 1.335 af, Atten= 24%, Lag= 5.3 min
 Primary = 13.26 cfs @ 12.26 hrs, Volume= 1.335 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 203.81' @ 12.26 hrs Surf.Area= 6,548 sf Storage= 16,105 cf

Plug-Flow detention time= 104.2 min calculated for 1.333 af (92% of inflow)
 Center-of-Mass det. time= 62.0 min (838.1 - 776.1)

Volume	Invert	Avail.Storage	Storage Description
#1	201.00'	24,392 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.00	4,695	0	0
202.00	5,685	5,190	5,190
203.00	6,015	5,850	11,040
204.00	6,676	6,346	17,386
205.00	7,336	7,006	24,392

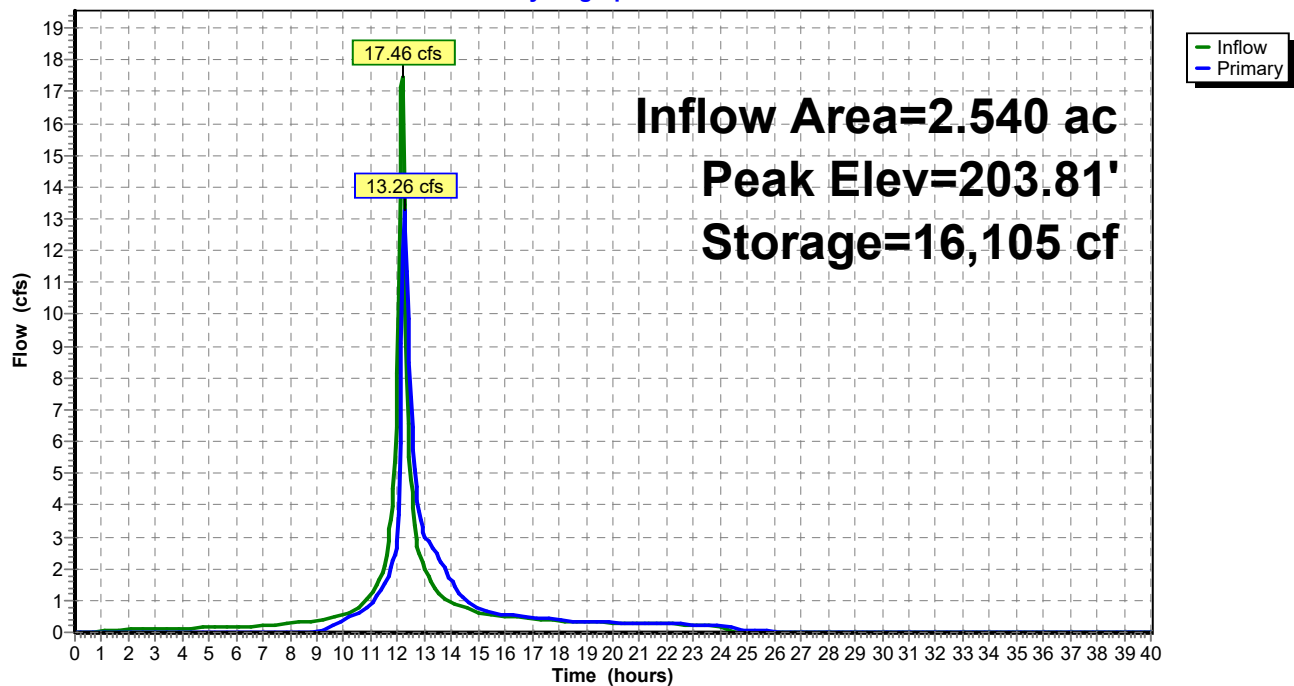
Device	Routing	Invert	Outlet Devices
#1	Primary	201.00'	24.0" Round Culvert L= 39.0' Ke= 0.500 Inlet / Outlet Invert= 201.00' / 200.10' S= 0.0231 ' / Cc= 0.900 n= 0.013, Flow Area= 3.14 sf
#2	Device 1	201.95'	24.0" W x 4.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	204.43'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=13.12 cfs @ 12.26 hrs HW=203.80' (Free Discharge)

1=Culvert (Passes 13.12 cfs of 20.29 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 4.16 cfs @ 6.24 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 8.96 cfs @ 2.92 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-53: Basin #53

Hydrograph



Stage-Discharge for Pond B-53: Basin #53

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.00	0.00	201.52	0.00	202.04	0.17	202.56	2.12
201.01	0.00	201.53	0.00	202.05	0.20	202.57	2.15
201.02	0.00	201.54	0.00	202.06	0.23	202.58	2.17
201.03	0.00	201.55	0.00	202.07	0.27	202.59	2.20
201.04	0.00	201.56	0.00	202.08	0.30	202.60	2.22
201.05	0.00	201.57	0.00	202.09	0.34	202.61	2.24
201.06	0.00	201.58	0.00	202.10	0.37	202.62	2.27
201.07	0.00	201.59	0.00	202.11	0.41	202.63	2.29
201.08	0.00	201.60	0.00	202.12	0.45	202.64	2.31
201.09	0.00	201.61	0.00	202.13	0.49	202.65	2.33
201.10	0.00	201.62	0.00	202.14	0.53	202.66	2.36
201.11	0.00	201.63	0.00	202.15	0.57	202.67	2.38
201.12	0.00	201.64	0.00	202.16	0.62	202.68	2.40
201.13	0.00	201.65	0.00	202.17	0.66	202.69	2.42
201.14	0.00	201.66	0.00	202.18	0.71	202.70	2.44
201.15	0.00	201.67	0.00	202.19	0.75	202.71	2.46
201.16	0.00	201.68	0.00	202.20	0.80	202.72	2.49
201.17	0.00	201.69	0.00	202.21	0.85	202.73	2.51
201.18	0.00	201.70	0.00	202.22	0.90	202.74	2.53
201.19	0.00	201.71	0.00	202.23	0.95	202.75	2.55
201.20	0.00	201.72	0.00	202.24	1.00	202.76	2.57
201.21	0.00	201.73	0.00	202.25	1.05	202.77	2.59
201.22	0.00	201.74	0.00	202.26	1.11	202.78	2.61
201.23	0.00	201.75	0.00	202.27	1.16	202.79	2.63
201.24	0.00	201.76	0.00	202.28	1.22	202.80	2.65
201.25	0.00	201.77	0.00	202.29	1.27	202.81	2.67
201.26	0.00	201.78	0.00	202.30	1.32	202.82	2.69
201.27	0.00	201.79	0.00	202.31	1.36	202.83	2.70
201.28	0.00	201.80	0.00	202.32	1.40	202.84	2.72
201.29	0.00	201.81	0.00	202.33	1.44	202.85	2.74
201.30	0.00	201.82	0.00	202.34	1.48	202.86	2.76
201.31	0.00	201.83	0.00	202.35	1.51	202.87	2.78
201.32	0.00	201.84	0.00	202.36	1.55	202.88	2.80
201.33	0.00	201.85	0.00	202.37	1.58	202.89	2.82
201.34	0.00	201.86	0.00	202.38	1.62	202.90	2.84
201.35	0.00	201.87	0.00	202.39	1.65	202.91	2.85
201.36	0.00	201.88	0.00	202.40	1.68	202.92	2.87
201.37	0.00	201.89	0.00	202.41	1.71	202.93	2.89
201.38	0.00	201.90	0.00	202.42	1.74	202.94	2.91
201.39	0.00	201.91	0.00	202.43	1.77	202.95	2.93
201.40	0.00	201.92	0.00	202.44	1.80	202.96	2.94
201.41	0.00	201.93	0.00	202.45	1.83	202.97	2.96
201.42	0.00	201.94	0.00	202.46	1.86	202.98	2.98
201.43	0.00	201.95	0.00	202.47	1.89	202.99	3.00
201.44	0.00	201.96	0.01	202.48	1.92	203.00	3.01
201.45	0.00	201.97	0.02	202.49	1.94	203.01	3.04
201.46	0.00	201.98	0.03	202.50	1.97	203.02	3.08
201.47	0.00	201.99	0.05	202.51	2.00	203.03	3.13
201.48	0.00	202.00	0.07	202.52	2.02	203.04	3.18
201.49	0.00	202.01	0.09	202.53	2.05	203.05	3.24
201.50	0.00	202.02	0.12	202.54	2.07	203.06	3.31
201.51	0.00	202.03	0.15	202.55	2.10	203.07	3.37

Stage-Discharge for Pond B-53: Basin #53 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.08	3.44	203.60	9.80	204.12	19.18	204.64	35.99
203.09	3.51	203.61	9.96	204.13	19.38	204.65	36.91
203.10	3.59	203.62	10.12	204.14	19.58	204.66	37.85
203.11	3.67	203.63	10.28	204.15	19.78	204.67	38.82
203.12	3.75	203.64	10.44	204.16	19.98	204.68	39.82
203.13	3.84	203.65	10.60	204.17	20.18	204.69	40.84
203.14	3.92	203.66	10.77	204.18	20.39	204.70	41.88
203.15	4.01	203.67	10.93	204.19	20.59	204.71	42.95
203.16	4.11	203.68	11.10	204.20	20.79	204.72	44.04
203.17	4.20	203.69	11.26	204.21	21.00	204.73	45.16
203.18	4.30	203.70	11.43	204.22	21.20	204.74	46.30
203.19	4.40	203.71	11.60	204.23	21.41	204.75	47.47
203.20	4.50	203.72	11.77	204.24	21.62	204.76	48.66
203.21	4.60	203.73	11.94	204.25	21.82	204.77	49.88
203.22	4.70	203.74	12.11	204.26	22.03	204.78	51.12
203.23	4.81	203.75	12.28	204.27	22.24	204.79	52.38
203.24	4.92	203.76	12.45	204.28	22.45	204.80	53.67
203.25	5.03	203.77	12.62	204.29	22.66	204.81	54.98
203.26	5.14	203.78	12.80	204.30	22.87	204.82	56.32
203.27	5.25	203.79	12.97	204.31	22.99	204.83	57.68
203.28	5.37	203.80	13.15	204.32	23.04	204.84	59.09
203.29	5.49	203.81	13.32	204.33	23.09	204.85	60.52
203.30	5.61	203.82	13.50	204.34	23.14	204.86	61.99
203.31	5.73	203.83	13.68	204.35	23.19	204.87	63.48
203.32	5.85	203.84	13.86	204.36	23.24	204.88	64.99
203.33	5.97	203.85	14.04	204.37	23.29	204.89	66.53
203.34	6.10	203.86	14.22	204.38	23.34	204.90	68.10
203.35	6.22	203.87	14.40	204.39	23.39	204.91	69.69
203.36	6.35	203.88	14.58	204.40	23.43	204.92	71.31
203.37	6.48	203.89	14.77	204.41	23.48	204.93	72.96
203.38	6.61	203.90	14.95	204.42	23.53	204.94	74.63
203.39	6.74	203.91	15.14	204.43	23.58	204.95	76.33
203.40	6.88	203.92	15.32	204.44	23.75	204.96	78.05
203.41	7.01	203.93	15.51	204.45	24.01	204.97	79.81
203.42	7.15	203.94	15.69	204.46	24.33	204.98	81.59
203.43	7.29	203.95	15.88	204.47	24.71	204.99	83.39
203.44	7.42	203.96	16.07	204.48	25.13	205.00	85.22
203.45	7.56	203.97	16.26	204.49	25.59		
203.46	7.70	203.98	16.45	204.50	26.09		
203.47	7.85	203.99	16.64	204.51	26.62		
203.48	7.99	204.00	16.83	204.52	27.19		
203.49	8.14	204.01	17.02	204.53	27.78		
203.50	8.28	204.02	17.21	204.54	28.40		
203.51	8.43	204.03	17.41	204.55	29.05		
203.52	8.58	204.04	17.60	204.56	29.72		
203.53	8.73	204.05	17.80	204.57	30.42		
203.54	8.88	204.06	17.99	204.58	31.14		
203.55	9.03	204.07	18.19	204.59	31.89		
203.56	9.18	204.08	18.38	204.60	32.66		
203.57	9.34	204.09	18.58	204.61	33.45		
203.58	9.49	204.10	18.78	204.62	34.26		
203.59	9.65	204.11	18.98	204.63	35.10		

Stage-Area-Storage for Pond B-53: Basin #53

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.00	4,695	0	201.52	5,210	2,575
201.01	4,705	47	201.53	5,220	2,627
201.02	4,715	94	201.54	5,230	2,680
201.03	4,725	141	201.55	5,240	2,732
201.04	4,735	189	201.56	5,249	2,784
201.05	4,745	236	201.57	5,259	2,837
201.06	4,754	283	201.58	5,269	2,890
201.07	4,764	331	201.59	5,279	2,942
201.08	4,774	379	201.60	5,289	2,995
201.09	4,784	427	201.61	5,299	3,048
201.10	4,794	474	201.62	5,309	3,101
201.11	4,804	522	201.63	5,319	3,154
201.12	4,814	571	201.64	5,329	3,208
201.13	4,824	619	201.65	5,339	3,261
201.14	4,834	667	201.66	5,348	3,314
201.15	4,844	715	201.67	5,358	3,368
201.16	4,853	764	201.68	5,368	3,421
201.17	4,863	812	201.69	5,378	3,475
201.18	4,873	861	201.70	5,388	3,529
201.19	4,883	910	201.71	5,398	3,583
201.20	4,893	959	201.72	5,408	3,637
201.21	4,903	1,008	201.73	5,418	3,691
201.22	4,913	1,057	201.74	5,428	3,745
201.23	4,923	1,106	201.75	5,438	3,800
201.24	4,933	1,155	201.76	5,447	3,854
201.25	4,943	1,205	201.77	5,457	3,909
201.26	4,952	1,254	201.78	5,467	3,963
201.27	4,962	1,304	201.79	5,477	4,018
201.28	4,972	1,353	201.80	5,487	4,073
201.29	4,982	1,403	201.81	5,497	4,128
201.30	4,992	1,453	201.82	5,507	4,183
201.31	5,002	1,503	201.83	5,517	4,238
201.32	5,012	1,553	201.84	5,527	4,293
201.33	5,022	1,603	201.85	5,536	4,348
201.34	5,032	1,654	201.86	5,546	4,404
201.35	5,041	1,704	201.87	5,556	4,459
201.36	5,051	1,754	201.88	5,566	4,515
201.37	5,061	1,805	201.89	5,576	4,571
201.38	5,071	1,856	201.90	5,586	4,626
201.39	5,081	1,906	201.91	5,596	4,682
201.40	5,091	1,957	201.92	5,606	4,738
201.41	5,101	2,008	201.93	5,616	4,794
201.42	5,111	2,059	201.94	5,626	4,851
201.43	5,121	2,110	201.95	5,635	4,907
201.44	5,131	2,162	201.96	5,645	4,963
201.45	5,140	2,213	201.97	5,655	5,020
201.46	5,150	2,264	201.98	5,665	5,076
201.47	5,160	2,316	201.99	5,675	5,133
201.48	5,170	2,368	202.00	5,685	5,190
201.49	5,180	2,419	202.01	5,688	5,247
201.50	5,190	2,471	202.02	5,692	5,304
201.51	5,200	2,523	202.03	5,695	5,361

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.04	5,698	5,418	202.56	5,870	8,425
202.05	5,702	5,475	202.57	5,873	8,484
202.06	5,705	5,532	202.58	5,876	8,543
202.07	5,708	5,589	202.59	5,880	8,602
202.08	5,711	5,646	202.60	5,883	8,660
202.09	5,715	5,703	202.61	5,886	8,719
202.10	5,718	5,760	202.62	5,890	8,778
202.11	5,721	5,817	202.63	5,893	8,837
202.12	5,725	5,875	202.64	5,896	8,896
202.13	5,728	5,932	202.65	5,900	8,955
202.14	5,731	5,989	202.66	5,903	9,014
202.15	5,735	6,046	202.67	5,906	9,073
202.16	5,738	6,104	202.68	5,909	9,132
202.17	5,741	6,161	202.69	5,913	9,191
202.18	5,744	6,219	202.70	5,916	9,250
202.19	5,748	6,276	202.71	5,919	9,310
202.20	5,751	6,334	202.72	5,923	9,369
202.21	5,754	6,391	202.73	5,926	9,428
202.22	5,758	6,449	202.74	5,929	9,487
202.23	5,761	6,506	202.75	5,933	9,547
202.24	5,764	6,564	202.76	5,936	9,606
202.25	5,768	6,622	202.77	5,939	9,665
202.26	5,771	6,679	202.78	5,942	9,725
202.27	5,774	6,737	202.79	5,946	9,784
202.28	5,777	6,795	202.80	5,949	9,844
202.29	5,781	6,853	202.81	5,952	9,903
202.30	5,784	6,910	202.82	5,956	9,963
202.31	5,787	6,968	202.83	5,959	10,022
202.32	5,791	7,026	202.84	5,962	10,082
202.33	5,794	7,084	202.85	5,965	10,141
202.34	5,797	7,142	202.86	5,969	10,201
202.35	5,800	7,200	202.87	5,972	10,261
202.36	5,804	7,258	202.88	5,975	10,321
202.37	5,807	7,316	202.89	5,979	10,380
202.38	5,810	7,374	202.90	5,982	10,440
202.39	5,814	7,432	202.91	5,985	10,500
202.40	5,817	7,490	202.92	5,989	10,560
202.41	5,820	7,549	202.93	5,992	10,620
202.42	5,824	7,607	202.94	5,995	10,680
202.43	5,827	7,665	202.95	5,998	10,740
202.44	5,830	7,723	202.96	6,002	10,800
202.45	5,833	7,782	202.97	6,005	10,860
202.46	5,837	7,840	202.98	6,008	10,920
202.47	5,840	7,898	202.99	6,012	10,980
202.48	5,843	7,957	203.00	6,015	11,040
202.49	5,847	8,015	203.01	6,022	11,100
202.50	5,850	8,074	203.02	6,028	11,160
202.51	5,853	8,132	203.03	6,035	11,221
202.52	5,857	8,191	203.04	6,041	11,281
202.53	5,860	8,249	203.05	6,048	11,342
202.54	5,863	8,308	203.06	6,055	11,402
202.55	5,867	8,367	203.07	6,061	11,463

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.08	6,068	11,523	203.60	6,412	14,768
203.09	6,074	11,584	203.61	6,418	14,832
203.10	6,081	11,645	203.62	6,425	14,896
203.11	6,088	11,706	203.63	6,431	14,961
203.12	6,094	11,767	203.64	6,438	15,025
203.13	6,101	11,828	203.65	6,445	15,089
203.14	6,108	11,889	203.66	6,451	15,154
203.15	6,114	11,950	203.67	6,458	15,218
203.16	6,121	12,011	203.68	6,464	15,283
203.17	6,127	12,072	203.69	6,471	15,348
203.18	6,134	12,133	203.70	6,478	15,412
203.19	6,141	12,195	203.71	6,484	15,477
203.20	6,147	12,256	203.72	6,491	15,542
203.21	6,154	12,318	203.73	6,498	15,607
203.22	6,160	12,379	203.74	6,504	15,672
203.23	6,167	12,441	203.75	6,511	15,737
203.24	6,174	12,503	203.76	6,517	15,802
203.25	6,180	12,564	203.77	6,524	15,868
203.26	6,187	12,626	203.78	6,531	15,933
203.27	6,193	12,688	203.79	6,537	15,998
203.28	6,200	12,750	203.80	6,544	16,064
203.29	6,207	12,812	203.81	6,550	16,129
203.30	6,213	12,874	203.82	6,557	16,195
203.31	6,220	12,936	203.83	6,564	16,260
203.32	6,227	12,999	203.84	6,570	16,326
203.33	6,233	13,061	203.85	6,577	16,392
203.34	6,240	13,123	203.86	6,583	16,457
203.35	6,246	13,186	203.87	6,590	16,523
203.36	6,253	13,248	203.88	6,597	16,589
203.37	6,260	13,311	203.89	6,603	16,655
203.38	6,266	13,373	203.90	6,610	16,721
203.39	6,273	13,436	203.91	6,617	16,787
203.40	6,279	13,499	203.92	6,623	16,854
203.41	6,286	13,562	203.93	6,630	16,920
203.42	6,293	13,625	203.94	6,636	16,986
203.43	6,299	13,688	203.95	6,643	17,053
203.44	6,306	13,751	203.96	6,650	17,119
203.45	6,312	13,814	203.97	6,656	17,186
203.46	6,319	13,877	203.98	6,663	17,252
203.47	6,326	13,940	203.99	6,669	17,319
203.48	6,332	14,003	204.00	6,676	17,386
203.49	6,339	14,067	204.01	6,683	17,452
203.50	6,346	14,130	204.02	6,689	17,519
203.51	6,352	14,194	204.03	6,696	17,586
203.52	6,359	14,257	204.04	6,702	17,653
203.53	6,365	14,321	204.05	6,709	17,720
203.54	6,372	14,384	204.06	6,716	17,787
203.55	6,379	14,448	204.07	6,722	17,854
203.56	6,385	14,512	204.08	6,729	17,922
203.57	6,392	14,576	204.09	6,735	17,989
203.58	6,398	14,640	204.10	6,742	18,056
203.59	6,405	14,704	204.11	6,749	18,124

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.12	6,755	18,191	204.64	7,098	21,793
204.13	6,762	18,259	204.65	7,105	21,864
204.14	6,768	18,327	204.66	7,112	21,935
204.15	6,775	18,394	204.67	7,118	22,007
204.16	6,782	18,462	204.68	7,125	22,078
204.17	6,788	18,530	204.69	7,131	22,149
204.18	6,795	18,598	204.70	7,138	22,220
204.19	6,801	18,666	204.71	7,145	22,292
204.20	6,808	18,734	204.72	7,151	22,363
204.21	6,815	18,802	204.73	7,158	22,435
204.22	6,821	18,870	204.74	7,164	22,506
204.23	6,828	18,938	204.75	7,171	22,578
204.24	6,834	19,007	204.76	7,178	22,650
204.25	6,841	19,075	204.77	7,184	22,722
204.26	6,848	19,144	204.78	7,191	22,794
204.27	6,854	19,212	204.79	7,197	22,865
204.28	6,861	19,281	204.80	7,204	22,938
204.29	6,867	19,349	204.81	7,211	23,010
204.30	6,874	19,418	204.82	7,217	23,082
204.31	6,881	19,487	204.83	7,224	23,154
204.32	6,887	19,556	204.84	7,230	23,226
204.33	6,894	19,625	204.85	7,237	23,299
204.34	6,900	19,693	204.86	7,244	23,371
204.35	6,907	19,763	204.87	7,250	23,443
204.36	6,914	19,832	204.88	7,257	23,516
204.37	6,920	19,901	204.89	7,263	23,589
204.38	6,927	19,970	204.90	7,270	23,661
204.39	6,933	20,039	204.91	7,277	23,734
204.40	6,940	20,109	204.92	7,283	23,807
204.41	6,947	20,178	204.93	7,290	23,880
204.42	6,953	20,248	204.94	7,296	23,953
204.43	6,960	20,317	204.95	7,303	24,026
204.44	6,966	20,387	204.96	7,310	24,099
204.45	6,973	20,457	204.97	7,316	24,172
204.46	6,980	20,526	204.98	7,323	24,245
204.47	6,986	20,596	204.99	7,329	24,318
204.48	6,993	20,666	205.00	7,336	24,392
204.49	6,999	20,736			
204.50	7,006	20,806			
204.51	7,013	20,876			
204.52	7,019	20,946			
204.53	7,026	21,016			
204.54	7,032	21,087			
204.55	7,039	21,157			
204.56	7,046	21,228			
204.57	7,052	21,298			
204.58	7,059	21,369			
204.59	7,065	21,439			
204.60	7,072	21,510			
204.61	7,079	21,581			
204.62	7,085	21,651			
204.63	7,092	21,722			

Summary for Pond B-54: Basin #54

Inflow Area = 2.570 ac, 60.47% Impervious, Inflow Depth = 7.21" for Current 100 yr event
 Inflow = 18.27 cfs @ 12.17 hrs, Volume= 1.543 af
 Outflow = 14.84 cfs @ 12.25 hrs, Volume= 1.403 af, Atten= 19%, Lag= 4.5 min
 Primary = 14.84 cfs @ 12.25 hrs, Volume= 1.403 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 203.92' @ 12.24 hrs Surf.Area= 6,365 sf Storage= 15,748 cf

Plug-Flow detention time= 111.5 min calculated for 1.401 af (91% of inflow)
 Center-of-Mass det. time= 63.5 min (830.8 - 767.2)

Volume	Invert	Avail.Storage	Storage Description
#1	201.00'	23,042 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.00	4,440	0	0
202.00	5,100	4,770	4,770
203.00	5,760	5,430	10,200
204.00	6,421	6,091	16,291
205.00	7,081	6,751	23,042

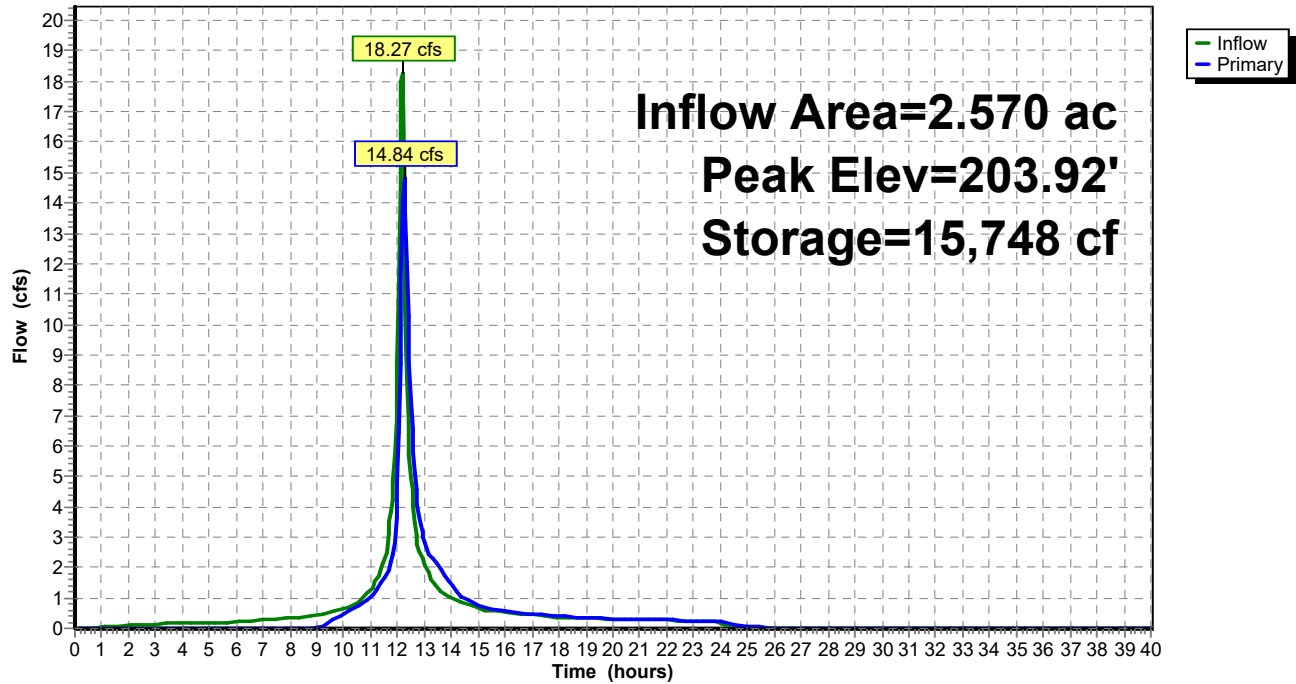
Device	Routing	Invert	Outlet Devices
#1	Primary	201.00'	24.0" Round Culvert L= 73.0' Ke= 0.500 Inlet / Outlet Invert= 201.00' / 200.10' S= 0.0123 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf
#2	Device 1	202.26'	24.0" W x 4.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	204.75'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=14.76 cfs @ 12.25 hrs HW=203.91' (Free Discharge)

1=Culvert (Passes 14.76 cfs of 20.91 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 3.91 cfs @ 5.86 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 10.85 cfs @ 3.12 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-54: Basin #54

Hydrograph



Stage-Discharge for Pond B-54: Basin #54

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.00	0.00	201.52	0.00	202.04	0.00	202.56	1.05
201.01	0.00	201.53	0.00	202.05	0.00	202.57	1.11
201.02	0.00	201.54	0.00	202.06	0.00	202.58	1.16
201.03	0.00	201.55	0.00	202.07	0.00	202.59	1.22
201.04	0.00	201.56	0.00	202.08	0.00	202.60	1.27
201.05	0.00	201.57	0.00	202.09	0.00	202.61	1.32
201.06	0.00	201.58	0.00	202.10	0.00	202.62	1.36
201.07	0.00	201.59	0.00	202.11	0.00	202.63	1.40
201.08	0.00	201.60	0.00	202.12	0.00	202.64	1.44
201.09	0.00	201.61	0.00	202.13	0.00	202.65	1.48
201.10	0.00	201.62	0.00	202.14	0.00	202.66	1.51
201.11	0.00	201.63	0.00	202.15	0.00	202.67	1.55
201.12	0.00	201.64	0.00	202.16	0.00	202.68	1.58
201.13	0.00	201.65	0.00	202.17	0.00	202.69	1.62
201.14	0.00	201.66	0.00	202.18	0.00	202.70	1.65
201.15	0.00	201.67	0.00	202.19	0.00	202.71	1.68
201.16	0.00	201.68	0.00	202.20	0.00	202.72	1.71
201.17	0.00	201.69	0.00	202.21	0.00	202.73	1.74
201.18	0.00	201.70	0.00	202.22	0.00	202.74	1.77
201.19	0.00	201.71	0.00	202.23	0.00	202.75	1.80
201.20	0.00	201.72	0.00	202.24	0.00	202.76	1.83
201.21	0.00	201.73	0.00	202.25	0.00	202.77	1.86
201.22	0.00	201.74	0.00	202.26	0.00	202.78	1.89
201.23	0.00	201.75	0.00	202.27	0.01	202.79	1.92
201.24	0.00	201.76	0.00	202.28	0.02	202.80	1.94
201.25	0.00	201.77	0.00	202.29	0.03	202.81	1.97
201.26	0.00	201.78	0.00	202.30	0.05	202.82	2.00
201.27	0.00	201.79	0.00	202.31	0.07	202.83	2.02
201.28	0.00	201.80	0.00	202.32	0.09	202.84	2.05
201.29	0.00	201.81	0.00	202.33	0.12	202.85	2.07
201.30	0.00	201.82	0.00	202.34	0.15	202.86	2.10
201.31	0.00	201.83	0.00	202.35	0.17	202.87	2.12
201.32	0.00	201.84	0.00	202.36	0.20	202.88	2.15
201.33	0.00	201.85	0.00	202.37	0.23	202.89	2.17
201.34	0.00	201.86	0.00	202.38	0.27	202.90	2.20
201.35	0.00	201.87	0.00	202.39	0.30	202.91	2.22
201.36	0.00	201.88	0.00	202.40	0.34	202.92	2.24
201.37	0.00	201.89	0.00	202.41	0.37	202.93	2.27
201.38	0.00	201.90	0.00	202.42	0.41	202.94	2.29
201.39	0.00	201.91	0.00	202.43	0.45	202.95	2.31
201.40	0.00	201.92	0.00	202.44	0.49	202.96	2.33
201.41	0.00	201.93	0.00	202.45	0.53	202.97	2.36
201.42	0.00	201.94	0.00	202.46	0.57	202.98	2.38
201.43	0.00	201.95	0.00	202.47	0.62	202.99	2.40
201.44	0.00	201.96	0.00	202.48	0.66	203.00	2.42
201.45	0.00	201.97	0.00	202.49	0.71	203.01	2.46
201.46	0.00	201.98	0.00	202.50	0.75	203.02	2.50
201.47	0.00	201.99	0.00	202.51	0.80	203.03	2.55
201.48	0.00	202.00	0.00	202.52	0.85	203.04	2.61
201.49	0.00	202.01	0.00	202.53	0.90	203.05	2.67
201.50	0.00	202.02	0.00	202.54	0.95	203.06	2.74
201.51	0.00	202.03	0.00	202.55	1.00	203.07	2.81

Stage-Discharge for Pond B-54: Basin #54 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.08	2.88	203.60	9.37	204.12	18.81	204.64	24.58
203.09	2.96	203.61	9.53	204.13	19.01	204.65	24.62
203.10	3.04	203.62	9.69	204.14	19.21	204.66	24.67
203.11	3.12	203.63	9.85	204.15	19.42	204.67	24.72
203.12	3.21	203.64	10.02	204.16	19.62	204.68	24.76
203.13	3.29	203.65	10.18	204.17	19.82	204.69	24.81
203.14	3.39	203.66	10.34	204.18	20.03	204.70	24.86
203.15	3.48	203.67	10.51	204.19	20.23	204.71	24.90
203.16	3.57	203.68	10.68	204.20	20.44	204.72	24.95
203.17	3.67	203.69	10.84	204.21	20.64	204.73	24.99
203.18	3.77	203.70	11.01	204.22	20.85	204.74	25.04
203.19	3.87	203.71	11.18	204.23	21.05	204.75	25.08
203.20	3.98	203.72	11.35	204.24	21.26	204.76	25.25
203.21	4.08	203.73	11.52	204.25	21.47	204.77	25.51
203.22	4.19	203.74	11.69	204.26	21.68	204.78	25.83
203.23	4.30	203.75	11.87	204.27	21.89	204.79	26.20
203.24	4.41	203.76	12.04	204.28	22.10	204.80	26.62
203.25	4.52	203.77	12.22	204.29	22.31	204.81	27.08
203.26	4.64	203.78	12.39	204.30	22.52	204.82	27.58
203.27	4.75	203.79	12.57	204.31	22.73	204.83	28.10
203.28	4.87	203.80	12.74	204.32	22.94	204.84	28.66
203.29	4.99	203.81	12.92	204.33	23.09	204.85	29.25
203.30	5.11	203.82	13.10	204.34	23.14	204.86	29.87
203.31	5.24	203.83	13.28	204.35	23.19	204.87	30.52
203.32	5.36	203.84	13.46	204.36	23.24	204.88	31.19
203.33	5.49	203.85	13.64	204.37	23.29	204.89	31.89
203.34	5.61	203.86	13.82	204.38	23.34	204.90	32.61
203.35	5.74	203.87	14.01	204.39	23.39	204.91	33.35
203.36	5.87	203.88	14.19	204.40	23.43	204.92	34.12
203.37	6.00	203.89	14.37	204.41	23.48	204.93	34.90
203.38	6.14	203.90	14.56	204.42	23.53	204.94	35.72
203.39	6.27	203.91	14.75	204.43	23.58	204.95	36.55
203.40	6.41	203.92	14.93	204.44	23.63	204.96	37.44
203.41	6.54	203.93	15.12	204.45	23.68	204.97	38.35
203.42	6.68	203.94	15.31	204.46	23.73	204.98	39.29
203.43	6.82	203.95	15.50	204.47	23.77	204.99	40.26
203.44	6.96	203.96	15.69	204.48	23.82	205.00	41.25
203.45	7.10	203.97	15.88	204.49	23.87		
203.46	7.25	203.98	16.07	204.50	23.92		
203.47	7.39	203.99	16.26	204.51	23.97		
203.48	7.54	204.00	16.45	204.52	24.01		
203.49	7.68	204.01	16.64	204.53	24.06		
203.50	7.83	204.02	16.84	204.54	24.11		
203.51	7.98	204.03	17.03	204.55	24.16		
203.52	8.13	204.04	17.23	204.56	24.20		
203.53	8.28	204.05	17.42	204.57	24.25		
203.54	8.43	204.06	17.62	204.58	24.30		
203.55	8.59	204.07	17.82	204.59	24.34		
203.56	8.74	204.08	18.01	204.60	24.39		
203.57	8.90	204.09	18.21	204.61	24.44		
203.58	9.05	204.10	18.41	204.62	24.48		
203.59	9.21	204.11	18.61	204.63	24.53		

Stage-Area-Storage for Pond B-54: Basin #54

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.00	4,440	0	201.52	4,783	2,398
201.01	4,447	44	201.53	4,790	2,446
201.02	4,453	89	201.54	4,796	2,494
201.03	4,460	133	201.55	4,803	2,542
201.04	4,466	178	201.56	4,810	2,590
201.05	4,473	223	201.57	4,816	2,638
201.06	4,480	268	201.58	4,823	2,686
201.07	4,486	312	201.59	4,829	2,734
201.08	4,493	357	201.60	4,836	2,783
201.09	4,499	402	201.61	4,843	2,831
201.10	4,506	447	201.62	4,849	2,880
201.11	4,513	492	201.63	4,856	2,928
201.12	4,519	538	201.64	4,862	2,977
201.13	4,526	583	201.65	4,869	3,025
201.14	4,532	628	201.66	4,876	3,074
201.15	4,539	673	201.67	4,882	3,123
201.16	4,546	719	201.68	4,889	3,172
201.17	4,552	764	201.69	4,895	3,221
201.18	4,559	810	201.70	4,902	3,270
201.19	4,565	856	201.71	4,909	3,319
201.20	4,572	901	201.72	4,915	3,368
201.21	4,579	947	201.73	4,922	3,417
201.22	4,585	993	201.74	4,928	3,466
201.23	4,592	1,039	201.75	4,935	3,516
201.24	4,598	1,085	201.76	4,942	3,565
201.25	4,605	1,131	201.77	4,948	3,614
201.26	4,612	1,177	201.78	4,955	3,664
201.27	4,618	1,223	201.79	4,961	3,714
201.28	4,625	1,269	201.80	4,968	3,763
201.29	4,631	1,315	201.81	4,975	3,813
201.30	4,638	1,362	201.82	4,981	3,863
201.31	4,645	1,408	201.83	4,988	3,913
201.32	4,651	1,455	201.84	4,994	3,962
201.33	4,658	1,501	201.85	5,001	4,012
201.34	4,664	1,548	201.86	5,008	4,062
201.35	4,671	1,594	201.87	5,014	4,113
201.36	4,678	1,641	201.88	5,021	4,163
201.37	4,684	1,688	201.89	5,027	4,213
201.38	4,691	1,735	201.90	5,034	4,263
201.39	4,697	1,782	201.91	5,041	4,314
201.40	4,704	1,829	201.92	5,047	4,364
201.41	4,711	1,876	201.93	5,054	4,415
201.42	4,717	1,923	201.94	5,060	4,465
201.43	4,724	1,970	201.95	5,067	4,516
201.44	4,730	2,017	201.96	5,074	4,567
201.45	4,737	2,065	201.97	5,080	4,617
201.46	4,744	2,112	201.98	5,087	4,668
201.47	4,750	2,160	201.99	5,093	4,719
201.48	4,757	2,207	202.00	5,100	4,770
201.49	4,763	2,255	202.01	5,107	4,821
201.50	4,770	2,303	202.02	5,113	4,872
201.51	4,777	2,350	202.03	5,120	4,923

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.04	5,126	4,975	202.56	5,470	7,729
202.05	5,133	5,026	202.57	5,476	7,784
202.06	5,140	5,077	202.58	5,483	7,839
202.07	5,146	5,129	202.59	5,489	7,894
202.08	5,153	5,180	202.60	5,496	7,949
202.09	5,159	5,232	202.61	5,503	8,004
202.10	5,166	5,283	202.62	5,509	8,059
202.11	5,173	5,335	202.63	5,516	8,114
202.12	5,179	5,387	202.64	5,522	8,169
202.13	5,186	5,439	202.65	5,529	8,224
202.14	5,192	5,490	202.66	5,536	8,280
202.15	5,199	5,542	202.67	5,542	8,335
202.16	5,206	5,594	202.68	5,549	8,391
202.17	5,212	5,647	202.69	5,555	8,446
202.18	5,219	5,699	202.70	5,562	8,502
202.19	5,225	5,751	202.71	5,569	8,557
202.20	5,232	5,803	202.72	5,575	8,613
202.21	5,239	5,856	202.73	5,582	8,669
202.22	5,245	5,908	202.74	5,588	8,725
202.23	5,252	5,960	202.75	5,595	8,781
202.24	5,258	6,013	202.76	5,602	8,837
202.25	5,265	6,066	202.77	5,608	8,893
202.26	5,272	6,118	202.78	5,615	8,949
202.27	5,278	6,171	202.79	5,621	9,005
202.28	5,285	6,224	202.80	5,628	9,061
202.29	5,291	6,277	202.81	5,635	9,118
202.30	5,298	6,330	202.82	5,641	9,174
202.31	5,305	6,383	202.83	5,648	9,230
202.32	5,311	6,436	202.84	5,654	9,287
202.33	5,318	6,489	202.85	5,661	9,343
202.34	5,324	6,542	202.86	5,668	9,400
202.35	5,331	6,595	202.87	5,674	9,457
202.36	5,338	6,649	202.88	5,681	9,514
202.37	5,344	6,702	202.89	5,687	9,570
202.38	5,351	6,756	202.90	5,694	9,627
202.39	5,357	6,809	202.91	5,701	9,684
202.40	5,364	6,863	202.92	5,707	9,741
202.41	5,371	6,916	202.93	5,714	9,798
202.42	5,377	6,970	202.94	5,720	9,856
202.43	5,384	7,024	202.95	5,727	9,913
202.44	5,390	7,078	202.96	5,734	9,970
202.45	5,397	7,132	202.97	5,740	10,027
202.46	5,404	7,186	202.98	5,747	10,085
202.47	5,410	7,240	202.99	5,753	10,142
202.48	5,417	7,294	203.00	5,760	10,200
202.49	5,423	7,348	203.01	5,767	10,258
202.50	5,430	7,403	203.02	5,773	10,315
202.51	5,437	7,457	203.03	5,780	10,373
202.52	5,443	7,511	203.04	5,786	10,431
202.53	5,450	7,566	203.05	5,793	10,489
202.54	5,456	7,620	203.06	5,800	10,547
202.55	5,463	7,675	203.07	5,806	10,605

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.08	5,813	10,663	203.60	6,157	13,775
203.09	5,819	10,721	203.61	6,163	13,837
203.10	5,826	10,779	203.62	6,170	13,898
203.11	5,833	10,838	203.63	6,176	13,960
203.12	5,839	10,896	203.64	6,183	14,022
203.13	5,846	10,954	203.65	6,190	14,084
203.14	5,853	11,013	203.66	6,196	14,146
203.15	5,859	11,071	203.67	6,203	14,208
203.16	5,866	11,130	203.68	6,209	14,270
203.17	5,872	11,189	203.69	6,216	14,332
203.18	5,879	11,248	203.70	6,223	14,394
203.19	5,886	11,306	203.71	6,229	14,456
203.20	5,892	11,365	203.72	6,236	14,519
203.21	5,899	11,424	203.73	6,243	14,581
203.22	5,905	11,483	203.74	6,249	14,643
203.23	5,912	11,542	203.75	6,256	14,706
203.24	5,919	11,601	203.76	6,262	14,768
203.25	5,925	11,661	203.77	6,269	14,831
203.26	5,932	11,720	203.78	6,276	14,894
203.27	5,938	11,779	203.79	6,282	14,957
203.28	5,945	11,839	203.80	6,289	15,020
203.29	5,952	11,898	203.81	6,295	15,082
203.30	5,958	11,958	203.82	6,302	15,145
203.31	5,965	12,017	203.83	6,309	15,208
203.32	5,972	12,077	203.84	6,315	15,272
203.33	5,978	12,137	203.85	6,322	15,335
203.34	5,985	12,197	203.86	6,328	15,398
203.35	5,991	12,256	203.87	6,335	15,461
203.36	5,998	12,316	203.88	6,342	15,525
203.37	6,005	12,376	203.89	6,348	15,588
203.38	6,011	12,437	203.90	6,355	15,652
203.39	6,018	12,497	203.91	6,362	15,715
203.40	6,024	12,557	203.92	6,368	15,779
203.41	6,031	12,617	203.93	6,375	15,843
203.42	6,038	12,678	203.94	6,381	15,906
203.43	6,044	12,738	203.95	6,388	15,970
203.44	6,051	12,798	203.96	6,395	16,034
203.45	6,057	12,859	203.97	6,401	16,098
203.46	6,064	12,920	203.98	6,408	16,162
203.47	6,071	12,980	203.99	6,414	16,226
203.48	6,077	13,041	204.00	6,421	16,291
203.49	6,084	13,102	204.01	6,428	16,355
203.50	6,091	13,163	204.02	6,434	16,419
203.51	6,097	13,224	204.03	6,441	16,483
203.52	6,104	13,285	204.04	6,447	16,548
203.53	6,110	13,346	204.05	6,454	16,612
203.54	6,117	13,407	204.06	6,461	16,677
203.55	6,124	13,468	204.07	6,467	16,742
203.56	6,130	13,529	204.08	6,474	16,806
203.57	6,137	13,591	204.09	6,480	16,871
203.58	6,143	13,652	204.10	6,487	16,936
203.59	6,150	13,713	204.11	6,494	17,001

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.12	6,500	17,066	204.64	6,843	20,535
204.13	6,507	17,131	204.65	6,850	20,604
204.14	6,513	17,196	204.66	6,857	20,672
204.15	6,520	17,261	204.67	6,863	20,741
204.16	6,527	17,326	204.68	6,870	20,809
204.17	6,533	17,392	204.69	6,876	20,878
204.18	6,540	17,457	204.70	6,883	20,947
204.19	6,546	17,522	204.71	6,890	21,016
204.20	6,553	17,588	204.72	6,896	21,085
204.21	6,560	17,653	204.73	6,903	21,154
204.22	6,566	17,719	204.74	6,909	21,223
204.23	6,573	17,785	204.75	6,916	21,292
204.24	6,579	17,851	204.76	6,923	21,361
204.25	6,586	17,916	204.77	6,929	21,430
204.26	6,593	17,982	204.78	6,936	21,500
204.27	6,599	18,048	204.79	6,942	21,569
204.28	6,606	18,114	204.80	6,949	21,639
204.29	6,612	18,180	204.81	6,956	21,708
204.30	6,619	18,247	204.82	6,962	21,778
204.31	6,626	18,313	204.83	6,969	21,847
204.32	6,632	18,379	204.84	6,975	21,917
204.33	6,639	18,445	204.85	6,982	21,987
204.34	6,645	18,512	204.86	6,989	22,057
204.35	6,652	18,578	204.87	6,995	22,127
204.36	6,659	18,645	204.88	7,002	22,197
204.37	6,665	18,711	204.89	7,008	22,267
204.38	6,672	18,778	204.90	7,015	22,337
204.39	6,678	18,845	204.91	7,022	22,407
204.40	6,685	18,912	204.92	7,028	22,477
204.41	6,692	18,979	204.93	7,035	22,547
204.42	6,698	19,046	204.94	7,041	22,618
204.43	6,705	19,113	204.95	7,048	22,688
204.44	6,711	19,180	204.96	7,055	22,759
204.45	6,718	19,247	204.97	7,061	22,829
204.46	6,725	19,314	204.98	7,068	22,900
204.47	6,731	19,381	204.99	7,074	22,971
204.48	6,738	19,449	205.00	7,081	23,042
204.49	6,744	19,516			
204.50	6,751	19,584			
204.51	6,758	19,651			
204.52	6,764	19,719			
204.53	6,771	19,786			
204.54	6,777	19,854			
204.55	6,784	19,922			
204.56	6,791	19,990			
204.57	6,797	20,058			
204.58	6,804	20,126			
204.59	6,810	20,194			
204.60	6,817	20,262			
204.61	6,824	20,330			
204.62	6,830	20,398			
204.63	6,837	20,467			

Summary for Pond B-55: Basin #55

Inflow Area = 2.301 ac, 47.33% Impervious, Inflow Depth = 6.83" for Current 100 yr event
 Inflow = 15.79 cfs @ 12.17 hrs, Volume= 1.309 af
 Outflow = 11.33 cfs @ 12.27 hrs, Volume= 1.206 af, Atten= 28%, Lag= 5.7 min
 Primary = 11.33 cfs @ 12.27 hrs, Volume= 1.206 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 194.77' @ 12.27 hrs Surf.Area= 5,661 sf Storage= 14,616 cf

Plug-Flow detention time= 107.5 min calculated for 1.206 af (92% of inflow)
 Center-of-Mass det. time= 64.0 min (840.4 - 776.4)

Volume	Invert	Avail.Storage	Storage Description
#1	191.56'	22,010 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.56	0	0	0
192.00	4,250	935	935
193.00	4,746	4,498	5,433
194.00	5,257	5,002	10,434
195.00	5,784	5,521	15,955
196.00	6,327	6,056	22,010

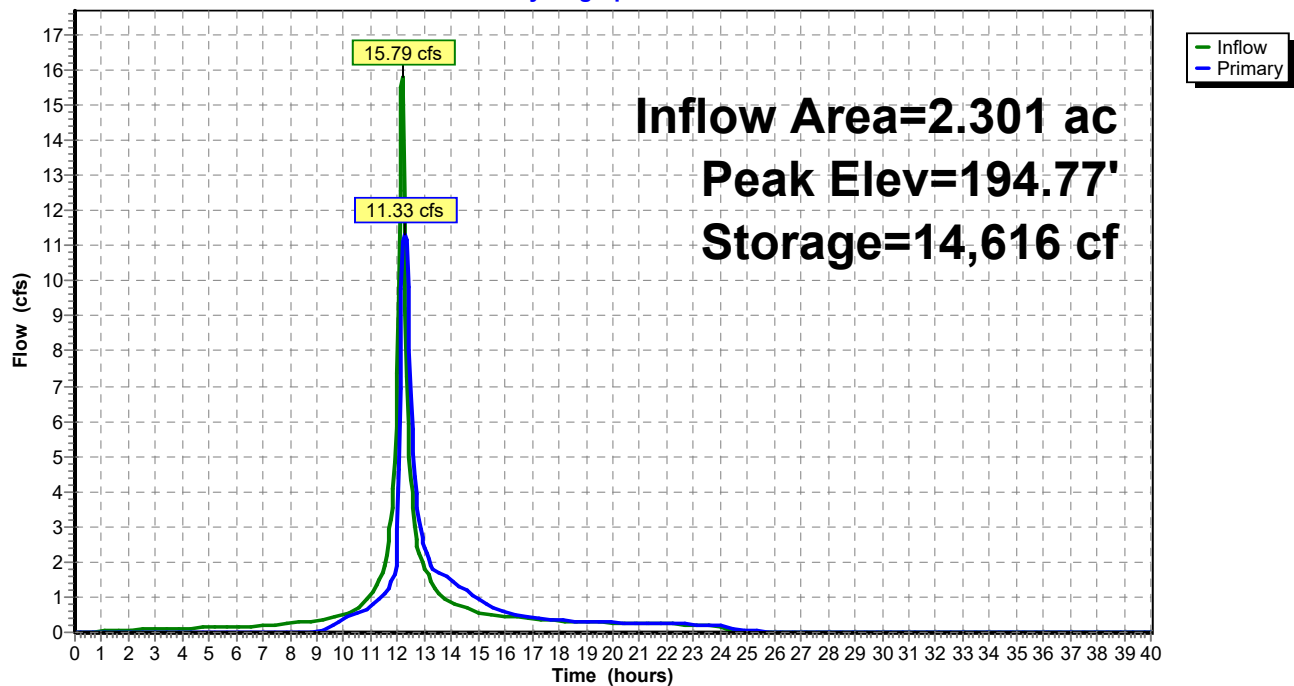
Device	Routing	Invert	Outlet Devices
#1	Primary	191.65'	18.0" Round Culvert L= 112.0' Ke= 0.500 Inlet / Outlet Invert= 191.65' / 191.00' S= 0.0058 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.80'	22.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.82'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	195.45'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=11.31 cfs @ 12.27 hrs HW=194.76' (Free Discharge)

1=Culvert (Barrel Controls 11.31 cfs @ 6.40 fps)
 2=Orifice/Grate (Passes < 2.50 cfs potential flow)
 3=Sharp-Crested Rectangular Weir (Passes < 11.28 cfs potential flow)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-55: Basin #55

Hydrograph



Stage-Discharge for Pond B-55: Basin #55

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.56	0.00	192.08	0.00	192.60	0.00	193.12	0.85
191.57	0.00	192.09	0.00	192.61	0.00	193.13	0.87
191.58	0.00	192.10	0.00	192.62	0.00	193.14	0.89
191.59	0.00	192.11	0.00	192.63	0.00	193.15	0.90
191.60	0.00	192.12	0.00	192.64	0.00	193.16	0.92
191.61	0.00	192.13	0.00	192.65	0.00	193.17	0.94
191.62	0.00	192.14	0.00	192.66	0.00	193.18	0.96
191.63	0.00	192.15	0.00	192.67	0.00	193.19	0.98
191.64	0.00	192.16	0.00	192.68	0.00	193.20	0.99
191.65	0.00	192.17	0.00	192.69	0.00	193.21	1.01
191.66	0.00	192.18	0.00	192.70	0.00	193.22	1.03
191.67	0.00	192.19	0.00	192.71	0.00	193.23	1.05
191.68	0.00	192.20	0.00	192.72	0.00	193.24	1.06
191.69	0.00	192.21	0.00	192.73	0.00	193.25	1.08
191.70	0.00	192.22	0.00	192.74	0.00	193.26	1.09
191.71	0.00	192.23	0.00	192.75	0.00	193.27	1.11
191.72	0.00	192.24	0.00	192.76	0.00	193.28	1.12
191.73	0.00	192.25	0.00	192.77	0.00	193.29	1.14
191.74	0.00	192.26	0.00	192.78	0.00	193.30	1.15
191.75	0.00	192.27	0.00	192.79	0.00	193.31	1.17
191.76	0.00	192.28	0.00	192.80	0.00	193.32	1.18
191.77	0.00	192.29	0.00	192.81	0.01	193.33	1.20
191.78	0.00	192.30	0.00	192.82	0.02	193.34	1.21
191.79	0.00	192.31	0.00	192.83	0.03	193.35	1.23
191.80	0.00	192.32	0.00	192.84	0.05	193.36	1.24
191.81	0.00	192.33	0.00	192.85	0.07	193.37	1.25
191.82	0.00	192.34	0.00	192.86	0.09	193.38	1.27
191.83	0.00	192.35	0.00	192.87	0.11	193.39	1.28
191.84	0.00	192.36	0.00	192.88	0.13	193.40	1.29
191.85	0.00	192.37	0.00	192.89	0.16	193.41	1.31
191.86	0.00	192.38	0.00	192.90	0.19	193.42	1.32
191.87	0.00	192.39	0.00	192.91	0.21	193.43	1.33
191.88	0.00	192.40	0.00	192.92	0.24	193.44	1.34
191.89	0.00	192.41	0.00	192.93	0.28	193.45	1.36
191.90	0.00	192.42	0.00	192.94	0.31	193.46	1.37
191.91	0.00	192.43	0.00	192.95	0.34	193.47	1.38
191.92	0.00	192.44	0.00	192.96	0.38	193.48	1.39
191.93	0.00	192.45	0.00	192.97	0.41	193.49	1.41
191.94	0.00	192.46	0.00	192.98	0.45	193.50	1.42
191.95	0.00	192.47	0.00	192.99	0.49	193.51	1.43
191.96	0.00	192.48	0.00	193.00	0.53	193.52	1.44
191.97	0.00	192.49	0.00	193.01	0.57	193.53	1.45
191.98	0.00	192.50	0.00	193.02	0.60	193.54	1.46
191.99	0.00	192.51	0.00	193.03	0.63	193.55	1.48
192.00	0.00	192.52	0.00	193.04	0.66	193.56	1.49
192.01	0.00	192.53	0.00	193.05	0.69	193.57	1.50
192.02	0.00	192.54	0.00	193.06	0.71	193.58	1.51
192.03	0.00	192.55	0.00	193.07	0.74	193.59	1.52
192.04	0.00	192.56	0.00	193.08	0.76	193.60	1.53
192.05	0.00	192.57	0.00	193.09	0.78	193.61	1.54
192.06	0.00	192.58	0.00	193.10	0.80	193.62	1.55
192.07	0.00	192.59	0.00	193.11	0.82	193.63	1.57

Stage-Discharge for Pond B-55: Basin #55 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.64	1.58	194.16	4.61	194.68	11.12	195.20	12.37
193.65	1.59	194.17	4.73	194.69	11.14	195.21	12.39
193.66	1.60	194.18	4.85	194.70	11.17	195.22	12.42
193.67	1.61	194.19	4.97	194.71	11.19	195.23	12.44
193.68	1.62	194.20	5.10	194.72	11.22	195.24	12.46
193.69	1.63	194.21	5.22	194.73	11.24	195.25	12.48
193.70	1.64	194.22	5.35	194.74	11.27	195.26	12.51
193.71	1.65	194.23	5.48	194.75	11.29	195.27	12.53
193.72	1.66	194.24	5.61	194.76	11.32	195.28	12.55
193.73	1.67	194.25	5.74	194.77	11.34	195.29	12.58
193.74	1.68	194.26	5.87	194.78	11.37	195.30	12.60
193.75	1.69	194.27	6.01	194.79	11.39	195.31	12.62
193.76	1.70	194.28	6.14	194.80	11.42	195.32	12.64
193.77	1.71	194.29	6.28	194.81	11.44	195.33	12.66
193.78	1.72	194.30	6.42	194.82	11.47	195.34	12.69
193.79	1.73	194.31	6.56	194.83	11.49	195.35	12.71
193.80	1.74	194.32	6.70	194.84	11.52	195.36	12.73
193.81	1.75	194.33	6.84	194.85	11.54	195.37	12.75
193.82	1.76	194.34	6.98	194.86	11.57	195.38	12.78
193.83	1.78	194.35	7.12	194.87	11.59	195.39	12.80
193.84	1.82	194.36	7.27	194.88	11.61	195.40	12.82
193.85	1.86	194.37	7.41	194.89	11.64	195.41	12.84
193.86	1.90	194.38	7.56	194.90	11.66	195.42	12.86
193.87	1.95	194.39	7.71	194.91	11.69	195.43	12.89
193.88	2.01	194.40	7.86	194.92	11.71	195.44	12.91
193.89	2.07	194.41	8.01	194.93	11.74	195.45	12.93
193.90	2.13	194.42	8.16	194.94	11.76	195.46	13.07
193.91	2.20	194.43	8.31	194.95	11.78	195.47	13.31
193.92	2.26	194.44	8.47	194.96	11.81	195.48	13.61
193.93	2.34	194.45	8.62	194.97	11.83	195.49	13.96
193.94	2.41	194.46	8.78	194.98	11.86	195.50	14.35
193.95	2.49	194.47	8.93	194.99	11.88	195.51	14.79
193.96	2.57	194.48	9.09	195.00	11.90	195.52	15.26
193.97	2.65	194.49	9.25	195.01	11.93	195.53	15.76
193.98	2.74	194.50	9.41	195.02	11.95	195.54	16.30
193.99	2.82	194.51	9.57	195.03	11.97	195.55	16.87
194.00	2.91	194.52	9.73	195.04	12.00	195.56	17.46
194.01	3.01	194.53	9.89	195.05	12.02	195.57	18.08
194.02	3.10	194.54	10.06	195.06	12.05	195.58	18.73
194.03	3.20	194.55	10.22	195.07	12.07	195.59	19.40
194.04	3.29	194.56	10.38	195.08	12.09	195.60	20.10
194.05	3.39	194.57	10.55	195.09	12.12	195.61	20.82
194.06	3.50	194.58	10.72	195.10	12.14	195.62	21.57
194.07	3.60	194.59	10.88	195.11	12.16	195.63	22.33
194.08	3.71	194.60	10.91	195.12	12.19	195.64	23.12
194.09	3.81	194.61	10.94	195.13	12.21	195.65	23.93
194.10	3.92	194.62	10.96	195.14	12.23	195.66	24.79
194.11	4.03	194.63	10.99	195.15	12.26	195.67	25.69
194.12	4.14	194.64	11.01	195.16	12.28	195.68	26.61
194.13	4.26	194.65	11.04	195.17	12.30	195.69	27.55
194.14	4.37	194.66	11.06	195.18	12.32	195.70	28.52
194.15	4.49	194.67	11.09	195.19	12.35	195.71	29.52

Stage-Discharge for Pond B-55: Basin #55 (continued)

Elevation (feet)	Primary (cfs)
195.72	30.53
195.73	31.58
195.74	32.65
195.75	33.74
195.76	34.86
195.77	36.00
195.78	37.17
195.79	38.36
195.80	39.57
195.81	40.81
195.82	42.08
195.83	43.36
195.84	44.67
195.85	46.01
195.86	47.40
195.87	48.81
195.88	50.25
195.89	51.71
195.90	53.20
195.91	54.72
195.92	56.26
195.93	57.83
195.94	59.43
195.95	61.05
195.96	62.70
195.97	64.37
195.98	66.07
195.99	67.80
196.00	69.56

Stage-Area-Storage for Pond B-55: Basin #55

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.56	0	0	192.08	4,290	1,277
191.57	97	0	192.09	4,295	1,320
191.58	193	2	192.10	4,300	1,362
191.59	290	4	192.11	4,305	1,406
191.60	386	8	192.12	4,310	1,449
191.61	483	12	192.13	4,314	1,492
191.62	580	17	192.14	4,319	1,535
191.63	676	24	192.15	4,324	1,578
191.64	773	31	192.16	4,329	1,621
191.65	869	39	192.17	4,334	1,665
191.66	966	48	192.18	4,339	1,708
191.67	1,063	58	192.19	4,344	1,751
191.68	1,159	70	192.20	4,349	1,795
191.69	1,256	82	192.21	4,354	1,838
191.70	1,352	95	192.22	4,359	1,882
191.71	1,449	109	192.23	4,364	1,926
191.72	1,545	124	192.24	4,369	1,969
191.73	1,642	140	192.25	4,374	2,013
191.74	1,739	156	192.26	4,379	2,057
191.75	1,835	174	192.27	4,384	2,101
191.76	1,932	193	192.28	4,389	2,144
191.77	2,028	213	192.29	4,394	2,188
191.78	2,125	234	192.30	4,399	2,232
191.79	2,222	255	192.31	4,404	2,276
191.80	2,318	278	192.32	4,409	2,320
191.81	2,415	302	192.33	4,414	2,365
191.82	2,511	326	192.34	4,419	2,409
191.83	2,608	352	192.35	4,424	2,453
191.84	2,705	379	192.36	4,429	2,497
191.85	2,801	406	192.37	4,434	2,541
191.86	2,898	435	192.38	4,438	2,586
191.87	2,994	464	192.39	4,443	2,630
191.88	3,091	495	192.40	4,448	2,675
191.89	3,188	526	192.41	4,453	2,719
191.90	3,284	558	192.42	4,458	2,764
191.91	3,381	592	192.43	4,463	2,808
191.92	3,477	626	192.44	4,468	2,853
191.93	3,574	661	192.45	4,473	2,898
191.94	3,670	697	192.46	4,478	2,942
191.95	3,767	735	192.47	4,483	2,987
191.96	3,864	773	192.48	4,488	3,032
191.97	3,960	812	192.49	4,493	3,077
191.98	4,057	852	192.50	4,498	3,122
191.99	4,153	893	192.51	4,503	3,167
192.00	4,250	935	192.52	4,508	3,212
192.01	4,255	978	192.53	4,513	3,257
192.02	4,260	1,020	192.54	4,518	3,302
192.03	4,265	1,063	192.55	4,523	3,348
192.04	4,270	1,105	192.56	4,528	3,393
192.05	4,275	1,148	192.57	4,533	3,438
192.06	4,280	1,191	192.58	4,538	3,483
192.07	4,285	1,234	192.59	4,543	3,529

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.60	4,548	3,574	193.12	4,807	6,006
192.61	4,553	3,620	193.13	4,812	6,054
192.62	4,558	3,665	193.14	4,818	6,102
192.63	4,562	3,711	193.15	4,823	6,151
192.64	4,567	3,757	193.16	4,828	6,199
192.65	4,572	3,802	193.17	4,833	6,247
192.66	4,577	3,848	193.18	4,838	6,296
192.67	4,582	3,894	193.19	4,843	6,344
192.68	4,587	3,940	193.20	4,848	6,392
192.69	4,592	3,986	193.21	4,853	6,441
192.70	4,597	4,032	193.22	4,858	6,489
192.71	4,602	4,078	193.23	4,864	6,538
192.72	4,607	4,124	193.24	4,869	6,587
192.73	4,612	4,170	193.25	4,874	6,635
192.74	4,617	4,216	193.26	4,879	6,684
192.75	4,622	4,262	193.27	4,884	6,733
192.76	4,627	4,308	193.28	4,889	6,782
192.77	4,632	4,355	193.29	4,894	6,831
192.78	4,637	4,401	193.30	4,899	6,880
192.79	4,642	4,447	193.31	4,904	6,929
192.80	4,647	4,494	193.32	4,910	6,978
192.81	4,652	4,540	193.33	4,915	7,027
192.82	4,657	4,587	193.34	4,920	7,076
192.83	4,662	4,633	193.35	4,925	7,125
192.84	4,667	4,680	193.36	4,930	7,175
192.85	4,672	4,727	193.37	4,935	7,224
192.86	4,677	4,773	193.38	4,940	7,273
192.87	4,682	4,820	193.39	4,945	7,323
192.88	4,686	4,867	193.40	4,950	7,372
192.89	4,691	4,914	193.41	4,956	7,422
192.90	4,696	4,961	193.42	4,961	7,471
192.91	4,701	5,008	193.43	4,966	7,521
192.92	4,706	5,055	193.44	4,971	7,571
192.93	4,711	5,102	193.45	4,976	7,620
192.94	4,716	5,149	193.46	4,981	7,670
192.95	4,721	5,196	193.47	4,986	7,720
192.96	4,726	5,244	193.48	4,991	7,770
192.97	4,731	5,291	193.49	4,996	7,820
192.98	4,736	5,338	193.50	5,002	7,870
192.99	4,741	5,386	193.51	5,007	7,920
193.00	4,746	5,433	193.52	5,012	7,970
193.01	4,751	5,480	193.53	5,017	8,020
193.02	4,756	5,528	193.54	5,022	8,070
193.03	4,761	5,576	193.55	5,027	8,121
193.04	4,766	5,623	193.56	5,032	8,171
193.05	4,772	5,671	193.57	5,037	8,221
193.06	4,777	5,719	193.58	5,042	8,272
193.07	4,782	5,766	193.59	5,047	8,322
193.08	4,787	5,814	193.60	5,053	8,373
193.09	4,792	5,862	193.61	5,058	8,423
193.10	4,797	5,910	193.62	5,063	8,474
193.11	4,802	5,958	193.63	5,068	8,524

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.64	5,073	8,575	194.16	5,341	11,282
193.65	5,078	8,626	194.17	5,347	11,336
193.66	5,083	8,677	194.18	5,352	11,389
193.67	5,088	8,728	194.19	5,357	11,443
193.68	5,093	8,778	194.20	5,362	11,496
193.69	5,099	8,829	194.21	5,368	11,550
193.70	5,104	8,880	194.22	5,373	11,604
193.71	5,109	8,931	194.23	5,378	11,658
193.72	5,114	8,983	194.24	5,383	11,711
193.73	5,119	9,034	194.25	5,389	11,765
193.74	5,124	9,085	194.26	5,394	11,819
193.75	5,129	9,136	194.27	5,399	11,873
193.76	5,134	9,188	194.28	5,405	11,927
193.77	5,139	9,239	194.29	5,410	11,981
193.78	5,145	9,290	194.30	5,415	12,035
193.79	5,150	9,342	194.31	5,420	12,089
193.80	5,155	9,393	194.32	5,426	12,144
193.81	5,160	9,445	194.33	5,431	12,198
193.82	5,165	9,497	194.34	5,436	12,252
193.83	5,170	9,548	194.35	5,441	12,307
193.84	5,175	9,600	194.36	5,447	12,361
193.85	5,180	9,652	194.37	5,452	12,416
193.86	5,185	9,704	194.38	5,457	12,470
193.87	5,191	9,755	194.39	5,463	12,525
193.88	5,196	9,807	194.40	5,468	12,579
193.89	5,201	9,859	194.41	5,473	12,634
193.90	5,206	9,911	194.42	5,478	12,689
193.91	5,211	9,963	194.43	5,484	12,744
193.92	5,216	10,016	194.44	5,489	12,799
193.93	5,221	10,068	194.45	5,494	12,854
193.94	5,226	10,120	194.46	5,499	12,908
193.95	5,231	10,172	194.47	5,505	12,963
193.96	5,237	10,225	194.48	5,510	13,019
193.97	5,242	10,277	194.49	5,515	13,074
193.98	5,247	10,329	194.50	5,521	13,129
193.99	5,252	10,382	194.51	5,526	13,184
194.00	5,257	10,434	194.52	5,531	13,239
194.01	5,262	10,487	194.53	5,536	13,295
194.02	5,268	10,540	194.54	5,542	13,350
194.03	5,273	10,592	194.55	5,547	13,406
194.04	5,278	10,645	194.56	5,552	13,461
194.05	5,283	10,698	194.57	5,557	13,517
194.06	5,289	10,751	194.58	5,563	13,572
194.07	5,294	10,804	194.59	5,568	13,628
194.08	5,299	10,857	194.60	5,573	13,684
194.09	5,304	10,910	194.61	5,578	13,739
194.10	5,310	10,963	194.62	5,584	13,795
194.11	5,315	11,016	194.63	5,589	13,851
194.12	5,320	11,069	194.64	5,594	13,907
194.13	5,326	11,122	194.65	5,600	13,963
194.14	5,331	11,176	194.66	5,605	14,019
194.15	5,336	11,229	194.67	5,610	14,075

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.68	5,615	14,131	195.20	5,893	17,123
194.69	5,621	14,187	195.21	5,898	17,182
194.70	5,626	14,244	195.22	5,903	17,241
194.71	5,631	14,300	195.23	5,909	17,300
194.72	5,636	14,356	195.24	5,914	17,359
194.73	5,642	14,413	195.25	5,920	17,418
194.74	5,647	14,469	195.26	5,925	17,477
194.75	5,652	14,525	195.27	5,931	17,536
194.76	5,658	14,582	195.28	5,936	17,596
194.77	5,663	14,639	195.29	5,941	17,655
194.78	5,668	14,695	195.30	5,947	17,715
194.79	5,673	14,752	195.31	5,952	17,774
194.80	5,679	14,809	195.32	5,958	17,834
194.81	5,684	14,866	195.33	5,963	17,893
194.82	5,689	14,922	195.34	5,969	17,953
194.83	5,694	14,979	195.35	5,974	18,013
194.84	5,700	15,036	195.36	5,979	18,072
194.85	5,705	15,093	195.37	5,985	18,132
194.86	5,710	15,150	195.38	5,990	18,192
194.87	5,715	15,208	195.39	5,996	18,252
194.88	5,721	15,265	195.40	6,001	18,312
194.89	5,726	15,322	195.41	6,007	18,372
194.90	5,731	15,379	195.42	6,012	18,432
194.91	5,737	15,437	195.43	6,017	18,492
194.92	5,742	15,494	195.44	6,023	18,553
194.93	5,747	15,551	195.45	6,028	18,613
194.94	5,752	15,609	195.46	6,034	18,673
194.95	5,758	15,666	195.47	6,039	18,733
194.96	5,763	15,724	195.48	6,045	18,794
194.97	5,768	15,782	195.49	6,050	18,854
194.98	5,773	15,839	195.50	6,056	18,915
194.99	5,779	15,897	195.51	6,061	18,975
195.00	5,784	15,955	195.52	6,066	19,036
195.01	5,789	16,013	195.53	6,072	19,097
195.02	5,795	16,071	195.54	6,077	19,158
195.03	5,800	16,129	195.55	6,083	19,218
195.04	5,806	16,187	195.56	6,088	19,279
195.05	5,811	16,245	195.57	6,094	19,340
195.06	5,817	16,303	195.58	6,099	19,401
195.07	5,822	16,361	195.59	6,104	19,462
195.08	5,827	16,419	195.60	6,110	19,523
195.09	5,833	16,478	195.61	6,115	19,584
195.10	5,838	16,536	195.62	6,121	19,645
195.11	5,844	16,595	195.63	6,126	19,707
195.12	5,849	16,653	195.64	6,132	19,768
195.13	5,855	16,712	195.65	6,137	19,829
195.14	5,860	16,770	195.66	6,142	19,891
195.15	5,865	16,829	195.67	6,148	19,952
195.16	5,871	16,887	195.68	6,153	20,014
195.17	5,876	16,946	195.69	6,159	20,075
195.18	5,882	17,005	195.70	6,164	20,137
195.19	5,887	17,064	195.71	6,170	20,199

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.72	6,175	20,260
195.73	6,180	20,322
195.74	6,186	20,384
195.75	6,191	20,446
195.76	6,197	20,508
195.77	6,202	20,570
195.78	6,208	20,632
195.79	6,213	20,694
195.80	6,218	20,756
195.81	6,224	20,818
195.82	6,229	20,880
195.83	6,235	20,943
195.84	6,240	21,005
195.85	6,246	21,068
195.86	6,251	21,130
195.87	6,256	21,193
195.88	6,262	21,255
195.89	6,267	21,318
195.90	6,273	21,381
195.91	6,278	21,443
195.92	6,284	21,506
195.93	6,289	21,569
195.94	6,294	21,632
195.95	6,300	21,695
195.96	6,305	21,758
195.97	6,311	21,821
195.98	6,316	21,884
195.99	6,322	21,947
196.00	6,327	22,010

Summary for Pond B-56: Basin #56

Inflow Area = 1.512 ac, 31.08% Impervious, Inflow Depth = 6.36" for Current 100 yr event
 Inflow = 9.92 cfs @ 12.17 hrs, Volume= 0.801 af
 Outflow = 6.20 cfs @ 12.29 hrs, Volume= 0.754 af, Atten= 37%, Lag= 7.4 min
 Primary = 6.20 cfs @ 12.29 hrs, Volume= 0.754 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 193.18' @ 12.29 hrs Surf.Area= 5,580 sf Storage= 7,355 cf

Plug-Flow detention time= 78.3 min calculated for 0.753 af (94% of inflow)
 Center-of-Mass det. time= 45.4 min (834.7 - 789.3)

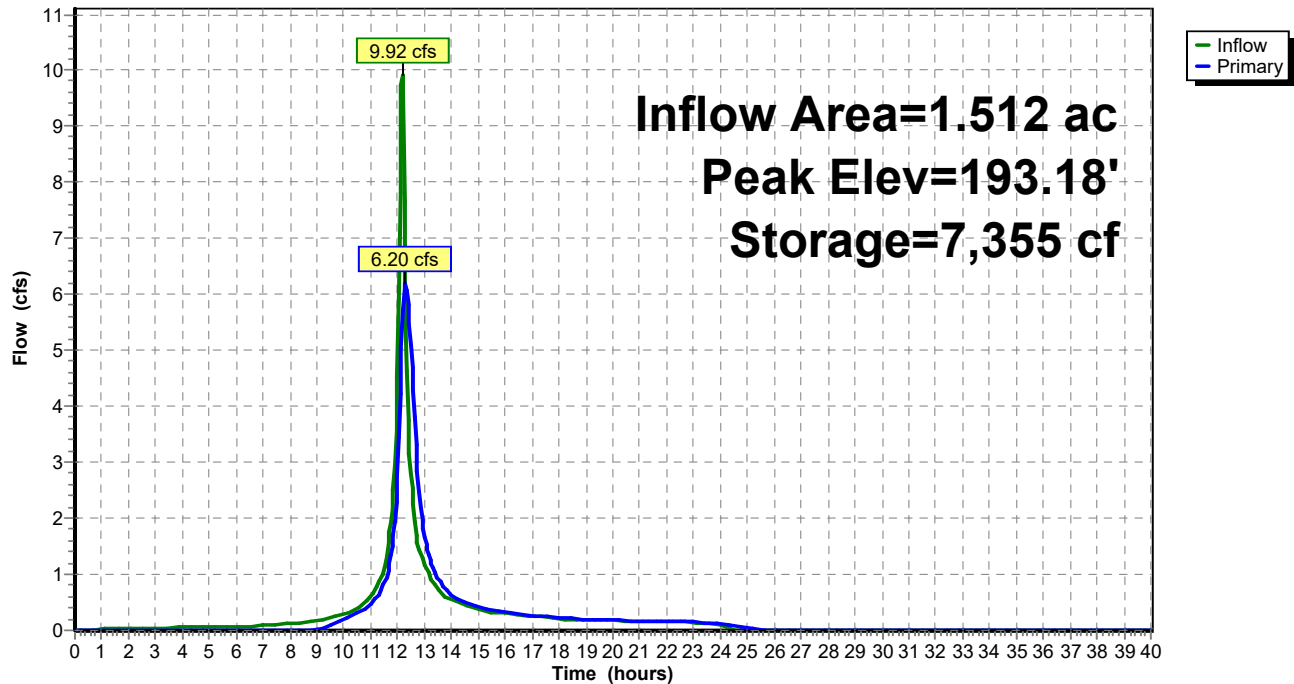
Volume	Invert	Avail.Storage	Storage Description
#1	191.57'	25,032 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.57	0	0	0
192.00	5,021	1,080	1,080
193.00	5,490	5,256	6,335
194.00	5,976	5,733	12,068
195.00	6,478	6,227	18,295
196.00	6,995	6,737	25,032

Device	Routing	Invert	Outlet Devices
#1	Primary	191.57'	18.0" Round Culvert L= 29.0' Ke= 0.500 Inlet / Outlet Invert= 191.57' / 191.42' S= 0.0052 ' / Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.19'	36.0" W x 6.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.62'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	194.99'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=6.19 cfs @ 12.29 hrs HW=193.18' (Free Discharge)

1=Culvert (Passes 6.19 cfs of 6.59 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 6.19 cfs @ 4.13 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-56: Basin #56**Hydrograph**

Stage-Discharge for Pond B-56: Basin #56

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.57	0.00	192.09	0.00	192.61	2.62	193.13	5.97
191.58	0.00	192.10	0.00	192.62	2.72	193.14	6.01
191.59	0.00	192.11	0.00	192.63	2.81	193.15	6.05
191.60	0.00	192.12	0.00	192.64	2.91	193.16	6.10
191.61	0.00	192.13	0.00	192.65	3.00	193.17	6.14
191.62	0.00	192.14	0.00	192.66	3.10	193.18	6.18
191.63	0.00	192.15	0.00	192.67	3.20	193.19	6.23
191.64	0.00	192.16	0.00	192.68	3.30	193.20	6.27
191.65	0.00	192.17	0.00	192.69	3.40	193.21	6.31
191.66	0.00	192.18	0.00	192.70	3.50	193.22	6.35
191.67	0.00	192.19	0.00	192.71	3.58	193.23	6.39
191.68	0.00	192.20	0.01	192.72	3.67	193.24	6.43
191.69	0.00	192.21	0.03	192.73	3.74	193.25	6.47
191.70	0.00	192.22	0.05	192.74	3.82	193.26	6.51
191.71	0.00	192.23	0.08	192.75	3.89	193.27	6.55
191.72	0.00	192.24	0.11	192.76	3.97	193.28	6.59
191.73	0.00	192.25	0.14	192.77	4.04	193.29	6.63
191.74	0.00	192.26	0.18	192.78	4.10	193.30	6.67
191.75	0.00	192.27	0.22	192.79	4.17	193.31	6.71
191.76	0.00	192.28	0.26	192.80	4.24	193.32	6.75
191.77	0.00	192.29	0.30	192.81	4.30	193.33	6.79
191.78	0.00	192.30	0.35	192.82	4.36	193.34	6.83
191.79	0.00	192.31	0.40	192.83	4.43	193.35	6.87
191.80	0.00	192.32	0.45	192.84	4.49	193.36	6.91
191.81	0.00	192.33	0.50	192.85	4.55	193.37	6.94
191.82	0.00	192.34	0.56	192.86	4.61	193.38	6.98
191.83	0.00	192.35	0.62	192.87	4.66	193.39	7.02
191.84	0.00	192.36	0.67	192.88	4.72	193.40	7.06
191.85	0.00	192.37	0.74	192.89	4.78	193.41	7.09
191.86	0.00	192.38	0.80	192.90	4.83	193.42	7.13
191.87	0.00	192.39	0.86	192.91	4.89	193.43	7.17
191.88	0.00	192.40	0.93	192.92	4.94	193.44	7.20
191.89	0.00	192.41	0.99	192.93	5.00	193.45	7.24
191.90	0.00	192.42	1.06	192.94	5.05	193.46	7.28
191.91	0.00	192.43	1.13	192.95	5.10	193.47	7.31
191.92	0.00	192.44	1.20	192.96	5.16	193.48	7.35
191.93	0.00	192.45	1.28	192.97	5.21	193.49	7.38
191.94	0.00	192.46	1.35	192.98	5.26	193.50	7.42
191.95	0.00	192.47	1.43	192.99	5.31	193.51	7.45
191.96	0.00	192.48	1.50	193.00	5.36	193.52	7.49
191.97	0.00	192.49	1.58	193.01	5.41	193.53	7.52
191.98	0.00	192.50	1.66	193.02	5.46	193.54	7.56
191.99	0.00	192.51	1.74	193.03	5.50	193.55	7.59
192.00	0.00	192.52	1.83	193.04	5.55	193.56	7.63
192.01	0.00	192.53	1.91	193.05	5.60	193.57	7.66
192.02	0.00	192.54	1.99	193.06	5.65	193.58	7.70
192.03	0.00	192.55	2.08	193.07	5.69	193.59	7.73
192.04	0.00	192.56	2.17	193.08	5.74	193.60	7.76
192.05	0.00	192.57	2.26	193.09	5.79	193.61	7.80
192.06	0.00	192.58	2.35	193.10	5.83	193.62	7.83
192.07	0.00	192.59	2.44	193.11	5.88	193.63	7.88
192.08	0.00	192.60	2.53	193.12	5.92	193.64	7.93

Stage-Discharge for Pond B-56: Basin #56 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.65	8.00	194.17	11.13	194.69	13.10	195.21	26.75
193.66	8.07	194.18	11.17	194.70	13.13	195.22	27.67
193.67	8.14	194.19	11.22	194.71	13.15	195.23	28.62
193.68	8.22	194.20	11.26	194.72	13.18	195.24	29.59
193.69	8.30	194.21	11.30	194.73	13.21	195.25	30.59
193.70	8.39	194.22	11.35	194.74	13.24	195.26	31.61
193.71	8.48	194.23	11.39	194.75	13.26	195.27	32.66
193.72	8.57	194.24	11.43	194.76	13.29	195.28	33.74
193.73	8.66	194.25	11.48	194.77	13.32	195.29	34.83
193.74	8.76	194.26	11.52	194.78	13.35	195.30	35.95
193.75	8.86	194.27	11.56	194.79	13.37	195.31	37.10
193.76	8.97	194.28	11.61	194.80	13.40	195.32	38.27
193.77	9.07	194.29	11.65	194.81	13.43	195.33	39.46
193.78	9.18	194.30	11.69	194.82	13.45	195.34	40.68
193.79	9.28	194.31	11.73	194.83	13.48	195.35	41.93
193.80	9.34	194.32	11.78	194.84	13.51	195.36	43.19
193.81	9.39	194.33	11.82	194.85	13.53	195.37	44.48
193.82	9.44	194.34	11.86	194.86	13.56	195.38	45.80
193.83	9.49	194.35	11.90	194.87	13.59	195.39	47.14
193.84	9.55	194.36	11.94	194.88	13.61	195.40	48.53
193.85	9.60	194.37	11.98	194.89	13.64	195.41	49.94
193.86	9.65	194.38	12.03	194.90	13.67	195.42	51.39
193.87	9.70	194.39	12.07	194.91	13.69	195.43	52.85
193.88	9.75	194.40	12.11	194.92	13.72	195.44	54.35
193.89	9.80	194.41	12.15	194.93	13.75	195.45	55.87
193.90	9.85	194.42	12.19	194.94	13.77	195.46	57.42
193.91	9.90	194.43	12.23	194.95	13.80	195.47	58.99
193.92	9.95	194.44	12.27	194.96	13.83	195.48	60.59
193.93	10.00	194.45	12.31	194.97	13.85	195.49	62.21
193.94	10.05	194.46	12.35	194.98	13.88	195.50	63.87
193.95	10.10	194.47	12.39	194.99	13.90	195.51	65.55
193.96	10.15	194.48	12.43	195.00	14.05	195.52	67.25
193.97	10.20	194.49	12.47	195.01	14.29	195.53	68.98
193.98	10.25	194.50	12.51	195.02	14.59	195.54	70.74
193.99	10.29	194.51	12.55	195.03	14.94	195.55	72.53
194.00	10.34	194.52	12.59	195.04	15.34	195.56	74.34
194.01	10.39	194.53	12.63	195.05	15.78	195.57	76.18
194.02	10.44	194.54	12.67	195.06	16.26	195.58	78.04
194.03	10.49	194.55	12.71	195.07	16.77	195.59	79.94
194.04	10.53	194.56	12.73	195.08	17.31	195.60	81.59
194.05	10.58	194.57	12.76	195.09	17.88	195.61	83.25
194.06	10.63	194.58	12.79	195.10	18.48	195.62	84.93
194.07	10.67	194.59	12.82	195.11	19.10	195.63	86.62
194.08	10.72	194.60	12.85	195.12	19.76	195.64	88.32
194.09	10.77	194.61	12.88	195.13	20.43	195.65	90.04
194.10	10.81	194.62	12.90	195.14	21.13	195.66	91.77
194.11	10.86	194.63	12.93	195.15	21.86	195.67	93.51
194.12	10.90	194.64	12.96	195.16	22.61	195.68	95.27
194.13	10.95	194.65	12.99	195.17	23.38	195.69	97.04
194.14	10.99	194.66	13.02	195.18	24.17	195.70	98.82
194.15	11.04	194.67	13.04	195.19	24.98	195.71	100.61
194.16	11.08	194.68	13.07	195.20	25.85	195.72	102.42

Stage-Discharge for Pond B-56: Basin #56 (continued)

Elevation (feet)	Primary (cfs)
195.73	104.24
195.74	106.07
195.75	107.92
195.76	109.77
195.77	111.64
195.78	113.52
195.79	115.41
195.80	117.36
195.81	119.31
195.82	121.28
195.83	123.26
195.84	125.26
195.85	127.27
195.86	129.29
195.87	131.32
195.88	133.37
195.89	135.43
195.90	137.50
195.91	139.59
195.92	141.69
195.93	143.80
195.94	145.92
195.95	148.06
195.96	150.21
195.97	152.37
195.98	154.55
195.99	156.73
196.00	158.88

Stage-Area-Storage for Pond B-56: Basin #56

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.57	0	0	192.09	5,063	1,533
191.58	117	1	192.10	5,068	1,584
191.59	234	2	192.11	5,073	1,635
191.60	350	5	192.12	5,077	1,685
191.61	467	9	192.13	5,082	1,736
191.62	584	15	192.14	5,087	1,787
191.63	701	21	192.15	5,091	1,838
191.64	817	29	192.16	5,096	1,889
191.65	934	37	192.17	5,101	1,940
191.66	1,051	47	192.18	5,105	1,991
191.67	1,168	58	192.19	5,110	2,042
191.68	1,284	71	192.20	5,115	2,093
191.69	1,401	84	192.21	5,119	2,144
191.70	1,518	99	192.22	5,124	2,195
191.71	1,635	114	192.23	5,129	2,247
191.72	1,752	131	192.24	5,134	2,298
191.73	1,868	149	192.25	5,138	2,349
191.74	1,985	169	192.26	5,143	2,401
191.75	2,102	189	192.27	5,148	2,452
191.76	2,219	211	192.28	5,152	2,504
191.77	2,335	234	192.29	5,157	2,555
191.78	2,452	257	192.30	5,162	2,607
191.79	2,569	283	192.31	5,166	2,659
191.80	2,686	309	192.32	5,171	2,710
191.81	2,802	336	192.33	5,176	2,762
191.82	2,919	365	192.34	5,180	2,814
191.83	3,036	395	192.35	5,185	2,866
191.84	3,153	426	192.36	5,190	2,917
191.85	3,269	458	192.37	5,195	2,969
191.86	3,386	491	192.38	5,199	3,021
191.87	3,503	525	192.39	5,204	3,073
191.88	3,620	561	192.40	5,209	3,125
191.89	3,737	598	192.41	5,213	3,178
191.90	3,853	636	192.42	5,218	3,230
191.91	3,970	675	192.43	5,223	3,282
191.92	4,087	715	192.44	5,227	3,334
191.93	4,204	757	192.45	5,232	3,386
191.94	4,320	799	192.46	5,237	3,439
191.95	4,437	843	192.47	5,241	3,491
191.96	4,554	888	192.48	5,246	3,544
191.97	4,671	934	192.49	5,251	3,596
191.98	4,787	981	192.50	5,256	3,649
191.99	4,904	1,030	192.51	5,260	3,701
192.00	5,021	1,080	192.52	5,265	3,754
192.01	5,026	1,130	192.53	5,270	3,807
192.02	5,030	1,180	192.54	5,274	3,859
192.03	5,035	1,230	192.55	5,279	3,912
192.04	5,040	1,281	192.56	5,284	3,965
192.05	5,044	1,331	192.57	5,288	4,018
192.06	5,049	1,382	192.58	5,293	4,071
192.07	5,054	1,432	192.59	5,298	4,124
192.08	5,059	1,483	192.60	5,302	4,177

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.61	5,307	4,230	193.13	5,553	7,053
192.62	5,312	4,283	193.14	5,558	7,108
192.63	5,316	4,336	193.15	5,563	7,164
192.64	5,321	4,389	193.16	5,568	7,220
192.65	5,326	4,442	193.17	5,573	7,275
192.66	5,331	4,496	193.18	5,577	7,331
192.67	5,335	4,549	193.19	5,582	7,387
192.68	5,340	4,602	193.20	5,587	7,443
192.69	5,345	4,656	193.21	5,592	7,499
192.70	5,349	4,709	193.22	5,597	7,555
192.71	5,354	4,763	193.23	5,602	7,611
192.72	5,359	4,816	193.24	5,607	7,667
192.73	5,363	4,870	193.25	5,612	7,723
192.74	5,368	4,923	193.26	5,616	7,779
192.75	5,373	4,977	193.27	5,621	7,835
192.76	5,377	5,031	193.28	5,626	7,891
192.77	5,382	5,085	193.29	5,631	7,948
192.78	5,387	5,139	193.30	5,636	8,004
192.79	5,392	5,192	193.31	5,641	8,060
192.80	5,396	5,246	193.32	5,646	8,117
192.81	5,401	5,300	193.33	5,650	8,173
192.82	5,406	5,354	193.34	5,655	8,230
192.83	5,410	5,408	193.35	5,660	8,286
192.84	5,415	5,463	193.36	5,665	8,343
192.85	5,420	5,517	193.37	5,670	8,400
192.86	5,424	5,571	193.38	5,675	8,456
192.87	5,429	5,625	193.39	5,680	8,513
192.88	5,434	5,680	193.40	5,684	8,570
192.89	5,438	5,734	193.41	5,689	8,627
192.90	5,443	5,788	193.42	5,694	8,684
192.91	5,448	5,843	193.43	5,699	8,741
192.92	5,452	5,897	193.44	5,704	8,798
192.93	5,457	5,952	193.45	5,709	8,855
192.94	5,462	6,006	193.46	5,714	8,912
192.95	5,467	6,061	193.47	5,718	8,969
192.96	5,471	6,116	193.48	5,723	9,026
192.97	5,476	6,171	193.49	5,728	9,083
192.98	5,481	6,225	193.50	5,733	9,141
192.99	5,485	6,280	193.51	5,738	9,198
193.00	5,490	6,335	193.52	5,743	9,256
193.01	5,495	6,390	193.53	5,748	9,313
193.02	5,500	6,445	193.54	5,752	9,370
193.03	5,505	6,500	193.55	5,757	9,428
193.04	5,509	6,555	193.56	5,762	9,486
193.05	5,514	6,610	193.57	5,767	9,543
193.06	5,519	6,665	193.58	5,772	9,601
193.07	5,524	6,721	193.59	5,777	9,659
193.08	5,529	6,776	193.60	5,782	9,716
193.09	5,534	6,831	193.61	5,786	9,774
193.10	5,539	6,886	193.62	5,791	9,832
193.11	5,543	6,942	193.63	5,796	9,890
193.12	5,548	6,997	193.64	5,801	9,948

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.65	5,806	10,006	194.17	6,061	13,091
193.66	5,811	10,064	194.18	6,066	13,152
193.67	5,816	10,122	194.19	6,071	13,213
193.68	5,820	10,181	194.20	6,076	13,273
193.69	5,825	10,239	194.21	6,081	13,334
193.70	5,830	10,297	194.22	6,086	13,395
193.71	5,835	10,355	194.23	6,091	13,456
193.72	5,840	10,414	194.24	6,096	13,517
193.73	5,845	10,472	194.25	6,102	13,578
193.74	5,850	10,531	194.26	6,107	13,639
193.75	5,855	10,589	194.27	6,112	13,700
193.76	5,859	10,648	194.28	6,117	13,761
193.77	5,864	10,706	194.29	6,122	13,822
193.78	5,869	10,765	194.30	6,127	13,883
193.79	5,874	10,824	194.31	6,132	13,945
193.80	5,879	10,883	194.32	6,137	14,006
193.81	5,884	10,941	194.33	6,142	14,067
193.82	5,889	11,000	194.34	6,147	14,129
193.83	5,893	11,059	194.35	6,152	14,190
193.84	5,898	11,118	194.36	6,157	14,252
193.85	5,903	11,177	194.37	6,162	14,313
193.86	5,908	11,236	194.38	6,167	14,375
193.87	5,913	11,295	194.39	6,172	14,437
193.88	5,918	11,354	194.40	6,177	14,499
193.89	5,923	11,414	194.41	6,182	14,560
193.90	5,927	11,473	194.42	6,187	14,622
193.91	5,932	11,532	194.43	6,192	14,684
193.92	5,937	11,591	194.44	6,197	14,746
193.93	5,942	11,651	194.45	6,202	14,808
193.94	5,947	11,710	194.46	6,207	14,870
193.95	5,952	11,770	194.47	6,212	14,932
193.96	5,957	11,829	194.48	6,217	14,994
193.97	5,961	11,889	194.49	6,222	15,057
193.98	5,966	11,949	194.50	6,227	15,119
193.99	5,971	12,008	194.51	6,232	15,181
194.00	5,976	12,068	194.52	6,237	15,243
194.01	5,981	12,128	194.53	6,242	15,306
194.02	5,986	12,188	194.54	6,247	15,368
194.03	5,991	12,248	194.55	6,252	15,431
194.04	5,996	12,307	194.56	6,257	15,493
194.05	6,001	12,367	194.57	6,262	15,556
194.06	6,006	12,427	194.58	6,267	15,619
194.07	6,011	12,488	194.59	6,272	15,681
194.08	6,016	12,548	194.60	6,277	15,744
194.09	6,021	12,608	194.61	6,282	15,807
194.10	6,026	12,668	194.62	6,287	15,870
194.11	6,031	12,728	194.63	6,292	15,933
194.12	6,036	12,789	194.64	6,297	15,995
194.13	6,041	12,849	194.65	6,302	16,058
194.14	6,046	12,910	194.66	6,307	16,122
194.15	6,051	12,970	194.67	6,312	16,185
194.16	6,056	13,031	194.68	6,317	16,248

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.69	6,322	16,311	195.21	6,587	19,667
194.70	6,327	16,374	195.22	6,592	19,733
194.71	6,332	16,438	195.23	6,597	19,799
194.72	6,337	16,501	195.24	6,602	19,865
194.73	6,342	16,564	195.25	6,607	19,931
194.74	6,347	16,628	195.26	6,612	19,997
194.75	6,353	16,691	195.27	6,618	20,063
194.76	6,358	16,755	195.28	6,623	20,129
194.77	6,363	16,818	195.29	6,628	20,195
194.78	6,368	16,882	195.30	6,633	20,262
194.79	6,373	16,946	195.31	6,638	20,328
194.80	6,378	17,009	195.32	6,643	20,394
194.81	6,383	17,073	195.33	6,649	20,461
194.82	6,388	17,137	195.34	6,654	20,527
194.83	6,393	17,201	195.35	6,659	20,594
194.84	6,398	17,265	195.36	6,664	20,661
194.85	6,403	17,329	195.37	6,669	20,727
194.86	6,408	17,393	195.38	6,674	20,794
194.87	6,413	17,457	195.39	6,680	20,861
194.88	6,418	17,521	195.40	6,685	20,928
194.89	6,423	17,585	195.41	6,690	20,994
194.90	6,428	17,650	195.42	6,695	21,061
194.91	6,433	17,714	195.43	6,700	21,128
194.92	6,438	17,778	195.44	6,705	21,195
194.93	6,443	17,843	195.45	6,711	21,262
194.94	6,448	17,907	195.46	6,716	21,330
194.95	6,453	17,972	195.47	6,721	21,397
194.96	6,458	18,036	195.48	6,726	21,464
194.97	6,463	18,101	195.49	6,731	21,531
194.98	6,468	18,166	195.50	6,737	21,599
194.99	6,473	18,230	195.51	6,742	21,666
195.00	6,478	18,295	195.52	6,747	21,733
195.01	6,483	18,360	195.53	6,752	21,801
195.02	6,488	18,425	195.54	6,757	21,869
195.03	6,494	18,490	195.55	6,762	21,936
195.04	6,499	18,555	195.56	6,768	22,004
195.05	6,504	18,620	195.57	6,773	22,071
195.06	6,509	18,685	195.58	6,778	22,139
195.07	6,514	18,750	195.59	6,783	22,207
195.08	6,519	18,815	195.60	6,788	22,275
195.09	6,525	18,880	195.61	6,793	22,343
195.10	6,530	18,945	195.62	6,799	22,411
195.11	6,535	19,011	195.63	6,804	22,479
195.12	6,540	19,076	195.64	6,809	22,547
195.13	6,545	19,142	195.65	6,814	22,615
195.14	6,550	19,207	195.66	6,819	22,683
195.15	6,556	19,273	195.67	6,824	22,751
195.16	6,561	19,338	195.68	6,830	22,820
195.17	6,566	19,404	195.69	6,835	22,888
195.18	6,571	19,469	195.70	6,840	22,956
195.19	6,576	19,535	195.71	6,845	23,025
195.20	6,581	19,601	195.72	6,850	23,093

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.73	6,855	23,162
195.74	6,861	23,230
195.75	6,866	23,299
195.76	6,871	23,368
195.77	6,876	23,436
195.78	6,881	23,505
195.79	6,886	23,574
195.80	6,892	23,643
195.81	6,897	23,712
195.82	6,902	23,781
195.83	6,907	23,850
195.84	6,912	23,919
195.85	6,917	23,988
195.86	6,923	24,057
195.87	6,928	24,127
195.88	6,933	24,196
195.89	6,938	24,265
195.90	6,943	24,335
195.91	6,948	24,404
195.92	6,954	24,474
195.93	6,959	24,543
195.94	6,964	24,613
195.95	6,969	24,682
195.96	6,974	24,752
195.97	6,979	24,822
195.98	6,985	24,892
195.99	6,990	24,962
196.00	6,995	25,032

Summary for Pond B-57: Basin #57

Inflow Area = 1.434 ac, 47.56% Impervious, Inflow Depth = 6.83" for Current 100 yr event
 Inflow = 9.85 cfs @ 12.17 hrs, Volume= 0.816 af
 Outflow = 8.25 cfs @ 12.24 hrs, Volume= 0.748 af, Atten= 16%, Lag= 4.1 min
 Primary = 8.25 cfs @ 12.24 hrs, Volume= 0.748 af
 Routed to Pond B-58 : Basin #58

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 203.74' @ 12.24 hrs Surf.Area= 4,893 sf Storage= 9,101 cf

Plug-Flow detention time= 176.2 min calculated for 0.747 af (91% of inflow)
 Center-of-Mass det. time= 132.2 min (908.4 - 776.3)

Volume	Invert	Avail.Storage	Storage Description
#1	201.30'	13,039 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.30	0	0	0
202.00	3,969	1,389	1,389
203.00	4,488	4,229	5,618
204.00	5,034	4,761	10,379
204.50	5,608	2,661	13,039

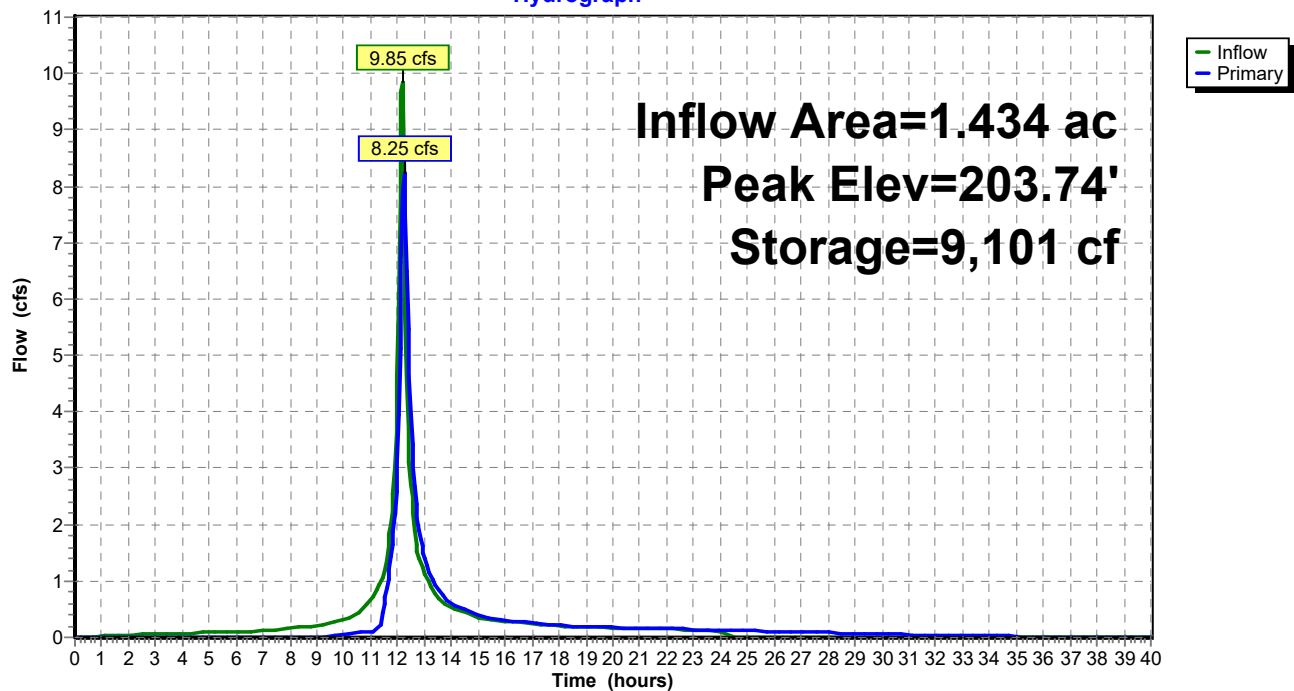
Device	Routing	Invert	Outlet Devices
#1	Primary	202.00'	36.0" Round Culvert L= 252.0' Ke= 0.500 Inlet / Outlet Invert= 202.00' / 199.00' S= 0.0119 '/' Cc= 0.900 n= 0.013, Flow Area= 7.07 sf
#2	Device 1	202.34'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	204.25'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=8.16 cfs @ 12.24 hrs HW=203.74' (Free Discharge)

1=Culvert (Passes 8.16 cfs of 19.04 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.19 cfs @ 5.48 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 7.98 cfs @ 2.81 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-57: Basin #57

Hydrograph



Stage-Discharge for Pond B-57: Basin #57

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.30	0.00	201.82	0.00	202.34	0.00	202.86	0.11
201.31	0.00	201.83	0.00	202.35	0.00	202.87	0.11
201.32	0.00	201.84	0.00	202.36	0.00	202.88	0.11
201.33	0.00	201.85	0.00	202.37	0.00	202.89	0.11
201.34	0.00	201.86	0.00	202.38	0.00	202.90	0.11
201.35	0.00	201.87	0.00	202.39	0.00	202.91	0.11
201.36	0.00	201.88	0.00	202.40	0.01	202.92	0.11
201.37	0.00	201.89	0.00	202.41	0.01	202.93	0.11
201.38	0.00	201.90	0.00	202.42	0.01	202.94	0.12
201.39	0.00	201.91	0.00	202.43	0.01	202.95	0.12
201.40	0.00	201.92	0.00	202.44	0.02	202.96	0.12
201.41	0.00	201.93	0.00	202.45	0.02	202.97	0.12
201.42	0.00	201.94	0.00	202.46	0.02	202.98	0.12
201.43	0.00	201.95	0.00	202.47	0.03	202.99	0.12
201.44	0.00	201.96	0.00	202.48	0.03	203.00	0.12
201.45	0.00	201.97	0.00	202.49	0.03	203.01	0.14
201.46	0.00	201.98	0.00	202.50	0.04	203.02	0.16
201.47	0.00	201.99	0.00	202.51	0.04	203.03	0.19
201.48	0.00	202.00	0.00	202.52	0.05	203.04	0.23
201.49	0.00	202.01	0.00	202.53	0.05	203.05	0.27
201.50	0.00	202.02	0.00	202.54	0.05	203.06	0.32
201.51	0.00	202.03	0.00	202.55	0.05	203.07	0.37
201.52	0.00	202.04	0.00	202.56	0.06	203.08	0.43
201.53	0.00	202.05	0.00	202.57	0.06	203.09	0.48
201.54	0.00	202.06	0.00	202.58	0.06	203.10	0.54
201.55	0.00	202.07	0.00	202.59	0.06	203.11	0.61
201.56	0.00	202.08	0.00	202.60	0.06	203.12	0.68
201.57	0.00	202.09	0.00	202.61	0.07	203.13	0.75
201.58	0.00	202.10	0.00	202.62	0.07	203.14	0.82
201.59	0.00	202.11	0.00	202.63	0.07	203.15	0.89
201.60	0.00	202.12	0.00	202.64	0.07	203.16	0.97
201.61	0.00	202.13	0.00	202.65	0.07	203.17	1.05
201.62	0.00	202.14	0.00	202.66	0.08	203.18	1.13
201.63	0.00	202.15	0.00	202.67	0.08	203.19	1.21
201.64	0.00	202.16	0.00	202.68	0.08	203.20	1.30
201.65	0.00	202.17	0.00	202.69	0.08	203.21	1.39
201.66	0.00	202.18	0.00	202.70	0.08	203.22	1.48
201.67	0.00	202.19	0.00	202.71	0.08	203.23	1.57
201.68	0.00	202.20	0.00	202.72	0.09	203.24	1.67
201.69	0.00	202.21	0.00	202.73	0.09	203.25	1.76
201.70	0.00	202.22	0.00	202.74	0.09	203.26	1.86
201.71	0.00	202.23	0.00	202.75	0.09	203.27	1.96
201.72	0.00	202.24	0.00	202.76	0.09	203.28	2.06
201.73	0.00	202.25	0.00	202.77	0.09	203.29	2.16
201.74	0.00	202.26	0.00	202.78	0.10	203.30	2.27
201.75	0.00	202.27	0.00	202.79	0.10	203.31	2.38
201.76	0.00	202.28	0.00	202.80	0.10	203.32	2.48
201.77	0.00	202.29	0.00	202.81	0.10	203.33	2.59
201.78	0.00	202.30	0.00	202.82	0.10	203.34	2.70
201.79	0.00	202.31	0.00	202.83	0.10	203.35	2.82
201.80	0.00	202.32	0.00	202.84	0.10	203.36	2.93
201.81	0.00	202.33	0.00	202.85	0.10	203.37	3.05

Stage-Discharge for Pond B-57: Basin #57 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.38	3.16	203.90	10.86	204.42	29.06	204.94	111.85
203.39	3.28	203.91	11.04	204.43	30.01	204.95	113.82
203.40	3.40	203.92	11.21	204.44	30.98	204.96	115.81
203.41	3.52	203.93	11.39	204.45	31.98	204.97	117.81
203.42	3.65	203.94	11.56	204.46	33.04	204.98	119.83
203.43	3.77	203.95	11.74	204.47	34.12	204.99	121.86
203.44	3.90	203.96	11.91	204.48	35.22	205.00	123.90
203.45	4.02	203.97	12.09	204.49	36.36		
203.46	4.15	203.98	12.27	204.50	37.52		
203.47	4.28	203.99	12.45	204.51	38.70		
203.48	4.41	204.00	12.63	204.52	39.91		
203.49	4.54	204.01	12.81	204.53	41.15		
203.50	4.68	204.02	12.99	204.54	42.41		
203.51	4.81	204.03	13.18	204.55	43.69		
203.52	4.95	204.04	13.36	204.56	45.00		
203.53	5.08	204.05	13.54	204.57	46.34		
203.54	5.22	204.06	13.73	204.58	47.70		
203.55	5.36	204.07	13.91	204.59	49.08		
203.56	5.50	204.08	14.10	204.60	50.49		
203.57	5.64	204.09	14.28	204.61	51.93		
203.58	5.79	204.10	14.47	204.62	53.39		
203.59	5.93	204.11	14.66	204.63	54.87		
203.60	6.07	204.12	14.85	204.64	56.38		
203.61	6.22	204.13	15.04	204.65	57.91		
203.62	6.37	204.14	15.23	204.66	59.49		
203.63	6.51	204.15	15.42	204.67	61.10		
203.64	6.66	204.16	15.61	204.68	62.74		
203.65	6.81	204.17	15.80	204.69	64.40		
203.66	6.96	204.18	15.99	204.70	66.09		
203.67	7.11	204.19	16.19	204.71	67.81		
203.68	7.27	204.20	16.38	204.72	69.55		
203.69	7.42	204.21	16.57	204.73	71.32		
203.70	7.58	204.22	16.77	204.74	73.12		
203.71	7.73	204.23	16.96	204.75	74.95		
203.72	7.89	204.24	17.16	204.76	76.80		
203.73	8.05	204.25	17.36	204.77	78.67		
203.74	8.21	204.26	17.67	204.78	80.58		
203.75	8.36	204.27	18.08	204.79	82.51		
203.76	8.53	204.28	18.56	204.80	84.47		
203.77	8.69	204.29	19.09	204.81	86.46		
203.78	8.85	204.30	19.66	204.82	88.47		
203.79	9.01	204.31	20.28	204.83	90.51		
203.80	9.18	204.32	20.93	204.84	92.58		
203.81	9.34	204.33	21.61	204.85	94.67		
203.82	9.51	204.34	22.33	204.86	96.53		
203.83	9.67	204.35	23.08	204.87	98.39		
203.84	9.84	204.36	23.85	204.88	100.27		
203.85	10.01	204.37	24.66	204.89	102.17		
203.86	10.18	204.38	25.49	204.90	104.08		
203.87	10.35	204.39	26.34	204.91	106.00		
203.88	10.52	204.40	27.23	204.92	107.94		
203.89	10.69	204.41	28.13	204.93	109.88		

Stage-Area-Storage for Pond B-57: Basin #57

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.30	0	0	201.82	2,948	767
201.31	57	0	201.83	3,005	796
201.32	113	1	201.84	3,062	827
201.33	170	3	201.85	3,119	858
201.34	227	5	201.86	3,175	889
201.35	284	7	201.87	3,232	921
201.36	340	10	201.88	3,289	954
201.37	397	14	201.89	3,345	987
201.38	454	18	201.90	3,402	1,021
201.39	510	23	201.91	3,459	1,055
201.40	567	28	201.92	3,515	1,090
201.41	624	34	201.93	3,572	1,125
201.42	680	41	201.94	3,629	1,161
201.43	737	48	201.95	3,686	1,198
201.44	794	56	201.96	3,742	1,235
201.45	851	64	201.97	3,799	1,273
201.46	907	73	201.98	3,856	1,311
201.47	964	82	201.99	3,912	1,350
201.48	1,021	92	202.00	3,969	1,389
201.49	1,077	102	202.01	3,974	1,429
201.50	1,134	113	202.02	3,979	1,469
201.51	1,191	125	202.03	3,985	1,508
201.52	1,247	137	202.04	3,990	1,548
201.53	1,304	150	202.05	3,995	1,588
201.54	1,361	163	202.06	4,000	1,628
201.55	1,418	177	202.07	4,005	1,668
201.56	1,474	192	202.08	4,011	1,708
201.57	1,531	207	202.09	4,016	1,748
201.58	1,588	222	202.10	4,021	1,789
201.59	1,644	238	202.11	4,026	1,829
201.60	1,701	255	202.12	4,031	1,869
201.61	1,758	272	202.13	4,036	1,910
201.62	1,814	290	202.14	4,042	1,950
201.63	1,871	309	202.15	4,047	1,990
201.64	1,928	328	202.16	4,052	2,031
201.65	1,985	347	202.17	4,057	2,071
201.66	2,041	367	202.18	4,062	2,112
201.67	2,098	388	202.19	4,068	2,153
201.68	2,155	409	202.20	4,073	2,193
201.69	2,211	431	202.21	4,078	2,234
201.70	2,268	454	202.22	4,083	2,275
201.71	2,325	477	202.23	4,088	2,316
201.72	2,381	500	202.24	4,094	2,357
201.73	2,438	524	202.25	4,099	2,398
201.74	2,495	549	202.26	4,104	2,439
201.75	2,551	574	202.27	4,109	2,480
201.76	2,608	600	202.28	4,114	2,521
201.77	2,665	626	202.29	4,120	2,562
201.78	2,722	653	202.30	4,125	2,603
201.79	2,778	681	202.31	4,130	2,644
201.80	2,835	709	202.32	4,135	2,686
201.81	2,892	737	202.33	4,140	2,727

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.34	4,145	2,769	202.86	4,415	4,994
202.35	4,151	2,810	202.87	4,421	5,039
202.36	4,156	2,852	202.88	4,426	5,083
202.37	4,161	2,893	202.89	4,431	5,127
202.38	4,166	2,935	202.90	4,436	5,171
202.39	4,171	2,977	202.91	4,441	5,216
202.40	4,177	3,018	202.92	4,446	5,260
202.41	4,182	3,060	202.93	4,452	5,305
202.42	4,187	3,102	202.94	4,457	5,349
202.43	4,192	3,144	202.95	4,462	5,394
202.44	4,197	3,186	202.96	4,467	5,439
202.45	4,203	3,228	202.97	4,472	5,483
202.46	4,208	3,270	202.98	4,478	5,528
202.47	4,213	3,312	202.99	4,483	5,573
202.48	4,218	3,354	203.00	4,488	5,618
202.49	4,223	3,396	203.01	4,493	5,663
202.50	4,229	3,439	203.02	4,499	5,708
202.51	4,234	3,481	203.03	4,504	5,753
202.52	4,239	3,523	203.04	4,510	5,798
202.53	4,244	3,566	203.05	4,515	5,843
202.54	4,249	3,608	203.06	4,521	5,888
202.55	4,254	3,651	203.07	4,526	5,933
202.56	4,260	3,693	203.08	4,532	5,978
202.57	4,265	3,736	203.09	4,537	6,024
202.58	4,270	3,778	203.10	4,543	6,069
202.59	4,275	3,821	203.11	4,548	6,115
202.60	4,280	3,864	203.12	4,554	6,160
202.61	4,286	3,907	203.13	4,559	6,206
202.62	4,291	3,950	203.14	4,564	6,251
202.63	4,296	3,993	203.15	4,570	6,297
202.64	4,301	4,036	203.16	4,575	6,343
202.65	4,306	4,079	203.17	4,581	6,388
202.66	4,312	4,122	203.18	4,586	6,434
202.67	4,317	4,165	203.19	4,592	6,480
202.68	4,322	4,208	203.20	4,597	6,526
202.69	4,327	4,251	203.21	4,603	6,572
202.70	4,332	4,295	203.22	4,608	6,618
202.71	4,337	4,338	203.23	4,614	6,664
202.72	4,343	4,381	203.24	4,619	6,710
202.73	4,348	4,425	203.25	4,625	6,757
202.74	4,353	4,468	203.26	4,630	6,803
202.75	4,358	4,512	203.27	4,635	6,849
202.76	4,363	4,555	203.28	4,641	6,896
202.77	4,369	4,599	203.29	4,646	6,942
202.78	4,374	4,643	203.30	4,652	6,989
202.79	4,379	4,687	203.31	4,657	7,035
202.80	4,384	4,730	203.32	4,663	7,082
202.81	4,389	4,774	203.33	4,668	7,128
202.82	4,395	4,818	203.34	4,674	7,175
202.83	4,400	4,862	203.35	4,679	7,222
202.84	4,405	4,906	203.36	4,685	7,269
202.85	4,410	4,950	203.37	4,690	7,316

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.38	4,695	7,363	203.90	4,979	9,878
203.39	4,701	7,409	203.91	4,985	9,928
203.40	4,706	7,457	203.92	4,990	9,978
203.41	4,712	7,504	203.93	4,996	10,028
203.42	4,717	7,551	203.94	5,001	10,078
203.43	4,723	7,598	203.95	5,007	10,128
203.44	4,728	7,645	203.96	5,012	10,178
203.45	4,734	7,693	203.97	5,018	10,228
203.46	4,739	7,740	203.98	5,023	10,278
203.47	4,745	7,787	203.99	5,029	10,328
203.48	4,750	7,835	204.00	5,034	10,379
203.49	4,756	7,882	204.01	5,045	10,429
203.50	4,761	7,930	204.02	5,057	10,480
203.51	4,766	7,978	204.03	5,068	10,530
203.52	4,772	8,025	204.04	5,080	10,581
203.53	4,777	8,073	204.05	5,091	10,632
203.54	4,783	8,121	204.06	5,103	10,683
203.55	4,788	8,169	204.07	5,114	10,734
203.56	4,794	8,217	204.08	5,126	10,785
203.57	4,799	8,265	204.09	5,137	10,836
203.58	4,805	8,313	204.10	5,149	10,888
203.59	4,810	8,361	204.11	5,160	10,939
203.60	4,816	8,409	204.12	5,172	10,991
203.61	4,821	8,457	204.13	5,183	11,043
203.62	4,827	8,505	204.14	5,195	11,095
203.63	4,832	8,553	204.15	5,206	11,147
203.64	4,837	8,602	204.16	5,218	11,199
203.65	4,843	8,650	204.17	5,229	11,251
203.66	4,848	8,699	204.18	5,241	11,303
203.67	4,854	8,747	204.19	5,252	11,356
203.68	4,859	8,796	204.20	5,264	11,408
203.69	4,865	8,844	204.21	5,275	11,461
203.70	4,870	8,893	204.22	5,287	11,514
203.71	4,876	8,942	204.23	5,298	11,567
203.72	4,881	8,991	204.24	5,310	11,620
203.73	4,887	9,039	204.25	5,321	11,673
203.74	4,892	9,088	204.26	5,332	11,726
203.75	4,898	9,137	204.27	5,344	11,780
203.76	4,903	9,186	204.28	5,355	11,833
203.77	4,908	9,235	204.29	5,367	11,887
203.78	4,914	9,284	204.30	5,378	11,941
203.79	4,919	9,334	204.31	5,390	11,994
203.80	4,925	9,383	204.32	5,401	12,048
203.81	4,930	9,432	204.33	5,413	12,102
203.82	4,936	9,481	204.34	5,424	12,157
203.83	4,941	9,531	204.35	5,436	12,211
203.84	4,947	9,580	204.36	5,447	12,265
203.85	4,952	9,630	204.37	5,459	12,320
203.86	4,958	9,679	204.38	5,470	12,374
203.87	4,963	9,729	204.39	5,482	12,429
203.88	4,968	9,779	204.40	5,493	12,484
203.89	4,974	9,828	204.41	5,505	12,539

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.42	5,516	12,594	204.94	5,608	13,039
204.43	5,528	12,649	204.95	5,608	13,039
204.44	5,539	12,705	204.96	5,608	13,039
204.45	5,551	12,760	204.97	5,608	13,039
204.46	5,562	12,816	204.98	5,608	13,039
204.47	5,574	12,871	204.99	5,608	13,039
204.48	5,585	12,927	205.00	5,608	13,039
204.49	5,597	12,983			
204.50	5,608	13,039			
204.51	5,608	13,039			
204.52	5,608	13,039			
204.53	5,608	13,039			
204.54	5,608	13,039			
204.55	5,608	13,039			
204.56	5,608	13,039			
204.57	5,608	13,039			
204.58	5,608	13,039			
204.59	5,608	13,039			
204.60	5,608	13,039			
204.61	5,608	13,039			
204.62	5,608	13,039			
204.63	5,608	13,039			
204.64	5,608	13,039			
204.65	5,608	13,039			
204.66	5,608	13,039			
204.67	5,608	13,039			
204.68	5,608	13,039			
204.69	5,608	13,039			
204.70	5,608	13,039			
204.71	5,608	13,039			
204.72	5,608	13,039			
204.73	5,608	13,039			
204.74	5,608	13,039			
204.75	5,608	13,039			
204.76	5,608	13,039			
204.77	5,608	13,039			
204.78	5,608	13,039			
204.79	5,608	13,039			
204.80	5,608	13,039			
204.81	5,608	13,039			
204.82	5,608	13,039			
204.83	5,608	13,039			
204.84	5,608	13,039			
204.85	5,608	13,039			
204.86	5,608	13,039			
204.87	5,608	13,039			
204.88	5,608	13,039			
204.89	5,608	13,039			
204.90	5,608	13,039			
204.91	5,608	13,039			
204.92	5,608	13,039			
204.93	5,608	13,039			

Summary for Pond B-58: Basin #58

Inflow Area = 3.083 ac, 36.46% Impervious, Inflow Depth > 6.24" for Current 100 yr event
 Inflow = 18.32 cfs @ 12.19 hrs, Volume= 1.604 af
 Outflow = 9.20 cfs @ 12.42 hrs, Volume= 1.549 af, Atten= 50%, Lag= 13.3 min
 Primary = 9.20 cfs @ 12.42 hrs, Volume= 1.549 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 201.31' @ 12.42 hrs Surf.Area= 7,906 sf Storage= 18,494 cf

Plug-Flow detention time= 82.5 min calculated for 1.547 af (96% of inflow)
 Center-of-Mass det. time= 52.2 min (899.0 - 846.8)

Volume	Invert	Avail.Storage	Storage Description
#1	198.30'	32,924 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
198.30	0	0	0
199.00	6,230	2,180	2,180
200.00	6,932	6,581	8,761
201.00	7,670	7,301	16,062
202.00	8,426	8,048	24,110
203.00	9,201	8,814	32,924

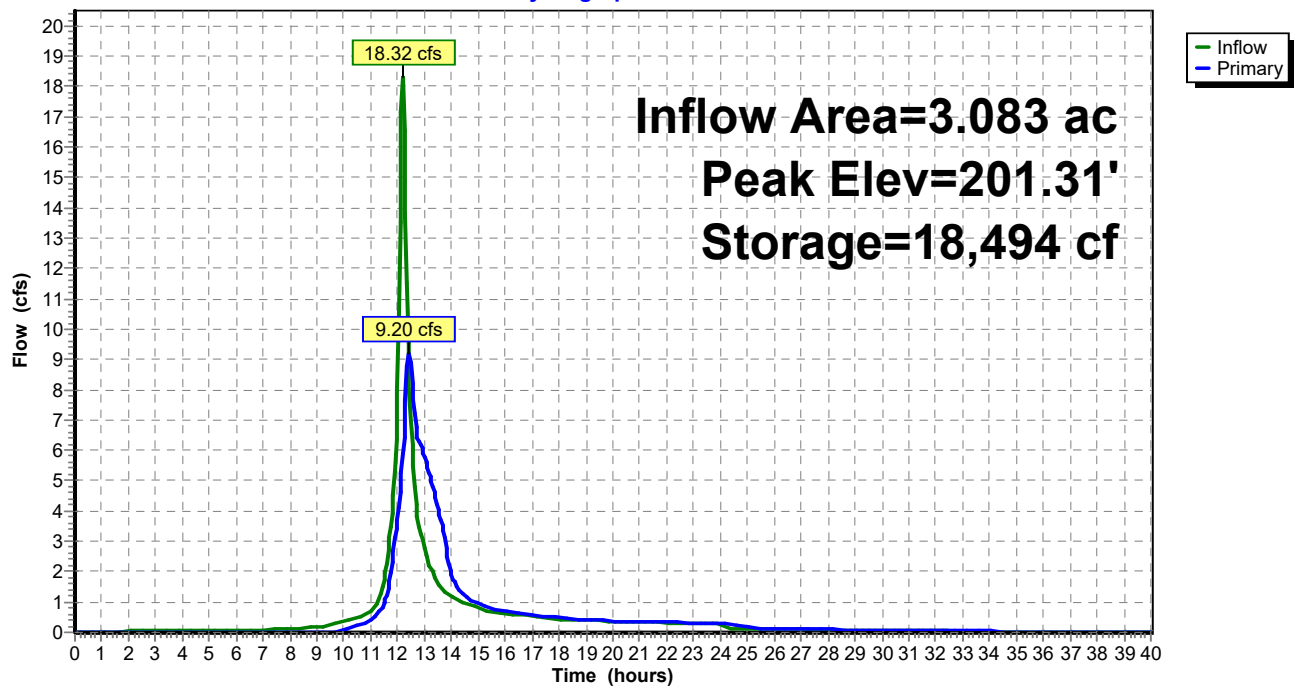
Device	Routing	Invert	Outlet Devices
#1	Primary	199.00'	36.0" Round Culvert L= 87.0' Ke= 0.500 Inlet / Outlet Invert= 199.00' / 198.00' S= 0.0115 '/' Cc= 0.900 n= 0.013, Flow Area= 7.07 sf
#2	Device 1	198.97'	24.0" W x 6.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	201.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	202.75'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=9.15 cfs @ 12.42 hrs HW=201.31' (Free Discharge)

1=Culvert (Passes 9.15 cfs of 29.62 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 6.95 cfs @ 6.95 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 2.20 cfs @ 1.81 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-58: Basin #58

Hydrograph



Stage-Discharge for Pond B-58: Basin #58

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
198.30	0.00	198.82	0.00	199.34	0.88	199.86	3.82
198.31	0.00	198.83	0.00	199.35	0.93	199.87	3.86
198.32	0.00	198.84	0.00	199.36	0.98	199.88	3.89
198.33	0.00	198.85	0.00	199.37	1.04	199.89	3.92
198.34	0.00	198.86	0.00	199.38	1.09	199.90	3.95
198.35	0.00	198.87	0.00	199.39	1.15	199.91	3.97
198.36	0.00	198.88	0.00	199.40	1.21	199.92	4.00
198.37	0.00	198.89	0.00	199.41	1.27	199.93	4.03
198.38	0.00	198.90	0.00	199.42	1.33	199.94	4.06
198.39	0.00	198.91	0.00	199.43	1.39	199.95	4.09
198.40	0.00	198.92	0.00	199.44	1.45	199.96	4.12
198.41	0.00	198.93	0.00	199.45	1.52	199.97	4.15
198.42	0.00	198.94	0.00	199.46	1.59	199.98	4.18
198.43	0.00	198.95	0.00	199.47	1.65	199.99	4.20
198.44	0.00	198.96	0.00	199.48	1.72	200.00	4.23
198.45	0.00	198.97	0.00	199.49	1.79	200.01	4.26
198.46	0.00	198.98	0.00	199.50	1.86	200.02	4.29
198.47	0.00	198.99	0.00	199.51	1.94	200.03	4.31
198.48	0.00	199.00	0.00	199.52	2.01	200.04	4.34
198.49	0.00	199.01	0.00	199.53	2.09	200.05	4.37
198.50	0.00	199.02	0.00	199.54	2.16	200.06	4.39
198.51	0.00	199.03	0.01	199.55	2.24	200.07	4.42
198.52	0.00	199.04	0.01	199.56	2.32	200.08	4.45
198.53	0.00	199.05	0.02	199.57	2.40	200.09	4.47
198.54	0.00	199.06	0.03	199.58	2.49	200.10	4.50
198.55	0.00	199.07	0.04	199.59	2.57	200.11	4.53
198.56	0.00	199.08	0.05	199.60	2.65	200.12	4.55
198.57	0.00	199.09	0.06	199.61	2.74	200.13	4.58
198.58	0.00	199.10	0.08	199.62	2.83	200.14	4.60
198.59	0.00	199.11	0.09	199.63	2.92	200.15	4.63
198.60	0.00	199.12	0.11	199.64	3.01	200.16	4.65
198.61	0.00	199.13	0.13	199.65	3.10	200.17	4.68
198.62	0.00	199.14	0.15	199.66	3.15	200.18	4.70
198.63	0.00	199.15	0.17	199.67	3.18	200.19	4.73
198.64	0.00	199.16	0.20	199.68	3.22	200.20	4.75
198.65	0.00	199.17	0.22	199.69	3.26	200.21	4.78
198.66	0.00	199.18	0.25	199.70	3.29	200.22	4.80
198.67	0.00	199.19	0.28	199.71	3.33	200.23	4.82
198.68	0.00	199.20	0.31	199.72	3.36	200.24	4.85
198.69	0.00	199.21	0.34	199.73	3.40	200.25	4.87
198.70	0.00	199.22	0.37	199.74	3.43	200.26	4.90
198.71	0.00	199.23	0.41	199.75	3.47	200.27	4.92
198.72	0.00	199.24	0.44	199.76	3.50	200.28	4.94
198.73	0.00	199.25	0.48	199.77	3.54	200.29	4.97
198.74	0.00	199.26	0.52	199.78	3.57	200.30	4.99
198.75	0.00	199.27	0.56	199.79	3.60	200.31	5.01
198.76	0.00	199.28	0.60	199.80	3.64	200.32	5.04
198.77	0.00	199.29	0.64	199.81	3.67	200.33	5.06
198.78	0.00	199.30	0.69	199.82	3.70	200.34	5.08
198.79	0.00	199.31	0.73	199.83	3.73	200.35	5.11
198.80	0.00	199.32	0.78	199.84	3.76	200.36	5.13
198.81	0.00	199.33	0.83	199.85	3.79	200.37	5.15

Stage-Discharge for Pond B-58: Basin #58 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.38	5.17	200.90	6.23	201.42	10.62	201.94	19.30
200.39	5.20	200.91	6.25	201.43	10.76	201.95	19.49
200.40	5.22	200.92	6.27	201.44	10.90	201.96	19.68
200.41	5.24	200.93	6.29	201.45	11.04	201.97	19.87
200.42	5.26	200.94	6.31	201.46	11.19	201.98	20.06
200.43	5.29	200.95	6.33	201.47	11.33	201.99	20.26
200.44	5.31	200.96	6.34	201.48	11.48	202.00	20.45
200.45	5.33	200.97	6.36	201.49	11.63	202.01	20.64
200.46	5.35	200.98	6.38	201.50	11.77	202.02	20.84
200.47	5.37	200.99	6.40	201.51	11.92	202.03	21.04
200.48	5.39	201.00	6.42	201.52	12.07	202.04	21.23
200.49	5.42	201.01	6.45	201.53	12.23	202.05	21.43
200.50	5.44	201.02	6.49	201.54	12.38	202.06	21.63
200.51	5.46	201.03	6.54	201.55	12.53	202.07	21.83
200.52	5.48	201.04	6.59	201.56	12.69	202.08	22.03
200.53	5.50	201.05	6.65	201.57	12.84	202.09	22.23
200.54	5.52	201.06	6.72	201.58	13.00	202.10	22.43
200.55	5.54	201.07	6.78	201.59	13.16	202.11	22.63
200.56	5.56	201.08	6.86	201.60	13.32	202.12	22.83
200.57	5.58	201.09	6.93	201.61	13.48	202.13	23.03
200.58	5.61	201.10	7.01	201.62	13.64	202.14	23.24
200.59	5.63	201.11	7.09	201.63	13.80	202.15	23.44
200.60	5.65	201.12	7.17	201.64	13.97	202.16	23.65
200.61	5.67	201.13	7.26	201.65	14.13	202.17	23.85
200.62	5.69	201.14	7.35	201.66	14.30	202.18	24.06
200.63	5.71	201.15	7.44	201.67	14.47	202.19	24.26
200.64	5.73	201.16	7.53	201.68	14.63	202.20	24.47
200.65	5.75	201.17	7.63	201.69	14.80	202.21	24.68
200.66	5.77	201.18	7.72	201.70	14.97	202.22	24.89
200.67	5.79	201.19	7.83	201.71	15.14	202.23	25.10
200.68	5.81	201.20	7.93	201.72	15.31	202.24	25.31
200.69	5.83	201.21	8.03	201.73	15.48	202.25	25.52
200.70	5.85	201.22	8.14	201.74	15.66	202.26	25.73
200.71	5.87	201.23	8.25	201.75	15.83	202.27	25.94
200.72	5.89	201.24	8.36	201.76	16.01	202.28	26.15
200.73	5.91	201.25	8.47	201.77	16.18	202.29	26.36
200.74	5.93	201.26	8.58	201.78	16.36	202.30	26.57
200.75	5.95	201.27	8.70	201.79	16.54	202.31	26.79
200.76	5.97	201.28	8.82	201.80	16.71	202.32	27.00
200.77	5.99	201.29	8.93	201.81	16.89	202.33	27.22
200.78	6.01	201.30	9.06	201.82	17.07	202.34	27.43
200.79	6.03	201.31	9.18	201.83	17.25	202.35	27.65
200.80	6.04	201.32	9.30	201.84	17.44	202.36	27.86
200.81	6.06	201.33	9.43	201.85	17.62	202.37	28.08
200.82	6.08	201.34	9.55	201.86	17.80	202.38	28.30
200.83	6.10	201.35	9.68	201.87	17.99	202.39	28.51
200.84	6.12	201.36	9.81	201.88	18.17	202.40	28.73
200.85	6.14	201.37	9.94	201.89	18.36	202.41	28.95
200.86	6.16	201.38	10.08	201.90	18.54	202.42	29.17
200.87	6.18	201.39	10.21	201.91	18.73	202.43	29.39
200.88	6.20	201.40	10.35	201.92	18.92	202.44	29.61
200.89	6.21	201.41	10.48	201.93	19.11	202.45	29.83

Stage-Discharge for Pond B-58: Basin #58 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
202.46	30.05	202.98	55.35
202.47	30.28	202.99	56.52
202.48	30.50	203.00	57.71
202.49	30.72		
202.50	30.94		
202.51	31.17		
202.52	31.39		
202.53	31.62		
202.54	31.84		
202.55	32.07		
202.56	32.29		
202.57	32.52		
202.58	32.75		
202.59	32.98		
202.60	33.20		
202.61	33.43		
202.62	33.66		
202.63	33.89		
202.64	34.12		
202.65	34.35		
202.66	34.58		
202.67	34.81		
202.68	35.04		
202.69	35.27		
202.70	35.51		
202.71	35.74		
202.72	35.97		
202.73	36.21		
202.74	36.44		
202.75	36.67		
202.76	37.03		
202.77	37.48		
202.78	37.99		
202.79	38.55		
202.80	39.16		
202.81	39.81		
202.82	40.50		
202.83	41.22		
202.84	41.97		
202.85	42.76		
202.86	43.57		
202.87	44.41		
202.88	45.27		
202.89	46.17		
202.90	47.08		
202.91	48.02		
202.92	48.98		
202.93	49.97		
202.94	50.98		
202.95	52.01		
202.96	53.09		
202.97	54.21		

Stage-Area-Storage for Pond B-58: Basin #58

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
198.30	0	0	198.82	4,628	1,203
198.31	89	0	198.83	4,717	1,250
198.32	178	2	198.84	4,806	1,298
198.33	267	4	198.85	4,895	1,346
198.34	356	7	198.86	4,984	1,396
198.35	445	11	198.87	5,073	1,446
198.36	534	16	198.88	5,162	1,497
198.37	623	22	198.89	5,251	1,549
198.38	712	28	198.90	5,340	1,602
198.39	801	36	198.91	5,429	1,656
198.40	890	44	198.92	5,518	1,711
198.41	979	54	198.93	5,607	1,766
198.42	1,068	64	198.94	5,696	1,823
198.43	1,157	75	198.95	5,785	1,880
198.44	1,246	87	198.96	5,874	1,938
198.45	1,335	100	198.97	5,963	1,998
198.46	1,424	114	198.98	6,052	2,058
198.47	1,513	129	198.99	6,141	2,119
198.48	1,602	144	199.00	6,230	2,180
198.49	1,691	161	199.01	6,237	2,243
198.50	1,780	178	199.02	6,244	2,305
198.51	1,869	196	199.03	6,251	2,368
198.52	1,958	215	199.04	6,258	2,430
198.53	2,047	235	199.05	6,265	2,493
198.54	2,136	256	199.06	6,272	2,556
198.55	2,225	278	199.07	6,279	2,618
198.56	2,314	301	199.08	6,286	2,681
198.57	2,403	324	199.09	6,293	2,744
198.58	2,492	349	199.10	6,300	2,807
198.59	2,581	374	199.11	6,307	2,870
198.60	2,670	401	199.12	6,314	2,933
198.61	2,759	428	199.13	6,321	2,996
198.62	2,848	456	199.14	6,328	3,060
198.63	2,937	485	199.15	6,335	3,123
198.64	3,026	514	199.16	6,342	3,186
198.65	3,115	545	199.17	6,349	3,250
198.66	3,204	577	199.18	6,356	3,313
198.67	3,293	609	199.19	6,363	3,377
198.68	3,382	643	199.20	6,370	3,441
198.69	3,471	677	199.21	6,377	3,504
198.70	3,560	712	199.22	6,384	3,568
198.71	3,649	748	199.23	6,391	3,632
198.72	3,738	785	199.24	6,398	3,696
198.73	3,827	823	199.25	6,406	3,760
198.74	3,916	862	199.26	6,413	3,824
198.75	4,005	901	199.27	6,420	3,888
198.76	4,094	942	199.28	6,427	3,952
198.77	4,183	983	199.29	6,434	4,017
198.78	4,272	1,025	199.30	6,441	4,081
198.79	4,361	1,068	199.31	6,448	4,146
198.80	4,450	1,113	199.32	6,455	4,210
198.81	4,539	1,157	199.33	6,462	4,275

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
199.34	6,469	4,339	199.86	6,834	7,798
199.35	6,476	4,404	199.87	6,841	7,866
199.36	6,483	4,469	199.88	6,848	7,935
199.37	6,490	4,534	199.89	6,855	8,003
199.38	6,497	4,599	199.90	6,862	8,072
199.39	6,504	4,664	199.91	6,869	8,140
199.40	6,511	4,729	199.92	6,876	8,209
199.41	6,518	4,794	199.93	6,883	8,278
199.42	6,525	4,859	199.94	6,890	8,347
199.43	6,532	4,924	199.95	6,897	8,416
199.44	6,539	4,990	199.96	6,904	8,485
199.45	6,546	5,055	199.97	6,911	8,554
199.46	6,553	5,121	199.98	6,918	8,623
199.47	6,560	5,186	199.99	6,925	8,692
199.48	6,567	5,252	200.00	6,932	8,761
199.49	6,574	5,317	200.01	6,939	8,831
199.50	6,581	5,383	200.02	6,947	8,900
199.51	6,588	5,449	200.03	6,954	8,970
199.52	6,595	5,515	200.04	6,962	9,039
199.53	6,602	5,581	200.05	6,969	9,109
199.54	6,609	5,647	200.06	6,976	9,179
199.55	6,616	5,713	200.07	6,984	9,249
199.56	6,623	5,779	200.08	6,991	9,318
199.57	6,630	5,846	200.09	6,998	9,388
199.58	6,637	5,912	200.10	7,006	9,458
199.59	6,644	5,978	200.11	7,013	9,528
199.60	6,651	6,045	200.12	7,021	9,599
199.61	6,658	6,111	200.13	7,028	9,669
199.62	6,665	6,178	200.14	7,035	9,739
199.63	6,672	6,245	200.15	7,043	9,810
199.64	6,679	6,311	200.16	7,050	9,880
199.65	6,686	6,378	200.17	7,057	9,951
199.66	6,693	6,445	200.18	7,065	10,021
199.67	6,700	6,512	200.19	7,072	10,092
199.68	6,707	6,579	200.20	7,080	10,163
199.69	6,714	6,646	200.21	7,087	10,233
199.70	6,721	6,713	200.22	7,094	10,304
199.71	6,728	6,781	200.23	7,102	10,375
199.72	6,735	6,848	200.24	7,109	10,446
199.73	6,742	6,915	200.25	7,117	10,518
199.74	6,749	6,983	200.26	7,124	10,589
199.75	6,757	7,050	200.27	7,131	10,660
199.76	6,764	7,118	200.28	7,139	10,731
199.77	6,771	7,186	200.29	7,146	10,803
199.78	6,778	7,253	200.30	7,153	10,874
199.79	6,785	7,321	200.31	7,161	10,946
199.80	6,792	7,389	200.32	7,168	11,018
199.81	6,799	7,457	200.33	7,176	11,089
199.82	6,806	7,525	200.34	7,183	11,161
199.83	6,813	7,593	200.35	7,190	11,233
199.84	6,820	7,661	200.36	7,198	11,305
199.85	6,827	7,730	200.37	7,205	11,377

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.38	7,212	11,449	200.90	7,596	15,299
200.39	7,220	11,521	200.91	7,604	15,375
200.40	7,227	11,593	200.92	7,611	15,451
200.41	7,235	11,666	200.93	7,618	15,527
200.42	7,242	11,738	200.94	7,626	15,604
200.43	7,249	11,810	200.95	7,633	15,680
200.44	7,257	11,883	200.96	7,640	15,756
200.45	7,264	11,956	200.97	7,648	15,833
200.46	7,271	12,028	200.98	7,655	15,909
200.47	7,279	12,101	200.99	7,663	15,986
200.48	7,286	12,174	201.00	7,670	16,062
200.49	7,294	12,247	201.01	7,678	16,139
200.50	7,301	12,320	201.02	7,685	16,216
200.51	7,308	12,393	201.03	7,693	16,293
200.52	7,316	12,466	201.04	7,700	16,370
200.53	7,323	12,539	201.05	7,708	16,447
200.54	7,331	12,612	201.06	7,715	16,524
200.55	7,338	12,686	201.07	7,723	16,601
200.56	7,345	12,759	201.08	7,730	16,679
200.57	7,353	12,833	201.09	7,738	16,756
200.58	7,360	12,906	201.10	7,746	16,833
200.59	7,367	12,980	201.11	7,753	16,911
200.60	7,375	13,054	201.12	7,761	16,988
200.61	7,382	13,127	201.13	7,768	17,066
200.62	7,390	13,201	201.14	7,776	17,144
200.63	7,397	13,275	201.15	7,783	17,222
200.64	7,404	13,349	201.16	7,791	17,299
200.65	7,412	13,423	201.17	7,799	17,377
200.66	7,419	13,497	201.18	7,806	17,455
200.67	7,426	13,572	201.19	7,814	17,533
200.68	7,434	13,646	201.20	7,821	17,612
200.69	7,441	13,720	201.21	7,829	17,690
200.70	7,449	13,795	201.22	7,836	17,768
200.71	7,456	13,869	201.23	7,844	17,847
200.72	7,463	13,944	201.24	7,851	17,925
200.73	7,471	14,019	201.25	7,859	18,004
200.74	7,478	14,093	201.26	7,867	18,082
200.75	7,486	14,168	201.27	7,874	18,161
200.76	7,493	14,243	201.28	7,882	18,240
200.77	7,500	14,318	201.29	7,889	18,319
200.78	7,508	14,393	201.30	7,897	18,398
200.79	7,515	14,468	201.31	7,904	18,477
200.80	7,522	14,543	201.32	7,912	18,556
200.81	7,530	14,619	201.33	7,919	18,635
200.82	7,537	14,694	201.34	7,927	18,714
200.83	7,545	14,769	201.35	7,935	18,793
200.84	7,552	14,845	201.36	7,942	18,873
200.85	7,559	14,920	201.37	7,950	18,952
200.86	7,567	14,996	201.38	7,957	19,032
200.87	7,574	15,072	201.39	7,965	19,111
200.88	7,581	15,147	201.40	7,972	19,191
200.89	7,589	15,223	201.41	7,980	19,271

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.42	7,988	19,351	201.94	8,381	23,606
201.43	7,995	19,430	201.95	8,388	23,690
201.44	8,003	19,510	201.96	8,396	23,774
201.45	8,010	19,591	201.97	8,403	23,858
201.46	8,018	19,671	201.98	8,411	23,942
201.47	8,025	19,751	201.99	8,418	24,026
201.48	8,033	19,831	202.00	8,426	24,110
201.49	8,040	19,912	202.01	8,434	24,195
201.50	8,048	19,992	202.02	8,442	24,279
201.51	8,056	20,073	202.03	8,449	24,364
201.52	8,063	20,153	202.04	8,457	24,448
201.53	8,071	20,234	202.05	8,465	24,533
201.54	8,078	20,315	202.06	8,473	24,617
201.55	8,086	20,395	202.07	8,480	24,702
201.56	8,093	20,476	202.08	8,488	24,787
201.57	8,101	20,557	202.09	8,496	24,872
201.58	8,108	20,638	202.10	8,504	24,957
201.59	8,116	20,719	202.11	8,511	25,042
201.60	8,124	20,801	202.12	8,519	25,127
201.61	8,131	20,882	202.13	8,527	25,212
201.62	8,139	20,963	202.14	8,535	25,298
201.63	8,146	21,045	202.15	8,542	25,383
201.64	8,154	21,126	202.16	8,550	25,469
201.65	8,161	21,208	202.17	8,558	25,554
201.66	8,169	21,289	202.18	8,566	25,640
201.67	8,177	21,371	202.19	8,573	25,725
201.68	8,184	21,453	202.20	8,581	25,811
201.69	8,192	21,535	202.21	8,589	25,897
201.70	8,199	21,617	202.22	8,597	25,983
201.71	8,207	21,699	202.23	8,604	26,069
201.72	8,214	21,781	202.24	8,612	26,155
201.73	8,222	21,863	202.25	8,620	26,241
201.74	8,229	21,945	202.26	8,628	26,327
201.75	8,237	22,028	202.27	8,635	26,414
201.76	8,245	22,110	202.28	8,643	26,500
201.77	8,252	22,193	202.29	8,651	26,587
201.78	8,260	22,275	202.30	8,659	26,673
201.79	8,267	22,358	202.31	8,666	26,760
201.80	8,275	22,440	202.32	8,674	26,847
201.81	8,282	22,523	202.33	8,682	26,933
201.82	8,290	22,606	202.34	8,690	27,020
201.83	8,297	22,689	202.35	8,697	27,107
201.84	8,305	22,772	202.36	8,705	27,194
201.85	8,313	22,855	202.37	8,713	27,281
201.86	8,320	22,938	202.38	8,721	27,368
201.87	8,328	23,022	202.39	8,728	27,456
201.88	8,335	23,105	202.40	8,736	27,543
201.89	8,343	23,188	202.41	8,744	27,630
201.90	8,350	23,272	202.42	8,752	27,718
201.91	8,358	23,355	202.43	8,759	27,805
201.92	8,366	23,439	202.44	8,767	27,893
201.93	8,373	23,523	202.45	8,775	27,981

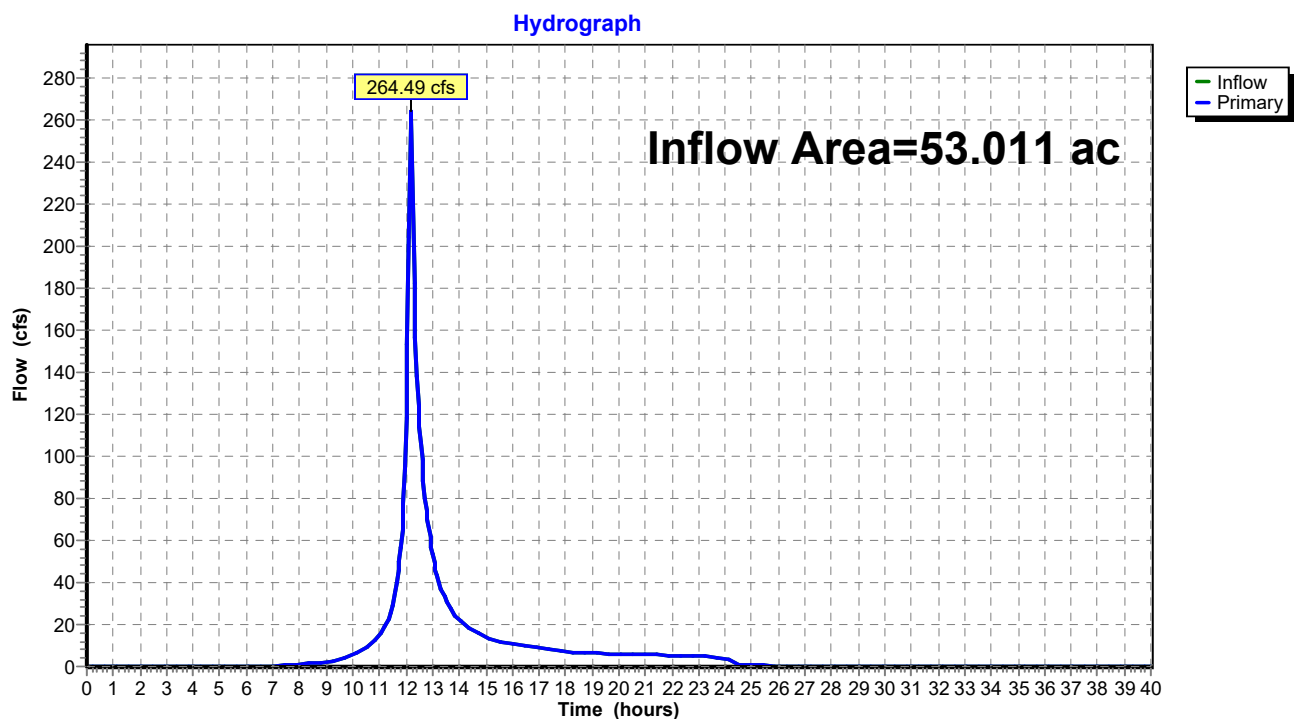
Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.46	8,783	28,068	202.98	9,186	32,740
202.47	8,790	28,156	202.99	9,193	32,832
202.48	8,798	28,244	203.00	9,201	32,924
202.49	8,806	28,332			
202.50	8,814	28,420			
202.51	8,821	28,509			
202.52	8,829	28,597			
202.53	8,837	28,685			
202.54	8,845	28,774			
202.55	8,852	28,862			
202.56	8,860	28,951			
202.57	8,868	29,039			
202.58	8,876	29,128			
202.59	8,883	29,217			
202.60	8,891	29,306			
202.61	8,899	29,395			
202.62	8,907	29,484			
202.63	8,914	29,573			
202.64	8,922	29,662			
202.65	8,930	29,751			
202.66	8,938	29,840			
202.67	8,945	29,930			
202.68	8,953	30,019			
202.69	8,961	30,109			
202.70	8,969	30,199			
202.71	8,976	30,288			
202.72	8,984	30,378			
202.73	8,992	30,468			
202.74	9,000	30,558			
202.75	9,007	30,648			
202.76	9,015	30,738			
202.77	9,023	30,828			
202.78	9,031	30,919			
202.79	9,038	31,009			
202.80	9,046	31,099			
202.81	9,054	31,190			
202.82	9,062	31,280			
202.83	9,069	31,371			
202.84	9,077	31,462			
202.85	9,085	31,553			
202.86	9,093	31,643			
202.87	9,100	31,734			
202.88	9,108	31,825			
202.89	9,116	31,917			
202.90	9,124	32,008			
202.91	9,131	32,099			
202.92	9,139	32,190			
202.93	9,147	32,282			
202.94	9,154	32,373			
202.95	9,162	32,465			
202.96	9,170	32,557			
202.97	9,178	32,648			

Summary for Link PDA-6: Proposed Drainage Area #6

Inflow Area = 53.011 ac, 11.21% Impervious, Inflow Depth = 5.65" for Current 100 yr event
Inflow = 264.49 cfs @ 12.18 hrs, Volume= 24.956 af
Primary = 264.49 cfs @ 12.18 hrs, Volume= 24.956 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-6: Proposed Drainage Area #6

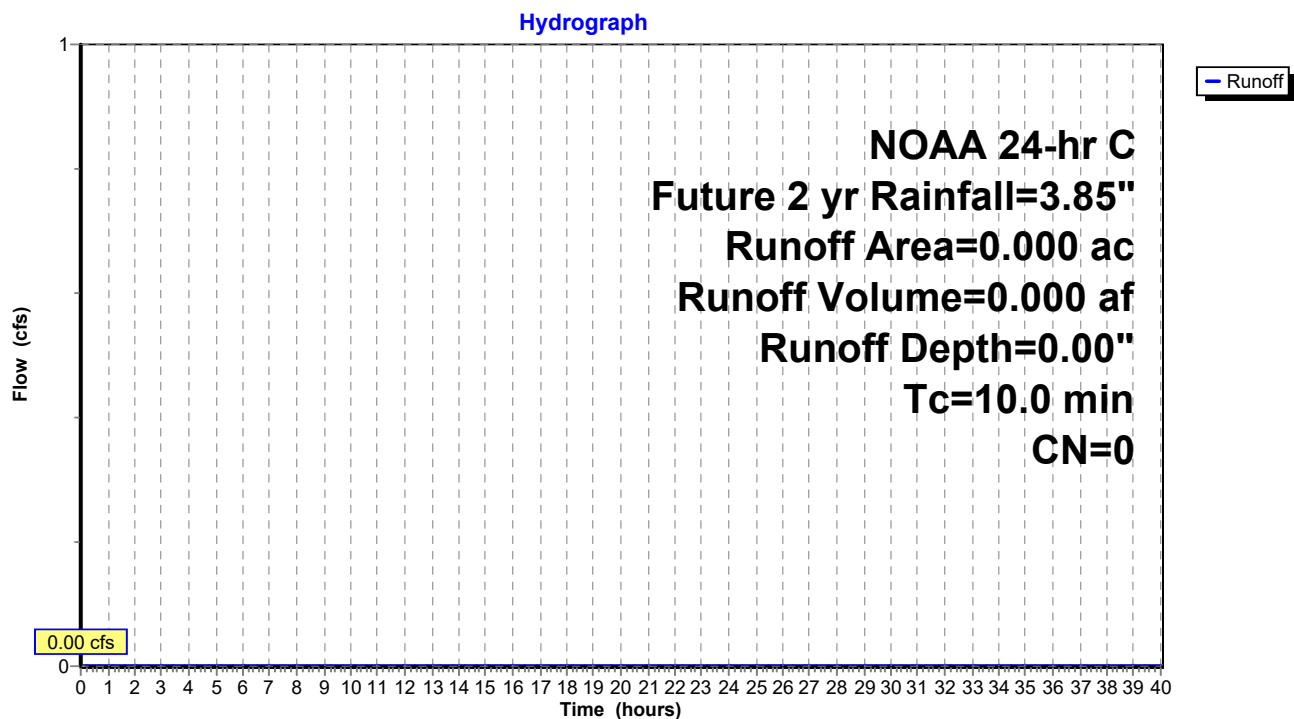
Summary for Subcatchment 51I: PDA-51 (impervious)

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
 Routed to Pond B-51 : Basin #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
* 0.000	98	Roof, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 51I: PDA-51 (impervious)

Summary for Subcatchment 51P: PDA-51 (pervious)

Runoff = 1.11 cfs @ 12.18 hrs, Volume= 0.084 af, Depth= 1.49"
 Routed to Pond B-51 : Basin #51

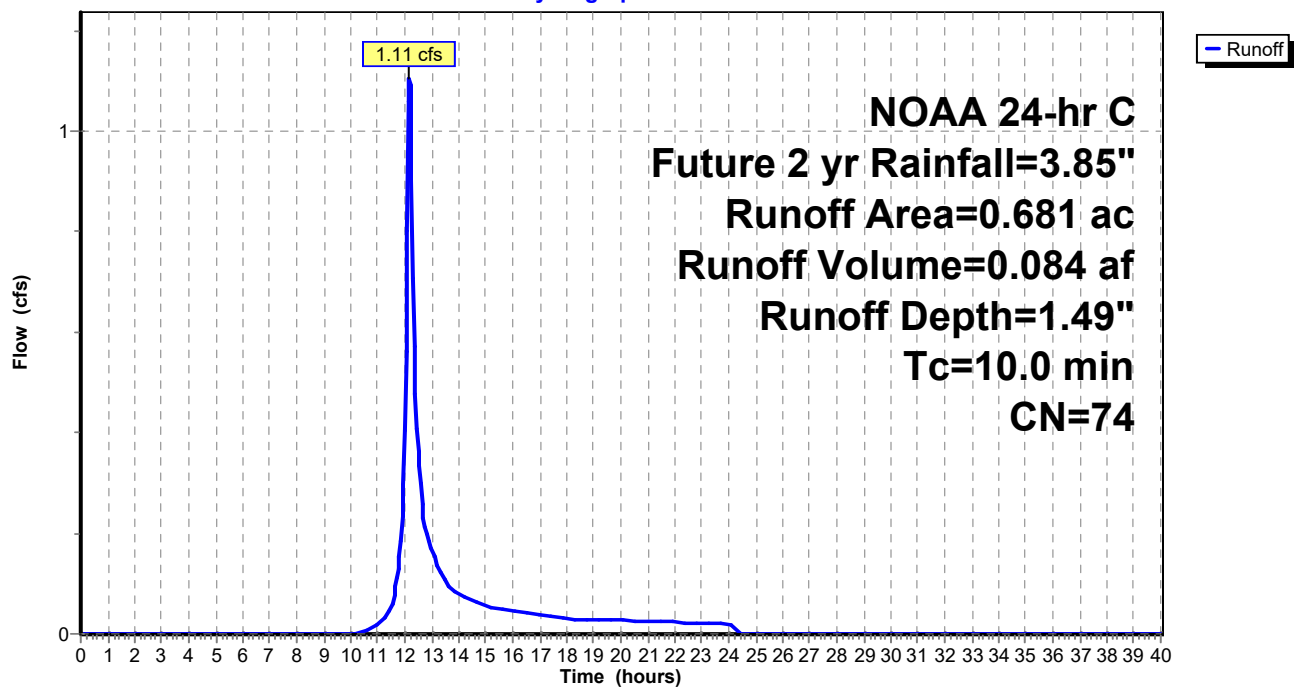
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.681	74	>75% Grass cover, Good, HSG C
0.681		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 51P: PDA-51 (pervious)

Hydrograph



Summary for Subcatchment 52I: PDA-52 (impervious)

Runoff = 1.71 cfs @ 12.17 hrs, Volume= 0.148 af, Depth= 3.62"
 Routed to Pond B-52 : Basin #52

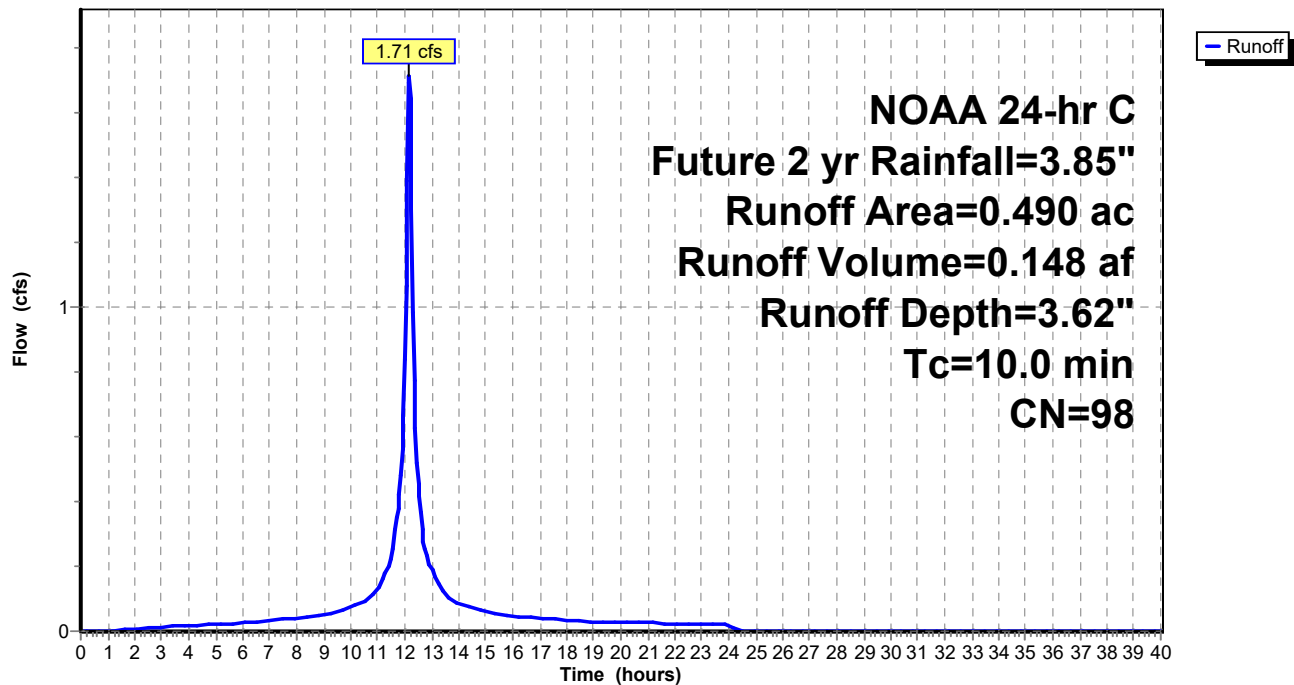
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
* 0.118	98	Pavement, HSG C
* 0.339	98	Roof, HSG C
* 0.033	98	Concrete, HSG C
0.490	98	Weighted Average
0.490		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 52I: PDA-52 (impervious)

Hydrograph



Summary for Subcatchment 52P: PDA-52 (pervious)

Runoff = 1.51 cfs @ 12.18 hrs, Volume= 0.116 af, Depth= 1.49"
 Routed to Pond B-52 : Basin #52

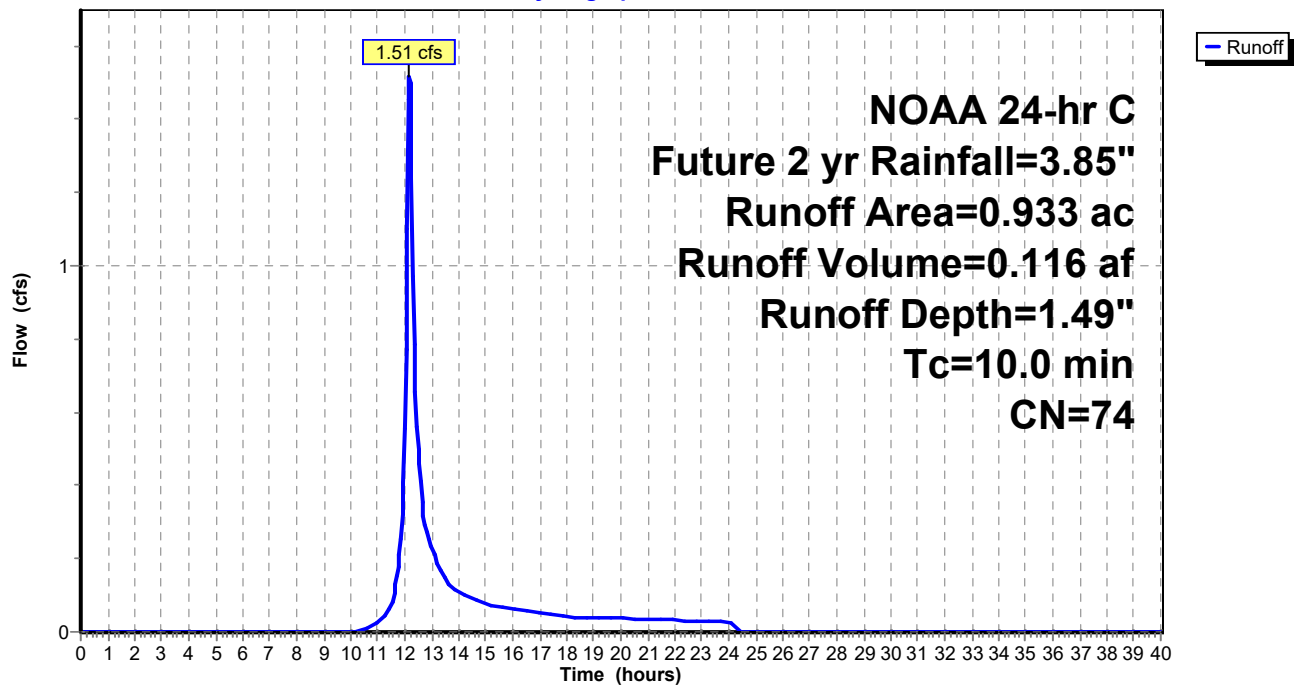
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.933	74	>75% Grass cover, Good, HSG C
0.933		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 52P: PDA-52 (pervious)

Hydrograph



Summary for Subcatchment 53I: PDA-53 (impervious)

Runoff = 4.24 cfs @ 12.17 hrs, Volume= 0.366 af, Depth= 3.62"
Routed to Pond B-53 : Basin #53

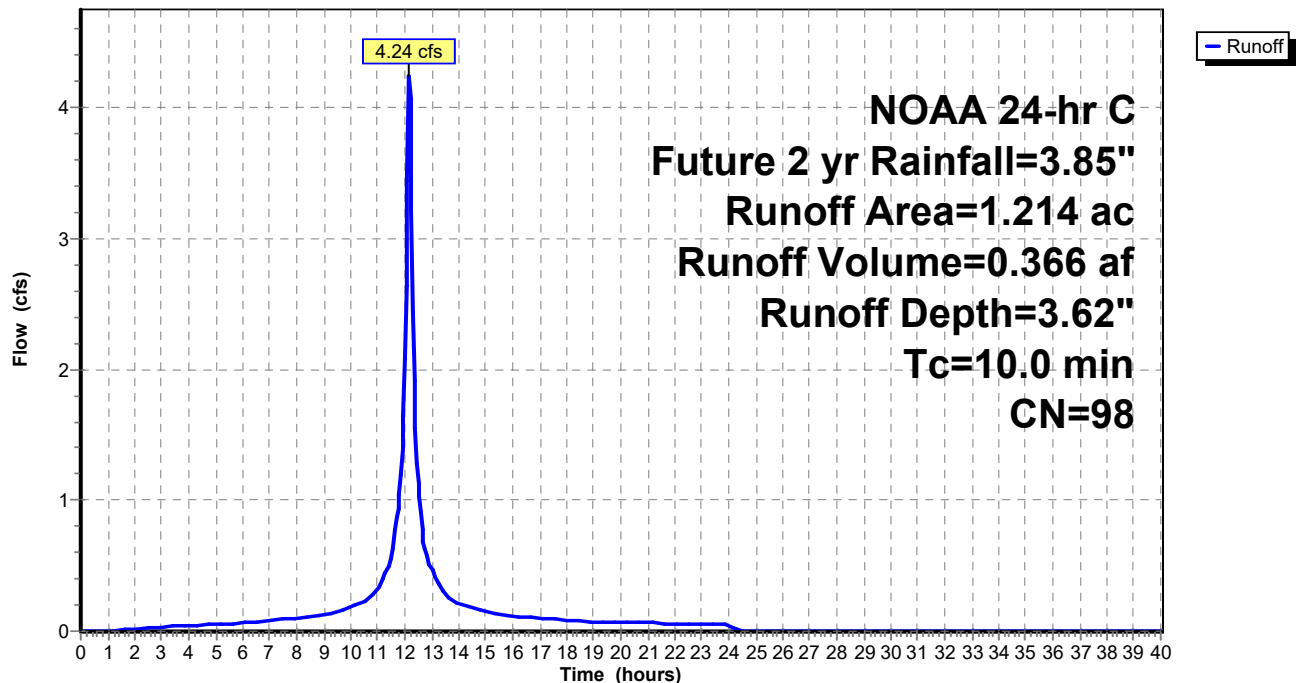
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
* 0.628	98	Pavement, HSG C
* 0.450	98	Roof, HSG C
* 0.136	98	Concrete, HSG C
1.214	98	Weighted Average
1.214		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 53I: PDA-53 (impervious)

Hydrograph



Summary for Subcatchment 53P: PDA-53 (pervious)

Runoff = 2.15 cfs @ 12.18 hrs, Volume= 0.164 af, Depth= 1.49"
 Routed to Pond B-53 : Basin #53

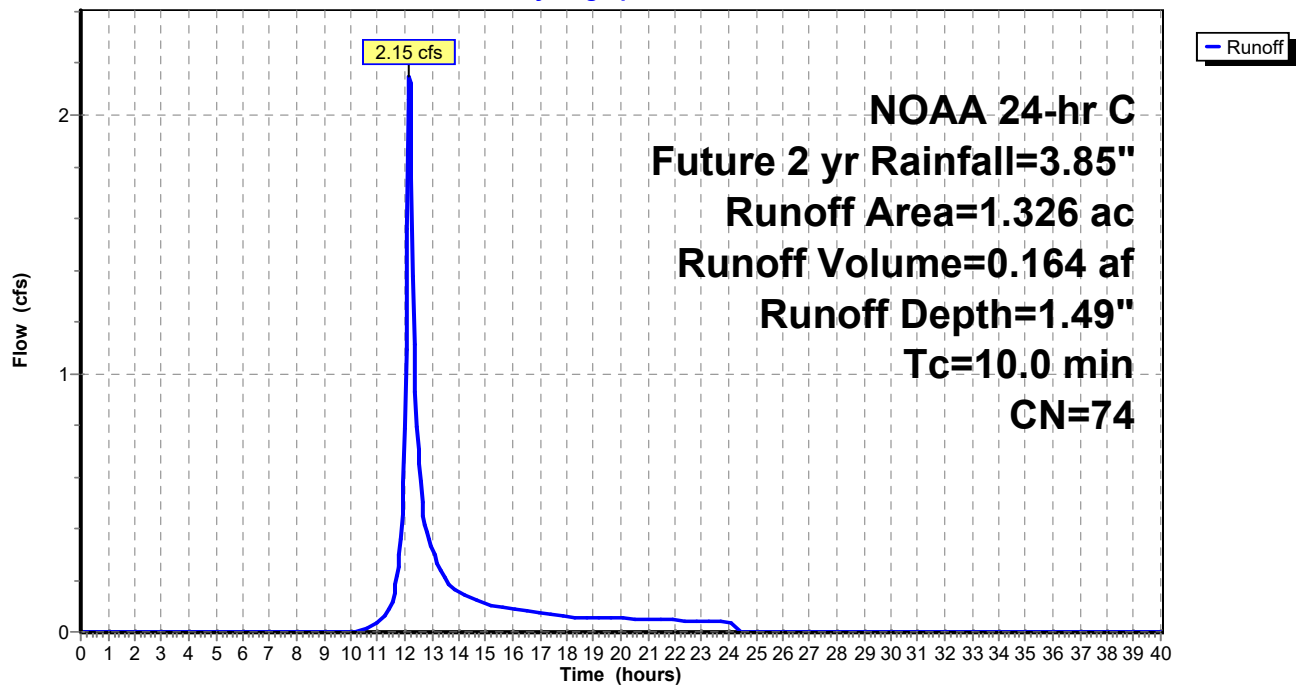
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.326	74	>75% Grass cover, Good, HSG C
1.326		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 53P: PDA-53 (pervious)

Hydrograph



Summary for Subcatchment 54I: PDA-54 (impervious)

Runoff = 5.43 cfs @ 12.17 hrs, Volume= 0.468 af, Depth= 3.62"
 Routed to Pond B-54 : Basin #54

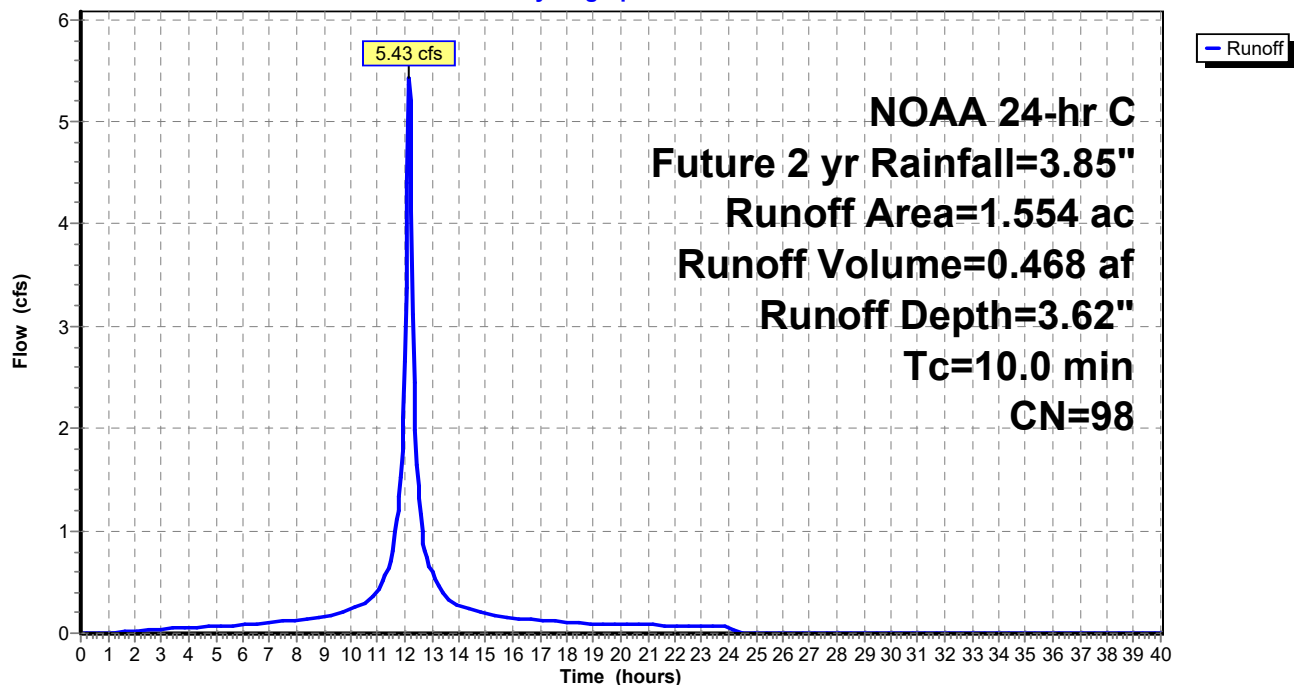
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
* 0.983	98	Pavement, HSG C
* 0.361	98	Roof, HSG C
* 0.210	98	Concrete, HSG C
1.554	98	Weighted Average
1.554		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 54I: PDA-54 (impervious)

Hydrograph



Summary for Subcatchment 54P: PDA-54 (pervious)

Runoff = 1.65 cfs @ 12.18 hrs, Volume= 0.126 af, Depth= 1.49"
 Routed to Pond B-54 : Basin #54

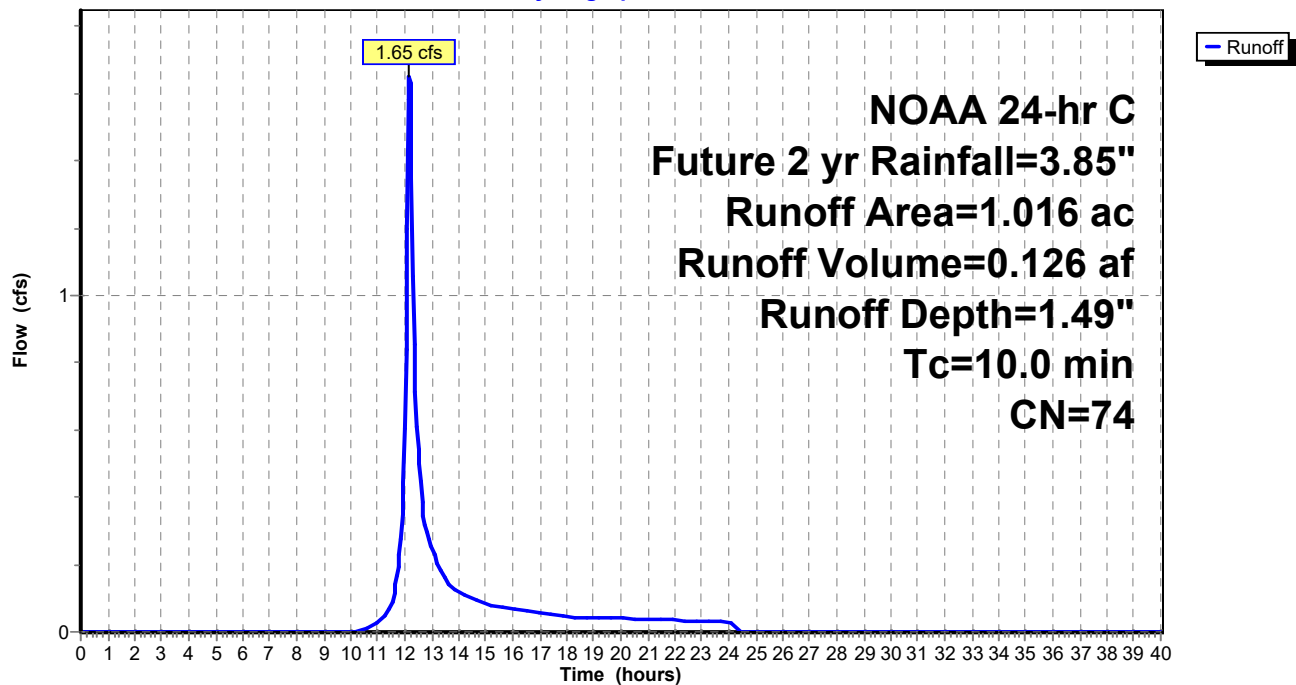
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.016	74	>75% Grass cover, Good, HSG C
1.016		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 54P: PDA-54 (pervious)

Hydrograph



Summary for Subcatchment 55I: PDA-55 (impervious)

Runoff = 3.80 cfs @ 12.17 hrs, Volume= 0.328 af, Depth= 3.62"
 Routed to Pond B-55 : Basin #55

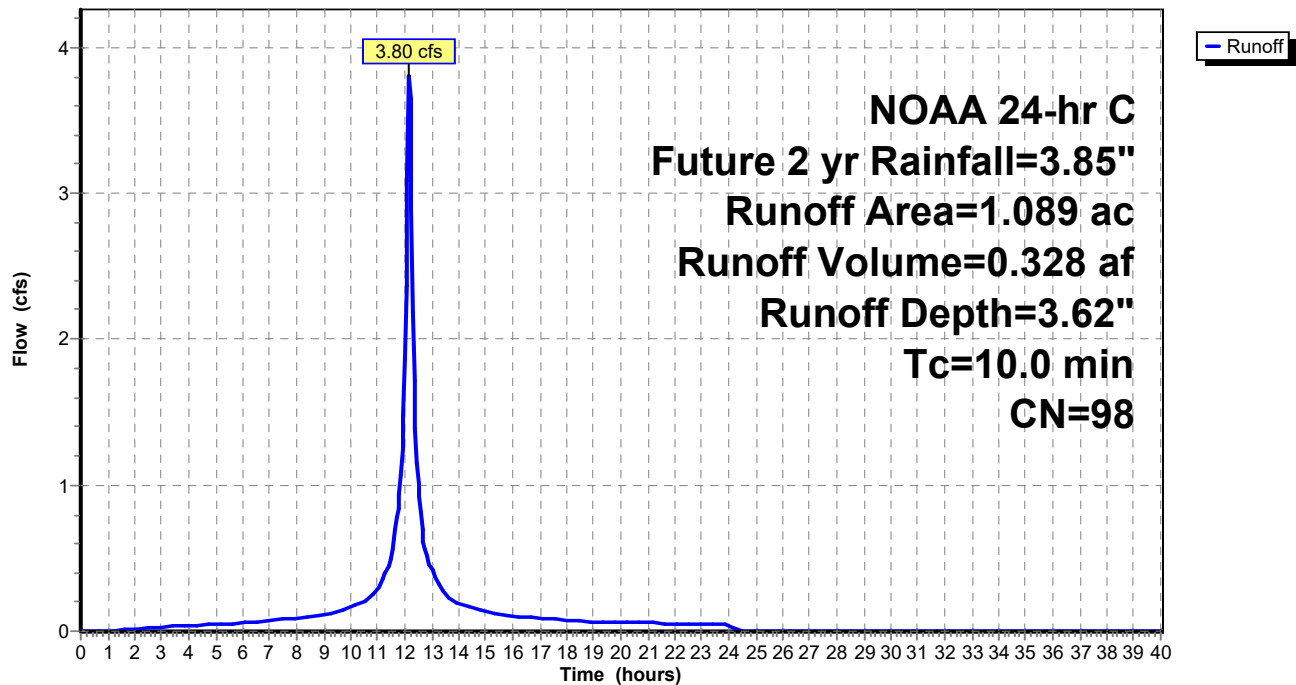
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
* 0.467	98	Pavement, HSG C
* 0.574	98	Roof, HSG C
* 0.048	98	Concrete, HSG C
1.089	98	Weighted Average
1.089		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 55I: PDA-55 (impervious)

Hydrograph



Summary for Subcatchment 55P: PDA-55 (pervious)

Runoff = 1.97 cfs @ 12.18 hrs, Volume= 0.150 af, Depth= 1.49"
 Routed to Pond B-55 : Basin #55

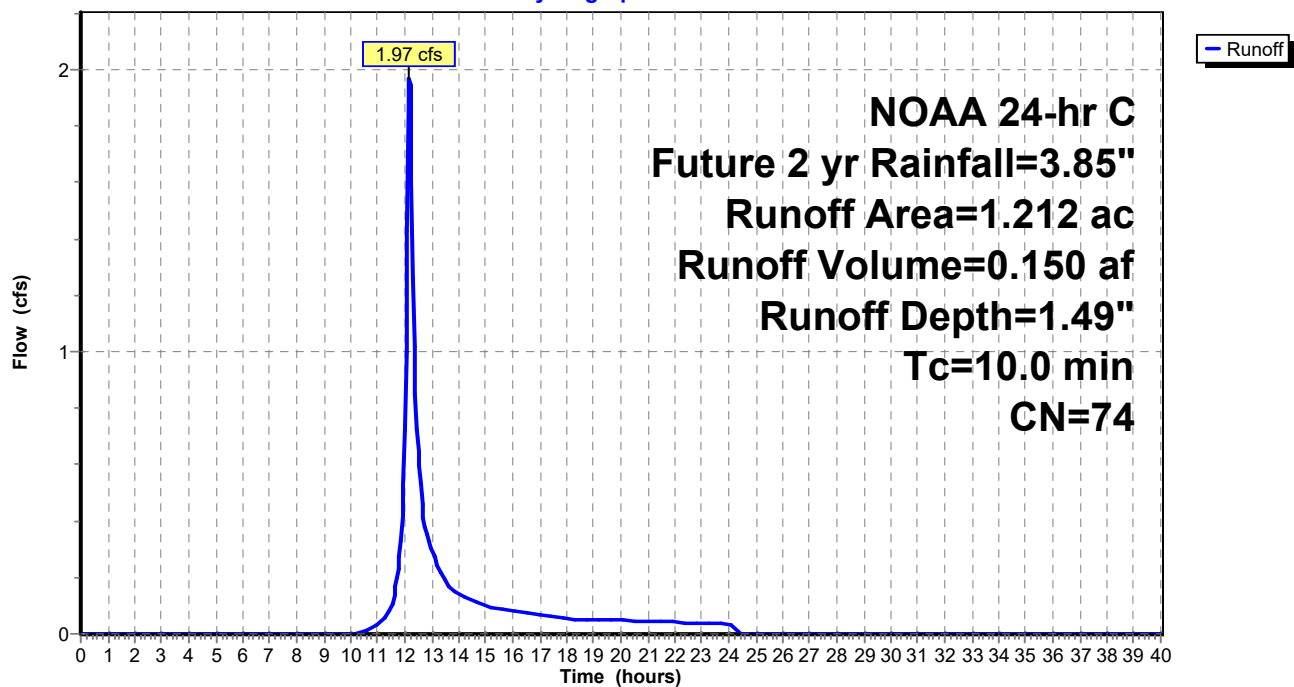
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.212	74	>75% Grass cover, Good, HSG C
1.212		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 55P: PDA-55 (pervious)

Hydrograph



Summary for Subcatchment 56I: PDA-56 (impervious)

Runoff = 1.64 cfs @ 12.17 hrs, Volume= 0.142 af, Depth= 3.62"
 Routed to Pond B-56 : Basin #56

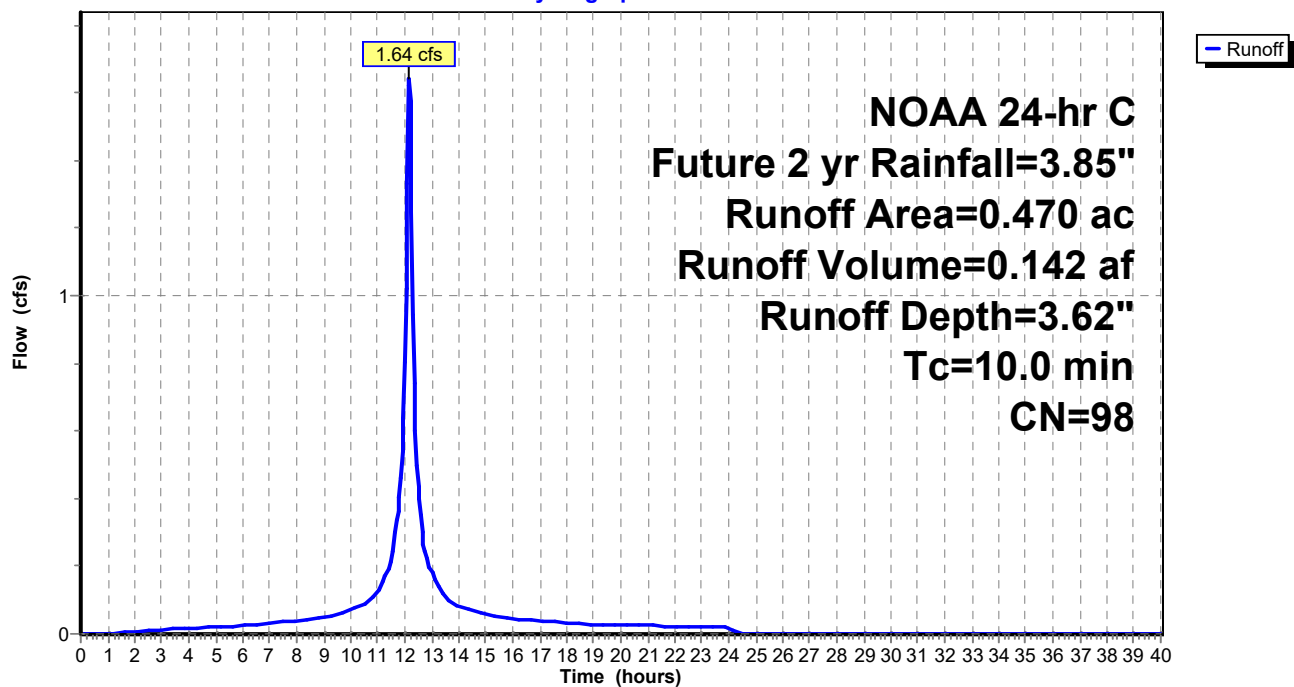
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
* 0.470	98	Roof, HSG C
0.470		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 56I: PDA-56 (impervious)

Hydrograph



Summary for Subcatchment 56P: PDA-56 (pervious)

Runoff = 1.69 cfs @ 12.18 hrs, Volume= 0.129 af, Depth= 1.49"
 Routed to Pond B-56 : Basin #56

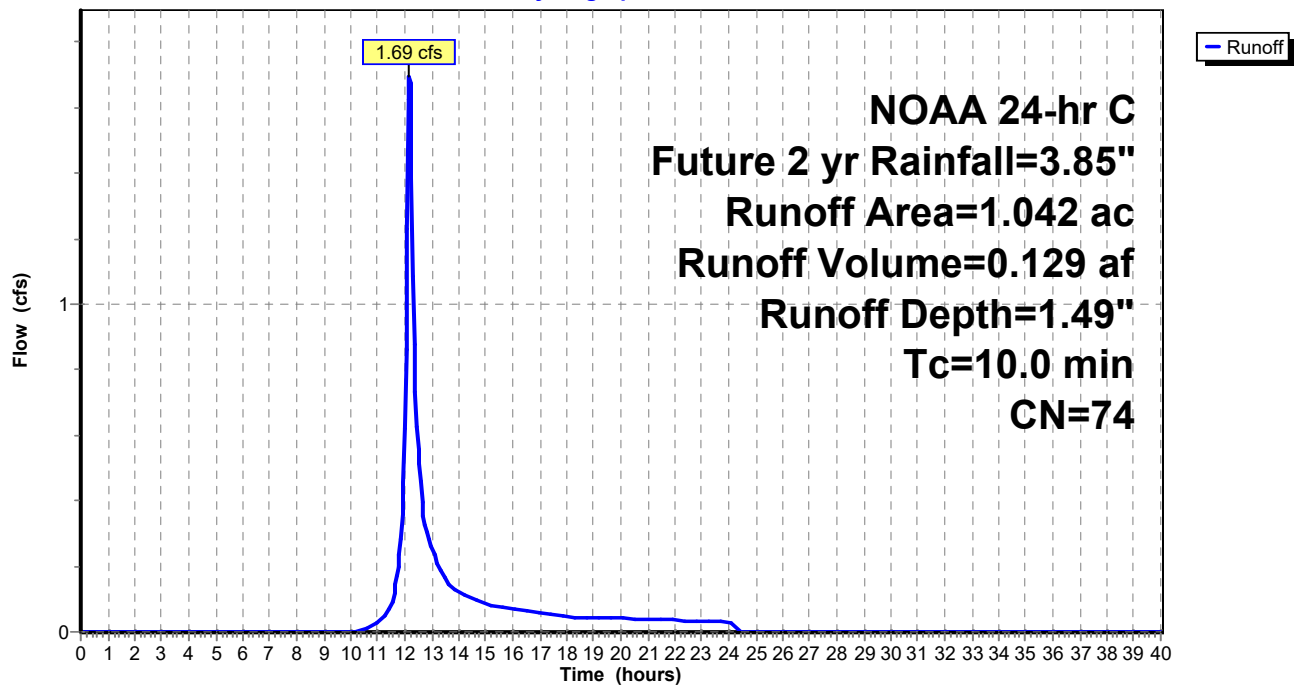
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.042	74	>75% Grass cover, Good, HSG C
1.042		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 56P: PDA-56 (pervious)

Hydrograph



Summary for Subcatchment 57I: PDA-57 (impervious)

Runoff = 2.38 cfs @ 12.17 hrs, Volume= 0.205 af, Depth= 3.62"
 Routed to Pond B-57 : Basin #57

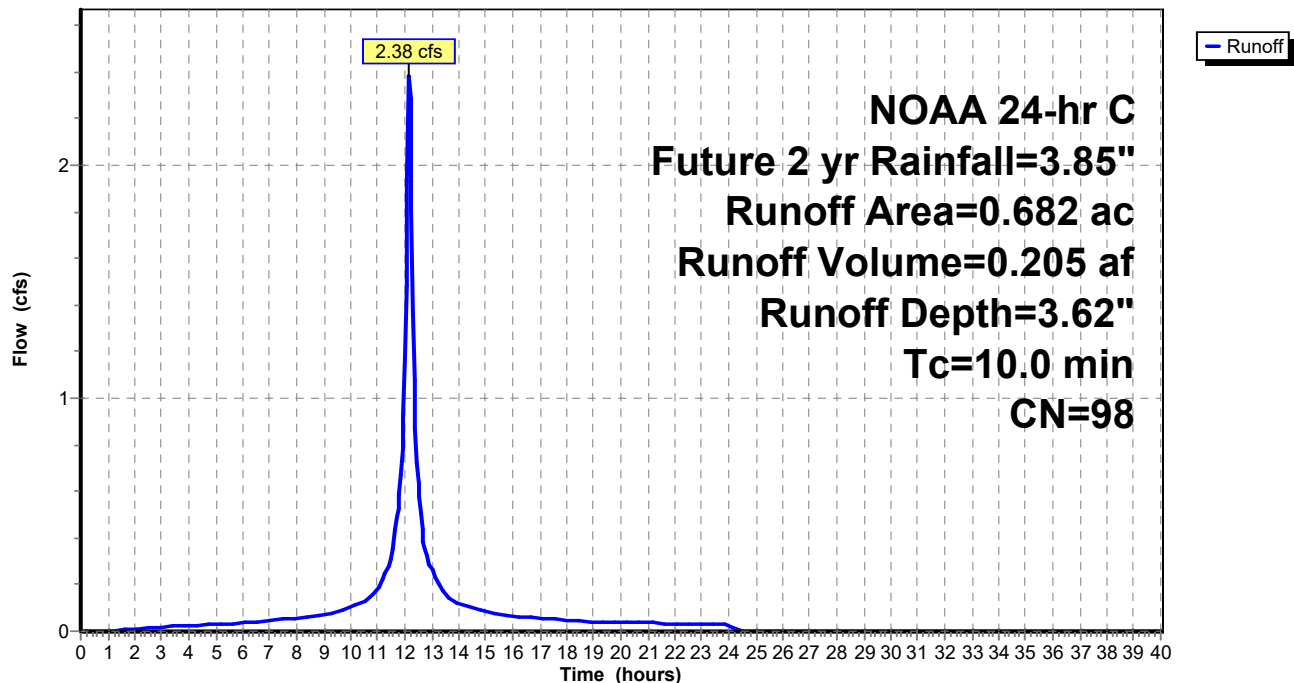
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
* 0.268	98	Pavement, HSG C
* 0.378	98	Roof, HSG C
* 0.036	98	Concrete, HSG C
0.682	98	Weighted Average
0.682		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 57I: PDA-57 (impervious)

Hydrograph



Summary for Subcatchment 57P: PDA-57 (pervious)

Runoff = 1.22 cfs @ 12.18 hrs, Volume= 0.093 af, Depth= 1.49"
 Routed to Pond B-57 : Basin #57

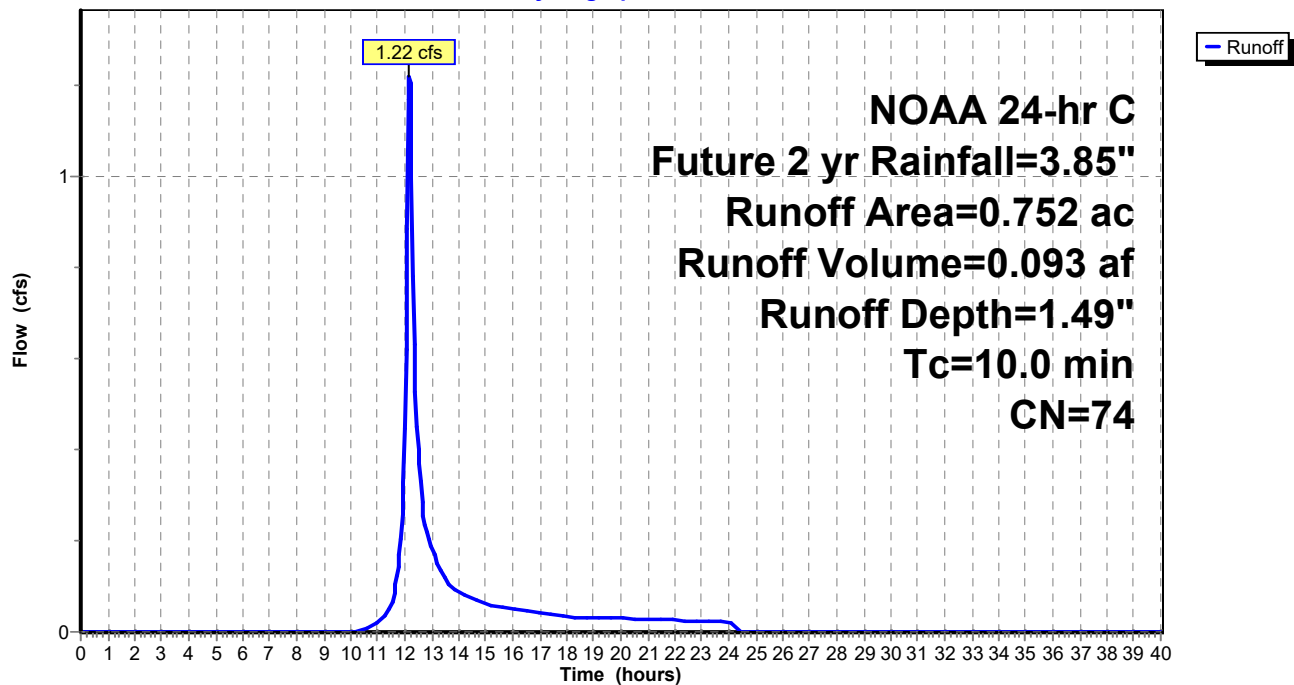
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.752	74	>75% Grass cover, Good, HSG C
0.752		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 57P: PDA-57 (pervious)

Hydrograph



Summary for Subcatchment 58I: PDA-58 (impervious)

Runoff = 1.54 cfs @ 12.17 hrs, Volume= 0.133 af, Depth= 3.62"
 Routed to Pond B-58 : Basin #58

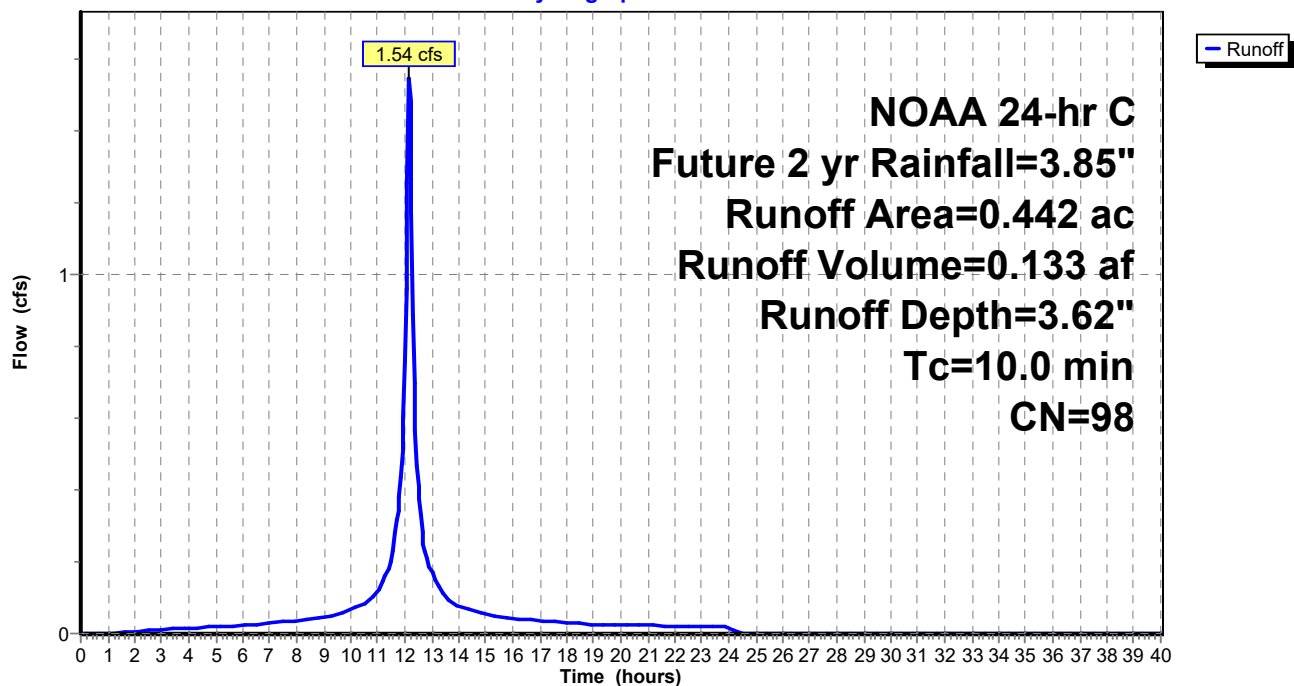
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
* 0.442	98	Roof, HSG C
* 0.000	98	Concrete, HSG C
0.442	98	Weighted Average
0.442		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 58I: PDA-58 (impervious)

Hydrograph



Summary for Subcatchment 58P: PDA-58 (pervious)

Runoff = 1.96 cfs @ 12.18 hrs, Volume= 0.150 af, Depth= 1.49"
 Routed to Pond B-58 : Basin #58

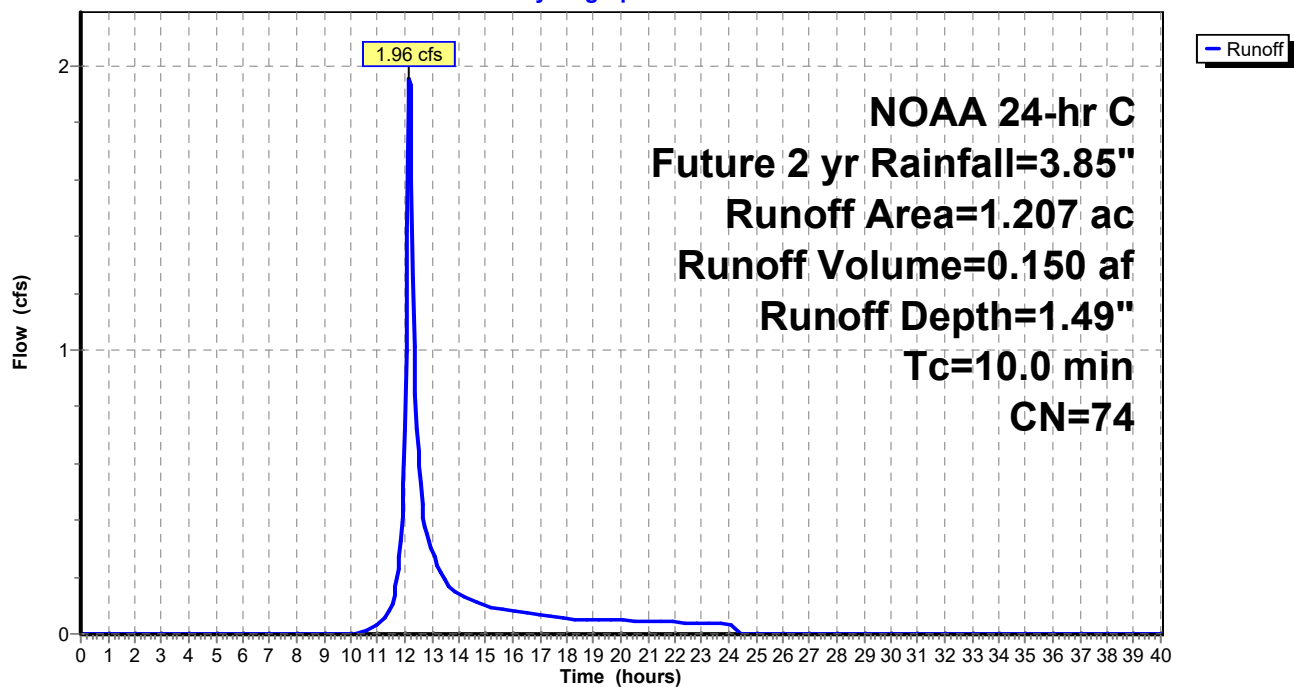
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.207	74	>75% Grass cover, Good, HSG C
1.207		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 58P: PDA-58 (pervious)

Hydrograph



Summary for Subcatchment UPDA-6: PDA-6 (undetained)

Runoff = 63.14 cfs @ 12.18 hrs, Volume= 4.821 af, Depth= 1.49"
 Routed to Link PDA-6 : Proposed Drainage Area #6

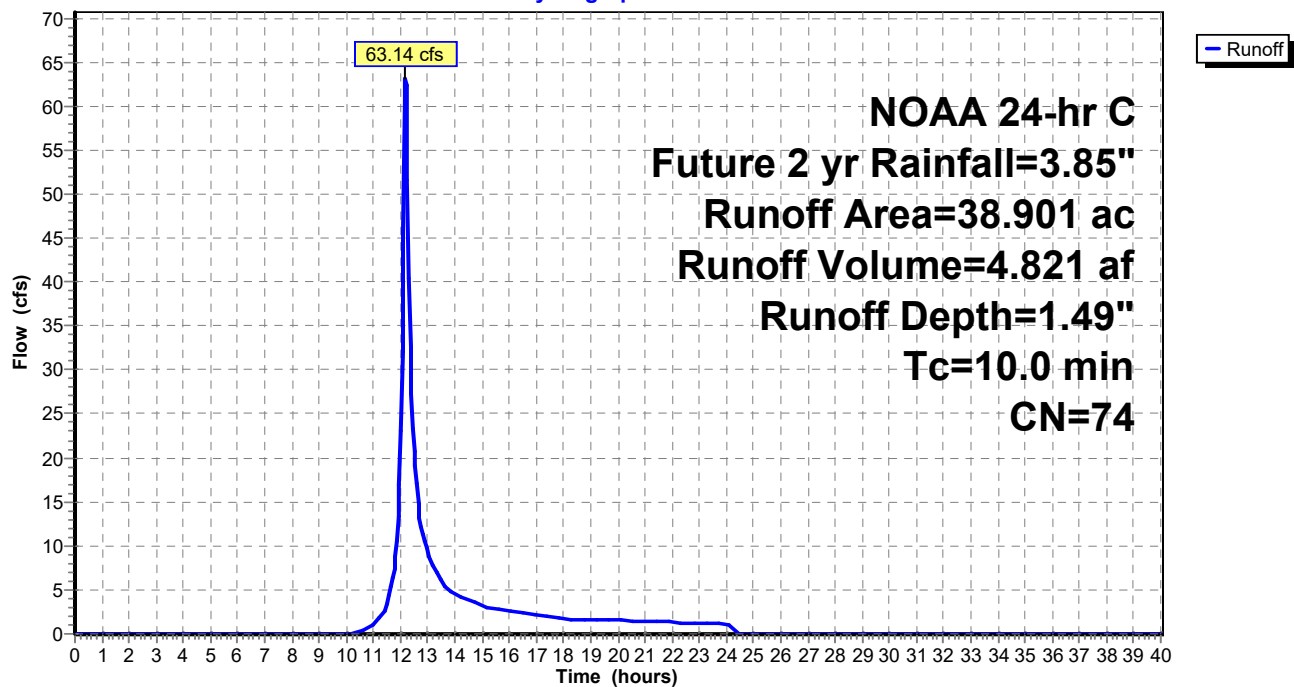
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
38.901	74	>75% Grass cover, Good, HSG C
38.901		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment UPDA-6: PDA-6 (undetained)

Hydrograph



Summary for Pond B-51: Basin #51

Inflow Area = 11.027 ac, 43.68% Impervious, Inflow Depth = 1.93" for Future 2 yr event
 Inflow = 13.09 cfs @ 12.28 hrs, Volume= 1.770 af
 Outflow = 10.84 cfs @ 12.47 hrs, Volume= 1.764 af, Atten= 17%, Lag= 11.2 min
 Primary = 10.84 cfs @ 12.47 hrs, Volume= 1.764 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 185.36' @ 12.47 hrs Surf.Area= 7,338 sf Storage= 8,516 cf

Plug-Flow detention time= 26.1 min calculated for 1.764 af (100% of inflow)
 Center-of-Mass det. time= 23.3 min (903.0 - 879.8)

Volume	Invert	Avail.Storage	Storage Description
#1	184.00'	58,347 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
184.00	5,243	0	0
185.00	6,727	5,985	5,985
186.00	8,424	7,576	13,561
187.00	10,085	9,255	22,815
188.00	11,802	10,944	33,759
189.00	13,576	12,689	46,448
189.83	15,098	11,900	58,347

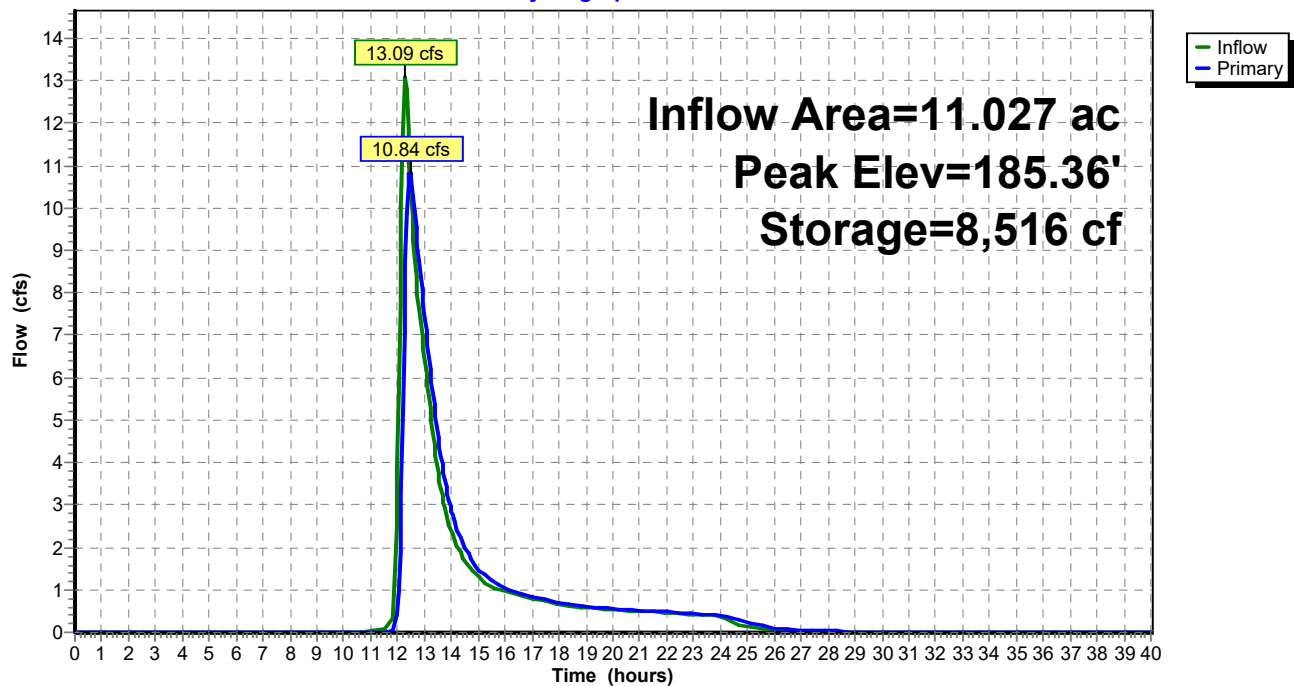
Device	Routing	Invert	Outlet Devices
#1	Primary	184.00'	30.0" Round Culvert L= 147.0' Ke= 0.500 Inlet / Outlet Invert= 184.00' / 182.00' S= 0.0136 '/' Cc= 0.900 n= 0.013, Flow Area= 4.91 sf
#2	Device 1	184.05'	48.0" W x 12.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	187.00'	8.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	189.80'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=10.80 cfs @ 12.47 hrs HW=185.36' (Free Discharge)

1=Culvert (Inlet Controls 10.80 cfs @ 3.97 fps)
 2=Orifice/Grate (Passes 10.80 cfs of 17.01 cfs potential flow)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-51: Basin #51

Hydrograph



Stage-Discharge for Pond B-51: Basin #51

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
184.00	0.00	184.52	1.81	185.04	6.71	185.56	13.70
184.01	0.00	184.53	1.88	185.05	6.83	185.57	13.85
184.02	0.00	184.54	1.95	185.06	6.94	185.58	13.99
184.03	0.00	184.55	2.02	185.07	7.06	185.59	14.14
184.04	0.00	184.56	2.09	185.08	7.19	185.60	14.29
184.05	0.00	184.57	2.17	185.09	7.31	185.61	14.44
184.06	0.01	184.58	2.24	185.10	7.43	185.62	14.59
184.07	0.03	184.59	2.31	185.11	7.55	185.63	14.73
184.08	0.05	184.60	2.39	185.12	7.67	185.64	14.88
184.09	0.06	184.61	2.47	185.13	7.80	185.65	15.03
184.10	0.07	184.62	2.54	185.14	7.92	185.66	15.18
184.11	0.09	184.63	2.62	185.15	8.05	185.67	15.33
184.12	0.10	184.64	2.70	185.16	8.18	185.68	15.48
184.13	0.12	184.65	2.78	185.17	8.30	185.69	15.63
184.14	0.14	184.66	2.87	185.18	8.43	185.70	15.78
184.15	0.16	184.67	2.95	185.19	8.56	185.71	15.93
184.16	0.18	184.68	3.03	185.20	8.69	185.72	16.08
184.17	0.20	184.69	3.12	185.21	8.82	185.73	16.23
184.18	0.23	184.70	3.21	185.22	8.95	185.74	16.38
184.19	0.25	184.71	3.29	185.23	9.08	185.75	16.53
184.20	0.28	184.72	3.38	185.24	9.21	185.76	16.68
184.21	0.31	184.73	3.47	185.25	9.34	185.77	16.83
184.22	0.34	184.74	3.56	185.26	9.48	185.78	16.98
184.23	0.37	184.75	3.65	185.27	9.61	185.79	17.13
184.24	0.40	184.76	3.74	185.28	9.74	185.80	17.28
184.25	0.43	184.77	3.84	185.29	9.88	185.81	17.43
184.26	0.47	184.78	3.93	185.30	10.01	185.82	17.58
184.27	0.51	184.79	4.03	185.31	10.15	185.83	17.73
184.28	0.54	184.80	4.12	185.32	10.28	185.84	17.89
184.29	0.58	184.81	4.22	185.33	10.42	185.85	18.04
184.30	0.62	184.82	4.32	185.34	10.56	185.86	18.19
184.31	0.66	184.83	4.42	185.35	10.70	185.87	18.34
184.32	0.71	184.84	4.52	185.36	10.84	185.88	18.49
184.33	0.75	184.85	4.62	185.37	10.97	185.89	18.64
184.34	0.80	184.86	4.72	185.38	11.11	185.90	18.79
184.35	0.84	184.87	4.82	185.39	11.25	185.91	18.94
184.36	0.89	184.88	4.93	185.40	11.39	185.92	19.08
184.37	0.94	184.89	5.03	185.41	11.54	185.93	19.23
184.38	0.99	184.90	5.14	185.42	11.68	185.94	19.38
184.39	1.04	184.91	5.25	185.43	11.82	185.95	19.53
184.40	1.09	184.92	5.35	185.44	11.96	185.96	19.68
184.41	1.15	184.93	5.46	185.45	12.10	185.97	19.83
184.42	1.20	184.94	5.57	185.46	12.25	185.98	19.98
184.43	1.26	184.95	5.68	185.47	12.39	185.99	20.12
184.44	1.31	184.96	5.79	185.48	12.53	186.00	20.27
184.45	1.37	184.97	5.90	185.49	12.68	186.01	20.42
184.46	1.43	184.98	6.02	185.50	12.82	186.02	20.56
184.47	1.49	184.99	6.13	185.51	12.97	186.03	20.71
184.48	1.55	185.00	6.24	185.52	13.11	186.04	20.86
184.49	1.62	185.01	6.36	185.53	13.26	186.05	21.00
184.50	1.68	185.02	6.47	185.54	13.41	186.06	21.14
184.51	1.75	185.03	6.59	185.55	13.55	186.07	21.29

Stage-Discharge for Pond B-51: Basin #51 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.08	21.43	186.60	27.46	187.12	31.91	187.64	36.54
186.09	21.58	186.61	27.56	187.13	32.11	187.65	36.62
186.10	21.72	186.62	27.64	187.14	32.31	187.66	36.69
186.11	21.86	186.63	27.71	187.15	32.52	187.67	36.77
186.12	22.00	186.64	27.78	187.16	32.66	187.68	36.84
186.13	22.14	186.65	27.84	187.17	32.75	187.69	36.92
186.14	22.28	186.66	27.91	187.18	32.84	187.70	37.00
186.15	22.42	186.67	27.98	187.19	32.92	187.71	37.07
186.16	22.56	186.68	28.04	187.20	33.01	187.72	37.15
186.17	22.70	186.69	28.11	187.21	33.09	187.73	37.22
186.18	22.83	186.70	28.18	187.22	33.17	187.74	37.30
186.19	22.97	186.71	28.24	187.23	33.26	187.75	37.37
186.20	23.10	186.72	28.31	187.24	33.34	187.76	37.45
186.21	23.24	186.73	28.37	187.25	33.43	187.77	37.52
186.22	23.37	186.74	28.44	187.26	33.51	187.78	37.59
186.23	23.50	186.75	28.50	187.27	33.59	187.79	37.67
186.24	23.63	186.76	28.57	187.28	33.68	187.80	37.74
186.25	23.76	186.77	28.64	187.29	33.76	187.81	37.82
186.26	23.89	186.78	28.70	187.30	33.84	187.82	37.89
186.27	24.02	186.79	28.77	187.31	33.92	187.83	37.96
186.28	24.15	186.80	28.83	187.32	34.01	187.84	38.04
186.29	24.27	186.81	28.89	187.33	34.09	187.85	38.11
186.30	24.40	186.82	28.96	187.34	34.17	187.86	38.18
186.31	24.52	186.83	29.02	187.35	34.25	187.87	38.26
186.32	24.64	186.84	29.09	187.36	34.33	187.88	38.33
186.33	24.76	186.85	29.15	187.37	34.41	187.89	38.40
186.34	24.88	186.86	29.21	187.38	34.49	187.90	38.48
186.35	24.99	186.87	29.28	187.39	34.58	187.91	38.55
186.36	25.11	186.88	29.34	187.40	34.66	187.92	38.62
186.37	25.22	186.89	29.41	187.41	34.74	187.93	38.69
186.38	25.33	186.90	29.47	187.42	34.82	187.94	38.77
186.39	25.44	186.91	29.53	187.43	34.90	187.95	38.84
186.40	25.54	186.92	29.59	187.44	34.98	187.96	38.91
186.41	25.65	186.93	29.66	187.45	35.06	187.97	38.98
186.42	25.75	186.94	29.72	187.46	35.14	187.98	39.05
186.43	25.85	186.95	29.78	187.47	35.22	187.99	39.12
186.44	25.94	186.96	29.85	187.48	35.30	188.00	39.19
186.45	26.03	186.97	29.91	187.49	35.37	188.01	39.27
186.46	26.12	186.98	29.97	187.50	35.45	188.02	39.34
186.47	26.21	186.99	30.03	187.51	35.53	188.03	39.41
186.48	26.29	187.00	30.09	187.52	35.61	188.04	39.48
186.49	26.36	187.01	30.18	187.53	35.69	188.05	39.55
186.50	26.43	187.02	30.29	187.54	35.77	188.06	39.62
186.51	26.53	187.03	30.41	187.55	35.84	188.07	39.69
186.52	26.64	187.04	30.55	187.56	35.92	188.08	39.76
186.53	26.74	187.05	30.69	187.57	36.00	188.09	39.83
186.54	26.84	187.06	30.85	187.58	36.08	188.10	39.90
186.55	26.95	187.07	31.01	187.59	36.16	188.11	39.97
186.56	27.05	187.08	31.18	187.60	36.23	188.12	40.04
186.57	27.16	187.09	31.35	187.61	36.31	188.13	40.11
186.58	27.26	187.10	31.53	187.62	36.39	188.14	40.18
186.59	27.36	187.11	31.72	187.63	36.46	188.15	40.25

Stage-Discharge for Pond B-51: Basin #51 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
188.16	40.32	188.68	43.77	189.20	46.97	189.72	49.97
188.17	40.39	188.69	43.84	189.21	47.03	189.73	50.03
188.18	40.46	188.70	43.90	189.22	47.09	189.74	50.08
188.19	40.53	188.71	43.96	189.23	47.15	189.75	50.14
188.20	40.60	188.72	44.03	189.24	47.21	189.76	50.19
188.21	40.66	188.73	44.09	189.25	47.27	189.77	50.25
188.22	40.73	188.74	44.15	189.26	47.33	189.78	50.31
188.23	40.80	188.75	44.22	189.27	47.39	189.79	50.36
188.24	40.87	188.76	44.28	189.28	47.45	189.80	50.42
188.25	40.94	188.77	44.34	189.29	47.51	189.81	50.59
188.26	41.01	188.78	44.41	189.30	47.57	189.82	50.86
188.27	41.07	188.79	44.47	189.31	47.62	189.83	51.19
188.28	41.14	188.80	44.53	189.32	47.68		
188.29	41.21	188.81	44.60	189.33	47.74		
188.30	41.28	188.82	44.66	189.34	47.80		
188.31	41.35	188.83	44.72	189.35	47.86		
188.32	41.41	188.84	44.78	189.36	47.92		
188.33	41.48	188.85	44.85	189.37	47.97		
188.34	41.55	188.86	44.91	189.38	48.03		
188.35	41.61	188.87	44.97	189.39	48.09		
188.36	41.68	188.88	45.03	189.40	48.15		
188.37	41.75	188.89	45.09	189.41	48.21		
188.38	41.82	188.90	45.16	189.42	48.26		
188.39	41.88	188.91	45.22	189.43	48.32		
188.40	41.95	188.92	45.28	189.44	48.38		
188.41	42.02	188.93	45.34	189.45	48.44		
188.42	42.08	188.94	45.40	189.46	48.50		
188.43	42.15	188.95	45.46	189.47	48.55		
188.44	42.21	188.96	45.53	189.48	48.61		
188.45	42.28	188.97	45.59	189.49	48.67		
188.46	42.35	188.98	45.65	189.50	48.73		
188.47	42.41	188.99	45.71	189.51	48.78		
188.48	42.48	189.00	45.77	189.52	48.84		
188.49	42.54	189.01	45.83	189.53	48.90		
188.50	42.61	189.02	45.89	189.54	48.95		
188.51	42.67	189.03	45.95	189.55	49.01		
188.52	42.74	189.04	46.01	189.56	49.07		
188.53	42.81	189.05	46.07	189.57	49.13		
188.54	42.87	189.06	46.13	189.58	49.18		
188.55	42.94	189.07	46.20	189.59	49.24		
188.56	43.00	189.08	46.26	189.60	49.30		
188.57	43.07	189.09	46.32	189.61	49.35		
188.58	43.13	189.10	46.38	189.62	49.41		
188.59	43.20	189.11	46.44	189.63	49.47		
188.60	43.26	189.12	46.50	189.64	49.52		
188.61	43.32	189.13	46.56	189.65	49.58		
188.62	43.39	189.14	46.62	189.66	49.63		
188.63	43.45	189.15	46.68	189.67	49.69		
188.64	43.52	189.16	46.74	189.68	49.75		
188.65	43.58	189.17	46.80	189.69	49.80		
188.66	43.65	189.18	46.86	189.70	49.86		
188.67	43.71	189.19	46.92	189.71	49.92		

Stage-Area-Storage for Pond B-51: Basin #51

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.00	5,243	0	184.52	6,015	2,927
184.01	5,258	53	184.53	6,030	2,987
184.02	5,273	105	184.54	6,044	3,048
184.03	5,288	158	184.55	6,059	3,108
184.04	5,302	211	184.56	6,074	3,169
184.05	5,317	264	184.57	6,089	3,230
184.06	5,332	317	184.58	6,104	3,291
184.07	5,347	371	184.59	6,119	3,352
184.08	5,362	424	184.60	6,133	3,413
184.09	5,377	478	184.61	6,148	3,474
184.10	5,391	532	184.62	6,163	3,536
184.11	5,406	586	184.63	6,178	3,598
184.12	5,421	640	184.64	6,193	3,659
184.13	5,436	694	184.65	6,208	3,721
184.14	5,451	749	184.66	6,222	3,784
184.15	5,466	803	184.67	6,237	3,846
184.16	5,480	858	184.68	6,252	3,908
184.17	5,495	913	184.69	6,267	3,971
184.18	5,510	968	184.70	6,282	4,034
184.19	5,525	1,023	184.71	6,297	4,097
184.20	5,540	1,078	184.72	6,311	4,160
184.21	5,555	1,134	184.73	6,326	4,223
184.22	5,569	1,189	184.74	6,341	4,286
184.23	5,584	1,245	184.75	6,356	4,350
184.24	5,599	1,301	184.76	6,371	4,413
184.25	5,614	1,357	184.77	6,386	4,477
184.26	5,629	1,413	184.78	6,401	4,541
184.27	5,644	1,470	184.79	6,415	4,605
184.28	5,659	1,526	184.80	6,430	4,669
184.29	5,673	1,583	184.81	6,445	4,734
184.30	5,688	1,640	184.82	6,460	4,798
184.31	5,703	1,697	184.83	6,475	4,863
184.32	5,718	1,754	184.84	6,490	4,928
184.33	5,733	1,811	184.85	6,504	4,993
184.34	5,748	1,868	184.86	6,519	5,058
184.35	5,762	1,926	184.87	6,534	5,123
184.36	5,777	1,984	184.88	6,549	5,188
184.37	5,792	2,041	184.89	6,564	5,254
184.38	5,807	2,099	184.90	6,579	5,320
184.39	5,822	2,158	184.91	6,593	5,386
184.40	5,837	2,216	184.92	6,608	5,452
184.41	5,851	2,274	184.93	6,623	5,518
184.42	5,866	2,333	184.94	6,638	5,584
184.43	5,881	2,392	184.95	6,653	5,651
184.44	5,896	2,451	184.96	6,668	5,717
184.45	5,911	2,510	184.97	6,682	5,784
184.46	5,926	2,569	184.98	6,697	5,851
184.47	5,940	2,628	184.99	6,712	5,918
184.48	5,955	2,688	185.00	6,727	5,985
184.49	5,970	2,747	185.01	6,744	6,052
184.50	5,985	2,807	185.02	6,761	6,120
184.51	6,000	2,867	185.03	6,778	6,188

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.04	6,795	6,255	185.56	7,677	10,018
185.05	6,812	6,323	185.57	7,694	10,095
185.06	6,829	6,392	185.58	7,711	10,172
185.07	6,846	6,460	185.59	7,728	10,249
185.08	6,863	6,529	185.60	7,745	10,327
185.09	6,880	6,597	185.61	7,762	10,404
185.10	6,897	6,666	185.62	7,779	10,482
185.11	6,914	6,735	185.63	7,796	10,560
185.12	6,931	6,804	185.64	7,813	10,638
185.13	6,948	6,874	185.65	7,830	10,716
185.14	6,965	6,943	185.66	7,847	10,794
185.15	6,982	7,013	185.67	7,864	10,873
185.16	6,999	7,083	185.68	7,881	10,952
185.17	7,015	7,153	185.69	7,898	11,031
185.18	7,032	7,223	185.70	7,915	11,110
185.19	7,049	7,294	185.71	7,932	11,189
185.20	7,066	7,364	185.72	7,949	11,268
185.21	7,083	7,435	185.73	7,966	11,348
185.22	7,100	7,506	185.74	7,983	11,428
185.23	7,117	7,577	185.75	8,000	11,508
185.24	7,134	7,648	185.76	8,017	11,588
185.25	7,151	7,720	185.77	8,034	11,668
185.26	7,168	7,791	185.78	8,051	11,748
185.27	7,185	7,863	185.79	8,068	11,829
185.28	7,202	7,935	185.80	8,085	11,910
185.29	7,219	8,007	185.81	8,102	11,991
185.30	7,236	8,079	185.82	8,119	12,072
185.31	7,253	8,152	185.83	8,136	12,153
185.32	7,270	8,225	185.84	8,152	12,234
185.33	7,287	8,297	185.85	8,169	12,316
185.34	7,304	8,370	185.86	8,186	12,398
185.35	7,321	8,443	185.87	8,203	12,480
185.36	7,338	8,517	185.88	8,220	12,562
185.37	7,355	8,590	185.89	8,237	12,644
185.38	7,372	8,664	185.90	8,254	12,727
185.39	7,389	8,738	185.91	8,271	12,809
185.40	7,406	8,812	185.92	8,288	12,892
185.41	7,423	8,886	185.93	8,305	12,975
185.42	7,440	8,960	185.94	8,322	13,058
185.43	7,457	9,034	185.95	8,339	13,141
185.44	7,474	9,109	185.96	8,356	13,225
185.45	7,491	9,184	185.97	8,373	13,309
185.46	7,508	9,259	185.98	8,390	13,392
185.47	7,525	9,334	185.99	8,407	13,476
185.48	7,542	9,409	186.00	8,424	13,561
185.49	7,559	9,485	186.01	8,441	13,645
185.50	7,576	9,561	186.02	8,457	13,729
185.51	7,592	9,636	186.03	8,474	13,814
185.52	7,609	9,712	186.04	8,490	13,899
185.53	7,626	9,789	186.05	8,507	13,984
185.54	7,643	9,865	186.06	8,524	14,069
185.55	7,660	9,942	186.07	8,540	14,154

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.08	8,557	14,240	186.60	9,421	18,914
186.09	8,573	14,325	186.61	9,437	19,008
186.10	8,590	14,411	186.62	9,454	19,103
186.11	8,607	14,497	186.63	9,470	19,197
186.12	8,623	14,583	186.64	9,487	19,292
186.13	8,640	14,670	186.65	9,504	19,387
186.14	8,657	14,756	186.66	9,520	19,482
186.15	8,673	14,843	186.67	9,537	19,577
186.16	8,690	14,930	186.68	9,553	19,673
186.17	8,706	15,017	186.69	9,570	19,768
186.18	8,723	15,104	186.70	9,587	19,864
186.19	8,740	15,191	186.71	9,603	19,960
186.20	8,756	15,279	186.72	9,620	20,056
186.21	8,773	15,366	186.73	9,637	20,153
186.22	8,789	15,454	186.74	9,653	20,249
186.23	8,806	15,542	186.75	9,670	20,346
186.24	8,823	15,630	186.76	9,686	20,442
186.25	8,839	15,718	186.77	9,703	20,539
186.26	8,856	15,807	186.78	9,720	20,636
186.27	8,872	15,896	186.79	9,736	20,734
186.28	8,889	15,984	186.80	9,753	20,831
186.29	8,906	16,073	186.81	9,769	20,929
186.30	8,922	16,162	186.82	9,786	21,027
186.31	8,939	16,252	186.83	9,803	21,125
186.32	8,956	16,341	186.84	9,819	21,223
186.33	8,972	16,431	186.85	9,836	21,321
186.34	8,989	16,521	186.86	9,852	21,419
186.35	9,005	16,611	186.87	9,869	21,518
186.36	9,022	16,701	186.88	9,886	21,617
186.37	9,039	16,791	186.89	9,902	21,716
186.38	9,055	16,882	186.90	9,919	21,815
186.39	9,072	16,972	186.91	9,936	21,914
186.40	9,088	17,063	186.92	9,952	22,014
186.41	9,105	17,154	186.93	9,969	22,113
186.42	9,122	17,245	186.94	9,985	22,213
186.43	9,138	17,336	186.95	10,002	22,313
186.44	9,155	17,428	186.96	10,019	22,413
186.45	9,171	17,519	186.97	10,035	22,513
186.46	9,188	17,611	186.98	10,052	22,614
186.47	9,205	17,703	186.99	10,068	22,714
186.48	9,221	17,795	187.00	10,085	22,815
186.49	9,238	17,888	187.01	10,102	22,916
186.50	9,255	17,980	187.02	10,119	23,017
186.51	9,271	18,073	187.03	10,137	23,118
186.52	9,288	18,166	187.04	10,154	23,220
186.53	9,304	18,259	187.05	10,171	23,321
186.54	9,321	18,352	187.06	10,188	23,423
186.55	9,338	18,445	187.07	10,205	23,525
186.56	9,354	18,538	187.08	10,222	23,627
186.57	9,371	18,632	187.09	10,240	23,730
186.58	9,387	18,726	187.10	10,257	23,832
186.59	9,404	18,820	187.11	10,274	23,935

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.12	10,291	24,038	187.64	11,184	29,621
187.13	10,308	24,141	187.65	11,201	29,733
187.14	10,325	24,244	187.66	11,218	29,845
187.15	10,343	24,347	187.67	11,235	29,957
187.16	10,360	24,451	187.68	11,253	30,070
187.17	10,377	24,554	187.69	11,270	30,182
187.18	10,394	24,658	187.70	11,287	30,295
187.19	10,411	24,762	187.71	11,304	30,408
187.20	10,428	24,866	187.72	11,321	30,521
187.21	10,446	24,971	187.73	11,338	30,635
187.22	10,463	25,075	187.74	11,356	30,748
187.23	10,480	25,180	187.75	11,373	30,862
187.24	10,497	25,285	187.76	11,390	30,975
187.25	10,514	25,390	187.77	11,407	31,089
187.26	10,531	25,495	187.78	11,424	31,204
187.27	10,549	25,601	187.79	11,441	31,318
187.28	10,566	25,706	187.80	11,459	31,432
187.29	10,583	25,812	187.81	11,476	31,547
187.30	10,600	25,918	187.82	11,493	31,662
187.31	10,617	26,024	187.83	11,510	31,777
187.32	10,634	26,130	187.84	11,527	31,892
187.33	10,652	26,237	187.85	11,544	32,008
187.34	10,669	26,343	187.86	11,562	32,123
187.35	10,686	26,450	187.87	11,579	32,239
187.36	10,703	26,557	187.88	11,596	32,355
187.37	10,720	26,664	187.89	11,613	32,471
187.38	10,737	26,771	187.90	11,630	32,587
187.39	10,755	26,879	187.91	11,647	32,703
187.40	10,772	26,986	187.92	11,665	32,820
187.41	10,789	27,094	187.93	11,682	32,937
187.42	10,806	27,202	187.94	11,699	33,053
187.43	10,823	27,310	187.95	11,716	33,171
187.44	10,840	27,419	187.96	11,733	33,288
187.45	10,858	27,527	187.97	11,750	33,405
187.46	10,875	27,636	187.98	11,768	33,523
187.47	10,892	27,745	187.99	11,785	33,641
187.48	10,909	27,854	188.00	11,802	33,759
187.49	10,926	27,963	188.01	11,820	33,877
187.50	10,944	28,072	188.02	11,837	33,995
187.51	10,961	28,182	188.03	11,855	34,113
187.52	10,978	28,291	188.04	11,873	34,232
187.53	10,995	28,401	188.05	11,891	34,351
187.54	11,012	28,511	188.06	11,908	34,470
187.55	11,029	28,621	188.07	11,926	34,589
187.56	11,047	28,732	188.08	11,944	34,708
187.57	11,064	28,842	188.09	11,962	34,828
187.58	11,081	28,953	188.10	11,979	34,948
187.59	11,098	29,064	188.11	11,997	35,067
187.60	11,115	29,175	188.12	12,015	35,188
187.61	11,132	29,286	188.13	12,033	35,308
187.62	11,150	29,398	188.14	12,050	35,428
187.63	11,167	29,509	188.15	12,068	35,549

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.16	12,086	35,670	188.68	13,008	42,194
188.17	12,104	35,790	188.69	13,026	42,324
188.18	12,121	35,912	188.70	13,044	42,455
188.19	12,139	36,033	188.71	13,062	42,585
188.20	12,157	36,154	188.72	13,079	42,716
188.21	12,175	36,276	188.73	13,097	42,847
188.22	12,192	36,398	188.74	13,115	42,978
188.23	12,210	36,520	188.75	13,133	43,109
188.24	12,228	36,642	188.76	13,150	43,240
188.25	12,246	36,764	188.77	13,168	43,372
188.26	12,263	36,887	188.78	13,186	43,504
188.27	12,281	37,010	188.79	13,203	43,636
188.28	12,299	37,133	188.80	13,221	43,768
188.29	12,316	37,256	188.81	13,239	43,900
188.30	12,334	37,379	188.82	13,257	44,033
188.31	12,352	37,502	188.83	13,274	44,165
188.32	12,370	37,626	188.84	13,292	44,298
188.33	12,387	37,750	188.85	13,310	44,431
188.34	12,405	37,874	188.86	13,328	44,564
188.35	12,423	37,998	188.87	13,345	44,698
188.36	12,441	38,122	188.88	13,363	44,831
188.37	12,458	38,247	188.89	13,381	44,965
188.38	12,476	38,371	188.90	13,399	45,099
188.39	12,494	38,496	188.91	13,416	45,233
188.40	12,512	38,621	188.92	13,434	45,367
188.41	12,529	38,746	188.93	13,452	45,502
188.42	12,547	38,872	188.94	13,470	45,636
188.43	12,565	38,997	188.95	13,487	45,771
188.44	12,583	39,123	188.96	13,505	45,906
188.45	12,600	39,249	188.97	13,523	46,041
188.46	12,618	39,375	188.98	13,541	46,176
188.47	12,636	39,501	188.99	13,558	46,312
188.48	12,654	39,628	189.00	13,576	46,448
188.49	12,671	39,754	189.01	13,594	46,583
188.50	12,689	39,881	189.02	13,613	46,719
188.51	12,707	40,008	189.03	13,631	46,856
188.52	12,724	40,135	189.04	13,649	46,992
188.53	12,742	40,263	189.05	13,668	47,129
188.54	12,760	40,390	189.06	13,686	47,265
188.55	12,778	40,518	189.07	13,704	47,402
188.56	12,795	40,646	189.08	13,723	47,539
188.57	12,813	40,774	189.09	13,741	47,677
188.58	12,831	40,902	189.10	13,759	47,814
188.59	12,849	41,030	189.11	13,778	47,952
188.60	12,866	41,159	189.12	13,796	48,090
188.61	12,884	41,288	189.13	13,814	48,228
188.62	12,902	41,417	189.14	13,833	48,366
188.63	12,920	41,546	189.15	13,851	48,505
188.64	12,937	41,675	189.16	13,869	48,643
188.65	12,955	41,805	189.17	13,888	48,782
188.66	12,973	41,934	189.18	13,906	48,921
188.67	12,991	42,064	189.19	13,924	49,060

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.20	13,943	49,199	189.72	14,896	56,698
189.21	13,961	49,339	189.73	14,915	56,847
189.22	13,979	49,479	189.74	14,933	56,996
189.23	13,998	49,618	189.75	14,951	57,145
189.24	14,016	49,759	189.76	14,970	57,295
189.25	14,034	49,899	189.77	14,988	57,445
189.26	14,053	50,039	189.78	15,006	57,595
189.27	14,071	50,180	189.79	15,025	57,745
189.28	14,089	50,321	189.80	15,043	57,895
189.29	14,108	50,462	189.81	15,061	58,046
189.30	14,126	50,603	189.82	15,080	58,196
189.31	14,144	50,744	189.83	15,098	58,347
189.32	14,163	50,886			
189.33	14,181	51,027			
189.34	14,199	51,169			
189.35	14,218	51,311			
189.36	14,236	51,454			
189.37	14,254	51,596			
189.38	14,273	51,739			
189.39	14,291	51,882			
189.40	14,309	52,025			
189.41	14,328	52,168			
189.42	14,346	52,311			
189.43	14,365	52,455			
189.44	14,383	52,598			
189.45	14,401	52,742			
189.46	14,420	52,886			
189.47	14,438	53,031			
189.48	14,456	53,175			
189.49	14,475	53,320			
189.50	14,493	53,465			
189.51	14,511	53,610			
189.52	14,530	53,755			
189.53	14,548	53,900			
189.54	14,566	54,046			
189.55	14,585	54,192			
189.56	14,603	54,338			
189.57	14,621	54,484			
189.58	14,640	54,630			
189.59	14,658	54,777			
189.60	14,676	54,923			
189.61	14,695	55,070			
189.62	14,713	55,217			
189.63	14,731	55,364			
189.64	14,750	55,512			
189.65	14,768	55,659			
189.66	14,786	55,807			
189.67	14,805	55,955			
189.68	14,823	56,103			
189.69	14,841	56,251			
189.70	14,860	56,400			
189.71	14,878	56,549			

Summary for Pond B-52: Basin #52

Inflow Area = 1.423 ac, 34.43% Impervious, Inflow Depth = 2.22" for Future 2 yr event
 Inflow = 3.22 cfs @ 12.17 hrs, Volume= 0.263 af
 Outflow = 2.92 cfs @ 12.22 hrs, Volume= 0.215 af, Atten= 9%, Lag= 2.9 min
 Primary = 2.92 cfs @ 12.22 hrs, Volume= 0.215 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 195.53' @ 12.22 hrs Surf.Area= 1,847 sf Storage= 2,864 cf

Plug-Flow detention time= 139.3 min calculated for 0.215 af (82% of inflow)
 Center-of-Mass det. time= 59.4 min (861.1 - 801.7)

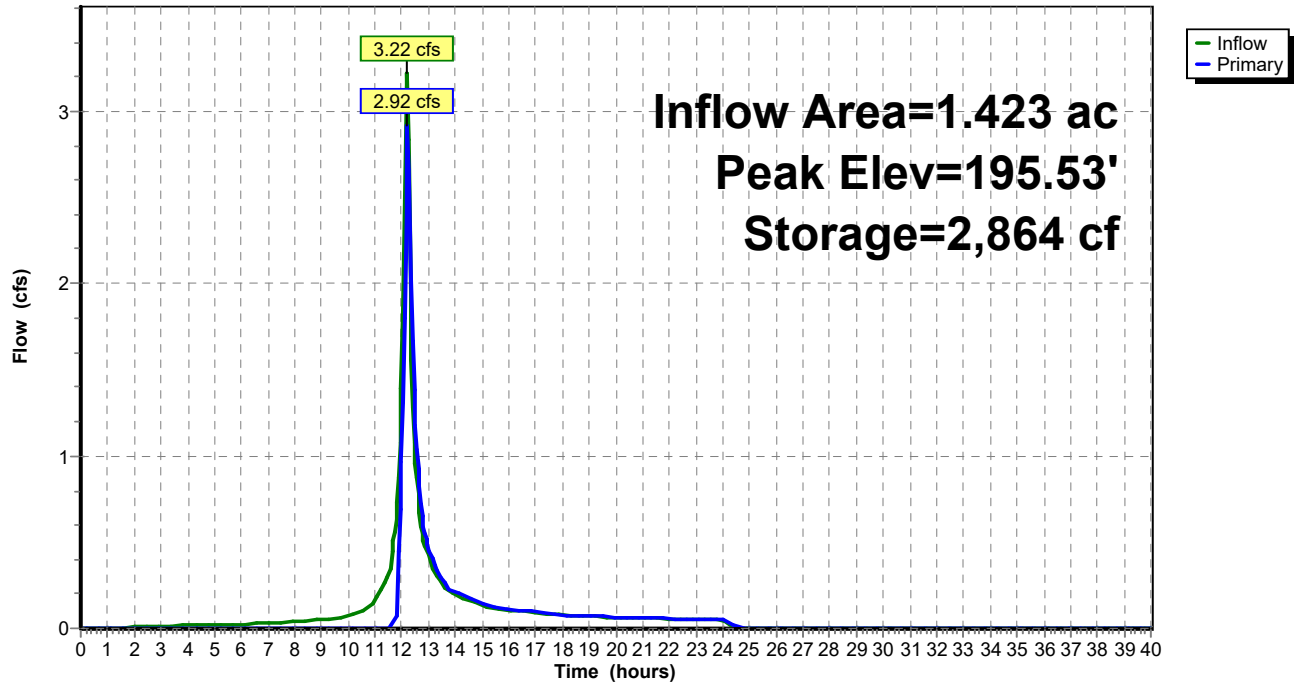
Volume	Invert	Avail.Storage	Storage Description
#1	193.00'	7,751 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
193.00	474	0	0
194.00	970	722	722
195.00	1,523	1,247	1,969
196.00	2,133	1,828	3,797
197.00	2,799	2,466	6,263
197.50	3,154	1,488	7,751

Device	Routing	Invert	Outlet Devices
#1	Primary	192.00'	15.0" Round Culvert L= 163.0' Ke= 0.500 Inlet / Outlet Invert= 192.00' / 191.00' S= 0.0061 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	195.08'	36.0" W x 6.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	195.72'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	197.25'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.86 cfs @ 12.22 hrs HW=195.53' (Free Discharge)

1=Culvert (Passes 2.86 cfs of 7.74 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 2.86 cfs @ 2.14 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-52: Basin #52**Hydrograph**

Stage-Discharge for Pond B-52: Basin #52

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.00	0.00	193.52	0.00	194.04	0.00	194.56	0.00
193.01	0.00	193.53	0.00	194.05	0.00	194.57	0.00
193.02	0.00	193.54	0.00	194.06	0.00	194.58	0.00
193.03	0.00	193.55	0.00	194.07	0.00	194.59	0.00
193.04	0.00	193.56	0.00	194.08	0.00	194.60	0.00
193.05	0.00	193.57	0.00	194.09	0.00	194.61	0.00
193.06	0.00	193.58	0.00	194.10	0.00	194.62	0.00
193.07	0.00	193.59	0.00	194.11	0.00	194.63	0.00
193.08	0.00	193.60	0.00	194.12	0.00	194.64	0.00
193.09	0.00	193.61	0.00	194.13	0.00	194.65	0.00
193.10	0.00	193.62	0.00	194.14	0.00	194.66	0.00
193.11	0.00	193.63	0.00	194.15	0.00	194.67	0.00
193.12	0.00	193.64	0.00	194.16	0.00	194.68	0.00
193.13	0.00	193.65	0.00	194.17	0.00	194.69	0.00
193.14	0.00	193.66	0.00	194.18	0.00	194.70	0.00
193.15	0.00	193.67	0.00	194.19	0.00	194.71	0.00
193.16	0.00	193.68	0.00	194.20	0.00	194.72	0.00
193.17	0.00	193.69	0.00	194.21	0.00	194.73	0.00
193.18	0.00	193.70	0.00	194.22	0.00	194.74	0.00
193.19	0.00	193.71	0.00	194.23	0.00	194.75	0.00
193.20	0.00	193.72	0.00	194.24	0.00	194.76	0.00
193.21	0.00	193.73	0.00	194.25	0.00	194.77	0.00
193.22	0.00	193.74	0.00	194.26	0.00	194.78	0.00
193.23	0.00	193.75	0.00	194.27	0.00	194.79	0.00
193.24	0.00	193.76	0.00	194.28	0.00	194.80	0.00
193.25	0.00	193.77	0.00	194.29	0.00	194.81	0.00
193.26	0.00	193.78	0.00	194.30	0.00	194.82	0.00
193.27	0.00	193.79	0.00	194.31	0.00	194.83	0.00
193.28	0.00	193.80	0.00	194.32	0.00	194.84	0.00
193.29	0.00	193.81	0.00	194.33	0.00	194.85	0.00
193.30	0.00	193.82	0.00	194.34	0.00	194.86	0.00
193.31	0.00	193.83	0.00	194.35	0.00	194.87	0.00
193.32	0.00	193.84	0.00	194.36	0.00	194.88	0.00
193.33	0.00	193.85	0.00	194.37	0.00	194.89	0.00
193.34	0.00	193.86	0.00	194.38	0.00	194.90	0.00
193.35	0.00	193.87	0.00	194.39	0.00	194.91	0.00
193.36	0.00	193.88	0.00	194.40	0.00	194.92	0.00
193.37	0.00	193.89	0.00	194.41	0.00	194.93	0.00
193.38	0.00	193.90	0.00	194.42	0.00	194.94	0.00
193.39	0.00	193.91	0.00	194.43	0.00	194.95	0.00
193.40	0.00	193.92	0.00	194.44	0.00	194.96	0.00
193.41	0.00	193.93	0.00	194.45	0.00	194.97	0.00
193.42	0.00	193.94	0.00	194.46	0.00	194.98	0.00
193.43	0.00	193.95	0.00	194.47	0.00	194.99	0.00
193.44	0.00	193.96	0.00	194.48	0.00	195.00	0.00
193.45	0.00	193.97	0.00	194.49	0.00	195.01	0.00
193.46	0.00	193.98	0.00	194.50	0.00	195.02	0.00
193.47	0.00	193.99	0.00	194.51	0.00	195.03	0.00
193.48	0.00	194.00	0.00	194.52	0.00	195.04	0.00
193.49	0.00	194.01	0.00	194.53	0.00	195.05	0.00
193.50	0.00	194.02	0.00	194.54	0.00	195.06	0.00
193.51	0.00	194.03	0.00	194.55	0.00	195.07	0.00

Stage-Discharge for Pond B-52: Basin #52 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
195.08	0.00	195.60	3.58	196.12	8.41	196.64	8.96
195.09	0.01	195.61	3.67	196.13	8.43	196.65	8.97
195.10	0.03	195.62	3.74	196.14	8.44	196.66	8.98
195.11	0.05	195.63	3.82	196.15	8.45	196.67	8.99
195.12	0.08	195.64	3.89	196.16	8.46	196.68	9.00
195.13	0.11	195.65	3.97	196.17	8.47	196.69	9.01
195.14	0.14	195.66	4.04	196.18	8.48	196.70	9.02
195.15	0.18	195.67	4.10	196.19	8.49	196.71	9.03
195.16	0.22	195.68	4.17	196.20	8.50	196.72	9.04
195.17	0.26	195.69	4.24	196.21	8.51	196.73	9.05
195.18	0.30	195.70	4.30	196.22	8.52	196.74	9.06
195.19	0.35	195.71	4.36	196.23	8.53	196.75	9.07
195.20	0.40	195.72	4.43	196.24	8.54	196.76	9.08
195.21	0.45	195.73	4.50	196.25	8.55	196.77	9.09
195.22	0.50	195.74	4.58	196.26	8.57	196.78	9.10
195.23	0.56	195.75	4.67	196.27	8.58	196.79	9.11
195.24	0.62	195.76	4.77	196.28	8.59	196.80	9.12
195.25	0.67	195.77	4.87	196.29	8.60	196.81	9.13
195.26	0.74	195.78	4.97	196.30	8.61	196.82	9.14
195.27	0.80	195.79	5.08	196.31	8.62	196.83	9.15
195.28	0.86	195.80	5.18	196.32	8.63	196.84	9.16
195.29	0.93	195.81	5.30	196.33	8.64	196.85	9.17
195.30	0.99	195.82	5.41	196.34	8.65	196.86	9.18
195.31	1.06	195.83	5.53	196.35	8.66	196.87	9.19
195.32	1.13	195.84	5.64	196.36	8.67	196.88	9.20
195.33	1.20	195.85	5.76	196.37	8.68	196.89	9.21
195.34	1.28	195.86	5.89	196.38	8.69	196.90	9.22
195.35	1.35	195.87	6.01	196.39	8.70	196.91	9.23
195.36	1.43	195.88	6.14	196.40	8.71	196.92	9.24
195.37	1.50	195.89	6.27	196.41	8.72	196.93	9.25
195.38	1.58	195.90	6.40	196.42	8.73	196.94	9.26
195.39	1.66	195.91	6.53	196.43	8.75	196.95	9.27
195.40	1.74	195.92	6.66	196.44	8.76	196.96	9.28
195.41	1.83	195.93	6.80	196.45	8.77	196.97	9.29
195.42	1.91	195.94	6.93	196.46	8.78	196.98	9.30
195.43	1.99	195.95	7.07	196.47	8.79	196.99	9.31
195.44	2.08	195.96	7.21	196.48	8.80	197.00	9.32
195.45	2.17	195.97	7.35	196.49	8.81	197.01	9.33
195.46	2.26	195.98	7.50	196.50	8.82	197.02	9.34
195.47	2.35	195.99	7.64	196.51	8.83	197.03	9.35
195.48	2.44	196.00	7.79	196.52	8.84	197.04	9.36
195.49	2.53	196.01	7.93	196.53	8.85	197.05	9.37
195.50	2.62	196.02	8.08	196.54	8.86	197.06	9.38
195.51	2.72	196.03	8.23	196.55	8.87	197.07	9.39
195.52	2.81	196.04	8.33	196.56	8.88	197.08	9.40
195.53	2.91	196.05	8.34	196.57	8.89	197.09	9.41
195.54	3.00	196.06	8.35	196.58	8.90	197.10	9.42
195.55	3.10	196.07	8.36	196.59	8.91	197.11	9.43
195.56	3.20	196.08	8.37	196.60	8.92	197.12	9.44
195.57	3.30	196.09	8.38	196.61	8.93	197.13	9.45
195.58	3.40	196.10	8.39	196.62	8.94	197.14	9.46
195.59	3.50	196.11	8.40	196.63	8.95	197.15	9.47

Stage-Discharge for Pond B-52: Basin #52 (continued)

Elevation (feet)	Primary (cfs)
197.16	9.48
197.17	9.49
197.18	9.50
197.19	9.51
197.20	9.52
197.21	9.53
197.22	9.54
197.23	9.55
197.24	9.55
197.25	9.56
197.26	9.69
197.27	9.91
197.28	10.20
197.29	10.54
197.30	10.92
197.31	11.35
197.32	11.81
197.33	12.30
197.34	12.82
197.35	13.38
197.36	13.96
197.37	14.57
197.38	15.21
197.39	15.87
197.40	16.55
197.41	17.26
197.42	17.99
197.43	18.75
197.44	19.52
197.45	20.32
197.46	21.17
197.47	22.06
197.48	22.96
197.49	23.90
197.50	24.85

Stage-Area-Storage for Pond B-52: Basin #52

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.00	474	0	193.52	732	314
193.01	479	5	193.53	737	321
193.02	484	10	193.54	742	328
193.03	489	14	193.55	747	336
193.04	494	19	193.56	752	343
193.05	499	24	193.57	757	351
193.06	504	29	193.58	762	358
193.07	509	34	193.59	767	366
193.08	514	40	193.60	772	374
193.09	519	45	193.61	777	381
193.10	524	50	193.62	782	389
193.11	529	55	193.63	786	397
193.12	534	60	193.64	791	405
193.13	538	66	193.65	796	413
193.14	543	71	193.66	801	421
193.15	548	77	193.67	806	429
193.16	553	82	193.68	811	437
193.17	558	88	193.69	816	445
193.18	563	93	193.70	821	453
193.19	568	99	193.71	826	462
193.20	573	105	193.72	831	470
193.21	578	110	193.73	836	478
193.22	583	116	193.74	841	487
193.23	588	122	193.75	846	495
193.24	593	128	193.76	851	503
193.25	598	134	193.77	856	512
193.26	603	140	193.78	861	521
193.27	608	146	193.79	866	529
193.28	613	152	193.80	871	538
193.29	618	158	193.81	876	547
193.30	623	165	193.82	881	555
193.31	628	171	193.83	886	564
193.32	633	177	193.84	891	573
193.33	638	183	193.85	896	582
193.34	643	190	193.86	901	591
193.35	648	196	193.87	906	600
193.36	653	203	193.88	910	609
193.37	658	209	193.89	915	618
193.38	662	216	193.90	920	627
193.39	667	223	193.91	925	637
193.40	672	229	193.92	930	646
193.41	677	236	193.93	935	655
193.42	682	243	193.94	940	665
193.43	687	250	193.95	945	674
193.44	692	257	193.96	950	684
193.45	697	264	193.97	955	693
193.46	702	271	193.98	960	703
193.47	707	278	193.99	965	712
193.48	712	285	194.00	970	722
193.49	717	292	194.01	976	732
193.50	722	299	194.02	981	742
193.51	727	306	194.03	987	751

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.04	992	761	194.56	1,280	1,352
194.05	998	771	194.57	1,285	1,365
194.06	1,003	781	194.58	1,291	1,378
194.07	1,009	791	194.59	1,296	1,391
194.08	1,014	801	194.60	1,302	1,404
194.09	1,020	812	194.61	1,307	1,417
194.10	1,025	822	194.62	1,313	1,430
194.11	1,031	832	194.63	1,318	1,443
194.12	1,036	842	194.64	1,324	1,456
194.13	1,042	853	194.65	1,329	1,469
194.14	1,047	863	194.66	1,335	1,483
194.15	1,053	874	194.67	1,341	1,496
194.16	1,058	884	194.68	1,346	1,509
194.17	1,064	895	194.69	1,352	1,523
194.18	1,070	906	194.70	1,357	1,536
194.19	1,075	916	194.71	1,363	1,550
194.20	1,081	927	194.72	1,368	1,564
194.21	1,086	938	194.73	1,374	1,577
194.22	1,092	949	194.74	1,379	1,591
194.23	1,097	960	194.75	1,385	1,605
194.24	1,103	971	194.76	1,390	1,619
194.25	1,108	982	194.77	1,396	1,633
194.26	1,114	993	194.78	1,401	1,647
194.27	1,119	1,004	194.79	1,407	1,661
194.28	1,125	1,015	194.80	1,412	1,675
194.29	1,130	1,027	194.81	1,418	1,689
194.30	1,136	1,038	194.82	1,423	1,703
194.31	1,141	1,049	194.83	1,429	1,718
194.32	1,147	1,061	194.84	1,435	1,732
194.33	1,152	1,072	194.85	1,440	1,746
194.34	1,158	1,084	194.86	1,446	1,761
194.35	1,164	1,095	194.87	1,451	1,775
194.36	1,169	1,107	194.88	1,457	1,790
194.37	1,175	1,119	194.89	1,462	1,804
194.38	1,180	1,131	194.90	1,468	1,819
194.39	1,186	1,142	194.91	1,473	1,834
194.40	1,191	1,154	194.92	1,479	1,848
194.41	1,197	1,166	194.93	1,484	1,863
194.42	1,202	1,178	194.94	1,490	1,878
194.43	1,208	1,190	194.95	1,495	1,893
194.44	1,213	1,202	194.96	1,501	1,908
194.45	1,219	1,214	194.97	1,506	1,923
194.46	1,224	1,227	194.98	1,512	1,938
194.47	1,230	1,239	194.99	1,517	1,953
194.48	1,235	1,251	195.00	1,523	1,969
194.49	1,241	1,264	195.01	1,529	1,984
194.50	1,247	1,276	195.02	1,535	1,999
194.51	1,252	1,289	195.03	1,541	2,014
194.52	1,258	1,301	195.04	1,547	2,030
194.53	1,263	1,314	195.05	1,554	2,045
194.54	1,269	1,326	195.06	1,560	2,061
194.55	1,274	1,339	195.07	1,566	2,077

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.08	1,572	2,092	195.60	1,889	2,992
195.09	1,578	2,108	195.61	1,895	3,011
195.10	1,584	2,124	195.62	1,901	3,030
195.11	1,590	2,140	195.63	1,907	3,049
195.12	1,596	2,156	195.64	1,913	3,068
195.13	1,602	2,172	195.65	1,920	3,087
195.14	1,608	2,188	195.66	1,926	3,107
195.15	1,615	2,204	195.67	1,932	3,126
195.16	1,621	2,220	195.68	1,938	3,145
195.17	1,627	2,236	195.69	1,944	3,165
195.18	1,633	2,253	195.70	1,950	3,184
195.19	1,639	2,269	195.71	1,956	3,204
195.20	1,645	2,285	195.72	1,962	3,223
195.21	1,651	2,302	195.73	1,968	3,243
195.22	1,657	2,318	195.74	1,974	3,263
195.23	1,663	2,335	195.75	1,981	3,282
195.24	1,669	2,352	195.76	1,987	3,302
195.25	1,676	2,368	195.77	1,993	3,322
195.26	1,682	2,385	195.78	1,999	3,342
195.27	1,688	2,402	195.79	2,005	3,362
195.28	1,694	2,419	195.80	2,011	3,382
195.29	1,700	2,436	195.81	2,017	3,402
195.30	1,706	2,453	195.82	2,023	3,422
195.31	1,712	2,470	195.83	2,029	3,443
195.32	1,718	2,487	195.84	2,035	3,463
195.33	1,724	2,504	195.85	2,041	3,483
195.34	1,730	2,522	195.86	2,048	3,504
195.35	1,736	2,539	195.87	2,054	3,524
195.36	1,743	2,556	195.88	2,060	3,545
195.37	1,749	2,574	195.89	2,066	3,566
195.38	1,755	2,591	195.90	2,072	3,586
195.39	1,761	2,609	195.91	2,078	3,607
195.40	1,767	2,627	195.92	2,084	3,628
195.41	1,773	2,644	195.93	2,090	3,649
195.42	1,779	2,662	195.94	2,096	3,670
195.43	1,785	2,680	195.95	2,102	3,691
195.44	1,791	2,698	195.96	2,109	3,712
195.45	1,797	2,716	195.97	2,115	3,733
195.46	1,804	2,734	195.98	2,121	3,754
195.47	1,810	2,752	195.99	2,127	3,775
195.48	1,816	2,770	196.00	2,133	3,797
195.49	1,822	2,788	196.01	2,140	3,818
195.50	1,828	2,806	196.02	2,146	3,839
195.51	1,834	2,825	196.03	2,153	3,861
195.52	1,840	2,843	196.04	2,160	3,882
195.53	1,846	2,861	196.05	2,166	3,904
195.54	1,852	2,880	196.06	2,173	3,926
195.55	1,859	2,898	196.07	2,180	3,947
195.56	1,865	2,917	196.08	2,186	3,969
195.57	1,871	2,936	196.09	2,193	3,991
195.58	1,877	2,954	196.10	2,200	4,013
195.59	1,883	2,973	196.11	2,206	4,035

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.12	2,213	4,057	196.64	2,559	5,298
196.13	2,220	4,079	196.65	2,566	5,324
196.14	2,226	4,102	196.66	2,573	5,349
196.15	2,233	4,124	196.67	2,579	5,375
196.16	2,240	4,146	196.68	2,586	5,401
196.17	2,246	4,169	196.69	2,593	5,427
196.18	2,253	4,191	196.70	2,599	5,453
196.19	2,260	4,214	196.71	2,606	5,479
196.20	2,266	4,236	196.72	2,613	5,505
196.21	2,273	4,259	196.73	2,619	5,531
196.22	2,280	4,282	196.74	2,626	5,557
196.23	2,286	4,305	196.75	2,633	5,584
196.24	2,293	4,328	196.76	2,639	5,610
196.25	2,300	4,351	196.77	2,646	5,636
196.26	2,306	4,374	196.78	2,652	5,663
196.27	2,313	4,397	196.79	2,659	5,689
196.28	2,319	4,420	196.80	2,666	5,716
196.29	2,326	4,443	196.81	2,672	5,743
196.30	2,333	4,466	196.82	2,679	5,769
196.31	2,339	4,490	196.83	2,686	5,796
196.32	2,346	4,513	196.84	2,692	5,823
196.33	2,353	4,537	196.85	2,699	5,850
196.34	2,359	4,560	196.86	2,706	5,877
196.35	2,366	4,584	196.87	2,712	5,904
196.36	2,373	4,608	196.88	2,719	5,931
196.37	2,379	4,631	196.89	2,726	5,959
196.38	2,386	4,655	196.90	2,732	5,986
196.39	2,393	4,679	196.91	2,739	6,013
196.40	2,399	4,703	196.92	2,746	6,041
196.41	2,406	4,727	196.93	2,752	6,068
196.42	2,413	4,751	196.94	2,759	6,096
196.43	2,419	4,775	196.95	2,766	6,123
196.44	2,426	4,799	196.96	2,772	6,151
196.45	2,433	4,824	196.97	2,779	6,179
196.46	2,439	4,848	196.98	2,786	6,207
196.47	2,446	4,873	196.99	2,792	6,235
196.48	2,453	4,897	197.00	2,799	6,263
196.49	2,459	4,922	197.01	2,806	6,291
196.50	2,466	4,946	197.02	2,813	6,319
196.51	2,473	4,971	197.03	2,820	6,347
196.52	2,479	4,996	197.04	2,827	6,375
196.53	2,486	5,021	197.05	2,835	6,403
196.54	2,493	5,045	197.06	2,842	6,432
196.55	2,499	5,070	197.07	2,849	6,460
196.56	2,506	5,095	197.08	2,856	6,489
196.57	2,513	5,121	197.09	2,863	6,517
196.58	2,519	5,146	197.10	2,870	6,546
196.59	2,526	5,171	197.11	2,877	6,575
196.60	2,533	5,196	197.12	2,884	6,603
196.61	2,539	5,222	197.13	2,891	6,632
196.62	2,546	5,247	197.14	2,898	6,661
196.63	2,553	5,272	197.15	2,906	6,690

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.16	2,913	6,719
197.17	2,920	6,749
197.18	2,927	6,778
197.19	2,934	6,807
197.20	2,941	6,836
197.21	2,948	6,866
197.22	2,955	6,895
197.23	2,962	6,925
197.24	2,969	6,955
197.25	2,977	6,984
197.26	2,984	7,014
197.27	2,991	7,044
197.28	2,998	7,074
197.29	3,005	7,104
197.30	3,012	7,134
197.31	3,019	7,164
197.32	3,026	7,195
197.33	3,033	7,225
197.34	3,040	7,255
197.35	3,047	7,286
197.36	3,055	7,316
197.37	3,062	7,347
197.38	3,069	7,377
197.39	3,076	7,408
197.40	3,083	7,439
197.41	3,090	7,470
197.42	3,097	7,501
197.43	3,104	7,532
197.44	3,111	7,563
197.45	3,118	7,594
197.46	3,126	7,625
197.47	3,133	7,656
197.48	3,140	7,688
197.49	3,147	7,719
197.50	3,154	7,751

Summary for Pond B-53: Basin #53

Inflow Area = 2.540 ac, 47.80% Impervious, Inflow Depth = 2.50" for Future 2 yr event
 Inflow = 6.38 cfs @ 12.17 hrs, Volume= 0.530 af
 Outflow = 2.61 cfs @ 12.39 hrs, Volume= 0.417 af, Atten= 59%, Lag= 13.0 min
 Primary = 2.61 cfs @ 12.39 hrs, Volume= 0.417 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 202.78' @ 12.39 hrs Surf.Area= 5,943 sf Storage= 9,730 cf

Plug-Flow detention time= 181.4 min calculated for 0.417 af (79% of inflow)
 Center-of-Mass det. time= 96.4 min (885.0 - 788.7)

Volume	Invert	Avail.Storage	Storage Description
#1	201.00'	24,392 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.00	4,695	0	0
202.00	5,685	5,190	5,190
203.00	6,015	5,850	11,040
204.00	6,676	6,346	17,386
205.00	7,336	7,006	24,392

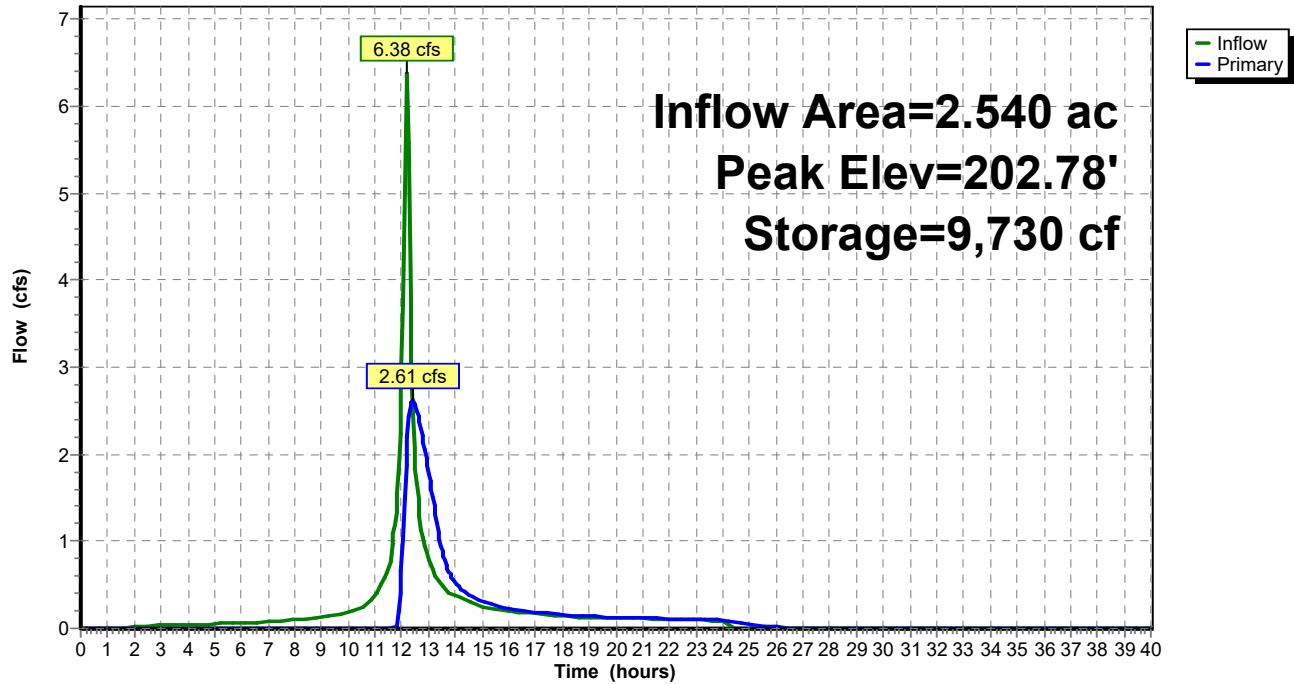
Device	Routing	Invert	Outlet Devices
#1	Primary	201.00'	24.0" Round Culvert L= 39.0' Ke= 0.500 Inlet / Outlet Invert= 201.00' / 200.10' S= 0.0231 ' / Cc= 0.900 n= 0.013, Flow Area= 3.14 sf
#2	Device 1	201.95'	24.0" W x 4.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	204.43'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.61 cfs @ 12.39 hrs HW=202.78' (Free Discharge)

1=Culvert (Passes 2.61 cfs of 13.41 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 2.61 cfs @ 3.91 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-53: Basin #53

Hydrograph



Stage-Discharge for Pond B-53: Basin #53

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.00	0.00	201.52	0.00	202.04	0.17	202.56	2.12
201.01	0.00	201.53	0.00	202.05	0.20	202.57	2.15
201.02	0.00	201.54	0.00	202.06	0.23	202.58	2.17
201.03	0.00	201.55	0.00	202.07	0.27	202.59	2.20
201.04	0.00	201.56	0.00	202.08	0.30	202.60	2.22
201.05	0.00	201.57	0.00	202.09	0.34	202.61	2.24
201.06	0.00	201.58	0.00	202.10	0.37	202.62	2.27
201.07	0.00	201.59	0.00	202.11	0.41	202.63	2.29
201.08	0.00	201.60	0.00	202.12	0.45	202.64	2.31
201.09	0.00	201.61	0.00	202.13	0.49	202.65	2.33
201.10	0.00	201.62	0.00	202.14	0.53	202.66	2.36
201.11	0.00	201.63	0.00	202.15	0.57	202.67	2.38
201.12	0.00	201.64	0.00	202.16	0.62	202.68	2.40
201.13	0.00	201.65	0.00	202.17	0.66	202.69	2.42
201.14	0.00	201.66	0.00	202.18	0.71	202.70	2.44
201.15	0.00	201.67	0.00	202.19	0.75	202.71	2.46
201.16	0.00	201.68	0.00	202.20	0.80	202.72	2.49
201.17	0.00	201.69	0.00	202.21	0.85	202.73	2.51
201.18	0.00	201.70	0.00	202.22	0.90	202.74	2.53
201.19	0.00	201.71	0.00	202.23	0.95	202.75	2.55
201.20	0.00	201.72	0.00	202.24	1.00	202.76	2.57
201.21	0.00	201.73	0.00	202.25	1.05	202.77	2.59
201.22	0.00	201.74	0.00	202.26	1.11	202.78	2.61
201.23	0.00	201.75	0.00	202.27	1.16	202.79	2.63
201.24	0.00	201.76	0.00	202.28	1.22	202.80	2.65
201.25	0.00	201.77	0.00	202.29	1.27	202.81	2.67
201.26	0.00	201.78	0.00	202.30	1.32	202.82	2.69
201.27	0.00	201.79	0.00	202.31	1.36	202.83	2.70
201.28	0.00	201.80	0.00	202.32	1.40	202.84	2.72
201.29	0.00	201.81	0.00	202.33	1.44	202.85	2.74
201.30	0.00	201.82	0.00	202.34	1.48	202.86	2.76
201.31	0.00	201.83	0.00	202.35	1.51	202.87	2.78
201.32	0.00	201.84	0.00	202.36	1.55	202.88	2.80
201.33	0.00	201.85	0.00	202.37	1.58	202.89	2.82
201.34	0.00	201.86	0.00	202.38	1.62	202.90	2.84
201.35	0.00	201.87	0.00	202.39	1.65	202.91	2.85
201.36	0.00	201.88	0.00	202.40	1.68	202.92	2.87
201.37	0.00	201.89	0.00	202.41	1.71	202.93	2.89
201.38	0.00	201.90	0.00	202.42	1.74	202.94	2.91
201.39	0.00	201.91	0.00	202.43	1.77	202.95	2.93
201.40	0.00	201.92	0.00	202.44	1.80	202.96	2.94
201.41	0.00	201.93	0.00	202.45	1.83	202.97	2.96
201.42	0.00	201.94	0.00	202.46	1.86	202.98	2.98
201.43	0.00	201.95	0.00	202.47	1.89	202.99	3.00
201.44	0.00	201.96	0.01	202.48	1.92	203.00	3.01
201.45	0.00	201.97	0.02	202.49	1.94	203.01	3.04
201.46	0.00	201.98	0.03	202.50	1.97	203.02	3.08
201.47	0.00	201.99	0.05	202.51	2.00	203.03	3.13
201.48	0.00	202.00	0.07	202.52	2.02	203.04	3.18
201.49	0.00	202.01	0.09	202.53	2.05	203.05	3.24
201.50	0.00	202.02	0.12	202.54	2.07	203.06	3.31
201.51	0.00	202.03	0.15	202.55	2.10	203.07	3.37

Stage-Discharge for Pond B-53: Basin #53 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.08	3.44	203.60	9.80	204.12	19.18	204.64	35.99
203.09	3.51	203.61	9.96	204.13	19.38	204.65	36.91
203.10	3.59	203.62	10.12	204.14	19.58	204.66	37.85
203.11	3.67	203.63	10.28	204.15	19.78	204.67	38.82
203.12	3.75	203.64	10.44	204.16	19.98	204.68	39.82
203.13	3.84	203.65	10.60	204.17	20.18	204.69	40.84
203.14	3.92	203.66	10.77	204.18	20.39	204.70	41.88
203.15	4.01	203.67	10.93	204.19	20.59	204.71	42.95
203.16	4.11	203.68	11.10	204.20	20.79	204.72	44.04
203.17	4.20	203.69	11.26	204.21	21.00	204.73	45.16
203.18	4.30	203.70	11.43	204.22	21.20	204.74	46.30
203.19	4.40	203.71	11.60	204.23	21.41	204.75	47.47
203.20	4.50	203.72	11.77	204.24	21.62	204.76	48.66
203.21	4.60	203.73	11.94	204.25	21.82	204.77	49.88
203.22	4.70	203.74	12.11	204.26	22.03	204.78	51.12
203.23	4.81	203.75	12.28	204.27	22.24	204.79	52.38
203.24	4.92	203.76	12.45	204.28	22.45	204.80	53.67
203.25	5.03	203.77	12.62	204.29	22.66	204.81	54.98
203.26	5.14	203.78	12.80	204.30	22.87	204.82	56.32
203.27	5.25	203.79	12.97	204.31	22.99	204.83	57.68
203.28	5.37	203.80	13.15	204.32	23.04	204.84	59.09
203.29	5.49	203.81	13.32	204.33	23.09	204.85	60.52
203.30	5.61	203.82	13.50	204.34	23.14	204.86	61.99
203.31	5.73	203.83	13.68	204.35	23.19	204.87	63.48
203.32	5.85	203.84	13.86	204.36	23.24	204.88	64.99
203.33	5.97	203.85	14.04	204.37	23.29	204.89	66.53
203.34	6.10	203.86	14.22	204.38	23.34	204.90	68.10
203.35	6.22	203.87	14.40	204.39	23.39	204.91	69.69
203.36	6.35	203.88	14.58	204.40	23.43	204.92	71.31
203.37	6.48	203.89	14.77	204.41	23.48	204.93	72.96
203.38	6.61	203.90	14.95	204.42	23.53	204.94	74.63
203.39	6.74	203.91	15.14	204.43	23.58	204.95	76.33
203.40	6.88	203.92	15.32	204.44	23.75	204.96	78.05
203.41	7.01	203.93	15.51	204.45	24.01	204.97	79.81
203.42	7.15	203.94	15.69	204.46	24.33	204.98	81.59
203.43	7.29	203.95	15.88	204.47	24.71	204.99	83.39
203.44	7.42	203.96	16.07	204.48	25.13	205.00	85.22
203.45	7.56	203.97	16.26	204.49	25.59		
203.46	7.70	203.98	16.45	204.50	26.09		
203.47	7.85	203.99	16.64	204.51	26.62		
203.48	7.99	204.00	16.83	204.52	27.19		
203.49	8.14	204.01	17.02	204.53	27.78		
203.50	8.28	204.02	17.21	204.54	28.40		
203.51	8.43	204.03	17.41	204.55	29.05		
203.52	8.58	204.04	17.60	204.56	29.72		
203.53	8.73	204.05	17.80	204.57	30.42		
203.54	8.88	204.06	17.99	204.58	31.14		
203.55	9.03	204.07	18.19	204.59	31.89		
203.56	9.18	204.08	18.38	204.60	32.66		
203.57	9.34	204.09	18.58	204.61	33.45		
203.58	9.49	204.10	18.78	204.62	34.26		
203.59	9.65	204.11	18.98	204.63	35.10		

Stage-Area-Storage for Pond B-53: Basin #53

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.00	4,695	0	201.52	5,210	2,575
201.01	4,705	47	201.53	5,220	2,627
201.02	4,715	94	201.54	5,230	2,680
201.03	4,725	141	201.55	5,240	2,732
201.04	4,735	189	201.56	5,249	2,784
201.05	4,745	236	201.57	5,259	2,837
201.06	4,754	283	201.58	5,269	2,890
201.07	4,764	331	201.59	5,279	2,942
201.08	4,774	379	201.60	5,289	2,995
201.09	4,784	427	201.61	5,299	3,048
201.10	4,794	474	201.62	5,309	3,101
201.11	4,804	522	201.63	5,319	3,154
201.12	4,814	571	201.64	5,329	3,208
201.13	4,824	619	201.65	5,339	3,261
201.14	4,834	667	201.66	5,348	3,314
201.15	4,844	715	201.67	5,358	3,368
201.16	4,853	764	201.68	5,368	3,421
201.17	4,863	812	201.69	5,378	3,475
201.18	4,873	861	201.70	5,388	3,529
201.19	4,883	910	201.71	5,398	3,583
201.20	4,893	959	201.72	5,408	3,637
201.21	4,903	1,008	201.73	5,418	3,691
201.22	4,913	1,057	201.74	5,428	3,745
201.23	4,923	1,106	201.75	5,438	3,800
201.24	4,933	1,155	201.76	5,447	3,854
201.25	4,943	1,205	201.77	5,457	3,909
201.26	4,952	1,254	201.78	5,467	3,963
201.27	4,962	1,304	201.79	5,477	4,018
201.28	4,972	1,353	201.80	5,487	4,073
201.29	4,982	1,403	201.81	5,497	4,128
201.30	4,992	1,453	201.82	5,507	4,183
201.31	5,002	1,503	201.83	5,517	4,238
201.32	5,012	1,553	201.84	5,527	4,293
201.33	5,022	1,603	201.85	5,536	4,348
201.34	5,032	1,654	201.86	5,546	4,404
201.35	5,041	1,704	201.87	5,556	4,459
201.36	5,051	1,754	201.88	5,566	4,515
201.37	5,061	1,805	201.89	5,576	4,571
201.38	5,071	1,856	201.90	5,586	4,626
201.39	5,081	1,906	201.91	5,596	4,682
201.40	5,091	1,957	201.92	5,606	4,738
201.41	5,101	2,008	201.93	5,616	4,794
201.42	5,111	2,059	201.94	5,626	4,851
201.43	5,121	2,110	201.95	5,635	4,907
201.44	5,131	2,162	201.96	5,645	4,963
201.45	5,140	2,213	201.97	5,655	5,020
201.46	5,150	2,264	201.98	5,665	5,076
201.47	5,160	2,316	201.99	5,675	5,133
201.48	5,170	2,368	202.00	5,685	5,190
201.49	5,180	2,419	202.01	5,688	5,247
201.50	5,190	2,471	202.02	5,692	5,304
201.51	5,200	2,523	202.03	5,695	5,361

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.04	5,698	5,418	202.56	5,870	8,425
202.05	5,702	5,475	202.57	5,873	8,484
202.06	5,705	5,532	202.58	5,876	8,543
202.07	5,708	5,589	202.59	5,880	8,602
202.08	5,711	5,646	202.60	5,883	8,660
202.09	5,715	5,703	202.61	5,886	8,719
202.10	5,718	5,760	202.62	5,890	8,778
202.11	5,721	5,817	202.63	5,893	8,837
202.12	5,725	5,875	202.64	5,896	8,896
202.13	5,728	5,932	202.65	5,900	8,955
202.14	5,731	5,989	202.66	5,903	9,014
202.15	5,735	6,046	202.67	5,906	9,073
202.16	5,738	6,104	202.68	5,909	9,132
202.17	5,741	6,161	202.69	5,913	9,191
202.18	5,744	6,219	202.70	5,916	9,250
202.19	5,748	6,276	202.71	5,919	9,310
202.20	5,751	6,334	202.72	5,923	9,369
202.21	5,754	6,391	202.73	5,926	9,428
202.22	5,758	6,449	202.74	5,929	9,487
202.23	5,761	6,506	202.75	5,933	9,547
202.24	5,764	6,564	202.76	5,936	9,606
202.25	5,768	6,622	202.77	5,939	9,665
202.26	5,771	6,679	202.78	5,942	9,725
202.27	5,774	6,737	202.79	5,946	9,784
202.28	5,777	6,795	202.80	5,949	9,844
202.29	5,781	6,853	202.81	5,952	9,903
202.30	5,784	6,910	202.82	5,956	9,963
202.31	5,787	6,968	202.83	5,959	10,022
202.32	5,791	7,026	202.84	5,962	10,082
202.33	5,794	7,084	202.85	5,965	10,141
202.34	5,797	7,142	202.86	5,969	10,201
202.35	5,800	7,200	202.87	5,972	10,261
202.36	5,804	7,258	202.88	5,975	10,321
202.37	5,807	7,316	202.89	5,979	10,380
202.38	5,810	7,374	202.90	5,982	10,440
202.39	5,814	7,432	202.91	5,985	10,500
202.40	5,817	7,490	202.92	5,989	10,560
202.41	5,820	7,549	202.93	5,992	10,620
202.42	5,824	7,607	202.94	5,995	10,680
202.43	5,827	7,665	202.95	5,998	10,740
202.44	5,830	7,723	202.96	6,002	10,800
202.45	5,833	7,782	202.97	6,005	10,860
202.46	5,837	7,840	202.98	6,008	10,920
202.47	5,840	7,898	202.99	6,012	10,980
202.48	5,843	7,957	203.00	6,015	11,040
202.49	5,847	8,015	203.01	6,022	11,100
202.50	5,850	8,074	203.02	6,028	11,160
202.51	5,853	8,132	203.03	6,035	11,221
202.52	5,857	8,191	203.04	6,041	11,281
202.53	5,860	8,249	203.05	6,048	11,342
202.54	5,863	8,308	203.06	6,055	11,402
202.55	5,867	8,367	203.07	6,061	11,463

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.08	6,068	11,523	203.60	6,412	14,768
203.09	6,074	11,584	203.61	6,418	14,832
203.10	6,081	11,645	203.62	6,425	14,896
203.11	6,088	11,706	203.63	6,431	14,961
203.12	6,094	11,767	203.64	6,438	15,025
203.13	6,101	11,828	203.65	6,445	15,089
203.14	6,108	11,889	203.66	6,451	15,154
203.15	6,114	11,950	203.67	6,458	15,218
203.16	6,121	12,011	203.68	6,464	15,283
203.17	6,127	12,072	203.69	6,471	15,348
203.18	6,134	12,133	203.70	6,478	15,412
203.19	6,141	12,195	203.71	6,484	15,477
203.20	6,147	12,256	203.72	6,491	15,542
203.21	6,154	12,318	203.73	6,498	15,607
203.22	6,160	12,379	203.74	6,504	15,672
203.23	6,167	12,441	203.75	6,511	15,737
203.24	6,174	12,503	203.76	6,517	15,802
203.25	6,180	12,564	203.77	6,524	15,868
203.26	6,187	12,626	203.78	6,531	15,933
203.27	6,193	12,688	203.79	6,537	15,998
203.28	6,200	12,750	203.80	6,544	16,064
203.29	6,207	12,812	203.81	6,550	16,129
203.30	6,213	12,874	203.82	6,557	16,195
203.31	6,220	12,936	203.83	6,564	16,260
203.32	6,227	12,999	203.84	6,570	16,326
203.33	6,233	13,061	203.85	6,577	16,392
203.34	6,240	13,123	203.86	6,583	16,457
203.35	6,246	13,186	203.87	6,590	16,523
203.36	6,253	13,248	203.88	6,597	16,589
203.37	6,260	13,311	203.89	6,603	16,655
203.38	6,266	13,373	203.90	6,610	16,721
203.39	6,273	13,436	203.91	6,617	16,787
203.40	6,279	13,499	203.92	6,623	16,854
203.41	6,286	13,562	203.93	6,630	16,920
203.42	6,293	13,625	203.94	6,636	16,986
203.43	6,299	13,688	203.95	6,643	17,053
203.44	6,306	13,751	203.96	6,650	17,119
203.45	6,312	13,814	203.97	6,656	17,186
203.46	6,319	13,877	203.98	6,663	17,252
203.47	6,326	13,940	203.99	6,669	17,319
203.48	6,332	14,003	204.00	6,676	17,386
203.49	6,339	14,067	204.01	6,683	17,452
203.50	6,346	14,130	204.02	6,689	17,519
203.51	6,352	14,194	204.03	6,696	17,586
203.52	6,359	14,257	204.04	6,702	17,653
203.53	6,365	14,321	204.05	6,709	17,720
203.54	6,372	14,384	204.06	6,716	17,787
203.55	6,379	14,448	204.07	6,722	17,854
203.56	6,385	14,512	204.08	6,729	17,922
203.57	6,392	14,576	204.09	6,735	17,989
203.58	6,398	14,640	204.10	6,742	18,056
203.59	6,405	14,704	204.11	6,749	18,124

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.12	6,755	18,191	204.64	7,098	21,793
204.13	6,762	18,259	204.65	7,105	21,864
204.14	6,768	18,327	204.66	7,112	21,935
204.15	6,775	18,394	204.67	7,118	22,007
204.16	6,782	18,462	204.68	7,125	22,078
204.17	6,788	18,530	204.69	7,131	22,149
204.18	6,795	18,598	204.70	7,138	22,220
204.19	6,801	18,666	204.71	7,145	22,292
204.20	6,808	18,734	204.72	7,151	22,363
204.21	6,815	18,802	204.73	7,158	22,435
204.22	6,821	18,870	204.74	7,164	22,506
204.23	6,828	18,938	204.75	7,171	22,578
204.24	6,834	19,007	204.76	7,178	22,650
204.25	6,841	19,075	204.77	7,184	22,722
204.26	6,848	19,144	204.78	7,191	22,794
204.27	6,854	19,212	204.79	7,197	22,865
204.28	6,861	19,281	204.80	7,204	22,938
204.29	6,867	19,349	204.81	7,211	23,010
204.30	6,874	19,418	204.82	7,217	23,082
204.31	6,881	19,487	204.83	7,224	23,154
204.32	6,887	19,556	204.84	7,230	23,226
204.33	6,894	19,625	204.85	7,237	23,299
204.34	6,900	19,693	204.86	7,244	23,371
204.35	6,907	19,763	204.87	7,250	23,443
204.36	6,914	19,832	204.88	7,257	23,516
204.37	6,920	19,901	204.89	7,263	23,589
204.38	6,927	19,970	204.90	7,270	23,661
204.39	6,933	20,039	204.91	7,277	23,734
204.40	6,940	20,109	204.92	7,283	23,807
204.41	6,947	20,178	204.93	7,290	23,880
204.42	6,953	20,248	204.94	7,296	23,953
204.43	6,960	20,317	204.95	7,303	24,026
204.44	6,966	20,387	204.96	7,310	24,099
204.45	6,973	20,457	204.97	7,316	24,172
204.46	6,980	20,526	204.98	7,323	24,245
204.47	6,986	20,596	204.99	7,329	24,318
204.48	6,993	20,666	205.00	7,336	24,392
204.49	6,999	20,736			
204.50	7,006	20,806			
204.51	7,013	20,876			
204.52	7,019	20,946			
204.53	7,026	21,016			
204.54	7,032	21,087			
204.55	7,039	21,157			
204.56	7,046	21,228			
204.57	7,052	21,298			
204.58	7,059	21,369			
204.59	7,065	21,439			
204.60	7,072	21,510			
204.61	7,079	21,581			
204.62	7,085	21,651			
204.63	7,092	21,722			

Summary for Pond B-54: Basin #54

Inflow Area = 2.570 ac, 60.47% Impervious, Inflow Depth = 2.77" for Future 2 yr event
 Inflow = 7.07 cfs @ 12.17 hrs, Volume= 0.594 af
 Outflow = 3.58 cfs @ 12.34 hrs, Volume= 0.454 af, Atten= 49%, Lag= 10.0 min
 Primary = 3.58 cfs @ 12.34 hrs, Volume= 0.454 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 203.16' @ 12.34 hrs Surf.Area= 5,866 sf Storage= 11,134 cf

Plug-Flow detention time= 189.7 min calculated for 0.454 af (76% of inflow)
 Center-of-Mass det. time= 99.6 min (878.4 - 778.8)

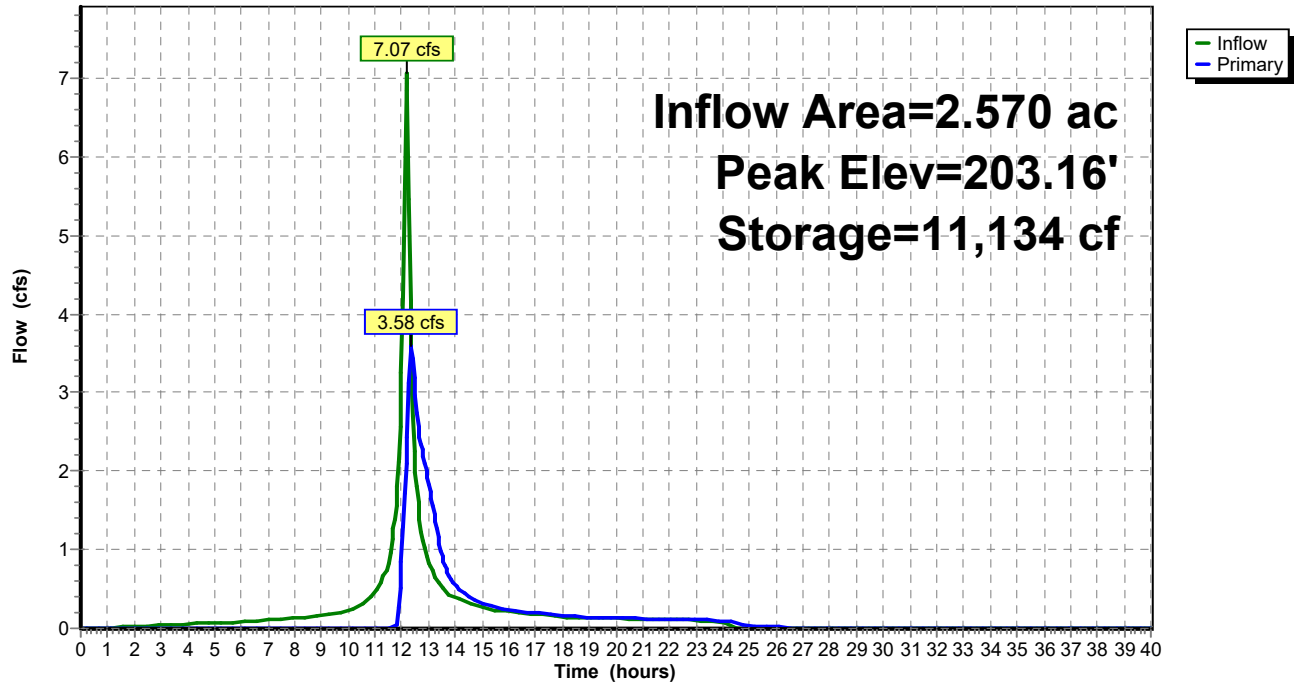
Volume	Invert	Avail.Storage	Storage Description
#1	201.00'	23,042 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.00	4,440	0	0
202.00	5,100	4,770	4,770
203.00	5,760	5,430	10,200
204.00	6,421	6,091	16,291
205.00	7,081	6,751	23,042

Device	Routing	Invert	Outlet Devices
#1	Primary	201.00'	24.0" Round Culvert L= 73.0' Ke= 0.500 Inlet / Outlet Invert= 201.00' / 200.10' S= 0.0123 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf
#2	Device 1	202.26'	24.0" W x 4.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	204.75'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.56 cfs @ 12.34 hrs HW=203.16' (Free Discharge)

1=Culvert (Passes 3.56 cfs of 16.28 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 2.74 cfs @ 4.11 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 0.82 cfs @ 1.30 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-54: Basin #54**Hydrograph**

Stage-Discharge for Pond B-54: Basin #54

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.00	0.00	201.52	0.00	202.04	0.00	202.56	1.05
201.01	0.00	201.53	0.00	202.05	0.00	202.57	1.11
201.02	0.00	201.54	0.00	202.06	0.00	202.58	1.16
201.03	0.00	201.55	0.00	202.07	0.00	202.59	1.22
201.04	0.00	201.56	0.00	202.08	0.00	202.60	1.27
201.05	0.00	201.57	0.00	202.09	0.00	202.61	1.32
201.06	0.00	201.58	0.00	202.10	0.00	202.62	1.36
201.07	0.00	201.59	0.00	202.11	0.00	202.63	1.40
201.08	0.00	201.60	0.00	202.12	0.00	202.64	1.44
201.09	0.00	201.61	0.00	202.13	0.00	202.65	1.48
201.10	0.00	201.62	0.00	202.14	0.00	202.66	1.51
201.11	0.00	201.63	0.00	202.15	0.00	202.67	1.55
201.12	0.00	201.64	0.00	202.16	0.00	202.68	1.58
201.13	0.00	201.65	0.00	202.17	0.00	202.69	1.62
201.14	0.00	201.66	0.00	202.18	0.00	202.70	1.65
201.15	0.00	201.67	0.00	202.19	0.00	202.71	1.68
201.16	0.00	201.68	0.00	202.20	0.00	202.72	1.71
201.17	0.00	201.69	0.00	202.21	0.00	202.73	1.74
201.18	0.00	201.70	0.00	202.22	0.00	202.74	1.77
201.19	0.00	201.71	0.00	202.23	0.00	202.75	1.80
201.20	0.00	201.72	0.00	202.24	0.00	202.76	1.83
201.21	0.00	201.73	0.00	202.25	0.00	202.77	1.86
201.22	0.00	201.74	0.00	202.26	0.00	202.78	1.89
201.23	0.00	201.75	0.00	202.27	0.01	202.79	1.92
201.24	0.00	201.76	0.00	202.28	0.02	202.80	1.94
201.25	0.00	201.77	0.00	202.29	0.03	202.81	1.97
201.26	0.00	201.78	0.00	202.30	0.05	202.82	2.00
201.27	0.00	201.79	0.00	202.31	0.07	202.83	2.02
201.28	0.00	201.80	0.00	202.32	0.09	202.84	2.05
201.29	0.00	201.81	0.00	202.33	0.12	202.85	2.07
201.30	0.00	201.82	0.00	202.34	0.15	202.86	2.10
201.31	0.00	201.83	0.00	202.35	0.17	202.87	2.12
201.32	0.00	201.84	0.00	202.36	0.20	202.88	2.15
201.33	0.00	201.85	0.00	202.37	0.23	202.89	2.17
201.34	0.00	201.86	0.00	202.38	0.27	202.90	2.20
201.35	0.00	201.87	0.00	202.39	0.30	202.91	2.22
201.36	0.00	201.88	0.00	202.40	0.34	202.92	2.24
201.37	0.00	201.89	0.00	202.41	0.37	202.93	2.27
201.38	0.00	201.90	0.00	202.42	0.41	202.94	2.29
201.39	0.00	201.91	0.00	202.43	0.45	202.95	2.31
201.40	0.00	201.92	0.00	202.44	0.49	202.96	2.33
201.41	0.00	201.93	0.00	202.45	0.53	202.97	2.36
201.42	0.00	201.94	0.00	202.46	0.57	202.98	2.38
201.43	0.00	201.95	0.00	202.47	0.62	202.99	2.40
201.44	0.00	201.96	0.00	202.48	0.66	203.00	2.42
201.45	0.00	201.97	0.00	202.49	0.71	203.01	2.46
201.46	0.00	201.98	0.00	202.50	0.75	203.02	2.50
201.47	0.00	201.99	0.00	202.51	0.80	203.03	2.55
201.48	0.00	202.00	0.00	202.52	0.85	203.04	2.61
201.49	0.00	202.01	0.00	202.53	0.90	203.05	2.67
201.50	0.00	202.02	0.00	202.54	0.95	203.06	2.74
201.51	0.00	202.03	0.00	202.55	1.00	203.07	2.81

Stage-Discharge for Pond B-54: Basin #54 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.08	2.88	203.60	9.37	204.12	18.81	204.64	24.58
203.09	2.96	203.61	9.53	204.13	19.01	204.65	24.62
203.10	3.04	203.62	9.69	204.14	19.21	204.66	24.67
203.11	3.12	203.63	9.85	204.15	19.42	204.67	24.72
203.12	3.21	203.64	10.02	204.16	19.62	204.68	24.76
203.13	3.29	203.65	10.18	204.17	19.82	204.69	24.81
203.14	3.39	203.66	10.34	204.18	20.03	204.70	24.86
203.15	3.48	203.67	10.51	204.19	20.23	204.71	24.90
203.16	3.57	203.68	10.68	204.20	20.44	204.72	24.95
203.17	3.67	203.69	10.84	204.21	20.64	204.73	24.99
203.18	3.77	203.70	11.01	204.22	20.85	204.74	25.04
203.19	3.87	203.71	11.18	204.23	21.05	204.75	25.08
203.20	3.98	203.72	11.35	204.24	21.26	204.76	25.25
203.21	4.08	203.73	11.52	204.25	21.47	204.77	25.51
203.22	4.19	203.74	11.69	204.26	21.68	204.78	25.83
203.23	4.30	203.75	11.87	204.27	21.89	204.79	26.20
203.24	4.41	203.76	12.04	204.28	22.10	204.80	26.62
203.25	4.52	203.77	12.22	204.29	22.31	204.81	27.08
203.26	4.64	203.78	12.39	204.30	22.52	204.82	27.58
203.27	4.75	203.79	12.57	204.31	22.73	204.83	28.10
203.28	4.87	203.80	12.74	204.32	22.94	204.84	28.66
203.29	4.99	203.81	12.92	204.33	23.09	204.85	29.25
203.30	5.11	203.82	13.10	204.34	23.14	204.86	29.87
203.31	5.24	203.83	13.28	204.35	23.19	204.87	30.52
203.32	5.36	203.84	13.46	204.36	23.24	204.88	31.19
203.33	5.49	203.85	13.64	204.37	23.29	204.89	31.89
203.34	5.61	203.86	13.82	204.38	23.34	204.90	32.61
203.35	5.74	203.87	14.01	204.39	23.39	204.91	33.35
203.36	5.87	203.88	14.19	204.40	23.43	204.92	34.12
203.37	6.00	203.89	14.37	204.41	23.48	204.93	34.90
203.38	6.14	203.90	14.56	204.42	23.53	204.94	35.72
203.39	6.27	203.91	14.75	204.43	23.58	204.95	36.55
203.40	6.41	203.92	14.93	204.44	23.63	204.96	37.44
203.41	6.54	203.93	15.12	204.45	23.68	204.97	38.35
203.42	6.68	203.94	15.31	204.46	23.73	204.98	39.29
203.43	6.82	203.95	15.50	204.47	23.77	204.99	40.26
203.44	6.96	203.96	15.69	204.48	23.82	205.00	41.25
203.45	7.10	203.97	15.88	204.49	23.87		
203.46	7.25	203.98	16.07	204.50	23.92		
203.47	7.39	203.99	16.26	204.51	23.97		
203.48	7.54	204.00	16.45	204.52	24.01		
203.49	7.68	204.01	16.64	204.53	24.06		
203.50	7.83	204.02	16.84	204.54	24.11		
203.51	7.98	204.03	17.03	204.55	24.16		
203.52	8.13	204.04	17.23	204.56	24.20		
203.53	8.28	204.05	17.42	204.57	24.25		
203.54	8.43	204.06	17.62	204.58	24.30		
203.55	8.59	204.07	17.82	204.59	24.34		
203.56	8.74	204.08	18.01	204.60	24.39		
203.57	8.90	204.09	18.21	204.61	24.44		
203.58	9.05	204.10	18.41	204.62	24.48		
203.59	9.21	204.11	18.61	204.63	24.53		

Stage-Area-Storage for Pond B-54: Basin #54

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.00	4,440	0	201.52	4,783	2,398
201.01	4,447	44	201.53	4,790	2,446
201.02	4,453	89	201.54	4,796	2,494
201.03	4,460	133	201.55	4,803	2,542
201.04	4,466	178	201.56	4,810	2,590
201.05	4,473	223	201.57	4,816	2,638
201.06	4,480	268	201.58	4,823	2,686
201.07	4,486	312	201.59	4,829	2,734
201.08	4,493	357	201.60	4,836	2,783
201.09	4,499	402	201.61	4,843	2,831
201.10	4,506	447	201.62	4,849	2,880
201.11	4,513	492	201.63	4,856	2,928
201.12	4,519	538	201.64	4,862	2,977
201.13	4,526	583	201.65	4,869	3,025
201.14	4,532	628	201.66	4,876	3,074
201.15	4,539	673	201.67	4,882	3,123
201.16	4,546	719	201.68	4,889	3,172
201.17	4,552	764	201.69	4,895	3,221
201.18	4,559	810	201.70	4,902	3,270
201.19	4,565	856	201.71	4,909	3,319
201.20	4,572	901	201.72	4,915	3,368
201.21	4,579	947	201.73	4,922	3,417
201.22	4,585	993	201.74	4,928	3,466
201.23	4,592	1,039	201.75	4,935	3,516
201.24	4,598	1,085	201.76	4,942	3,565
201.25	4,605	1,131	201.77	4,948	3,614
201.26	4,612	1,177	201.78	4,955	3,664
201.27	4,618	1,223	201.79	4,961	3,714
201.28	4,625	1,269	201.80	4,968	3,763
201.29	4,631	1,315	201.81	4,975	3,813
201.30	4,638	1,362	201.82	4,981	3,863
201.31	4,645	1,408	201.83	4,988	3,913
201.32	4,651	1,455	201.84	4,994	3,962
201.33	4,658	1,501	201.85	5,001	4,012
201.34	4,664	1,548	201.86	5,008	4,062
201.35	4,671	1,594	201.87	5,014	4,113
201.36	4,678	1,641	201.88	5,021	4,163
201.37	4,684	1,688	201.89	5,027	4,213
201.38	4,691	1,735	201.90	5,034	4,263
201.39	4,697	1,782	201.91	5,041	4,314
201.40	4,704	1,829	201.92	5,047	4,364
201.41	4,711	1,876	201.93	5,054	4,415
201.42	4,717	1,923	201.94	5,060	4,465
201.43	4,724	1,970	201.95	5,067	4,516
201.44	4,730	2,017	201.96	5,074	4,567
201.45	4,737	2,065	201.97	5,080	4,617
201.46	4,744	2,112	201.98	5,087	4,668
201.47	4,750	2,160	201.99	5,093	4,719
201.48	4,757	2,207	202.00	5,100	4,770
201.49	4,763	2,255	202.01	5,107	4,821
201.50	4,770	2,303	202.02	5,113	4,872
201.51	4,777	2,350	202.03	5,120	4,923

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.04	5,126	4,975	202.56	5,470	7,729
202.05	5,133	5,026	202.57	5,476	7,784
202.06	5,140	5,077	202.58	5,483	7,839
202.07	5,146	5,129	202.59	5,489	7,894
202.08	5,153	5,180	202.60	5,496	7,949
202.09	5,159	5,232	202.61	5,503	8,004
202.10	5,166	5,283	202.62	5,509	8,059
202.11	5,173	5,335	202.63	5,516	8,114
202.12	5,179	5,387	202.64	5,522	8,169
202.13	5,186	5,439	202.65	5,529	8,224
202.14	5,192	5,490	202.66	5,536	8,280
202.15	5,199	5,542	202.67	5,542	8,335
202.16	5,206	5,594	202.68	5,549	8,391
202.17	5,212	5,647	202.69	5,555	8,446
202.18	5,219	5,699	202.70	5,562	8,502
202.19	5,225	5,751	202.71	5,569	8,557
202.20	5,232	5,803	202.72	5,575	8,613
202.21	5,239	5,856	202.73	5,582	8,669
202.22	5,245	5,908	202.74	5,588	8,725
202.23	5,252	5,960	202.75	5,595	8,781
202.24	5,258	6,013	202.76	5,602	8,837
202.25	5,265	6,066	202.77	5,608	8,893
202.26	5,272	6,118	202.78	5,615	8,949
202.27	5,278	6,171	202.79	5,621	9,005
202.28	5,285	6,224	202.80	5,628	9,061
202.29	5,291	6,277	202.81	5,635	9,118
202.30	5,298	6,330	202.82	5,641	9,174
202.31	5,305	6,383	202.83	5,648	9,230
202.32	5,311	6,436	202.84	5,654	9,287
202.33	5,318	6,489	202.85	5,661	9,343
202.34	5,324	6,542	202.86	5,668	9,400
202.35	5,331	6,595	202.87	5,674	9,457
202.36	5,338	6,649	202.88	5,681	9,514
202.37	5,344	6,702	202.89	5,687	9,570
202.38	5,351	6,756	202.90	5,694	9,627
202.39	5,357	6,809	202.91	5,701	9,684
202.40	5,364	6,863	202.92	5,707	9,741
202.41	5,371	6,916	202.93	5,714	9,798
202.42	5,377	6,970	202.94	5,720	9,856
202.43	5,384	7,024	202.95	5,727	9,913
202.44	5,390	7,078	202.96	5,734	9,970
202.45	5,397	7,132	202.97	5,740	10,027
202.46	5,404	7,186	202.98	5,747	10,085
202.47	5,410	7,240	202.99	5,753	10,142
202.48	5,417	7,294	203.00	5,760	10,200
202.49	5,423	7,348	203.01	5,767	10,258
202.50	5,430	7,403	203.02	5,773	10,315
202.51	5,437	7,457	203.03	5,780	10,373
202.52	5,443	7,511	203.04	5,786	10,431
202.53	5,450	7,566	203.05	5,793	10,489
202.54	5,456	7,620	203.06	5,800	10,547
202.55	5,463	7,675	203.07	5,806	10,605

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.08	5,813	10,663	203.60	6,157	13,775
203.09	5,819	10,721	203.61	6,163	13,837
203.10	5,826	10,779	203.62	6,170	13,898
203.11	5,833	10,838	203.63	6,176	13,960
203.12	5,839	10,896	203.64	6,183	14,022
203.13	5,846	10,954	203.65	6,190	14,084
203.14	5,853	11,013	203.66	6,196	14,146
203.15	5,859	11,071	203.67	6,203	14,208
203.16	5,866	11,130	203.68	6,209	14,270
203.17	5,872	11,189	203.69	6,216	14,332
203.18	5,879	11,248	203.70	6,223	14,394
203.19	5,886	11,306	203.71	6,229	14,456
203.20	5,892	11,365	203.72	6,236	14,519
203.21	5,899	11,424	203.73	6,243	14,581
203.22	5,905	11,483	203.74	6,249	14,643
203.23	5,912	11,542	203.75	6,256	14,706
203.24	5,919	11,601	203.76	6,262	14,768
203.25	5,925	11,661	203.77	6,269	14,831
203.26	5,932	11,720	203.78	6,276	14,894
203.27	5,938	11,779	203.79	6,282	14,957
203.28	5,945	11,839	203.80	6,289	15,020
203.29	5,952	11,898	203.81	6,295	15,082
203.30	5,958	11,958	203.82	6,302	15,145
203.31	5,965	12,017	203.83	6,309	15,208
203.32	5,972	12,077	203.84	6,315	15,272
203.33	5,978	12,137	203.85	6,322	15,335
203.34	5,985	12,197	203.86	6,328	15,398
203.35	5,991	12,256	203.87	6,335	15,461
203.36	5,998	12,316	203.88	6,342	15,525
203.37	6,005	12,376	203.89	6,348	15,588
203.38	6,011	12,437	203.90	6,355	15,652
203.39	6,018	12,497	203.91	6,362	15,715
203.40	6,024	12,557	203.92	6,368	15,779
203.41	6,031	12,617	203.93	6,375	15,843
203.42	6,038	12,678	203.94	6,381	15,906
203.43	6,044	12,738	203.95	6,388	15,970
203.44	6,051	12,798	203.96	6,395	16,034
203.45	6,057	12,859	203.97	6,401	16,098
203.46	6,064	12,920	203.98	6,408	16,162
203.47	6,071	12,980	203.99	6,414	16,226
203.48	6,077	13,041	204.00	6,421	16,291
203.49	6,084	13,102	204.01	6,428	16,355
203.50	6,091	13,163	204.02	6,434	16,419
203.51	6,097	13,224	204.03	6,441	16,483
203.52	6,104	13,285	204.04	6,447	16,548
203.53	6,110	13,346	204.05	6,454	16,612
203.54	6,117	13,407	204.06	6,461	16,677
203.55	6,124	13,468	204.07	6,467	16,742
203.56	6,130	13,529	204.08	6,474	16,806
203.57	6,137	13,591	204.09	6,480	16,871
203.58	6,143	13,652	204.10	6,487	16,936
203.59	6,150	13,713	204.11	6,494	17,001

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.12	6,500	17,066	204.64	6,843	20,535
204.13	6,507	17,131	204.65	6,850	20,604
204.14	6,513	17,196	204.66	6,857	20,672
204.15	6,520	17,261	204.67	6,863	20,741
204.16	6,527	17,326	204.68	6,870	20,809
204.17	6,533	17,392	204.69	6,876	20,878
204.18	6,540	17,457	204.70	6,883	20,947
204.19	6,546	17,522	204.71	6,890	21,016
204.20	6,553	17,588	204.72	6,896	21,085
204.21	6,560	17,653	204.73	6,903	21,154
204.22	6,566	17,719	204.74	6,909	21,223
204.23	6,573	17,785	204.75	6,916	21,292
204.24	6,579	17,851	204.76	6,923	21,361
204.25	6,586	17,916	204.77	6,929	21,430
204.26	6,593	17,982	204.78	6,936	21,500
204.27	6,599	18,048	204.79	6,942	21,569
204.28	6,606	18,114	204.80	6,949	21,639
204.29	6,612	18,180	204.81	6,956	21,708
204.30	6,619	18,247	204.82	6,962	21,778
204.31	6,626	18,313	204.83	6,969	21,847
204.32	6,632	18,379	204.84	6,975	21,917
204.33	6,639	18,445	204.85	6,982	21,987
204.34	6,645	18,512	204.86	6,989	22,057
204.35	6,652	18,578	204.87	6,995	22,127
204.36	6,659	18,645	204.88	7,002	22,197
204.37	6,665	18,711	204.89	7,008	22,267
204.38	6,672	18,778	204.90	7,015	22,337
204.39	6,678	18,845	204.91	7,022	22,407
204.40	6,685	18,912	204.92	7,028	22,477
204.41	6,692	18,979	204.93	7,035	22,547
204.42	6,698	19,046	204.94	7,041	22,618
204.43	6,705	19,113	204.95	7,048	22,688
204.44	6,711	19,180	204.96	7,055	22,759
204.45	6,718	19,247	204.97	7,061	22,829
204.46	6,725	19,314	204.98	7,068	22,900
204.47	6,731	19,381	204.99	7,074	22,971
204.48	6,738	19,449	205.00	7,081	23,042
204.49	6,744	19,516			
204.50	6,751	19,584			
204.51	6,758	19,651			
204.52	6,764	19,719			
204.53	6,771	19,786			
204.54	6,777	19,854			
204.55	6,784	19,922			
204.56	6,791	19,990			
204.57	6,797	20,058			
204.58	6,804	20,126			
204.59	6,810	20,194			
204.60	6,817	20,262			
204.61	6,824	20,330			
204.62	6,830	20,398			
204.63	6,837	20,467			

Summary for Pond B-55: Basin #55

Inflow Area = 2.301 ac, 47.33% Impervious, Inflow Depth = 2.49" for Future 2 yr event
 Inflow = 5.76 cfs @ 12.17 hrs, Volume= 0.478 af
 Outflow = 1.75 cfs @ 12.48 hrs, Volume= 0.375 af, Atten= 70%, Lag= 18.4 min
 Primary = 1.75 cfs @ 12.48 hrs, Volume= 0.375 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 193.82' @ 12.48 hrs Surf.Area= 5,163 sf Storage= 9,473 cf

Plug-Flow detention time= 187.6 min calculated for 0.375 af (78% of inflow)
 Center-of-Mass det. time= 101.7 min (890.8 - 789.1)

Volume	Invert	Avail.Storage	Storage Description
#1	191.56'	22,010 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.56	0	0	0
192.00	4,250	935	935
193.00	4,746	4,498	5,433
194.00	5,257	5,002	10,434
195.00	5,784	5,521	15,955
196.00	6,327	6,056	22,010

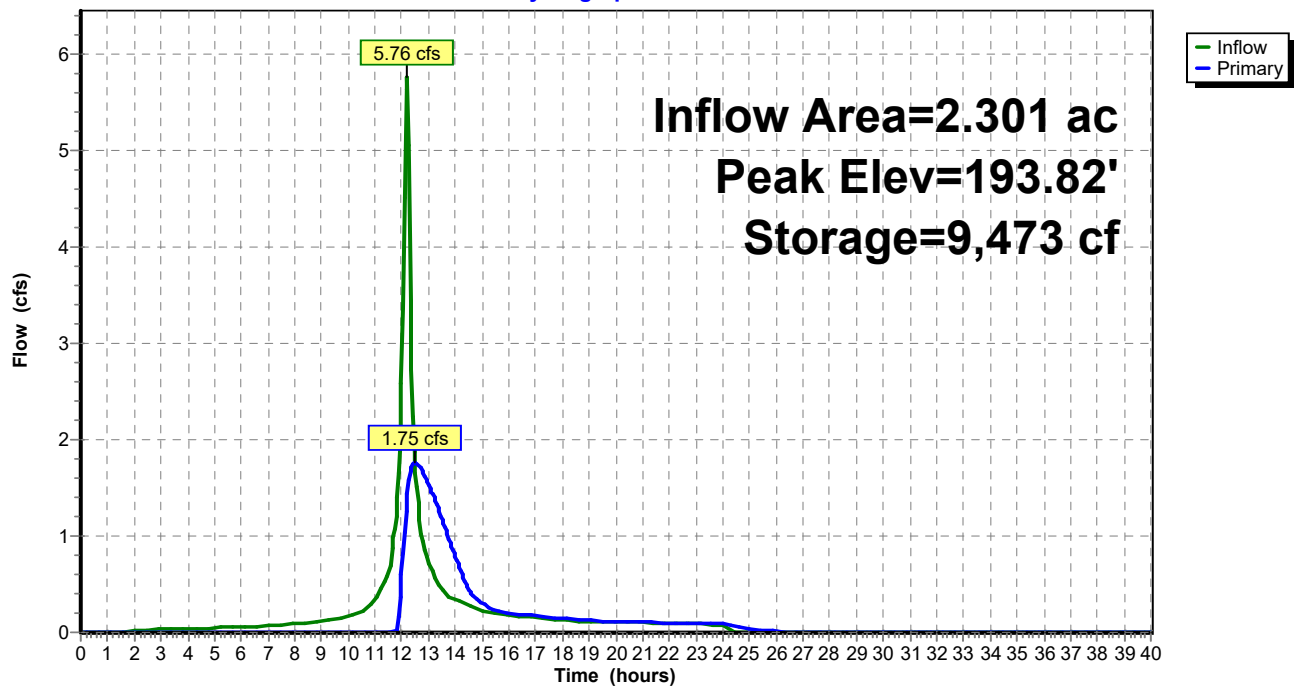
Device	Routing	Invert	Outlet Devices
#1	Primary	191.65'	18.0" Round Culvert L= 112.0' Ke= 0.500 Inlet / Outlet Invert= 191.65' / 191.00' S= 0.0058 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.80'	22.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.82'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	195.45'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.75 cfs @ 12.48 hrs HW=193.81' (Free Discharge)

1=Culvert (Passes 1.75 cfs of 8.63 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 1.75 cfs @ 4.59 fps)
 3=Sharp-Crested Rectangular Weir(Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs)

Pond B-55: Basin #55

Hydrograph



Stage-Discharge for Pond B-55: Basin #55

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.56	0.00	192.08	0.00	192.60	0.00	193.12	0.85
191.57	0.00	192.09	0.00	192.61	0.00	193.13	0.87
191.58	0.00	192.10	0.00	192.62	0.00	193.14	0.89
191.59	0.00	192.11	0.00	192.63	0.00	193.15	0.90
191.60	0.00	192.12	0.00	192.64	0.00	193.16	0.92
191.61	0.00	192.13	0.00	192.65	0.00	193.17	0.94
191.62	0.00	192.14	0.00	192.66	0.00	193.18	0.96
191.63	0.00	192.15	0.00	192.67	0.00	193.19	0.98
191.64	0.00	192.16	0.00	192.68	0.00	193.20	0.99
191.65	0.00	192.17	0.00	192.69	0.00	193.21	1.01
191.66	0.00	192.18	0.00	192.70	0.00	193.22	1.03
191.67	0.00	192.19	0.00	192.71	0.00	193.23	1.05
191.68	0.00	192.20	0.00	192.72	0.00	193.24	1.06
191.69	0.00	192.21	0.00	192.73	0.00	193.25	1.08
191.70	0.00	192.22	0.00	192.74	0.00	193.26	1.09
191.71	0.00	192.23	0.00	192.75	0.00	193.27	1.11
191.72	0.00	192.24	0.00	192.76	0.00	193.28	1.12
191.73	0.00	192.25	0.00	192.77	0.00	193.29	1.14
191.74	0.00	192.26	0.00	192.78	0.00	193.30	1.15
191.75	0.00	192.27	0.00	192.79	0.00	193.31	1.17
191.76	0.00	192.28	0.00	192.80	0.00	193.32	1.18
191.77	0.00	192.29	0.00	192.81	0.01	193.33	1.20
191.78	0.00	192.30	0.00	192.82	0.02	193.34	1.21
191.79	0.00	192.31	0.00	192.83	0.03	193.35	1.23
191.80	0.00	192.32	0.00	192.84	0.05	193.36	1.24
191.81	0.00	192.33	0.00	192.85	0.07	193.37	1.25
191.82	0.00	192.34	0.00	192.86	0.09	193.38	1.27
191.83	0.00	192.35	0.00	192.87	0.11	193.39	1.28
191.84	0.00	192.36	0.00	192.88	0.13	193.40	1.29
191.85	0.00	192.37	0.00	192.89	0.16	193.41	1.31
191.86	0.00	192.38	0.00	192.90	0.19	193.42	1.32
191.87	0.00	192.39	0.00	192.91	0.21	193.43	1.33
191.88	0.00	192.40	0.00	192.92	0.24	193.44	1.34
191.89	0.00	192.41	0.00	192.93	0.28	193.45	1.36
191.90	0.00	192.42	0.00	192.94	0.31	193.46	1.37
191.91	0.00	192.43	0.00	192.95	0.34	193.47	1.38
191.92	0.00	192.44	0.00	192.96	0.38	193.48	1.39
191.93	0.00	192.45	0.00	192.97	0.41	193.49	1.41
191.94	0.00	192.46	0.00	192.98	0.45	193.50	1.42
191.95	0.00	192.47	0.00	192.99	0.49	193.51	1.43
191.96	0.00	192.48	0.00	193.00	0.53	193.52	1.44
191.97	0.00	192.49	0.00	193.01	0.57	193.53	1.45
191.98	0.00	192.50	0.00	193.02	0.60	193.54	1.46
191.99	0.00	192.51	0.00	193.03	0.63	193.55	1.48
192.00	0.00	192.52	0.00	193.04	0.66	193.56	1.49
192.01	0.00	192.53	0.00	193.05	0.69	193.57	1.50
192.02	0.00	192.54	0.00	193.06	0.71	193.58	1.51
192.03	0.00	192.55	0.00	193.07	0.74	193.59	1.52
192.04	0.00	192.56	0.00	193.08	0.76	193.60	1.53
192.05	0.00	192.57	0.00	193.09	0.78	193.61	1.54
192.06	0.00	192.58	0.00	193.10	0.80	193.62	1.55
192.07	0.00	192.59	0.00	193.11	0.82	193.63	1.57

Stage-Discharge for Pond B-55: Basin #55 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.64	1.58	194.16	4.61	194.68	11.12	195.20	12.37
193.65	1.59	194.17	4.73	194.69	11.14	195.21	12.39
193.66	1.60	194.18	4.85	194.70	11.17	195.22	12.42
193.67	1.61	194.19	4.97	194.71	11.19	195.23	12.44
193.68	1.62	194.20	5.10	194.72	11.22	195.24	12.46
193.69	1.63	194.21	5.22	194.73	11.24	195.25	12.48
193.70	1.64	194.22	5.35	194.74	11.27	195.26	12.51
193.71	1.65	194.23	5.48	194.75	11.29	195.27	12.53
193.72	1.66	194.24	5.61	194.76	11.32	195.28	12.55
193.73	1.67	194.25	5.74	194.77	11.34	195.29	12.58
193.74	1.68	194.26	5.87	194.78	11.37	195.30	12.60
193.75	1.69	194.27	6.01	194.79	11.39	195.31	12.62
193.76	1.70	194.28	6.14	194.80	11.42	195.32	12.64
193.77	1.71	194.29	6.28	194.81	11.44	195.33	12.66
193.78	1.72	194.30	6.42	194.82	11.47	195.34	12.69
193.79	1.73	194.31	6.56	194.83	11.49	195.35	12.71
193.80	1.74	194.32	6.70	194.84	11.52	195.36	12.73
193.81	1.75	194.33	6.84	194.85	11.54	195.37	12.75
193.82	1.76	194.34	6.98	194.86	11.57	195.38	12.78
193.83	1.78	194.35	7.12	194.87	11.59	195.39	12.80
193.84	1.82	194.36	7.27	194.88	11.61	195.40	12.82
193.85	1.86	194.37	7.41	194.89	11.64	195.41	12.84
193.86	1.90	194.38	7.56	194.90	11.66	195.42	12.86
193.87	1.95	194.39	7.71	194.91	11.69	195.43	12.89
193.88	2.01	194.40	7.86	194.92	11.71	195.44	12.91
193.89	2.07	194.41	8.01	194.93	11.74	195.45	12.93
193.90	2.13	194.42	8.16	194.94	11.76	195.46	13.07
193.91	2.20	194.43	8.31	194.95	11.78	195.47	13.31
193.92	2.26	194.44	8.47	194.96	11.81	195.48	13.61
193.93	2.34	194.45	8.62	194.97	11.83	195.49	13.96
193.94	2.41	194.46	8.78	194.98	11.86	195.50	14.35
193.95	2.49	194.47	8.93	194.99	11.88	195.51	14.79
193.96	2.57	194.48	9.09	195.00	11.90	195.52	15.26
193.97	2.65	194.49	9.25	195.01	11.93	195.53	15.76
193.98	2.74	194.50	9.41	195.02	11.95	195.54	16.30
193.99	2.82	194.51	9.57	195.03	11.97	195.55	16.87
194.00	2.91	194.52	9.73	195.04	12.00	195.56	17.46
194.01	3.01	194.53	9.89	195.05	12.02	195.57	18.08
194.02	3.10	194.54	10.06	195.06	12.05	195.58	18.73
194.03	3.20	194.55	10.22	195.07	12.07	195.59	19.40
194.04	3.29	194.56	10.38	195.08	12.09	195.60	20.10
194.05	3.39	194.57	10.55	195.09	12.12	195.61	20.82
194.06	3.50	194.58	10.72	195.10	12.14	195.62	21.57
194.07	3.60	194.59	10.88	195.11	12.16	195.63	22.33
194.08	3.71	194.60	10.91	195.12	12.19	195.64	23.12
194.09	3.81	194.61	10.94	195.13	12.21	195.65	23.93
194.10	3.92	194.62	10.96	195.14	12.23	195.66	24.79
194.11	4.03	194.63	10.99	195.15	12.26	195.67	25.69
194.12	4.14	194.64	11.01	195.16	12.28	195.68	26.61
194.13	4.26	194.65	11.04	195.17	12.30	195.69	27.55
194.14	4.37	194.66	11.06	195.18	12.32	195.70	28.52
194.15	4.49	194.67	11.09	195.19	12.35	195.71	29.52

Stage-Discharge for Pond B-55: Basin #55 (continued)

Elevation (feet)	Primary (cfs)
195.72	30.53
195.73	31.58
195.74	32.65
195.75	33.74
195.76	34.86
195.77	36.00
195.78	37.17
195.79	38.36
195.80	39.57
195.81	40.81
195.82	42.08
195.83	43.36
195.84	44.67
195.85	46.01
195.86	47.40
195.87	48.81
195.88	50.25
195.89	51.71
195.90	53.20
195.91	54.72
195.92	56.26
195.93	57.83
195.94	59.43
195.95	61.05
195.96	62.70
195.97	64.37
195.98	66.07
195.99	67.80
196.00	69.56

Stage-Area-Storage for Pond B-55: Basin #55

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.56	0	0	192.08	4,290	1,277
191.57	97	0	192.09	4,295	1,320
191.58	193	2	192.10	4,300	1,362
191.59	290	4	192.11	4,305	1,406
191.60	386	8	192.12	4,310	1,449
191.61	483	12	192.13	4,314	1,492
191.62	580	17	192.14	4,319	1,535
191.63	676	24	192.15	4,324	1,578
191.64	773	31	192.16	4,329	1,621
191.65	869	39	192.17	4,334	1,665
191.66	966	48	192.18	4,339	1,708
191.67	1,063	58	192.19	4,344	1,751
191.68	1,159	70	192.20	4,349	1,795
191.69	1,256	82	192.21	4,354	1,838
191.70	1,352	95	192.22	4,359	1,882
191.71	1,449	109	192.23	4,364	1,926
191.72	1,545	124	192.24	4,369	1,969
191.73	1,642	140	192.25	4,374	2,013
191.74	1,739	156	192.26	4,379	2,057
191.75	1,835	174	192.27	4,384	2,101
191.76	1,932	193	192.28	4,389	2,144
191.77	2,028	213	192.29	4,394	2,188
191.78	2,125	234	192.30	4,399	2,232
191.79	2,222	255	192.31	4,404	2,276
191.80	2,318	278	192.32	4,409	2,320
191.81	2,415	302	192.33	4,414	2,365
191.82	2,511	326	192.34	4,419	2,409
191.83	2,608	352	192.35	4,424	2,453
191.84	2,705	379	192.36	4,429	2,497
191.85	2,801	406	192.37	4,434	2,541
191.86	2,898	435	192.38	4,438	2,586
191.87	2,994	464	192.39	4,443	2,630
191.88	3,091	495	192.40	4,448	2,675
191.89	3,188	526	192.41	4,453	2,719
191.90	3,284	558	192.42	4,458	2,764
191.91	3,381	592	192.43	4,463	2,808
191.92	3,477	626	192.44	4,468	2,853
191.93	3,574	661	192.45	4,473	2,898
191.94	3,670	697	192.46	4,478	2,942
191.95	3,767	735	192.47	4,483	2,987
191.96	3,864	773	192.48	4,488	3,032
191.97	3,960	812	192.49	4,493	3,077
191.98	4,057	852	192.50	4,498	3,122
191.99	4,153	893	192.51	4,503	3,167
192.00	4,250	935	192.52	4,508	3,212
192.01	4,255	978	192.53	4,513	3,257
192.02	4,260	1,020	192.54	4,518	3,302
192.03	4,265	1,063	192.55	4,523	3,348
192.04	4,270	1,105	192.56	4,528	3,393
192.05	4,275	1,148	192.57	4,533	3,438
192.06	4,280	1,191	192.58	4,538	3,483
192.07	4,285	1,234	192.59	4,543	3,529

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.60	4,548	3,574	193.12	4,807	6,006
192.61	4,553	3,620	193.13	4,812	6,054
192.62	4,558	3,665	193.14	4,818	6,102
192.63	4,562	3,711	193.15	4,823	6,151
192.64	4,567	3,757	193.16	4,828	6,199
192.65	4,572	3,802	193.17	4,833	6,247
192.66	4,577	3,848	193.18	4,838	6,296
192.67	4,582	3,894	193.19	4,843	6,344
192.68	4,587	3,940	193.20	4,848	6,392
192.69	4,592	3,986	193.21	4,853	6,441
192.70	4,597	4,032	193.22	4,858	6,489
192.71	4,602	4,078	193.23	4,864	6,538
192.72	4,607	4,124	193.24	4,869	6,587
192.73	4,612	4,170	193.25	4,874	6,635
192.74	4,617	4,216	193.26	4,879	6,684
192.75	4,622	4,262	193.27	4,884	6,733
192.76	4,627	4,308	193.28	4,889	6,782
192.77	4,632	4,355	193.29	4,894	6,831
192.78	4,637	4,401	193.30	4,899	6,880
192.79	4,642	4,447	193.31	4,904	6,929
192.80	4,647	4,494	193.32	4,910	6,978
192.81	4,652	4,540	193.33	4,915	7,027
192.82	4,657	4,587	193.34	4,920	7,076
192.83	4,662	4,633	193.35	4,925	7,125
192.84	4,667	4,680	193.36	4,930	7,175
192.85	4,672	4,727	193.37	4,935	7,224
192.86	4,677	4,773	193.38	4,940	7,273
192.87	4,682	4,820	193.39	4,945	7,323
192.88	4,686	4,867	193.40	4,950	7,372
192.89	4,691	4,914	193.41	4,956	7,422
192.90	4,696	4,961	193.42	4,961	7,471
192.91	4,701	5,008	193.43	4,966	7,521
192.92	4,706	5,055	193.44	4,971	7,571
192.93	4,711	5,102	193.45	4,976	7,620
192.94	4,716	5,149	193.46	4,981	7,670
192.95	4,721	5,196	193.47	4,986	7,720
192.96	4,726	5,244	193.48	4,991	7,770
192.97	4,731	5,291	193.49	4,996	7,820
192.98	4,736	5,338	193.50	5,002	7,870
192.99	4,741	5,386	193.51	5,007	7,920
193.00	4,746	5,433	193.52	5,012	7,970
193.01	4,751	5,480	193.53	5,017	8,020
193.02	4,756	5,528	193.54	5,022	8,070
193.03	4,761	5,576	193.55	5,027	8,121
193.04	4,766	5,623	193.56	5,032	8,171
193.05	4,772	5,671	193.57	5,037	8,221
193.06	4,777	5,719	193.58	5,042	8,272
193.07	4,782	5,766	193.59	5,047	8,322
193.08	4,787	5,814	193.60	5,053	8,373
193.09	4,792	5,862	193.61	5,058	8,423
193.10	4,797	5,910	193.62	5,063	8,474
193.11	4,802	5,958	193.63	5,068	8,524

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.64	5,073	8,575	194.16	5,341	11,282
193.65	5,078	8,626	194.17	5,347	11,336
193.66	5,083	8,677	194.18	5,352	11,389
193.67	5,088	8,728	194.19	5,357	11,443
193.68	5,093	8,778	194.20	5,362	11,496
193.69	5,099	8,829	194.21	5,368	11,550
193.70	5,104	8,880	194.22	5,373	11,604
193.71	5,109	8,931	194.23	5,378	11,658
193.72	5,114	8,983	194.24	5,383	11,711
193.73	5,119	9,034	194.25	5,389	11,765
193.74	5,124	9,085	194.26	5,394	11,819
193.75	5,129	9,136	194.27	5,399	11,873
193.76	5,134	9,188	194.28	5,405	11,927
193.77	5,139	9,239	194.29	5,410	11,981
193.78	5,145	9,290	194.30	5,415	12,035
193.79	5,150	9,342	194.31	5,420	12,089
193.80	5,155	9,393	194.32	5,426	12,144
193.81	5,160	9,445	194.33	5,431	12,198
193.82	5,165	9,497	194.34	5,436	12,252
193.83	5,170	9,548	194.35	5,441	12,307
193.84	5,175	9,600	194.36	5,447	12,361
193.85	5,180	9,652	194.37	5,452	12,416
193.86	5,185	9,704	194.38	5,457	12,470
193.87	5,191	9,755	194.39	5,463	12,525
193.88	5,196	9,807	194.40	5,468	12,579
193.89	5,201	9,859	194.41	5,473	12,634
193.90	5,206	9,911	194.42	5,478	12,689
193.91	5,211	9,963	194.43	5,484	12,744
193.92	5,216	10,016	194.44	5,489	12,799
193.93	5,221	10,068	194.45	5,494	12,854
193.94	5,226	10,120	194.46	5,499	12,908
193.95	5,231	10,172	194.47	5,505	12,963
193.96	5,237	10,225	194.48	5,510	13,019
193.97	5,242	10,277	194.49	5,515	13,074
193.98	5,247	10,329	194.50	5,521	13,129
193.99	5,252	10,382	194.51	5,526	13,184
194.00	5,257	10,434	194.52	5,531	13,239
194.01	5,262	10,487	194.53	5,536	13,295
194.02	5,268	10,540	194.54	5,542	13,350
194.03	5,273	10,592	194.55	5,547	13,406
194.04	5,278	10,645	194.56	5,552	13,461
194.05	5,283	10,698	194.57	5,557	13,517
194.06	5,289	10,751	194.58	5,563	13,572
194.07	5,294	10,804	194.59	5,568	13,628
194.08	5,299	10,857	194.60	5,573	13,684
194.09	5,304	10,910	194.61	5,578	13,739
194.10	5,310	10,963	194.62	5,584	13,795
194.11	5,315	11,016	194.63	5,589	13,851
194.12	5,320	11,069	194.64	5,594	13,907
194.13	5,326	11,122	194.65	5,600	13,963
194.14	5,331	11,176	194.66	5,605	14,019
194.15	5,336	11,229	194.67	5,610	14,075

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.68	5,615	14,131	195.20	5,893	17,123
194.69	5,621	14,187	195.21	5,898	17,182
194.70	5,626	14,244	195.22	5,903	17,241
194.71	5,631	14,300	195.23	5,909	17,300
194.72	5,636	14,356	195.24	5,914	17,359
194.73	5,642	14,413	195.25	5,920	17,418
194.74	5,647	14,469	195.26	5,925	17,477
194.75	5,652	14,525	195.27	5,931	17,536
194.76	5,658	14,582	195.28	5,936	17,596
194.77	5,663	14,639	195.29	5,941	17,655
194.78	5,668	14,695	195.30	5,947	17,715
194.79	5,673	14,752	195.31	5,952	17,774
194.80	5,679	14,809	195.32	5,958	17,834
194.81	5,684	14,866	195.33	5,963	17,893
194.82	5,689	14,922	195.34	5,969	17,953
194.83	5,694	14,979	195.35	5,974	18,013
194.84	5,700	15,036	195.36	5,979	18,072
194.85	5,705	15,093	195.37	5,985	18,132
194.86	5,710	15,150	195.38	5,990	18,192
194.87	5,715	15,208	195.39	5,996	18,252
194.88	5,721	15,265	195.40	6,001	18,312
194.89	5,726	15,322	195.41	6,007	18,372
194.90	5,731	15,379	195.42	6,012	18,432
194.91	5,737	15,437	195.43	6,017	18,492
194.92	5,742	15,494	195.44	6,023	18,553
194.93	5,747	15,551	195.45	6,028	18,613
194.94	5,752	15,609	195.46	6,034	18,673
194.95	5,758	15,666	195.47	6,039	18,733
194.96	5,763	15,724	195.48	6,045	18,794
194.97	5,768	15,782	195.49	6,050	18,854
194.98	5,773	15,839	195.50	6,056	18,915
194.99	5,779	15,897	195.51	6,061	18,975
195.00	5,784	15,955	195.52	6,066	19,036
195.01	5,789	16,013	195.53	6,072	19,097
195.02	5,795	16,071	195.54	6,077	19,158
195.03	5,800	16,129	195.55	6,083	19,218
195.04	5,806	16,187	195.56	6,088	19,279
195.05	5,811	16,245	195.57	6,094	19,340
195.06	5,817	16,303	195.58	6,099	19,401
195.07	5,822	16,361	195.59	6,104	19,462
195.08	5,827	16,419	195.60	6,110	19,523
195.09	5,833	16,478	195.61	6,115	19,584
195.10	5,838	16,536	195.62	6,121	19,645
195.11	5,844	16,595	195.63	6,126	19,707
195.12	5,849	16,653	195.64	6,132	19,768
195.13	5,855	16,712	195.65	6,137	19,829
195.14	5,860	16,770	195.66	6,142	19,891
195.15	5,865	16,829	195.67	6,148	19,952
195.16	5,871	16,887	195.68	6,153	20,014
195.17	5,876	16,946	195.69	6,159	20,075
195.18	5,882	17,005	195.70	6,164	20,137
195.19	5,887	17,064	195.71	6,170	20,199

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.72	6,175	20,260
195.73	6,180	20,322
195.74	6,186	20,384
195.75	6,191	20,446
195.76	6,197	20,508
195.77	6,202	20,570
195.78	6,208	20,632
195.79	6,213	20,694
195.80	6,218	20,756
195.81	6,224	20,818
195.82	6,229	20,880
195.83	6,235	20,943
195.84	6,240	21,005
195.85	6,246	21,068
195.86	6,251	21,130
195.87	6,256	21,193
195.88	6,262	21,255
195.89	6,267	21,318
195.90	6,273	21,381
195.91	6,278	21,443
195.92	6,284	21,506
195.93	6,289	21,569
195.94	6,294	21,632
195.95	6,300	21,695
195.96	6,305	21,758
195.97	6,311	21,821
195.98	6,316	21,884
195.99	6,322	21,947
196.00	6,327	22,010

Summary for Pond B-56: Basin #56

Inflow Area = 1.512 ac, 31.08% Impervious, Inflow Depth = 2.15" for Future 2 yr event
 Inflow = 3.32 cfs @ 12.18 hrs, Volume= 0.271 af
 Outflow = 2.14 cfs @ 12.30 hrs, Volume= 0.224 af, Atten= 35%, Lag= 7.3 min
 Primary = 2.14 cfs @ 12.30 hrs, Volume= 0.224 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 192.56' @ 12.30 hrs Surf.Area= 5,282 sf Storage= 3,948 cf

Plug-Flow detention time= 151.4 min calculated for 0.224 af (83% of inflow)
 Center-of-Mass det. time= 74.8 min (880.3 - 805.5)

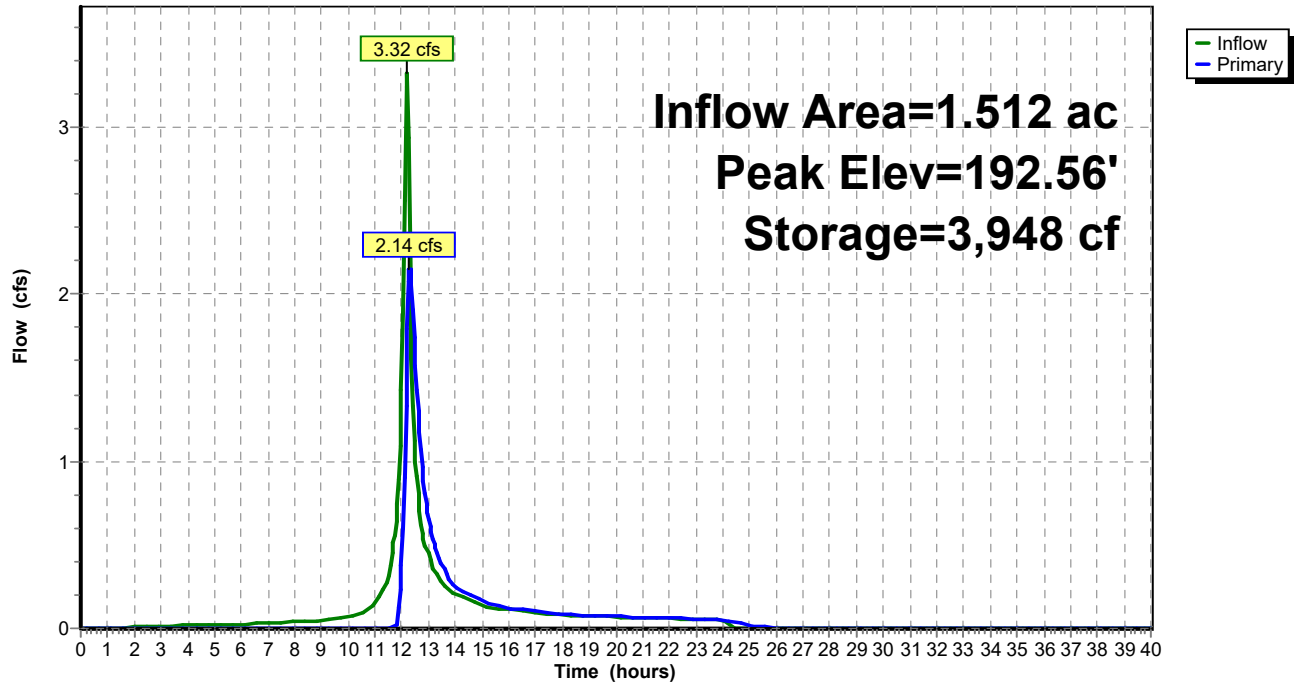
Volume	Invert	Avail.Storage	Storage Description
#1	191.57'	25,032 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.57	0	0	0
192.00	5,021	1,080	1,080
193.00	5,490	5,256	6,335
194.00	5,976	5,733	12,068
195.00	6,478	6,227	18,295
196.00	6,995	6,737	25,032

Device	Routing	Invert	Outlet Devices
#1	Primary	191.57'	18.0" Round Culvert L= 29.0' Ke= 0.500 Inlet / Outlet Invert= 191.57' / 191.42' S= 0.0052 ' / Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.19'	36.0" W x 6.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.62'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	194.99'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.14 cfs @ 12.30 hrs HW=192.56' (Free Discharge)

1=Culvert (Passes 2.14 cfs of 3.07 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 2.14 cfs @ 1.94 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-56: Basin #56**Hydrograph**

Stage-Discharge for Pond B-56: Basin #56

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.57	0.00	192.09	0.00	192.61	2.62	193.13	5.97
191.58	0.00	192.10	0.00	192.62	2.72	193.14	6.01
191.59	0.00	192.11	0.00	192.63	2.81	193.15	6.05
191.60	0.00	192.12	0.00	192.64	2.91	193.16	6.10
191.61	0.00	192.13	0.00	192.65	3.00	193.17	6.14
191.62	0.00	192.14	0.00	192.66	3.10	193.18	6.18
191.63	0.00	192.15	0.00	192.67	3.20	193.19	6.23
191.64	0.00	192.16	0.00	192.68	3.30	193.20	6.27
191.65	0.00	192.17	0.00	192.69	3.40	193.21	6.31
191.66	0.00	192.18	0.00	192.70	3.50	193.22	6.35
191.67	0.00	192.19	0.00	192.71	3.58	193.23	6.39
191.68	0.00	192.20	0.01	192.72	3.67	193.24	6.43
191.69	0.00	192.21	0.03	192.73	3.74	193.25	6.47
191.70	0.00	192.22	0.05	192.74	3.82	193.26	6.51
191.71	0.00	192.23	0.08	192.75	3.89	193.27	6.55
191.72	0.00	192.24	0.11	192.76	3.97	193.28	6.59
191.73	0.00	192.25	0.14	192.77	4.04	193.29	6.63
191.74	0.00	192.26	0.18	192.78	4.10	193.30	6.67
191.75	0.00	192.27	0.22	192.79	4.17	193.31	6.71
191.76	0.00	192.28	0.26	192.80	4.24	193.32	6.75
191.77	0.00	192.29	0.30	192.81	4.30	193.33	6.79
191.78	0.00	192.30	0.35	192.82	4.36	193.34	6.83
191.79	0.00	192.31	0.40	192.83	4.43	193.35	6.87
191.80	0.00	192.32	0.45	192.84	4.49	193.36	6.91
191.81	0.00	192.33	0.50	192.85	4.55	193.37	6.94
191.82	0.00	192.34	0.56	192.86	4.61	193.38	6.98
191.83	0.00	192.35	0.62	192.87	4.66	193.39	7.02
191.84	0.00	192.36	0.67	192.88	4.72	193.40	7.06
191.85	0.00	192.37	0.74	192.89	4.78	193.41	7.09
191.86	0.00	192.38	0.80	192.90	4.83	193.42	7.13
191.87	0.00	192.39	0.86	192.91	4.89	193.43	7.17
191.88	0.00	192.40	0.93	192.92	4.94	193.44	7.20
191.89	0.00	192.41	0.99	192.93	5.00	193.45	7.24
191.90	0.00	192.42	1.06	192.94	5.05	193.46	7.28
191.91	0.00	192.43	1.13	192.95	5.10	193.47	7.31
191.92	0.00	192.44	1.20	192.96	5.16	193.48	7.35
191.93	0.00	192.45	1.28	192.97	5.21	193.49	7.38
191.94	0.00	192.46	1.35	192.98	5.26	193.50	7.42
191.95	0.00	192.47	1.43	192.99	5.31	193.51	7.45
191.96	0.00	192.48	1.50	193.00	5.36	193.52	7.49
191.97	0.00	192.49	1.58	193.01	5.41	193.53	7.52
191.98	0.00	192.50	1.66	193.02	5.46	193.54	7.56
191.99	0.00	192.51	1.74	193.03	5.50	193.55	7.59
192.00	0.00	192.52	1.83	193.04	5.55	193.56	7.63
192.01	0.00	192.53	1.91	193.05	5.60	193.57	7.66
192.02	0.00	192.54	1.99	193.06	5.65	193.58	7.70
192.03	0.00	192.55	2.08	193.07	5.69	193.59	7.73
192.04	0.00	192.56	2.17	193.08	5.74	193.60	7.76
192.05	0.00	192.57	2.26	193.09	5.79	193.61	7.80
192.06	0.00	192.58	2.35	193.10	5.83	193.62	7.83
192.07	0.00	192.59	2.44	193.11	5.88	193.63	7.88
192.08	0.00	192.60	2.53	193.12	5.92	193.64	7.93

Stage-Discharge for Pond B-56: Basin #56 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.65	8.00	194.17	11.13	194.69	13.10	195.21	26.75
193.66	8.07	194.18	11.17	194.70	13.13	195.22	27.67
193.67	8.14	194.19	11.22	194.71	13.15	195.23	28.62
193.68	8.22	194.20	11.26	194.72	13.18	195.24	29.59
193.69	8.30	194.21	11.30	194.73	13.21	195.25	30.59
193.70	8.39	194.22	11.35	194.74	13.24	195.26	31.61
193.71	8.48	194.23	11.39	194.75	13.26	195.27	32.66
193.72	8.57	194.24	11.43	194.76	13.29	195.28	33.74
193.73	8.66	194.25	11.48	194.77	13.32	195.29	34.83
193.74	8.76	194.26	11.52	194.78	13.35	195.30	35.95
193.75	8.86	194.27	11.56	194.79	13.37	195.31	37.10
193.76	8.97	194.28	11.61	194.80	13.40	195.32	38.27
193.77	9.07	194.29	11.65	194.81	13.43	195.33	39.46
193.78	9.18	194.30	11.69	194.82	13.45	195.34	40.68
193.79	9.28	194.31	11.73	194.83	13.48	195.35	41.93
193.80	9.34	194.32	11.78	194.84	13.51	195.36	43.19
193.81	9.39	194.33	11.82	194.85	13.53	195.37	44.48
193.82	9.44	194.34	11.86	194.86	13.56	195.38	45.80
193.83	9.49	194.35	11.90	194.87	13.59	195.39	47.14
193.84	9.55	194.36	11.94	194.88	13.61	195.40	48.53
193.85	9.60	194.37	11.98	194.89	13.64	195.41	49.94
193.86	9.65	194.38	12.03	194.90	13.67	195.42	51.39
193.87	9.70	194.39	12.07	194.91	13.69	195.43	52.85
193.88	9.75	194.40	12.11	194.92	13.72	195.44	54.35
193.89	9.80	194.41	12.15	194.93	13.75	195.45	55.87
193.90	9.85	194.42	12.19	194.94	13.77	195.46	57.42
193.91	9.90	194.43	12.23	194.95	13.80	195.47	58.99
193.92	9.95	194.44	12.27	194.96	13.83	195.48	60.59
193.93	10.00	194.45	12.31	194.97	13.85	195.49	62.21
193.94	10.05	194.46	12.35	194.98	13.88	195.50	63.87
193.95	10.10	194.47	12.39	194.99	13.90	195.51	65.55
193.96	10.15	194.48	12.43	195.00	14.05	195.52	67.25
193.97	10.20	194.49	12.47	195.01	14.29	195.53	68.98
193.98	10.25	194.50	12.51	195.02	14.59	195.54	70.74
193.99	10.29	194.51	12.55	195.03	14.94	195.55	72.53
194.00	10.34	194.52	12.59	195.04	15.34	195.56	74.34
194.01	10.39	194.53	12.63	195.05	15.78	195.57	76.18
194.02	10.44	194.54	12.67	195.06	16.26	195.58	78.04
194.03	10.49	194.55	12.71	195.07	16.77	195.59	79.94
194.04	10.53	194.56	12.73	195.08	17.31	195.60	81.59
194.05	10.58	194.57	12.76	195.09	17.88	195.61	83.25
194.06	10.63	194.58	12.79	195.10	18.48	195.62	84.93
194.07	10.67	194.59	12.82	195.11	19.10	195.63	86.62
194.08	10.72	194.60	12.85	195.12	19.76	195.64	88.32
194.09	10.77	194.61	12.88	195.13	20.43	195.65	90.04
194.10	10.81	194.62	12.90	195.14	21.13	195.66	91.77
194.11	10.86	194.63	12.93	195.15	21.86	195.67	93.51
194.12	10.90	194.64	12.96	195.16	22.61	195.68	95.27
194.13	10.95	194.65	12.99	195.17	23.38	195.69	97.04
194.14	10.99	194.66	13.02	195.18	24.17	195.70	98.82
194.15	11.04	194.67	13.04	195.19	24.98	195.71	100.61
194.16	11.08	194.68	13.07	195.20	25.85	195.72	102.42

Stage-Discharge for Pond B-56: Basin #56 (continued)

Elevation (feet)	Primary (cfs)
195.73	104.24
195.74	106.07
195.75	107.92
195.76	109.77
195.77	111.64
195.78	113.52
195.79	115.41
195.80	117.36
195.81	119.31
195.82	121.28
195.83	123.26
195.84	125.26
195.85	127.27
195.86	129.29
195.87	131.32
195.88	133.37
195.89	135.43
195.90	137.50
195.91	139.59
195.92	141.69
195.93	143.80
195.94	145.92
195.95	148.06
195.96	150.21
195.97	152.37
195.98	154.55
195.99	156.73
196.00	158.88

Stage-Area-Storage for Pond B-56: Basin #56

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.57	0	0	192.09	5,063	1,533
191.58	117	1	192.10	5,068	1,584
191.59	234	2	192.11	5,073	1,635
191.60	350	5	192.12	5,077	1,685
191.61	467	9	192.13	5,082	1,736
191.62	584	15	192.14	5,087	1,787
191.63	701	21	192.15	5,091	1,838
191.64	817	29	192.16	5,096	1,889
191.65	934	37	192.17	5,101	1,940
191.66	1,051	47	192.18	5,105	1,991
191.67	1,168	58	192.19	5,110	2,042
191.68	1,284	71	192.20	5,115	2,093
191.69	1,401	84	192.21	5,119	2,144
191.70	1,518	99	192.22	5,124	2,195
191.71	1,635	114	192.23	5,129	2,247
191.72	1,752	131	192.24	5,134	2,298
191.73	1,868	149	192.25	5,138	2,349
191.74	1,985	169	192.26	5,143	2,401
191.75	2,102	189	192.27	5,148	2,452
191.76	2,219	211	192.28	5,152	2,504
191.77	2,335	234	192.29	5,157	2,555
191.78	2,452	257	192.30	5,162	2,607
191.79	2,569	283	192.31	5,166	2,659
191.80	2,686	309	192.32	5,171	2,710
191.81	2,802	336	192.33	5,176	2,762
191.82	2,919	365	192.34	5,180	2,814
191.83	3,036	395	192.35	5,185	2,866
191.84	3,153	426	192.36	5,190	2,917
191.85	3,269	458	192.37	5,195	2,969
191.86	3,386	491	192.38	5,199	3,021
191.87	3,503	525	192.39	5,204	3,073
191.88	3,620	561	192.40	5,209	3,125
191.89	3,737	598	192.41	5,213	3,178
191.90	3,853	636	192.42	5,218	3,230
191.91	3,970	675	192.43	5,223	3,282
191.92	4,087	715	192.44	5,227	3,334
191.93	4,204	757	192.45	5,232	3,386
191.94	4,320	799	192.46	5,237	3,439
191.95	4,437	843	192.47	5,241	3,491
191.96	4,554	888	192.48	5,246	3,544
191.97	4,671	934	192.49	5,251	3,596
191.98	4,787	981	192.50	5,256	3,649
191.99	4,904	1,030	192.51	5,260	3,701
192.00	5,021	1,080	192.52	5,265	3,754
192.01	5,026	1,130	192.53	5,270	3,807
192.02	5,030	1,180	192.54	5,274	3,859
192.03	5,035	1,230	192.55	5,279	3,912
192.04	5,040	1,281	192.56	5,284	3,965
192.05	5,044	1,331	192.57	5,288	4,018
192.06	5,049	1,382	192.58	5,293	4,071
192.07	5,054	1,432	192.59	5,298	4,124
192.08	5,059	1,483	192.60	5,302	4,177

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.61	5,307	4,230	193.13	5,553	7,053
192.62	5,312	4,283	193.14	5,558	7,108
192.63	5,316	4,336	193.15	5,563	7,164
192.64	5,321	4,389	193.16	5,568	7,220
192.65	5,326	4,442	193.17	5,573	7,275
192.66	5,331	4,496	193.18	5,577	7,331
192.67	5,335	4,549	193.19	5,582	7,387
192.68	5,340	4,602	193.20	5,587	7,443
192.69	5,345	4,656	193.21	5,592	7,499
192.70	5,349	4,709	193.22	5,597	7,555
192.71	5,354	4,763	193.23	5,602	7,611
192.72	5,359	4,816	193.24	5,607	7,667
192.73	5,363	4,870	193.25	5,612	7,723
192.74	5,368	4,923	193.26	5,616	7,779
192.75	5,373	4,977	193.27	5,621	7,835
192.76	5,377	5,031	193.28	5,626	7,891
192.77	5,382	5,085	193.29	5,631	7,948
192.78	5,387	5,139	193.30	5,636	8,004
192.79	5,392	5,192	193.31	5,641	8,060
192.80	5,396	5,246	193.32	5,646	8,117
192.81	5,401	5,300	193.33	5,650	8,173
192.82	5,406	5,354	193.34	5,655	8,230
192.83	5,410	5,408	193.35	5,660	8,286
192.84	5,415	5,463	193.36	5,665	8,343
192.85	5,420	5,517	193.37	5,670	8,400
192.86	5,424	5,571	193.38	5,675	8,456
192.87	5,429	5,625	193.39	5,680	8,513
192.88	5,434	5,680	193.40	5,684	8,570
192.89	5,438	5,734	193.41	5,689	8,627
192.90	5,443	5,788	193.42	5,694	8,684
192.91	5,448	5,843	193.43	5,699	8,741
192.92	5,452	5,897	193.44	5,704	8,798
192.93	5,457	5,952	193.45	5,709	8,855
192.94	5,462	6,006	193.46	5,714	8,912
192.95	5,467	6,061	193.47	5,718	8,969
192.96	5,471	6,116	193.48	5,723	9,026
192.97	5,476	6,171	193.49	5,728	9,083
192.98	5,481	6,225	193.50	5,733	9,141
192.99	5,485	6,280	193.51	5,738	9,198
193.00	5,490	6,335	193.52	5,743	9,256
193.01	5,495	6,390	193.53	5,748	9,313
193.02	5,500	6,445	193.54	5,752	9,370
193.03	5,505	6,500	193.55	5,757	9,428
193.04	5,509	6,555	193.56	5,762	9,486
193.05	5,514	6,610	193.57	5,767	9,543
193.06	5,519	6,665	193.58	5,772	9,601
193.07	5,524	6,721	193.59	5,777	9,659
193.08	5,529	6,776	193.60	5,782	9,716
193.09	5,534	6,831	193.61	5,786	9,774
193.10	5,539	6,886	193.62	5,791	9,832
193.11	5,543	6,942	193.63	5,796	9,890
193.12	5,548	6,997	193.64	5,801	9,948

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.65	5,806	10,006	194.17	6,061	13,091
193.66	5,811	10,064	194.18	6,066	13,152
193.67	5,816	10,122	194.19	6,071	13,213
193.68	5,820	10,181	194.20	6,076	13,273
193.69	5,825	10,239	194.21	6,081	13,334
193.70	5,830	10,297	194.22	6,086	13,395
193.71	5,835	10,355	194.23	6,091	13,456
193.72	5,840	10,414	194.24	6,096	13,517
193.73	5,845	10,472	194.25	6,102	13,578
193.74	5,850	10,531	194.26	6,107	13,639
193.75	5,855	10,589	194.27	6,112	13,700
193.76	5,859	10,648	194.28	6,117	13,761
193.77	5,864	10,706	194.29	6,122	13,822
193.78	5,869	10,765	194.30	6,127	13,883
193.79	5,874	10,824	194.31	6,132	13,945
193.80	5,879	10,883	194.32	6,137	14,006
193.81	5,884	10,941	194.33	6,142	14,067
193.82	5,889	11,000	194.34	6,147	14,129
193.83	5,893	11,059	194.35	6,152	14,190
193.84	5,898	11,118	194.36	6,157	14,252
193.85	5,903	11,177	194.37	6,162	14,313
193.86	5,908	11,236	194.38	6,167	14,375
193.87	5,913	11,295	194.39	6,172	14,437
193.88	5,918	11,354	194.40	6,177	14,499
193.89	5,923	11,414	194.41	6,182	14,560
193.90	5,927	11,473	194.42	6,187	14,622
193.91	5,932	11,532	194.43	6,192	14,684
193.92	5,937	11,591	194.44	6,197	14,746
193.93	5,942	11,651	194.45	6,202	14,808
193.94	5,947	11,710	194.46	6,207	14,870
193.95	5,952	11,770	194.47	6,212	14,932
193.96	5,957	11,829	194.48	6,217	14,994
193.97	5,961	11,889	194.49	6,222	15,057
193.98	5,966	11,949	194.50	6,227	15,119
193.99	5,971	12,008	194.51	6,232	15,181
194.00	5,976	12,068	194.52	6,237	15,243
194.01	5,981	12,128	194.53	6,242	15,306
194.02	5,986	12,188	194.54	6,247	15,368
194.03	5,991	12,248	194.55	6,252	15,431
194.04	5,996	12,307	194.56	6,257	15,493
194.05	6,001	12,367	194.57	6,262	15,556
194.06	6,006	12,427	194.58	6,267	15,619
194.07	6,011	12,488	194.59	6,272	15,681
194.08	6,016	12,548	194.60	6,277	15,744
194.09	6,021	12,608	194.61	6,282	15,807
194.10	6,026	12,668	194.62	6,287	15,870
194.11	6,031	12,728	194.63	6,292	15,933
194.12	6,036	12,789	194.64	6,297	15,995
194.13	6,041	12,849	194.65	6,302	16,058
194.14	6,046	12,910	194.66	6,307	16,122
194.15	6,051	12,970	194.67	6,312	16,185
194.16	6,056	13,031	194.68	6,317	16,248

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.69	6,322	16,311	195.21	6,587	19,667
194.70	6,327	16,374	195.22	6,592	19,733
194.71	6,332	16,438	195.23	6,597	19,799
194.72	6,337	16,501	195.24	6,602	19,865
194.73	6,342	16,564	195.25	6,607	19,931
194.74	6,347	16,628	195.26	6,612	19,997
194.75	6,353	16,691	195.27	6,618	20,063
194.76	6,358	16,755	195.28	6,623	20,129
194.77	6,363	16,818	195.29	6,628	20,195
194.78	6,368	16,882	195.30	6,633	20,262
194.79	6,373	16,946	195.31	6,638	20,328
194.80	6,378	17,009	195.32	6,643	20,394
194.81	6,383	17,073	195.33	6,649	20,461
194.82	6,388	17,137	195.34	6,654	20,527
194.83	6,393	17,201	195.35	6,659	20,594
194.84	6,398	17,265	195.36	6,664	20,661
194.85	6,403	17,329	195.37	6,669	20,727
194.86	6,408	17,393	195.38	6,674	20,794
194.87	6,413	17,457	195.39	6,680	20,861
194.88	6,418	17,521	195.40	6,685	20,928
194.89	6,423	17,585	195.41	6,690	20,994
194.90	6,428	17,650	195.42	6,695	21,061
194.91	6,433	17,714	195.43	6,700	21,128
194.92	6,438	17,778	195.44	6,705	21,195
194.93	6,443	17,843	195.45	6,711	21,262
194.94	6,448	17,907	195.46	6,716	21,330
194.95	6,453	17,972	195.47	6,721	21,397
194.96	6,458	18,036	195.48	6,726	21,464
194.97	6,463	18,101	195.49	6,731	21,531
194.98	6,468	18,166	195.50	6,737	21,599
194.99	6,473	18,230	195.51	6,742	21,666
195.00	6,478	18,295	195.52	6,747	21,733
195.01	6,483	18,360	195.53	6,752	21,801
195.02	6,488	18,425	195.54	6,757	21,869
195.03	6,494	18,490	195.55	6,762	21,936
195.04	6,499	18,555	195.56	6,768	22,004
195.05	6,504	18,620	195.57	6,773	22,071
195.06	6,509	18,685	195.58	6,778	22,139
195.07	6,514	18,750	195.59	6,783	22,207
195.08	6,519	18,815	195.60	6,788	22,275
195.09	6,525	18,880	195.61	6,793	22,343
195.10	6,530	18,945	195.62	6,799	22,411
195.11	6,535	19,011	195.63	6,804	22,479
195.12	6,540	19,076	195.64	6,809	22,547
195.13	6,545	19,142	195.65	6,814	22,615
195.14	6,550	19,207	195.66	6,819	22,683
195.15	6,556	19,273	195.67	6,824	22,751
195.16	6,561	19,338	195.68	6,830	22,820
195.17	6,566	19,404	195.69	6,835	22,888
195.18	6,571	19,469	195.70	6,840	22,956
195.19	6,576	19,535	195.71	6,845	23,025
195.20	6,581	19,601	195.72	6,850	23,093

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.73	6,855	23,162
195.74	6,861	23,230
195.75	6,866	23,299
195.76	6,871	23,368
195.77	6,876	23,436
195.78	6,881	23,505
195.79	6,886	23,574
195.80	6,892	23,643
195.81	6,897	23,712
195.82	6,902	23,781
195.83	6,907	23,850
195.84	6,912	23,919
195.85	6,917	23,988
195.86	6,923	24,057
195.87	6,928	24,127
195.88	6,933	24,196
195.89	6,938	24,265
195.90	6,943	24,335
195.91	6,948	24,404
195.92	6,954	24,474
195.93	6,959	24,543
195.94	6,964	24,613
195.95	6,969	24,682
195.96	6,974	24,752
195.97	6,979	24,822
195.98	6,985	24,892
195.99	6,990	24,962
196.00	6,995	25,032

Summary for Pond B-57: Basin #57

Inflow Area = 1.434 ac, 47.56% Impervious, Inflow Depth = 2.50" for Future 2 yr event
 Inflow = 3.60 cfs @ 12.17 hrs, Volume= 0.299 af
 Outflow = 1.31 cfs @ 12.42 hrs, Volume= 0.231 af, Atten= 64%, Lag= 15.0 min
 Primary = 1.31 cfs @ 12.42 hrs, Volume= 0.231 af
 Routed to Pond B-58 : Basin #58

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 203.20' @ 12.42 hrs Surf.Area= 4,598 sf Storage= 6,529 cf

Plug-Flow detention time= 362.0 min calculated for 0.231 af (77% of inflow)
 Center-of-Mass det. time= 274.5 min (1,063.4 - 788.9)

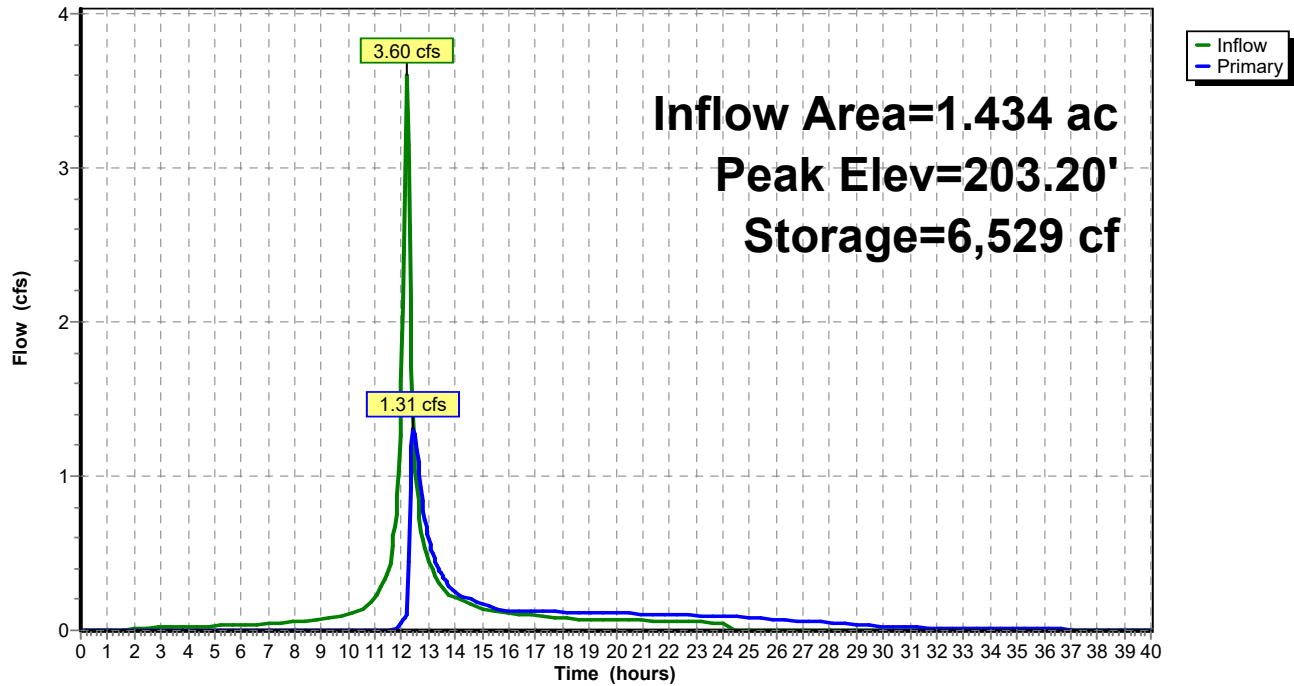
Volume	Invert	Avail.Storage	Storage Description
#1	201.30'	13,039 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.30	0	0	0
202.00	3,969	1,389	1,389
203.00	4,488	4,229	5,618
204.00	5,034	4,761	10,379
204.50	5,608	2,661	13,039

Device	Routing	Invert	Outlet Devices
#1	Primary	202.00'	36.0" Round Culvert L= 252.0' Ke= 0.500 Inlet / Outlet Invert= 202.00' / 199.00' S= 0.0119 '/' Cc= 0.900 n= 0.013, Flow Area= 7.07 sf
#2	Device 1	202.34'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	204.25'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.29 cfs @ 12.42 hrs HW=203.20' (Free Discharge)

1=Culvert (Passes 1.29 cfs of 9.83 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.14 cfs @ 4.18 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 1.15 cfs @ 1.46 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-57: Basin #57**Hydrograph**

Stage-Discharge for Pond B-57: Basin #57

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.30	0.00	201.82	0.00	202.34	0.00	202.86	0.11
201.31	0.00	201.83	0.00	202.35	0.00	202.87	0.11
201.32	0.00	201.84	0.00	202.36	0.00	202.88	0.11
201.33	0.00	201.85	0.00	202.37	0.00	202.89	0.11
201.34	0.00	201.86	0.00	202.38	0.00	202.90	0.11
201.35	0.00	201.87	0.00	202.39	0.00	202.91	0.11
201.36	0.00	201.88	0.00	202.40	0.01	202.92	0.11
201.37	0.00	201.89	0.00	202.41	0.01	202.93	0.11
201.38	0.00	201.90	0.00	202.42	0.01	202.94	0.12
201.39	0.00	201.91	0.00	202.43	0.01	202.95	0.12
201.40	0.00	201.92	0.00	202.44	0.02	202.96	0.12
201.41	0.00	201.93	0.00	202.45	0.02	202.97	0.12
201.42	0.00	201.94	0.00	202.46	0.02	202.98	0.12
201.43	0.00	201.95	0.00	202.47	0.03	202.99	0.12
201.44	0.00	201.96	0.00	202.48	0.03	203.00	0.12
201.45	0.00	201.97	0.00	202.49	0.03	203.01	0.14
201.46	0.00	201.98	0.00	202.50	0.04	203.02	0.16
201.47	0.00	201.99	0.00	202.51	0.04	203.03	0.19
201.48	0.00	202.00	0.00	202.52	0.05	203.04	0.23
201.49	0.00	202.01	0.00	202.53	0.05	203.05	0.27
201.50	0.00	202.02	0.00	202.54	0.05	203.06	0.32
201.51	0.00	202.03	0.00	202.55	0.05	203.07	0.37
201.52	0.00	202.04	0.00	202.56	0.06	203.08	0.43
201.53	0.00	202.05	0.00	202.57	0.06	203.09	0.48
201.54	0.00	202.06	0.00	202.58	0.06	203.10	0.54
201.55	0.00	202.07	0.00	202.59	0.06	203.11	0.61
201.56	0.00	202.08	0.00	202.60	0.06	203.12	0.68
201.57	0.00	202.09	0.00	202.61	0.07	203.13	0.75
201.58	0.00	202.10	0.00	202.62	0.07	203.14	0.82
201.59	0.00	202.11	0.00	202.63	0.07	203.15	0.89
201.60	0.00	202.12	0.00	202.64	0.07	203.16	0.97
201.61	0.00	202.13	0.00	202.65	0.07	203.17	1.05
201.62	0.00	202.14	0.00	202.66	0.08	203.18	1.13
201.63	0.00	202.15	0.00	202.67	0.08	203.19	1.21
201.64	0.00	202.16	0.00	202.68	0.08	203.20	1.30
201.65	0.00	202.17	0.00	202.69	0.08	203.21	1.39
201.66	0.00	202.18	0.00	202.70	0.08	203.22	1.48
201.67	0.00	202.19	0.00	202.71	0.08	203.23	1.57
201.68	0.00	202.20	0.00	202.72	0.09	203.24	1.67
201.69	0.00	202.21	0.00	202.73	0.09	203.25	1.76
201.70	0.00	202.22	0.00	202.74	0.09	203.26	1.86
201.71	0.00	202.23	0.00	202.75	0.09	203.27	1.96
201.72	0.00	202.24	0.00	202.76	0.09	203.28	2.06
201.73	0.00	202.25	0.00	202.77	0.09	203.29	2.16
201.74	0.00	202.26	0.00	202.78	0.10	203.30	2.27
201.75	0.00	202.27	0.00	202.79	0.10	203.31	2.38
201.76	0.00	202.28	0.00	202.80	0.10	203.32	2.48
201.77	0.00	202.29	0.00	202.81	0.10	203.33	2.59
201.78	0.00	202.30	0.00	202.82	0.10	203.34	2.70
201.79	0.00	202.31	0.00	202.83	0.10	203.35	2.82
201.80	0.00	202.32	0.00	202.84	0.10	203.36	2.93
201.81	0.00	202.33	0.00	202.85	0.10	203.37	3.05

Stage-Discharge for Pond B-57: Basin #57 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.38	3.16	203.90	10.86	204.42	29.06	204.94	111.85
203.39	3.28	203.91	11.04	204.43	30.01	204.95	113.82
203.40	3.40	203.92	11.21	204.44	30.98	204.96	115.81
203.41	3.52	203.93	11.39	204.45	31.98	204.97	117.81
203.42	3.65	203.94	11.56	204.46	33.04	204.98	119.83
203.43	3.77	203.95	11.74	204.47	34.12	204.99	121.86
203.44	3.90	203.96	11.91	204.48	35.22	205.00	123.90
203.45	4.02	203.97	12.09	204.49	36.36		
203.46	4.15	203.98	12.27	204.50	37.52		
203.47	4.28	203.99	12.45	204.51	38.70		
203.48	4.41	204.00	12.63	204.52	39.91		
203.49	4.54	204.01	12.81	204.53	41.15		
203.50	4.68	204.02	12.99	204.54	42.41		
203.51	4.81	204.03	13.18	204.55	43.69		
203.52	4.95	204.04	13.36	204.56	45.00		
203.53	5.08	204.05	13.54	204.57	46.34		
203.54	5.22	204.06	13.73	204.58	47.70		
203.55	5.36	204.07	13.91	204.59	49.08		
203.56	5.50	204.08	14.10	204.60	50.49		
203.57	5.64	204.09	14.28	204.61	51.93		
203.58	5.79	204.10	14.47	204.62	53.39		
203.59	5.93	204.11	14.66	204.63	54.87		
203.60	6.07	204.12	14.85	204.64	56.38		
203.61	6.22	204.13	15.04	204.65	57.91		
203.62	6.37	204.14	15.23	204.66	59.49		
203.63	6.51	204.15	15.42	204.67	61.10		
203.64	6.66	204.16	15.61	204.68	62.74		
203.65	6.81	204.17	15.80	204.69	64.40		
203.66	6.96	204.18	15.99	204.70	66.09		
203.67	7.11	204.19	16.19	204.71	67.81		
203.68	7.27	204.20	16.38	204.72	69.55		
203.69	7.42	204.21	16.57	204.73	71.32		
203.70	7.58	204.22	16.77	204.74	73.12		
203.71	7.73	204.23	16.96	204.75	74.95		
203.72	7.89	204.24	17.16	204.76	76.80		
203.73	8.05	204.25	17.36	204.77	78.67		
203.74	8.21	204.26	17.67	204.78	80.58		
203.75	8.36	204.27	18.08	204.79	82.51		
203.76	8.53	204.28	18.56	204.80	84.47		
203.77	8.69	204.29	19.09	204.81	86.46		
203.78	8.85	204.30	19.66	204.82	88.47		
203.79	9.01	204.31	20.28	204.83	90.51		
203.80	9.18	204.32	20.93	204.84	92.58		
203.81	9.34	204.33	21.61	204.85	94.67		
203.82	9.51	204.34	22.33	204.86	96.53		
203.83	9.67	204.35	23.08	204.87	98.39		
203.84	9.84	204.36	23.85	204.88	100.27		
203.85	10.01	204.37	24.66	204.89	102.17		
203.86	10.18	204.38	25.49	204.90	104.08		
203.87	10.35	204.39	26.34	204.91	106.00		
203.88	10.52	204.40	27.23	204.92	107.94		
203.89	10.69	204.41	28.13	204.93	109.88		

Stage-Area-Storage for Pond B-57: Basin #57

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.30	0	0	201.82	2,948	767
201.31	57	0	201.83	3,005	796
201.32	113	1	201.84	3,062	827
201.33	170	3	201.85	3,119	858
201.34	227	5	201.86	3,175	889
201.35	284	7	201.87	3,232	921
201.36	340	10	201.88	3,289	954
201.37	397	14	201.89	3,345	987
201.38	454	18	201.90	3,402	1,021
201.39	510	23	201.91	3,459	1,055
201.40	567	28	201.92	3,515	1,090
201.41	624	34	201.93	3,572	1,125
201.42	680	41	201.94	3,629	1,161
201.43	737	48	201.95	3,686	1,198
201.44	794	56	201.96	3,742	1,235
201.45	851	64	201.97	3,799	1,273
201.46	907	73	201.98	3,856	1,311
201.47	964	82	201.99	3,912	1,350
201.48	1,021	92	202.00	3,969	1,389
201.49	1,077	102	202.01	3,974	1,429
201.50	1,134	113	202.02	3,979	1,469
201.51	1,191	125	202.03	3,985	1,508
201.52	1,247	137	202.04	3,990	1,548
201.53	1,304	150	202.05	3,995	1,588
201.54	1,361	163	202.06	4,000	1,628
201.55	1,418	177	202.07	4,005	1,668
201.56	1,474	192	202.08	4,011	1,708
201.57	1,531	207	202.09	4,016	1,748
201.58	1,588	222	202.10	4,021	1,789
201.59	1,644	238	202.11	4,026	1,829
201.60	1,701	255	202.12	4,031	1,869
201.61	1,758	272	202.13	4,036	1,910
201.62	1,814	290	202.14	4,042	1,950
201.63	1,871	309	202.15	4,047	1,990
201.64	1,928	328	202.16	4,052	2,031
201.65	1,985	347	202.17	4,057	2,071
201.66	2,041	367	202.18	4,062	2,112
201.67	2,098	388	202.19	4,068	2,153
201.68	2,155	409	202.20	4,073	2,193
201.69	2,211	431	202.21	4,078	2,234
201.70	2,268	454	202.22	4,083	2,275
201.71	2,325	477	202.23	4,088	2,316
201.72	2,381	500	202.24	4,094	2,357
201.73	2,438	524	202.25	4,099	2,398
201.74	2,495	549	202.26	4,104	2,439
201.75	2,551	574	202.27	4,109	2,480
201.76	2,608	600	202.28	4,114	2,521
201.77	2,665	626	202.29	4,120	2,562
201.78	2,722	653	202.30	4,125	2,603
201.79	2,778	681	202.31	4,130	2,644
201.80	2,835	709	202.32	4,135	2,686
201.81	2,892	737	202.33	4,140	2,727

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.34	4,145	2,769	202.86	4,415	4,994
202.35	4,151	2,810	202.87	4,421	5,039
202.36	4,156	2,852	202.88	4,426	5,083
202.37	4,161	2,893	202.89	4,431	5,127
202.38	4,166	2,935	202.90	4,436	5,171
202.39	4,171	2,977	202.91	4,441	5,216
202.40	4,177	3,018	202.92	4,446	5,260
202.41	4,182	3,060	202.93	4,452	5,305
202.42	4,187	3,102	202.94	4,457	5,349
202.43	4,192	3,144	202.95	4,462	5,394
202.44	4,197	3,186	202.96	4,467	5,439
202.45	4,203	3,228	202.97	4,472	5,483
202.46	4,208	3,270	202.98	4,478	5,528
202.47	4,213	3,312	202.99	4,483	5,573
202.48	4,218	3,354	203.00	4,488	5,618
202.49	4,223	3,396	203.01	4,493	5,663
202.50	4,229	3,439	203.02	4,499	5,708
202.51	4,234	3,481	203.03	4,504	5,753
202.52	4,239	3,523	203.04	4,510	5,798
202.53	4,244	3,566	203.05	4,515	5,843
202.54	4,249	3,608	203.06	4,521	5,888
202.55	4,254	3,651	203.07	4,526	5,933
202.56	4,260	3,693	203.08	4,532	5,978
202.57	4,265	3,736	203.09	4,537	6,024
202.58	4,270	3,778	203.10	4,543	6,069
202.59	4,275	3,821	203.11	4,548	6,115
202.60	4,280	3,864	203.12	4,554	6,160
202.61	4,286	3,907	203.13	4,559	6,206
202.62	4,291	3,950	203.14	4,564	6,251
202.63	4,296	3,993	203.15	4,570	6,297
202.64	4,301	4,036	203.16	4,575	6,343
202.65	4,306	4,079	203.17	4,581	6,388
202.66	4,312	4,122	203.18	4,586	6,434
202.67	4,317	4,165	203.19	4,592	6,480
202.68	4,322	4,208	203.20	4,597	6,526
202.69	4,327	4,251	203.21	4,603	6,572
202.70	4,332	4,295	203.22	4,608	6,618
202.71	4,337	4,338	203.23	4,614	6,664
202.72	4,343	4,381	203.24	4,619	6,710
202.73	4,348	4,425	203.25	4,625	6,757
202.74	4,353	4,468	203.26	4,630	6,803
202.75	4,358	4,512	203.27	4,635	6,849
202.76	4,363	4,555	203.28	4,641	6,896
202.77	4,369	4,599	203.29	4,646	6,942
202.78	4,374	4,643	203.30	4,652	6,989
202.79	4,379	4,687	203.31	4,657	7,035
202.80	4,384	4,730	203.32	4,663	7,082
202.81	4,389	4,774	203.33	4,668	7,128
202.82	4,395	4,818	203.34	4,674	7,175
202.83	4,400	4,862	203.35	4,679	7,222
202.84	4,405	4,906	203.36	4,685	7,269
202.85	4,410	4,950	203.37	4,690	7,316

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.38	4,695	7,363	203.90	4,979	9,878
203.39	4,701	7,409	203.91	4,985	9,928
203.40	4,706	7,457	203.92	4,990	9,978
203.41	4,712	7,504	203.93	4,996	10,028
203.42	4,717	7,551	203.94	5,001	10,078
203.43	4,723	7,598	203.95	5,007	10,128
203.44	4,728	7,645	203.96	5,012	10,178
203.45	4,734	7,693	203.97	5,018	10,228
203.46	4,739	7,740	203.98	5,023	10,278
203.47	4,745	7,787	203.99	5,029	10,328
203.48	4,750	7,835	204.00	5,034	10,379
203.49	4,756	7,882	204.01	5,045	10,429
203.50	4,761	7,930	204.02	5,057	10,480
203.51	4,766	7,978	204.03	5,068	10,530
203.52	4,772	8,025	204.04	5,080	10,581
203.53	4,777	8,073	204.05	5,091	10,632
203.54	4,783	8,121	204.06	5,103	10,683
203.55	4,788	8,169	204.07	5,114	10,734
203.56	4,794	8,217	204.08	5,126	10,785
203.57	4,799	8,265	204.09	5,137	10,836
203.58	4,805	8,313	204.10	5,149	10,888
203.59	4,810	8,361	204.11	5,160	10,939
203.60	4,816	8,409	204.12	5,172	10,991
203.61	4,821	8,457	204.13	5,183	11,043
203.62	4,827	8,505	204.14	5,195	11,095
203.63	4,832	8,553	204.15	5,206	11,147
203.64	4,837	8,602	204.16	5,218	11,199
203.65	4,843	8,650	204.17	5,229	11,251
203.66	4,848	8,699	204.18	5,241	11,303
203.67	4,854	8,747	204.19	5,252	11,356
203.68	4,859	8,796	204.20	5,264	11,408
203.69	4,865	8,844	204.21	5,275	11,461
203.70	4,870	8,893	204.22	5,287	11,514
203.71	4,876	8,942	204.23	5,298	11,567
203.72	4,881	8,991	204.24	5,310	11,620
203.73	4,887	9,039	204.25	5,321	11,673
203.74	4,892	9,088	204.26	5,332	11,726
203.75	4,898	9,137	204.27	5,344	11,780
203.76	4,903	9,186	204.28	5,355	11,833
203.77	4,908	9,235	204.29	5,367	11,887
203.78	4,914	9,284	204.30	5,378	11,941
203.79	4,919	9,334	204.31	5,390	11,994
203.80	4,925	9,383	204.32	5,401	12,048
203.81	4,930	9,432	204.33	5,413	12,102
203.82	4,936	9,481	204.34	5,424	12,157
203.83	4,941	9,531	204.35	5,436	12,211
203.84	4,947	9,580	204.36	5,447	12,265
203.85	4,952	9,630	204.37	5,459	12,320
203.86	4,958	9,679	204.38	5,470	12,374
203.87	4,963	9,729	204.39	5,482	12,429
203.88	4,968	9,779	204.40	5,493	12,484
203.89	4,974	9,828	204.41	5,505	12,539

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.42	5,516	12,594	204.94	5,608	13,039
204.43	5,528	12,649	204.95	5,608	13,039
204.44	5,539	12,705	204.96	5,608	13,039
204.45	5,551	12,760	204.97	5,608	13,039
204.46	5,562	12,816	204.98	5,608	13,039
204.47	5,574	12,871	204.99	5,608	13,039
204.48	5,585	12,927	205.00	5,608	13,039
204.49	5,597	12,983			
204.50	5,608	13,039			
204.51	5,608	13,039			
204.52	5,608	13,039			
204.53	5,608	13,039			
204.54	5,608	13,039			
204.55	5,608	13,039			
204.56	5,608	13,039			
204.57	5,608	13,039			
204.58	5,608	13,039			
204.59	5,608	13,039			
204.60	5,608	13,039			
204.61	5,608	13,039			
204.62	5,608	13,039			
204.63	5,608	13,039			
204.64	5,608	13,039			
204.65	5,608	13,039			
204.66	5,608	13,039			
204.67	5,608	13,039			
204.68	5,608	13,039			
204.69	5,608	13,039			
204.70	5,608	13,039			
204.71	5,608	13,039			
204.72	5,608	13,039			
204.73	5,608	13,039			
204.74	5,608	13,039			
204.75	5,608	13,039			
204.76	5,608	13,039			
204.77	5,608	13,039			
204.78	5,608	13,039			
204.79	5,608	13,039			
204.80	5,608	13,039			
204.81	5,608	13,039			
204.82	5,608	13,039			
204.83	5,608	13,039			
204.84	5,608	13,039			
204.85	5,608	13,039			
204.86	5,608	13,039			
204.87	5,608	13,039			
204.88	5,608	13,039			
204.89	5,608	13,039			
204.90	5,608	13,039			
204.91	5,608	13,039			
204.92	5,608	13,039			
204.93	5,608	13,039			

Summary for Pond B-58: Basin #58

Inflow Area = 3.083 ac, 36.46% Impervious, Inflow Depth > 2.00" for Future 2 yr event
 Inflow = 3.56 cfs @ 12.18 hrs, Volume= 0.514 af
 Outflow = 2.17 cfs @ 12.54 hrs, Volume= 0.460 af, Atten= 39%, Lag= 21.6 min
 Primary = 2.17 cfs @ 12.54 hrs, Volume= 0.460 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 199.54' @ 12.54 hrs Surf.Area= 6,609 sf Storage= 5,650 cf

Plug-Flow detention time= 169.6 min calculated for 0.460 af (90% of inflow)
 Center-of-Mass det. time= 91.8 min (1,016.2 - 924.4)

Volume	Invert	Avail.Storage	Storage Description
#1	198.30'	32,924 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
198.30	0	0	0
199.00	6,230	2,180	2,180
200.00	6,932	6,581	8,761
201.00	7,670	7,301	16,062
202.00	8,426	8,048	24,110
203.00	9,201	8,814	32,924

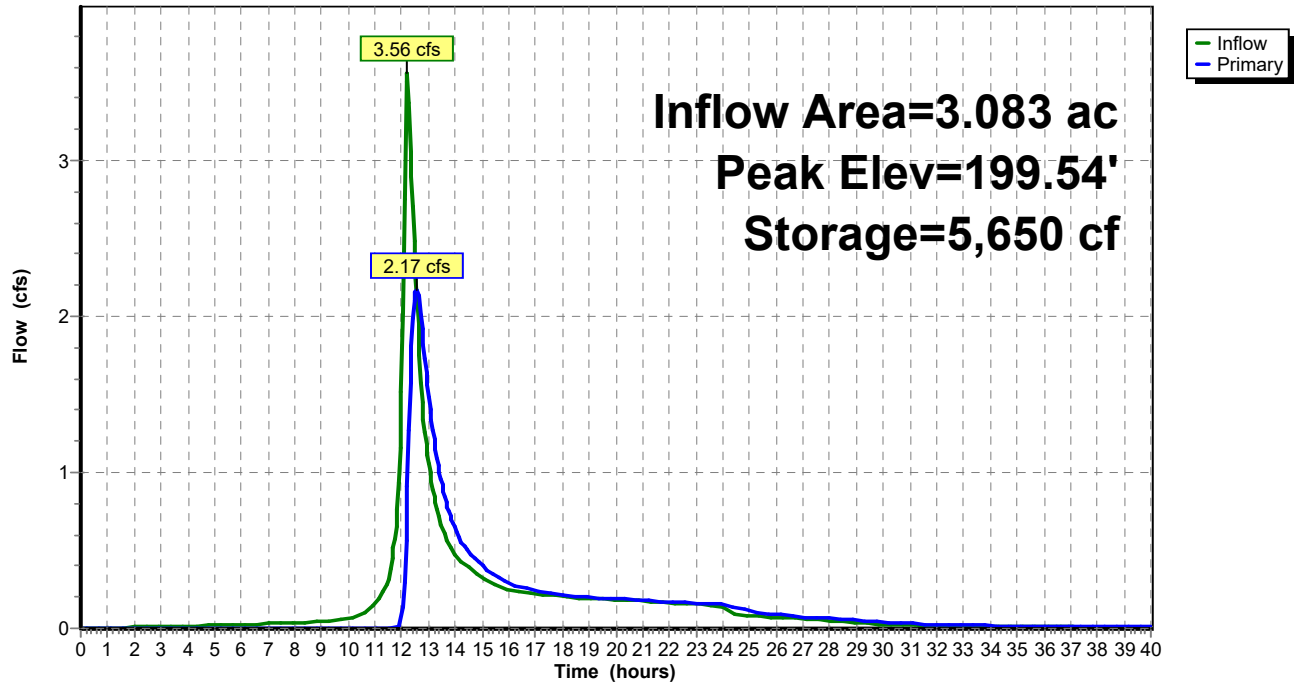
Device	Routing	Invert	Outlet Devices
#1	Primary	199.00'	36.0" Round Culvert L= 87.0' Ke= 0.500 Inlet / Outlet Invert= 199.00' / 198.00' S= 0.0115 '/' Cc= 0.900 n= 0.013, Flow Area= 7.07 sf
#2	Device 1	198.97'	24.0" W x 6.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	201.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	202.75'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.17 cfs @ 12.54 hrs HW=199.54' (Free Discharge)

1=Culvert (Inlet Controls 2.17 cfs @ 2.50 fps)
 2=Orifice/Grate (Passes 2.17 cfs of 2.64 cfs potential flow)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-58: Basin #58

Hydrograph



Stage-Discharge for Pond B-58: Basin #58

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
198.30	0.00	198.82	0.00	199.34	0.88	199.86	3.82
198.31	0.00	198.83	0.00	199.35	0.93	199.87	3.86
198.32	0.00	198.84	0.00	199.36	0.98	199.88	3.89
198.33	0.00	198.85	0.00	199.37	1.04	199.89	3.92
198.34	0.00	198.86	0.00	199.38	1.09	199.90	3.95
198.35	0.00	198.87	0.00	199.39	1.15	199.91	3.97
198.36	0.00	198.88	0.00	199.40	1.21	199.92	4.00
198.37	0.00	198.89	0.00	199.41	1.27	199.93	4.03
198.38	0.00	198.90	0.00	199.42	1.33	199.94	4.06
198.39	0.00	198.91	0.00	199.43	1.39	199.95	4.09
198.40	0.00	198.92	0.00	199.44	1.45	199.96	4.12
198.41	0.00	198.93	0.00	199.45	1.52	199.97	4.15
198.42	0.00	198.94	0.00	199.46	1.59	199.98	4.18
198.43	0.00	198.95	0.00	199.47	1.65	199.99	4.20
198.44	0.00	198.96	0.00	199.48	1.72	200.00	4.23
198.45	0.00	198.97	0.00	199.49	1.79	200.01	4.26
198.46	0.00	198.98	0.00	199.50	1.86	200.02	4.29
198.47	0.00	198.99	0.00	199.51	1.94	200.03	4.31
198.48	0.00	199.00	0.00	199.52	2.01	200.04	4.34
198.49	0.00	199.01	0.00	199.53	2.09	200.05	4.37
198.50	0.00	199.02	0.00	199.54	2.16	200.06	4.39
198.51	0.00	199.03	0.01	199.55	2.24	200.07	4.42
198.52	0.00	199.04	0.01	199.56	2.32	200.08	4.45
198.53	0.00	199.05	0.02	199.57	2.40	200.09	4.47
198.54	0.00	199.06	0.03	199.58	2.49	200.10	4.50
198.55	0.00	199.07	0.04	199.59	2.57	200.11	4.53
198.56	0.00	199.08	0.05	199.60	2.65	200.12	4.55
198.57	0.00	199.09	0.06	199.61	2.74	200.13	4.58
198.58	0.00	199.10	0.08	199.62	2.83	200.14	4.60
198.59	0.00	199.11	0.09	199.63	2.92	200.15	4.63
198.60	0.00	199.12	0.11	199.64	3.01	200.16	4.65
198.61	0.00	199.13	0.13	199.65	3.10	200.17	4.68
198.62	0.00	199.14	0.15	199.66	3.15	200.18	4.70
198.63	0.00	199.15	0.17	199.67	3.18	200.19	4.73
198.64	0.00	199.16	0.20	199.68	3.22	200.20	4.75
198.65	0.00	199.17	0.22	199.69	3.26	200.21	4.78
198.66	0.00	199.18	0.25	199.70	3.29	200.22	4.80
198.67	0.00	199.19	0.28	199.71	3.33	200.23	4.82
198.68	0.00	199.20	0.31	199.72	3.36	200.24	4.85
198.69	0.00	199.21	0.34	199.73	3.40	200.25	4.87
198.70	0.00	199.22	0.37	199.74	3.43	200.26	4.90
198.71	0.00	199.23	0.41	199.75	3.47	200.27	4.92
198.72	0.00	199.24	0.44	199.76	3.50	200.28	4.94
198.73	0.00	199.25	0.48	199.77	3.54	200.29	4.97
198.74	0.00	199.26	0.52	199.78	3.57	200.30	4.99
198.75	0.00	199.27	0.56	199.79	3.60	200.31	5.01
198.76	0.00	199.28	0.60	199.80	3.64	200.32	5.04
198.77	0.00	199.29	0.64	199.81	3.67	200.33	5.06
198.78	0.00	199.30	0.69	199.82	3.70	200.34	5.08
198.79	0.00	199.31	0.73	199.83	3.73	200.35	5.11
198.80	0.00	199.32	0.78	199.84	3.76	200.36	5.13
198.81	0.00	199.33	0.83	199.85	3.79	200.37	5.15

Stage-Discharge for Pond B-58: Basin #58 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.38	5.17	200.90	6.23	201.42	10.62	201.94	19.30
200.39	5.20	200.91	6.25	201.43	10.76	201.95	19.49
200.40	5.22	200.92	6.27	201.44	10.90	201.96	19.68
200.41	5.24	200.93	6.29	201.45	11.04	201.97	19.87
200.42	5.26	200.94	6.31	201.46	11.19	201.98	20.06
200.43	5.29	200.95	6.33	201.47	11.33	201.99	20.26
200.44	5.31	200.96	6.34	201.48	11.48	202.00	20.45
200.45	5.33	200.97	6.36	201.49	11.63	202.01	20.64
200.46	5.35	200.98	6.38	201.50	11.77	202.02	20.84
200.47	5.37	200.99	6.40	201.51	11.92	202.03	21.04
200.48	5.39	201.00	6.42	201.52	12.07	202.04	21.23
200.49	5.42	201.01	6.45	201.53	12.23	202.05	21.43
200.50	5.44	201.02	6.49	201.54	12.38	202.06	21.63
200.51	5.46	201.03	6.54	201.55	12.53	202.07	21.83
200.52	5.48	201.04	6.59	201.56	12.69	202.08	22.03
200.53	5.50	201.05	6.65	201.57	12.84	202.09	22.23
200.54	5.52	201.06	6.72	201.58	13.00	202.10	22.43
200.55	5.54	201.07	6.78	201.59	13.16	202.11	22.63
200.56	5.56	201.08	6.86	201.60	13.32	202.12	22.83
200.57	5.58	201.09	6.93	201.61	13.48	202.13	23.03
200.58	5.61	201.10	7.01	201.62	13.64	202.14	23.24
200.59	5.63	201.11	7.09	201.63	13.80	202.15	23.44
200.60	5.65	201.12	7.17	201.64	13.97	202.16	23.65
200.61	5.67	201.13	7.26	201.65	14.13	202.17	23.85
200.62	5.69	201.14	7.35	201.66	14.30	202.18	24.06
200.63	5.71	201.15	7.44	201.67	14.47	202.19	24.26
200.64	5.73	201.16	7.53	201.68	14.63	202.20	24.47
200.65	5.75	201.17	7.63	201.69	14.80	202.21	24.68
200.66	5.77	201.18	7.72	201.70	14.97	202.22	24.89
200.67	5.79	201.19	7.83	201.71	15.14	202.23	25.10
200.68	5.81	201.20	7.93	201.72	15.31	202.24	25.31
200.69	5.83	201.21	8.03	201.73	15.48	202.25	25.52
200.70	5.85	201.22	8.14	201.74	15.66	202.26	25.73
200.71	5.87	201.23	8.25	201.75	15.83	202.27	25.94
200.72	5.89	201.24	8.36	201.76	16.01	202.28	26.15
200.73	5.91	201.25	8.47	201.77	16.18	202.29	26.36
200.74	5.93	201.26	8.58	201.78	16.36	202.30	26.57
200.75	5.95	201.27	8.70	201.79	16.54	202.31	26.79
200.76	5.97	201.28	8.82	201.80	16.71	202.32	27.00
200.77	5.99	201.29	8.93	201.81	16.89	202.33	27.22
200.78	6.01	201.30	9.06	201.82	17.07	202.34	27.43
200.79	6.03	201.31	9.18	201.83	17.25	202.35	27.65
200.80	6.04	201.32	9.30	201.84	17.44	202.36	27.86
200.81	6.06	201.33	9.43	201.85	17.62	202.37	28.08
200.82	6.08	201.34	9.55	201.86	17.80	202.38	28.30
200.83	6.10	201.35	9.68	201.87	17.99	202.39	28.51
200.84	6.12	201.36	9.81	201.88	18.17	202.40	28.73
200.85	6.14	201.37	9.94	201.89	18.36	202.41	28.95
200.86	6.16	201.38	10.08	201.90	18.54	202.42	29.17
200.87	6.18	201.39	10.21	201.91	18.73	202.43	29.39
200.88	6.20	201.40	10.35	201.92	18.92	202.44	29.61
200.89	6.21	201.41	10.48	201.93	19.11	202.45	29.83

Stage-Discharge for Pond B-58: Basin #58 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
202.46	30.05	202.98	55.35
202.47	30.28	202.99	56.52
202.48	30.50	203.00	57.71
202.49	30.72		
202.50	30.94		
202.51	31.17		
202.52	31.39		
202.53	31.62		
202.54	31.84		
202.55	32.07		
202.56	32.29		
202.57	32.52		
202.58	32.75		
202.59	32.98		
202.60	33.20		
202.61	33.43		
202.62	33.66		
202.63	33.89		
202.64	34.12		
202.65	34.35		
202.66	34.58		
202.67	34.81		
202.68	35.04		
202.69	35.27		
202.70	35.51		
202.71	35.74		
202.72	35.97		
202.73	36.21		
202.74	36.44		
202.75	36.67		
202.76	37.03		
202.77	37.48		
202.78	37.99		
202.79	38.55		
202.80	39.16		
202.81	39.81		
202.82	40.50		
202.83	41.22		
202.84	41.97		
202.85	42.76		
202.86	43.57		
202.87	44.41		
202.88	45.27		
202.89	46.17		
202.90	47.08		
202.91	48.02		
202.92	48.98		
202.93	49.97		
202.94	50.98		
202.95	52.01		
202.96	53.09		
202.97	54.21		

Stage-Area-Storage for Pond B-58: Basin #58

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
198.30	0	0	198.82	4,628	1,203
198.31	89	0	198.83	4,717	1,250
198.32	178	2	198.84	4,806	1,298
198.33	267	4	198.85	4,895	1,346
198.34	356	7	198.86	4,984	1,396
198.35	445	11	198.87	5,073	1,446
198.36	534	16	198.88	5,162	1,497
198.37	623	22	198.89	5,251	1,549
198.38	712	28	198.90	5,340	1,602
198.39	801	36	198.91	5,429	1,656
198.40	890	44	198.92	5,518	1,711
198.41	979	54	198.93	5,607	1,766
198.42	1,068	64	198.94	5,696	1,823
198.43	1,157	75	198.95	5,785	1,880
198.44	1,246	87	198.96	5,874	1,938
198.45	1,335	100	198.97	5,963	1,998
198.46	1,424	114	198.98	6,052	2,058
198.47	1,513	129	198.99	6,141	2,119
198.48	1,602	144	199.00	6,230	2,180
198.49	1,691	161	199.01	6,237	2,243
198.50	1,780	178	199.02	6,244	2,305
198.51	1,869	196	199.03	6,251	2,368
198.52	1,958	215	199.04	6,258	2,430
198.53	2,047	235	199.05	6,265	2,493
198.54	2,136	256	199.06	6,272	2,556
198.55	2,225	278	199.07	6,279	2,618
198.56	2,314	301	199.08	6,286	2,681
198.57	2,403	324	199.09	6,293	2,744
198.58	2,492	349	199.10	6,300	2,807
198.59	2,581	374	199.11	6,307	2,870
198.60	2,670	401	199.12	6,314	2,933
198.61	2,759	428	199.13	6,321	2,996
198.62	2,848	456	199.14	6,328	3,060
198.63	2,937	485	199.15	6,335	3,123
198.64	3,026	514	199.16	6,342	3,186
198.65	3,115	545	199.17	6,349	3,250
198.66	3,204	577	199.18	6,356	3,313
198.67	3,293	609	199.19	6,363	3,377
198.68	3,382	643	199.20	6,370	3,441
198.69	3,471	677	199.21	6,377	3,504
198.70	3,560	712	199.22	6,384	3,568
198.71	3,649	748	199.23	6,391	3,632
198.72	3,738	785	199.24	6,398	3,696
198.73	3,827	823	199.25	6,406	3,760
198.74	3,916	862	199.26	6,413	3,824
198.75	4,005	901	199.27	6,420	3,888
198.76	4,094	942	199.28	6,427	3,952
198.77	4,183	983	199.29	6,434	4,017
198.78	4,272	1,025	199.30	6,441	4,081
198.79	4,361	1,068	199.31	6,448	4,146
198.80	4,450	1,113	199.32	6,455	4,210
198.81	4,539	1,157	199.33	6,462	4,275

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
199.34	6,469	4,339	199.86	6,834	7,798
199.35	6,476	4,404	199.87	6,841	7,866
199.36	6,483	4,469	199.88	6,848	7,935
199.37	6,490	4,534	199.89	6,855	8,003
199.38	6,497	4,599	199.90	6,862	8,072
199.39	6,504	4,664	199.91	6,869	8,140
199.40	6,511	4,729	199.92	6,876	8,209
199.41	6,518	4,794	199.93	6,883	8,278
199.42	6,525	4,859	199.94	6,890	8,347
199.43	6,532	4,924	199.95	6,897	8,416
199.44	6,539	4,990	199.96	6,904	8,485
199.45	6,546	5,055	199.97	6,911	8,554
199.46	6,553	5,121	199.98	6,918	8,623
199.47	6,560	5,186	199.99	6,925	8,692
199.48	6,567	5,252	200.00	6,932	8,761
199.49	6,574	5,317	200.01	6,939	8,831
199.50	6,581	5,383	200.02	6,947	8,900
199.51	6,588	5,449	200.03	6,954	8,970
199.52	6,595	5,515	200.04	6,962	9,039
199.53	6,602	5,581	200.05	6,969	9,109
199.54	6,609	5,647	200.06	6,976	9,179
199.55	6,616	5,713	200.07	6,984	9,249
199.56	6,623	5,779	200.08	6,991	9,318
199.57	6,630	5,846	200.09	6,998	9,388
199.58	6,637	5,912	200.10	7,006	9,458
199.59	6,644	5,978	200.11	7,013	9,528
199.60	6,651	6,045	200.12	7,021	9,599
199.61	6,658	6,111	200.13	7,028	9,669
199.62	6,665	6,178	200.14	7,035	9,739
199.63	6,672	6,245	200.15	7,043	9,810
199.64	6,679	6,311	200.16	7,050	9,880
199.65	6,686	6,378	200.17	7,057	9,951
199.66	6,693	6,445	200.18	7,065	10,021
199.67	6,700	6,512	200.19	7,072	10,092
199.68	6,707	6,579	200.20	7,080	10,163
199.69	6,714	6,646	200.21	7,087	10,233
199.70	6,721	6,713	200.22	7,094	10,304
199.71	6,728	6,781	200.23	7,102	10,375
199.72	6,735	6,848	200.24	7,109	10,446
199.73	6,742	6,915	200.25	7,117	10,518
199.74	6,749	6,983	200.26	7,124	10,589
199.75	6,757	7,050	200.27	7,131	10,660
199.76	6,764	7,118	200.28	7,139	10,731
199.77	6,771	7,186	200.29	7,146	10,803
199.78	6,778	7,253	200.30	7,153	10,874
199.79	6,785	7,321	200.31	7,161	10,946
199.80	6,792	7,389	200.32	7,168	11,018
199.81	6,799	7,457	200.33	7,176	11,089
199.82	6,806	7,525	200.34	7,183	11,161
199.83	6,813	7,593	200.35	7,190	11,233
199.84	6,820	7,661	200.36	7,198	11,305
199.85	6,827	7,730	200.37	7,205	11,377

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.38	7,212	11,449	200.90	7,596	15,299
200.39	7,220	11,521	200.91	7,604	15,375
200.40	7,227	11,593	200.92	7,611	15,451
200.41	7,235	11,666	200.93	7,618	15,527
200.42	7,242	11,738	200.94	7,626	15,604
200.43	7,249	11,810	200.95	7,633	15,680
200.44	7,257	11,883	200.96	7,640	15,756
200.45	7,264	11,956	200.97	7,648	15,833
200.46	7,271	12,028	200.98	7,655	15,909
200.47	7,279	12,101	200.99	7,663	15,986
200.48	7,286	12,174	201.00	7,670	16,062
200.49	7,294	12,247	201.01	7,678	16,139
200.50	7,301	12,320	201.02	7,685	16,216
200.51	7,308	12,393	201.03	7,693	16,293
200.52	7,316	12,466	201.04	7,700	16,370
200.53	7,323	12,539	201.05	7,708	16,447
200.54	7,331	12,612	201.06	7,715	16,524
200.55	7,338	12,686	201.07	7,723	16,601
200.56	7,345	12,759	201.08	7,730	16,679
200.57	7,353	12,833	201.09	7,738	16,756
200.58	7,360	12,906	201.10	7,746	16,833
200.59	7,367	12,980	201.11	7,753	16,911
200.60	7,375	13,054	201.12	7,761	16,988
200.61	7,382	13,127	201.13	7,768	17,066
200.62	7,390	13,201	201.14	7,776	17,144
200.63	7,397	13,275	201.15	7,783	17,222
200.64	7,404	13,349	201.16	7,791	17,299
200.65	7,412	13,423	201.17	7,799	17,377
200.66	7,419	13,497	201.18	7,806	17,455
200.67	7,426	13,572	201.19	7,814	17,533
200.68	7,434	13,646	201.20	7,821	17,612
200.69	7,441	13,720	201.21	7,829	17,690
200.70	7,449	13,795	201.22	7,836	17,768
200.71	7,456	13,869	201.23	7,844	17,847
200.72	7,463	13,944	201.24	7,851	17,925
200.73	7,471	14,019	201.25	7,859	18,004
200.74	7,478	14,093	201.26	7,867	18,082
200.75	7,486	14,168	201.27	7,874	18,161
200.76	7,493	14,243	201.28	7,882	18,240
200.77	7,500	14,318	201.29	7,889	18,319
200.78	7,508	14,393	201.30	7,897	18,398
200.79	7,515	14,468	201.31	7,904	18,477
200.80	7,522	14,543	201.32	7,912	18,556
200.81	7,530	14,619	201.33	7,919	18,635
200.82	7,537	14,694	201.34	7,927	18,714
200.83	7,545	14,769	201.35	7,935	18,793
200.84	7,552	14,845	201.36	7,942	18,873
200.85	7,559	14,920	201.37	7,950	18,952
200.86	7,567	14,996	201.38	7,957	19,032
200.87	7,574	15,072	201.39	7,965	19,111
200.88	7,581	15,147	201.40	7,972	19,191
200.89	7,589	15,223	201.41	7,980	19,271

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.42	7,988	19,351	201.94	8,381	23,606
201.43	7,995	19,430	201.95	8,388	23,690
201.44	8,003	19,510	201.96	8,396	23,774
201.45	8,010	19,591	201.97	8,403	23,858
201.46	8,018	19,671	201.98	8,411	23,942
201.47	8,025	19,751	201.99	8,418	24,026
201.48	8,033	19,831	202.00	8,426	24,110
201.49	8,040	19,912	202.01	8,434	24,195
201.50	8,048	19,992	202.02	8,442	24,279
201.51	8,056	20,073	202.03	8,449	24,364
201.52	8,063	20,153	202.04	8,457	24,448
201.53	8,071	20,234	202.05	8,465	24,533
201.54	8,078	20,315	202.06	8,473	24,617
201.55	8,086	20,395	202.07	8,480	24,702
201.56	8,093	20,476	202.08	8,488	24,787
201.57	8,101	20,557	202.09	8,496	24,872
201.58	8,108	20,638	202.10	8,504	24,957
201.59	8,116	20,719	202.11	8,511	25,042
201.60	8,124	20,801	202.12	8,519	25,127
201.61	8,131	20,882	202.13	8,527	25,212
201.62	8,139	20,963	202.14	8,535	25,298
201.63	8,146	21,045	202.15	8,542	25,383
201.64	8,154	21,126	202.16	8,550	25,469
201.65	8,161	21,208	202.17	8,558	25,554
201.66	8,169	21,289	202.18	8,566	25,640
201.67	8,177	21,371	202.19	8,573	25,725
201.68	8,184	21,453	202.20	8,581	25,811
201.69	8,192	21,535	202.21	8,589	25,897
201.70	8,199	21,617	202.22	8,597	25,983
201.71	8,207	21,699	202.23	8,604	26,069
201.72	8,214	21,781	202.24	8,612	26,155
201.73	8,222	21,863	202.25	8,620	26,241
201.74	8,229	21,945	202.26	8,628	26,327
201.75	8,237	22,028	202.27	8,635	26,414
201.76	8,245	22,110	202.28	8,643	26,500
201.77	8,252	22,193	202.29	8,651	26,587
201.78	8,260	22,275	202.30	8,659	26,673
201.79	8,267	22,358	202.31	8,666	26,760
201.80	8,275	22,440	202.32	8,674	26,847
201.81	8,282	22,523	202.33	8,682	26,933
201.82	8,290	22,606	202.34	8,690	27,020
201.83	8,297	22,689	202.35	8,697	27,107
201.84	8,305	22,772	202.36	8,705	27,194
201.85	8,313	22,855	202.37	8,713	27,281
201.86	8,320	22,938	202.38	8,721	27,368
201.87	8,328	23,022	202.39	8,728	27,456
201.88	8,335	23,105	202.40	8,736	27,543
201.89	8,343	23,188	202.41	8,744	27,630
201.90	8,350	23,272	202.42	8,752	27,718
201.91	8,358	23,355	202.43	8,759	27,805
201.92	8,366	23,439	202.44	8,767	27,893
201.93	8,373	23,523	202.45	8,775	27,981

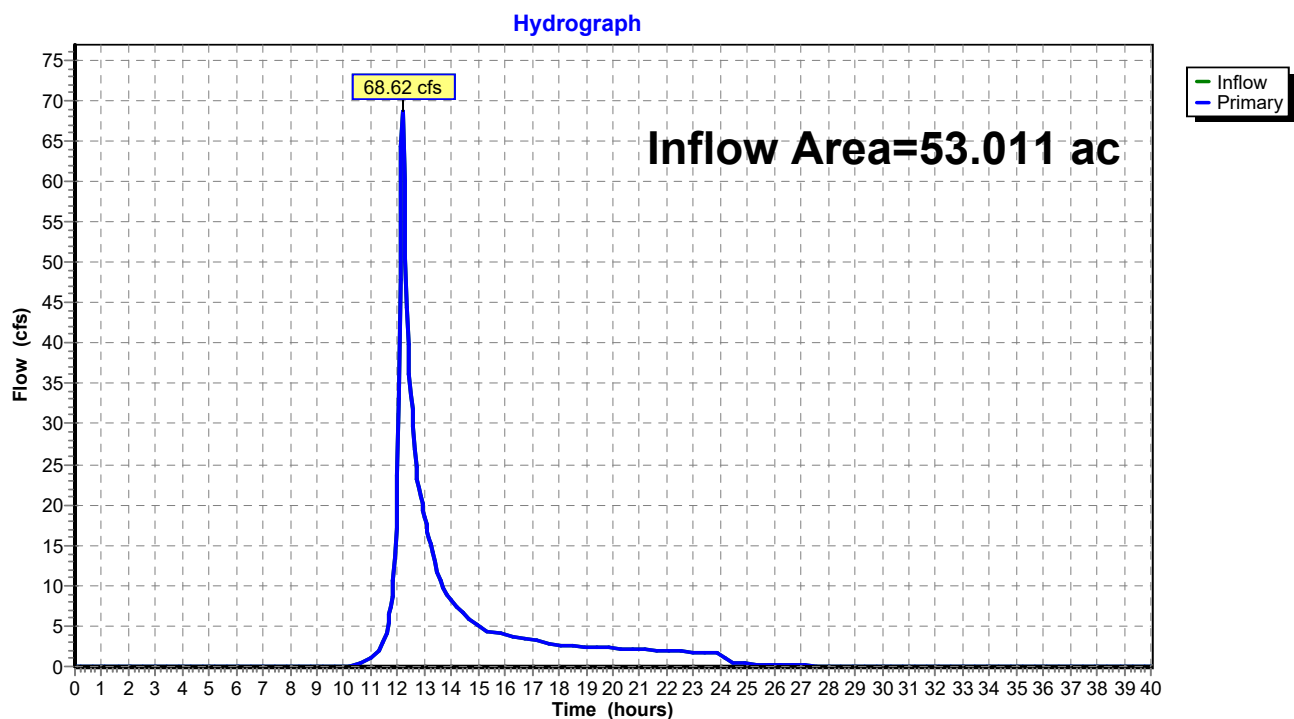
Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.46	8,783	28,068	202.98	9,186	32,740
202.47	8,790	28,156	202.99	9,193	32,832
202.48	8,798	28,244	203.00	9,201	32,924
202.49	8,806	28,332			
202.50	8,814	28,420			
202.51	8,821	28,509			
202.52	8,829	28,597			
202.53	8,837	28,685			
202.54	8,845	28,774			
202.55	8,852	28,862			
202.56	8,860	28,951			
202.57	8,868	29,039			
202.58	8,876	29,128			
202.59	8,883	29,217			
202.60	8,891	29,306			
202.61	8,899	29,395			
202.62	8,907	29,484			
202.63	8,914	29,573			
202.64	8,922	29,662			
202.65	8,930	29,751			
202.66	8,938	29,840			
202.67	8,945	29,930			
202.68	8,953	30,019			
202.69	8,961	30,109			
202.70	8,969	30,199			
202.71	8,976	30,288			
202.72	8,984	30,378			
202.73	8,992	30,468			
202.74	9,000	30,558			
202.75	9,007	30,648			
202.76	9,015	30,738			
202.77	9,023	30,828			
202.78	9,031	30,919			
202.79	9,038	31,009			
202.80	9,046	31,099			
202.81	9,054	31,190			
202.82	9,062	31,280			
202.83	9,069	31,371			
202.84	9,077	31,462			
202.85	9,085	31,553			
202.86	9,093	31,643			
202.87	9,100	31,734			
202.88	9,108	31,825			
202.89	9,116	31,917			
202.90	9,124	32,008			
202.91	9,131	32,099			
202.92	9,139	32,190			
202.93	9,147	32,282			
202.94	9,154	32,373			
202.95	9,162	32,465			
202.96	9,170	32,557			
202.97	9,178	32,648			

Summary for Link PDA-6: Proposed Drainage Area #6

Inflow Area = 53.011 ac, 11.21% Impervious, Inflow Depth > 1.59" for Future 2 yr event
Inflow = 68.62 cfs @ 12.19 hrs, Volume= 7.045 af
Primary = 68.62 cfs @ 12.19 hrs, Volume= 7.045 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-6: Proposed Drainage Area #6

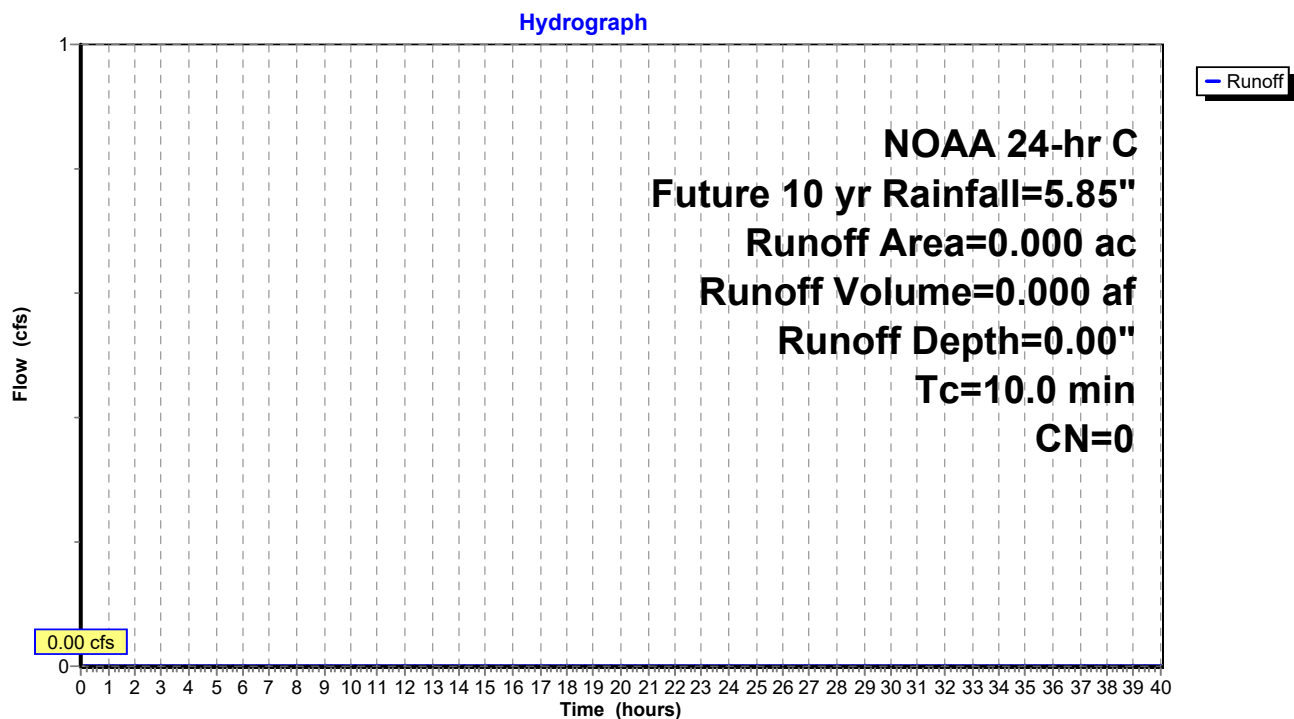
Summary for Subcatchment 51I: PDA-51 (impervious)

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
 Routed to Pond B-51 : Basin #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
* 0.000	98	Roof, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 51I: PDA-51 (impervious)

Summary for Subcatchment 51P: PDA-51 (pervious)

Runoff = 2.30 cfs @ 12.18 hrs, Volume= 0.174 af, Depth= 3.06"
 Routed to Pond B-51 : Basin #51

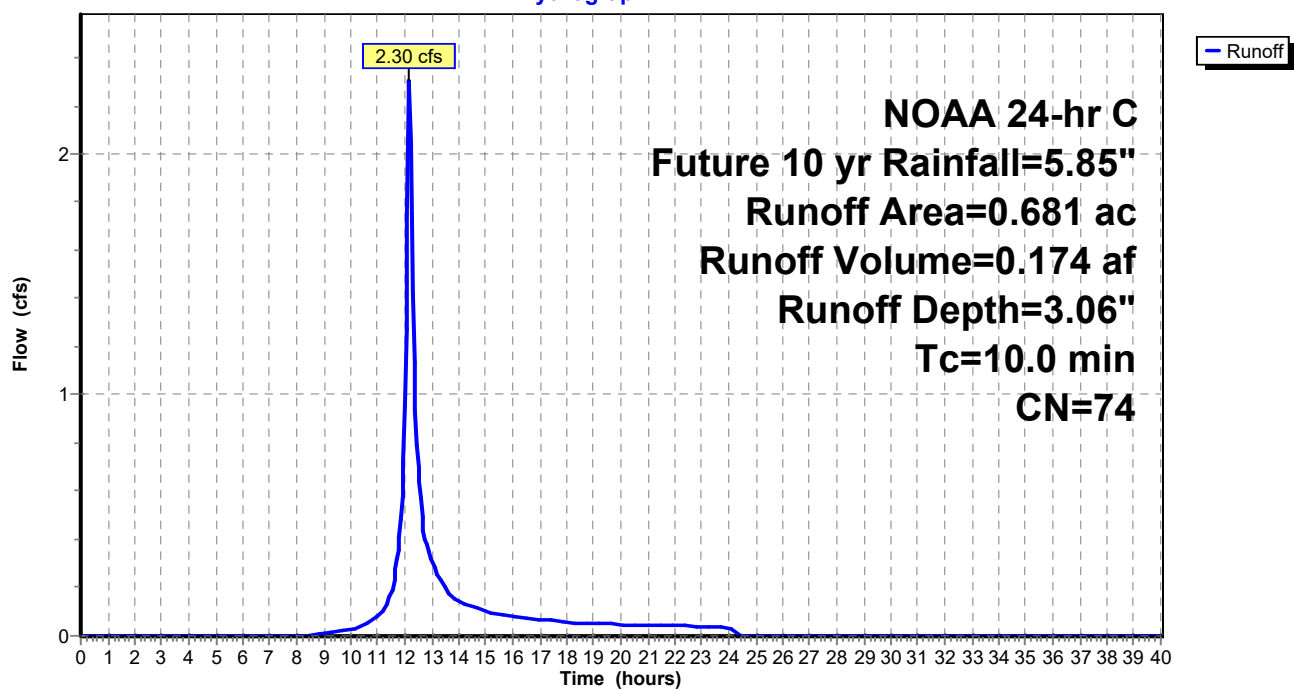
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.681	74	>75% Grass cover, Good, HSG C
0.681		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 51P: PDA-51 (pervious)

Hydrograph



Summary for Subcatchment 52I: PDA-52 (impervious)

Runoff = 2.61 cfs @ 12.17 hrs, Volume= 0.229 af, Depth= 5.61"
 Routed to Pond B-52 : Basin #52

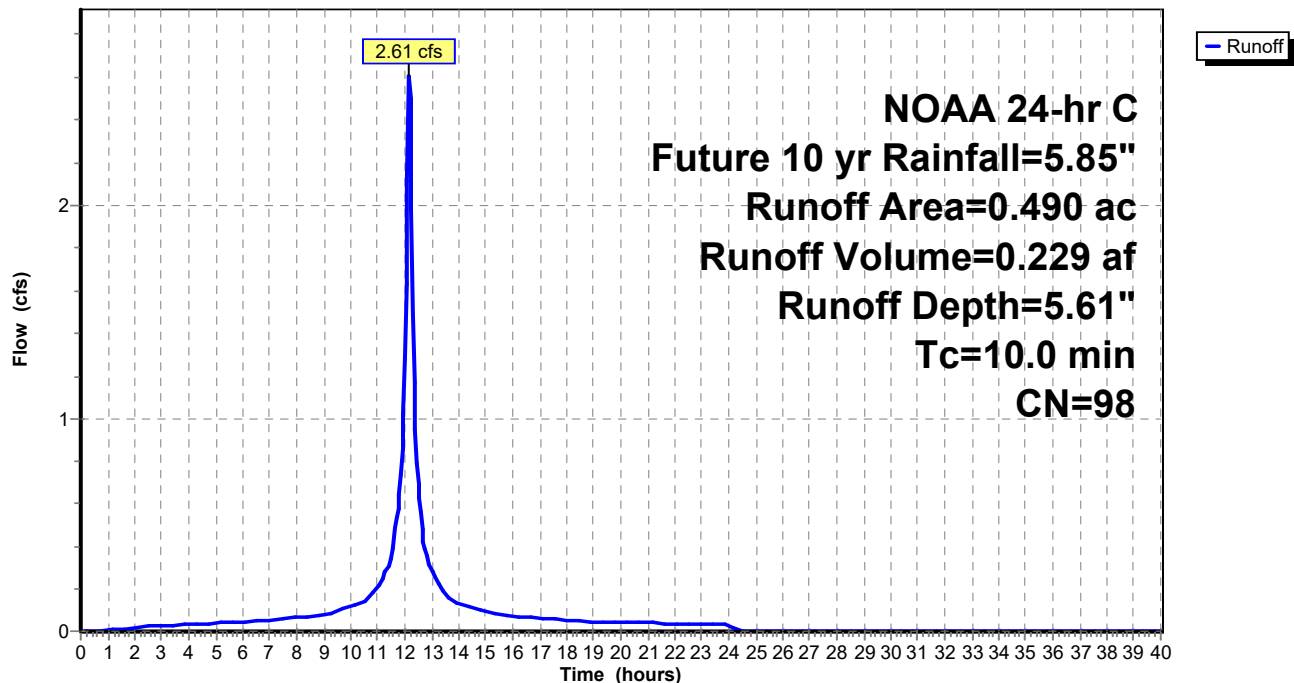
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
* 0.118	98	Pavement, HSG C
* 0.339	98	Roof, HSG C
* 0.033	98	Concrete, HSG C
0.490	98	Weighted Average
0.490		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 52I: PDA-52 (impervious)

Hydrograph



Summary for Subcatchment 52P: PDA-52 (pervious)

Runoff = 3.15 cfs @ 12.18 hrs, Volume= 0.238 af, Depth= 3.06"
 Routed to Pond B-52 : Basin #52

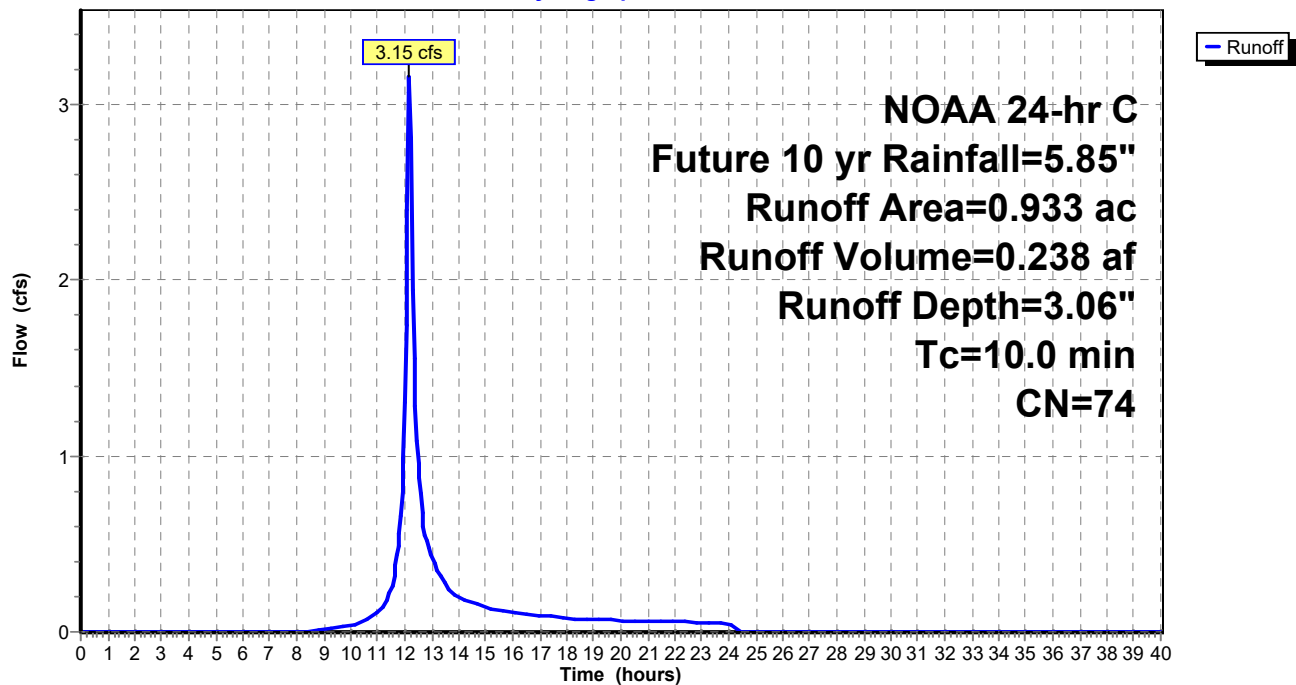
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.933	74	>75% Grass cover, Good, HSG C
0.933		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 52P: PDA-52 (pervious)

Hydrograph



Summary for Subcatchment 53I: PDA-53 (impervious)

Runoff = 6.48 cfs @ 12.17 hrs, Volume= 0.568 af, Depth= 5.61"
 Routed to Pond B-53 : Basin #53

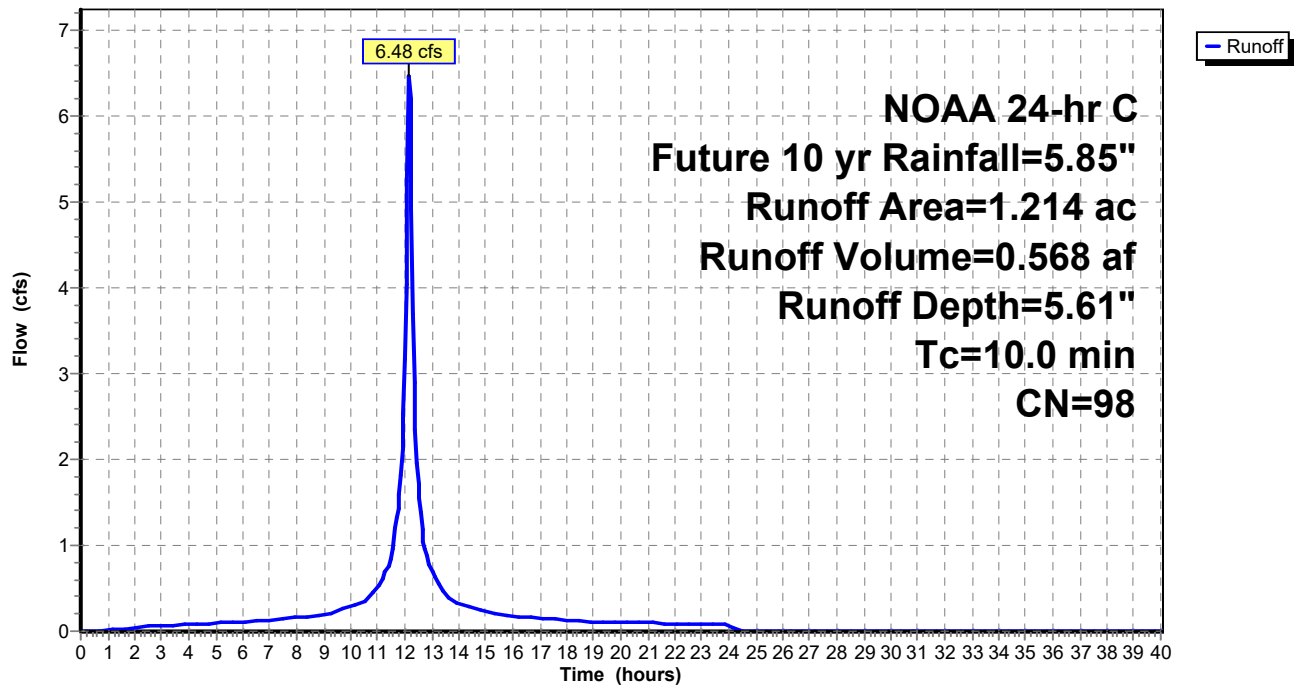
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
* 0.628	98	Pavement, HSG C
* 0.450	98	Roof, HSG C
* 0.136	98	Concrete, HSG C
1.214	98	Weighted Average
1.214		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 53I: PDA-53 (impervious)

Hydrograph



Summary for Subcatchment 53P: PDA-53 (pervious)

Runoff = 4.48 cfs @ 12.18 hrs, Volume= 0.338 af, Depth= 3.06"
 Routed to Pond B-53 : Basin #53

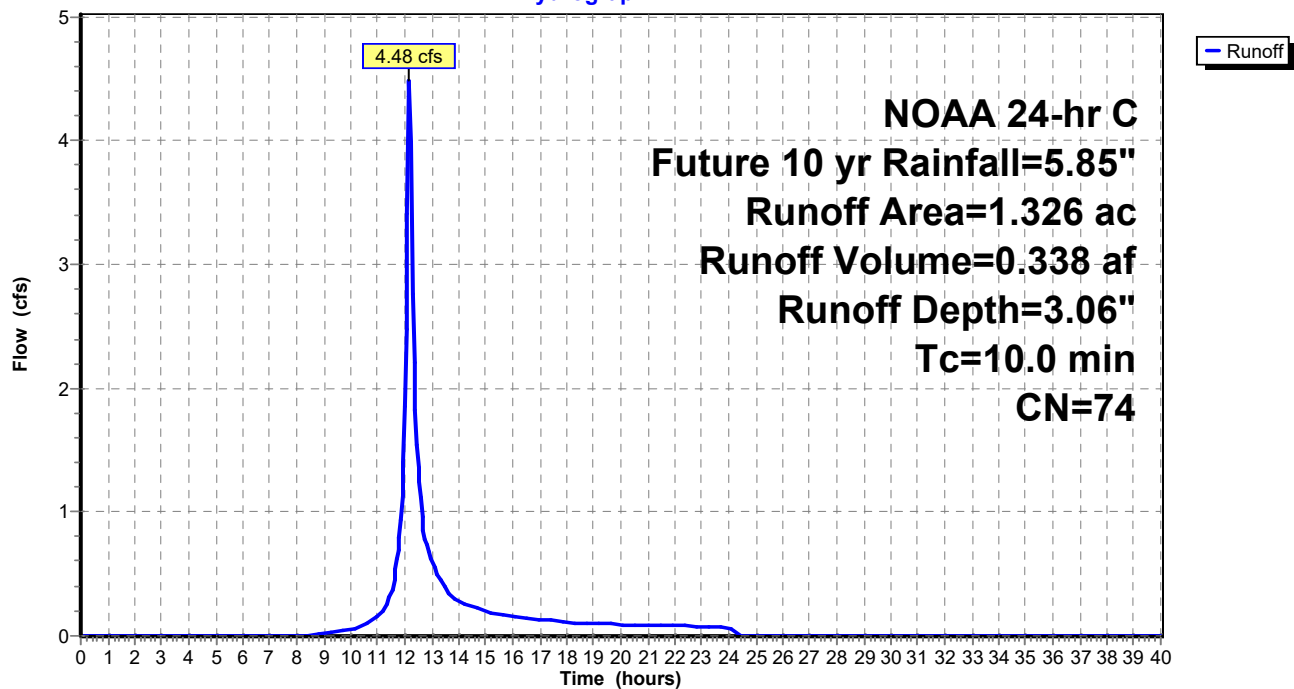
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.326	74	>75% Grass cover, Good, HSG C
1.326		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 53P: PDA-53 (pervious)

Hydrograph



Summary for Subcatchment 54I: PDA-54 (impervious)

Runoff = 8.29 cfs @ 12.17 hrs, Volume= 0.727 af, Depth= 5.61"
 Routed to Pond B-54 : Basin #54

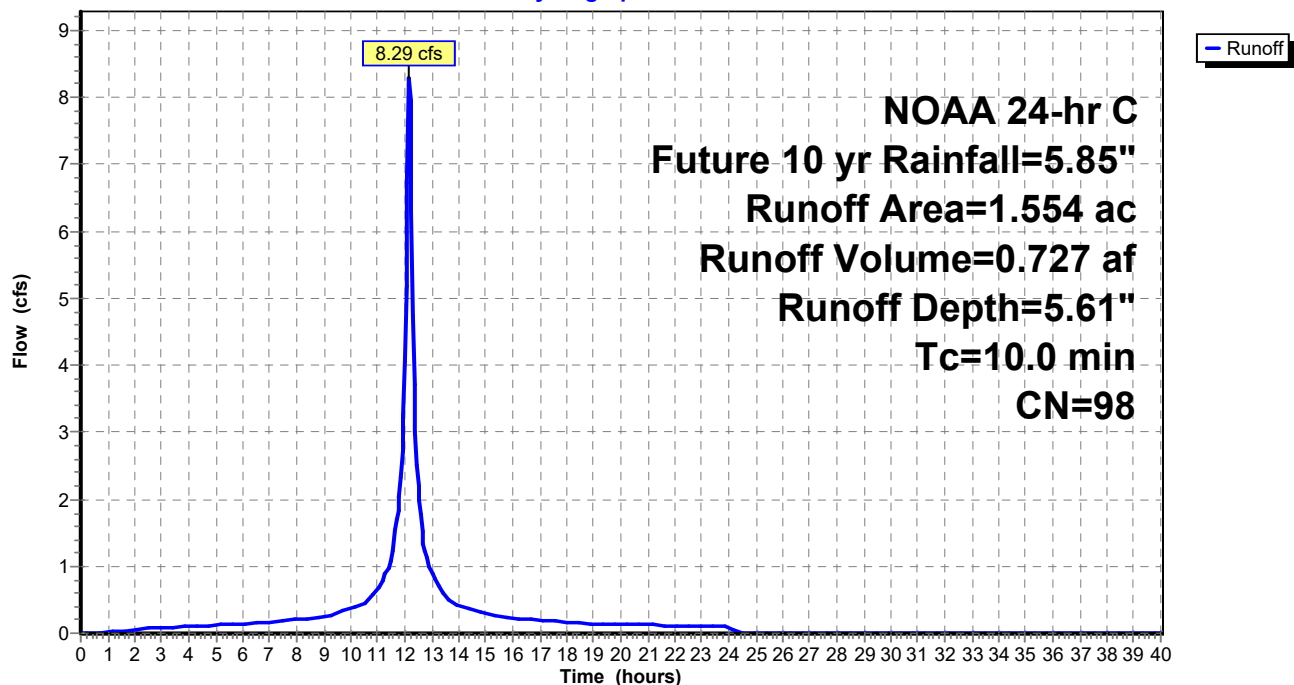
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
* 0.983	98	Pavement, HSG C
* 0.361	98	Roof, HSG C
* 0.210	98	Concrete, HSG C
1.554	98	Weighted Average
1.554		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 54I: PDA-54 (impervious)

Hydrograph



Summary for Subcatchment 54P: PDA-54 (pervious)

Runoff = 3.44 cfs @ 12.18 hrs, Volume= 0.259 af, Depth= 3.06"
 Routed to Pond B-54 : Basin #54

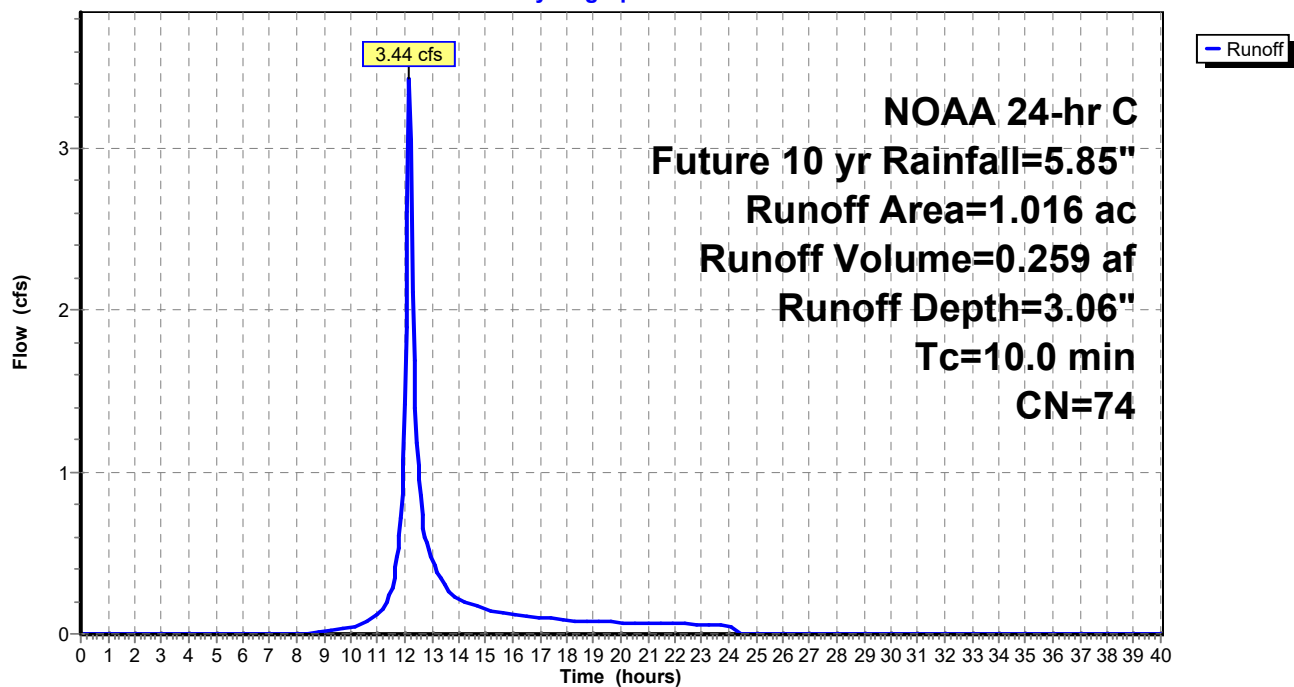
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.016	74	>75% Grass cover, Good, HSG C
1.016		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 54P: PDA-54 (pervious)

Hydrograph



Summary for Subcatchment 55I: PDA-55 (impervious)

Runoff = 5.81 cfs @ 12.17 hrs, Volume= 0.509 af, Depth= 5.61"
 Routed to Pond B-55 : Basin #55

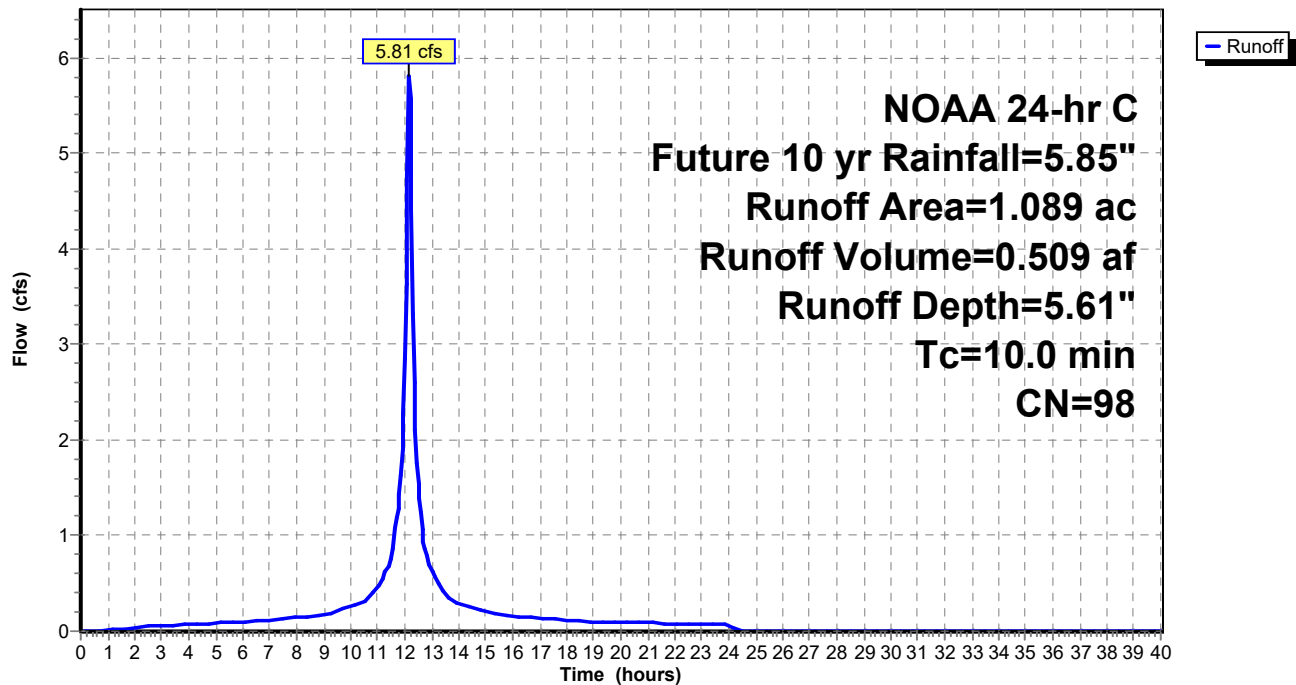
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
* 0.467	98	Pavement, HSG C
* 0.574	98	Roof, HSG C
* 0.048	98	Concrete, HSG C
1.089	98	Weighted Average
1.089		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 55I: PDA-55 (impervious)

Hydrograph



Summary for Subcatchment 55P: PDA-55 (pervious)

Runoff = 4.10 cfs @ 12.18 hrs, Volume= 0.309 af, Depth= 3.06"
 Routed to Pond B-55 : Basin #55

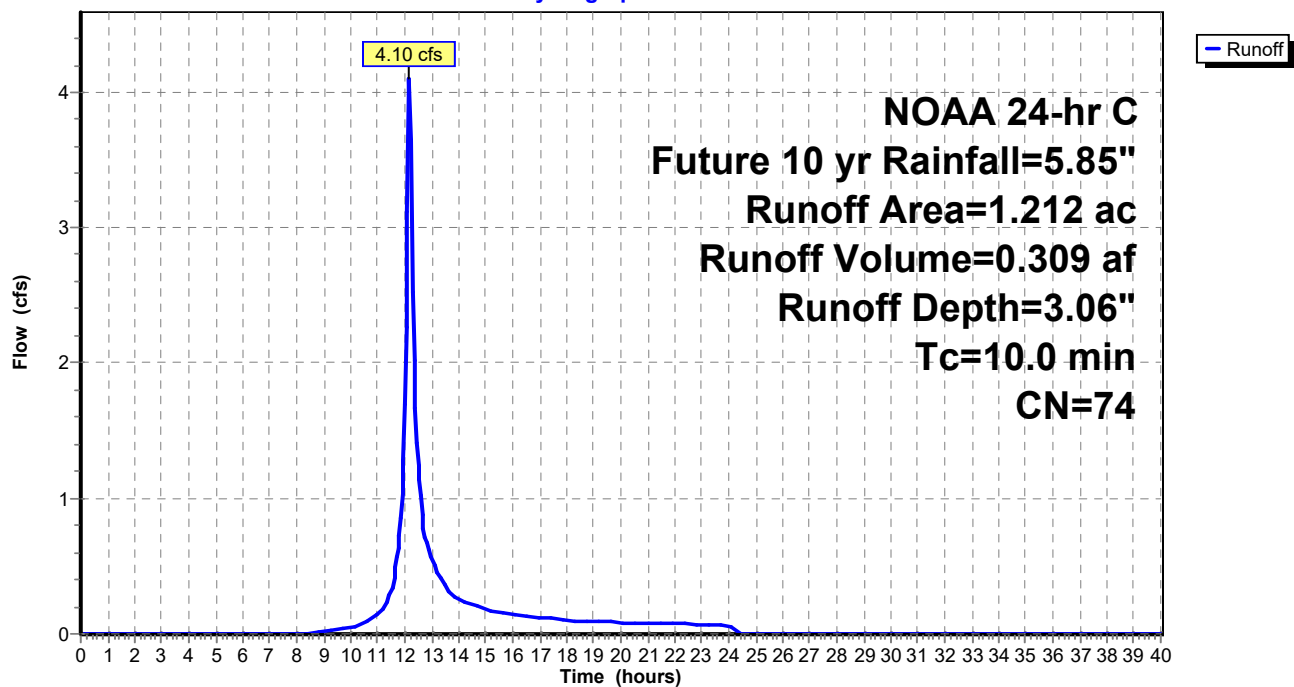
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.212	74	>75% Grass cover, Good, HSG C
1.212		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 55P: PDA-55 (pervious)

Hydrograph



Summary for Subcatchment 56I: PDA-56 (impervious)

Runoff = 2.51 cfs @ 12.17 hrs, Volume= 0.220 af, Depth= 5.61"
 Routed to Pond B-56 : Basin #56

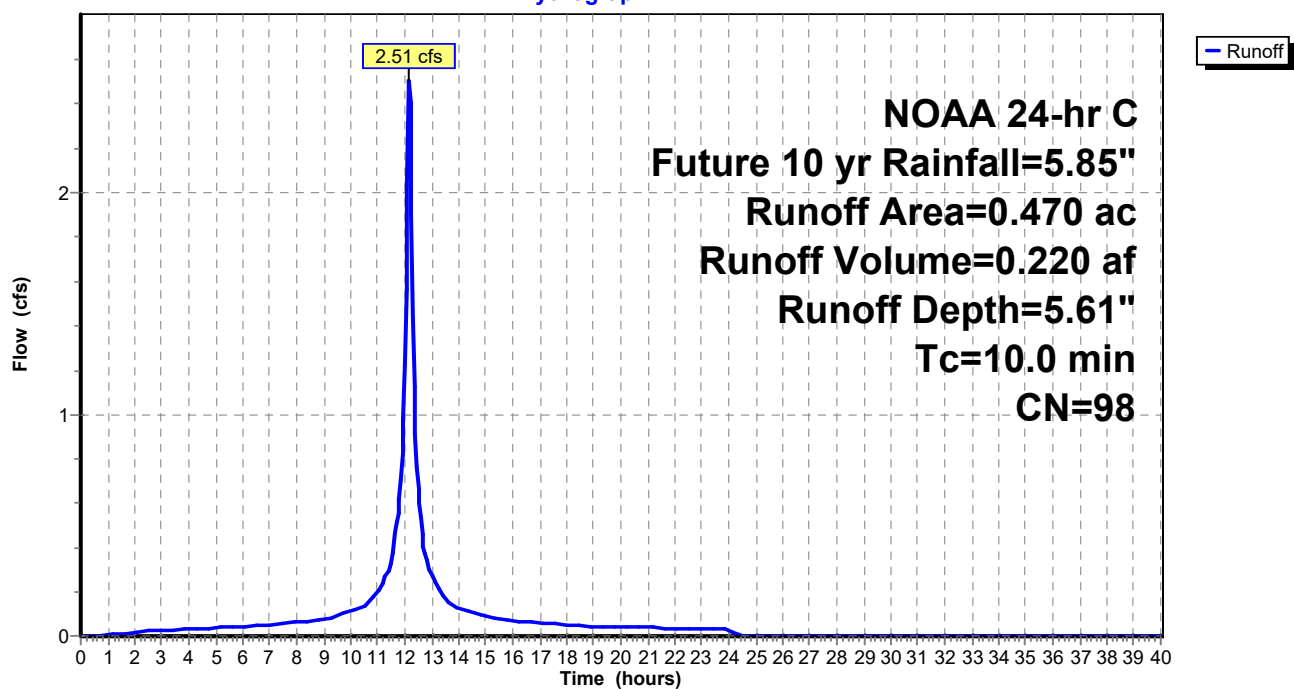
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
* 0.470	98	Roof, HSG C
0.470		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 56I: PDA-56 (impervious)

Hydrograph



Summary for Subcatchment 56P: PDA-56 (pervious)

Runoff = 3.52 cfs @ 12.18 hrs, Volume= 0.266 af, Depth= 3.06"
 Routed to Pond B-56 : Basin #56

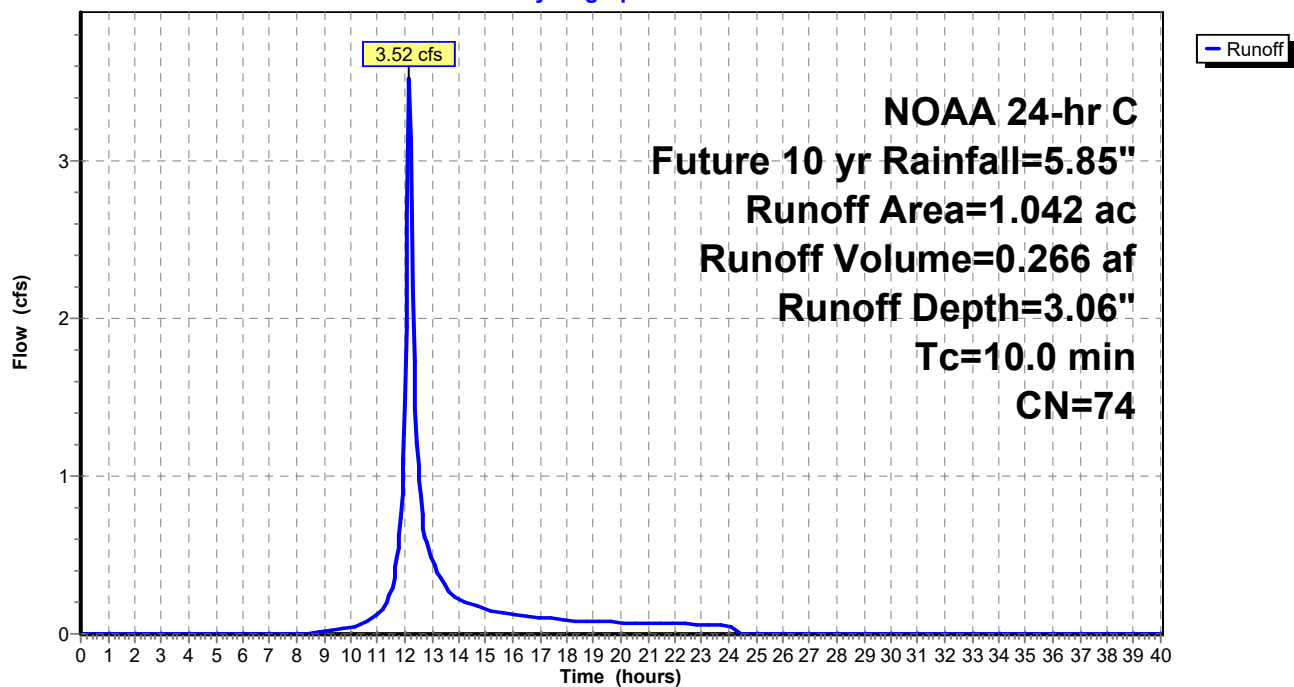
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.042	74	>75% Grass cover, Good, HSG C
1.042		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 56P: PDA-56 (pervious)

Hydrograph



Summary for Subcatchment 57I: PDA-57 (impervious)

Runoff = 3.64 cfs @ 12.17 hrs, Volume= 0.319 af, Depth= 5.61"
 Routed to Pond B-57 : Basin #57

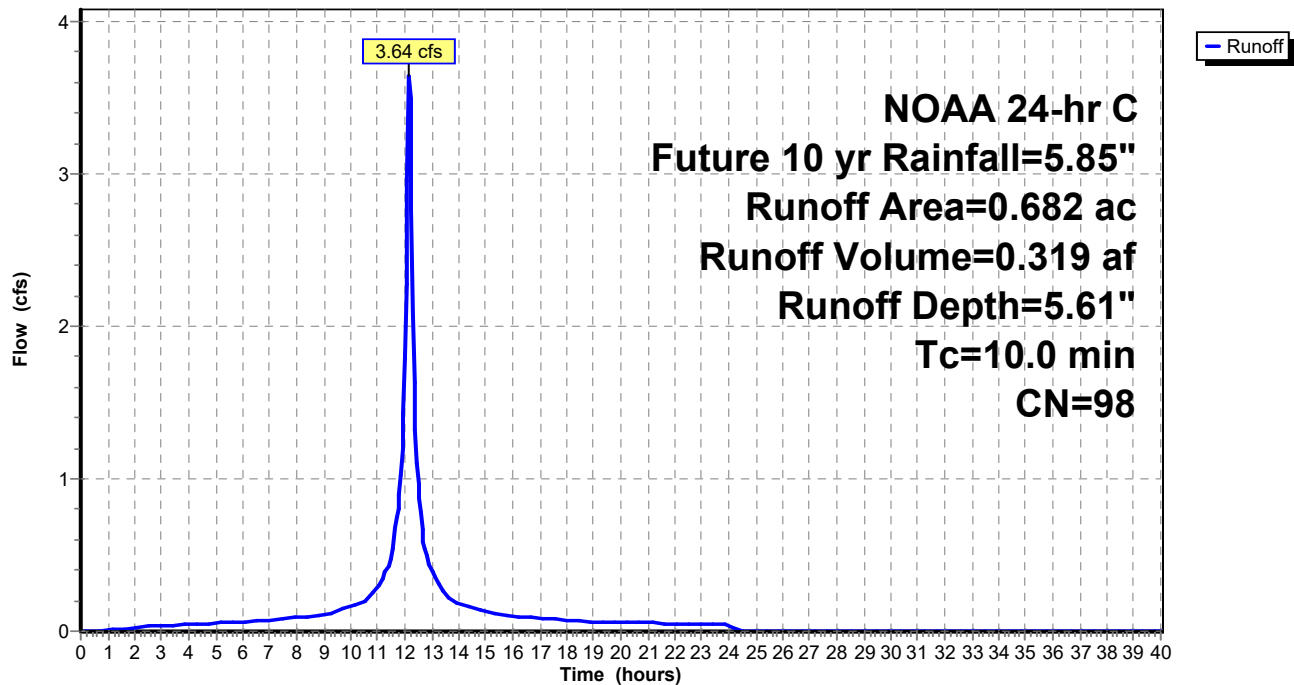
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
* 0.268	98	Pavement, HSG C
* 0.378	98	Roof, HSG C
* 0.036	98	Concrete, HSG C
0.682	98	Weighted Average
0.682		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 57I: PDA-57 (impervious)

Hydrograph



Summary for Subcatchment 57P: PDA-57 (pervious)

Runoff = 2.54 cfs @ 12.18 hrs, Volume= 0.192 af, Depth= 3.06"
 Routed to Pond B-57 : Basin #57

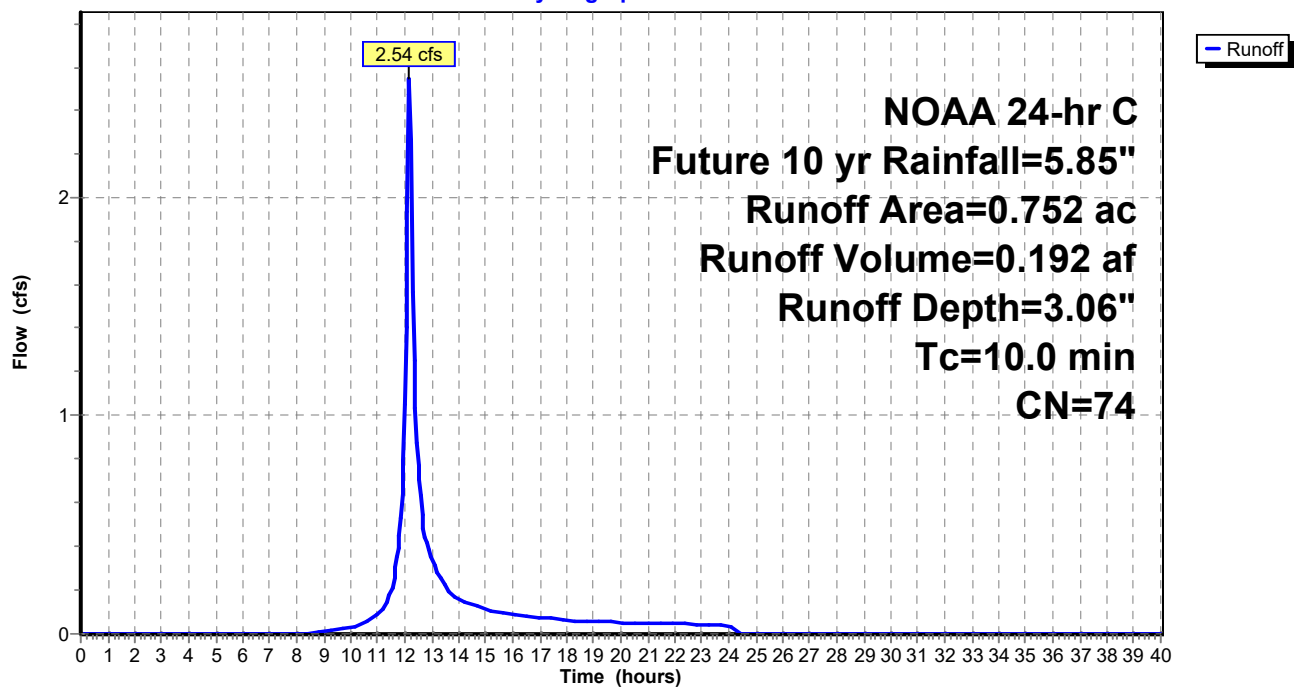
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.752	74	>75% Grass cover, Good, HSG C
0.752		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 57P: PDA-57 (pervious)

Hydrograph



Summary for Subcatchment 58I: PDA-58 (impervious)

Runoff = 2.36 cfs @ 12.17 hrs, Volume= 0.207 af, Depth= 5.61"
 Routed to Pond B-58 : Basin #58

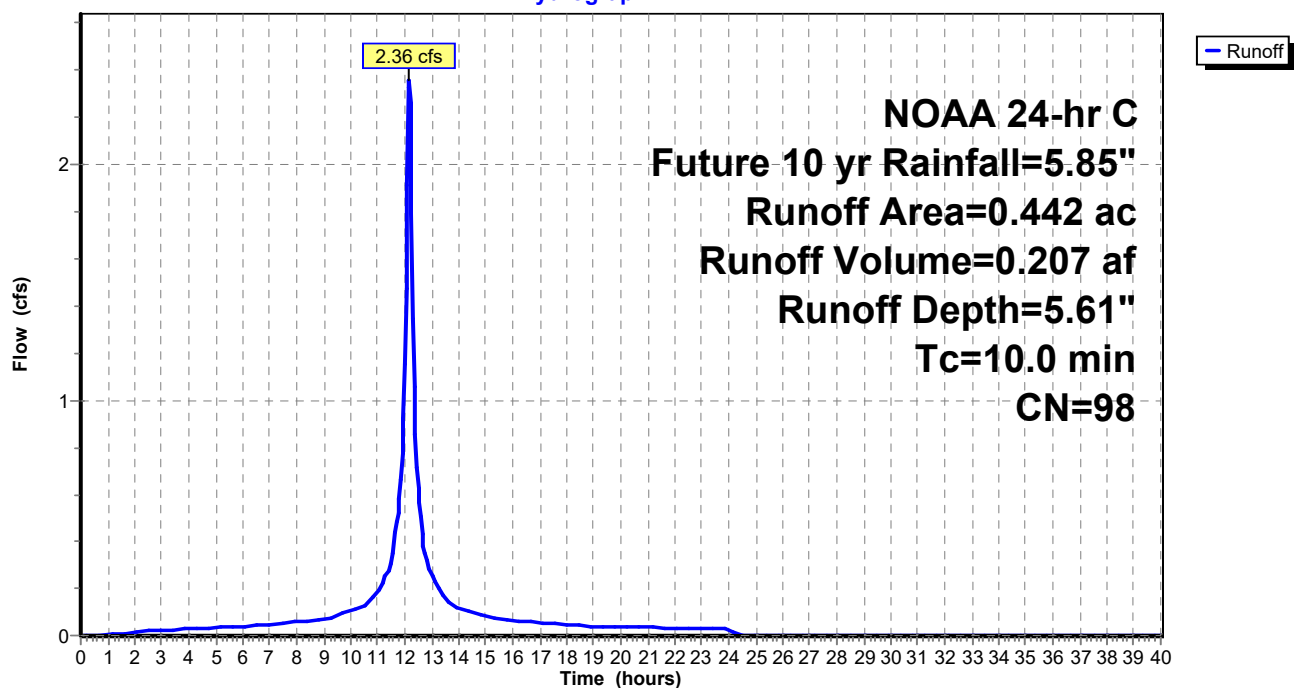
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
* 0.442	98	Roof, HSG C
* 0.000	98	Concrete, HSG C
0.442	98	Weighted Average
0.442		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 58I: PDA-58 (impervious)

Hydrograph



Summary for Subcatchment 58P: PDA-58 (pervious)

Runoff = 4.08 cfs @ 12.18 hrs, Volume= 0.308 af, Depth= 3.06"
 Routed to Pond B-58 : Basin #58

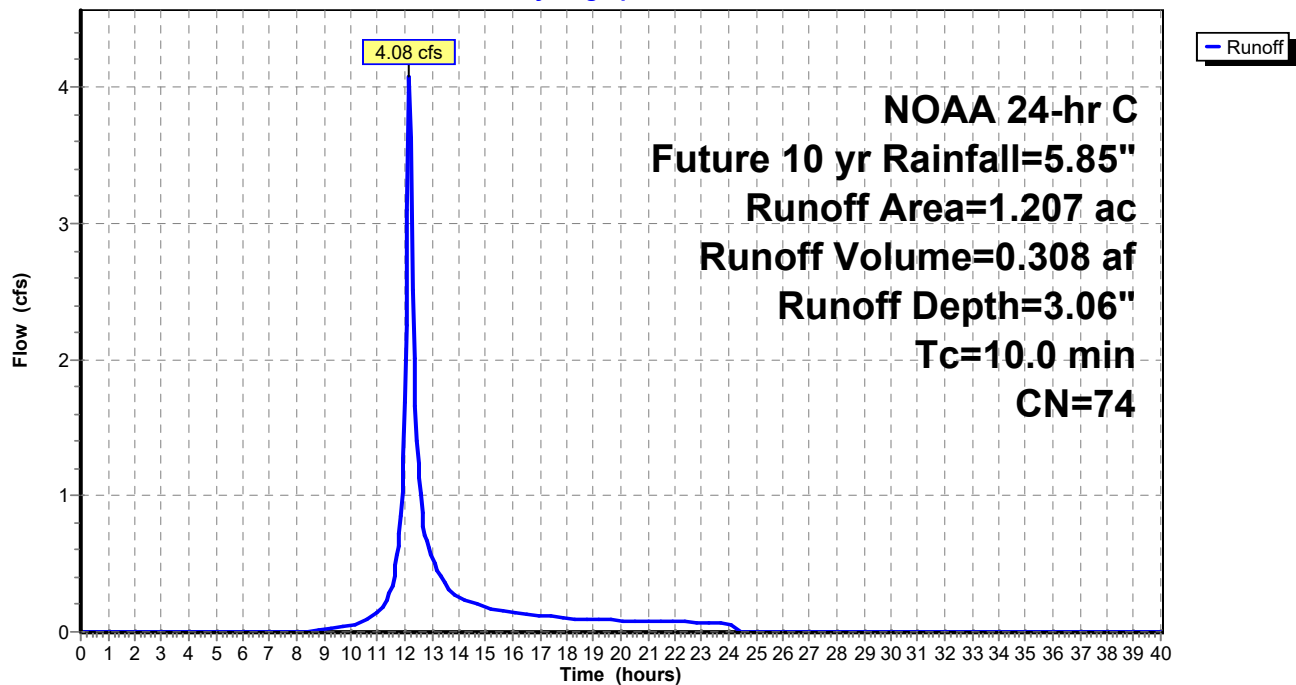
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.207	74	>75% Grass cover, Good, HSG C
1.207		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 58P: PDA-58 (pervious)

Hydrograph



Summary for Subcatchment UPDA-6: PDA-6 (undetained)

Runoff = 131.53 cfs @ 12.18 hrs, Volume= 9.917 af, Depth= 3.06"
 Routed to Link PDA-6 : Proposed Drainage Area #6

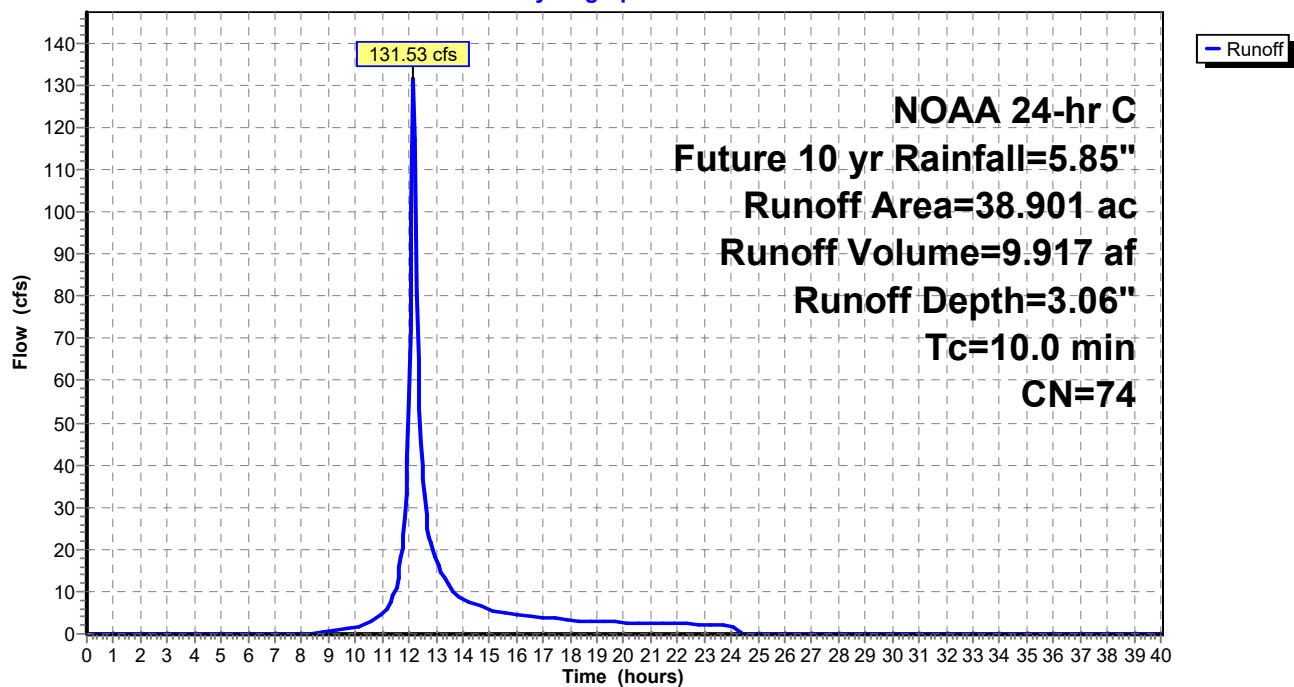
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
38.901	74	>75% Grass cover, Good, HSG C
38.901		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment UPDA-6: PDA-6 (undetained)

Hydrograph



Summary for Pond B-51: Basin #51

Inflow Area = 11.027 ac, 43.68% Impervious, Inflow Depth = 3.68" for Future 10 yr event
 Inflow = 32.36 cfs @ 12.27 hrs, Volume= 3.385 af
 Outflow = 25.25 cfs @ 12.41 hrs, Volume= 3.379 af, Atten= 22%, Lag= 8.4 min
 Primary = 25.25 cfs @ 12.41 hrs, Volume= 3.379 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 186.37' @ 12.41 hrs Surf.Area= 9,044 sf Storage= 16,822 cf

Plug-Flow detention time= 19.7 min calculated for 3.374 af (100% of inflow)
 Center-of-Mass det. time= 18.6 min (871.9 - 853.3)

Volume	Invert	Avail.Storage	Storage Description
#1	184.00'	58,347 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
184.00	5,243	0	0
185.00	6,727	5,985	5,985
186.00	8,424	7,576	13,561
187.00	10,085	9,255	22,815
188.00	11,802	10,944	33,759
189.00	13,576	12,689	46,448
189.83	15,098	11,900	58,347

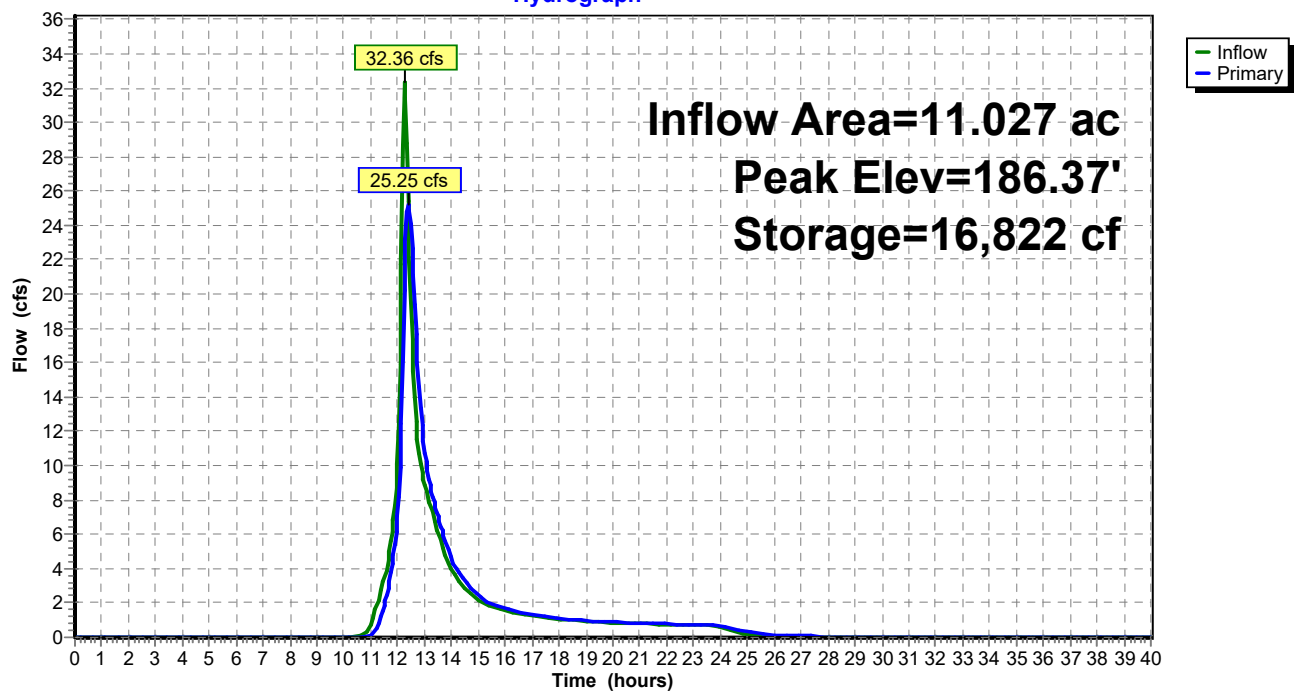
Device	Routing	Invert	Outlet Devices
#1	Primary	184.00'	30.0" Round Culvert L= 147.0' Ke= 0.500 Inlet / Outlet Invert= 184.00' / 182.00' S= 0.0136 '/' Cc= 0.900 n= 0.013, Flow Area= 4.91 sf
#2	Device 1	184.05'	48.0" W x 12.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	187.00'	8.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	189.80'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=25.22 cfs @ 12.41 hrs HW=186.37' (Free Discharge)

1=Culvert (Inlet Controls 25.22 cfs @ 5.24 fps)
 2=Orifice/Grate (Passes 25.22 cfs of 25.90 cfs potential flow)
 3=Sharp-Crested Rectangular Weir(Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs)

Pond B-51: Basin #51

Hydrograph



Stage-Discharge for Pond B-51: Basin #51

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
184.00	0.00	184.52	1.81	185.04	6.71	185.56	13.70
184.01	0.00	184.53	1.88	185.05	6.83	185.57	13.85
184.02	0.00	184.54	1.95	185.06	6.94	185.58	13.99
184.03	0.00	184.55	2.02	185.07	7.06	185.59	14.14
184.04	0.00	184.56	2.09	185.08	7.19	185.60	14.29
184.05	0.00	184.57	2.17	185.09	7.31	185.61	14.44
184.06	0.01	184.58	2.24	185.10	7.43	185.62	14.59
184.07	0.03	184.59	2.31	185.11	7.55	185.63	14.73
184.08	0.05	184.60	2.39	185.12	7.67	185.64	14.88
184.09	0.06	184.61	2.47	185.13	7.80	185.65	15.03
184.10	0.07	184.62	2.54	185.14	7.92	185.66	15.18
184.11	0.09	184.63	2.62	185.15	8.05	185.67	15.33
184.12	0.10	184.64	2.70	185.16	8.18	185.68	15.48
184.13	0.12	184.65	2.78	185.17	8.30	185.69	15.63
184.14	0.14	184.66	2.87	185.18	8.43	185.70	15.78
184.15	0.16	184.67	2.95	185.19	8.56	185.71	15.93
184.16	0.18	184.68	3.03	185.20	8.69	185.72	16.08
184.17	0.20	184.69	3.12	185.21	8.82	185.73	16.23
184.18	0.23	184.70	3.21	185.22	8.95	185.74	16.38
184.19	0.25	184.71	3.29	185.23	9.08	185.75	16.53
184.20	0.28	184.72	3.38	185.24	9.21	185.76	16.68
184.21	0.31	184.73	3.47	185.25	9.34	185.77	16.83
184.22	0.34	184.74	3.56	185.26	9.48	185.78	16.98
184.23	0.37	184.75	3.65	185.27	9.61	185.79	17.13
184.24	0.40	184.76	3.74	185.28	9.74	185.80	17.28
184.25	0.43	184.77	3.84	185.29	9.88	185.81	17.43
184.26	0.47	184.78	3.93	185.30	10.01	185.82	17.58
184.27	0.51	184.79	4.03	185.31	10.15	185.83	17.73
184.28	0.54	184.80	4.12	185.32	10.28	185.84	17.89
184.29	0.58	184.81	4.22	185.33	10.42	185.85	18.04
184.30	0.62	184.82	4.32	185.34	10.56	185.86	18.19
184.31	0.66	184.83	4.42	185.35	10.70	185.87	18.34
184.32	0.71	184.84	4.52	185.36	10.84	185.88	18.49
184.33	0.75	184.85	4.62	185.37	10.97	185.89	18.64
184.34	0.80	184.86	4.72	185.38	11.11	185.90	18.79
184.35	0.84	184.87	4.82	185.39	11.25	185.91	18.94
184.36	0.89	184.88	4.93	185.40	11.39	185.92	19.08
184.37	0.94	184.89	5.03	185.41	11.54	185.93	19.23
184.38	0.99	184.90	5.14	185.42	11.68	185.94	19.38
184.39	1.04	184.91	5.25	185.43	11.82	185.95	19.53
184.40	1.09	184.92	5.35	185.44	11.96	185.96	19.68
184.41	1.15	184.93	5.46	185.45	12.10	185.97	19.83
184.42	1.20	184.94	5.57	185.46	12.25	185.98	19.98
184.43	1.26	184.95	5.68	185.47	12.39	185.99	20.12
184.44	1.31	184.96	5.79	185.48	12.53	186.00	20.27
184.45	1.37	184.97	5.90	185.49	12.68	186.01	20.42
184.46	1.43	184.98	6.02	185.50	12.82	186.02	20.56
184.47	1.49	184.99	6.13	185.51	12.97	186.03	20.71
184.48	1.55	185.00	6.24	185.52	13.11	186.04	20.86
184.49	1.62	185.01	6.36	185.53	13.26	186.05	21.00
184.50	1.68	185.02	6.47	185.54	13.41	186.06	21.14
184.51	1.75	185.03	6.59	185.55	13.55	186.07	21.29

Stage-Discharge for Pond B-51: Basin #51 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.08	21.43	186.60	27.46	187.12	31.91	187.64	36.54
186.09	21.58	186.61	27.56	187.13	32.11	187.65	36.62
186.10	21.72	186.62	27.64	187.14	32.31	187.66	36.69
186.11	21.86	186.63	27.71	187.15	32.52	187.67	36.77
186.12	22.00	186.64	27.78	187.16	32.66	187.68	36.84
186.13	22.14	186.65	27.84	187.17	32.75	187.69	36.92
186.14	22.28	186.66	27.91	187.18	32.84	187.70	37.00
186.15	22.42	186.67	27.98	187.19	32.92	187.71	37.07
186.16	22.56	186.68	28.04	187.20	33.01	187.72	37.15
186.17	22.70	186.69	28.11	187.21	33.09	187.73	37.22
186.18	22.83	186.70	28.18	187.22	33.17	187.74	37.30
186.19	22.97	186.71	28.24	187.23	33.26	187.75	37.37
186.20	23.10	186.72	28.31	187.24	33.34	187.76	37.45
186.21	23.24	186.73	28.37	187.25	33.43	187.77	37.52
186.22	23.37	186.74	28.44	187.26	33.51	187.78	37.59
186.23	23.50	186.75	28.50	187.27	33.59	187.79	37.67
186.24	23.63	186.76	28.57	187.28	33.68	187.80	37.74
186.25	23.76	186.77	28.64	187.29	33.76	187.81	37.82
186.26	23.89	186.78	28.70	187.30	33.84	187.82	37.89
186.27	24.02	186.79	28.77	187.31	33.92	187.83	37.96
186.28	24.15	186.80	28.83	187.32	34.01	187.84	38.04
186.29	24.27	186.81	28.89	187.33	34.09	187.85	38.11
186.30	24.40	186.82	28.96	187.34	34.17	187.86	38.18
186.31	24.52	186.83	29.02	187.35	34.25	187.87	38.26
186.32	24.64	186.84	29.09	187.36	34.33	187.88	38.33
186.33	24.76	186.85	29.15	187.37	34.41	187.89	38.40
186.34	24.88	186.86	29.21	187.38	34.49	187.90	38.48
186.35	24.99	186.87	29.28	187.39	34.58	187.91	38.55
186.36	25.11	186.88	29.34	187.40	34.66	187.92	38.62
186.37	25.22	186.89	29.41	187.41	34.74	187.93	38.69
186.38	25.33	186.90	29.47	187.42	34.82	187.94	38.77
186.39	25.44	186.91	29.53	187.43	34.90	187.95	38.84
186.40	25.54	186.92	29.59	187.44	34.98	187.96	38.91
186.41	25.65	186.93	29.66	187.45	35.06	187.97	38.98
186.42	25.75	186.94	29.72	187.46	35.14	187.98	39.05
186.43	25.85	186.95	29.78	187.47	35.22	187.99	39.12
186.44	25.94	186.96	29.85	187.48	35.30	188.00	39.19
186.45	26.03	186.97	29.91	187.49	35.37	188.01	39.27
186.46	26.12	186.98	29.97	187.50	35.45	188.02	39.34
186.47	26.21	186.99	30.03	187.51	35.53	188.03	39.41
186.48	26.29	187.00	30.09	187.52	35.61	188.04	39.48
186.49	26.36	187.01	30.18	187.53	35.69	188.05	39.55
186.50	26.43	187.02	30.29	187.54	35.77	188.06	39.62
186.51	26.53	187.03	30.41	187.55	35.84	188.07	39.69
186.52	26.64	187.04	30.55	187.56	35.92	188.08	39.76
186.53	26.74	187.05	30.69	187.57	36.00	188.09	39.83
186.54	26.84	187.06	30.85	187.58	36.08	188.10	39.90
186.55	26.95	187.07	31.01	187.59	36.16	188.11	39.97
186.56	27.05	187.08	31.18	187.60	36.23	188.12	40.04
186.57	27.16	187.09	31.35	187.61	36.31	188.13	40.11
186.58	27.26	187.10	31.53	187.62	36.39	188.14	40.18
186.59	27.36	187.11	31.72	187.63	36.46	188.15	40.25

Stage-Discharge for Pond B-51: Basin #51 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
188.16	40.32	188.68	43.77	189.20	46.97	189.72	49.97
188.17	40.39	188.69	43.84	189.21	47.03	189.73	50.03
188.18	40.46	188.70	43.90	189.22	47.09	189.74	50.08
188.19	40.53	188.71	43.96	189.23	47.15	189.75	50.14
188.20	40.60	188.72	44.03	189.24	47.21	189.76	50.19
188.21	40.66	188.73	44.09	189.25	47.27	189.77	50.25
188.22	40.73	188.74	44.15	189.26	47.33	189.78	50.31
188.23	40.80	188.75	44.22	189.27	47.39	189.79	50.36
188.24	40.87	188.76	44.28	189.28	47.45	189.80	50.42
188.25	40.94	188.77	44.34	189.29	47.51	189.81	50.59
188.26	41.01	188.78	44.41	189.30	47.57	189.82	50.86
188.27	41.07	188.79	44.47	189.31	47.62	189.83	51.19
188.28	41.14	188.80	44.53	189.32	47.68		
188.29	41.21	188.81	44.60	189.33	47.74		
188.30	41.28	188.82	44.66	189.34	47.80		
188.31	41.35	188.83	44.72	189.35	47.86		
188.32	41.41	188.84	44.78	189.36	47.92		
188.33	41.48	188.85	44.85	189.37	47.97		
188.34	41.55	188.86	44.91	189.38	48.03		
188.35	41.61	188.87	44.97	189.39	48.09		
188.36	41.68	188.88	45.03	189.40	48.15		
188.37	41.75	188.89	45.09	189.41	48.21		
188.38	41.82	188.90	45.16	189.42	48.26		
188.39	41.88	188.91	45.22	189.43	48.32		
188.40	41.95	188.92	45.28	189.44	48.38		
188.41	42.02	188.93	45.34	189.45	48.44		
188.42	42.08	188.94	45.40	189.46	48.50		
188.43	42.15	188.95	45.46	189.47	48.55		
188.44	42.21	188.96	45.53	189.48	48.61		
188.45	42.28	188.97	45.59	189.49	48.67		
188.46	42.35	188.98	45.65	189.50	48.73		
188.47	42.41	188.99	45.71	189.51	48.78		
188.48	42.48	189.00	45.77	189.52	48.84		
188.49	42.54	189.01	45.83	189.53	48.90		
188.50	42.61	189.02	45.89	189.54	48.95		
188.51	42.67	189.03	45.95	189.55	49.01		
188.52	42.74	189.04	46.01	189.56	49.07		
188.53	42.81	189.05	46.07	189.57	49.13		
188.54	42.87	189.06	46.13	189.58	49.18		
188.55	42.94	189.07	46.20	189.59	49.24		
188.56	43.00	189.08	46.26	189.60	49.30		
188.57	43.07	189.09	46.32	189.61	49.35		
188.58	43.13	189.10	46.38	189.62	49.41		
188.59	43.20	189.11	46.44	189.63	49.47		
188.60	43.26	189.12	46.50	189.64	49.52		
188.61	43.32	189.13	46.56	189.65	49.58		
188.62	43.39	189.14	46.62	189.66	49.63		
188.63	43.45	189.15	46.68	189.67	49.69		
188.64	43.52	189.16	46.74	189.68	49.75		
188.65	43.58	189.17	46.80	189.69	49.80		
188.66	43.65	189.18	46.86	189.70	49.86		
188.67	43.71	189.19	46.92	189.71	49.92		

Stage-Area-Storage for Pond B-51: Basin #51

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.00	5,243	0	184.52	6,015	2,927
184.01	5,258	53	184.53	6,030	2,987
184.02	5,273	105	184.54	6,044	3,048
184.03	5,288	158	184.55	6,059	3,108
184.04	5,302	211	184.56	6,074	3,169
184.05	5,317	264	184.57	6,089	3,230
184.06	5,332	317	184.58	6,104	3,291
184.07	5,347	371	184.59	6,119	3,352
184.08	5,362	424	184.60	6,133	3,413
184.09	5,377	478	184.61	6,148	3,474
184.10	5,391	532	184.62	6,163	3,536
184.11	5,406	586	184.63	6,178	3,598
184.12	5,421	640	184.64	6,193	3,659
184.13	5,436	694	184.65	6,208	3,721
184.14	5,451	749	184.66	6,222	3,784
184.15	5,466	803	184.67	6,237	3,846
184.16	5,480	858	184.68	6,252	3,908
184.17	5,495	913	184.69	6,267	3,971
184.18	5,510	968	184.70	6,282	4,034
184.19	5,525	1,023	184.71	6,297	4,097
184.20	5,540	1,078	184.72	6,311	4,160
184.21	5,555	1,134	184.73	6,326	4,223
184.22	5,569	1,189	184.74	6,341	4,286
184.23	5,584	1,245	184.75	6,356	4,350
184.24	5,599	1,301	184.76	6,371	4,413
184.25	5,614	1,357	184.77	6,386	4,477
184.26	5,629	1,413	184.78	6,401	4,541
184.27	5,644	1,470	184.79	6,415	4,605
184.28	5,659	1,526	184.80	6,430	4,669
184.29	5,673	1,583	184.81	6,445	4,734
184.30	5,688	1,640	184.82	6,460	4,798
184.31	5,703	1,697	184.83	6,475	4,863
184.32	5,718	1,754	184.84	6,490	4,928
184.33	5,733	1,811	184.85	6,504	4,993
184.34	5,748	1,868	184.86	6,519	5,058
184.35	5,762	1,926	184.87	6,534	5,123
184.36	5,777	1,984	184.88	6,549	5,188
184.37	5,792	2,041	184.89	6,564	5,254
184.38	5,807	2,099	184.90	6,579	5,320
184.39	5,822	2,158	184.91	6,593	5,386
184.40	5,837	2,216	184.92	6,608	5,452
184.41	5,851	2,274	184.93	6,623	5,518
184.42	5,866	2,333	184.94	6,638	5,584
184.43	5,881	2,392	184.95	6,653	5,651
184.44	5,896	2,451	184.96	6,668	5,717
184.45	5,911	2,510	184.97	6,682	5,784
184.46	5,926	2,569	184.98	6,697	5,851
184.47	5,940	2,628	184.99	6,712	5,918
184.48	5,955	2,688	185.00	6,727	5,985
184.49	5,970	2,747	185.01	6,744	6,052
184.50	5,985	2,807	185.02	6,761	6,120
184.51	6,000	2,867	185.03	6,778	6,188

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.04	6,795	6,255	185.56	7,677	10,018
185.05	6,812	6,323	185.57	7,694	10,095
185.06	6,829	6,392	185.58	7,711	10,172
185.07	6,846	6,460	185.59	7,728	10,249
185.08	6,863	6,529	185.60	7,745	10,327
185.09	6,880	6,597	185.61	7,762	10,404
185.10	6,897	6,666	185.62	7,779	10,482
185.11	6,914	6,735	185.63	7,796	10,560
185.12	6,931	6,804	185.64	7,813	10,638
185.13	6,948	6,874	185.65	7,830	10,716
185.14	6,965	6,943	185.66	7,847	10,794
185.15	6,982	7,013	185.67	7,864	10,873
185.16	6,999	7,083	185.68	7,881	10,952
185.17	7,015	7,153	185.69	7,898	11,031
185.18	7,032	7,223	185.70	7,915	11,110
185.19	7,049	7,294	185.71	7,932	11,189
185.20	7,066	7,364	185.72	7,949	11,268
185.21	7,083	7,435	185.73	7,966	11,348
185.22	7,100	7,506	185.74	7,983	11,428
185.23	7,117	7,577	185.75	8,000	11,508
185.24	7,134	7,648	185.76	8,017	11,588
185.25	7,151	7,720	185.77	8,034	11,668
185.26	7,168	7,791	185.78	8,051	11,748
185.27	7,185	7,863	185.79	8,068	11,829
185.28	7,202	7,935	185.80	8,085	11,910
185.29	7,219	8,007	185.81	8,102	11,991
185.30	7,236	8,079	185.82	8,119	12,072
185.31	7,253	8,152	185.83	8,136	12,153
185.32	7,270	8,225	185.84	8,152	12,234
185.33	7,287	8,297	185.85	8,169	12,316
185.34	7,304	8,370	185.86	8,186	12,398
185.35	7,321	8,443	185.87	8,203	12,480
185.36	7,338	8,517	185.88	8,220	12,562
185.37	7,355	8,590	185.89	8,237	12,644
185.38	7,372	8,664	185.90	8,254	12,727
185.39	7,389	8,738	185.91	8,271	12,809
185.40	7,406	8,812	185.92	8,288	12,892
185.41	7,423	8,886	185.93	8,305	12,975
185.42	7,440	8,960	185.94	8,322	13,058
185.43	7,457	9,034	185.95	8,339	13,141
185.44	7,474	9,109	185.96	8,356	13,225
185.45	7,491	9,184	185.97	8,373	13,309
185.46	7,508	9,259	185.98	8,390	13,392
185.47	7,525	9,334	185.99	8,407	13,476
185.48	7,542	9,409	186.00	8,424	13,561
185.49	7,559	9,485	186.01	8,441	13,645
185.50	7,576	9,561	186.02	8,457	13,729
185.51	7,592	9,636	186.03	8,474	13,814
185.52	7,609	9,712	186.04	8,490	13,899
185.53	7,626	9,789	186.05	8,507	13,984
185.54	7,643	9,865	186.06	8,524	14,069
185.55	7,660	9,942	186.07	8,540	14,154

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.08	8,557	14,240	186.60	9,421	18,914
186.09	8,573	14,325	186.61	9,437	19,008
186.10	8,590	14,411	186.62	9,454	19,103
186.11	8,607	14,497	186.63	9,470	19,197
186.12	8,623	14,583	186.64	9,487	19,292
186.13	8,640	14,670	186.65	9,504	19,387
186.14	8,657	14,756	186.66	9,520	19,482
186.15	8,673	14,843	186.67	9,537	19,577
186.16	8,690	14,930	186.68	9,553	19,673
186.17	8,706	15,017	186.69	9,570	19,768
186.18	8,723	15,104	186.70	9,587	19,864
186.19	8,740	15,191	186.71	9,603	19,960
186.20	8,756	15,279	186.72	9,620	20,056
186.21	8,773	15,366	186.73	9,637	20,153
186.22	8,789	15,454	186.74	9,653	20,249
186.23	8,806	15,542	186.75	9,670	20,346
186.24	8,823	15,630	186.76	9,686	20,442
186.25	8,839	15,718	186.77	9,703	20,539
186.26	8,856	15,807	186.78	9,720	20,636
186.27	8,872	15,896	186.79	9,736	20,734
186.28	8,889	15,984	186.80	9,753	20,831
186.29	8,906	16,073	186.81	9,769	20,929
186.30	8,922	16,162	186.82	9,786	21,027
186.31	8,939	16,252	186.83	9,803	21,125
186.32	8,956	16,341	186.84	9,819	21,223
186.33	8,972	16,431	186.85	9,836	21,321
186.34	8,989	16,521	186.86	9,852	21,419
186.35	9,005	16,611	186.87	9,869	21,518
186.36	9,022	16,701	186.88	9,886	21,617
186.37	9,039	16,791	186.89	9,902	21,716
186.38	9,055	16,882	186.90	9,919	21,815
186.39	9,072	16,972	186.91	9,936	21,914
186.40	9,088	17,063	186.92	9,952	22,014
186.41	9,105	17,154	186.93	9,969	22,113
186.42	9,122	17,245	186.94	9,985	22,213
186.43	9,138	17,336	186.95	10,002	22,313
186.44	9,155	17,428	186.96	10,019	22,413
186.45	9,171	17,519	186.97	10,035	22,513
186.46	9,188	17,611	186.98	10,052	22,614
186.47	9,205	17,703	186.99	10,068	22,714
186.48	9,221	17,795	187.00	10,085	22,815
186.49	9,238	17,888	187.01	10,102	22,916
186.50	9,255	17,980	187.02	10,119	23,017
186.51	9,271	18,073	187.03	10,137	23,118
186.52	9,288	18,166	187.04	10,154	23,220
186.53	9,304	18,259	187.05	10,171	23,321
186.54	9,321	18,352	187.06	10,188	23,423
186.55	9,338	18,445	187.07	10,205	23,525
186.56	9,354	18,538	187.08	10,222	23,627
186.57	9,371	18,632	187.09	10,240	23,730
186.58	9,387	18,726	187.10	10,257	23,832
186.59	9,404	18,820	187.11	10,274	23,935

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.12	10,291	24,038	187.64	11,184	29,621
187.13	10,308	24,141	187.65	11,201	29,733
187.14	10,325	24,244	187.66	11,218	29,845
187.15	10,343	24,347	187.67	11,235	29,957
187.16	10,360	24,451	187.68	11,253	30,070
187.17	10,377	24,554	187.69	11,270	30,182
187.18	10,394	24,658	187.70	11,287	30,295
187.19	10,411	24,762	187.71	11,304	30,408
187.20	10,428	24,866	187.72	11,321	30,521
187.21	10,446	24,971	187.73	11,338	30,635
187.22	10,463	25,075	187.74	11,356	30,748
187.23	10,480	25,180	187.75	11,373	30,862
187.24	10,497	25,285	187.76	11,390	30,975
187.25	10,514	25,390	187.77	11,407	31,089
187.26	10,531	25,495	187.78	11,424	31,204
187.27	10,549	25,601	187.79	11,441	31,318
187.28	10,566	25,706	187.80	11,459	31,432
187.29	10,583	25,812	187.81	11,476	31,547
187.30	10,600	25,918	187.82	11,493	31,662
187.31	10,617	26,024	187.83	11,510	31,777
187.32	10,634	26,130	187.84	11,527	31,892
187.33	10,652	26,237	187.85	11,544	32,008
187.34	10,669	26,343	187.86	11,562	32,123
187.35	10,686	26,450	187.87	11,579	32,239
187.36	10,703	26,557	187.88	11,596	32,355
187.37	10,720	26,664	187.89	11,613	32,471
187.38	10,737	26,771	187.90	11,630	32,587
187.39	10,755	26,879	187.91	11,647	32,703
187.40	10,772	26,986	187.92	11,665	32,820
187.41	10,789	27,094	187.93	11,682	32,937
187.42	10,806	27,202	187.94	11,699	33,053
187.43	10,823	27,310	187.95	11,716	33,171
187.44	10,840	27,419	187.96	11,733	33,288
187.45	10,858	27,527	187.97	11,750	33,405
187.46	10,875	27,636	187.98	11,768	33,523
187.47	10,892	27,745	187.99	11,785	33,641
187.48	10,909	27,854	188.00	11,802	33,759
187.49	10,926	27,963	188.01	11,820	33,877
187.50	10,944	28,072	188.02	11,837	33,995
187.51	10,961	28,182	188.03	11,855	34,113
187.52	10,978	28,291	188.04	11,873	34,232
187.53	10,995	28,401	188.05	11,891	34,351
187.54	11,012	28,511	188.06	11,908	34,470
187.55	11,029	28,621	188.07	11,926	34,589
187.56	11,047	28,732	188.08	11,944	34,708
187.57	11,064	28,842	188.09	11,962	34,828
187.58	11,081	28,953	188.10	11,979	34,948
187.59	11,098	29,064	188.11	11,997	35,067
187.60	11,115	29,175	188.12	12,015	35,188
187.61	11,132	29,286	188.13	12,033	35,308
187.62	11,150	29,398	188.14	12,050	35,428
187.63	11,167	29,509	188.15	12,068	35,549

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.16	12,086	35,670	188.68	13,008	42,194
188.17	12,104	35,790	188.69	13,026	42,324
188.18	12,121	35,912	188.70	13,044	42,455
188.19	12,139	36,033	188.71	13,062	42,585
188.20	12,157	36,154	188.72	13,079	42,716
188.21	12,175	36,276	188.73	13,097	42,847
188.22	12,192	36,398	188.74	13,115	42,978
188.23	12,210	36,520	188.75	13,133	43,109
188.24	12,228	36,642	188.76	13,150	43,240
188.25	12,246	36,764	188.77	13,168	43,372
188.26	12,263	36,887	188.78	13,186	43,504
188.27	12,281	37,010	188.79	13,203	43,636
188.28	12,299	37,133	188.80	13,221	43,768
188.29	12,316	37,256	188.81	13,239	43,900
188.30	12,334	37,379	188.82	13,257	44,033
188.31	12,352	37,502	188.83	13,274	44,165
188.32	12,370	37,626	188.84	13,292	44,298
188.33	12,387	37,750	188.85	13,310	44,431
188.34	12,405	37,874	188.86	13,328	44,564
188.35	12,423	37,998	188.87	13,345	44,698
188.36	12,441	38,122	188.88	13,363	44,831
188.37	12,458	38,247	188.89	13,381	44,965
188.38	12,476	38,371	188.90	13,399	45,099
188.39	12,494	38,496	188.91	13,416	45,233
188.40	12,512	38,621	188.92	13,434	45,367
188.41	12,529	38,746	188.93	13,452	45,502
188.42	12,547	38,872	188.94	13,470	45,636
188.43	12,565	38,997	188.95	13,487	45,771
188.44	12,583	39,123	188.96	13,505	45,906
188.45	12,600	39,249	188.97	13,523	46,041
188.46	12,618	39,375	188.98	13,541	46,176
188.47	12,636	39,501	188.99	13,558	46,312
188.48	12,654	39,628	189.00	13,576	46,448
188.49	12,671	39,754	189.01	13,594	46,583
188.50	12,689	39,881	189.02	13,613	46,719
188.51	12,707	40,008	189.03	13,631	46,856
188.52	12,724	40,135	189.04	13,649	46,992
188.53	12,742	40,263	189.05	13,668	47,129
188.54	12,760	40,390	189.06	13,686	47,265
188.55	12,778	40,518	189.07	13,704	47,402
188.56	12,795	40,646	189.08	13,723	47,539
188.57	12,813	40,774	189.09	13,741	47,677
188.58	12,831	40,902	189.10	13,759	47,814
188.59	12,849	41,030	189.11	13,778	47,952
188.60	12,866	41,159	189.12	13,796	48,090
188.61	12,884	41,288	189.13	13,814	48,228
188.62	12,902	41,417	189.14	13,833	48,366
188.63	12,920	41,546	189.15	13,851	48,505
188.64	12,937	41,675	189.16	13,869	48,643
188.65	12,955	41,805	189.17	13,888	48,782
188.66	12,973	41,934	189.18	13,906	48,921
188.67	12,991	42,064	189.19	13,924	49,060

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.20	13,943	49,199	189.72	14,896	56,698
189.21	13,961	49,339	189.73	14,915	56,847
189.22	13,979	49,479	189.74	14,933	56,996
189.23	13,998	49,618	189.75	14,951	57,145
189.24	14,016	49,759	189.76	14,970	57,295
189.25	14,034	49,899	189.77	14,988	57,445
189.26	14,053	50,039	189.78	15,006	57,595
189.27	14,071	50,180	189.79	15,025	57,745
189.28	14,089	50,321	189.80	15,043	57,895
189.29	14,108	50,462	189.81	15,061	58,046
189.30	14,126	50,603	189.82	15,080	58,196
189.31	14,144	50,744	189.83	15,098	58,347
189.32	14,163	50,886			
189.33	14,181	51,027			
189.34	14,199	51,169			
189.35	14,218	51,311			
189.36	14,236	51,454			
189.37	14,254	51,596			
189.38	14,273	51,739			
189.39	14,291	51,882			
189.40	14,309	52,025			
189.41	14,328	52,168			
189.42	14,346	52,311			
189.43	14,365	52,455			
189.44	14,383	52,598			
189.45	14,401	52,742			
189.46	14,420	52,886			
189.47	14,438	53,031			
189.48	14,456	53,175			
189.49	14,475	53,320			
189.50	14,493	53,465			
189.51	14,511	53,610			
189.52	14,530	53,755			
189.53	14,548	53,900			
189.54	14,566	54,046			
189.55	14,585	54,192			
189.56	14,603	54,338			
189.57	14,621	54,484			
189.58	14,640	54,630			
189.59	14,658	54,777			
189.60	14,676	54,923			
189.61	14,695	55,070			
189.62	14,713	55,217			
189.63	14,731	55,364			
189.64	14,750	55,512			
189.65	14,768	55,659			
189.66	14,786	55,807			
189.67	14,805	55,955			
189.68	14,823	56,103			
189.69	14,841	56,251			
189.70	14,860	56,400			
189.71	14,878	56,549			

Summary for Pond B-52: Basin #52

Inflow Area = 1.423 ac, 34.43% Impervious, Inflow Depth = 3.94" for Future 10 yr event
 Inflow = 5.77 cfs @ 12.17 hrs, Volume= 0.467 af
 Outflow = 5.12 cfs @ 12.23 hrs, Volume= 0.419 af, Atten= 11%, Lag= 3.1 min
 Primary = 5.12 cfs @ 12.23 hrs, Volume= 0.419 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 195.80' @ 12.23 hrs Surf.Area= 2,008 sf Storage= 3,373 cf

Plug-Flow detention time= 96.6 min calculated for 0.419 af (90% of inflow)
 Center-of-Mass det. time= 43.5 min (837.8 - 794.3)

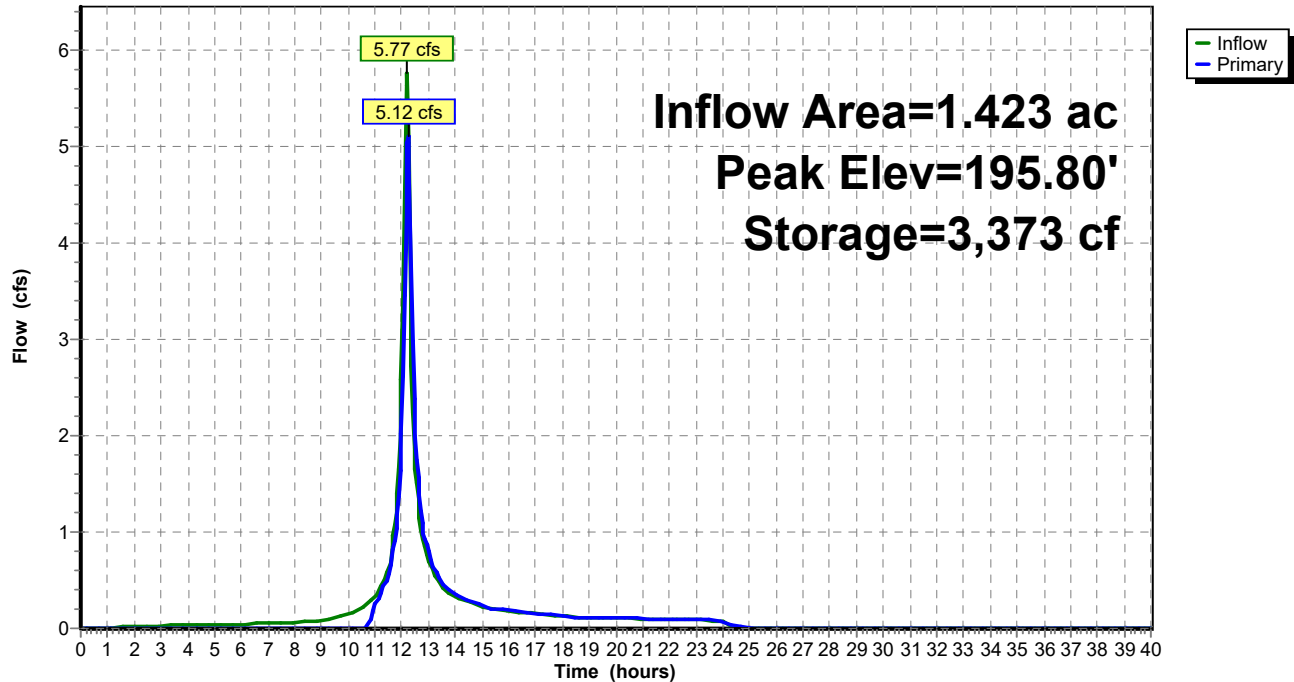
Volume	Invert	Avail.Storage	Storage Description
#1	193.00'	7,751 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
193.00	474	0	0
194.00	970	722	722
195.00	1,523	1,247	1,969
196.00	2,133	1,828	3,797
197.00	2,799	2,466	6,263
197.50	3,154	1,488	7,751

Device	Routing	Invert	Outlet Devices
#1	Primary	192.00'	15.0" Round Culvert L= 163.0' Ke= 0.500 Inlet / Outlet Invert= 192.00' / 191.00' S= 0.0061 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	195.08'	36.0" W x 6.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	195.72'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	197.25'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=5.04 cfs @ 12.23 hrs HW=195.79' (Free Discharge)

1=Culvert (Passes 5.04 cfs of 8.04 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 4.82 cfs @ 3.21 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 0.23 cfs @ 0.85 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-52: Basin #52**Hydrograph**

Stage-Discharge for Pond B-52: Basin #52

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.00	0.00	193.52	0.00	194.04	0.00	194.56	0.00
193.01	0.00	193.53	0.00	194.05	0.00	194.57	0.00
193.02	0.00	193.54	0.00	194.06	0.00	194.58	0.00
193.03	0.00	193.55	0.00	194.07	0.00	194.59	0.00
193.04	0.00	193.56	0.00	194.08	0.00	194.60	0.00
193.05	0.00	193.57	0.00	194.09	0.00	194.61	0.00
193.06	0.00	193.58	0.00	194.10	0.00	194.62	0.00
193.07	0.00	193.59	0.00	194.11	0.00	194.63	0.00
193.08	0.00	193.60	0.00	194.12	0.00	194.64	0.00
193.09	0.00	193.61	0.00	194.13	0.00	194.65	0.00
193.10	0.00	193.62	0.00	194.14	0.00	194.66	0.00
193.11	0.00	193.63	0.00	194.15	0.00	194.67	0.00
193.12	0.00	193.64	0.00	194.16	0.00	194.68	0.00
193.13	0.00	193.65	0.00	194.17	0.00	194.69	0.00
193.14	0.00	193.66	0.00	194.18	0.00	194.70	0.00
193.15	0.00	193.67	0.00	194.19	0.00	194.71	0.00
193.16	0.00	193.68	0.00	194.20	0.00	194.72	0.00
193.17	0.00	193.69	0.00	194.21	0.00	194.73	0.00
193.18	0.00	193.70	0.00	194.22	0.00	194.74	0.00
193.19	0.00	193.71	0.00	194.23	0.00	194.75	0.00
193.20	0.00	193.72	0.00	194.24	0.00	194.76	0.00
193.21	0.00	193.73	0.00	194.25	0.00	194.77	0.00
193.22	0.00	193.74	0.00	194.26	0.00	194.78	0.00
193.23	0.00	193.75	0.00	194.27	0.00	194.79	0.00
193.24	0.00	193.76	0.00	194.28	0.00	194.80	0.00
193.25	0.00	193.77	0.00	194.29	0.00	194.81	0.00
193.26	0.00	193.78	0.00	194.30	0.00	194.82	0.00
193.27	0.00	193.79	0.00	194.31	0.00	194.83	0.00
193.28	0.00	193.80	0.00	194.32	0.00	194.84	0.00
193.29	0.00	193.81	0.00	194.33	0.00	194.85	0.00
193.30	0.00	193.82	0.00	194.34	0.00	194.86	0.00
193.31	0.00	193.83	0.00	194.35	0.00	194.87	0.00
193.32	0.00	193.84	0.00	194.36	0.00	194.88	0.00
193.33	0.00	193.85	0.00	194.37	0.00	194.89	0.00
193.34	0.00	193.86	0.00	194.38	0.00	194.90	0.00
193.35	0.00	193.87	0.00	194.39	0.00	194.91	0.00
193.36	0.00	193.88	0.00	194.40	0.00	194.92	0.00
193.37	0.00	193.89	0.00	194.41	0.00	194.93	0.00
193.38	0.00	193.90	0.00	194.42	0.00	194.94	0.00
193.39	0.00	193.91	0.00	194.43	0.00	194.95	0.00
193.40	0.00	193.92	0.00	194.44	0.00	194.96	0.00
193.41	0.00	193.93	0.00	194.45	0.00	194.97	0.00
193.42	0.00	193.94	0.00	194.46	0.00	194.98	0.00
193.43	0.00	193.95	0.00	194.47	0.00	194.99	0.00
193.44	0.00	193.96	0.00	194.48	0.00	195.00	0.00
193.45	0.00	193.97	0.00	194.49	0.00	195.01	0.00
193.46	0.00	193.98	0.00	194.50	0.00	195.02	0.00
193.47	0.00	193.99	0.00	194.51	0.00	195.03	0.00
193.48	0.00	194.00	0.00	194.52	0.00	195.04	0.00
193.49	0.00	194.01	0.00	194.53	0.00	195.05	0.00
193.50	0.00	194.02	0.00	194.54	0.00	195.06	0.00
193.51	0.00	194.03	0.00	194.55	0.00	195.07	0.00

Stage-Discharge for Pond B-52: Basin #52 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
195.08	0.00	195.60	3.58	196.12	8.41	196.64	8.96
195.09	0.01	195.61	3.67	196.13	8.43	196.65	8.97
195.10	0.03	195.62	3.74	196.14	8.44	196.66	8.98
195.11	0.05	195.63	3.82	196.15	8.45	196.67	8.99
195.12	0.08	195.64	3.89	196.16	8.46	196.68	9.00
195.13	0.11	195.65	3.97	196.17	8.47	196.69	9.01
195.14	0.14	195.66	4.04	196.18	8.48	196.70	9.02
195.15	0.18	195.67	4.10	196.19	8.49	196.71	9.03
195.16	0.22	195.68	4.17	196.20	8.50	196.72	9.04
195.17	0.26	195.69	4.24	196.21	8.51	196.73	9.05
195.18	0.30	195.70	4.30	196.22	8.52	196.74	9.06
195.19	0.35	195.71	4.36	196.23	8.53	196.75	9.07
195.20	0.40	195.72	4.43	196.24	8.54	196.76	9.08
195.21	0.45	195.73	4.50	196.25	8.55	196.77	9.09
195.22	0.50	195.74	4.58	196.26	8.57	196.78	9.10
195.23	0.56	195.75	4.67	196.27	8.58	196.79	9.11
195.24	0.62	195.76	4.77	196.28	8.59	196.80	9.12
195.25	0.67	195.77	4.87	196.29	8.60	196.81	9.13
195.26	0.74	195.78	4.97	196.30	8.61	196.82	9.14
195.27	0.80	195.79	5.08	196.31	8.62	196.83	9.15
195.28	0.86	195.80	5.18	196.32	8.63	196.84	9.16
195.29	0.93	195.81	5.30	196.33	8.64	196.85	9.17
195.30	0.99	195.82	5.41	196.34	8.65	196.86	9.18
195.31	1.06	195.83	5.53	196.35	8.66	196.87	9.19
195.32	1.13	195.84	5.64	196.36	8.67	196.88	9.20
195.33	1.20	195.85	5.76	196.37	8.68	196.89	9.21
195.34	1.28	195.86	5.89	196.38	8.69	196.90	9.22
195.35	1.35	195.87	6.01	196.39	8.70	196.91	9.23
195.36	1.43	195.88	6.14	196.40	8.71	196.92	9.24
195.37	1.50	195.89	6.27	196.41	8.72	196.93	9.25
195.38	1.58	195.90	6.40	196.42	8.73	196.94	9.26
195.39	1.66	195.91	6.53	196.43	8.75	196.95	9.27
195.40	1.74	195.92	6.66	196.44	8.76	196.96	9.28
195.41	1.83	195.93	6.80	196.45	8.77	196.97	9.29
195.42	1.91	195.94	6.93	196.46	8.78	196.98	9.30
195.43	1.99	195.95	7.07	196.47	8.79	196.99	9.31
195.44	2.08	195.96	7.21	196.48	8.80	197.00	9.32
195.45	2.17	195.97	7.35	196.49	8.81	197.01	9.33
195.46	2.26	195.98	7.50	196.50	8.82	197.02	9.34
195.47	2.35	195.99	7.64	196.51	8.83	197.03	9.35
195.48	2.44	196.00	7.79	196.52	8.84	197.04	9.36
195.49	2.53	196.01	7.93	196.53	8.85	197.05	9.37
195.50	2.62	196.02	8.08	196.54	8.86	197.06	9.38
195.51	2.72	196.03	8.23	196.55	8.87	197.07	9.39
195.52	2.81	196.04	8.33	196.56	8.88	197.08	9.40
195.53	2.91	196.05	8.34	196.57	8.89	197.09	9.41
195.54	3.00	196.06	8.35	196.58	8.90	197.10	9.42
195.55	3.10	196.07	8.36	196.59	8.91	197.11	9.43
195.56	3.20	196.08	8.37	196.60	8.92	197.12	9.44
195.57	3.30	196.09	8.38	196.61	8.93	197.13	9.45
195.58	3.40	196.10	8.39	196.62	8.94	197.14	9.46
195.59	3.50	196.11	8.40	196.63	8.95	197.15	9.47

Stage-Discharge for Pond B-52: Basin #52 (continued)

Elevation (feet)	Primary (cfs)
197.16	9.48
197.17	9.49
197.18	9.50
197.19	9.51
197.20	9.52
197.21	9.53
197.22	9.54
197.23	9.55
197.24	9.55
197.25	9.56
197.26	9.69
197.27	9.91
197.28	10.20
197.29	10.54
197.30	10.92
197.31	11.35
197.32	11.81
197.33	12.30
197.34	12.82
197.35	13.38
197.36	13.96
197.37	14.57
197.38	15.21
197.39	15.87
197.40	16.55
197.41	17.26
197.42	17.99
197.43	18.75
197.44	19.52
197.45	20.32
197.46	21.17
197.47	22.06
197.48	22.96
197.49	23.90
197.50	24.85

Stage-Area-Storage for Pond B-52: Basin #52

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.00	474	0	193.52	732	314
193.01	479	5	193.53	737	321
193.02	484	10	193.54	742	328
193.03	489	14	193.55	747	336
193.04	494	19	193.56	752	343
193.05	499	24	193.57	757	351
193.06	504	29	193.58	762	358
193.07	509	34	193.59	767	366
193.08	514	40	193.60	772	374
193.09	519	45	193.61	777	381
193.10	524	50	193.62	782	389
193.11	529	55	193.63	786	397
193.12	534	60	193.64	791	405
193.13	538	66	193.65	796	413
193.14	543	71	193.66	801	421
193.15	548	77	193.67	806	429
193.16	553	82	193.68	811	437
193.17	558	88	193.69	816	445
193.18	563	93	193.70	821	453
193.19	568	99	193.71	826	462
193.20	573	105	193.72	831	470
193.21	578	110	193.73	836	478
193.22	583	116	193.74	841	487
193.23	588	122	193.75	846	495
193.24	593	128	193.76	851	503
193.25	598	134	193.77	856	512
193.26	603	140	193.78	861	521
193.27	608	146	193.79	866	529
193.28	613	152	193.80	871	538
193.29	618	158	193.81	876	547
193.30	623	165	193.82	881	555
193.31	628	171	193.83	886	564
193.32	633	177	193.84	891	573
193.33	638	183	193.85	896	582
193.34	643	190	193.86	901	591
193.35	648	196	193.87	906	600
193.36	653	203	193.88	910	609
193.37	658	209	193.89	915	618
193.38	662	216	193.90	920	627
193.39	667	223	193.91	925	637
193.40	672	229	193.92	930	646
193.41	677	236	193.93	935	655
193.42	682	243	193.94	940	665
193.43	687	250	193.95	945	674
193.44	692	257	193.96	950	684
193.45	697	264	193.97	955	693
193.46	702	271	193.98	960	703
193.47	707	278	193.99	965	712
193.48	712	285	194.00	970	722
193.49	717	292	194.01	976	732
193.50	722	299	194.02	981	742
193.51	727	306	194.03	987	751

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.04	992	761	194.56	1,280	1,352
194.05	998	771	194.57	1,285	1,365
194.06	1,003	781	194.58	1,291	1,378
194.07	1,009	791	194.59	1,296	1,391
194.08	1,014	801	194.60	1,302	1,404
194.09	1,020	812	194.61	1,307	1,417
194.10	1,025	822	194.62	1,313	1,430
194.11	1,031	832	194.63	1,318	1,443
194.12	1,036	842	194.64	1,324	1,456
194.13	1,042	853	194.65	1,329	1,469
194.14	1,047	863	194.66	1,335	1,483
194.15	1,053	874	194.67	1,341	1,496
194.16	1,058	884	194.68	1,346	1,509
194.17	1,064	895	194.69	1,352	1,523
194.18	1,070	906	194.70	1,357	1,536
194.19	1,075	916	194.71	1,363	1,550
194.20	1,081	927	194.72	1,368	1,564
194.21	1,086	938	194.73	1,374	1,577
194.22	1,092	949	194.74	1,379	1,591
194.23	1,097	960	194.75	1,385	1,605
194.24	1,103	971	194.76	1,390	1,619
194.25	1,108	982	194.77	1,396	1,633
194.26	1,114	993	194.78	1,401	1,647
194.27	1,119	1,004	194.79	1,407	1,661
194.28	1,125	1,015	194.80	1,412	1,675
194.29	1,130	1,027	194.81	1,418	1,689
194.30	1,136	1,038	194.82	1,423	1,703
194.31	1,141	1,049	194.83	1,429	1,718
194.32	1,147	1,061	194.84	1,435	1,732
194.33	1,152	1,072	194.85	1,440	1,746
194.34	1,158	1,084	194.86	1,446	1,761
194.35	1,164	1,095	194.87	1,451	1,775
194.36	1,169	1,107	194.88	1,457	1,790
194.37	1,175	1,119	194.89	1,462	1,804
194.38	1,180	1,131	194.90	1,468	1,819
194.39	1,186	1,142	194.91	1,473	1,834
194.40	1,191	1,154	194.92	1,479	1,848
194.41	1,197	1,166	194.93	1,484	1,863
194.42	1,202	1,178	194.94	1,490	1,878
194.43	1,208	1,190	194.95	1,495	1,893
194.44	1,213	1,202	194.96	1,501	1,908
194.45	1,219	1,214	194.97	1,506	1,923
194.46	1,224	1,227	194.98	1,512	1,938
194.47	1,230	1,239	194.99	1,517	1,953
194.48	1,235	1,251	195.00	1,523	1,969
194.49	1,241	1,264	195.01	1,529	1,984
194.50	1,247	1,276	195.02	1,535	1,999
194.51	1,252	1,289	195.03	1,541	2,014
194.52	1,258	1,301	195.04	1,547	2,030
194.53	1,263	1,314	195.05	1,554	2,045
194.54	1,269	1,326	195.06	1,560	2,061
194.55	1,274	1,339	195.07	1,566	2,077

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.08	1,572	2,092	195.60	1,889	2,992
195.09	1,578	2,108	195.61	1,895	3,011
195.10	1,584	2,124	195.62	1,901	3,030
195.11	1,590	2,140	195.63	1,907	3,049
195.12	1,596	2,156	195.64	1,913	3,068
195.13	1,602	2,172	195.65	1,920	3,087
195.14	1,608	2,188	195.66	1,926	3,107
195.15	1,615	2,204	195.67	1,932	3,126
195.16	1,621	2,220	195.68	1,938	3,145
195.17	1,627	2,236	195.69	1,944	3,165
195.18	1,633	2,253	195.70	1,950	3,184
195.19	1,639	2,269	195.71	1,956	3,204
195.20	1,645	2,285	195.72	1,962	3,223
195.21	1,651	2,302	195.73	1,968	3,243
195.22	1,657	2,318	195.74	1,974	3,263
195.23	1,663	2,335	195.75	1,981	3,282
195.24	1,669	2,352	195.76	1,987	3,302
195.25	1,676	2,368	195.77	1,993	3,322
195.26	1,682	2,385	195.78	1,999	3,342
195.27	1,688	2,402	195.79	2,005	3,362
195.28	1,694	2,419	195.80	2,011	3,382
195.29	1,700	2,436	195.81	2,017	3,402
195.30	1,706	2,453	195.82	2,023	3,422
195.31	1,712	2,470	195.83	2,029	3,443
195.32	1,718	2,487	195.84	2,035	3,463
195.33	1,724	2,504	195.85	2,041	3,483
195.34	1,730	2,522	195.86	2,048	3,504
195.35	1,736	2,539	195.87	2,054	3,524
195.36	1,743	2,556	195.88	2,060	3,545
195.37	1,749	2,574	195.89	2,066	3,566
195.38	1,755	2,591	195.90	2,072	3,586
195.39	1,761	2,609	195.91	2,078	3,607
195.40	1,767	2,627	195.92	2,084	3,628
195.41	1,773	2,644	195.93	2,090	3,649
195.42	1,779	2,662	195.94	2,096	3,670
195.43	1,785	2,680	195.95	2,102	3,691
195.44	1,791	2,698	195.96	2,109	3,712
195.45	1,797	2,716	195.97	2,115	3,733
195.46	1,804	2,734	195.98	2,121	3,754
195.47	1,810	2,752	195.99	2,127	3,775
195.48	1,816	2,770	196.00	2,133	3,797
195.49	1,822	2,788	196.01	2,140	3,818
195.50	1,828	2,806	196.02	2,146	3,839
195.51	1,834	2,825	196.03	2,153	3,861
195.52	1,840	2,843	196.04	2,160	3,882
195.53	1,846	2,861	196.05	2,166	3,904
195.54	1,852	2,880	196.06	2,173	3,926
195.55	1,859	2,898	196.07	2,180	3,947
195.56	1,865	2,917	196.08	2,186	3,969
195.57	1,871	2,936	196.09	2,193	3,991
195.58	1,877	2,954	196.10	2,200	4,013
195.59	1,883	2,973	196.11	2,206	4,035

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.12	2,213	4,057	196.64	2,559	5,298
196.13	2,220	4,079	196.65	2,566	5,324
196.14	2,226	4,102	196.66	2,573	5,349
196.15	2,233	4,124	196.67	2,579	5,375
196.16	2,240	4,146	196.68	2,586	5,401
196.17	2,246	4,169	196.69	2,593	5,427
196.18	2,253	4,191	196.70	2,599	5,453
196.19	2,260	4,214	196.71	2,606	5,479
196.20	2,266	4,236	196.72	2,613	5,505
196.21	2,273	4,259	196.73	2,619	5,531
196.22	2,280	4,282	196.74	2,626	5,557
196.23	2,286	4,305	196.75	2,633	5,584
196.24	2,293	4,328	196.76	2,639	5,610
196.25	2,300	4,351	196.77	2,646	5,636
196.26	2,306	4,374	196.78	2,652	5,663
196.27	2,313	4,397	196.79	2,659	5,689
196.28	2,319	4,420	196.80	2,666	5,716
196.29	2,326	4,443	196.81	2,672	5,743
196.30	2,333	4,466	196.82	2,679	5,769
196.31	2,339	4,490	196.83	2,686	5,796
196.32	2,346	4,513	196.84	2,692	5,823
196.33	2,353	4,537	196.85	2,699	5,850
196.34	2,359	4,560	196.86	2,706	5,877
196.35	2,366	4,584	196.87	2,712	5,904
196.36	2,373	4,608	196.88	2,719	5,931
196.37	2,379	4,631	196.89	2,726	5,959
196.38	2,386	4,655	196.90	2,732	5,986
196.39	2,393	4,679	196.91	2,739	6,013
196.40	2,399	4,703	196.92	2,746	6,041
196.41	2,406	4,727	196.93	2,752	6,068
196.42	2,413	4,751	196.94	2,759	6,096
196.43	2,419	4,775	196.95	2,766	6,123
196.44	2,426	4,799	196.96	2,772	6,151
196.45	2,433	4,824	196.97	2,779	6,179
196.46	2,439	4,848	196.98	2,786	6,207
196.47	2,446	4,873	196.99	2,792	6,235
196.48	2,453	4,897	197.00	2,799	6,263
196.49	2,459	4,922	197.01	2,806	6,291
196.50	2,466	4,946	197.02	2,813	6,319
196.51	2,473	4,971	197.03	2,820	6,347
196.52	2,479	4,996	197.04	2,827	6,375
196.53	2,486	5,021	197.05	2,835	6,403
196.54	2,493	5,045	197.06	2,842	6,432
196.55	2,499	5,070	197.07	2,849	6,460
196.56	2,506	5,095	197.08	2,856	6,489
196.57	2,513	5,121	197.09	2,863	6,517
196.58	2,519	5,146	197.10	2,870	6,546
196.59	2,526	5,171	197.11	2,877	6,575
196.60	2,533	5,196	197.12	2,884	6,603
196.61	2,539	5,222	197.13	2,891	6,632
196.62	2,546	5,247	197.14	2,898	6,661
196.63	2,553	5,272	197.15	2,906	6,690

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.16	2,913	6,719
197.17	2,920	6,749
197.18	2,927	6,778
197.19	2,934	6,807
197.20	2,941	6,836
197.21	2,948	6,866
197.22	2,955	6,895
197.23	2,962	6,925
197.24	2,969	6,955
197.25	2,977	6,984
197.26	2,984	7,014
197.27	2,991	7,044
197.28	2,998	7,074
197.29	3,005	7,104
197.30	3,012	7,134
197.31	3,019	7,164
197.32	3,026	7,195
197.33	3,033	7,225
197.34	3,040	7,255
197.35	3,047	7,286
197.36	3,055	7,316
197.37	3,062	7,347
197.38	3,069	7,377
197.39	3,076	7,408
197.40	3,083	7,439
197.41	3,090	7,470
197.42	3,097	7,501
197.43	3,104	7,532
197.44	3,111	7,563
197.45	3,118	7,594
197.46	3,126	7,625
197.47	3,133	7,656
197.48	3,140	7,688
197.49	3,147	7,719
197.50	3,154	7,751

Summary for Pond B-53: Basin #53

Inflow Area = 2.540 ac, 47.80% Impervious, Inflow Depth = 4.28" for Future 10 yr event
 Inflow = 10.96 cfs @ 12.17 hrs, Volume= 0.906 af
 Outflow = 6.46 cfs @ 12.31 hrs, Volume= 0.793 af, Atten= 41%, Lag= 8.3 min
 Primary = 6.46 cfs @ 12.31 hrs, Volume= 0.793 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 203.37' @ 12.31 hrs Surf.Area= 6,258 sf Storage= 13,300 cf

Plug-Flow detention time= 137.2 min calculated for 0.792 af (87% of inflow)
 Center-of-Mass det. time= 77.0 min (859.4 - 782.4)

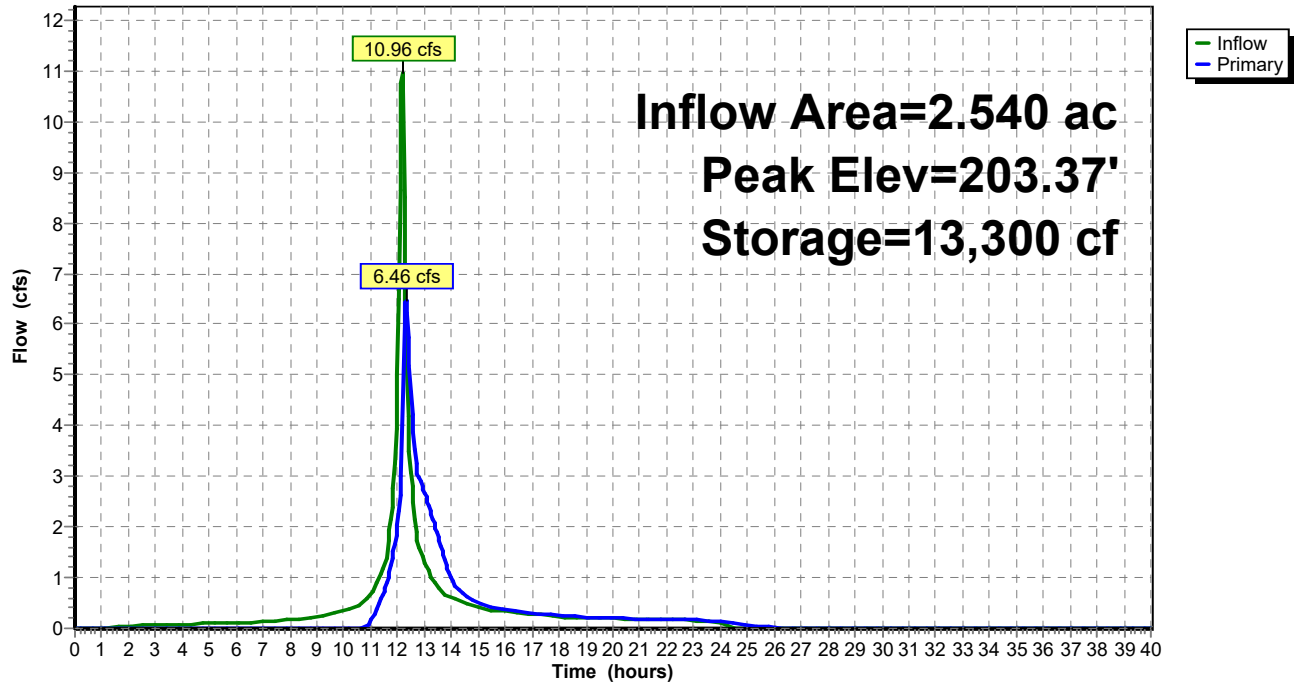
Volume	Invert	Avail.Storage	Storage Description
#1	201.00'	24,392 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.00	4,695	0	0
202.00	5,685	5,190	5,190
203.00	6,015	5,850	11,040
204.00	6,676	6,346	17,386
205.00	7,336	7,006	24,392

Device	Routing	Invert	Outlet Devices
#1	Primary	201.00'	24.0" Round Culvert L= 39.0' Ke= 0.500 Inlet / Outlet Invert= 201.00' / 200.10' S= 0.0231 ' / Cc= 0.900 n= 0.013, Flow Area= 3.14 sf
#2	Device 1	201.95'	24.0" W x 4.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	204.43'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=6.40 cfs @ 12.31 hrs HW=203.36' (Free Discharge)

1=Culvert (Passes 6.40 cfs of 17.67 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 3.58 cfs @ 5.37 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 2.82 cfs @ 1.97 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-53: Basin #53**Hydrograph**

Stage-Discharge for Pond B-53: Basin #53

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.00	0.00	201.52	0.00	202.04	0.17	202.56	2.12
201.01	0.00	201.53	0.00	202.05	0.20	202.57	2.15
201.02	0.00	201.54	0.00	202.06	0.23	202.58	2.17
201.03	0.00	201.55	0.00	202.07	0.27	202.59	2.20
201.04	0.00	201.56	0.00	202.08	0.30	202.60	2.22
201.05	0.00	201.57	0.00	202.09	0.34	202.61	2.24
201.06	0.00	201.58	0.00	202.10	0.37	202.62	2.27
201.07	0.00	201.59	0.00	202.11	0.41	202.63	2.29
201.08	0.00	201.60	0.00	202.12	0.45	202.64	2.31
201.09	0.00	201.61	0.00	202.13	0.49	202.65	2.33
201.10	0.00	201.62	0.00	202.14	0.53	202.66	2.36
201.11	0.00	201.63	0.00	202.15	0.57	202.67	2.38
201.12	0.00	201.64	0.00	202.16	0.62	202.68	2.40
201.13	0.00	201.65	0.00	202.17	0.66	202.69	2.42
201.14	0.00	201.66	0.00	202.18	0.71	202.70	2.44
201.15	0.00	201.67	0.00	202.19	0.75	202.71	2.46
201.16	0.00	201.68	0.00	202.20	0.80	202.72	2.49
201.17	0.00	201.69	0.00	202.21	0.85	202.73	2.51
201.18	0.00	201.70	0.00	202.22	0.90	202.74	2.53
201.19	0.00	201.71	0.00	202.23	0.95	202.75	2.55
201.20	0.00	201.72	0.00	202.24	1.00	202.76	2.57
201.21	0.00	201.73	0.00	202.25	1.05	202.77	2.59
201.22	0.00	201.74	0.00	202.26	1.11	202.78	2.61
201.23	0.00	201.75	0.00	202.27	1.16	202.79	2.63
201.24	0.00	201.76	0.00	202.28	1.22	202.80	2.65
201.25	0.00	201.77	0.00	202.29	1.27	202.81	2.67
201.26	0.00	201.78	0.00	202.30	1.32	202.82	2.69
201.27	0.00	201.79	0.00	202.31	1.36	202.83	2.70
201.28	0.00	201.80	0.00	202.32	1.40	202.84	2.72
201.29	0.00	201.81	0.00	202.33	1.44	202.85	2.74
201.30	0.00	201.82	0.00	202.34	1.48	202.86	2.76
201.31	0.00	201.83	0.00	202.35	1.51	202.87	2.78
201.32	0.00	201.84	0.00	202.36	1.55	202.88	2.80
201.33	0.00	201.85	0.00	202.37	1.58	202.89	2.82
201.34	0.00	201.86	0.00	202.38	1.62	202.90	2.84
201.35	0.00	201.87	0.00	202.39	1.65	202.91	2.85
201.36	0.00	201.88	0.00	202.40	1.68	202.92	2.87
201.37	0.00	201.89	0.00	202.41	1.71	202.93	2.89
201.38	0.00	201.90	0.00	202.42	1.74	202.94	2.91
201.39	0.00	201.91	0.00	202.43	1.77	202.95	2.93
201.40	0.00	201.92	0.00	202.44	1.80	202.96	2.94
201.41	0.00	201.93	0.00	202.45	1.83	202.97	2.96
201.42	0.00	201.94	0.00	202.46	1.86	202.98	2.98
201.43	0.00	201.95	0.00	202.47	1.89	202.99	3.00
201.44	0.00	201.96	0.01	202.48	1.92	203.00	3.01
201.45	0.00	201.97	0.02	202.49	1.94	203.01	3.04
201.46	0.00	201.98	0.03	202.50	1.97	203.02	3.08
201.47	0.00	201.99	0.05	202.51	2.00	203.03	3.13
201.48	0.00	202.00	0.07	202.52	2.02	203.04	3.18
201.49	0.00	202.01	0.09	202.53	2.05	203.05	3.24
201.50	0.00	202.02	0.12	202.54	2.07	203.06	3.31
201.51	0.00	202.03	0.15	202.55	2.10	203.07	3.37

Stage-Discharge for Pond B-53: Basin #53 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.08	3.44	203.60	9.80	204.12	19.18	204.64	35.99
203.09	3.51	203.61	9.96	204.13	19.38	204.65	36.91
203.10	3.59	203.62	10.12	204.14	19.58	204.66	37.85
203.11	3.67	203.63	10.28	204.15	19.78	204.67	38.82
203.12	3.75	203.64	10.44	204.16	19.98	204.68	39.82
203.13	3.84	203.65	10.60	204.17	20.18	204.69	40.84
203.14	3.92	203.66	10.77	204.18	20.39	204.70	41.88
203.15	4.01	203.67	10.93	204.19	20.59	204.71	42.95
203.16	4.11	203.68	11.10	204.20	20.79	204.72	44.04
203.17	4.20	203.69	11.26	204.21	21.00	204.73	45.16
203.18	4.30	203.70	11.43	204.22	21.20	204.74	46.30
203.19	4.40	203.71	11.60	204.23	21.41	204.75	47.47
203.20	4.50	203.72	11.77	204.24	21.62	204.76	48.66
203.21	4.60	203.73	11.94	204.25	21.82	204.77	49.88
203.22	4.70	203.74	12.11	204.26	22.03	204.78	51.12
203.23	4.81	203.75	12.28	204.27	22.24	204.79	52.38
203.24	4.92	203.76	12.45	204.28	22.45	204.80	53.67
203.25	5.03	203.77	12.62	204.29	22.66	204.81	54.98
203.26	5.14	203.78	12.80	204.30	22.87	204.82	56.32
203.27	5.25	203.79	12.97	204.31	22.99	204.83	57.68
203.28	5.37	203.80	13.15	204.32	23.04	204.84	59.09
203.29	5.49	203.81	13.32	204.33	23.09	204.85	60.52
203.30	5.61	203.82	13.50	204.34	23.14	204.86	61.99
203.31	5.73	203.83	13.68	204.35	23.19	204.87	63.48
203.32	5.85	203.84	13.86	204.36	23.24	204.88	64.99
203.33	5.97	203.85	14.04	204.37	23.29	204.89	66.53
203.34	6.10	203.86	14.22	204.38	23.34	204.90	68.10
203.35	6.22	203.87	14.40	204.39	23.39	204.91	69.69
203.36	6.35	203.88	14.58	204.40	23.43	204.92	71.31
203.37	6.48	203.89	14.77	204.41	23.48	204.93	72.96
203.38	6.61	203.90	14.95	204.42	23.53	204.94	74.63
203.39	6.74	203.91	15.14	204.43	23.58	204.95	76.33
203.40	6.88	203.92	15.32	204.44	23.75	204.96	78.05
203.41	7.01	203.93	15.51	204.45	24.01	204.97	79.81
203.42	7.15	203.94	15.69	204.46	24.33	204.98	81.59
203.43	7.29	203.95	15.88	204.47	24.71	204.99	83.39
203.44	7.42	203.96	16.07	204.48	25.13	205.00	85.22
203.45	7.56	203.97	16.26	204.49	25.59		
203.46	7.70	203.98	16.45	204.50	26.09		
203.47	7.85	203.99	16.64	204.51	26.62		
203.48	7.99	204.00	16.83	204.52	27.19		
203.49	8.14	204.01	17.02	204.53	27.78		
203.50	8.28	204.02	17.21	204.54	28.40		
203.51	8.43	204.03	17.41	204.55	29.05		
203.52	8.58	204.04	17.60	204.56	29.72		
203.53	8.73	204.05	17.80	204.57	30.42		
203.54	8.88	204.06	17.99	204.58	31.14		
203.55	9.03	204.07	18.19	204.59	31.89		
203.56	9.18	204.08	18.38	204.60	32.66		
203.57	9.34	204.09	18.58	204.61	33.45		
203.58	9.49	204.10	18.78	204.62	34.26		
203.59	9.65	204.11	18.98	204.63	35.10		

Stage-Area-Storage for Pond B-53: Basin #53

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.00	4,695	0	201.52	5,210	2,575
201.01	4,705	47	201.53	5,220	2,627
201.02	4,715	94	201.54	5,230	2,680
201.03	4,725	141	201.55	5,240	2,732
201.04	4,735	189	201.56	5,249	2,784
201.05	4,745	236	201.57	5,259	2,837
201.06	4,754	283	201.58	5,269	2,890
201.07	4,764	331	201.59	5,279	2,942
201.08	4,774	379	201.60	5,289	2,995
201.09	4,784	427	201.61	5,299	3,048
201.10	4,794	474	201.62	5,309	3,101
201.11	4,804	522	201.63	5,319	3,154
201.12	4,814	571	201.64	5,329	3,208
201.13	4,824	619	201.65	5,339	3,261
201.14	4,834	667	201.66	5,348	3,314
201.15	4,844	715	201.67	5,358	3,368
201.16	4,853	764	201.68	5,368	3,421
201.17	4,863	812	201.69	5,378	3,475
201.18	4,873	861	201.70	5,388	3,529
201.19	4,883	910	201.71	5,398	3,583
201.20	4,893	959	201.72	5,408	3,637
201.21	4,903	1,008	201.73	5,418	3,691
201.22	4,913	1,057	201.74	5,428	3,745
201.23	4,923	1,106	201.75	5,438	3,800
201.24	4,933	1,155	201.76	5,447	3,854
201.25	4,943	1,205	201.77	5,457	3,909
201.26	4,952	1,254	201.78	5,467	3,963
201.27	4,962	1,304	201.79	5,477	4,018
201.28	4,972	1,353	201.80	5,487	4,073
201.29	4,982	1,403	201.81	5,497	4,128
201.30	4,992	1,453	201.82	5,507	4,183
201.31	5,002	1,503	201.83	5,517	4,238
201.32	5,012	1,553	201.84	5,527	4,293
201.33	5,022	1,603	201.85	5,536	4,348
201.34	5,032	1,654	201.86	5,546	4,404
201.35	5,041	1,704	201.87	5,556	4,459
201.36	5,051	1,754	201.88	5,566	4,515
201.37	5,061	1,805	201.89	5,576	4,571
201.38	5,071	1,856	201.90	5,586	4,626
201.39	5,081	1,906	201.91	5,596	4,682
201.40	5,091	1,957	201.92	5,606	4,738
201.41	5,101	2,008	201.93	5,616	4,794
201.42	5,111	2,059	201.94	5,626	4,851
201.43	5,121	2,110	201.95	5,635	4,907
201.44	5,131	2,162	201.96	5,645	4,963
201.45	5,140	2,213	201.97	5,655	5,020
201.46	5,150	2,264	201.98	5,665	5,076
201.47	5,160	2,316	201.99	5,675	5,133
201.48	5,170	2,368	202.00	5,685	5,190
201.49	5,180	2,419	202.01	5,688	5,247
201.50	5,190	2,471	202.02	5,692	5,304
201.51	5,200	2,523	202.03	5,695	5,361

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.04	5,698	5,418	202.56	5,870	8,425
202.05	5,702	5,475	202.57	5,873	8,484
202.06	5,705	5,532	202.58	5,876	8,543
202.07	5,708	5,589	202.59	5,880	8,602
202.08	5,711	5,646	202.60	5,883	8,660
202.09	5,715	5,703	202.61	5,886	8,719
202.10	5,718	5,760	202.62	5,890	8,778
202.11	5,721	5,817	202.63	5,893	8,837
202.12	5,725	5,875	202.64	5,896	8,896
202.13	5,728	5,932	202.65	5,900	8,955
202.14	5,731	5,989	202.66	5,903	9,014
202.15	5,735	6,046	202.67	5,906	9,073
202.16	5,738	6,104	202.68	5,909	9,132
202.17	5,741	6,161	202.69	5,913	9,191
202.18	5,744	6,219	202.70	5,916	9,250
202.19	5,748	6,276	202.71	5,919	9,310
202.20	5,751	6,334	202.72	5,923	9,369
202.21	5,754	6,391	202.73	5,926	9,428
202.22	5,758	6,449	202.74	5,929	9,487
202.23	5,761	6,506	202.75	5,933	9,547
202.24	5,764	6,564	202.76	5,936	9,606
202.25	5,768	6,622	202.77	5,939	9,665
202.26	5,771	6,679	202.78	5,942	9,725
202.27	5,774	6,737	202.79	5,946	9,784
202.28	5,777	6,795	202.80	5,949	9,844
202.29	5,781	6,853	202.81	5,952	9,903
202.30	5,784	6,910	202.82	5,956	9,963
202.31	5,787	6,968	202.83	5,959	10,022
202.32	5,791	7,026	202.84	5,962	10,082
202.33	5,794	7,084	202.85	5,965	10,141
202.34	5,797	7,142	202.86	5,969	10,201
202.35	5,800	7,200	202.87	5,972	10,261
202.36	5,804	7,258	202.88	5,975	10,321
202.37	5,807	7,316	202.89	5,979	10,380
202.38	5,810	7,374	202.90	5,982	10,440
202.39	5,814	7,432	202.91	5,985	10,500
202.40	5,817	7,490	202.92	5,989	10,560
202.41	5,820	7,549	202.93	5,992	10,620
202.42	5,824	7,607	202.94	5,995	10,680
202.43	5,827	7,665	202.95	5,998	10,740
202.44	5,830	7,723	202.96	6,002	10,800
202.45	5,833	7,782	202.97	6,005	10,860
202.46	5,837	7,840	202.98	6,008	10,920
202.47	5,840	7,898	202.99	6,012	10,980
202.48	5,843	7,957	203.00	6,015	11,040
202.49	5,847	8,015	203.01	6,022	11,100
202.50	5,850	8,074	203.02	6,028	11,160
202.51	5,853	8,132	203.03	6,035	11,221
202.52	5,857	8,191	203.04	6,041	11,281
202.53	5,860	8,249	203.05	6,048	11,342
202.54	5,863	8,308	203.06	6,055	11,402
202.55	5,867	8,367	203.07	6,061	11,463

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.08	6,068	11,523	203.60	6,412	14,768
203.09	6,074	11,584	203.61	6,418	14,832
203.10	6,081	11,645	203.62	6,425	14,896
203.11	6,088	11,706	203.63	6,431	14,961
203.12	6,094	11,767	203.64	6,438	15,025
203.13	6,101	11,828	203.65	6,445	15,089
203.14	6,108	11,889	203.66	6,451	15,154
203.15	6,114	11,950	203.67	6,458	15,218
203.16	6,121	12,011	203.68	6,464	15,283
203.17	6,127	12,072	203.69	6,471	15,348
203.18	6,134	12,133	203.70	6,478	15,412
203.19	6,141	12,195	203.71	6,484	15,477
203.20	6,147	12,256	203.72	6,491	15,542
203.21	6,154	12,318	203.73	6,498	15,607
203.22	6,160	12,379	203.74	6,504	15,672
203.23	6,167	12,441	203.75	6,511	15,737
203.24	6,174	12,503	203.76	6,517	15,802
203.25	6,180	12,564	203.77	6,524	15,868
203.26	6,187	12,626	203.78	6,531	15,933
203.27	6,193	12,688	203.79	6,537	15,998
203.28	6,200	12,750	203.80	6,544	16,064
203.29	6,207	12,812	203.81	6,550	16,129
203.30	6,213	12,874	203.82	6,557	16,195
203.31	6,220	12,936	203.83	6,564	16,260
203.32	6,227	12,999	203.84	6,570	16,326
203.33	6,233	13,061	203.85	6,577	16,392
203.34	6,240	13,123	203.86	6,583	16,457
203.35	6,246	13,186	203.87	6,590	16,523
203.36	6,253	13,248	203.88	6,597	16,589
203.37	6,260	13,311	203.89	6,603	16,655
203.38	6,266	13,373	203.90	6,610	16,721
203.39	6,273	13,436	203.91	6,617	16,787
203.40	6,279	13,499	203.92	6,623	16,854
203.41	6,286	13,562	203.93	6,630	16,920
203.42	6,293	13,625	203.94	6,636	16,986
203.43	6,299	13,688	203.95	6,643	17,053
203.44	6,306	13,751	203.96	6,650	17,119
203.45	6,312	13,814	203.97	6,656	17,186
203.46	6,319	13,877	203.98	6,663	17,252
203.47	6,326	13,940	203.99	6,669	17,319
203.48	6,332	14,003	204.00	6,676	17,386
203.49	6,339	14,067	204.01	6,683	17,452
203.50	6,346	14,130	204.02	6,689	17,519
203.51	6,352	14,194	204.03	6,696	17,586
203.52	6,359	14,257	204.04	6,702	17,653
203.53	6,365	14,321	204.05	6,709	17,720
203.54	6,372	14,384	204.06	6,716	17,787
203.55	6,379	14,448	204.07	6,722	17,854
203.56	6,385	14,512	204.08	6,729	17,922
203.57	6,392	14,576	204.09	6,735	17,989
203.58	6,398	14,640	204.10	6,742	18,056
203.59	6,405	14,704	204.11	6,749	18,124

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.12	6,755	18,191	204.64	7,098	21,793
204.13	6,762	18,259	204.65	7,105	21,864
204.14	6,768	18,327	204.66	7,112	21,935
204.15	6,775	18,394	204.67	7,118	22,007
204.16	6,782	18,462	204.68	7,125	22,078
204.17	6,788	18,530	204.69	7,131	22,149
204.18	6,795	18,598	204.70	7,138	22,220
204.19	6,801	18,666	204.71	7,145	22,292
204.20	6,808	18,734	204.72	7,151	22,363
204.21	6,815	18,802	204.73	7,158	22,435
204.22	6,821	18,870	204.74	7,164	22,506
204.23	6,828	18,938	204.75	7,171	22,578
204.24	6,834	19,007	204.76	7,178	22,650
204.25	6,841	19,075	204.77	7,184	22,722
204.26	6,848	19,144	204.78	7,191	22,794
204.27	6,854	19,212	204.79	7,197	22,865
204.28	6,861	19,281	204.80	7,204	22,938
204.29	6,867	19,349	204.81	7,211	23,010
204.30	6,874	19,418	204.82	7,217	23,082
204.31	6,881	19,487	204.83	7,224	23,154
204.32	6,887	19,556	204.84	7,230	23,226
204.33	6,894	19,625	204.85	7,237	23,299
204.34	6,900	19,693	204.86	7,244	23,371
204.35	6,907	19,763	204.87	7,250	23,443
204.36	6,914	19,832	204.88	7,257	23,516
204.37	6,920	19,901	204.89	7,263	23,589
204.38	6,927	19,970	204.90	7,270	23,661
204.39	6,933	20,039	204.91	7,277	23,734
204.40	6,940	20,109	204.92	7,283	23,807
204.41	6,947	20,178	204.93	7,290	23,880
204.42	6,953	20,248	204.94	7,296	23,953
204.43	6,960	20,317	204.95	7,303	24,026
204.44	6,966	20,387	204.96	7,310	24,099
204.45	6,973	20,457	204.97	7,316	24,172
204.46	6,980	20,526	204.98	7,323	24,245
204.47	6,986	20,596	204.99	7,329	24,318
204.48	6,993	20,666	205.00	7,336	24,392
204.49	6,999	20,736			
204.50	7,006	20,806			
204.51	7,013	20,876			
204.52	7,019	20,946			
204.53	7,026	21,016			
204.54	7,032	21,087			
204.55	7,039	21,157			
204.56	7,046	21,228			
204.57	7,052	21,298			
204.58	7,059	21,369			
204.59	7,065	21,439			
204.60	7,072	21,510			
204.61	7,079	21,581			
204.62	7,085	21,651			
204.63	7,092	21,722			

Summary for Pond B-54: Basin #54

Inflow Area = 2.570 ac, 60.47% Impervious, Inflow Depth = 4.60" for Future 10 yr event
 Inflow = 11.73 cfs @ 12.17 hrs, Volume= 0.986 af
 Outflow = 8.69 cfs @ 12.26 hrs, Volume= 0.845 af, Atten= 26%, Lag= 5.6 min
 Primary = 8.69 cfs @ 12.26 hrs, Volume= 0.845 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 203.56' @ 12.26 hrs Surf.Area= 6,128 sf Storage= 13,508 cf

Plug-Flow detention time= 144.2 min calculated for 0.844 af (86% of inflow)
 Center-of-Mass det. time= 78.1 min (851.0 - 772.8)

Volume	Invert	Avail.Storage	Storage Description
#1	201.00'	23,042 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.00	4,440	0	0
202.00	5,100	4,770	4,770
203.00	5,760	5,430	10,200
204.00	6,421	6,091	16,291
205.00	7,081	6,751	23,042

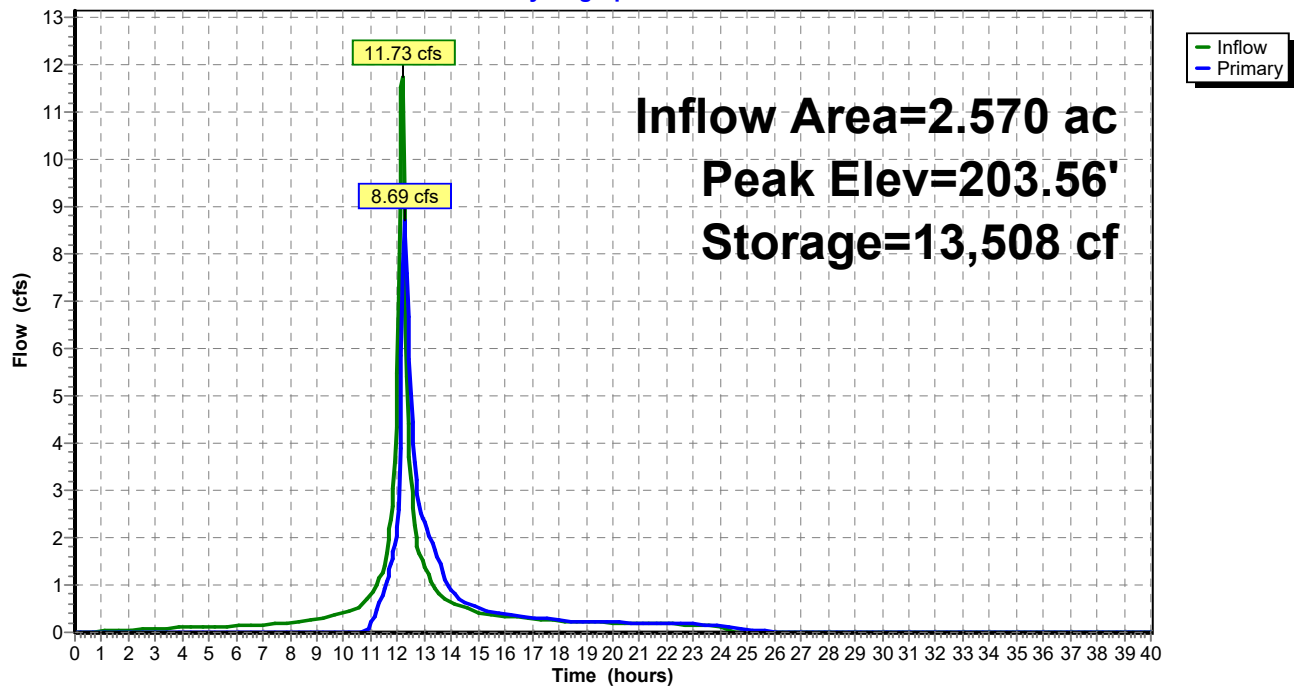
Device	Routing	Invert	Outlet Devices
#1	Primary	201.00'	24.0" Round Culvert L= 73.0' Ke= 0.500 Inlet / Outlet Invert= 201.00' / 200.10' S= 0.0123 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf
#2	Device 1	202.26'	24.0" W x 4.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	204.75'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=8.57 cfs @ 12.26 hrs HW=203.55' (Free Discharge)

1=Culvert (Passes 8.57 cfs of 18.83 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 3.40 cfs @ 5.10 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 5.18 cfs @ 2.42 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-54: Basin #54

Hydrograph



Stage-Discharge for Pond B-54: Basin #54

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.00	0.00	201.52	0.00	202.04	0.00	202.56	1.05
201.01	0.00	201.53	0.00	202.05	0.00	202.57	1.11
201.02	0.00	201.54	0.00	202.06	0.00	202.58	1.16
201.03	0.00	201.55	0.00	202.07	0.00	202.59	1.22
201.04	0.00	201.56	0.00	202.08	0.00	202.60	1.27
201.05	0.00	201.57	0.00	202.09	0.00	202.61	1.32
201.06	0.00	201.58	0.00	202.10	0.00	202.62	1.36
201.07	0.00	201.59	0.00	202.11	0.00	202.63	1.40
201.08	0.00	201.60	0.00	202.12	0.00	202.64	1.44
201.09	0.00	201.61	0.00	202.13	0.00	202.65	1.48
201.10	0.00	201.62	0.00	202.14	0.00	202.66	1.51
201.11	0.00	201.63	0.00	202.15	0.00	202.67	1.55
201.12	0.00	201.64	0.00	202.16	0.00	202.68	1.58
201.13	0.00	201.65	0.00	202.17	0.00	202.69	1.62
201.14	0.00	201.66	0.00	202.18	0.00	202.70	1.65
201.15	0.00	201.67	0.00	202.19	0.00	202.71	1.68
201.16	0.00	201.68	0.00	202.20	0.00	202.72	1.71
201.17	0.00	201.69	0.00	202.21	0.00	202.73	1.74
201.18	0.00	201.70	0.00	202.22	0.00	202.74	1.77
201.19	0.00	201.71	0.00	202.23	0.00	202.75	1.80
201.20	0.00	201.72	0.00	202.24	0.00	202.76	1.83
201.21	0.00	201.73	0.00	202.25	0.00	202.77	1.86
201.22	0.00	201.74	0.00	202.26	0.00	202.78	1.89
201.23	0.00	201.75	0.00	202.27	0.01	202.79	1.92
201.24	0.00	201.76	0.00	202.28	0.02	202.80	1.94
201.25	0.00	201.77	0.00	202.29	0.03	202.81	1.97
201.26	0.00	201.78	0.00	202.30	0.05	202.82	2.00
201.27	0.00	201.79	0.00	202.31	0.07	202.83	2.02
201.28	0.00	201.80	0.00	202.32	0.09	202.84	2.05
201.29	0.00	201.81	0.00	202.33	0.12	202.85	2.07
201.30	0.00	201.82	0.00	202.34	0.15	202.86	2.10
201.31	0.00	201.83	0.00	202.35	0.17	202.87	2.12
201.32	0.00	201.84	0.00	202.36	0.20	202.88	2.15
201.33	0.00	201.85	0.00	202.37	0.23	202.89	2.17
201.34	0.00	201.86	0.00	202.38	0.27	202.90	2.20
201.35	0.00	201.87	0.00	202.39	0.30	202.91	2.22
201.36	0.00	201.88	0.00	202.40	0.34	202.92	2.24
201.37	0.00	201.89	0.00	202.41	0.37	202.93	2.27
201.38	0.00	201.90	0.00	202.42	0.41	202.94	2.29
201.39	0.00	201.91	0.00	202.43	0.45	202.95	2.31
201.40	0.00	201.92	0.00	202.44	0.49	202.96	2.33
201.41	0.00	201.93	0.00	202.45	0.53	202.97	2.36
201.42	0.00	201.94	0.00	202.46	0.57	202.98	2.38
201.43	0.00	201.95	0.00	202.47	0.62	202.99	2.40
201.44	0.00	201.96	0.00	202.48	0.66	203.00	2.42
201.45	0.00	201.97	0.00	202.49	0.71	203.01	2.46
201.46	0.00	201.98	0.00	202.50	0.75	203.02	2.50
201.47	0.00	201.99	0.00	202.51	0.80	203.03	2.55
201.48	0.00	202.00	0.00	202.52	0.85	203.04	2.61
201.49	0.00	202.01	0.00	202.53	0.90	203.05	2.67
201.50	0.00	202.02	0.00	202.54	0.95	203.06	2.74
201.51	0.00	202.03	0.00	202.55	1.00	203.07	2.81

Stage-Discharge for Pond B-54: Basin #54 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.08	2.88	203.60	9.37	204.12	18.81	204.64	24.58
203.09	2.96	203.61	9.53	204.13	19.01	204.65	24.62
203.10	3.04	203.62	9.69	204.14	19.21	204.66	24.67
203.11	3.12	203.63	9.85	204.15	19.42	204.67	24.72
203.12	3.21	203.64	10.02	204.16	19.62	204.68	24.76
203.13	3.29	203.65	10.18	204.17	19.82	204.69	24.81
203.14	3.39	203.66	10.34	204.18	20.03	204.70	24.86
203.15	3.48	203.67	10.51	204.19	20.23	204.71	24.90
203.16	3.57	203.68	10.68	204.20	20.44	204.72	24.95
203.17	3.67	203.69	10.84	204.21	20.64	204.73	24.99
203.18	3.77	203.70	11.01	204.22	20.85	204.74	25.04
203.19	3.87	203.71	11.18	204.23	21.05	204.75	25.08
203.20	3.98	203.72	11.35	204.24	21.26	204.76	25.25
203.21	4.08	203.73	11.52	204.25	21.47	204.77	25.51
203.22	4.19	203.74	11.69	204.26	21.68	204.78	25.83
203.23	4.30	203.75	11.87	204.27	21.89	204.79	26.20
203.24	4.41	203.76	12.04	204.28	22.10	204.80	26.62
203.25	4.52	203.77	12.22	204.29	22.31	204.81	27.08
203.26	4.64	203.78	12.39	204.30	22.52	204.82	27.58
203.27	4.75	203.79	12.57	204.31	22.73	204.83	28.10
203.28	4.87	203.80	12.74	204.32	22.94	204.84	28.66
203.29	4.99	203.81	12.92	204.33	23.09	204.85	29.25
203.30	5.11	203.82	13.10	204.34	23.14	204.86	29.87
203.31	5.24	203.83	13.28	204.35	23.19	204.87	30.52
203.32	5.36	203.84	13.46	204.36	23.24	204.88	31.19
203.33	5.49	203.85	13.64	204.37	23.29	204.89	31.89
203.34	5.61	203.86	13.82	204.38	23.34	204.90	32.61
203.35	5.74	203.87	14.01	204.39	23.39	204.91	33.35
203.36	5.87	203.88	14.19	204.40	23.43	204.92	34.12
203.37	6.00	203.89	14.37	204.41	23.48	204.93	34.90
203.38	6.14	203.90	14.56	204.42	23.53	204.94	35.72
203.39	6.27	203.91	14.75	204.43	23.58	204.95	36.55
203.40	6.41	203.92	14.93	204.44	23.63	204.96	37.44
203.41	6.54	203.93	15.12	204.45	23.68	204.97	38.35
203.42	6.68	203.94	15.31	204.46	23.73	204.98	39.29
203.43	6.82	203.95	15.50	204.47	23.77	204.99	40.26
203.44	6.96	203.96	15.69	204.48	23.82	205.00	41.25
203.45	7.10	203.97	15.88	204.49	23.87		
203.46	7.25	203.98	16.07	204.50	23.92		
203.47	7.39	203.99	16.26	204.51	23.97		
203.48	7.54	204.00	16.45	204.52	24.01		
203.49	7.68	204.01	16.64	204.53	24.06		
203.50	7.83	204.02	16.84	204.54	24.11		
203.51	7.98	204.03	17.03	204.55	24.16		
203.52	8.13	204.04	17.23	204.56	24.20		
203.53	8.28	204.05	17.42	204.57	24.25		
203.54	8.43	204.06	17.62	204.58	24.30		
203.55	8.59	204.07	17.82	204.59	24.34		
203.56	8.74	204.08	18.01	204.60	24.39		
203.57	8.90	204.09	18.21	204.61	24.44		
203.58	9.05	204.10	18.41	204.62	24.48		
203.59	9.21	204.11	18.61	204.63	24.53		

Stage-Area-Storage for Pond B-54: Basin #54

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.00	4,440	0	201.52	4,783	2,398
201.01	4,447	44	201.53	4,790	2,446
201.02	4,453	89	201.54	4,796	2,494
201.03	4,460	133	201.55	4,803	2,542
201.04	4,466	178	201.56	4,810	2,590
201.05	4,473	223	201.57	4,816	2,638
201.06	4,480	268	201.58	4,823	2,686
201.07	4,486	312	201.59	4,829	2,734
201.08	4,493	357	201.60	4,836	2,783
201.09	4,499	402	201.61	4,843	2,831
201.10	4,506	447	201.62	4,849	2,880
201.11	4,513	492	201.63	4,856	2,928
201.12	4,519	538	201.64	4,862	2,977
201.13	4,526	583	201.65	4,869	3,025
201.14	4,532	628	201.66	4,876	3,074
201.15	4,539	673	201.67	4,882	3,123
201.16	4,546	719	201.68	4,889	3,172
201.17	4,552	764	201.69	4,895	3,221
201.18	4,559	810	201.70	4,902	3,270
201.19	4,565	856	201.71	4,909	3,319
201.20	4,572	901	201.72	4,915	3,368
201.21	4,579	947	201.73	4,922	3,417
201.22	4,585	993	201.74	4,928	3,466
201.23	4,592	1,039	201.75	4,935	3,516
201.24	4,598	1,085	201.76	4,942	3,565
201.25	4,605	1,131	201.77	4,948	3,614
201.26	4,612	1,177	201.78	4,955	3,664
201.27	4,618	1,223	201.79	4,961	3,714
201.28	4,625	1,269	201.80	4,968	3,763
201.29	4,631	1,315	201.81	4,975	3,813
201.30	4,638	1,362	201.82	4,981	3,863
201.31	4,645	1,408	201.83	4,988	3,913
201.32	4,651	1,455	201.84	4,994	3,962
201.33	4,658	1,501	201.85	5,001	4,012
201.34	4,664	1,548	201.86	5,008	4,062
201.35	4,671	1,594	201.87	5,014	4,113
201.36	4,678	1,641	201.88	5,021	4,163
201.37	4,684	1,688	201.89	5,027	4,213
201.38	4,691	1,735	201.90	5,034	4,263
201.39	4,697	1,782	201.91	5,041	4,314
201.40	4,704	1,829	201.92	5,047	4,364
201.41	4,711	1,876	201.93	5,054	4,415
201.42	4,717	1,923	201.94	5,060	4,465
201.43	4,724	1,970	201.95	5,067	4,516
201.44	4,730	2,017	201.96	5,074	4,567
201.45	4,737	2,065	201.97	5,080	4,617
201.46	4,744	2,112	201.98	5,087	4,668
201.47	4,750	2,160	201.99	5,093	4,719
201.48	4,757	2,207	202.00	5,100	4,770
201.49	4,763	2,255	202.01	5,107	4,821
201.50	4,770	2,303	202.02	5,113	4,872
201.51	4,777	2,350	202.03	5,120	4,923

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.04	5,126	4,975	202.56	5,470	7,729
202.05	5,133	5,026	202.57	5,476	7,784
202.06	5,140	5,077	202.58	5,483	7,839
202.07	5,146	5,129	202.59	5,489	7,894
202.08	5,153	5,180	202.60	5,496	7,949
202.09	5,159	5,232	202.61	5,503	8,004
202.10	5,166	5,283	202.62	5,509	8,059
202.11	5,173	5,335	202.63	5,516	8,114
202.12	5,179	5,387	202.64	5,522	8,169
202.13	5,186	5,439	202.65	5,529	8,224
202.14	5,192	5,490	202.66	5,536	8,280
202.15	5,199	5,542	202.67	5,542	8,335
202.16	5,206	5,594	202.68	5,549	8,391
202.17	5,212	5,647	202.69	5,555	8,446
202.18	5,219	5,699	202.70	5,562	8,502
202.19	5,225	5,751	202.71	5,569	8,557
202.20	5,232	5,803	202.72	5,575	8,613
202.21	5,239	5,856	202.73	5,582	8,669
202.22	5,245	5,908	202.74	5,588	8,725
202.23	5,252	5,960	202.75	5,595	8,781
202.24	5,258	6,013	202.76	5,602	8,837
202.25	5,265	6,066	202.77	5,608	8,893
202.26	5,272	6,118	202.78	5,615	8,949
202.27	5,278	6,171	202.79	5,621	9,005
202.28	5,285	6,224	202.80	5,628	9,061
202.29	5,291	6,277	202.81	5,635	9,118
202.30	5,298	6,330	202.82	5,641	9,174
202.31	5,305	6,383	202.83	5,648	9,230
202.32	5,311	6,436	202.84	5,654	9,287
202.33	5,318	6,489	202.85	5,661	9,343
202.34	5,324	6,542	202.86	5,668	9,400
202.35	5,331	6,595	202.87	5,674	9,457
202.36	5,338	6,649	202.88	5,681	9,514
202.37	5,344	6,702	202.89	5,687	9,570
202.38	5,351	6,756	202.90	5,694	9,627
202.39	5,357	6,809	202.91	5,701	9,684
202.40	5,364	6,863	202.92	5,707	9,741
202.41	5,371	6,916	202.93	5,714	9,798
202.42	5,377	6,970	202.94	5,720	9,856
202.43	5,384	7,024	202.95	5,727	9,913
202.44	5,390	7,078	202.96	5,734	9,970
202.45	5,397	7,132	202.97	5,740	10,027
202.46	5,404	7,186	202.98	5,747	10,085
202.47	5,410	7,240	202.99	5,753	10,142
202.48	5,417	7,294	203.00	5,760	10,200
202.49	5,423	7,348	203.01	5,767	10,258
202.50	5,430	7,403	203.02	5,773	10,315
202.51	5,437	7,457	203.03	5,780	10,373
202.52	5,443	7,511	203.04	5,786	10,431
202.53	5,450	7,566	203.05	5,793	10,489
202.54	5,456	7,620	203.06	5,800	10,547
202.55	5,463	7,675	203.07	5,806	10,605

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.08	5,813	10,663	203.60	6,157	13,775
203.09	5,819	10,721	203.61	6,163	13,837
203.10	5,826	10,779	203.62	6,170	13,898
203.11	5,833	10,838	203.63	6,176	13,960
203.12	5,839	10,896	203.64	6,183	14,022
203.13	5,846	10,954	203.65	6,190	14,084
203.14	5,853	11,013	203.66	6,196	14,146
203.15	5,859	11,071	203.67	6,203	14,208
203.16	5,866	11,130	203.68	6,209	14,270
203.17	5,872	11,189	203.69	6,216	14,332
203.18	5,879	11,248	203.70	6,223	14,394
203.19	5,886	11,306	203.71	6,229	14,456
203.20	5,892	11,365	203.72	6,236	14,519
203.21	5,899	11,424	203.73	6,243	14,581
203.22	5,905	11,483	203.74	6,249	14,643
203.23	5,912	11,542	203.75	6,256	14,706
203.24	5,919	11,601	203.76	6,262	14,768
203.25	5,925	11,661	203.77	6,269	14,831
203.26	5,932	11,720	203.78	6,276	14,894
203.27	5,938	11,779	203.79	6,282	14,957
203.28	5,945	11,839	203.80	6,289	15,020
203.29	5,952	11,898	203.81	6,295	15,082
203.30	5,958	11,958	203.82	6,302	15,145
203.31	5,965	12,017	203.83	6,309	15,208
203.32	5,972	12,077	203.84	6,315	15,272
203.33	5,978	12,137	203.85	6,322	15,335
203.34	5,985	12,197	203.86	6,328	15,398
203.35	5,991	12,256	203.87	6,335	15,461
203.36	5,998	12,316	203.88	6,342	15,525
203.37	6,005	12,376	203.89	6,348	15,588
203.38	6,011	12,437	203.90	6,355	15,652
203.39	6,018	12,497	203.91	6,362	15,715
203.40	6,024	12,557	203.92	6,368	15,779
203.41	6,031	12,617	203.93	6,375	15,843
203.42	6,038	12,678	203.94	6,381	15,906
203.43	6,044	12,738	203.95	6,388	15,970
203.44	6,051	12,798	203.96	6,395	16,034
203.45	6,057	12,859	203.97	6,401	16,098
203.46	6,064	12,920	203.98	6,408	16,162
203.47	6,071	12,980	203.99	6,414	16,226
203.48	6,077	13,041	204.00	6,421	16,291
203.49	6,084	13,102	204.01	6,428	16,355
203.50	6,091	13,163	204.02	6,434	16,419
203.51	6,097	13,224	204.03	6,441	16,483
203.52	6,104	13,285	204.04	6,447	16,548
203.53	6,110	13,346	204.05	6,454	16,612
203.54	6,117	13,407	204.06	6,461	16,677
203.55	6,124	13,468	204.07	6,467	16,742
203.56	6,130	13,529	204.08	6,474	16,806
203.57	6,137	13,591	204.09	6,480	16,871
203.58	6,143	13,652	204.10	6,487	16,936
203.59	6,150	13,713	204.11	6,494	17,001

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.12	6,500	17,066	204.64	6,843	20,535
204.13	6,507	17,131	204.65	6,850	20,604
204.14	6,513	17,196	204.66	6,857	20,672
204.15	6,520	17,261	204.67	6,863	20,741
204.16	6,527	17,326	204.68	6,870	20,809
204.17	6,533	17,392	204.69	6,876	20,878
204.18	6,540	17,457	204.70	6,883	20,947
204.19	6,546	17,522	204.71	6,890	21,016
204.20	6,553	17,588	204.72	6,896	21,085
204.21	6,560	17,653	204.73	6,903	21,154
204.22	6,566	17,719	204.74	6,909	21,223
204.23	6,573	17,785	204.75	6,916	21,292
204.24	6,579	17,851	204.76	6,923	21,361
204.25	6,586	17,916	204.77	6,929	21,430
204.26	6,593	17,982	204.78	6,936	21,500
204.27	6,599	18,048	204.79	6,942	21,569
204.28	6,606	18,114	204.80	6,949	21,639
204.29	6,612	18,180	204.81	6,956	21,708
204.30	6,619	18,247	204.82	6,962	21,778
204.31	6,626	18,313	204.83	6,969	21,847
204.32	6,632	18,379	204.84	6,975	21,917
204.33	6,639	18,445	204.85	6,982	21,987
204.34	6,645	18,512	204.86	6,989	22,057
204.35	6,652	18,578	204.87	6,995	22,127
204.36	6,659	18,645	204.88	7,002	22,197
204.37	6,665	18,711	204.89	7,008	22,267
204.38	6,672	18,778	204.90	7,015	22,337
204.39	6,678	18,845	204.91	7,022	22,407
204.40	6,685	18,912	204.92	7,028	22,477
204.41	6,692	18,979	204.93	7,035	22,547
204.42	6,698	19,046	204.94	7,041	22,618
204.43	6,705	19,113	204.95	7,048	22,688
204.44	6,711	19,180	204.96	7,055	22,759
204.45	6,718	19,247	204.97	7,061	22,829
204.46	6,725	19,314	204.98	7,068	22,900
204.47	6,731	19,381	204.99	7,074	22,971
204.48	6,738	19,449	205.00	7,081	23,042
204.49	6,744	19,516			
204.50	6,751	19,584			
204.51	6,758	19,651			
204.52	6,764	19,719			
204.53	6,771	19,786			
204.54	6,777	19,854			
204.55	6,784	19,922			
204.56	6,791	19,990			
204.57	6,797	20,058			
204.58	6,804	20,126			
204.59	6,810	20,194			
204.60	6,817	20,262			
204.61	6,824	20,330			
204.62	6,830	20,398			
204.63	6,837	20,467			

Summary for Pond B-55: Basin #55

Inflow Area = 2.301 ac, 47.33% Impervious, Inflow Depth = 4.27" for Future 10 yr event
 Inflow = 9.91 cfs @ 12.17 hrs, Volume= 0.818 af
 Outflow = 6.59 cfs @ 12.28 hrs, Volume= 0.715 af, Atten= 34%, Lag= 6.8 min
 Primary = 6.59 cfs @ 12.28 hrs, Volume= 0.715 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 194.31' @ 12.28 hrs Surf.Area= 5,422 sf Storage= 12,101 cf

Plug-Flow detention time= 141.2 min calculated for 0.715 af (87% of inflow)
 Center-of-Mass det. time= 79.3 min (862.1 - 782.8)

Volume	Invert	Avail.Storage	Storage Description
#1	191.56'	22,010 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.56	0	0	0
192.00	4,250	935	935
193.00	4,746	4,498	5,433
194.00	5,257	5,002	10,434
195.00	5,784	5,521	15,955
196.00	6,327	6,056	22,010

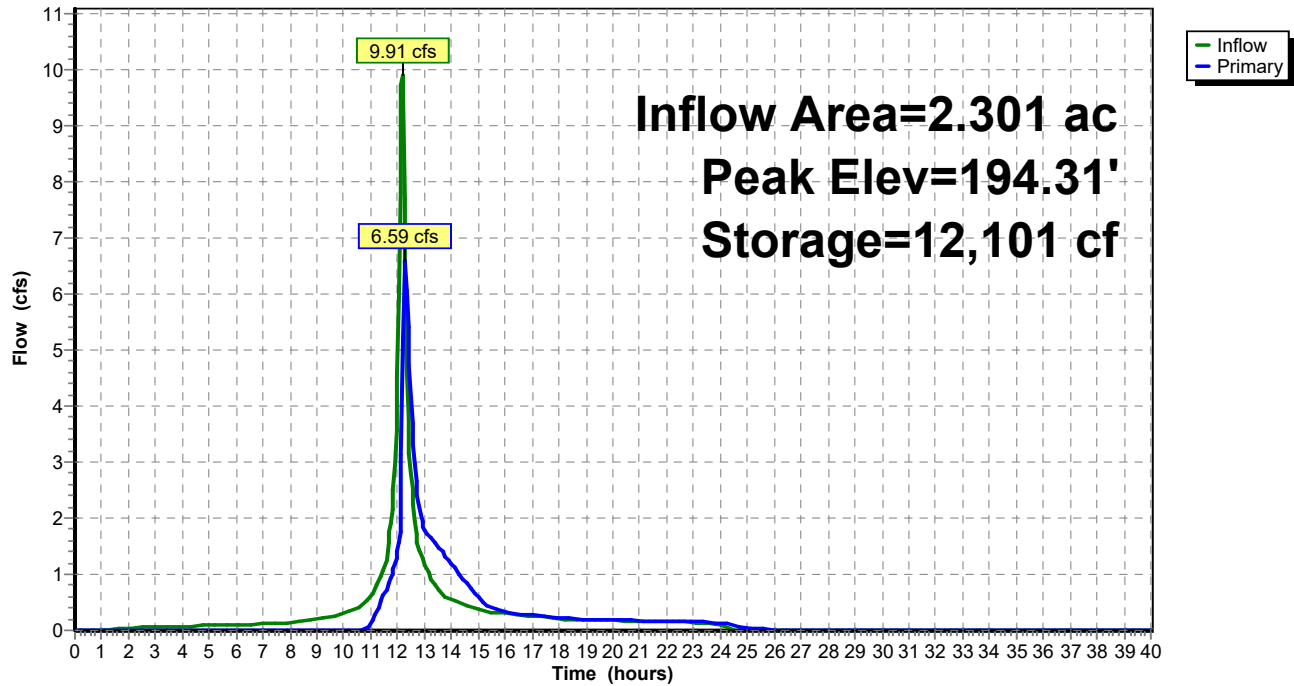
Device	Routing	Invert	Outlet Devices
#1	Primary	191.65'	18.0" Round Culvert L= 112.0' Ke= 0.500 Inlet / Outlet Invert= 191.65' / 191.00' S= 0.0058 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.80'	22.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.82'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	195.45'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=6.52 cfs @ 12.28 hrs HW=194.31' (Free Discharge)

1=Culvert (Passes 6.52 cfs of 10.12 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 2.18 cfs @ 5.70 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 4.34 cfs @ 2.28 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-55: Basin #55

Hydrograph



Stage-Discharge for Pond B-55: Basin #55

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.56	0.00	192.08	0.00	192.60	0.00	193.12	0.85
191.57	0.00	192.09	0.00	192.61	0.00	193.13	0.87
191.58	0.00	192.10	0.00	192.62	0.00	193.14	0.89
191.59	0.00	192.11	0.00	192.63	0.00	193.15	0.90
191.60	0.00	192.12	0.00	192.64	0.00	193.16	0.92
191.61	0.00	192.13	0.00	192.65	0.00	193.17	0.94
191.62	0.00	192.14	0.00	192.66	0.00	193.18	0.96
191.63	0.00	192.15	0.00	192.67	0.00	193.19	0.98
191.64	0.00	192.16	0.00	192.68	0.00	193.20	0.99
191.65	0.00	192.17	0.00	192.69	0.00	193.21	1.01
191.66	0.00	192.18	0.00	192.70	0.00	193.22	1.03
191.67	0.00	192.19	0.00	192.71	0.00	193.23	1.05
191.68	0.00	192.20	0.00	192.72	0.00	193.24	1.06
191.69	0.00	192.21	0.00	192.73	0.00	193.25	1.08
191.70	0.00	192.22	0.00	192.74	0.00	193.26	1.09
191.71	0.00	192.23	0.00	192.75	0.00	193.27	1.11
191.72	0.00	192.24	0.00	192.76	0.00	193.28	1.12
191.73	0.00	192.25	0.00	192.77	0.00	193.29	1.14
191.74	0.00	192.26	0.00	192.78	0.00	193.30	1.15
191.75	0.00	192.27	0.00	192.79	0.00	193.31	1.17
191.76	0.00	192.28	0.00	192.80	0.00	193.32	1.18
191.77	0.00	192.29	0.00	192.81	0.01	193.33	1.20
191.78	0.00	192.30	0.00	192.82	0.02	193.34	1.21
191.79	0.00	192.31	0.00	192.83	0.03	193.35	1.23
191.80	0.00	192.32	0.00	192.84	0.05	193.36	1.24
191.81	0.00	192.33	0.00	192.85	0.07	193.37	1.25
191.82	0.00	192.34	0.00	192.86	0.09	193.38	1.27
191.83	0.00	192.35	0.00	192.87	0.11	193.39	1.28
191.84	0.00	192.36	0.00	192.88	0.13	193.40	1.29
191.85	0.00	192.37	0.00	192.89	0.16	193.41	1.31
191.86	0.00	192.38	0.00	192.90	0.19	193.42	1.32
191.87	0.00	192.39	0.00	192.91	0.21	193.43	1.33
191.88	0.00	192.40	0.00	192.92	0.24	193.44	1.34
191.89	0.00	192.41	0.00	192.93	0.28	193.45	1.36
191.90	0.00	192.42	0.00	192.94	0.31	193.46	1.37
191.91	0.00	192.43	0.00	192.95	0.34	193.47	1.38
191.92	0.00	192.44	0.00	192.96	0.38	193.48	1.39
191.93	0.00	192.45	0.00	192.97	0.41	193.49	1.41
191.94	0.00	192.46	0.00	192.98	0.45	193.50	1.42
191.95	0.00	192.47	0.00	192.99	0.49	193.51	1.43
191.96	0.00	192.48	0.00	193.00	0.53	193.52	1.44
191.97	0.00	192.49	0.00	193.01	0.57	193.53	1.45
191.98	0.00	192.50	0.00	193.02	0.60	193.54	1.46
191.99	0.00	192.51	0.00	193.03	0.63	193.55	1.48
192.00	0.00	192.52	0.00	193.04	0.66	193.56	1.49
192.01	0.00	192.53	0.00	193.05	0.69	193.57	1.50
192.02	0.00	192.54	0.00	193.06	0.71	193.58	1.51
192.03	0.00	192.55	0.00	193.07	0.74	193.59	1.52
192.04	0.00	192.56	0.00	193.08	0.76	193.60	1.53
192.05	0.00	192.57	0.00	193.09	0.78	193.61	1.54
192.06	0.00	192.58	0.00	193.10	0.80	193.62	1.55
192.07	0.00	192.59	0.00	193.11	0.82	193.63	1.57

Stage-Discharge for Pond B-55: Basin #55 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.64	1.58	194.16	4.61	194.68	11.12	195.20	12.37
193.65	1.59	194.17	4.73	194.69	11.14	195.21	12.39
193.66	1.60	194.18	4.85	194.70	11.17	195.22	12.42
193.67	1.61	194.19	4.97	194.71	11.19	195.23	12.44
193.68	1.62	194.20	5.10	194.72	11.22	195.24	12.46
193.69	1.63	194.21	5.22	194.73	11.24	195.25	12.48
193.70	1.64	194.22	5.35	194.74	11.27	195.26	12.51
193.71	1.65	194.23	5.48	194.75	11.29	195.27	12.53
193.72	1.66	194.24	5.61	194.76	11.32	195.28	12.55
193.73	1.67	194.25	5.74	194.77	11.34	195.29	12.58
193.74	1.68	194.26	5.87	194.78	11.37	195.30	12.60
193.75	1.69	194.27	6.01	194.79	11.39	195.31	12.62
193.76	1.70	194.28	6.14	194.80	11.42	195.32	12.64
193.77	1.71	194.29	6.28	194.81	11.44	195.33	12.66
193.78	1.72	194.30	6.42	194.82	11.47	195.34	12.69
193.79	1.73	194.31	6.56	194.83	11.49	195.35	12.71
193.80	1.74	194.32	6.70	194.84	11.52	195.36	12.73
193.81	1.75	194.33	6.84	194.85	11.54	195.37	12.75
193.82	1.76	194.34	6.98	194.86	11.57	195.38	12.78
193.83	1.78	194.35	7.12	194.87	11.59	195.39	12.80
193.84	1.82	194.36	7.27	194.88	11.61	195.40	12.82
193.85	1.86	194.37	7.41	194.89	11.64	195.41	12.84
193.86	1.90	194.38	7.56	194.90	11.66	195.42	12.86
193.87	1.95	194.39	7.71	194.91	11.69	195.43	12.89
193.88	2.01	194.40	7.86	194.92	11.71	195.44	12.91
193.89	2.07	194.41	8.01	194.93	11.74	195.45	12.93
193.90	2.13	194.42	8.16	194.94	11.76	195.46	13.07
193.91	2.20	194.43	8.31	194.95	11.78	195.47	13.31
193.92	2.26	194.44	8.47	194.96	11.81	195.48	13.61
193.93	2.34	194.45	8.62	194.97	11.83	195.49	13.96
193.94	2.41	194.46	8.78	194.98	11.86	195.50	14.35
193.95	2.49	194.47	8.93	194.99	11.88	195.51	14.79
193.96	2.57	194.48	9.09	195.00	11.90	195.52	15.26
193.97	2.65	194.49	9.25	195.01	11.93	195.53	15.76
193.98	2.74	194.50	9.41	195.02	11.95	195.54	16.30
193.99	2.82	194.51	9.57	195.03	11.97	195.55	16.87
194.00	2.91	194.52	9.73	195.04	12.00	195.56	17.46
194.01	3.01	194.53	9.89	195.05	12.02	195.57	18.08
194.02	3.10	194.54	10.06	195.06	12.05	195.58	18.73
194.03	3.20	194.55	10.22	195.07	12.07	195.59	19.40
194.04	3.29	194.56	10.38	195.08	12.09	195.60	20.10
194.05	3.39	194.57	10.55	195.09	12.12	195.61	20.82
194.06	3.50	194.58	10.72	195.10	12.14	195.62	21.57
194.07	3.60	194.59	10.88	195.11	12.16	195.63	22.33
194.08	3.71	194.60	10.91	195.12	12.19	195.64	23.12
194.09	3.81	194.61	10.94	195.13	12.21	195.65	23.93
194.10	3.92	194.62	10.96	195.14	12.23	195.66	24.79
194.11	4.03	194.63	10.99	195.15	12.26	195.67	25.69
194.12	4.14	194.64	11.01	195.16	12.28	195.68	26.61
194.13	4.26	194.65	11.04	195.17	12.30	195.69	27.55
194.14	4.37	194.66	11.06	195.18	12.32	195.70	28.52
194.15	4.49	194.67	11.09	195.19	12.35	195.71	29.52

Stage-Discharge for Pond B-55: Basin #55 (continued)

Elevation (feet)	Primary (cfs)
195.72	30.53
195.73	31.58
195.74	32.65
195.75	33.74
195.76	34.86
195.77	36.00
195.78	37.17
195.79	38.36
195.80	39.57
195.81	40.81
195.82	42.08
195.83	43.36
195.84	44.67
195.85	46.01
195.86	47.40
195.87	48.81
195.88	50.25
195.89	51.71
195.90	53.20
195.91	54.72
195.92	56.26
195.93	57.83
195.94	59.43
195.95	61.05
195.96	62.70
195.97	64.37
195.98	66.07
195.99	67.80
196.00	69.56

Stage-Area-Storage for Pond B-55: Basin #55

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.56	0	0	192.08	4,290	1,277
191.57	97	0	192.09	4,295	1,320
191.58	193	2	192.10	4,300	1,362
191.59	290	4	192.11	4,305	1,406
191.60	386	8	192.12	4,310	1,449
191.61	483	12	192.13	4,314	1,492
191.62	580	17	192.14	4,319	1,535
191.63	676	24	192.15	4,324	1,578
191.64	773	31	192.16	4,329	1,621
191.65	869	39	192.17	4,334	1,665
191.66	966	48	192.18	4,339	1,708
191.67	1,063	58	192.19	4,344	1,751
191.68	1,159	70	192.20	4,349	1,795
191.69	1,256	82	192.21	4,354	1,838
191.70	1,352	95	192.22	4,359	1,882
191.71	1,449	109	192.23	4,364	1,926
191.72	1,545	124	192.24	4,369	1,969
191.73	1,642	140	192.25	4,374	2,013
191.74	1,739	156	192.26	4,379	2,057
191.75	1,835	174	192.27	4,384	2,101
191.76	1,932	193	192.28	4,389	2,144
191.77	2,028	213	192.29	4,394	2,188
191.78	2,125	234	192.30	4,399	2,232
191.79	2,222	255	192.31	4,404	2,276
191.80	2,318	278	192.32	4,409	2,320
191.81	2,415	302	192.33	4,414	2,365
191.82	2,511	326	192.34	4,419	2,409
191.83	2,608	352	192.35	4,424	2,453
191.84	2,705	379	192.36	4,429	2,497
191.85	2,801	406	192.37	4,434	2,541
191.86	2,898	435	192.38	4,438	2,586
191.87	2,994	464	192.39	4,443	2,630
191.88	3,091	495	192.40	4,448	2,675
191.89	3,188	526	192.41	4,453	2,719
191.90	3,284	558	192.42	4,458	2,764
191.91	3,381	592	192.43	4,463	2,808
191.92	3,477	626	192.44	4,468	2,853
191.93	3,574	661	192.45	4,473	2,898
191.94	3,670	697	192.46	4,478	2,942
191.95	3,767	735	192.47	4,483	2,987
191.96	3,864	773	192.48	4,488	3,032
191.97	3,960	812	192.49	4,493	3,077
191.98	4,057	852	192.50	4,498	3,122
191.99	4,153	893	192.51	4,503	3,167
192.00	4,250	935	192.52	4,508	3,212
192.01	4,255	978	192.53	4,513	3,257
192.02	4,260	1,020	192.54	4,518	3,302
192.03	4,265	1,063	192.55	4,523	3,348
192.04	4,270	1,105	192.56	4,528	3,393
192.05	4,275	1,148	192.57	4,533	3,438
192.06	4,280	1,191	192.58	4,538	3,483
192.07	4,285	1,234	192.59	4,543	3,529

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.60	4,548	3,574	193.12	4,807	6,006
192.61	4,553	3,620	193.13	4,812	6,054
192.62	4,558	3,665	193.14	4,818	6,102
192.63	4,562	3,711	193.15	4,823	6,151
192.64	4,567	3,757	193.16	4,828	6,199
192.65	4,572	3,802	193.17	4,833	6,247
192.66	4,577	3,848	193.18	4,838	6,296
192.67	4,582	3,894	193.19	4,843	6,344
192.68	4,587	3,940	193.20	4,848	6,392
192.69	4,592	3,986	193.21	4,853	6,441
192.70	4,597	4,032	193.22	4,858	6,489
192.71	4,602	4,078	193.23	4,864	6,538
192.72	4,607	4,124	193.24	4,869	6,587
192.73	4,612	4,170	193.25	4,874	6,635
192.74	4,617	4,216	193.26	4,879	6,684
192.75	4,622	4,262	193.27	4,884	6,733
192.76	4,627	4,308	193.28	4,889	6,782
192.77	4,632	4,355	193.29	4,894	6,831
192.78	4,637	4,401	193.30	4,899	6,880
192.79	4,642	4,447	193.31	4,904	6,929
192.80	4,647	4,494	193.32	4,910	6,978
192.81	4,652	4,540	193.33	4,915	7,027
192.82	4,657	4,587	193.34	4,920	7,076
192.83	4,662	4,633	193.35	4,925	7,125
192.84	4,667	4,680	193.36	4,930	7,175
192.85	4,672	4,727	193.37	4,935	7,224
192.86	4,677	4,773	193.38	4,940	7,273
192.87	4,682	4,820	193.39	4,945	7,323
192.88	4,686	4,867	193.40	4,950	7,372
192.89	4,691	4,914	193.41	4,956	7,422
192.90	4,696	4,961	193.42	4,961	7,471
192.91	4,701	5,008	193.43	4,966	7,521
192.92	4,706	5,055	193.44	4,971	7,571
192.93	4,711	5,102	193.45	4,976	7,620
192.94	4,716	5,149	193.46	4,981	7,670
192.95	4,721	5,196	193.47	4,986	7,720
192.96	4,726	5,244	193.48	4,991	7,770
192.97	4,731	5,291	193.49	4,996	7,820
192.98	4,736	5,338	193.50	5,002	7,870
192.99	4,741	5,386	193.51	5,007	7,920
193.00	4,746	5,433	193.52	5,012	7,970
193.01	4,751	5,480	193.53	5,017	8,020
193.02	4,756	5,528	193.54	5,022	8,070
193.03	4,761	5,576	193.55	5,027	8,121
193.04	4,766	5,623	193.56	5,032	8,171
193.05	4,772	5,671	193.57	5,037	8,221
193.06	4,777	5,719	193.58	5,042	8,272
193.07	4,782	5,766	193.59	5,047	8,322
193.08	4,787	5,814	193.60	5,053	8,373
193.09	4,792	5,862	193.61	5,058	8,423
193.10	4,797	5,910	193.62	5,063	8,474
193.11	4,802	5,958	193.63	5,068	8,524

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.64	5,073	8,575	194.16	5,341	11,282
193.65	5,078	8,626	194.17	5,347	11,336
193.66	5,083	8,677	194.18	5,352	11,389
193.67	5,088	8,728	194.19	5,357	11,443
193.68	5,093	8,778	194.20	5,362	11,496
193.69	5,099	8,829	194.21	5,368	11,550
193.70	5,104	8,880	194.22	5,373	11,604
193.71	5,109	8,931	194.23	5,378	11,658
193.72	5,114	8,983	194.24	5,383	11,711
193.73	5,119	9,034	194.25	5,389	11,765
193.74	5,124	9,085	194.26	5,394	11,819
193.75	5,129	9,136	194.27	5,399	11,873
193.76	5,134	9,188	194.28	5,405	11,927
193.77	5,139	9,239	194.29	5,410	11,981
193.78	5,145	9,290	194.30	5,415	12,035
193.79	5,150	9,342	194.31	5,420	12,089
193.80	5,155	9,393	194.32	5,426	12,144
193.81	5,160	9,445	194.33	5,431	12,198
193.82	5,165	9,497	194.34	5,436	12,252
193.83	5,170	9,548	194.35	5,441	12,307
193.84	5,175	9,600	194.36	5,447	12,361
193.85	5,180	9,652	194.37	5,452	12,416
193.86	5,185	9,704	194.38	5,457	12,470
193.87	5,191	9,755	194.39	5,463	12,525
193.88	5,196	9,807	194.40	5,468	12,579
193.89	5,201	9,859	194.41	5,473	12,634
193.90	5,206	9,911	194.42	5,478	12,689
193.91	5,211	9,963	194.43	5,484	12,744
193.92	5,216	10,016	194.44	5,489	12,799
193.93	5,221	10,068	194.45	5,494	12,854
193.94	5,226	10,120	194.46	5,499	12,908
193.95	5,231	10,172	194.47	5,505	12,963
193.96	5,237	10,225	194.48	5,510	13,019
193.97	5,242	10,277	194.49	5,515	13,074
193.98	5,247	10,329	194.50	5,521	13,129
193.99	5,252	10,382	194.51	5,526	13,184
194.00	5,257	10,434	194.52	5,531	13,239
194.01	5,262	10,487	194.53	5,536	13,295
194.02	5,268	10,540	194.54	5,542	13,350
194.03	5,273	10,592	194.55	5,547	13,406
194.04	5,278	10,645	194.56	5,552	13,461
194.05	5,283	10,698	194.57	5,557	13,517
194.06	5,289	10,751	194.58	5,563	13,572
194.07	5,294	10,804	194.59	5,568	13,628
194.08	5,299	10,857	194.60	5,573	13,684
194.09	5,304	10,910	194.61	5,578	13,739
194.10	5,310	10,963	194.62	5,584	13,795
194.11	5,315	11,016	194.63	5,589	13,851
194.12	5,320	11,069	194.64	5,594	13,907
194.13	5,326	11,122	194.65	5,600	13,963
194.14	5,331	11,176	194.66	5,605	14,019
194.15	5,336	11,229	194.67	5,610	14,075

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.68	5,615	14,131	195.20	5,893	17,123
194.69	5,621	14,187	195.21	5,898	17,182
194.70	5,626	14,244	195.22	5,903	17,241
194.71	5,631	14,300	195.23	5,909	17,300
194.72	5,636	14,356	195.24	5,914	17,359
194.73	5,642	14,413	195.25	5,920	17,418
194.74	5,647	14,469	195.26	5,925	17,477
194.75	5,652	14,525	195.27	5,931	17,536
194.76	5,658	14,582	195.28	5,936	17,596
194.77	5,663	14,639	195.29	5,941	17,655
194.78	5,668	14,695	195.30	5,947	17,715
194.79	5,673	14,752	195.31	5,952	17,774
194.80	5,679	14,809	195.32	5,958	17,834
194.81	5,684	14,866	195.33	5,963	17,893
194.82	5,689	14,922	195.34	5,969	17,953
194.83	5,694	14,979	195.35	5,974	18,013
194.84	5,700	15,036	195.36	5,979	18,072
194.85	5,705	15,093	195.37	5,985	18,132
194.86	5,710	15,150	195.38	5,990	18,192
194.87	5,715	15,208	195.39	5,996	18,252
194.88	5,721	15,265	195.40	6,001	18,312
194.89	5,726	15,322	195.41	6,007	18,372
194.90	5,731	15,379	195.42	6,012	18,432
194.91	5,737	15,437	195.43	6,017	18,492
194.92	5,742	15,494	195.44	6,023	18,553
194.93	5,747	15,551	195.45	6,028	18,613
194.94	5,752	15,609	195.46	6,034	18,673
194.95	5,758	15,666	195.47	6,039	18,733
194.96	5,763	15,724	195.48	6,045	18,794
194.97	5,768	15,782	195.49	6,050	18,854
194.98	5,773	15,839	195.50	6,056	18,915
194.99	5,779	15,897	195.51	6,061	18,975
195.00	5,784	15,955	195.52	6,066	19,036
195.01	5,789	16,013	195.53	6,072	19,097
195.02	5,795	16,071	195.54	6,077	19,158
195.03	5,800	16,129	195.55	6,083	19,218
195.04	5,806	16,187	195.56	6,088	19,279
195.05	5,811	16,245	195.57	6,094	19,340
195.06	5,817	16,303	195.58	6,099	19,401
195.07	5,822	16,361	195.59	6,104	19,462
195.08	5,827	16,419	195.60	6,110	19,523
195.09	5,833	16,478	195.61	6,115	19,584
195.10	5,838	16,536	195.62	6,121	19,645
195.11	5,844	16,595	195.63	6,126	19,707
195.12	5,849	16,653	195.64	6,132	19,768
195.13	5,855	16,712	195.65	6,137	19,829
195.14	5,860	16,770	195.66	6,142	19,891
195.15	5,865	16,829	195.67	6,148	19,952
195.16	5,871	16,887	195.68	6,153	20,014
195.17	5,876	16,946	195.69	6,159	20,075
195.18	5,882	17,005	195.70	6,164	20,137
195.19	5,887	17,064	195.71	6,170	20,199

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.72	6,175	20,260
195.73	6,180	20,322
195.74	6,186	20,384
195.75	6,191	20,446
195.76	6,197	20,508
195.77	6,202	20,570
195.78	6,208	20,632
195.79	6,213	20,694
195.80	6,218	20,756
195.81	6,224	20,818
195.82	6,229	20,880
195.83	6,235	20,943
195.84	6,240	21,005
195.85	6,246	21,068
195.86	6,251	21,130
195.87	6,256	21,193
195.88	6,262	21,255
195.89	6,267	21,318
195.90	6,273	21,381
195.91	6,278	21,443
195.92	6,284	21,506
195.93	6,289	21,569
195.94	6,294	21,632
195.95	6,300	21,695
195.96	6,305	21,758
195.97	6,311	21,821
195.98	6,316	21,884
195.99	6,322	21,947
196.00	6,327	22,010

Summary for Pond B-56: Basin #56

Inflow Area = 1.512 ac, 31.08% Impervious, Inflow Depth = 3.85" for Future 10 yr event
 Inflow = 6.03 cfs @ 12.17 hrs, Volume= 0.485 af
 Outflow = 4.22 cfs @ 12.27 hrs, Volume= 0.439 af, Atten= 30%, Lag= 6.0 min
 Primary = 4.22 cfs @ 12.27 hrs, Volume= 0.439 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 192.80' @ 12.27 hrs Surf.Area= 5,395 sf Storage= 5,238 cf

Plug-Flow detention time= 107.0 min calculated for 0.439 af (90% of inflow)
 Center-of-Mass det. time= 56.2 min (853.8 - 797.6)

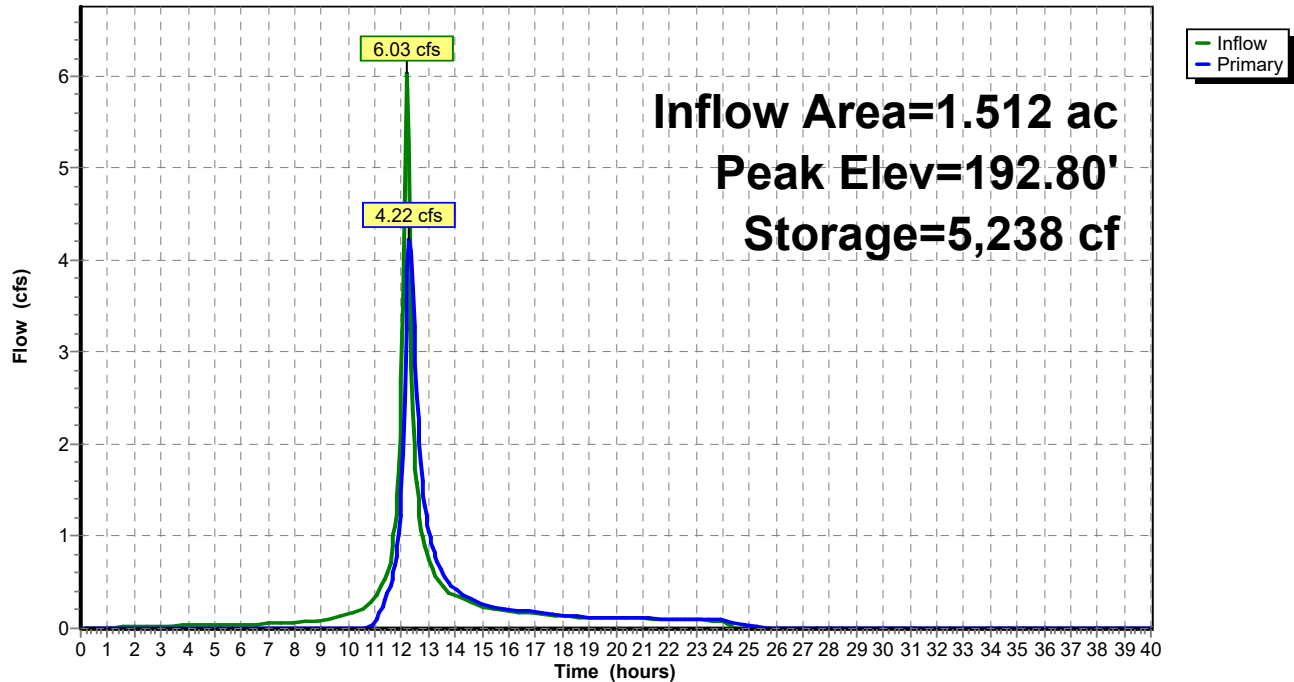
Volume	Invert	Avail.Storage	Storage Description
#1	191.57'	25,032 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.57	0	0	0
192.00	5,021	1,080	1,080
193.00	5,490	5,256	6,335
194.00	5,976	5,733	12,068
195.00	6,478	6,227	18,295
196.00	6,995	6,737	25,032

Device	Routing	Invert	Outlet Devices
#1	Primary	191.57'	18.0" Round Culvert L= 29.0' Ke= 0.500 Inlet / Outlet Invert= 191.57' / 191.42' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.19'	36.0" W x 6.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.62'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	194.99'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.19 cfs @ 12.27 hrs HW=192.79' (Free Discharge)

1=Culvert (Passes 4.19 cfs of 4.39 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 4.19 cfs @ 2.79 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-56: Basin #56**Hydrograph**

Stage-Discharge for Pond B-56: Basin #56

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.57	0.00	192.09	0.00	192.61	2.62	193.13	5.97
191.58	0.00	192.10	0.00	192.62	2.72	193.14	6.01
191.59	0.00	192.11	0.00	192.63	2.81	193.15	6.05
191.60	0.00	192.12	0.00	192.64	2.91	193.16	6.10
191.61	0.00	192.13	0.00	192.65	3.00	193.17	6.14
191.62	0.00	192.14	0.00	192.66	3.10	193.18	6.18
191.63	0.00	192.15	0.00	192.67	3.20	193.19	6.23
191.64	0.00	192.16	0.00	192.68	3.30	193.20	6.27
191.65	0.00	192.17	0.00	192.69	3.40	193.21	6.31
191.66	0.00	192.18	0.00	192.70	3.50	193.22	6.35
191.67	0.00	192.19	0.00	192.71	3.58	193.23	6.39
191.68	0.00	192.20	0.01	192.72	3.67	193.24	6.43
191.69	0.00	192.21	0.03	192.73	3.74	193.25	6.47
191.70	0.00	192.22	0.05	192.74	3.82	193.26	6.51
191.71	0.00	192.23	0.08	192.75	3.89	193.27	6.55
191.72	0.00	192.24	0.11	192.76	3.97	193.28	6.59
191.73	0.00	192.25	0.14	192.77	4.04	193.29	6.63
191.74	0.00	192.26	0.18	192.78	4.10	193.30	6.67
191.75	0.00	192.27	0.22	192.79	4.17	193.31	6.71
191.76	0.00	192.28	0.26	192.80	4.24	193.32	6.75
191.77	0.00	192.29	0.30	192.81	4.30	193.33	6.79
191.78	0.00	192.30	0.35	192.82	4.36	193.34	6.83
191.79	0.00	192.31	0.40	192.83	4.43	193.35	6.87
191.80	0.00	192.32	0.45	192.84	4.49	193.36	6.91
191.81	0.00	192.33	0.50	192.85	4.55	193.37	6.94
191.82	0.00	192.34	0.56	192.86	4.61	193.38	6.98
191.83	0.00	192.35	0.62	192.87	4.66	193.39	7.02
191.84	0.00	192.36	0.67	192.88	4.72	193.40	7.06
191.85	0.00	192.37	0.74	192.89	4.78	193.41	7.09
191.86	0.00	192.38	0.80	192.90	4.83	193.42	7.13
191.87	0.00	192.39	0.86	192.91	4.89	193.43	7.17
191.88	0.00	192.40	0.93	192.92	4.94	193.44	7.20
191.89	0.00	192.41	0.99	192.93	5.00	193.45	7.24
191.90	0.00	192.42	1.06	192.94	5.05	193.46	7.28
191.91	0.00	192.43	1.13	192.95	5.10	193.47	7.31
191.92	0.00	192.44	1.20	192.96	5.16	193.48	7.35
191.93	0.00	192.45	1.28	192.97	5.21	193.49	7.38
191.94	0.00	192.46	1.35	192.98	5.26	193.50	7.42
191.95	0.00	192.47	1.43	192.99	5.31	193.51	7.45
191.96	0.00	192.48	1.50	193.00	5.36	193.52	7.49
191.97	0.00	192.49	1.58	193.01	5.41	193.53	7.52
191.98	0.00	192.50	1.66	193.02	5.46	193.54	7.56
191.99	0.00	192.51	1.74	193.03	5.50	193.55	7.59
192.00	0.00	192.52	1.83	193.04	5.55	193.56	7.63
192.01	0.00	192.53	1.91	193.05	5.60	193.57	7.66
192.02	0.00	192.54	1.99	193.06	5.65	193.58	7.70
192.03	0.00	192.55	2.08	193.07	5.69	193.59	7.73
192.04	0.00	192.56	2.17	193.08	5.74	193.60	7.76
192.05	0.00	192.57	2.26	193.09	5.79	193.61	7.80
192.06	0.00	192.58	2.35	193.10	5.83	193.62	7.83
192.07	0.00	192.59	2.44	193.11	5.88	193.63	7.88
192.08	0.00	192.60	2.53	193.12	5.92	193.64	7.93

Stage-Discharge for Pond B-56: Basin #56 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.65	8.00	194.17	11.13	194.69	13.10	195.21	26.75
193.66	8.07	194.18	11.17	194.70	13.13	195.22	27.67
193.67	8.14	194.19	11.22	194.71	13.15	195.23	28.62
193.68	8.22	194.20	11.26	194.72	13.18	195.24	29.59
193.69	8.30	194.21	11.30	194.73	13.21	195.25	30.59
193.70	8.39	194.22	11.35	194.74	13.24	195.26	31.61
193.71	8.48	194.23	11.39	194.75	13.26	195.27	32.66
193.72	8.57	194.24	11.43	194.76	13.29	195.28	33.74
193.73	8.66	194.25	11.48	194.77	13.32	195.29	34.83
193.74	8.76	194.26	11.52	194.78	13.35	195.30	35.95
193.75	8.86	194.27	11.56	194.79	13.37	195.31	37.10
193.76	8.97	194.28	11.61	194.80	13.40	195.32	38.27
193.77	9.07	194.29	11.65	194.81	13.43	195.33	39.46
193.78	9.18	194.30	11.69	194.82	13.45	195.34	40.68
193.79	9.28	194.31	11.73	194.83	13.48	195.35	41.93
193.80	9.34	194.32	11.78	194.84	13.51	195.36	43.19
193.81	9.39	194.33	11.82	194.85	13.53	195.37	44.48
193.82	9.44	194.34	11.86	194.86	13.56	195.38	45.80
193.83	9.49	194.35	11.90	194.87	13.59	195.39	47.14
193.84	9.55	194.36	11.94	194.88	13.61	195.40	48.53
193.85	9.60	194.37	11.98	194.89	13.64	195.41	49.94
193.86	9.65	194.38	12.03	194.90	13.67	195.42	51.39
193.87	9.70	194.39	12.07	194.91	13.69	195.43	52.85
193.88	9.75	194.40	12.11	194.92	13.72	195.44	54.35
193.89	9.80	194.41	12.15	194.93	13.75	195.45	55.87
193.90	9.85	194.42	12.19	194.94	13.77	195.46	57.42
193.91	9.90	194.43	12.23	194.95	13.80	195.47	58.99
193.92	9.95	194.44	12.27	194.96	13.83	195.48	60.59
193.93	10.00	194.45	12.31	194.97	13.85	195.49	62.21
193.94	10.05	194.46	12.35	194.98	13.88	195.50	63.87
193.95	10.10	194.47	12.39	194.99	13.90	195.51	65.55
193.96	10.15	194.48	12.43	195.00	14.05	195.52	67.25
193.97	10.20	194.49	12.47	195.01	14.29	195.53	68.98
193.98	10.25	194.50	12.51	195.02	14.59	195.54	70.74
193.99	10.29	194.51	12.55	195.03	14.94	195.55	72.53
194.00	10.34	194.52	12.59	195.04	15.34	195.56	74.34
194.01	10.39	194.53	12.63	195.05	15.78	195.57	76.18
194.02	10.44	194.54	12.67	195.06	16.26	195.58	78.04
194.03	10.49	194.55	12.71	195.07	16.77	195.59	79.94
194.04	10.53	194.56	12.73	195.08	17.31	195.60	81.59
194.05	10.58	194.57	12.76	195.09	17.88	195.61	83.25
194.06	10.63	194.58	12.79	195.10	18.48	195.62	84.93
194.07	10.67	194.59	12.82	195.11	19.10	195.63	86.62
194.08	10.72	194.60	12.85	195.12	19.76	195.64	88.32
194.09	10.77	194.61	12.88	195.13	20.43	195.65	90.04
194.10	10.81	194.62	12.90	195.14	21.13	195.66	91.77
194.11	10.86	194.63	12.93	195.15	21.86	195.67	93.51
194.12	10.90	194.64	12.96	195.16	22.61	195.68	95.27
194.13	10.95	194.65	12.99	195.17	23.38	195.69	97.04
194.14	10.99	194.66	13.02	195.18	24.17	195.70	98.82
194.15	11.04	194.67	13.04	195.19	24.98	195.71	100.61
194.16	11.08	194.68	13.07	195.20	25.85	195.72	102.42

Stage-Discharge for Pond B-56: Basin #56 (continued)

Elevation (feet)	Primary (cfs)
195.73	104.24
195.74	106.07
195.75	107.92
195.76	109.77
195.77	111.64
195.78	113.52
195.79	115.41
195.80	117.36
195.81	119.31
195.82	121.28
195.83	123.26
195.84	125.26
195.85	127.27
195.86	129.29
195.87	131.32
195.88	133.37
195.89	135.43
195.90	137.50
195.91	139.59
195.92	141.69
195.93	143.80
195.94	145.92
195.95	148.06
195.96	150.21
195.97	152.37
195.98	154.55
195.99	156.73
196.00	158.88

Stage-Area-Storage for Pond B-56: Basin #56

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.57	0	0	192.09	5,063	1,533
191.58	117	1	192.10	5,068	1,584
191.59	234	2	192.11	5,073	1,635
191.60	350	5	192.12	5,077	1,685
191.61	467	9	192.13	5,082	1,736
191.62	584	15	192.14	5,087	1,787
191.63	701	21	192.15	5,091	1,838
191.64	817	29	192.16	5,096	1,889
191.65	934	37	192.17	5,101	1,940
191.66	1,051	47	192.18	5,105	1,991
191.67	1,168	58	192.19	5,110	2,042
191.68	1,284	71	192.20	5,115	2,093
191.69	1,401	84	192.21	5,119	2,144
191.70	1,518	99	192.22	5,124	2,195
191.71	1,635	114	192.23	5,129	2,247
191.72	1,752	131	192.24	5,134	2,298
191.73	1,868	149	192.25	5,138	2,349
191.74	1,985	169	192.26	5,143	2,401
191.75	2,102	189	192.27	5,148	2,452
191.76	2,219	211	192.28	5,152	2,504
191.77	2,335	234	192.29	5,157	2,555
191.78	2,452	257	192.30	5,162	2,607
191.79	2,569	283	192.31	5,166	2,659
191.80	2,686	309	192.32	5,171	2,710
191.81	2,802	336	192.33	5,176	2,762
191.82	2,919	365	192.34	5,180	2,814
191.83	3,036	395	192.35	5,185	2,866
191.84	3,153	426	192.36	5,190	2,917
191.85	3,269	458	192.37	5,195	2,969
191.86	3,386	491	192.38	5,199	3,021
191.87	3,503	525	192.39	5,204	3,073
191.88	3,620	561	192.40	5,209	3,125
191.89	3,737	598	192.41	5,213	3,178
191.90	3,853	636	192.42	5,218	3,230
191.91	3,970	675	192.43	5,223	3,282
191.92	4,087	715	192.44	5,227	3,334
191.93	4,204	757	192.45	5,232	3,386
191.94	4,320	799	192.46	5,237	3,439
191.95	4,437	843	192.47	5,241	3,491
191.96	4,554	888	192.48	5,246	3,544
191.97	4,671	934	192.49	5,251	3,596
191.98	4,787	981	192.50	5,256	3,649
191.99	4,904	1,030	192.51	5,260	3,701
192.00	5,021	1,080	192.52	5,265	3,754
192.01	5,026	1,130	192.53	5,270	3,807
192.02	5,030	1,180	192.54	5,274	3,859
192.03	5,035	1,230	192.55	5,279	3,912
192.04	5,040	1,281	192.56	5,284	3,965
192.05	5,044	1,331	192.57	5,288	4,018
192.06	5,049	1,382	192.58	5,293	4,071
192.07	5,054	1,432	192.59	5,298	4,124
192.08	5,059	1,483	192.60	5,302	4,177

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.61	5,307	4,230	193.13	5,553	7,053
192.62	5,312	4,283	193.14	5,558	7,108
192.63	5,316	4,336	193.15	5,563	7,164
192.64	5,321	4,389	193.16	5,568	7,220
192.65	5,326	4,442	193.17	5,573	7,275
192.66	5,331	4,496	193.18	5,577	7,331
192.67	5,335	4,549	193.19	5,582	7,387
192.68	5,340	4,602	193.20	5,587	7,443
192.69	5,345	4,656	193.21	5,592	7,499
192.70	5,349	4,709	193.22	5,597	7,555
192.71	5,354	4,763	193.23	5,602	7,611
192.72	5,359	4,816	193.24	5,607	7,667
192.73	5,363	4,870	193.25	5,612	7,723
192.74	5,368	4,923	193.26	5,616	7,779
192.75	5,373	4,977	193.27	5,621	7,835
192.76	5,377	5,031	193.28	5,626	7,891
192.77	5,382	5,085	193.29	5,631	7,948
192.78	5,387	5,139	193.30	5,636	8,004
192.79	5,392	5,192	193.31	5,641	8,060
192.80	5,396	5,246	193.32	5,646	8,117
192.81	5,401	5,300	193.33	5,650	8,173
192.82	5,406	5,354	193.34	5,655	8,230
192.83	5,410	5,408	193.35	5,660	8,286
192.84	5,415	5,463	193.36	5,665	8,343
192.85	5,420	5,517	193.37	5,670	8,400
192.86	5,424	5,571	193.38	5,675	8,456
192.87	5,429	5,625	193.39	5,680	8,513
192.88	5,434	5,680	193.40	5,684	8,570
192.89	5,438	5,734	193.41	5,689	8,627
192.90	5,443	5,788	193.42	5,694	8,684
192.91	5,448	5,843	193.43	5,699	8,741
192.92	5,452	5,897	193.44	5,704	8,798
192.93	5,457	5,952	193.45	5,709	8,855
192.94	5,462	6,006	193.46	5,714	8,912
192.95	5,467	6,061	193.47	5,718	8,969
192.96	5,471	6,116	193.48	5,723	9,026
192.97	5,476	6,171	193.49	5,728	9,083
192.98	5,481	6,225	193.50	5,733	9,141
192.99	5,485	6,280	193.51	5,738	9,198
193.00	5,490	6,335	193.52	5,743	9,256
193.01	5,495	6,390	193.53	5,748	9,313
193.02	5,500	6,445	193.54	5,752	9,370
193.03	5,505	6,500	193.55	5,757	9,428
193.04	5,509	6,555	193.56	5,762	9,486
193.05	5,514	6,610	193.57	5,767	9,543
193.06	5,519	6,665	193.58	5,772	9,601
193.07	5,524	6,721	193.59	5,777	9,659
193.08	5,529	6,776	193.60	5,782	9,716
193.09	5,534	6,831	193.61	5,786	9,774
193.10	5,539	6,886	193.62	5,791	9,832
193.11	5,543	6,942	193.63	5,796	9,890
193.12	5,548	6,997	193.64	5,801	9,948

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.65	5,806	10,006	194.17	6,061	13,091
193.66	5,811	10,064	194.18	6,066	13,152
193.67	5,816	10,122	194.19	6,071	13,213
193.68	5,820	10,181	194.20	6,076	13,273
193.69	5,825	10,239	194.21	6,081	13,334
193.70	5,830	10,297	194.22	6,086	13,395
193.71	5,835	10,355	194.23	6,091	13,456
193.72	5,840	10,414	194.24	6,096	13,517
193.73	5,845	10,472	194.25	6,102	13,578
193.74	5,850	10,531	194.26	6,107	13,639
193.75	5,855	10,589	194.27	6,112	13,700
193.76	5,859	10,648	194.28	6,117	13,761
193.77	5,864	10,706	194.29	6,122	13,822
193.78	5,869	10,765	194.30	6,127	13,883
193.79	5,874	10,824	194.31	6,132	13,945
193.80	5,879	10,883	194.32	6,137	14,006
193.81	5,884	10,941	194.33	6,142	14,067
193.82	5,889	11,000	194.34	6,147	14,129
193.83	5,893	11,059	194.35	6,152	14,190
193.84	5,898	11,118	194.36	6,157	14,252
193.85	5,903	11,177	194.37	6,162	14,313
193.86	5,908	11,236	194.38	6,167	14,375
193.87	5,913	11,295	194.39	6,172	14,437
193.88	5,918	11,354	194.40	6,177	14,499
193.89	5,923	11,414	194.41	6,182	14,560
193.90	5,927	11,473	194.42	6,187	14,622
193.91	5,932	11,532	194.43	6,192	14,684
193.92	5,937	11,591	194.44	6,197	14,746
193.93	5,942	11,651	194.45	6,202	14,808
193.94	5,947	11,710	194.46	6,207	14,870
193.95	5,952	11,770	194.47	6,212	14,932
193.96	5,957	11,829	194.48	6,217	14,994
193.97	5,961	11,889	194.49	6,222	15,057
193.98	5,966	11,949	194.50	6,227	15,119
193.99	5,971	12,008	194.51	6,232	15,181
194.00	5,976	12,068	194.52	6,237	15,243
194.01	5,981	12,128	194.53	6,242	15,306
194.02	5,986	12,188	194.54	6,247	15,368
194.03	5,991	12,248	194.55	6,252	15,431
194.04	5,996	12,307	194.56	6,257	15,493
194.05	6,001	12,367	194.57	6,262	15,556
194.06	6,006	12,427	194.58	6,267	15,619
194.07	6,011	12,488	194.59	6,272	15,681
194.08	6,016	12,548	194.60	6,277	15,744
194.09	6,021	12,608	194.61	6,282	15,807
194.10	6,026	12,668	194.62	6,287	15,870
194.11	6,031	12,728	194.63	6,292	15,933
194.12	6,036	12,789	194.64	6,297	15,995
194.13	6,041	12,849	194.65	6,302	16,058
194.14	6,046	12,910	194.66	6,307	16,122
194.15	6,051	12,970	194.67	6,312	16,185
194.16	6,056	13,031	194.68	6,317	16,248

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.69	6,322	16,311	195.21	6,587	19,667
194.70	6,327	16,374	195.22	6,592	19,733
194.71	6,332	16,438	195.23	6,597	19,799
194.72	6,337	16,501	195.24	6,602	19,865
194.73	6,342	16,564	195.25	6,607	19,931
194.74	6,347	16,628	195.26	6,612	19,997
194.75	6,353	16,691	195.27	6,618	20,063
194.76	6,358	16,755	195.28	6,623	20,129
194.77	6,363	16,818	195.29	6,628	20,195
194.78	6,368	16,882	195.30	6,633	20,262
194.79	6,373	16,946	195.31	6,638	20,328
194.80	6,378	17,009	195.32	6,643	20,394
194.81	6,383	17,073	195.33	6,649	20,461
194.82	6,388	17,137	195.34	6,654	20,527
194.83	6,393	17,201	195.35	6,659	20,594
194.84	6,398	17,265	195.36	6,664	20,661
194.85	6,403	17,329	195.37	6,669	20,727
194.86	6,408	17,393	195.38	6,674	20,794
194.87	6,413	17,457	195.39	6,680	20,861
194.88	6,418	17,521	195.40	6,685	20,928
194.89	6,423	17,585	195.41	6,690	20,994
194.90	6,428	17,650	195.42	6,695	21,061
194.91	6,433	17,714	195.43	6,700	21,128
194.92	6,438	17,778	195.44	6,705	21,195
194.93	6,443	17,843	195.45	6,711	21,262
194.94	6,448	17,907	195.46	6,716	21,330
194.95	6,453	17,972	195.47	6,721	21,397
194.96	6,458	18,036	195.48	6,726	21,464
194.97	6,463	18,101	195.49	6,731	21,531
194.98	6,468	18,166	195.50	6,737	21,599
194.99	6,473	18,230	195.51	6,742	21,666
195.00	6,478	18,295	195.52	6,747	21,733
195.01	6,483	18,360	195.53	6,752	21,801
195.02	6,488	18,425	195.54	6,757	21,869
195.03	6,494	18,490	195.55	6,762	21,936
195.04	6,499	18,555	195.56	6,768	22,004
195.05	6,504	18,620	195.57	6,773	22,071
195.06	6,509	18,685	195.58	6,778	22,139
195.07	6,514	18,750	195.59	6,783	22,207
195.08	6,519	18,815	195.60	6,788	22,275
195.09	6,525	18,880	195.61	6,793	22,343
195.10	6,530	18,945	195.62	6,799	22,411
195.11	6,535	19,011	195.63	6,804	22,479
195.12	6,540	19,076	195.64	6,809	22,547
195.13	6,545	19,142	195.65	6,814	22,615
195.14	6,550	19,207	195.66	6,819	22,683
195.15	6,556	19,273	195.67	6,824	22,751
195.16	6,561	19,338	195.68	6,830	22,820
195.17	6,566	19,404	195.69	6,835	22,888
195.18	6,571	19,469	195.70	6,840	22,956
195.19	6,576	19,535	195.71	6,845	23,025
195.20	6,581	19,601	195.72	6,850	23,093

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.73	6,855	23,162
195.74	6,861	23,230
195.75	6,866	23,299
195.76	6,871	23,368
195.77	6,876	23,436
195.78	6,881	23,505
195.79	6,886	23,574
195.80	6,892	23,643
195.81	6,897	23,712
195.82	6,902	23,781
195.83	6,907	23,850
195.84	6,912	23,919
195.85	6,917	23,988
195.86	6,923	24,057
195.87	6,928	24,127
195.88	6,933	24,196
195.89	6,938	24,265
195.90	6,943	24,335
195.91	6,948	24,404
195.92	6,954	24,474
195.93	6,959	24,543
195.94	6,964	24,613
195.95	6,969	24,682
195.96	6,974	24,752
195.97	6,979	24,822
195.98	6,985	24,892
195.99	6,990	24,962
196.00	6,995	25,032

Summary for Pond B-57: Basin #57

Inflow Area = 1.434 ac, 47.56% Impervious, Inflow Depth = 4.27" for Future 10 yr event
 Inflow = 6.18 cfs @ 12.17 hrs, Volume= 0.511 af
 Outflow = 4.81 cfs @ 12.26 hrs, Volume= 0.443 af, Atten= 22%, Lag= 5.1 min
 Primary = 4.81 cfs @ 12.26 hrs, Volume= 0.443 af
 Routed to Pond B-58 : Basin #58

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 203.51' @ 12.26 hrs Surf.Area= 4,766 sf Storage= 7,976 cf

Plug-Flow detention time= 248.1 min calculated for 0.442 af (87% of inflow)
 Center-of-Mass det. time= 185.5 min (968.1 - 782.6)

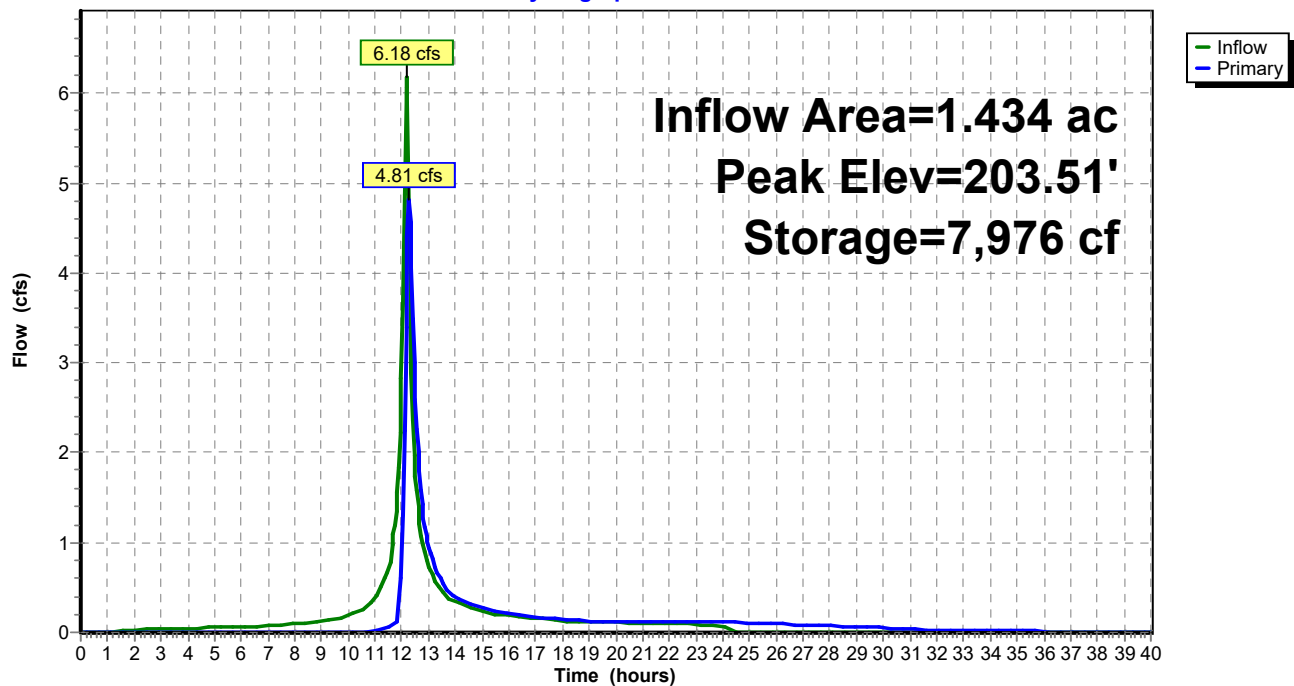
Volume	Invert	Avail.Storage	Storage Description
#1	201.30'	13,039 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.30	0	0	0
202.00	3,969	1,389	1,389
203.00	4,488	4,229	5,618
204.00	5,034	4,761	10,379
204.50	5,608	2,661	13,039

Device	Routing	Invert	Outlet Devices
#1	Primary	202.00'	36.0" Round Culvert L= 252.0' Ke= 0.500 Inlet / Outlet Invert= 202.00' / 199.00' S= 0.0119 '/' Cc= 0.900 n= 0.013, Flow Area= 7.07 sf
#2	Device 1	202.34'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	204.25'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.77 cfs @ 12.26 hrs HW=203.51' (Free Discharge)

1=Culvert (Passes 4.77 cfs of 14.86 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.17 cfs @ 4.96 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 4.60 cfs @ 2.33 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-57: Basin #57**Hydrograph**

Stage-Discharge for Pond B-57: Basin #57

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.30	0.00	201.82	0.00	202.34	0.00	202.86	0.11
201.31	0.00	201.83	0.00	202.35	0.00	202.87	0.11
201.32	0.00	201.84	0.00	202.36	0.00	202.88	0.11
201.33	0.00	201.85	0.00	202.37	0.00	202.89	0.11
201.34	0.00	201.86	0.00	202.38	0.00	202.90	0.11
201.35	0.00	201.87	0.00	202.39	0.00	202.91	0.11
201.36	0.00	201.88	0.00	202.40	0.01	202.92	0.11
201.37	0.00	201.89	0.00	202.41	0.01	202.93	0.11
201.38	0.00	201.90	0.00	202.42	0.01	202.94	0.12
201.39	0.00	201.91	0.00	202.43	0.01	202.95	0.12
201.40	0.00	201.92	0.00	202.44	0.02	202.96	0.12
201.41	0.00	201.93	0.00	202.45	0.02	202.97	0.12
201.42	0.00	201.94	0.00	202.46	0.02	202.98	0.12
201.43	0.00	201.95	0.00	202.47	0.03	202.99	0.12
201.44	0.00	201.96	0.00	202.48	0.03	203.00	0.12
201.45	0.00	201.97	0.00	202.49	0.03	203.01	0.14
201.46	0.00	201.98	0.00	202.50	0.04	203.02	0.16
201.47	0.00	201.99	0.00	202.51	0.04	203.03	0.19
201.48	0.00	202.00	0.00	202.52	0.05	203.04	0.23
201.49	0.00	202.01	0.00	202.53	0.05	203.05	0.27
201.50	0.00	202.02	0.00	202.54	0.05	203.06	0.32
201.51	0.00	202.03	0.00	202.55	0.05	203.07	0.37
201.52	0.00	202.04	0.00	202.56	0.06	203.08	0.43
201.53	0.00	202.05	0.00	202.57	0.06	203.09	0.48
201.54	0.00	202.06	0.00	202.58	0.06	203.10	0.54
201.55	0.00	202.07	0.00	202.59	0.06	203.11	0.61
201.56	0.00	202.08	0.00	202.60	0.06	203.12	0.68
201.57	0.00	202.09	0.00	202.61	0.07	203.13	0.75
201.58	0.00	202.10	0.00	202.62	0.07	203.14	0.82
201.59	0.00	202.11	0.00	202.63	0.07	203.15	0.89
201.60	0.00	202.12	0.00	202.64	0.07	203.16	0.97
201.61	0.00	202.13	0.00	202.65	0.07	203.17	1.05
201.62	0.00	202.14	0.00	202.66	0.08	203.18	1.13
201.63	0.00	202.15	0.00	202.67	0.08	203.19	1.21
201.64	0.00	202.16	0.00	202.68	0.08	203.20	1.30
201.65	0.00	202.17	0.00	202.69	0.08	203.21	1.39
201.66	0.00	202.18	0.00	202.70	0.08	203.22	1.48
201.67	0.00	202.19	0.00	202.71	0.08	203.23	1.57
201.68	0.00	202.20	0.00	202.72	0.09	203.24	1.67
201.69	0.00	202.21	0.00	202.73	0.09	203.25	1.76
201.70	0.00	202.22	0.00	202.74	0.09	203.26	1.86
201.71	0.00	202.23	0.00	202.75	0.09	203.27	1.96
201.72	0.00	202.24	0.00	202.76	0.09	203.28	2.06
201.73	0.00	202.25	0.00	202.77	0.09	203.29	2.16
201.74	0.00	202.26	0.00	202.78	0.10	203.30	2.27
201.75	0.00	202.27	0.00	202.79	0.10	203.31	2.38
201.76	0.00	202.28	0.00	202.80	0.10	203.32	2.48
201.77	0.00	202.29	0.00	202.81	0.10	203.33	2.59
201.78	0.00	202.30	0.00	202.82	0.10	203.34	2.70
201.79	0.00	202.31	0.00	202.83	0.10	203.35	2.82
201.80	0.00	202.32	0.00	202.84	0.10	203.36	2.93
201.81	0.00	202.33	0.00	202.85	0.10	203.37	3.05

Stage-Discharge for Pond B-57: Basin #57 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.38	3.16	203.90	10.86	204.42	29.06	204.94	111.85
203.39	3.28	203.91	11.04	204.43	30.01	204.95	113.82
203.40	3.40	203.92	11.21	204.44	30.98	204.96	115.81
203.41	3.52	203.93	11.39	204.45	31.98	204.97	117.81
203.42	3.65	203.94	11.56	204.46	33.04	204.98	119.83
203.43	3.77	203.95	11.74	204.47	34.12	204.99	121.86
203.44	3.90	203.96	11.91	204.48	35.22	205.00	123.90
203.45	4.02	203.97	12.09	204.49	36.36		
203.46	4.15	203.98	12.27	204.50	37.52		
203.47	4.28	203.99	12.45	204.51	38.70		
203.48	4.41	204.00	12.63	204.52	39.91		
203.49	4.54	204.01	12.81	204.53	41.15		
203.50	4.68	204.02	12.99	204.54	42.41		
203.51	4.81	204.03	13.18	204.55	43.69		
203.52	4.95	204.04	13.36	204.56	45.00		
203.53	5.08	204.05	13.54	204.57	46.34		
203.54	5.22	204.06	13.73	204.58	47.70		
203.55	5.36	204.07	13.91	204.59	49.08		
203.56	5.50	204.08	14.10	204.60	50.49		
203.57	5.64	204.09	14.28	204.61	51.93		
203.58	5.79	204.10	14.47	204.62	53.39		
203.59	5.93	204.11	14.66	204.63	54.87		
203.60	6.07	204.12	14.85	204.64	56.38		
203.61	6.22	204.13	15.04	204.65	57.91		
203.62	6.37	204.14	15.23	204.66	59.49		
203.63	6.51	204.15	15.42	204.67	61.10		
203.64	6.66	204.16	15.61	204.68	62.74		
203.65	6.81	204.17	15.80	204.69	64.40		
203.66	6.96	204.18	15.99	204.70	66.09		
203.67	7.11	204.19	16.19	204.71	67.81		
203.68	7.27	204.20	16.38	204.72	69.55		
203.69	7.42	204.21	16.57	204.73	71.32		
203.70	7.58	204.22	16.77	204.74	73.12		
203.71	7.73	204.23	16.96	204.75	74.95		
203.72	7.89	204.24	17.16	204.76	76.80		
203.73	8.05	204.25	17.36	204.77	78.67		
203.74	8.21	204.26	17.67	204.78	80.58		
203.75	8.36	204.27	18.08	204.79	82.51		
203.76	8.53	204.28	18.56	204.80	84.47		
203.77	8.69	204.29	19.09	204.81	86.46		
203.78	8.85	204.30	19.66	204.82	88.47		
203.79	9.01	204.31	20.28	204.83	90.51		
203.80	9.18	204.32	20.93	204.84	92.58		
203.81	9.34	204.33	21.61	204.85	94.67		
203.82	9.51	204.34	22.33	204.86	96.53		
203.83	9.67	204.35	23.08	204.87	98.39		
203.84	9.84	204.36	23.85	204.88	100.27		
203.85	10.01	204.37	24.66	204.89	102.17		
203.86	10.18	204.38	25.49	204.90	104.08		
203.87	10.35	204.39	26.34	204.91	106.00		
203.88	10.52	204.40	27.23	204.92	107.94		
203.89	10.69	204.41	28.13	204.93	109.88		

Stage-Area-Storage for Pond B-57: Basin #57

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.30	0	0	201.82	2,948	767
201.31	57	0	201.83	3,005	796
201.32	113	1	201.84	3,062	827
201.33	170	3	201.85	3,119	858
201.34	227	5	201.86	3,175	889
201.35	284	7	201.87	3,232	921
201.36	340	10	201.88	3,289	954
201.37	397	14	201.89	3,345	987
201.38	454	18	201.90	3,402	1,021
201.39	510	23	201.91	3,459	1,055
201.40	567	28	201.92	3,515	1,090
201.41	624	34	201.93	3,572	1,125
201.42	680	41	201.94	3,629	1,161
201.43	737	48	201.95	3,686	1,198
201.44	794	56	201.96	3,742	1,235
201.45	851	64	201.97	3,799	1,273
201.46	907	73	201.98	3,856	1,311
201.47	964	82	201.99	3,912	1,350
201.48	1,021	92	202.00	3,969	1,389
201.49	1,077	102	202.01	3,974	1,429
201.50	1,134	113	202.02	3,979	1,469
201.51	1,191	125	202.03	3,985	1,508
201.52	1,247	137	202.04	3,990	1,548
201.53	1,304	150	202.05	3,995	1,588
201.54	1,361	163	202.06	4,000	1,628
201.55	1,418	177	202.07	4,005	1,668
201.56	1,474	192	202.08	4,011	1,708
201.57	1,531	207	202.09	4,016	1,748
201.58	1,588	222	202.10	4,021	1,789
201.59	1,644	238	202.11	4,026	1,829
201.60	1,701	255	202.12	4,031	1,869
201.61	1,758	272	202.13	4,036	1,910
201.62	1,814	290	202.14	4,042	1,950
201.63	1,871	309	202.15	4,047	1,990
201.64	1,928	328	202.16	4,052	2,031
201.65	1,985	347	202.17	4,057	2,071
201.66	2,041	367	202.18	4,062	2,112
201.67	2,098	388	202.19	4,068	2,153
201.68	2,155	409	202.20	4,073	2,193
201.69	2,211	431	202.21	4,078	2,234
201.70	2,268	454	202.22	4,083	2,275
201.71	2,325	477	202.23	4,088	2,316
201.72	2,381	500	202.24	4,094	2,357
201.73	2,438	524	202.25	4,099	2,398
201.74	2,495	549	202.26	4,104	2,439
201.75	2,551	574	202.27	4,109	2,480
201.76	2,608	600	202.28	4,114	2,521
201.77	2,665	626	202.29	4,120	2,562
201.78	2,722	653	202.30	4,125	2,603
201.79	2,778	681	202.31	4,130	2,644
201.80	2,835	709	202.32	4,135	2,686
201.81	2,892	737	202.33	4,140	2,727

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.34	4,145	2,769	202.86	4,415	4,994
202.35	4,151	2,810	202.87	4,421	5,039
202.36	4,156	2,852	202.88	4,426	5,083
202.37	4,161	2,893	202.89	4,431	5,127
202.38	4,166	2,935	202.90	4,436	5,171
202.39	4,171	2,977	202.91	4,441	5,216
202.40	4,177	3,018	202.92	4,446	5,260
202.41	4,182	3,060	202.93	4,452	5,305
202.42	4,187	3,102	202.94	4,457	5,349
202.43	4,192	3,144	202.95	4,462	5,394
202.44	4,197	3,186	202.96	4,467	5,439
202.45	4,203	3,228	202.97	4,472	5,483
202.46	4,208	3,270	202.98	4,478	5,528
202.47	4,213	3,312	202.99	4,483	5,573
202.48	4,218	3,354	203.00	4,488	5,618
202.49	4,223	3,396	203.01	4,493	5,663
202.50	4,229	3,439	203.02	4,499	5,708
202.51	4,234	3,481	203.03	4,504	5,753
202.52	4,239	3,523	203.04	4,510	5,798
202.53	4,244	3,566	203.05	4,515	5,843
202.54	4,249	3,608	203.06	4,521	5,888
202.55	4,254	3,651	203.07	4,526	5,933
202.56	4,260	3,693	203.08	4,532	5,978
202.57	4,265	3,736	203.09	4,537	6,024
202.58	4,270	3,778	203.10	4,543	6,069
202.59	4,275	3,821	203.11	4,548	6,115
202.60	4,280	3,864	203.12	4,554	6,160
202.61	4,286	3,907	203.13	4,559	6,206
202.62	4,291	3,950	203.14	4,564	6,251
202.63	4,296	3,993	203.15	4,570	6,297
202.64	4,301	4,036	203.16	4,575	6,343
202.65	4,306	4,079	203.17	4,581	6,388
202.66	4,312	4,122	203.18	4,586	6,434
202.67	4,317	4,165	203.19	4,592	6,480
202.68	4,322	4,208	203.20	4,597	6,526
202.69	4,327	4,251	203.21	4,603	6,572
202.70	4,332	4,295	203.22	4,608	6,618
202.71	4,337	4,338	203.23	4,614	6,664
202.72	4,343	4,381	203.24	4,619	6,710
202.73	4,348	4,425	203.25	4,625	6,757
202.74	4,353	4,468	203.26	4,630	6,803
202.75	4,358	4,512	203.27	4,635	6,849
202.76	4,363	4,555	203.28	4,641	6,896
202.77	4,369	4,599	203.29	4,646	6,942
202.78	4,374	4,643	203.30	4,652	6,989
202.79	4,379	4,687	203.31	4,657	7,035
202.80	4,384	4,730	203.32	4,663	7,082
202.81	4,389	4,774	203.33	4,668	7,128
202.82	4,395	4,818	203.34	4,674	7,175
202.83	4,400	4,862	203.35	4,679	7,222
202.84	4,405	4,906	203.36	4,685	7,269
202.85	4,410	4,950	203.37	4,690	7,316

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.38	4,695	7,363	203.90	4,979	9,878
203.39	4,701	7,409	203.91	4,985	9,928
203.40	4,706	7,457	203.92	4,990	9,978
203.41	4,712	7,504	203.93	4,996	10,028
203.42	4,717	7,551	203.94	5,001	10,078
203.43	4,723	7,598	203.95	5,007	10,128
203.44	4,728	7,645	203.96	5,012	10,178
203.45	4,734	7,693	203.97	5,018	10,228
203.46	4,739	7,740	203.98	5,023	10,278
203.47	4,745	7,787	203.99	5,029	10,328
203.48	4,750	7,835	204.00	5,034	10,379
203.49	4,756	7,882	204.01	5,045	10,429
203.50	4,761	7,930	204.02	5,057	10,480
203.51	4,766	7,978	204.03	5,068	10,530
203.52	4,772	8,025	204.04	5,080	10,581
203.53	4,777	8,073	204.05	5,091	10,632
203.54	4,783	8,121	204.06	5,103	10,683
203.55	4,788	8,169	204.07	5,114	10,734
203.56	4,794	8,217	204.08	5,126	10,785
203.57	4,799	8,265	204.09	5,137	10,836
203.58	4,805	8,313	204.10	5,149	10,888
203.59	4,810	8,361	204.11	5,160	10,939
203.60	4,816	8,409	204.12	5,172	10,991
203.61	4,821	8,457	204.13	5,183	11,043
203.62	4,827	8,505	204.14	5,195	11,095
203.63	4,832	8,553	204.15	5,206	11,147
203.64	4,837	8,602	204.16	5,218	11,199
203.65	4,843	8,650	204.17	5,229	11,251
203.66	4,848	8,699	204.18	5,241	11,303
203.67	4,854	8,747	204.19	5,252	11,356
203.68	4,859	8,796	204.20	5,264	11,408
203.69	4,865	8,844	204.21	5,275	11,461
203.70	4,870	8,893	204.22	5,287	11,514
203.71	4,876	8,942	204.23	5,298	11,567
203.72	4,881	8,991	204.24	5,310	11,620
203.73	4,887	9,039	204.25	5,321	11,673
203.74	4,892	9,088	204.26	5,332	11,726
203.75	4,898	9,137	204.27	5,344	11,780
203.76	4,903	9,186	204.28	5,355	11,833
203.77	4,908	9,235	204.29	5,367	11,887
203.78	4,914	9,284	204.30	5,378	11,941
203.79	4,919	9,334	204.31	5,390	11,994
203.80	4,925	9,383	204.32	5,401	12,048
203.81	4,930	9,432	204.33	5,413	12,102
203.82	4,936	9,481	204.34	5,424	12,157
203.83	4,941	9,531	204.35	5,436	12,211
203.84	4,947	9,580	204.36	5,447	12,265
203.85	4,952	9,630	204.37	5,459	12,320
203.86	4,958	9,679	204.38	5,470	12,374
203.87	4,963	9,729	204.39	5,482	12,429
203.88	4,968	9,779	204.40	5,493	12,484
203.89	4,974	9,828	204.41	5,505	12,539

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.42	5,516	12,594	204.94	5,608	13,039
204.43	5,528	12,649	204.95	5,608	13,039
204.44	5,539	12,705	204.96	5,608	13,039
204.45	5,551	12,760	204.97	5,608	13,039
204.46	5,562	12,816	204.98	5,608	13,039
204.47	5,574	12,871	204.99	5,608	13,039
204.48	5,585	12,927	205.00	5,608	13,039
204.49	5,597	12,983			
204.50	5,608	13,039			
204.51	5,608	13,039			
204.52	5,608	13,039			
204.53	5,608	13,039			
204.54	5,608	13,039			
204.55	5,608	13,039			
204.56	5,608	13,039			
204.57	5,608	13,039			
204.58	5,608	13,039			
204.59	5,608	13,039			
204.60	5,608	13,039			
204.61	5,608	13,039			
204.62	5,608	13,039			
204.63	5,608	13,039			
204.64	5,608	13,039			
204.65	5,608	13,039			
204.66	5,608	13,039			
204.67	5,608	13,039			
204.68	5,608	13,039			
204.69	5,608	13,039			
204.70	5,608	13,039			
204.71	5,608	13,039			
204.72	5,608	13,039			
204.73	5,608	13,039			
204.74	5,608	13,039			
204.75	5,608	13,039			
204.76	5,608	13,039			
204.77	5,608	13,039			
204.78	5,608	13,039			
204.79	5,608	13,039			
204.80	5,608	13,039			
204.81	5,608	13,039			
204.82	5,608	13,039			
204.83	5,608	13,039			
204.84	5,608	13,039			
204.85	5,608	13,039			
204.86	5,608	13,039			
204.87	5,608	13,039			
204.88	5,608	13,039			
204.89	5,608	13,039			
204.90	5,608	13,039			
204.91	5,608	13,039			
204.92	5,608	13,039			
204.93	5,608	13,039			

Summary for Pond B-58: Basin #58

Inflow Area = 3.083 ac, 36.46% Impervious, Inflow Depth > 3.72" for Future 10 yr event
 Inflow = 10.67 cfs @ 12.20 hrs, Volume= 0.957 af
 Outflow = 5.02 cfs @ 12.46 hrs, Volume= 0.902 af, Atten= 53%, Lag= 15.5 min
 Primary = 5.02 cfs @ 12.46 hrs, Volume= 0.902 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 200.31' @ 12.46 hrs Surf.Area= 7,163 sf Storage= 10,967 cf

Plug-Flow detention time= 111.2 min calculated for 0.902 af (94% of inflow)
 Center-of-Mass det. time= 62.5 min (941.3 - 878.8)

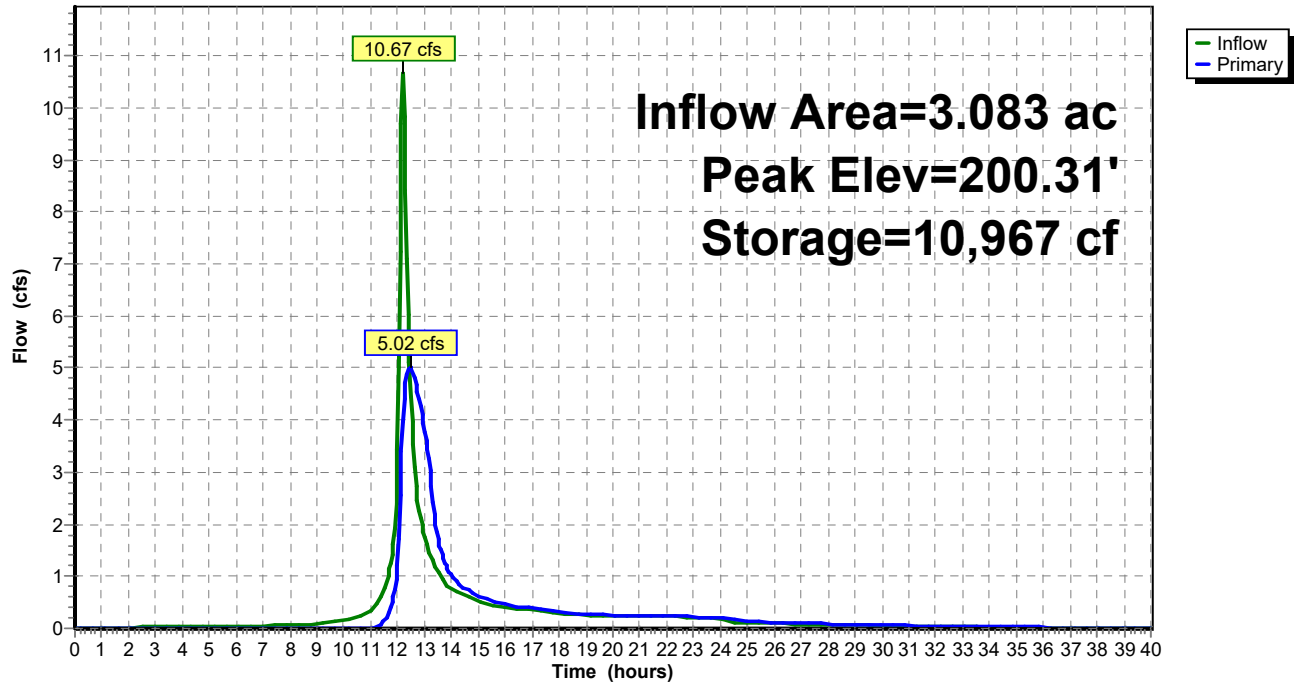
Volume	Invert	Avail.Storage	Storage Description
#1	198.30'	32,924 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
198.30	0	0	0
199.00	6,230	2,180	2,180
200.00	6,932	6,581	8,761
201.00	7,670	7,301	16,062
202.00	8,426	8,048	24,110
203.00	9,201	8,814	32,924

Device	Routing	Invert	Outlet Devices
#1	Primary	199.00'	36.0" Round Culvert L= 87.0' Ke= 0.500 Inlet / Outlet Invert= 199.00' / 198.00' S= 0.0115 '/' Cc= 0.900 n= 0.013, Flow Area= 7.07 sf
#2	Device 1	198.97'	24.0" W x 6.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	201.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	202.75'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=5.02 cfs @ 12.46 hrs HW=200.31' (Free Discharge)

1=Culvert (Passes 5.02 cfs of 11.58 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 5.02 cfs @ 5.02 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-58: Basin #58**Hydrograph**

Stage-Discharge for Pond B-58: Basin #58

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
198.30	0.00	198.82	0.00	199.34	0.88	199.86	3.82
198.31	0.00	198.83	0.00	199.35	0.93	199.87	3.86
198.32	0.00	198.84	0.00	199.36	0.98	199.88	3.89
198.33	0.00	198.85	0.00	199.37	1.04	199.89	3.92
198.34	0.00	198.86	0.00	199.38	1.09	199.90	3.95
198.35	0.00	198.87	0.00	199.39	1.15	199.91	3.97
198.36	0.00	198.88	0.00	199.40	1.21	199.92	4.00
198.37	0.00	198.89	0.00	199.41	1.27	199.93	4.03
198.38	0.00	198.90	0.00	199.42	1.33	199.94	4.06
198.39	0.00	198.91	0.00	199.43	1.39	199.95	4.09
198.40	0.00	198.92	0.00	199.44	1.45	199.96	4.12
198.41	0.00	198.93	0.00	199.45	1.52	199.97	4.15
198.42	0.00	198.94	0.00	199.46	1.59	199.98	4.18
198.43	0.00	198.95	0.00	199.47	1.65	199.99	4.20
198.44	0.00	198.96	0.00	199.48	1.72	200.00	4.23
198.45	0.00	198.97	0.00	199.49	1.79	200.01	4.26
198.46	0.00	198.98	0.00	199.50	1.86	200.02	4.29
198.47	0.00	198.99	0.00	199.51	1.94	200.03	4.31
198.48	0.00	199.00	0.00	199.52	2.01	200.04	4.34
198.49	0.00	199.01	0.00	199.53	2.09	200.05	4.37
198.50	0.00	199.02	0.00	199.54	2.16	200.06	4.39
198.51	0.00	199.03	0.01	199.55	2.24	200.07	4.42
198.52	0.00	199.04	0.01	199.56	2.32	200.08	4.45
198.53	0.00	199.05	0.02	199.57	2.40	200.09	4.47
198.54	0.00	199.06	0.03	199.58	2.49	200.10	4.50
198.55	0.00	199.07	0.04	199.59	2.57	200.11	4.53
198.56	0.00	199.08	0.05	199.60	2.65	200.12	4.55
198.57	0.00	199.09	0.06	199.61	2.74	200.13	4.58
198.58	0.00	199.10	0.08	199.62	2.83	200.14	4.60
198.59	0.00	199.11	0.09	199.63	2.92	200.15	4.63
198.60	0.00	199.12	0.11	199.64	3.01	200.16	4.65
198.61	0.00	199.13	0.13	199.65	3.10	200.17	4.68
198.62	0.00	199.14	0.15	199.66	3.15	200.18	4.70
198.63	0.00	199.15	0.17	199.67	3.18	200.19	4.73
198.64	0.00	199.16	0.20	199.68	3.22	200.20	4.75
198.65	0.00	199.17	0.22	199.69	3.26	200.21	4.78
198.66	0.00	199.18	0.25	199.70	3.29	200.22	4.80
198.67	0.00	199.19	0.28	199.71	3.33	200.23	4.82
198.68	0.00	199.20	0.31	199.72	3.36	200.24	4.85
198.69	0.00	199.21	0.34	199.73	3.40	200.25	4.87
198.70	0.00	199.22	0.37	199.74	3.43	200.26	4.90
198.71	0.00	199.23	0.41	199.75	3.47	200.27	4.92
198.72	0.00	199.24	0.44	199.76	3.50	200.28	4.94
198.73	0.00	199.25	0.48	199.77	3.54	200.29	4.97
198.74	0.00	199.26	0.52	199.78	3.57	200.30	4.99
198.75	0.00	199.27	0.56	199.79	3.60	200.31	5.01
198.76	0.00	199.28	0.60	199.80	3.64	200.32	5.04
198.77	0.00	199.29	0.64	199.81	3.67	200.33	5.06
198.78	0.00	199.30	0.69	199.82	3.70	200.34	5.08
198.79	0.00	199.31	0.73	199.83	3.73	200.35	5.11
198.80	0.00	199.32	0.78	199.84	3.76	200.36	5.13
198.81	0.00	199.33	0.83	199.85	3.79	200.37	5.15

Stage-Discharge for Pond B-58: Basin #58 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.38	5.17	200.90	6.23	201.42	10.62	201.94	19.30
200.39	5.20	200.91	6.25	201.43	10.76	201.95	19.49
200.40	5.22	200.92	6.27	201.44	10.90	201.96	19.68
200.41	5.24	200.93	6.29	201.45	11.04	201.97	19.87
200.42	5.26	200.94	6.31	201.46	11.19	201.98	20.06
200.43	5.29	200.95	6.33	201.47	11.33	201.99	20.26
200.44	5.31	200.96	6.34	201.48	11.48	202.00	20.45
200.45	5.33	200.97	6.36	201.49	11.63	202.01	20.64
200.46	5.35	200.98	6.38	201.50	11.77	202.02	20.84
200.47	5.37	200.99	6.40	201.51	11.92	202.03	21.04
200.48	5.39	201.00	6.42	201.52	12.07	202.04	21.23
200.49	5.42	201.01	6.45	201.53	12.23	202.05	21.43
200.50	5.44	201.02	6.49	201.54	12.38	202.06	21.63
200.51	5.46	201.03	6.54	201.55	12.53	202.07	21.83
200.52	5.48	201.04	6.59	201.56	12.69	202.08	22.03
200.53	5.50	201.05	6.65	201.57	12.84	202.09	22.23
200.54	5.52	201.06	6.72	201.58	13.00	202.10	22.43
200.55	5.54	201.07	6.78	201.59	13.16	202.11	22.63
200.56	5.56	201.08	6.86	201.60	13.32	202.12	22.83
200.57	5.58	201.09	6.93	201.61	13.48	202.13	23.03
200.58	5.61	201.10	7.01	201.62	13.64	202.14	23.24
200.59	5.63	201.11	7.09	201.63	13.80	202.15	23.44
200.60	5.65	201.12	7.17	201.64	13.97	202.16	23.65
200.61	5.67	201.13	7.26	201.65	14.13	202.17	23.85
200.62	5.69	201.14	7.35	201.66	14.30	202.18	24.06
200.63	5.71	201.15	7.44	201.67	14.47	202.19	24.26
200.64	5.73	201.16	7.53	201.68	14.63	202.20	24.47
200.65	5.75	201.17	7.63	201.69	14.80	202.21	24.68
200.66	5.77	201.18	7.72	201.70	14.97	202.22	24.89
200.67	5.79	201.19	7.83	201.71	15.14	202.23	25.10
200.68	5.81	201.20	7.93	201.72	15.31	202.24	25.31
200.69	5.83	201.21	8.03	201.73	15.48	202.25	25.52
200.70	5.85	201.22	8.14	201.74	15.66	202.26	25.73
200.71	5.87	201.23	8.25	201.75	15.83	202.27	25.94
200.72	5.89	201.24	8.36	201.76	16.01	202.28	26.15
200.73	5.91	201.25	8.47	201.77	16.18	202.29	26.36
200.74	5.93	201.26	8.58	201.78	16.36	202.30	26.57
200.75	5.95	201.27	8.70	201.79	16.54	202.31	26.79
200.76	5.97	201.28	8.82	201.80	16.71	202.32	27.00
200.77	5.99	201.29	8.93	201.81	16.89	202.33	27.22
200.78	6.01	201.30	9.06	201.82	17.07	202.34	27.43
200.79	6.03	201.31	9.18	201.83	17.25	202.35	27.65
200.80	6.04	201.32	9.30	201.84	17.44	202.36	27.86
200.81	6.06	201.33	9.43	201.85	17.62	202.37	28.08
200.82	6.08	201.34	9.55	201.86	17.80	202.38	28.30
200.83	6.10	201.35	9.68	201.87	17.99	202.39	28.51
200.84	6.12	201.36	9.81	201.88	18.17	202.40	28.73
200.85	6.14	201.37	9.94	201.89	18.36	202.41	28.95
200.86	6.16	201.38	10.08	201.90	18.54	202.42	29.17
200.87	6.18	201.39	10.21	201.91	18.73	202.43	29.39
200.88	6.20	201.40	10.35	201.92	18.92	202.44	29.61
200.89	6.21	201.41	10.48	201.93	19.11	202.45	29.83

Stage-Discharge for Pond B-58: Basin #58 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
202.46	30.05	202.98	55.35
202.47	30.28	202.99	56.52
202.48	30.50	203.00	57.71
202.49	30.72		
202.50	30.94		
202.51	31.17		
202.52	31.39		
202.53	31.62		
202.54	31.84		
202.55	32.07		
202.56	32.29		
202.57	32.52		
202.58	32.75		
202.59	32.98		
202.60	33.20		
202.61	33.43		
202.62	33.66		
202.63	33.89		
202.64	34.12		
202.65	34.35		
202.66	34.58		
202.67	34.81		
202.68	35.04		
202.69	35.27		
202.70	35.51		
202.71	35.74		
202.72	35.97		
202.73	36.21		
202.74	36.44		
202.75	36.67		
202.76	37.03		
202.77	37.48		
202.78	37.99		
202.79	38.55		
202.80	39.16		
202.81	39.81		
202.82	40.50		
202.83	41.22		
202.84	41.97		
202.85	42.76		
202.86	43.57		
202.87	44.41		
202.88	45.27		
202.89	46.17		
202.90	47.08		
202.91	48.02		
202.92	48.98		
202.93	49.97		
202.94	50.98		
202.95	52.01		
202.96	53.09		
202.97	54.21		

Stage-Area-Storage for Pond B-58: Basin #58

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
198.30	0	0	198.82	4,628	1,203
198.31	89	0	198.83	4,717	1,250
198.32	178	2	198.84	4,806	1,298
198.33	267	4	198.85	4,895	1,346
198.34	356	7	198.86	4,984	1,396
198.35	445	11	198.87	5,073	1,446
198.36	534	16	198.88	5,162	1,497
198.37	623	22	198.89	5,251	1,549
198.38	712	28	198.90	5,340	1,602
198.39	801	36	198.91	5,429	1,656
198.40	890	44	198.92	5,518	1,711
198.41	979	54	198.93	5,607	1,766
198.42	1,068	64	198.94	5,696	1,823
198.43	1,157	75	198.95	5,785	1,880
198.44	1,246	87	198.96	5,874	1,938
198.45	1,335	100	198.97	5,963	1,998
198.46	1,424	114	198.98	6,052	2,058
198.47	1,513	129	198.99	6,141	2,119
198.48	1,602	144	199.00	6,230	2,180
198.49	1,691	161	199.01	6,237	2,243
198.50	1,780	178	199.02	6,244	2,305
198.51	1,869	196	199.03	6,251	2,368
198.52	1,958	215	199.04	6,258	2,430
198.53	2,047	235	199.05	6,265	2,493
198.54	2,136	256	199.06	6,272	2,556
198.55	2,225	278	199.07	6,279	2,618
198.56	2,314	301	199.08	6,286	2,681
198.57	2,403	324	199.09	6,293	2,744
198.58	2,492	349	199.10	6,300	2,807
198.59	2,581	374	199.11	6,307	2,870
198.60	2,670	401	199.12	6,314	2,933
198.61	2,759	428	199.13	6,321	2,996
198.62	2,848	456	199.14	6,328	3,060
198.63	2,937	485	199.15	6,335	3,123
198.64	3,026	514	199.16	6,342	3,186
198.65	3,115	545	199.17	6,349	3,250
198.66	3,204	577	199.18	6,356	3,313
198.67	3,293	609	199.19	6,363	3,377
198.68	3,382	643	199.20	6,370	3,441
198.69	3,471	677	199.21	6,377	3,504
198.70	3,560	712	199.22	6,384	3,568
198.71	3,649	748	199.23	6,391	3,632
198.72	3,738	785	199.24	6,398	3,696
198.73	3,827	823	199.25	6,406	3,760
198.74	3,916	862	199.26	6,413	3,824
198.75	4,005	901	199.27	6,420	3,888
198.76	4,094	942	199.28	6,427	3,952
198.77	4,183	983	199.29	6,434	4,017
198.78	4,272	1,025	199.30	6,441	4,081
198.79	4,361	1,068	199.31	6,448	4,146
198.80	4,450	1,113	199.32	6,455	4,210
198.81	4,539	1,157	199.33	6,462	4,275

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
199.34	6,469	4,339	199.86	6,834	7,798
199.35	6,476	4,404	199.87	6,841	7,866
199.36	6,483	4,469	199.88	6,848	7,935
199.37	6,490	4,534	199.89	6,855	8,003
199.38	6,497	4,599	199.90	6,862	8,072
199.39	6,504	4,664	199.91	6,869	8,140
199.40	6,511	4,729	199.92	6,876	8,209
199.41	6,518	4,794	199.93	6,883	8,278
199.42	6,525	4,859	199.94	6,890	8,347
199.43	6,532	4,924	199.95	6,897	8,416
199.44	6,539	4,990	199.96	6,904	8,485
199.45	6,546	5,055	199.97	6,911	8,554
199.46	6,553	5,121	199.98	6,918	8,623
199.47	6,560	5,186	199.99	6,925	8,692
199.48	6,567	5,252	200.00	6,932	8,761
199.49	6,574	5,317	200.01	6,939	8,831
199.50	6,581	5,383	200.02	6,947	8,900
199.51	6,588	5,449	200.03	6,954	8,970
199.52	6,595	5,515	200.04	6,962	9,039
199.53	6,602	5,581	200.05	6,969	9,109
199.54	6,609	5,647	200.06	6,976	9,179
199.55	6,616	5,713	200.07	6,984	9,249
199.56	6,623	5,779	200.08	6,991	9,318
199.57	6,630	5,846	200.09	6,998	9,388
199.58	6,637	5,912	200.10	7,006	9,458
199.59	6,644	5,978	200.11	7,013	9,528
199.60	6,651	6,045	200.12	7,021	9,599
199.61	6,658	6,111	200.13	7,028	9,669
199.62	6,665	6,178	200.14	7,035	9,739
199.63	6,672	6,245	200.15	7,043	9,810
199.64	6,679	6,311	200.16	7,050	9,880
199.65	6,686	6,378	200.17	7,057	9,951
199.66	6,693	6,445	200.18	7,065	10,021
199.67	6,700	6,512	200.19	7,072	10,092
199.68	6,707	6,579	200.20	7,080	10,163
199.69	6,714	6,646	200.21	7,087	10,233
199.70	6,721	6,713	200.22	7,094	10,304
199.71	6,728	6,781	200.23	7,102	10,375
199.72	6,735	6,848	200.24	7,109	10,446
199.73	6,742	6,915	200.25	7,117	10,518
199.74	6,749	6,983	200.26	7,124	10,589
199.75	6,757	7,050	200.27	7,131	10,660
199.76	6,764	7,118	200.28	7,139	10,731
199.77	6,771	7,186	200.29	7,146	10,803
199.78	6,778	7,253	200.30	7,153	10,874
199.79	6,785	7,321	200.31	7,161	10,946
199.80	6,792	7,389	200.32	7,168	11,018
199.81	6,799	7,457	200.33	7,176	11,089
199.82	6,806	7,525	200.34	7,183	11,161
199.83	6,813	7,593	200.35	7,190	11,233
199.84	6,820	7,661	200.36	7,198	11,305
199.85	6,827	7,730	200.37	7,205	11,377

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.38	7,212	11,449	200.90	7,596	15,299
200.39	7,220	11,521	200.91	7,604	15,375
200.40	7,227	11,593	200.92	7,611	15,451
200.41	7,235	11,666	200.93	7,618	15,527
200.42	7,242	11,738	200.94	7,626	15,604
200.43	7,249	11,810	200.95	7,633	15,680
200.44	7,257	11,883	200.96	7,640	15,756
200.45	7,264	11,956	200.97	7,648	15,833
200.46	7,271	12,028	200.98	7,655	15,909
200.47	7,279	12,101	200.99	7,663	15,986
200.48	7,286	12,174	201.00	7,670	16,062
200.49	7,294	12,247	201.01	7,678	16,139
200.50	7,301	12,320	201.02	7,685	16,216
200.51	7,308	12,393	201.03	7,693	16,293
200.52	7,316	12,466	201.04	7,700	16,370
200.53	7,323	12,539	201.05	7,708	16,447
200.54	7,331	12,612	201.06	7,715	16,524
200.55	7,338	12,686	201.07	7,723	16,601
200.56	7,345	12,759	201.08	7,730	16,679
200.57	7,353	12,833	201.09	7,738	16,756
200.58	7,360	12,906	201.10	7,746	16,833
200.59	7,367	12,980	201.11	7,753	16,911
200.60	7,375	13,054	201.12	7,761	16,988
200.61	7,382	13,127	201.13	7,768	17,066
200.62	7,390	13,201	201.14	7,776	17,144
200.63	7,397	13,275	201.15	7,783	17,222
200.64	7,404	13,349	201.16	7,791	17,299
200.65	7,412	13,423	201.17	7,799	17,377
200.66	7,419	13,497	201.18	7,806	17,455
200.67	7,426	13,572	201.19	7,814	17,533
200.68	7,434	13,646	201.20	7,821	17,612
200.69	7,441	13,720	201.21	7,829	17,690
200.70	7,449	13,795	201.22	7,836	17,768
200.71	7,456	13,869	201.23	7,844	17,847
200.72	7,463	13,944	201.24	7,851	17,925
200.73	7,471	14,019	201.25	7,859	18,004
200.74	7,478	14,093	201.26	7,867	18,082
200.75	7,486	14,168	201.27	7,874	18,161
200.76	7,493	14,243	201.28	7,882	18,240
200.77	7,500	14,318	201.29	7,889	18,319
200.78	7,508	14,393	201.30	7,897	18,398
200.79	7,515	14,468	201.31	7,904	18,477
200.80	7,522	14,543	201.32	7,912	18,556
200.81	7,530	14,619	201.33	7,919	18,635
200.82	7,537	14,694	201.34	7,927	18,714
200.83	7,545	14,769	201.35	7,935	18,793
200.84	7,552	14,845	201.36	7,942	18,873
200.85	7,559	14,920	201.37	7,950	18,952
200.86	7,567	14,996	201.38	7,957	19,032
200.87	7,574	15,072	201.39	7,965	19,111
200.88	7,581	15,147	201.40	7,972	19,191
200.89	7,589	15,223	201.41	7,980	19,271

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.42	7,988	19,351	201.94	8,381	23,606
201.43	7,995	19,430	201.95	8,388	23,690
201.44	8,003	19,510	201.96	8,396	23,774
201.45	8,010	19,591	201.97	8,403	23,858
201.46	8,018	19,671	201.98	8,411	23,942
201.47	8,025	19,751	201.99	8,418	24,026
201.48	8,033	19,831	202.00	8,426	24,110
201.49	8,040	19,912	202.01	8,434	24,195
201.50	8,048	19,992	202.02	8,442	24,279
201.51	8,056	20,073	202.03	8,449	24,364
201.52	8,063	20,153	202.04	8,457	24,448
201.53	8,071	20,234	202.05	8,465	24,533
201.54	8,078	20,315	202.06	8,473	24,617
201.55	8,086	20,395	202.07	8,480	24,702
201.56	8,093	20,476	202.08	8,488	24,787
201.57	8,101	20,557	202.09	8,496	24,872
201.58	8,108	20,638	202.10	8,504	24,957
201.59	8,116	20,719	202.11	8,511	25,042
201.60	8,124	20,801	202.12	8,519	25,127
201.61	8,131	20,882	202.13	8,527	25,212
201.62	8,139	20,963	202.14	8,535	25,298
201.63	8,146	21,045	202.15	8,542	25,383
201.64	8,154	21,126	202.16	8,550	25,469
201.65	8,161	21,208	202.17	8,558	25,554
201.66	8,169	21,289	202.18	8,566	25,640
201.67	8,177	21,371	202.19	8,573	25,725
201.68	8,184	21,453	202.20	8,581	25,811
201.69	8,192	21,535	202.21	8,589	25,897
201.70	8,199	21,617	202.22	8,597	25,983
201.71	8,207	21,699	202.23	8,604	26,069
201.72	8,214	21,781	202.24	8,612	26,155
201.73	8,222	21,863	202.25	8,620	26,241
201.74	8,229	21,945	202.26	8,628	26,327
201.75	8,237	22,028	202.27	8,635	26,414
201.76	8,245	22,110	202.28	8,643	26,500
201.77	8,252	22,193	202.29	8,651	26,587
201.78	8,260	22,275	202.30	8,659	26,673
201.79	8,267	22,358	202.31	8,666	26,760
201.80	8,275	22,440	202.32	8,674	26,847
201.81	8,282	22,523	202.33	8,682	26,933
201.82	8,290	22,606	202.34	8,690	27,020
201.83	8,297	22,689	202.35	8,697	27,107
201.84	8,305	22,772	202.36	8,705	27,194
201.85	8,313	22,855	202.37	8,713	27,281
201.86	8,320	22,938	202.38	8,721	27,368
201.87	8,328	23,022	202.39	8,728	27,456
201.88	8,335	23,105	202.40	8,736	27,543
201.89	8,343	23,188	202.41	8,744	27,630
201.90	8,350	23,272	202.42	8,752	27,718
201.91	8,358	23,355	202.43	8,759	27,805
201.92	8,366	23,439	202.44	8,767	27,893
201.93	8,373	23,523	202.45	8,775	27,981

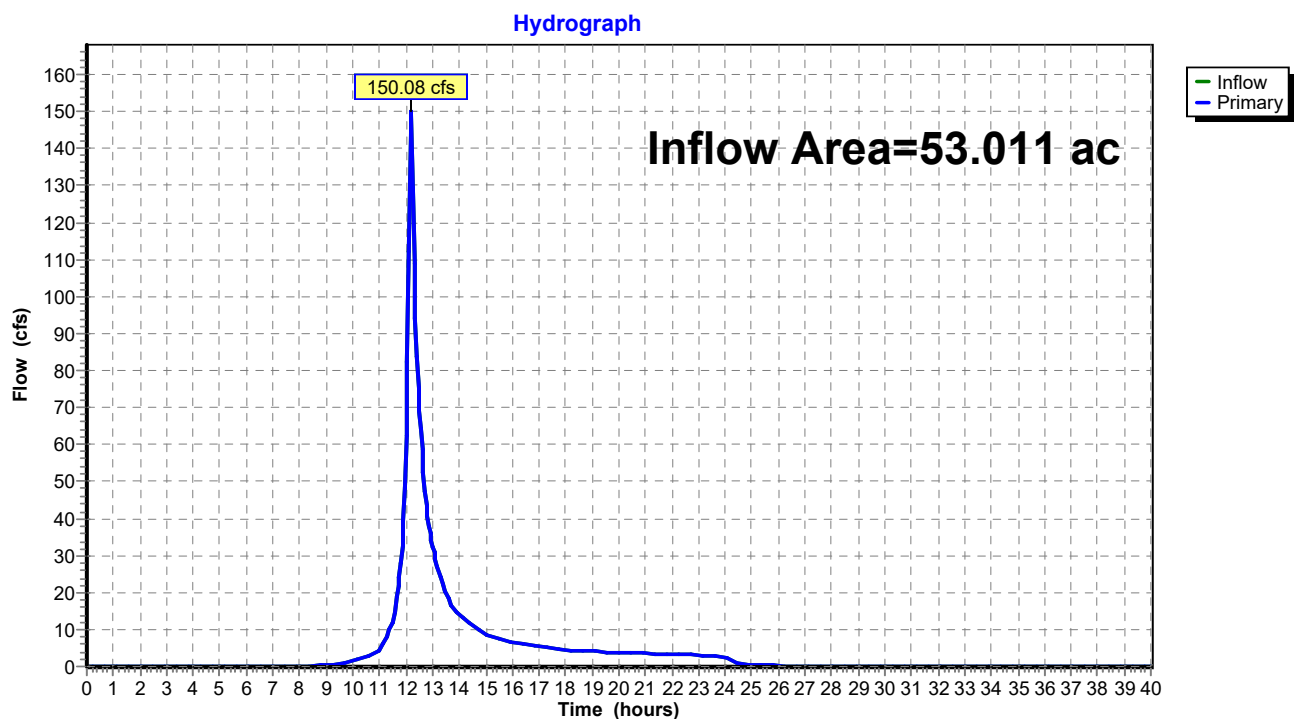
Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.46	8,783	28,068	202.98	9,186	32,740
202.47	8,790	28,156	202.99	9,193	32,832
202.48	8,798	28,244	203.00	9,201	32,924
202.49	8,806	28,332			
202.50	8,814	28,420			
202.51	8,821	28,509			
202.52	8,829	28,597			
202.53	8,837	28,685			
202.54	8,845	28,774			
202.55	8,852	28,862			
202.56	8,860	28,951			
202.57	8,868	29,039			
202.58	8,876	29,128			
202.59	8,883	29,217			
202.60	8,891	29,306			
202.61	8,899	29,395			
202.62	8,907	29,484			
202.63	8,914	29,573			
202.64	8,922	29,662			
202.65	8,930	29,751			
202.66	8,938	29,840			
202.67	8,945	29,930			
202.68	8,953	30,019			
202.69	8,961	30,109			
202.70	8,969	30,199			
202.71	8,976	30,288			
202.72	8,984	30,378			
202.73	8,992	30,468			
202.74	9,000	30,558			
202.75	9,007	30,648			
202.76	9,015	30,738			
202.77	9,023	30,828			
202.78	9,031	30,919			
202.79	9,038	31,009			
202.80	9,046	31,099			
202.81	9,054	31,190			
202.82	9,062	31,280			
202.83	9,069	31,371			
202.84	9,077	31,462			
202.85	9,085	31,553			
202.86	9,093	31,643			
202.87	9,100	31,734			
202.88	9,108	31,825			
202.89	9,116	31,917			
202.90	9,124	32,008			
202.91	9,131	32,099			
202.92	9,139	32,190			
202.93	9,147	32,282			
202.94	9,154	32,373			
202.95	9,162	32,465			
202.96	9,170	32,557			
202.97	9,178	32,648			

Summary for Link PDA-6: Proposed Drainage Area #6

Inflow Area = 53.011 ac, 11.21% Impervious, Inflow Depth = 3.21" for Future 10 yr event
Inflow = 150.08 cfs @ 12.19 hrs, Volume= 14.198 af
Primary = 150.08 cfs @ 12.19 hrs, Volume= 14.198 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-6: Proposed Drainage Area #6

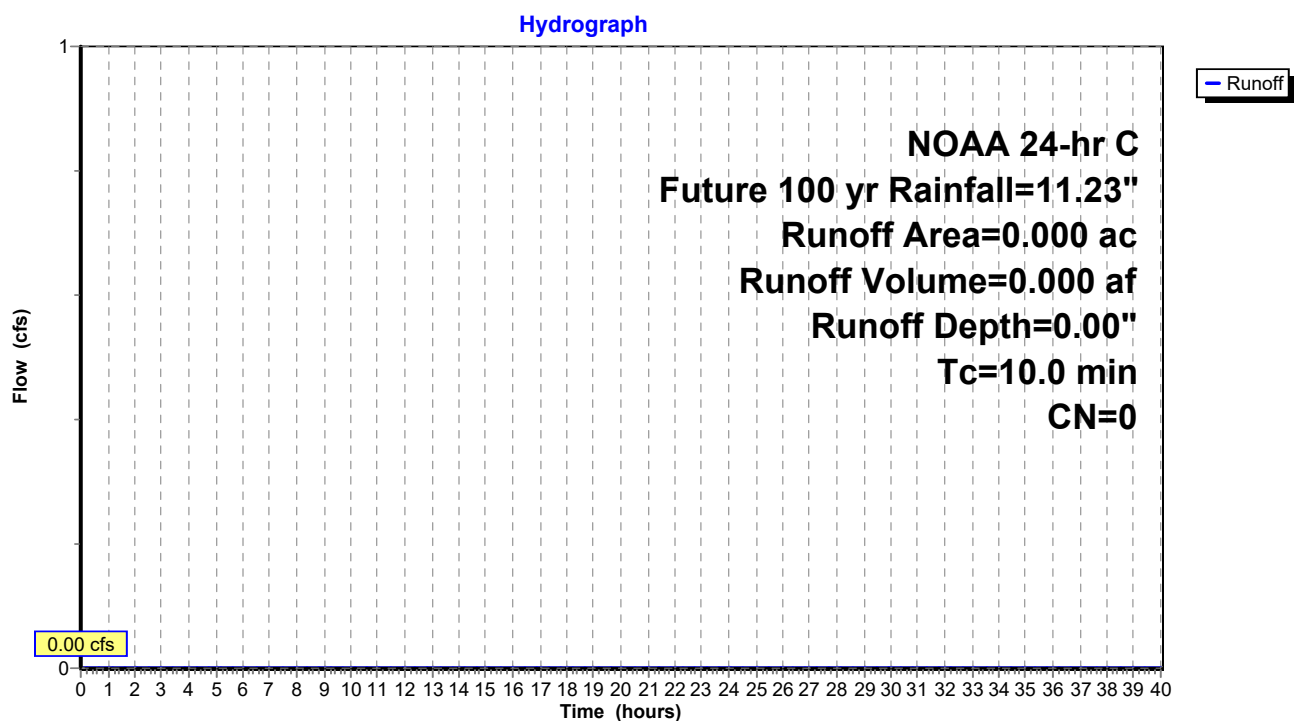
Summary for Subcatchment 51I: PDA-51 (impervious)

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
 Routed to Pond B-51 : Basin #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
* 0.000	98	Roof, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 51I: PDA-51 (impervious)

Summary for Subcatchment 51P: PDA-51 (pervious)

Runoff = 5.81 cfs @ 12.17 hrs, Volume= 0.448 af, Depth= 7.89"
 Routed to Pond B-51 : Basin #51

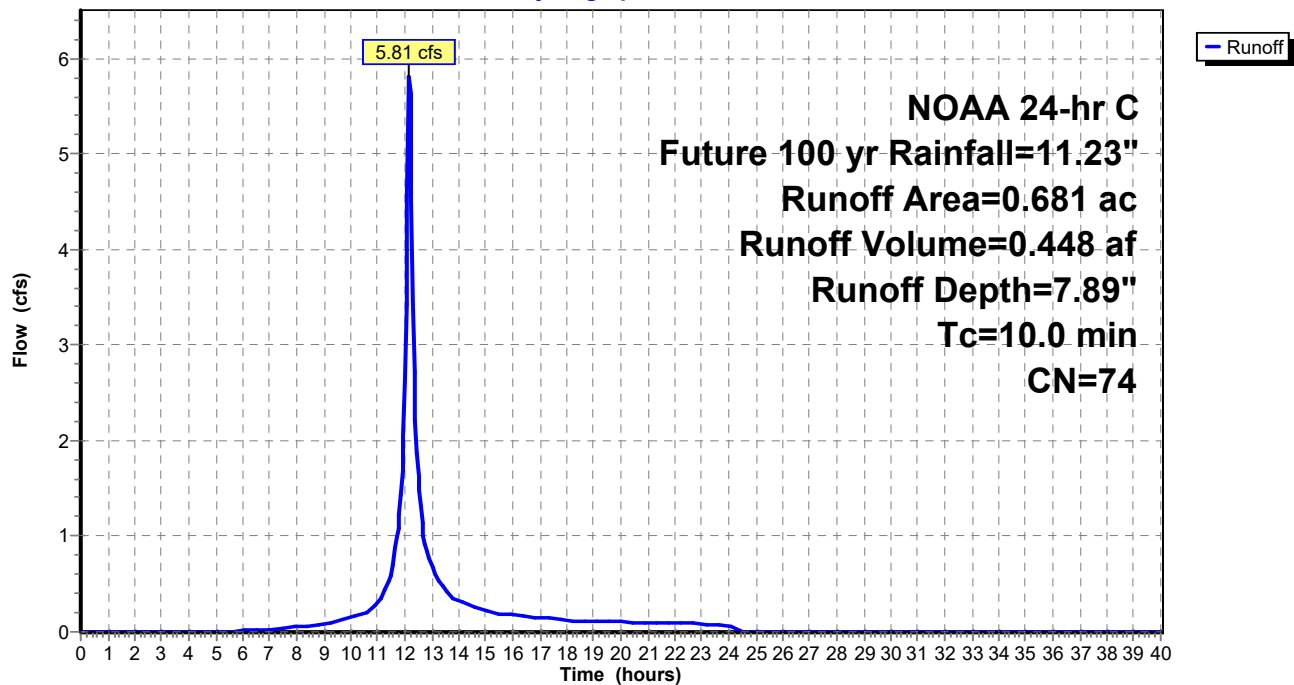
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.681	74	>75% Grass cover, Good, HSG C
0.681		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 51P: PDA-51 (pervious)

Hydrograph



Summary for Subcatchment 52I: PDA-52 (impervious)

Runoff = 5.03 cfs @ 12.17 hrs, Volume= 0.449 af, Depth=10.99"
 Routed to Pond B-52 : Basin #52

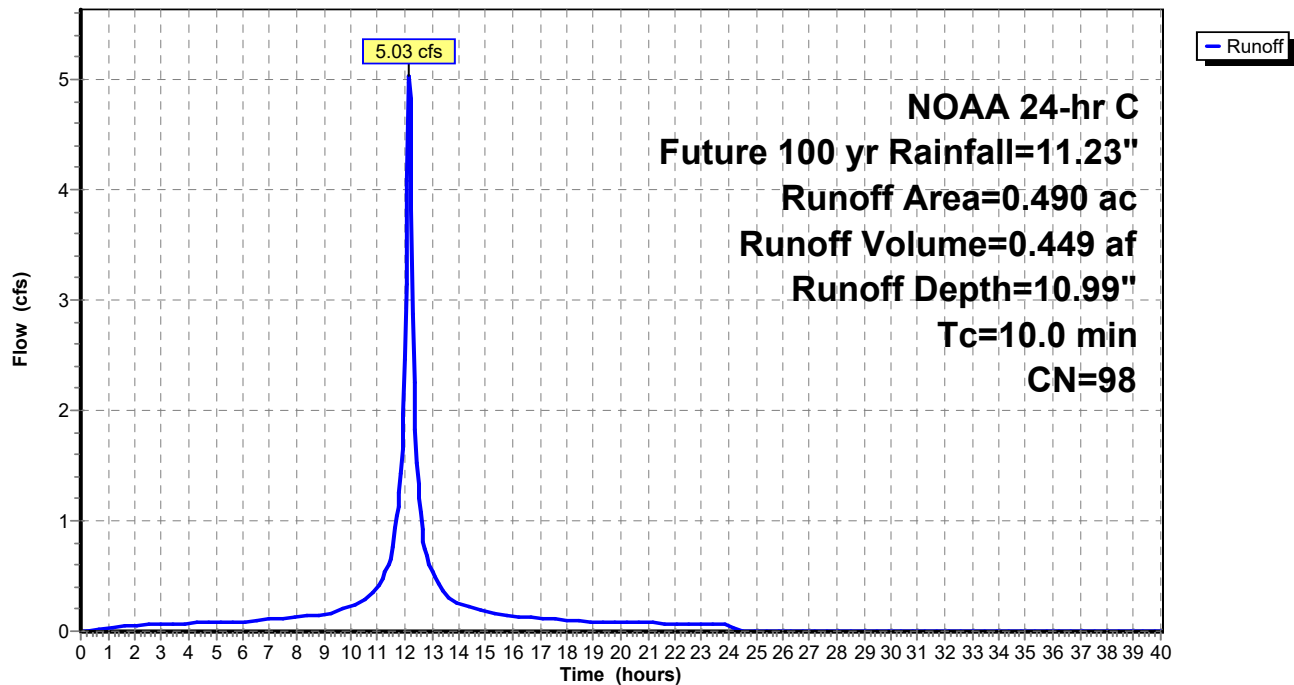
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
* 0.118	98	Pavement, HSG C
* 0.339	98	Roof, HSG C
* 0.033	98	Concrete, HSG C
0.490	98	Weighted Average
0.490		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 52I: PDA-52 (impervious)

Hydrograph



Summary for Subcatchment 52P: PDA-52 (pervious)

Runoff = 7.96 cfs @ 12.17 hrs, Volume= 0.614 af, Depth= 7.89"
 Routed to Pond B-52 : Basin #52

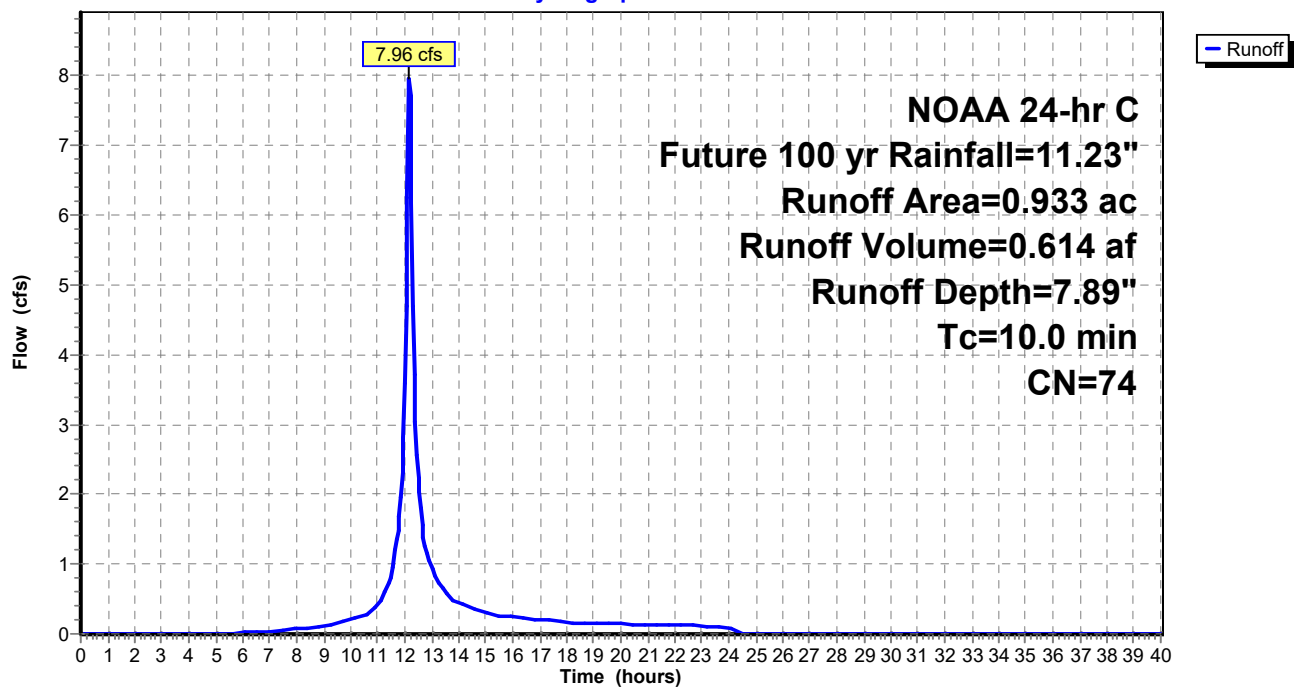
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.933	74	>75% Grass cover, Good, HSG C
0.933		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 52P: PDA-52 (pervious)

Hydrograph



Summary for Subcatchment 53I: PDA-53 (impervious)

Runoff = 12.47 cfs @ 12.17 hrs, Volume= 1.112 af, Depth=10.99"
 Routed to Pond B-53 : Basin #53

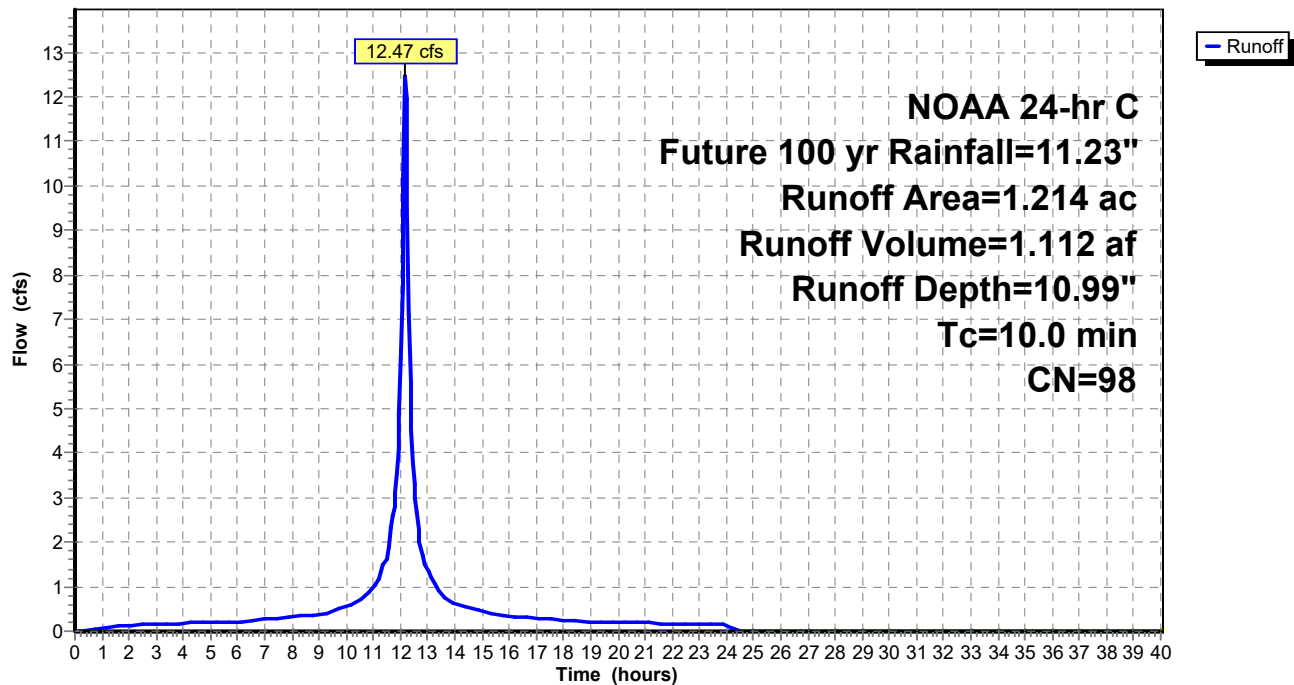
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
* 0.628	98	Pavement, HSG C
* 0.450	98	Roof, HSG C
* 0.136	98	Concrete, HSG C
1.214	98	Weighted Average
1.214		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 53I: PDA-53 (impervious)

Hydrograph



Summary for Subcatchment 53P: PDA-53 (pervious)

Runoff = 11.31 cfs @ 12.17 hrs, Volume= 0.872 af, Depth= 7.89"
 Routed to Pond B-53 : Basin #53

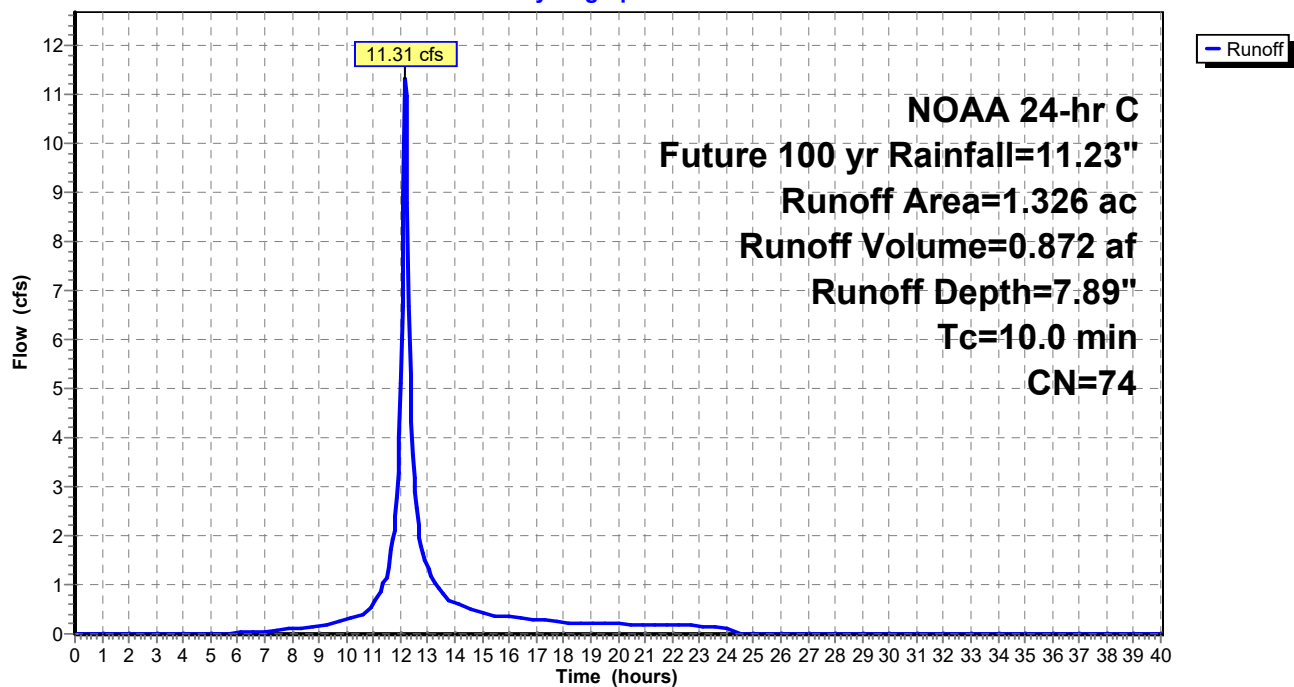
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.326	74	>75% Grass cover, Good, HSG C
1.326		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 53P: PDA-53 (pervious)

Hydrograph



Summary for Subcatchment 54I: PDA-54 (impervious)

Runoff = 15.96 cfs @ 12.17 hrs, Volume= 1.423 af, Depth=10.99"
 Routed to Pond B-54 : Basin #54

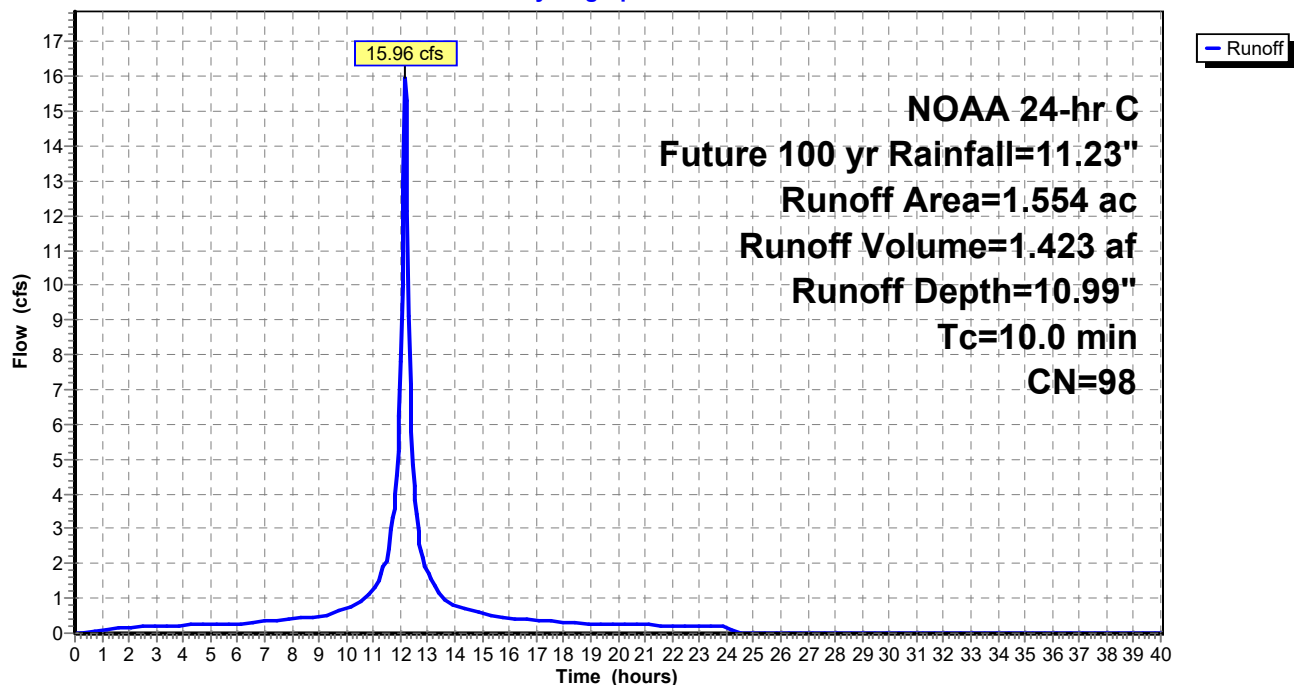
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
* 0.983	98	Pavement, HSG C
* 0.361	98	Roof, HSG C
* 0.210	98	Concrete, HSG C
1.554	98	Weighted Average
1.554		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 54I: PDA-54 (impervious)

Hydrograph



Summary for Subcatchment 54P: PDA-54 (pervious)

Runoff = 8.67 cfs @ 12.17 hrs, Volume= 0.668 af, Depth= 7.89"
 Routed to Pond B-54 : Basin #54

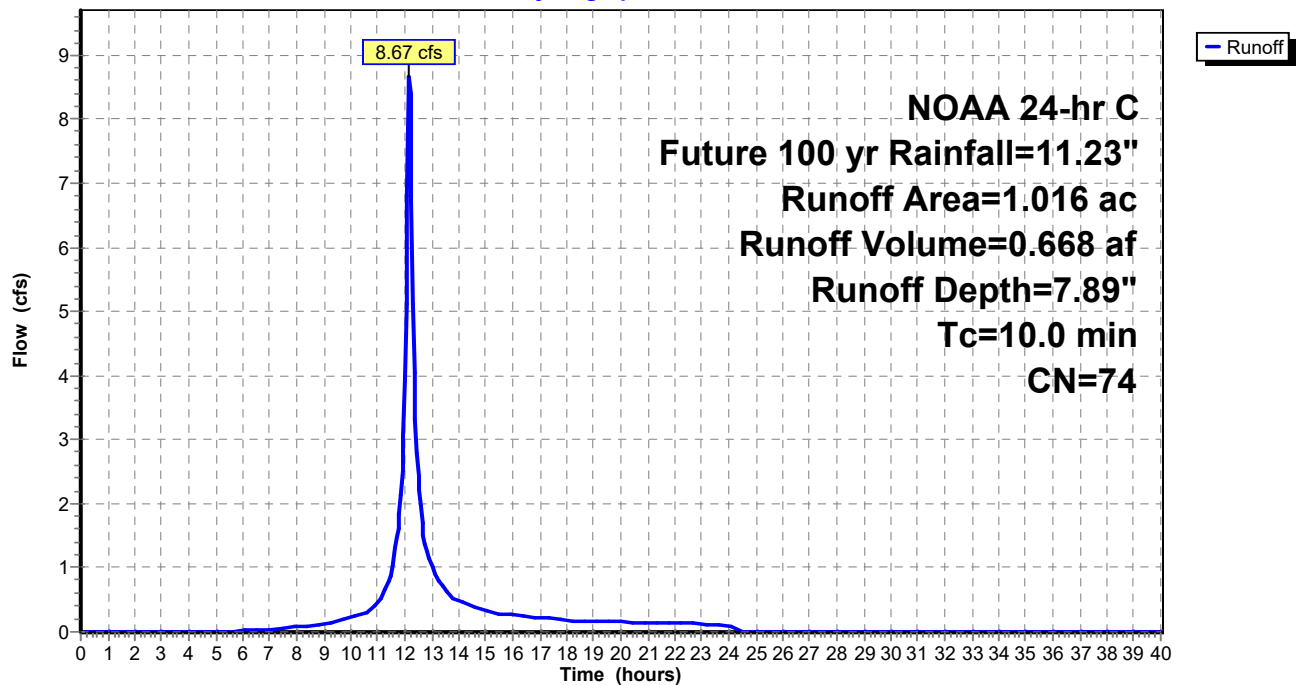
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.016	74	>75% Grass cover, Good, HSG C
1.016		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 54P: PDA-54 (pervious)

Hydrograph



Summary for Subcatchment 55I: PDA-55 (impervious)

Runoff = 11.19 cfs @ 12.17 hrs, Volume= 0.997 af, Depth=10.99"
 Routed to Pond B-55 : Basin #55

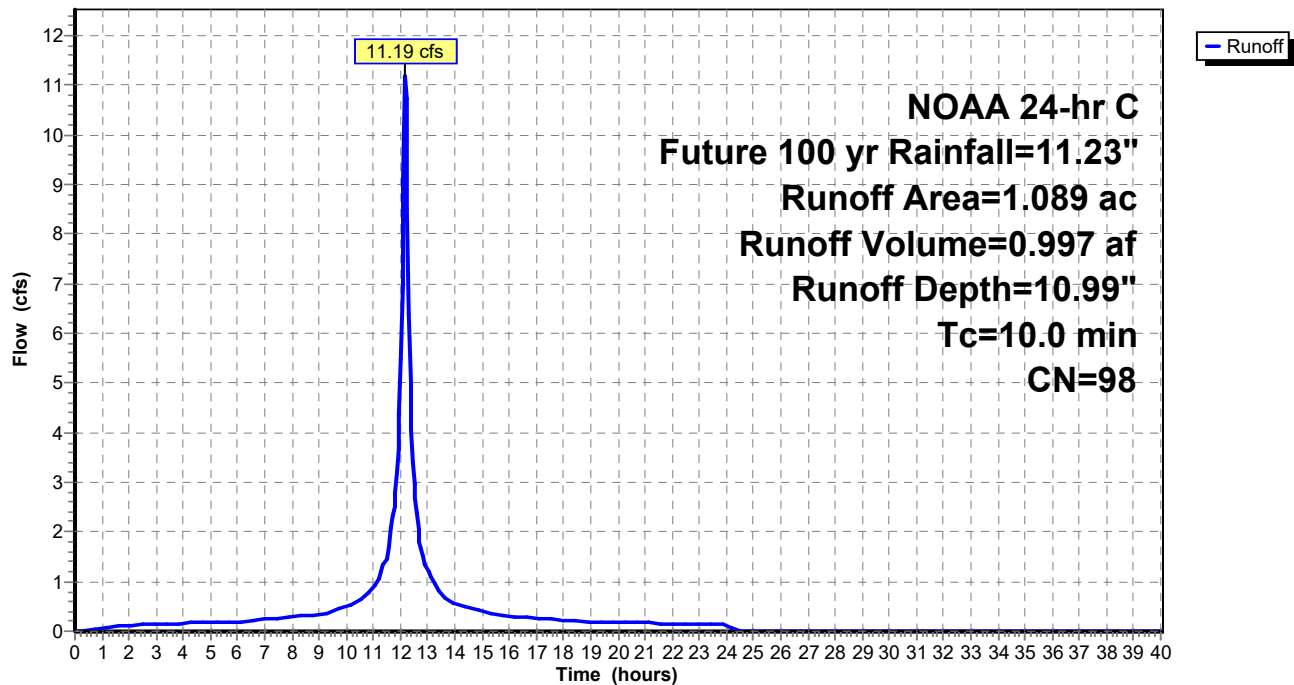
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
* 0.467	98	Pavement, HSG C
* 0.574	98	Roof, HSG C
* 0.048	98	Concrete, HSG C
1.089	98	Weighted Average
1.089		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 55I: PDA-55 (impervious)

Hydrograph



Summary for Subcatchment 55P: PDA-55 (pervious)

Runoff = 10.34 cfs @ 12.17 hrs, Volume= 0.797 af, Depth= 7.89"
 Routed to Pond B-55 : Basin #55

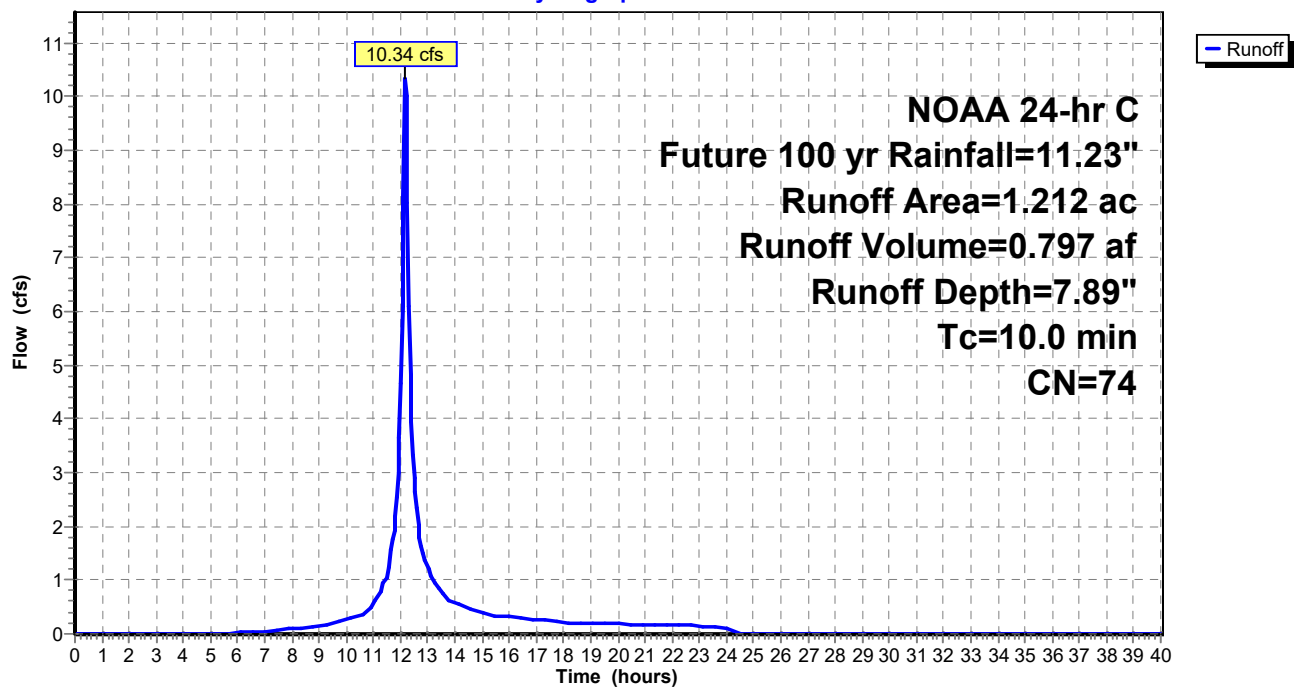
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.212	74	>75% Grass cover, Good, HSG C
1.212		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 55P: PDA-55 (pervious)

Hydrograph



Summary for Subcatchment 56I: PDA-56 (impervious)

Runoff = 4.83 cfs @ 12.17 hrs, Volume= 0.430 af, Depth=10.99"
 Routed to Pond B-56 : Basin #56

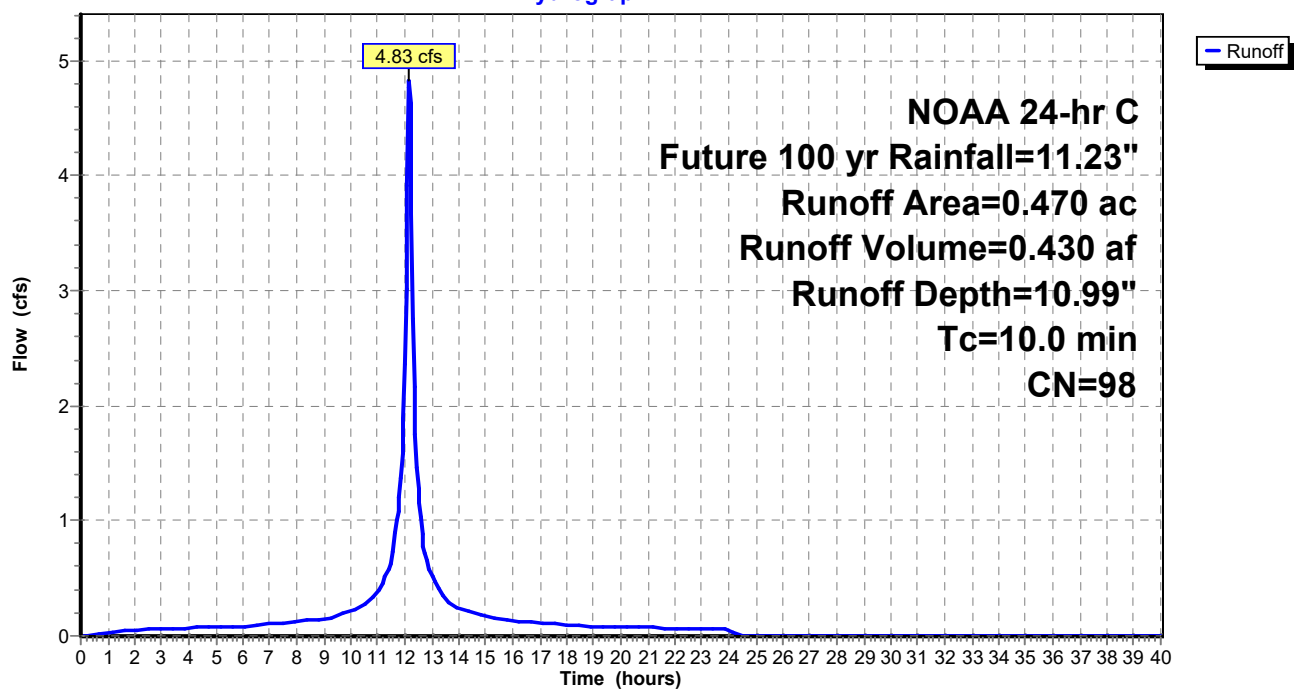
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
* 0.470	98	Roof, HSG C
0.470		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 56I: PDA-56 (impervious)

Hydrograph



Summary for Subcatchment 56P: PDA-56 (pervious)

Runoff = 8.89 cfs @ 12.17 hrs, Volume= 0.685 af, Depth= 7.89"
 Routed to Pond B-56 : Basin #56

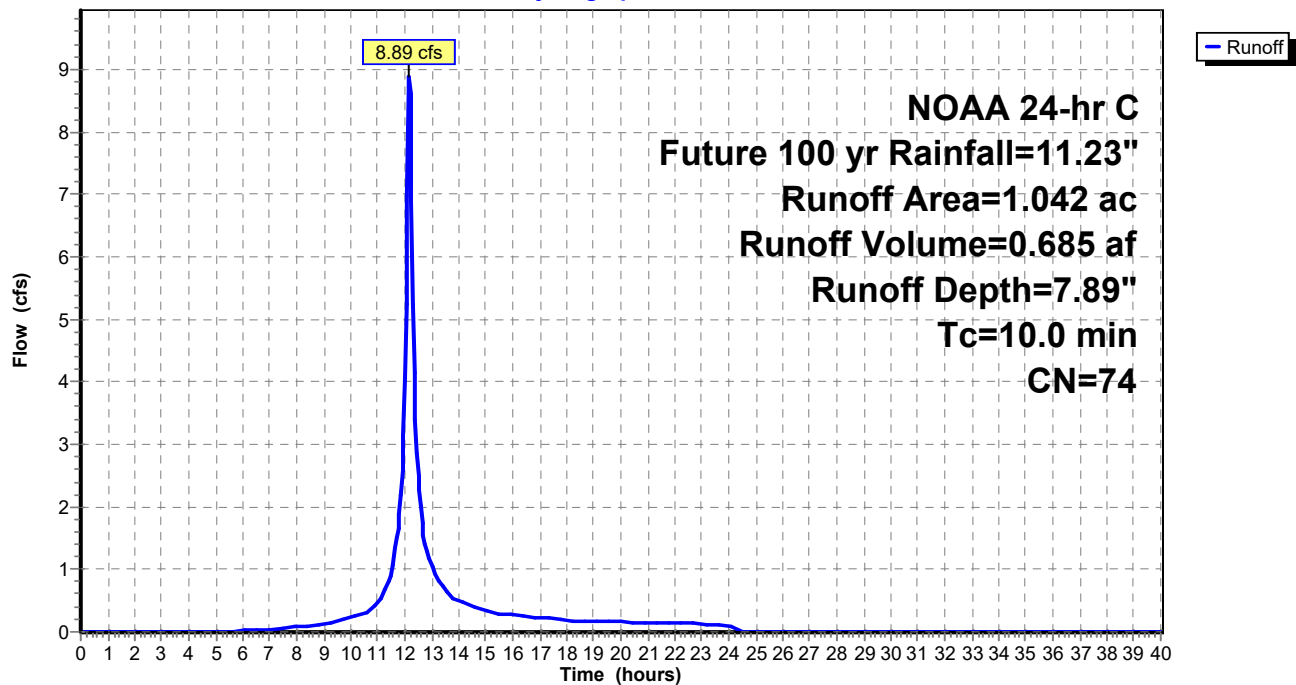
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.042	74	>75% Grass cover, Good, HSG C
1.042		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 56P: PDA-56 (pervious)

Hydrograph



Summary for Subcatchment 57I: PDA-57 (impervious)

Runoff = 7.01 cfs @ 12.17 hrs, Volume= 0.625 af, Depth=10.99"
 Routed to Pond B-57 : Basin #57

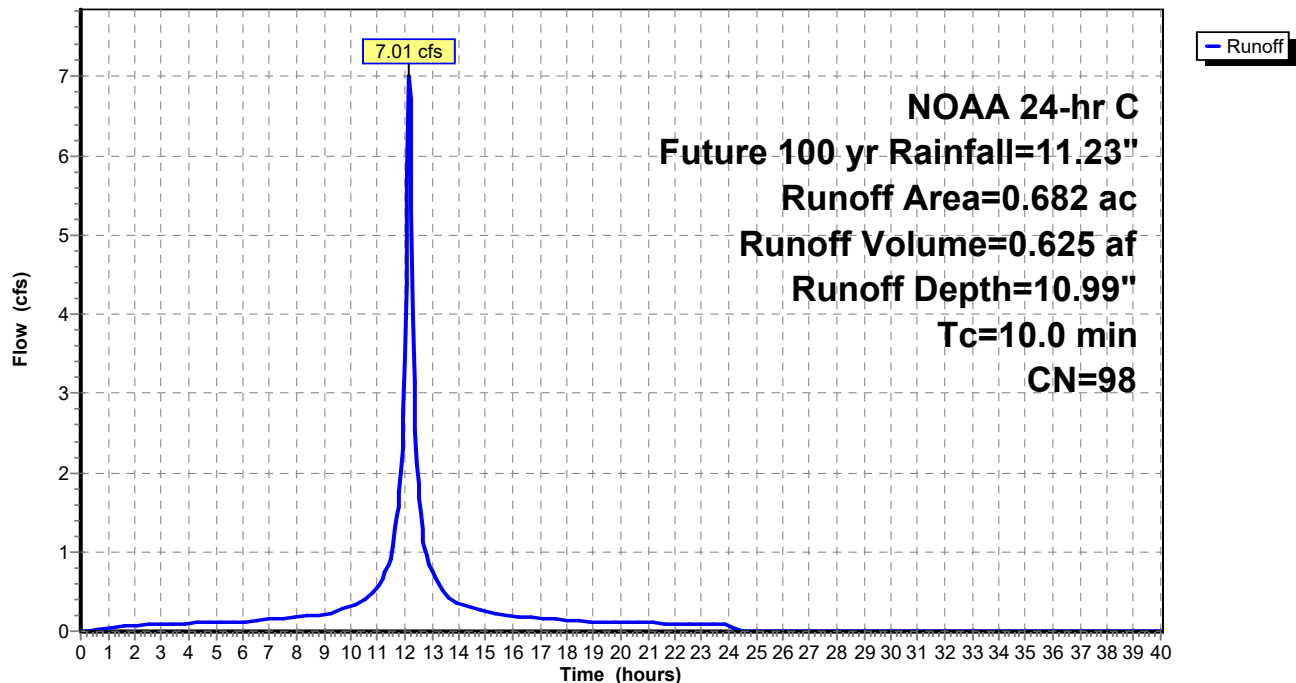
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
* 0.268	98	Pavement, HSG C
* 0.378	98	Roof, HSG C
* 0.036	98	Concrete, HSG C
0.682	98	Weighted Average
0.682		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 57I: PDA-57 (impervious)

Hydrograph



Summary for Subcatchment 57P: PDA-57 (pervious)

Runoff = 6.42 cfs @ 12.17 hrs, Volume= 0.495 af, Depth= 7.89"
 Routed to Pond B-57 : Basin #57

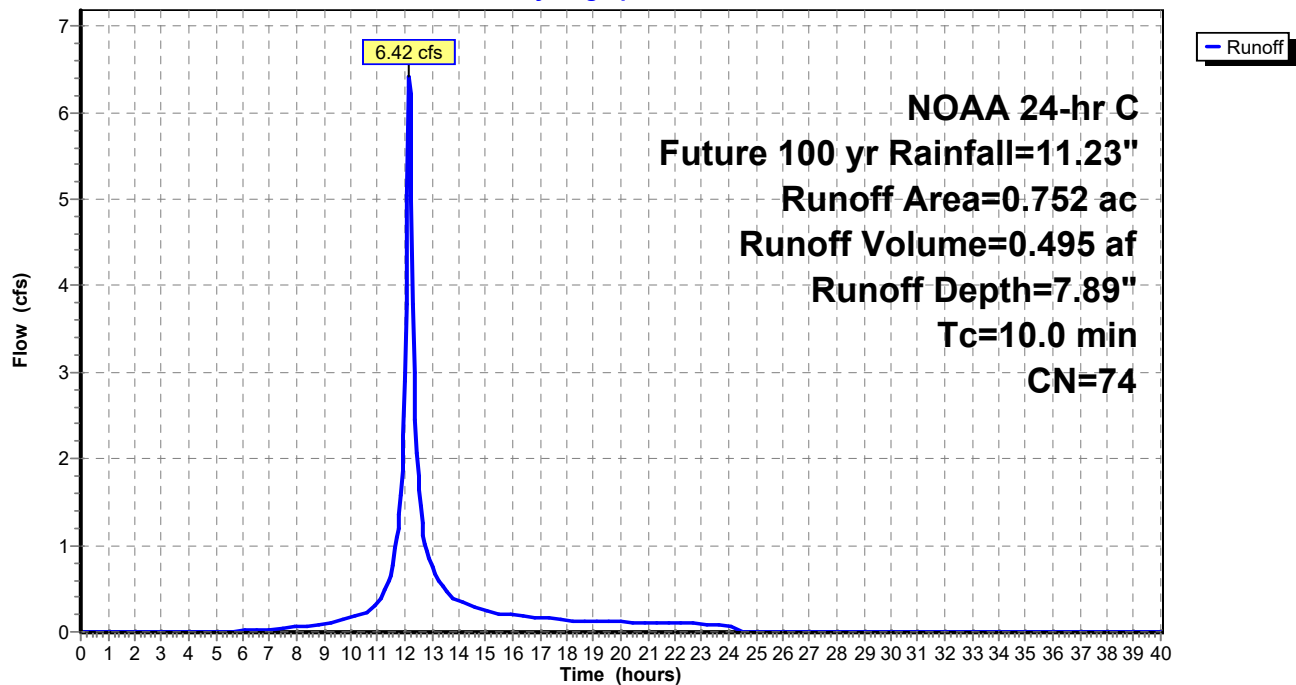
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.752	74	>75% Grass cover, Good, HSG C
0.752		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 57P: PDA-57 (pervious)

Hydrograph



Summary for Subcatchment 58I: PDA-58 (impervious)

Runoff = 4.54 cfs @ 12.17 hrs, Volume= 0.405 af, Depth=10.99"
 Routed to Pond B-58 : Basin #58

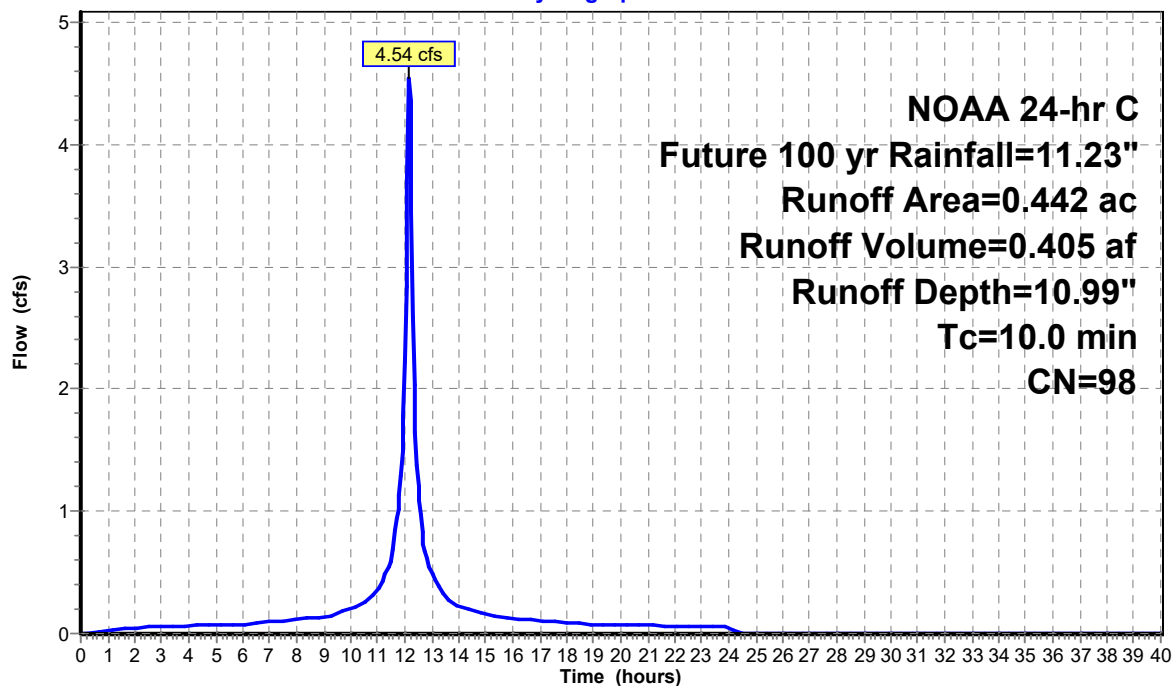
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
* 0.442	98	Roof, HSG C
* 0.000	98	Concrete, HSG C
0.442	98	Weighted Average
0.442		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 58I: PDA-58 (impervious)

Hydrograph



Summary for Subcatchment 58P: PDA-58 (pervious)

Runoff = 10.30 cfs @ 12.17 hrs, Volume= 0.794 af, Depth= 7.89"
 Routed to Pond B-58 : Basin #58

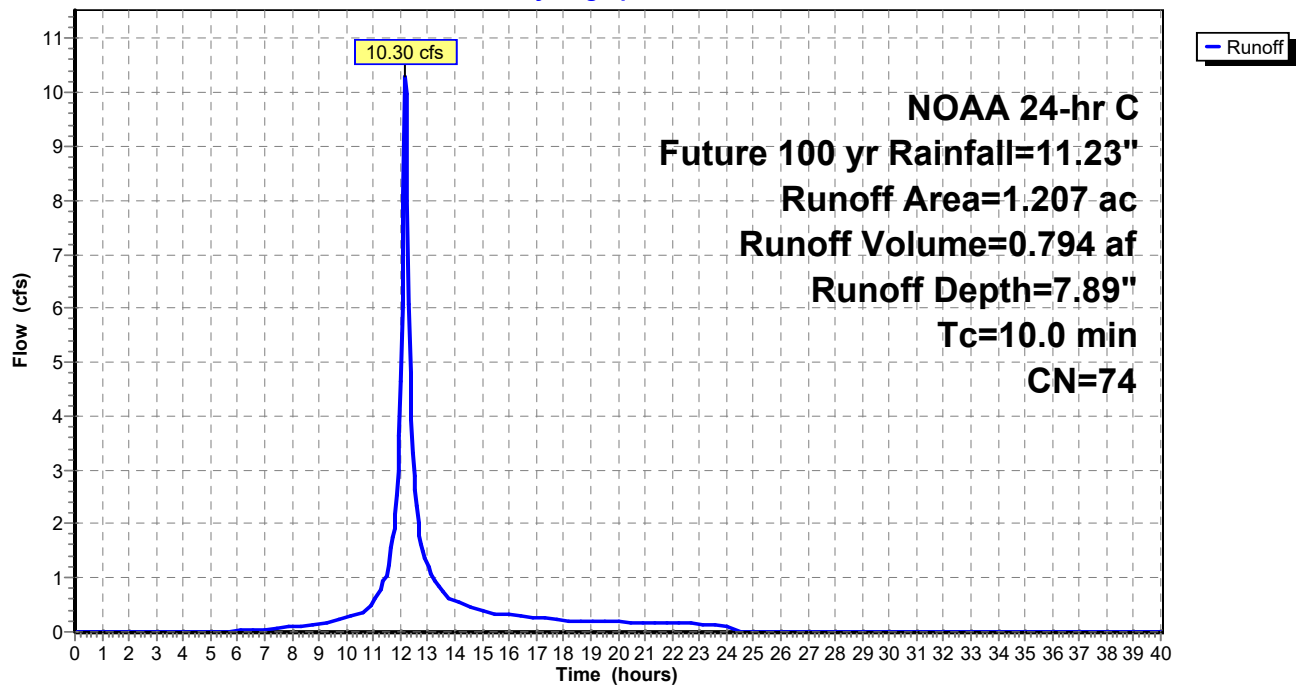
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.207	74	>75% Grass cover, Good, HSG C
1.207		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment 58P: PDA-58 (pervious)

Hydrograph



Summary for Subcatchment UPDA-6: PDA-6 (undetained)

Runoff = 331.86 cfs @ 12.17 hrs, Volume= 25.587 af, Depth= 7.89"

Routed to Link PDA-6 : Proposed Drainage Area #6

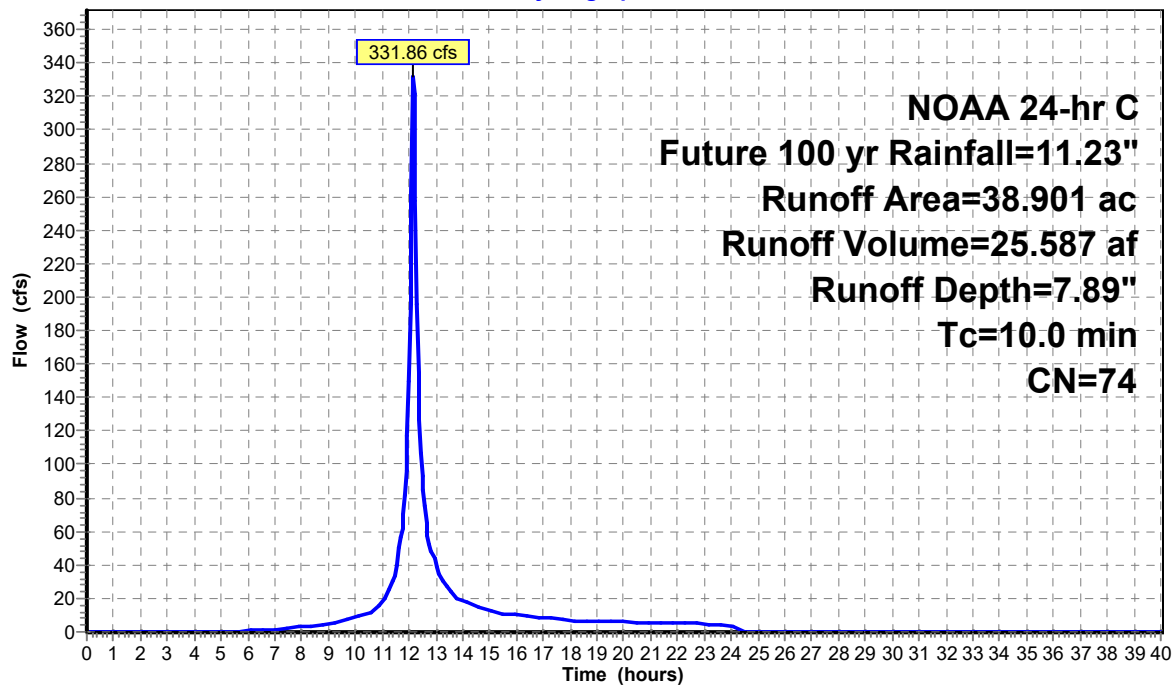
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
38.901	74	>75% Grass cover, Good, HSG C
38.901		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment UPDA-6: PDA-6 (undetained)

Hydrograph



Summary for Pond B-51: Basin #51

Inflow Area = 11.027 ac, 43.68% Impervious, Inflow Depth = 8.75" for Future 100 yr event
 Inflow = 73.79 cfs @ 12.24 hrs, Volume= 8.044 af
 Outflow = 47.45 cfs @ 12.48 hrs, Volume= 8.038 af, Atten= 36%, Lag= 14.7 min
 Primary = 47.45 cfs @ 12.48 hrs, Volume= 8.038 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 189.28' @ 12.48 hrs Surf.Area= 14,090 sf Storage= 50,324 cf

Plug-Flow detention time= 18.1 min calculated for 8.038 af (100% of inflow)
 Center-of-Mass det. time= 17.1 min (837.8 - 820.7)

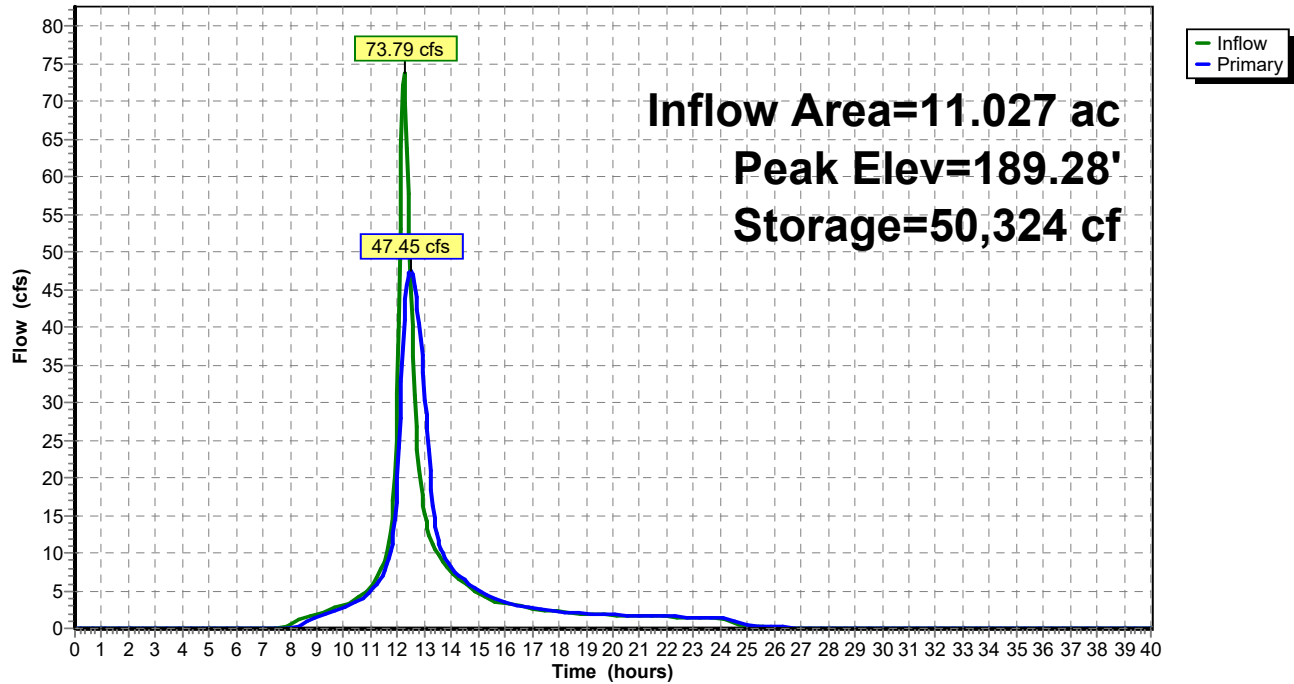
Volume	Invert	Avail.Storage	Storage Description
#1	184.00'	58,347 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
184.00	5,243	0	0
185.00	6,727	5,985	5,985
186.00	8,424	7,576	13,561
187.00	10,085	9,255	22,815
188.00	11,802	10,944	33,759
189.00	13,576	12,689	46,448
189.83	15,098	11,900	58,347

Device	Routing	Invert	Outlet Devices
#1	Primary	184.00'	30.0" Round Culvert L= 147.0' Ke= 0.500 Inlet / Outlet Invert= 184.00' / 182.00' S= 0.0136 '/' Cc= 0.900 n= 0.013, Flow Area= 4.91 sf
#2	Device 1	184.05'	48.0" W x 12.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	187.00'	8.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	189.80'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=47.40 cfs @ 12.48 hrs HW=189.27' (Free Discharge)

1=Culvert (Inlet Controls 47.40 cfs @ 9.66 fps)
 2=Orifice/Grate (Passes < 41.83 cfs potential flow)
 3=Sharp-Crested Rectangular Weir (Passes < 84.51 cfs potential flow)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-51: Basin #51**Hydrograph**

Stage-Discharge for Pond B-51: Basin #51

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
184.00	0.00	184.52	1.81	185.04	6.71	185.56	13.70
184.01	0.00	184.53	1.88	185.05	6.83	185.57	13.85
184.02	0.00	184.54	1.95	185.06	6.94	185.58	13.99
184.03	0.00	184.55	2.02	185.07	7.06	185.59	14.14
184.04	0.00	184.56	2.09	185.08	7.19	185.60	14.29
184.05	0.00	184.57	2.17	185.09	7.31	185.61	14.44
184.06	0.01	184.58	2.24	185.10	7.43	185.62	14.59
184.07	0.03	184.59	2.31	185.11	7.55	185.63	14.73
184.08	0.05	184.60	2.39	185.12	7.67	185.64	14.88
184.09	0.06	184.61	2.47	185.13	7.80	185.65	15.03
184.10	0.07	184.62	2.54	185.14	7.92	185.66	15.18
184.11	0.09	184.63	2.62	185.15	8.05	185.67	15.33
184.12	0.10	184.64	2.70	185.16	8.18	185.68	15.48
184.13	0.12	184.65	2.78	185.17	8.30	185.69	15.63
184.14	0.14	184.66	2.87	185.18	8.43	185.70	15.78
184.15	0.16	184.67	2.95	185.19	8.56	185.71	15.93
184.16	0.18	184.68	3.03	185.20	8.69	185.72	16.08
184.17	0.20	184.69	3.12	185.21	8.82	185.73	16.23
184.18	0.23	184.70	3.21	185.22	8.95	185.74	16.38
184.19	0.25	184.71	3.29	185.23	9.08	185.75	16.53
184.20	0.28	184.72	3.38	185.24	9.21	185.76	16.68
184.21	0.31	184.73	3.47	185.25	9.34	185.77	16.83
184.22	0.34	184.74	3.56	185.26	9.48	185.78	16.98
184.23	0.37	184.75	3.65	185.27	9.61	185.79	17.13
184.24	0.40	184.76	3.74	185.28	9.74	185.80	17.28
184.25	0.43	184.77	3.84	185.29	9.88	185.81	17.43
184.26	0.47	184.78	3.93	185.30	10.01	185.82	17.58
184.27	0.51	184.79	4.03	185.31	10.15	185.83	17.73
184.28	0.54	184.80	4.12	185.32	10.28	185.84	17.89
184.29	0.58	184.81	4.22	185.33	10.42	185.85	18.04
184.30	0.62	184.82	4.32	185.34	10.56	185.86	18.19
184.31	0.66	184.83	4.42	185.35	10.70	185.87	18.34
184.32	0.71	184.84	4.52	185.36	10.84	185.88	18.49
184.33	0.75	184.85	4.62	185.37	10.97	185.89	18.64
184.34	0.80	184.86	4.72	185.38	11.11	185.90	18.79
184.35	0.84	184.87	4.82	185.39	11.25	185.91	18.94
184.36	0.89	184.88	4.93	185.40	11.39	185.92	19.08
184.37	0.94	184.89	5.03	185.41	11.54	185.93	19.23
184.38	0.99	184.90	5.14	185.42	11.68	185.94	19.38
184.39	1.04	184.91	5.25	185.43	11.82	185.95	19.53
184.40	1.09	184.92	5.35	185.44	11.96	185.96	19.68
184.41	1.15	184.93	5.46	185.45	12.10	185.97	19.83
184.42	1.20	184.94	5.57	185.46	12.25	185.98	19.98
184.43	1.26	184.95	5.68	185.47	12.39	185.99	20.12
184.44	1.31	184.96	5.79	185.48	12.53	186.00	20.27
184.45	1.37	184.97	5.90	185.49	12.68	186.01	20.42
184.46	1.43	184.98	6.02	185.50	12.82	186.02	20.56
184.47	1.49	184.99	6.13	185.51	12.97	186.03	20.71
184.48	1.55	185.00	6.24	185.52	13.11	186.04	20.86
184.49	1.62	185.01	6.36	185.53	13.26	186.05	21.00
184.50	1.68	185.02	6.47	185.54	13.41	186.06	21.14
184.51	1.75	185.03	6.59	185.55	13.55	186.07	21.29

Stage-Discharge for Pond B-51: Basin #51 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.08	21.43	186.60	27.46	187.12	31.91	187.64	36.54
186.09	21.58	186.61	27.56	187.13	32.11	187.65	36.62
186.10	21.72	186.62	27.64	187.14	32.31	187.66	36.69
186.11	21.86	186.63	27.71	187.15	32.52	187.67	36.77
186.12	22.00	186.64	27.78	187.16	32.66	187.68	36.84
186.13	22.14	186.65	27.84	187.17	32.75	187.69	36.92
186.14	22.28	186.66	27.91	187.18	32.84	187.70	37.00
186.15	22.42	186.67	27.98	187.19	32.92	187.71	37.07
186.16	22.56	186.68	28.04	187.20	33.01	187.72	37.15
186.17	22.70	186.69	28.11	187.21	33.09	187.73	37.22
186.18	22.83	186.70	28.18	187.22	33.17	187.74	37.30
186.19	22.97	186.71	28.24	187.23	33.26	187.75	37.37
186.20	23.10	186.72	28.31	187.24	33.34	187.76	37.45
186.21	23.24	186.73	28.37	187.25	33.43	187.77	37.52
186.22	23.37	186.74	28.44	187.26	33.51	187.78	37.59
186.23	23.50	186.75	28.50	187.27	33.59	187.79	37.67
186.24	23.63	186.76	28.57	187.28	33.68	187.80	37.74
186.25	23.76	186.77	28.64	187.29	33.76	187.81	37.82
186.26	23.89	186.78	28.70	187.30	33.84	187.82	37.89
186.27	24.02	186.79	28.77	187.31	33.92	187.83	37.96
186.28	24.15	186.80	28.83	187.32	34.01	187.84	38.04
186.29	24.27	186.81	28.89	187.33	34.09	187.85	38.11
186.30	24.40	186.82	28.96	187.34	34.17	187.86	38.18
186.31	24.52	186.83	29.02	187.35	34.25	187.87	38.26
186.32	24.64	186.84	29.09	187.36	34.33	187.88	38.33
186.33	24.76	186.85	29.15	187.37	34.41	187.89	38.40
186.34	24.88	186.86	29.21	187.38	34.49	187.90	38.48
186.35	24.99	186.87	29.28	187.39	34.58	187.91	38.55
186.36	25.11	186.88	29.34	187.40	34.66	187.92	38.62
186.37	25.22	186.89	29.41	187.41	34.74	187.93	38.69
186.38	25.33	186.90	29.47	187.42	34.82	187.94	38.77
186.39	25.44	186.91	29.53	187.43	34.90	187.95	38.84
186.40	25.54	186.92	29.59	187.44	34.98	187.96	38.91
186.41	25.65	186.93	29.66	187.45	35.06	187.97	38.98
186.42	25.75	186.94	29.72	187.46	35.14	187.98	39.05
186.43	25.85	186.95	29.78	187.47	35.22	187.99	39.12
186.44	25.94	186.96	29.85	187.48	35.30	188.00	39.19
186.45	26.03	186.97	29.91	187.49	35.37	188.01	39.27
186.46	26.12	186.98	29.97	187.50	35.45	188.02	39.34
186.47	26.21	186.99	30.03	187.51	35.53	188.03	39.41
186.48	26.29	187.00	30.09	187.52	35.61	188.04	39.48
186.49	26.36	187.01	30.18	187.53	35.69	188.05	39.55
186.50	26.43	187.02	30.29	187.54	35.77	188.06	39.62
186.51	26.53	187.03	30.41	187.55	35.84	188.07	39.69
186.52	26.64	187.04	30.55	187.56	35.92	188.08	39.76
186.53	26.74	187.05	30.69	187.57	36.00	188.09	39.83
186.54	26.84	187.06	30.85	187.58	36.08	188.10	39.90
186.55	26.95	187.07	31.01	187.59	36.16	188.11	39.97
186.56	27.05	187.08	31.18	187.60	36.23	188.12	40.04
186.57	27.16	187.09	31.35	187.61	36.31	188.13	40.11
186.58	27.26	187.10	31.53	187.62	36.39	188.14	40.18
186.59	27.36	187.11	31.72	187.63	36.46	188.15	40.25

Stage-Discharge for Pond B-51: Basin #51 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
188.16	40.32	188.68	43.77	189.20	46.97	189.72	49.97
188.17	40.39	188.69	43.84	189.21	47.03	189.73	50.03
188.18	40.46	188.70	43.90	189.22	47.09	189.74	50.08
188.19	40.53	188.71	43.96	189.23	47.15	189.75	50.14
188.20	40.60	188.72	44.03	189.24	47.21	189.76	50.19
188.21	40.66	188.73	44.09	189.25	47.27	189.77	50.25
188.22	40.73	188.74	44.15	189.26	47.33	189.78	50.31
188.23	40.80	188.75	44.22	189.27	47.39	189.79	50.36
188.24	40.87	188.76	44.28	189.28	47.45	189.80	50.42
188.25	40.94	188.77	44.34	189.29	47.51	189.81	50.59
188.26	41.01	188.78	44.41	189.30	47.57	189.82	50.86
188.27	41.07	188.79	44.47	189.31	47.62	189.83	51.19
188.28	41.14	188.80	44.53	189.32	47.68		
188.29	41.21	188.81	44.60	189.33	47.74		
188.30	41.28	188.82	44.66	189.34	47.80		
188.31	41.35	188.83	44.72	189.35	47.86		
188.32	41.41	188.84	44.78	189.36	47.92		
188.33	41.48	188.85	44.85	189.37	47.97		
188.34	41.55	188.86	44.91	189.38	48.03		
188.35	41.61	188.87	44.97	189.39	48.09		
188.36	41.68	188.88	45.03	189.40	48.15		
188.37	41.75	188.89	45.09	189.41	48.21		
188.38	41.82	188.90	45.16	189.42	48.26		
188.39	41.88	188.91	45.22	189.43	48.32		
188.40	41.95	188.92	45.28	189.44	48.38		
188.41	42.02	188.93	45.34	189.45	48.44		
188.42	42.08	188.94	45.40	189.46	48.50		
188.43	42.15	188.95	45.46	189.47	48.55		
188.44	42.21	188.96	45.53	189.48	48.61		
188.45	42.28	188.97	45.59	189.49	48.67		
188.46	42.35	188.98	45.65	189.50	48.73		
188.47	42.41	188.99	45.71	189.51	48.78		
188.48	42.48	189.00	45.77	189.52	48.84		
188.49	42.54	189.01	45.83	189.53	48.90		
188.50	42.61	189.02	45.89	189.54	48.95		
188.51	42.67	189.03	45.95	189.55	49.01		
188.52	42.74	189.04	46.01	189.56	49.07		
188.53	42.81	189.05	46.07	189.57	49.13		
188.54	42.87	189.06	46.13	189.58	49.18		
188.55	42.94	189.07	46.20	189.59	49.24		
188.56	43.00	189.08	46.26	189.60	49.30		
188.57	43.07	189.09	46.32	189.61	49.35		
188.58	43.13	189.10	46.38	189.62	49.41		
188.59	43.20	189.11	46.44	189.63	49.47		
188.60	43.26	189.12	46.50	189.64	49.52		
188.61	43.32	189.13	46.56	189.65	49.58		
188.62	43.39	189.14	46.62	189.66	49.63		
188.63	43.45	189.15	46.68	189.67	49.69		
188.64	43.52	189.16	46.74	189.68	49.75		
188.65	43.58	189.17	46.80	189.69	49.80		
188.66	43.65	189.18	46.86	189.70	49.86		
188.67	43.71	189.19	46.92	189.71	49.92		

Stage-Area-Storage for Pond B-51: Basin #51

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.00	5,243	0	184.52	6,015	2,927
184.01	5,258	53	184.53	6,030	2,987
184.02	5,273	105	184.54	6,044	3,048
184.03	5,288	158	184.55	6,059	3,108
184.04	5,302	211	184.56	6,074	3,169
184.05	5,317	264	184.57	6,089	3,230
184.06	5,332	317	184.58	6,104	3,291
184.07	5,347	371	184.59	6,119	3,352
184.08	5,362	424	184.60	6,133	3,413
184.09	5,377	478	184.61	6,148	3,474
184.10	5,391	532	184.62	6,163	3,536
184.11	5,406	586	184.63	6,178	3,598
184.12	5,421	640	184.64	6,193	3,659
184.13	5,436	694	184.65	6,208	3,721
184.14	5,451	749	184.66	6,222	3,784
184.15	5,466	803	184.67	6,237	3,846
184.16	5,480	858	184.68	6,252	3,908
184.17	5,495	913	184.69	6,267	3,971
184.18	5,510	968	184.70	6,282	4,034
184.19	5,525	1,023	184.71	6,297	4,097
184.20	5,540	1,078	184.72	6,311	4,160
184.21	5,555	1,134	184.73	6,326	4,223
184.22	5,569	1,189	184.74	6,341	4,286
184.23	5,584	1,245	184.75	6,356	4,350
184.24	5,599	1,301	184.76	6,371	4,413
184.25	5,614	1,357	184.77	6,386	4,477
184.26	5,629	1,413	184.78	6,401	4,541
184.27	5,644	1,470	184.79	6,415	4,605
184.28	5,659	1,526	184.80	6,430	4,669
184.29	5,673	1,583	184.81	6,445	4,734
184.30	5,688	1,640	184.82	6,460	4,798
184.31	5,703	1,697	184.83	6,475	4,863
184.32	5,718	1,754	184.84	6,490	4,928
184.33	5,733	1,811	184.85	6,504	4,993
184.34	5,748	1,868	184.86	6,519	5,058
184.35	5,762	1,926	184.87	6,534	5,123
184.36	5,777	1,984	184.88	6,549	5,188
184.37	5,792	2,041	184.89	6,564	5,254
184.38	5,807	2,099	184.90	6,579	5,320
184.39	5,822	2,158	184.91	6,593	5,386
184.40	5,837	2,216	184.92	6,608	5,452
184.41	5,851	2,274	184.93	6,623	5,518
184.42	5,866	2,333	184.94	6,638	5,584
184.43	5,881	2,392	184.95	6,653	5,651
184.44	5,896	2,451	184.96	6,668	5,717
184.45	5,911	2,510	184.97	6,682	5,784
184.46	5,926	2,569	184.98	6,697	5,851
184.47	5,940	2,628	184.99	6,712	5,918
184.48	5,955	2,688	185.00	6,727	5,985
184.49	5,970	2,747	185.01	6,744	6,052
184.50	5,985	2,807	185.02	6,761	6,120
184.51	6,000	2,867	185.03	6,778	6,188

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.04	6,795	6,255	185.56	7,677	10,018
185.05	6,812	6,323	185.57	7,694	10,095
185.06	6,829	6,392	185.58	7,711	10,172
185.07	6,846	6,460	185.59	7,728	10,249
185.08	6,863	6,529	185.60	7,745	10,327
185.09	6,880	6,597	185.61	7,762	10,404
185.10	6,897	6,666	185.62	7,779	10,482
185.11	6,914	6,735	185.63	7,796	10,560
185.12	6,931	6,804	185.64	7,813	10,638
185.13	6,948	6,874	185.65	7,830	10,716
185.14	6,965	6,943	185.66	7,847	10,794
185.15	6,982	7,013	185.67	7,864	10,873
185.16	6,999	7,083	185.68	7,881	10,952
185.17	7,015	7,153	185.69	7,898	11,031
185.18	7,032	7,223	185.70	7,915	11,110
185.19	7,049	7,294	185.71	7,932	11,189
185.20	7,066	7,364	185.72	7,949	11,268
185.21	7,083	7,435	185.73	7,966	11,348
185.22	7,100	7,506	185.74	7,983	11,428
185.23	7,117	7,577	185.75	8,000	11,508
185.24	7,134	7,648	185.76	8,017	11,588
185.25	7,151	7,720	185.77	8,034	11,668
185.26	7,168	7,791	185.78	8,051	11,748
185.27	7,185	7,863	185.79	8,068	11,829
185.28	7,202	7,935	185.80	8,085	11,910
185.29	7,219	8,007	185.81	8,102	11,991
185.30	7,236	8,079	185.82	8,119	12,072
185.31	7,253	8,152	185.83	8,136	12,153
185.32	7,270	8,225	185.84	8,152	12,234
185.33	7,287	8,297	185.85	8,169	12,316
185.34	7,304	8,370	185.86	8,186	12,398
185.35	7,321	8,443	185.87	8,203	12,480
185.36	7,338	8,517	185.88	8,220	12,562
185.37	7,355	8,590	185.89	8,237	12,644
185.38	7,372	8,664	185.90	8,254	12,727
185.39	7,389	8,738	185.91	8,271	12,809
185.40	7,406	8,812	185.92	8,288	12,892
185.41	7,423	8,886	185.93	8,305	12,975
185.42	7,440	8,960	185.94	8,322	13,058
185.43	7,457	9,034	185.95	8,339	13,141
185.44	7,474	9,109	185.96	8,356	13,225
185.45	7,491	9,184	185.97	8,373	13,309
185.46	7,508	9,259	185.98	8,390	13,392
185.47	7,525	9,334	185.99	8,407	13,476
185.48	7,542	9,409	186.00	8,424	13,561
185.49	7,559	9,485	186.01	8,441	13,645
185.50	7,576	9,561	186.02	8,457	13,729
185.51	7,592	9,636	186.03	8,474	13,814
185.52	7,609	9,712	186.04	8,490	13,899
185.53	7,626	9,789	186.05	8,507	13,984
185.54	7,643	9,865	186.06	8,524	14,069
185.55	7,660	9,942	186.07	8,540	14,154

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.08	8,557	14,240	186.60	9,421	18,914
186.09	8,573	14,325	186.61	9,437	19,008
186.10	8,590	14,411	186.62	9,454	19,103
186.11	8,607	14,497	186.63	9,470	19,197
186.12	8,623	14,583	186.64	9,487	19,292
186.13	8,640	14,670	186.65	9,504	19,387
186.14	8,657	14,756	186.66	9,520	19,482
186.15	8,673	14,843	186.67	9,537	19,577
186.16	8,690	14,930	186.68	9,553	19,673
186.17	8,706	15,017	186.69	9,570	19,768
186.18	8,723	15,104	186.70	9,587	19,864
186.19	8,740	15,191	186.71	9,603	19,960
186.20	8,756	15,279	186.72	9,620	20,056
186.21	8,773	15,366	186.73	9,637	20,153
186.22	8,789	15,454	186.74	9,653	20,249
186.23	8,806	15,542	186.75	9,670	20,346
186.24	8,823	15,630	186.76	9,686	20,442
186.25	8,839	15,718	186.77	9,703	20,539
186.26	8,856	15,807	186.78	9,720	20,636
186.27	8,872	15,896	186.79	9,736	20,734
186.28	8,889	15,984	186.80	9,753	20,831
186.29	8,906	16,073	186.81	9,769	20,929
186.30	8,922	16,162	186.82	9,786	21,027
186.31	8,939	16,252	186.83	9,803	21,125
186.32	8,956	16,341	186.84	9,819	21,223
186.33	8,972	16,431	186.85	9,836	21,321
186.34	8,989	16,521	186.86	9,852	21,419
186.35	9,005	16,611	186.87	9,869	21,518
186.36	9,022	16,701	186.88	9,886	21,617
186.37	9,039	16,791	186.89	9,902	21,716
186.38	9,055	16,882	186.90	9,919	21,815
186.39	9,072	16,972	186.91	9,936	21,914
186.40	9,088	17,063	186.92	9,952	22,014
186.41	9,105	17,154	186.93	9,969	22,113
186.42	9,122	17,245	186.94	9,985	22,213
186.43	9,138	17,336	186.95	10,002	22,313
186.44	9,155	17,428	186.96	10,019	22,413
186.45	9,171	17,519	186.97	10,035	22,513
186.46	9,188	17,611	186.98	10,052	22,614
186.47	9,205	17,703	186.99	10,068	22,714
186.48	9,221	17,795	187.00	10,085	22,815
186.49	9,238	17,888	187.01	10,102	22,916
186.50	9,255	17,980	187.02	10,119	23,017
186.51	9,271	18,073	187.03	10,137	23,118
186.52	9,288	18,166	187.04	10,154	23,220
186.53	9,304	18,259	187.05	10,171	23,321
186.54	9,321	18,352	187.06	10,188	23,423
186.55	9,338	18,445	187.07	10,205	23,525
186.56	9,354	18,538	187.08	10,222	23,627
186.57	9,371	18,632	187.09	10,240	23,730
186.58	9,387	18,726	187.10	10,257	23,832
186.59	9,404	18,820	187.11	10,274	23,935

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.12	10,291	24,038	187.64	11,184	29,621
187.13	10,308	24,141	187.65	11,201	29,733
187.14	10,325	24,244	187.66	11,218	29,845
187.15	10,343	24,347	187.67	11,235	29,957
187.16	10,360	24,451	187.68	11,253	30,070
187.17	10,377	24,554	187.69	11,270	30,182
187.18	10,394	24,658	187.70	11,287	30,295
187.19	10,411	24,762	187.71	11,304	30,408
187.20	10,428	24,866	187.72	11,321	30,521
187.21	10,446	24,971	187.73	11,338	30,635
187.22	10,463	25,075	187.74	11,356	30,748
187.23	10,480	25,180	187.75	11,373	30,862
187.24	10,497	25,285	187.76	11,390	30,975
187.25	10,514	25,390	187.77	11,407	31,089
187.26	10,531	25,495	187.78	11,424	31,204
187.27	10,549	25,601	187.79	11,441	31,318
187.28	10,566	25,706	187.80	11,459	31,432
187.29	10,583	25,812	187.81	11,476	31,547
187.30	10,600	25,918	187.82	11,493	31,662
187.31	10,617	26,024	187.83	11,510	31,777
187.32	10,634	26,130	187.84	11,527	31,892
187.33	10,652	26,237	187.85	11,544	32,008
187.34	10,669	26,343	187.86	11,562	32,123
187.35	10,686	26,450	187.87	11,579	32,239
187.36	10,703	26,557	187.88	11,596	32,355
187.37	10,720	26,664	187.89	11,613	32,471
187.38	10,737	26,771	187.90	11,630	32,587
187.39	10,755	26,879	187.91	11,647	32,703
187.40	10,772	26,986	187.92	11,665	32,820
187.41	10,789	27,094	187.93	11,682	32,937
187.42	10,806	27,202	187.94	11,699	33,053
187.43	10,823	27,310	187.95	11,716	33,171
187.44	10,840	27,419	187.96	11,733	33,288
187.45	10,858	27,527	187.97	11,750	33,405
187.46	10,875	27,636	187.98	11,768	33,523
187.47	10,892	27,745	187.99	11,785	33,641
187.48	10,909	27,854	188.00	11,802	33,759
187.49	10,926	27,963	188.01	11,820	33,877
187.50	10,944	28,072	188.02	11,837	33,995
187.51	10,961	28,182	188.03	11,855	34,113
187.52	10,978	28,291	188.04	11,873	34,232
187.53	10,995	28,401	188.05	11,891	34,351
187.54	11,012	28,511	188.06	11,908	34,470
187.55	11,029	28,621	188.07	11,926	34,589
187.56	11,047	28,732	188.08	11,944	34,708
187.57	11,064	28,842	188.09	11,962	34,828
187.58	11,081	28,953	188.10	11,979	34,948
187.59	11,098	29,064	188.11	11,997	35,067
187.60	11,115	29,175	188.12	12,015	35,188
187.61	11,132	29,286	188.13	12,033	35,308
187.62	11,150	29,398	188.14	12,050	35,428
187.63	11,167	29,509	188.15	12,068	35,549

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.16	12,086	35,670	188.68	13,008	42,194
188.17	12,104	35,790	188.69	13,026	42,324
188.18	12,121	35,912	188.70	13,044	42,455
188.19	12,139	36,033	188.71	13,062	42,585
188.20	12,157	36,154	188.72	13,079	42,716
188.21	12,175	36,276	188.73	13,097	42,847
188.22	12,192	36,398	188.74	13,115	42,978
188.23	12,210	36,520	188.75	13,133	43,109
188.24	12,228	36,642	188.76	13,150	43,240
188.25	12,246	36,764	188.77	13,168	43,372
188.26	12,263	36,887	188.78	13,186	43,504
188.27	12,281	37,010	188.79	13,203	43,636
188.28	12,299	37,133	188.80	13,221	43,768
188.29	12,316	37,256	188.81	13,239	43,900
188.30	12,334	37,379	188.82	13,257	44,033
188.31	12,352	37,502	188.83	13,274	44,165
188.32	12,370	37,626	188.84	13,292	44,298
188.33	12,387	37,750	188.85	13,310	44,431
188.34	12,405	37,874	188.86	13,328	44,564
188.35	12,423	37,998	188.87	13,345	44,698
188.36	12,441	38,122	188.88	13,363	44,831
188.37	12,458	38,247	188.89	13,381	44,965
188.38	12,476	38,371	188.90	13,399	45,099
188.39	12,494	38,496	188.91	13,416	45,233
188.40	12,512	38,621	188.92	13,434	45,367
188.41	12,529	38,746	188.93	13,452	45,502
188.42	12,547	38,872	188.94	13,470	45,636
188.43	12,565	38,997	188.95	13,487	45,771
188.44	12,583	39,123	188.96	13,505	45,906
188.45	12,600	39,249	188.97	13,523	46,041
188.46	12,618	39,375	188.98	13,541	46,176
188.47	12,636	39,501	188.99	13,558	46,312
188.48	12,654	39,628	189.00	13,576	46,448
188.49	12,671	39,754	189.01	13,594	46,583
188.50	12,689	39,881	189.02	13,613	46,719
188.51	12,707	40,008	189.03	13,631	46,856
188.52	12,724	40,135	189.04	13,649	46,992
188.53	12,742	40,263	189.05	13,668	47,129
188.54	12,760	40,390	189.06	13,686	47,265
188.55	12,778	40,518	189.07	13,704	47,402
188.56	12,795	40,646	189.08	13,723	47,539
188.57	12,813	40,774	189.09	13,741	47,677
188.58	12,831	40,902	189.10	13,759	47,814
188.59	12,849	41,030	189.11	13,778	47,952
188.60	12,866	41,159	189.12	13,796	48,090
188.61	12,884	41,288	189.13	13,814	48,228
188.62	12,902	41,417	189.14	13,833	48,366
188.63	12,920	41,546	189.15	13,851	48,505
188.64	12,937	41,675	189.16	13,869	48,643
188.65	12,955	41,805	189.17	13,888	48,782
188.66	12,973	41,934	189.18	13,906	48,921
188.67	12,991	42,064	189.19	13,924	49,060

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.20	13,943	49,199	189.72	14,896	56,698
189.21	13,961	49,339	189.73	14,915	56,847
189.22	13,979	49,479	189.74	14,933	56,996
189.23	13,998	49,618	189.75	14,951	57,145
189.24	14,016	49,759	189.76	14,970	57,295
189.25	14,034	49,899	189.77	14,988	57,445
189.26	14,053	50,039	189.78	15,006	57,595
189.27	14,071	50,180	189.79	15,025	57,745
189.28	14,089	50,321	189.80	15,043	57,895
189.29	14,108	50,462	189.81	15,061	58,046
189.30	14,126	50,603	189.82	15,080	58,196
189.31	14,144	50,744	189.83	15,098	58,347
189.32	14,163	50,886			
189.33	14,181	51,027			
189.34	14,199	51,169			
189.35	14,218	51,311			
189.36	14,236	51,454			
189.37	14,254	51,596			
189.38	14,273	51,739			
189.39	14,291	51,882			
189.40	14,309	52,025			
189.41	14,328	52,168			
189.42	14,346	52,311			
189.43	14,365	52,455			
189.44	14,383	52,598			
189.45	14,401	52,742			
189.46	14,420	52,886			
189.47	14,438	53,031			
189.48	14,456	53,175			
189.49	14,475	53,320			
189.50	14,493	53,465			
189.51	14,511	53,610			
189.52	14,530	53,755			
189.53	14,548	53,900			
189.54	14,566	54,046			
189.55	14,585	54,192			
189.56	14,603	54,338			
189.57	14,621	54,484			
189.58	14,640	54,630			
189.59	14,658	54,777			
189.60	14,676	54,923			
189.61	14,695	55,070			
189.62	14,713	55,217			
189.63	14,731	55,364			
189.64	14,750	55,512			
189.65	14,768	55,659			
189.66	14,786	55,807			
189.67	14,805	55,955			
189.68	14,823	56,103			
189.69	14,841	56,251			
189.70	14,860	56,400			
189.71	14,878	56,549			

Summary for Pond B-52: Basin #52

Inflow Area = 1.423 ac, 34.43% Impervious, Inflow Depth = 8.96" for Future 100 yr event
 Inflow = 12.99 cfs @ 12.17 hrs, Volume= 1.062 af
 Outflow = 9.08 cfs @ 12.27 hrs, Volume= 1.014 af, Atten= 30%, Lag= 6.0 min
 Primary = 9.08 cfs @ 12.27 hrs, Volume= 1.014 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 196.76' @ 12.27 hrs Surf.Area= 2,638 sf Storage= 5,605 cf

Plug-Flow detention time= 55.0 min calculated for 1.013 af (95% of inflow)
 Center-of-Mass det. time= 28.5 min (809.3 - 780.8)

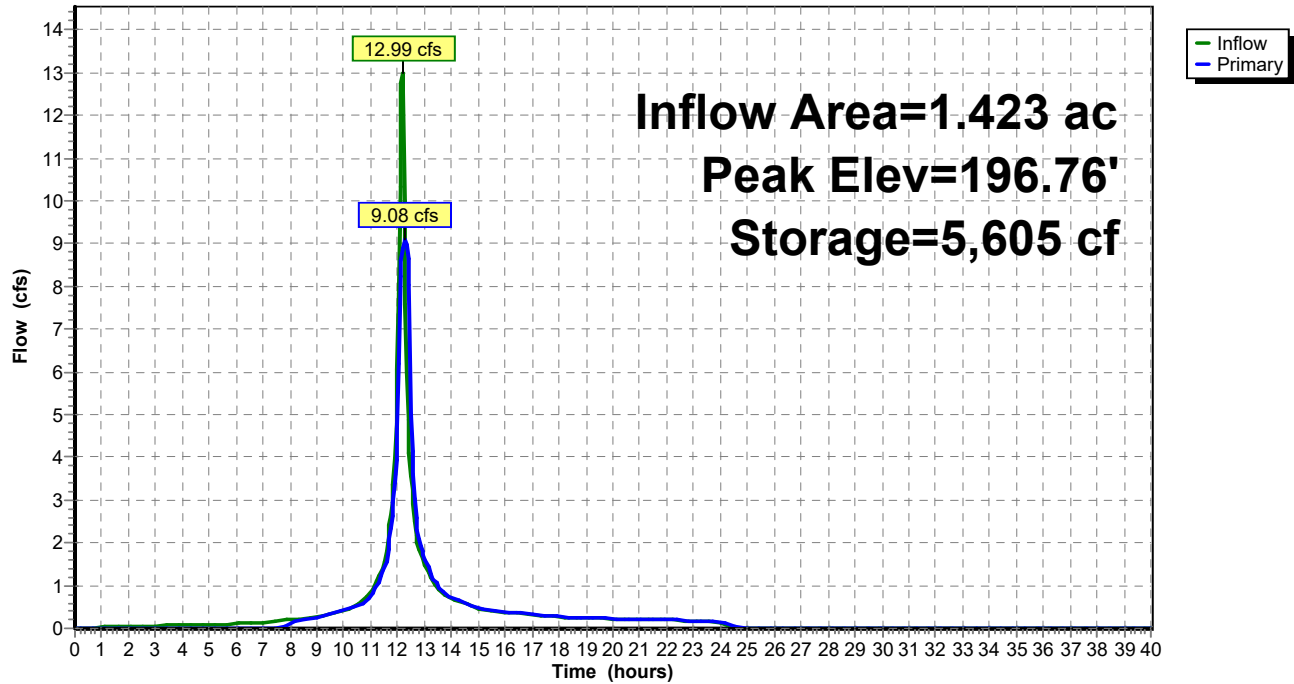
Volume	Invert	Avail.Storage	Storage Description
#1	193.00'	7,751 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
193.00	474	0	0
194.00	970	722	722
195.00	1,523	1,247	1,969
196.00	2,133	1,828	3,797
197.00	2,799	2,466	6,263
197.50	3,154	1,488	7,751

Device	Routing	Invert	Outlet Devices
#1	Primary	192.00'	15.0" Round Culvert L= 163.0' Ke= 0.500 Inlet / Outlet Invert= 192.00' / 191.00' S= 0.0061 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	195.08'	36.0" W x 6.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	195.72'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	197.25'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=9.06 cfs @ 12.27 hrs HW=196.74' (Free Discharge)

1=Culvert (Barrel Controls 9.06 cfs @ 7.38 fps)
 2=Orifice/Grate (Passes < 8.56 cfs potential flow)
 3=Sharp-Crested Rectangular Weir (Passes < 12.73 cfs potential flow)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-52: Basin #52**Hydrograph**

Stage-Discharge for Pond B-52: Basin #52

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.00	0.00	193.52	0.00	194.04	0.00	194.56	0.00
193.01	0.00	193.53	0.00	194.05	0.00	194.57	0.00
193.02	0.00	193.54	0.00	194.06	0.00	194.58	0.00
193.03	0.00	193.55	0.00	194.07	0.00	194.59	0.00
193.04	0.00	193.56	0.00	194.08	0.00	194.60	0.00
193.05	0.00	193.57	0.00	194.09	0.00	194.61	0.00
193.06	0.00	193.58	0.00	194.10	0.00	194.62	0.00
193.07	0.00	193.59	0.00	194.11	0.00	194.63	0.00
193.08	0.00	193.60	0.00	194.12	0.00	194.64	0.00
193.09	0.00	193.61	0.00	194.13	0.00	194.65	0.00
193.10	0.00	193.62	0.00	194.14	0.00	194.66	0.00
193.11	0.00	193.63	0.00	194.15	0.00	194.67	0.00
193.12	0.00	193.64	0.00	194.16	0.00	194.68	0.00
193.13	0.00	193.65	0.00	194.17	0.00	194.69	0.00
193.14	0.00	193.66	0.00	194.18	0.00	194.70	0.00
193.15	0.00	193.67	0.00	194.19	0.00	194.71	0.00
193.16	0.00	193.68	0.00	194.20	0.00	194.72	0.00
193.17	0.00	193.69	0.00	194.21	0.00	194.73	0.00
193.18	0.00	193.70	0.00	194.22	0.00	194.74	0.00
193.19	0.00	193.71	0.00	194.23	0.00	194.75	0.00
193.20	0.00	193.72	0.00	194.24	0.00	194.76	0.00
193.21	0.00	193.73	0.00	194.25	0.00	194.77	0.00
193.22	0.00	193.74	0.00	194.26	0.00	194.78	0.00
193.23	0.00	193.75	0.00	194.27	0.00	194.79	0.00
193.24	0.00	193.76	0.00	194.28	0.00	194.80	0.00
193.25	0.00	193.77	0.00	194.29	0.00	194.81	0.00
193.26	0.00	193.78	0.00	194.30	0.00	194.82	0.00
193.27	0.00	193.79	0.00	194.31	0.00	194.83	0.00
193.28	0.00	193.80	0.00	194.32	0.00	194.84	0.00
193.29	0.00	193.81	0.00	194.33	0.00	194.85	0.00
193.30	0.00	193.82	0.00	194.34	0.00	194.86	0.00
193.31	0.00	193.83	0.00	194.35	0.00	194.87	0.00
193.32	0.00	193.84	0.00	194.36	0.00	194.88	0.00
193.33	0.00	193.85	0.00	194.37	0.00	194.89	0.00
193.34	0.00	193.86	0.00	194.38	0.00	194.90	0.00
193.35	0.00	193.87	0.00	194.39	0.00	194.91	0.00
193.36	0.00	193.88	0.00	194.40	0.00	194.92	0.00
193.37	0.00	193.89	0.00	194.41	0.00	194.93	0.00
193.38	0.00	193.90	0.00	194.42	0.00	194.94	0.00
193.39	0.00	193.91	0.00	194.43	0.00	194.95	0.00
193.40	0.00	193.92	0.00	194.44	0.00	194.96	0.00
193.41	0.00	193.93	0.00	194.45	0.00	194.97	0.00
193.42	0.00	193.94	0.00	194.46	0.00	194.98	0.00
193.43	0.00	193.95	0.00	194.47	0.00	194.99	0.00
193.44	0.00	193.96	0.00	194.48	0.00	195.00	0.00
193.45	0.00	193.97	0.00	194.49	0.00	195.01	0.00
193.46	0.00	193.98	0.00	194.50	0.00	195.02	0.00
193.47	0.00	193.99	0.00	194.51	0.00	195.03	0.00
193.48	0.00	194.00	0.00	194.52	0.00	195.04	0.00
193.49	0.00	194.01	0.00	194.53	0.00	195.05	0.00
193.50	0.00	194.02	0.00	194.54	0.00	195.06	0.00
193.51	0.00	194.03	0.00	194.55	0.00	195.07	0.00

Stage-Discharge for Pond B-52: Basin #52 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
195.08	0.00	195.60	3.58	196.12	8.41	196.64	8.96
195.09	0.01	195.61	3.67	196.13	8.43	196.65	8.97
195.10	0.03	195.62	3.74	196.14	8.44	196.66	8.98
195.11	0.05	195.63	3.82	196.15	8.45	196.67	8.99
195.12	0.08	195.64	3.89	196.16	8.46	196.68	9.00
195.13	0.11	195.65	3.97	196.17	8.47	196.69	9.01
195.14	0.14	195.66	4.04	196.18	8.48	196.70	9.02
195.15	0.18	195.67	4.10	196.19	8.49	196.71	9.03
195.16	0.22	195.68	4.17	196.20	8.50	196.72	9.04
195.17	0.26	195.69	4.24	196.21	8.51	196.73	9.05
195.18	0.30	195.70	4.30	196.22	8.52	196.74	9.06
195.19	0.35	195.71	4.36	196.23	8.53	196.75	9.07
195.20	0.40	195.72	4.43	196.24	8.54	196.76	9.08
195.21	0.45	195.73	4.50	196.25	8.55	196.77	9.09
195.22	0.50	195.74	4.58	196.26	8.57	196.78	9.10
195.23	0.56	195.75	4.67	196.27	8.58	196.79	9.11
195.24	0.62	195.76	4.77	196.28	8.59	196.80	9.12
195.25	0.67	195.77	4.87	196.29	8.60	196.81	9.13
195.26	0.74	195.78	4.97	196.30	8.61	196.82	9.14
195.27	0.80	195.79	5.08	196.31	8.62	196.83	9.15
195.28	0.86	195.80	5.18	196.32	8.63	196.84	9.16
195.29	0.93	195.81	5.30	196.33	8.64	196.85	9.17
195.30	0.99	195.82	5.41	196.34	8.65	196.86	9.18
195.31	1.06	195.83	5.53	196.35	8.66	196.87	9.19
195.32	1.13	195.84	5.64	196.36	8.67	196.88	9.20
195.33	1.20	195.85	5.76	196.37	8.68	196.89	9.21
195.34	1.28	195.86	5.89	196.38	8.69	196.90	9.22
195.35	1.35	195.87	6.01	196.39	8.70	196.91	9.23
195.36	1.43	195.88	6.14	196.40	8.71	196.92	9.24
195.37	1.50	195.89	6.27	196.41	8.72	196.93	9.25
195.38	1.58	195.90	6.40	196.42	8.73	196.94	9.26
195.39	1.66	195.91	6.53	196.43	8.75	196.95	9.27
195.40	1.74	195.92	6.66	196.44	8.76	196.96	9.28
195.41	1.83	195.93	6.80	196.45	8.77	196.97	9.29
195.42	1.91	195.94	6.93	196.46	8.78	196.98	9.30
195.43	1.99	195.95	7.07	196.47	8.79	196.99	9.31
195.44	2.08	195.96	7.21	196.48	8.80	197.00	9.32
195.45	2.17	195.97	7.35	196.49	8.81	197.01	9.33
195.46	2.26	195.98	7.50	196.50	8.82	197.02	9.34
195.47	2.35	195.99	7.64	196.51	8.83	197.03	9.35
195.48	2.44	196.00	7.79	196.52	8.84	197.04	9.36
195.49	2.53	196.01	7.93	196.53	8.85	197.05	9.37
195.50	2.62	196.02	8.08	196.54	8.86	197.06	9.38
195.51	2.72	196.03	8.23	196.55	8.87	197.07	9.39
195.52	2.81	196.04	8.33	196.56	8.88	197.08	9.40
195.53	2.91	196.05	8.34	196.57	8.89	197.09	9.41
195.54	3.00	196.06	8.35	196.58	8.90	197.10	9.42
195.55	3.10	196.07	8.36	196.59	8.91	197.11	9.43
195.56	3.20	196.08	8.37	196.60	8.92	197.12	9.44
195.57	3.30	196.09	8.38	196.61	8.93	197.13	9.45
195.58	3.40	196.10	8.39	196.62	8.94	197.14	9.46
195.59	3.50	196.11	8.40	196.63	8.95	197.15	9.47

Stage-Discharge for Pond B-52: Basin #52 (continued)

Elevation (feet)	Primary (cfs)
197.16	9.48
197.17	9.49
197.18	9.50
197.19	9.51
197.20	9.52
197.21	9.53
197.22	9.54
197.23	9.55
197.24	9.55
197.25	9.56
197.26	9.69
197.27	9.91
197.28	10.20
197.29	10.54
197.30	10.92
197.31	11.35
197.32	11.81
197.33	12.30
197.34	12.82
197.35	13.38
197.36	13.96
197.37	14.57
197.38	15.21
197.39	15.87
197.40	16.55
197.41	17.26
197.42	17.99
197.43	18.75
197.44	19.52
197.45	20.32
197.46	21.17
197.47	22.06
197.48	22.96
197.49	23.90
197.50	24.85

Stage-Area-Storage for Pond B-52: Basin #52

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.00	474	0	193.52	732	314
193.01	479	5	193.53	737	321
193.02	484	10	193.54	742	328
193.03	489	14	193.55	747	336
193.04	494	19	193.56	752	343
193.05	499	24	193.57	757	351
193.06	504	29	193.58	762	358
193.07	509	34	193.59	767	366
193.08	514	40	193.60	772	374
193.09	519	45	193.61	777	381
193.10	524	50	193.62	782	389
193.11	529	55	193.63	786	397
193.12	534	60	193.64	791	405
193.13	538	66	193.65	796	413
193.14	543	71	193.66	801	421
193.15	548	77	193.67	806	429
193.16	553	82	193.68	811	437
193.17	558	88	193.69	816	445
193.18	563	93	193.70	821	453
193.19	568	99	193.71	826	462
193.20	573	105	193.72	831	470
193.21	578	110	193.73	836	478
193.22	583	116	193.74	841	487
193.23	588	122	193.75	846	495
193.24	593	128	193.76	851	503
193.25	598	134	193.77	856	512
193.26	603	140	193.78	861	521
193.27	608	146	193.79	866	529
193.28	613	152	193.80	871	538
193.29	618	158	193.81	876	547
193.30	623	165	193.82	881	555
193.31	628	171	193.83	886	564
193.32	633	177	193.84	891	573
193.33	638	183	193.85	896	582
193.34	643	190	193.86	901	591
193.35	648	196	193.87	906	600
193.36	653	203	193.88	910	609
193.37	658	209	193.89	915	618
193.38	662	216	193.90	920	627
193.39	667	223	193.91	925	637
193.40	672	229	193.92	930	646
193.41	677	236	193.93	935	655
193.42	682	243	193.94	940	665
193.43	687	250	193.95	945	674
193.44	692	257	193.96	950	684
193.45	697	264	193.97	955	693
193.46	702	271	193.98	960	703
193.47	707	278	193.99	965	712
193.48	712	285	194.00	970	722
193.49	717	292	194.01	976	732
193.50	722	299	194.02	981	742
193.51	727	306	194.03	987	751

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.04	992	761	194.56	1,280	1,352
194.05	998	771	194.57	1,285	1,365
194.06	1,003	781	194.58	1,291	1,378
194.07	1,009	791	194.59	1,296	1,391
194.08	1,014	801	194.60	1,302	1,404
194.09	1,020	812	194.61	1,307	1,417
194.10	1,025	822	194.62	1,313	1,430
194.11	1,031	832	194.63	1,318	1,443
194.12	1,036	842	194.64	1,324	1,456
194.13	1,042	853	194.65	1,329	1,469
194.14	1,047	863	194.66	1,335	1,483
194.15	1,053	874	194.67	1,341	1,496
194.16	1,058	884	194.68	1,346	1,509
194.17	1,064	895	194.69	1,352	1,523
194.18	1,070	906	194.70	1,357	1,536
194.19	1,075	916	194.71	1,363	1,550
194.20	1,081	927	194.72	1,368	1,564
194.21	1,086	938	194.73	1,374	1,577
194.22	1,092	949	194.74	1,379	1,591
194.23	1,097	960	194.75	1,385	1,605
194.24	1,103	971	194.76	1,390	1,619
194.25	1,108	982	194.77	1,396	1,633
194.26	1,114	993	194.78	1,401	1,647
194.27	1,119	1,004	194.79	1,407	1,661
194.28	1,125	1,015	194.80	1,412	1,675
194.29	1,130	1,027	194.81	1,418	1,689
194.30	1,136	1,038	194.82	1,423	1,703
194.31	1,141	1,049	194.83	1,429	1,718
194.32	1,147	1,061	194.84	1,435	1,732
194.33	1,152	1,072	194.85	1,440	1,746
194.34	1,158	1,084	194.86	1,446	1,761
194.35	1,164	1,095	194.87	1,451	1,775
194.36	1,169	1,107	194.88	1,457	1,790
194.37	1,175	1,119	194.89	1,462	1,804
194.38	1,180	1,131	194.90	1,468	1,819
194.39	1,186	1,142	194.91	1,473	1,834
194.40	1,191	1,154	194.92	1,479	1,848
194.41	1,197	1,166	194.93	1,484	1,863
194.42	1,202	1,178	194.94	1,490	1,878
194.43	1,208	1,190	194.95	1,495	1,893
194.44	1,213	1,202	194.96	1,501	1,908
194.45	1,219	1,214	194.97	1,506	1,923
194.46	1,224	1,227	194.98	1,512	1,938
194.47	1,230	1,239	194.99	1,517	1,953
194.48	1,235	1,251	195.00	1,523	1,969
194.49	1,241	1,264	195.01	1,529	1,984
194.50	1,247	1,276	195.02	1,535	1,999
194.51	1,252	1,289	195.03	1,541	2,014
194.52	1,258	1,301	195.04	1,547	2,030
194.53	1,263	1,314	195.05	1,554	2,045
194.54	1,269	1,326	195.06	1,560	2,061
194.55	1,274	1,339	195.07	1,566	2,077

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.08	1,572	2,092	195.60	1,889	2,992
195.09	1,578	2,108	195.61	1,895	3,011
195.10	1,584	2,124	195.62	1,901	3,030
195.11	1,590	2,140	195.63	1,907	3,049
195.12	1,596	2,156	195.64	1,913	3,068
195.13	1,602	2,172	195.65	1,920	3,087
195.14	1,608	2,188	195.66	1,926	3,107
195.15	1,615	2,204	195.67	1,932	3,126
195.16	1,621	2,220	195.68	1,938	3,145
195.17	1,627	2,236	195.69	1,944	3,165
195.18	1,633	2,253	195.70	1,950	3,184
195.19	1,639	2,269	195.71	1,956	3,204
195.20	1,645	2,285	195.72	1,962	3,223
195.21	1,651	2,302	195.73	1,968	3,243
195.22	1,657	2,318	195.74	1,974	3,263
195.23	1,663	2,335	195.75	1,981	3,282
195.24	1,669	2,352	195.76	1,987	3,302
195.25	1,676	2,368	195.77	1,993	3,322
195.26	1,682	2,385	195.78	1,999	3,342
195.27	1,688	2,402	195.79	2,005	3,362
195.28	1,694	2,419	195.80	2,011	3,382
195.29	1,700	2,436	195.81	2,017	3,402
195.30	1,706	2,453	195.82	2,023	3,422
195.31	1,712	2,470	195.83	2,029	3,443
195.32	1,718	2,487	195.84	2,035	3,463
195.33	1,724	2,504	195.85	2,041	3,483
195.34	1,730	2,522	195.86	2,048	3,504
195.35	1,736	2,539	195.87	2,054	3,524
195.36	1,743	2,556	195.88	2,060	3,545
195.37	1,749	2,574	195.89	2,066	3,566
195.38	1,755	2,591	195.90	2,072	3,586
195.39	1,761	2,609	195.91	2,078	3,607
195.40	1,767	2,627	195.92	2,084	3,628
195.41	1,773	2,644	195.93	2,090	3,649
195.42	1,779	2,662	195.94	2,096	3,670
195.43	1,785	2,680	195.95	2,102	3,691
195.44	1,791	2,698	195.96	2,109	3,712
195.45	1,797	2,716	195.97	2,115	3,733
195.46	1,804	2,734	195.98	2,121	3,754
195.47	1,810	2,752	195.99	2,127	3,775
195.48	1,816	2,770	196.00	2,133	3,797
195.49	1,822	2,788	196.01	2,140	3,818
195.50	1,828	2,806	196.02	2,146	3,839
195.51	1,834	2,825	196.03	2,153	3,861
195.52	1,840	2,843	196.04	2,160	3,882
195.53	1,846	2,861	196.05	2,166	3,904
195.54	1,852	2,880	196.06	2,173	3,926
195.55	1,859	2,898	196.07	2,180	3,947
195.56	1,865	2,917	196.08	2,186	3,969
195.57	1,871	2,936	196.09	2,193	3,991
195.58	1,877	2,954	196.10	2,200	4,013
195.59	1,883	2,973	196.11	2,206	4,035

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.12	2,213	4,057	196.64	2,559	5,298
196.13	2,220	4,079	196.65	2,566	5,324
196.14	2,226	4,102	196.66	2,573	5,349
196.15	2,233	4,124	196.67	2,579	5,375
196.16	2,240	4,146	196.68	2,586	5,401
196.17	2,246	4,169	196.69	2,593	5,427
196.18	2,253	4,191	196.70	2,599	5,453
196.19	2,260	4,214	196.71	2,606	5,479
196.20	2,266	4,236	196.72	2,613	5,505
196.21	2,273	4,259	196.73	2,619	5,531
196.22	2,280	4,282	196.74	2,626	5,557
196.23	2,286	4,305	196.75	2,633	5,584
196.24	2,293	4,328	196.76	2,639	5,610
196.25	2,300	4,351	196.77	2,646	5,636
196.26	2,306	4,374	196.78	2,652	5,663
196.27	2,313	4,397	196.79	2,659	5,689
196.28	2,319	4,420	196.80	2,666	5,716
196.29	2,326	4,443	196.81	2,672	5,743
196.30	2,333	4,466	196.82	2,679	5,769
196.31	2,339	4,490	196.83	2,686	5,796
196.32	2,346	4,513	196.84	2,692	5,823
196.33	2,353	4,537	196.85	2,699	5,850
196.34	2,359	4,560	196.86	2,706	5,877
196.35	2,366	4,584	196.87	2,712	5,904
196.36	2,373	4,608	196.88	2,719	5,931
196.37	2,379	4,631	196.89	2,726	5,959
196.38	2,386	4,655	196.90	2,732	5,986
196.39	2,393	4,679	196.91	2,739	6,013
196.40	2,399	4,703	196.92	2,746	6,041
196.41	2,406	4,727	196.93	2,752	6,068
196.42	2,413	4,751	196.94	2,759	6,096
196.43	2,419	4,775	196.95	2,766	6,123
196.44	2,426	4,799	196.96	2,772	6,151
196.45	2,433	4,824	196.97	2,779	6,179
196.46	2,439	4,848	196.98	2,786	6,207
196.47	2,446	4,873	196.99	2,792	6,235
196.48	2,453	4,897	197.00	2,799	6,263
196.49	2,459	4,922	197.01	2,806	6,291
196.50	2,466	4,946	197.02	2,813	6,319
196.51	2,473	4,971	197.03	2,820	6,347
196.52	2,479	4,996	197.04	2,827	6,375
196.53	2,486	5,021	197.05	2,835	6,403
196.54	2,493	5,045	197.06	2,842	6,432
196.55	2,499	5,070	197.07	2,849	6,460
196.56	2,506	5,095	197.08	2,856	6,489
196.57	2,513	5,121	197.09	2,863	6,517
196.58	2,519	5,146	197.10	2,870	6,546
196.59	2,526	5,171	197.11	2,877	6,575
196.60	2,533	5,196	197.12	2,884	6,603
196.61	2,539	5,222	197.13	2,891	6,632
196.62	2,546	5,247	197.14	2,898	6,661
196.63	2,553	5,272	197.15	2,906	6,690

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.16	2,913	6,719
197.17	2,920	6,749
197.18	2,927	6,778
197.19	2,934	6,807
197.20	2,941	6,836
197.21	2,948	6,866
197.22	2,955	6,895
197.23	2,962	6,925
197.24	2,969	6,955
197.25	2,977	6,984
197.26	2,984	7,014
197.27	2,991	7,044
197.28	2,998	7,074
197.29	3,005	7,104
197.30	3,012	7,134
197.31	3,019	7,164
197.32	3,026	7,195
197.33	3,033	7,225
197.34	3,040	7,255
197.35	3,047	7,286
197.36	3,055	7,316
197.37	3,062	7,347
197.38	3,069	7,377
197.39	3,076	7,408
197.40	3,083	7,439
197.41	3,090	7,470
197.42	3,097	7,501
197.43	3,104	7,532
197.44	3,111	7,563
197.45	3,118	7,594
197.46	3,126	7,625
197.47	3,133	7,656
197.48	3,140	7,688
197.49	3,147	7,719
197.50	3,154	7,751

Summary for Pond B-53: Basin #53

Inflow Area = 2.540 ac, 47.80% Impervious, Inflow Depth = 9.37" for Future 100 yr event
 Inflow = 23.78 cfs @ 12.17 hrs, Volume= 1.984 af
 Outflow = 19.30 cfs @ 12.25 hrs, Volume= 1.871 af, Atten= 19%, Lag= 4.5 min
 Primary = 19.30 cfs @ 12.25 hrs, Volume= 1.871 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 204.13' @ 12.25 hrs Surf.Area= 6,759 sf Storage= 18,233 cf

Plug-Flow detention time= 86.6 min calculated for 1.871 af (94% of inflow)
 Center-of-Mass det. time= 53.3 min (824.7 - 771.4)

Volume	Invert	Avail.Storage	Storage Description
#1	201.00'	24,392 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.00	4,695	0	0
202.00	5,685	5,190	5,190
203.00	6,015	5,850	11,040
204.00	6,676	6,346	17,386
205.00	7,336	7,006	24,392

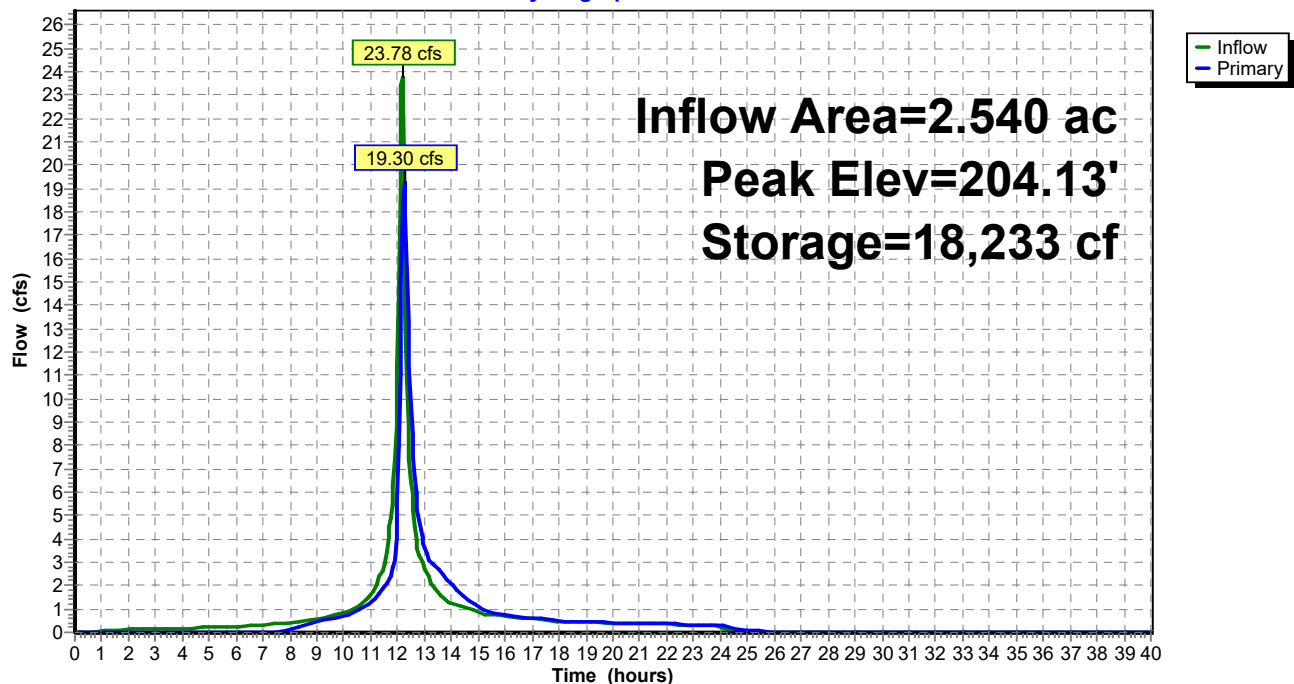
Device	Routing	Invert	Outlet Devices
#1	Primary	201.00'	24.0" Round Culvert L= 39.0' Ke= 0.500 Inlet / Outlet Invert= 201.00' / 200.10' S= 0.0231 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf
#2	Device 1	201.95'	24.0" W x 4.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	204.43'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=19.20 cfs @ 12.25 hrs HW=204.12' (Free Discharge)

1=Culvert (Passes 19.20 cfs of 22.03 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 4.54 cfs @ 6.82 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 14.66 cfs @ 3.46 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-53: Basin #53

Hydrograph



Stage-Discharge for Pond B-53: Basin #53

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.00	0.00	201.52	0.00	202.04	0.17	202.56	2.12
201.01	0.00	201.53	0.00	202.05	0.20	202.57	2.15
201.02	0.00	201.54	0.00	202.06	0.23	202.58	2.17
201.03	0.00	201.55	0.00	202.07	0.27	202.59	2.20
201.04	0.00	201.56	0.00	202.08	0.30	202.60	2.22
201.05	0.00	201.57	0.00	202.09	0.34	202.61	2.24
201.06	0.00	201.58	0.00	202.10	0.37	202.62	2.27
201.07	0.00	201.59	0.00	202.11	0.41	202.63	2.29
201.08	0.00	201.60	0.00	202.12	0.45	202.64	2.31
201.09	0.00	201.61	0.00	202.13	0.49	202.65	2.33
201.10	0.00	201.62	0.00	202.14	0.53	202.66	2.36
201.11	0.00	201.63	0.00	202.15	0.57	202.67	2.38
201.12	0.00	201.64	0.00	202.16	0.62	202.68	2.40
201.13	0.00	201.65	0.00	202.17	0.66	202.69	2.42
201.14	0.00	201.66	0.00	202.18	0.71	202.70	2.44
201.15	0.00	201.67	0.00	202.19	0.75	202.71	2.46
201.16	0.00	201.68	0.00	202.20	0.80	202.72	2.49
201.17	0.00	201.69	0.00	202.21	0.85	202.73	2.51
201.18	0.00	201.70	0.00	202.22	0.90	202.74	2.53
201.19	0.00	201.71	0.00	202.23	0.95	202.75	2.55
201.20	0.00	201.72	0.00	202.24	1.00	202.76	2.57
201.21	0.00	201.73	0.00	202.25	1.05	202.77	2.59
201.22	0.00	201.74	0.00	202.26	1.11	202.78	2.61
201.23	0.00	201.75	0.00	202.27	1.16	202.79	2.63
201.24	0.00	201.76	0.00	202.28	1.22	202.80	2.65
201.25	0.00	201.77	0.00	202.29	1.27	202.81	2.67
201.26	0.00	201.78	0.00	202.30	1.32	202.82	2.69
201.27	0.00	201.79	0.00	202.31	1.36	202.83	2.70
201.28	0.00	201.80	0.00	202.32	1.40	202.84	2.72
201.29	0.00	201.81	0.00	202.33	1.44	202.85	2.74
201.30	0.00	201.82	0.00	202.34	1.48	202.86	2.76
201.31	0.00	201.83	0.00	202.35	1.51	202.87	2.78
201.32	0.00	201.84	0.00	202.36	1.55	202.88	2.80
201.33	0.00	201.85	0.00	202.37	1.58	202.89	2.82
201.34	0.00	201.86	0.00	202.38	1.62	202.90	2.84
201.35	0.00	201.87	0.00	202.39	1.65	202.91	2.85
201.36	0.00	201.88	0.00	202.40	1.68	202.92	2.87
201.37	0.00	201.89	0.00	202.41	1.71	202.93	2.89
201.38	0.00	201.90	0.00	202.42	1.74	202.94	2.91
201.39	0.00	201.91	0.00	202.43	1.77	202.95	2.93
201.40	0.00	201.92	0.00	202.44	1.80	202.96	2.94
201.41	0.00	201.93	0.00	202.45	1.83	202.97	2.96
201.42	0.00	201.94	0.00	202.46	1.86	202.98	2.98
201.43	0.00	201.95	0.00	202.47	1.89	202.99	3.00
201.44	0.00	201.96	0.01	202.48	1.92	203.00	3.01
201.45	0.00	201.97	0.02	202.49	1.94	203.01	3.04
201.46	0.00	201.98	0.03	202.50	1.97	203.02	3.08
201.47	0.00	201.99	0.05	202.51	2.00	203.03	3.13
201.48	0.00	202.00	0.07	202.52	2.02	203.04	3.18
201.49	0.00	202.01	0.09	202.53	2.05	203.05	3.24
201.50	0.00	202.02	0.12	202.54	2.07	203.06	3.31
201.51	0.00	202.03	0.15	202.55	2.10	203.07	3.37

Stage-Discharge for Pond B-53: Basin #53 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.08	3.44	203.60	9.80	204.12	19.18	204.64	35.99
203.09	3.51	203.61	9.96	204.13	19.38	204.65	36.91
203.10	3.59	203.62	10.12	204.14	19.58	204.66	37.85
203.11	3.67	203.63	10.28	204.15	19.78	204.67	38.82
203.12	3.75	203.64	10.44	204.16	19.98	204.68	39.82
203.13	3.84	203.65	10.60	204.17	20.18	204.69	40.84
203.14	3.92	203.66	10.77	204.18	20.39	204.70	41.88
203.15	4.01	203.67	10.93	204.19	20.59	204.71	42.95
203.16	4.11	203.68	11.10	204.20	20.79	204.72	44.04
203.17	4.20	203.69	11.26	204.21	21.00	204.73	45.16
203.18	4.30	203.70	11.43	204.22	21.20	204.74	46.30
203.19	4.40	203.71	11.60	204.23	21.41	204.75	47.47
203.20	4.50	203.72	11.77	204.24	21.62	204.76	48.66
203.21	4.60	203.73	11.94	204.25	21.82	204.77	49.88
203.22	4.70	203.74	12.11	204.26	22.03	204.78	51.12
203.23	4.81	203.75	12.28	204.27	22.24	204.79	52.38
203.24	4.92	203.76	12.45	204.28	22.45	204.80	53.67
203.25	5.03	203.77	12.62	204.29	22.66	204.81	54.98
203.26	5.14	203.78	12.80	204.30	22.87	204.82	56.32
203.27	5.25	203.79	12.97	204.31	22.99	204.83	57.68
203.28	5.37	203.80	13.15	204.32	23.04	204.84	59.09
203.29	5.49	203.81	13.32	204.33	23.09	204.85	60.52
203.30	5.61	203.82	13.50	204.34	23.14	204.86	61.99
203.31	5.73	203.83	13.68	204.35	23.19	204.87	63.48
203.32	5.85	203.84	13.86	204.36	23.24	204.88	64.99
203.33	5.97	203.85	14.04	204.37	23.29	204.89	66.53
203.34	6.10	203.86	14.22	204.38	23.34	204.90	68.10
203.35	6.22	203.87	14.40	204.39	23.39	204.91	69.69
203.36	6.35	203.88	14.58	204.40	23.43	204.92	71.31
203.37	6.48	203.89	14.77	204.41	23.48	204.93	72.96
203.38	6.61	203.90	14.95	204.42	23.53	204.94	74.63
203.39	6.74	203.91	15.14	204.43	23.58	204.95	76.33
203.40	6.88	203.92	15.32	204.44	23.75	204.96	78.05
203.41	7.01	203.93	15.51	204.45	24.01	204.97	79.81
203.42	7.15	203.94	15.69	204.46	24.33	204.98	81.59
203.43	7.29	203.95	15.88	204.47	24.71	204.99	83.39
203.44	7.42	203.96	16.07	204.48	25.13	205.00	85.22
203.45	7.56	203.97	16.26	204.49	25.59		
203.46	7.70	203.98	16.45	204.50	26.09		
203.47	7.85	203.99	16.64	204.51	26.62		
203.48	7.99	204.00	16.83	204.52	27.19		
203.49	8.14	204.01	17.02	204.53	27.78		
203.50	8.28	204.02	17.21	204.54	28.40		
203.51	8.43	204.03	17.41	204.55	29.05		
203.52	8.58	204.04	17.60	204.56	29.72		
203.53	8.73	204.05	17.80	204.57	30.42		
203.54	8.88	204.06	17.99	204.58	31.14		
203.55	9.03	204.07	18.19	204.59	31.89		
203.56	9.18	204.08	18.38	204.60	32.66		
203.57	9.34	204.09	18.58	204.61	33.45		
203.58	9.49	204.10	18.78	204.62	34.26		
203.59	9.65	204.11	18.98	204.63	35.10		

Stage-Area-Storage for Pond B-53: Basin #53

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.00	4,695	0	201.52	5,210	2,575
201.01	4,705	47	201.53	5,220	2,627
201.02	4,715	94	201.54	5,230	2,680
201.03	4,725	141	201.55	5,240	2,732
201.04	4,735	189	201.56	5,249	2,784
201.05	4,745	236	201.57	5,259	2,837
201.06	4,754	283	201.58	5,269	2,890
201.07	4,764	331	201.59	5,279	2,942
201.08	4,774	379	201.60	5,289	2,995
201.09	4,784	427	201.61	5,299	3,048
201.10	4,794	474	201.62	5,309	3,101
201.11	4,804	522	201.63	5,319	3,154
201.12	4,814	571	201.64	5,329	3,208
201.13	4,824	619	201.65	5,339	3,261
201.14	4,834	667	201.66	5,348	3,314
201.15	4,844	715	201.67	5,358	3,368
201.16	4,853	764	201.68	5,368	3,421
201.17	4,863	812	201.69	5,378	3,475
201.18	4,873	861	201.70	5,388	3,529
201.19	4,883	910	201.71	5,398	3,583
201.20	4,893	959	201.72	5,408	3,637
201.21	4,903	1,008	201.73	5,418	3,691
201.22	4,913	1,057	201.74	5,428	3,745
201.23	4,923	1,106	201.75	5,438	3,800
201.24	4,933	1,155	201.76	5,447	3,854
201.25	4,943	1,205	201.77	5,457	3,909
201.26	4,952	1,254	201.78	5,467	3,963
201.27	4,962	1,304	201.79	5,477	4,018
201.28	4,972	1,353	201.80	5,487	4,073
201.29	4,982	1,403	201.81	5,497	4,128
201.30	4,992	1,453	201.82	5,507	4,183
201.31	5,002	1,503	201.83	5,517	4,238
201.32	5,012	1,553	201.84	5,527	4,293
201.33	5,022	1,603	201.85	5,536	4,348
201.34	5,032	1,654	201.86	5,546	4,404
201.35	5,041	1,704	201.87	5,556	4,459
201.36	5,051	1,754	201.88	5,566	4,515
201.37	5,061	1,805	201.89	5,576	4,571
201.38	5,071	1,856	201.90	5,586	4,626
201.39	5,081	1,906	201.91	5,596	4,682
201.40	5,091	1,957	201.92	5,606	4,738
201.41	5,101	2,008	201.93	5,616	4,794
201.42	5,111	2,059	201.94	5,626	4,851
201.43	5,121	2,110	201.95	5,635	4,907
201.44	5,131	2,162	201.96	5,645	4,963
201.45	5,140	2,213	201.97	5,655	5,020
201.46	5,150	2,264	201.98	5,665	5,076
201.47	5,160	2,316	201.99	5,675	5,133
201.48	5,170	2,368	202.00	5,685	5,190
201.49	5,180	2,419	202.01	5,688	5,247
201.50	5,190	2,471	202.02	5,692	5,304
201.51	5,200	2,523	202.03	5,695	5,361

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.04	5,698	5,418	202.56	5,870	8,425
202.05	5,702	5,475	202.57	5,873	8,484
202.06	5,705	5,532	202.58	5,876	8,543
202.07	5,708	5,589	202.59	5,880	8,602
202.08	5,711	5,646	202.60	5,883	8,660
202.09	5,715	5,703	202.61	5,886	8,719
202.10	5,718	5,760	202.62	5,890	8,778
202.11	5,721	5,817	202.63	5,893	8,837
202.12	5,725	5,875	202.64	5,896	8,896
202.13	5,728	5,932	202.65	5,900	8,955
202.14	5,731	5,989	202.66	5,903	9,014
202.15	5,735	6,046	202.67	5,906	9,073
202.16	5,738	6,104	202.68	5,909	9,132
202.17	5,741	6,161	202.69	5,913	9,191
202.18	5,744	6,219	202.70	5,916	9,250
202.19	5,748	6,276	202.71	5,919	9,310
202.20	5,751	6,334	202.72	5,923	9,369
202.21	5,754	6,391	202.73	5,926	9,428
202.22	5,758	6,449	202.74	5,929	9,487
202.23	5,761	6,506	202.75	5,933	9,547
202.24	5,764	6,564	202.76	5,936	9,606
202.25	5,768	6,622	202.77	5,939	9,665
202.26	5,771	6,679	202.78	5,942	9,725
202.27	5,774	6,737	202.79	5,946	9,784
202.28	5,777	6,795	202.80	5,949	9,844
202.29	5,781	6,853	202.81	5,952	9,903
202.30	5,784	6,910	202.82	5,956	9,963
202.31	5,787	6,968	202.83	5,959	10,022
202.32	5,791	7,026	202.84	5,962	10,082
202.33	5,794	7,084	202.85	5,965	10,141
202.34	5,797	7,142	202.86	5,969	10,201
202.35	5,800	7,200	202.87	5,972	10,261
202.36	5,804	7,258	202.88	5,975	10,321
202.37	5,807	7,316	202.89	5,979	10,380
202.38	5,810	7,374	202.90	5,982	10,440
202.39	5,814	7,432	202.91	5,985	10,500
202.40	5,817	7,490	202.92	5,989	10,560
202.41	5,820	7,549	202.93	5,992	10,620
202.42	5,824	7,607	202.94	5,995	10,680
202.43	5,827	7,665	202.95	5,998	10,740
202.44	5,830	7,723	202.96	6,002	10,800
202.45	5,833	7,782	202.97	6,005	10,860
202.46	5,837	7,840	202.98	6,008	10,920
202.47	5,840	7,898	202.99	6,012	10,980
202.48	5,843	7,957	203.00	6,015	11,040
202.49	5,847	8,015	203.01	6,022	11,100
202.50	5,850	8,074	203.02	6,028	11,160
202.51	5,853	8,132	203.03	6,035	11,221
202.52	5,857	8,191	203.04	6,041	11,281
202.53	5,860	8,249	203.05	6,048	11,342
202.54	5,863	8,308	203.06	6,055	11,402
202.55	5,867	8,367	203.07	6,061	11,463

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.08	6,068	11,523	203.60	6,412	14,768
203.09	6,074	11,584	203.61	6,418	14,832
203.10	6,081	11,645	203.62	6,425	14,896
203.11	6,088	11,706	203.63	6,431	14,961
203.12	6,094	11,767	203.64	6,438	15,025
203.13	6,101	11,828	203.65	6,445	15,089
203.14	6,108	11,889	203.66	6,451	15,154
203.15	6,114	11,950	203.67	6,458	15,218
203.16	6,121	12,011	203.68	6,464	15,283
203.17	6,127	12,072	203.69	6,471	15,348
203.18	6,134	12,133	203.70	6,478	15,412
203.19	6,141	12,195	203.71	6,484	15,477
203.20	6,147	12,256	203.72	6,491	15,542
203.21	6,154	12,318	203.73	6,498	15,607
203.22	6,160	12,379	203.74	6,504	15,672
203.23	6,167	12,441	203.75	6,511	15,737
203.24	6,174	12,503	203.76	6,517	15,802
203.25	6,180	12,564	203.77	6,524	15,868
203.26	6,187	12,626	203.78	6,531	15,933
203.27	6,193	12,688	203.79	6,537	15,998
203.28	6,200	12,750	203.80	6,544	16,064
203.29	6,207	12,812	203.81	6,550	16,129
203.30	6,213	12,874	203.82	6,557	16,195
203.31	6,220	12,936	203.83	6,564	16,260
203.32	6,227	12,999	203.84	6,570	16,326
203.33	6,233	13,061	203.85	6,577	16,392
203.34	6,240	13,123	203.86	6,583	16,457
203.35	6,246	13,186	203.87	6,590	16,523
203.36	6,253	13,248	203.88	6,597	16,589
203.37	6,260	13,311	203.89	6,603	16,655
203.38	6,266	13,373	203.90	6,610	16,721
203.39	6,273	13,436	203.91	6,617	16,787
203.40	6,279	13,499	203.92	6,623	16,854
203.41	6,286	13,562	203.93	6,630	16,920
203.42	6,293	13,625	203.94	6,636	16,986
203.43	6,299	13,688	203.95	6,643	17,053
203.44	6,306	13,751	203.96	6,650	17,119
203.45	6,312	13,814	203.97	6,656	17,186
203.46	6,319	13,877	203.98	6,663	17,252
203.47	6,326	13,940	203.99	6,669	17,319
203.48	6,332	14,003	204.00	6,676	17,386
203.49	6,339	14,067	204.01	6,683	17,452
203.50	6,346	14,130	204.02	6,689	17,519
203.51	6,352	14,194	204.03	6,696	17,586
203.52	6,359	14,257	204.04	6,702	17,653
203.53	6,365	14,321	204.05	6,709	17,720
203.54	6,372	14,384	204.06	6,716	17,787
203.55	6,379	14,448	204.07	6,722	17,854
203.56	6,385	14,512	204.08	6,729	17,922
203.57	6,392	14,576	204.09	6,735	17,989
203.58	6,398	14,640	204.10	6,742	18,056
203.59	6,405	14,704	204.11	6,749	18,124

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.12	6,755	18,191	204.64	7,098	21,793
204.13	6,762	18,259	204.65	7,105	21,864
204.14	6,768	18,327	204.66	7,112	21,935
204.15	6,775	18,394	204.67	7,118	22,007
204.16	6,782	18,462	204.68	7,125	22,078
204.17	6,788	18,530	204.69	7,131	22,149
204.18	6,795	18,598	204.70	7,138	22,220
204.19	6,801	18,666	204.71	7,145	22,292
204.20	6,808	18,734	204.72	7,151	22,363
204.21	6,815	18,802	204.73	7,158	22,435
204.22	6,821	18,870	204.74	7,164	22,506
204.23	6,828	18,938	204.75	7,171	22,578
204.24	6,834	19,007	204.76	7,178	22,650
204.25	6,841	19,075	204.77	7,184	22,722
204.26	6,848	19,144	204.78	7,191	22,794
204.27	6,854	19,212	204.79	7,197	22,865
204.28	6,861	19,281	204.80	7,204	22,938
204.29	6,867	19,349	204.81	7,211	23,010
204.30	6,874	19,418	204.82	7,217	23,082
204.31	6,881	19,487	204.83	7,224	23,154
204.32	6,887	19,556	204.84	7,230	23,226
204.33	6,894	19,625	204.85	7,237	23,299
204.34	6,900	19,693	204.86	7,244	23,371
204.35	6,907	19,763	204.87	7,250	23,443
204.36	6,914	19,832	204.88	7,257	23,516
204.37	6,920	19,901	204.89	7,263	23,589
204.38	6,927	19,970	204.90	7,270	23,661
204.39	6,933	20,039	204.91	7,277	23,734
204.40	6,940	20,109	204.92	7,283	23,807
204.41	6,947	20,178	204.93	7,290	23,880
204.42	6,953	20,248	204.94	7,296	23,953
204.43	6,960	20,317	204.95	7,303	24,026
204.44	6,966	20,387	204.96	7,310	24,099
204.45	6,973	20,457	204.97	7,316	24,172
204.46	6,980	20,526	204.98	7,323	24,245
204.47	6,986	20,596	204.99	7,329	24,318
204.48	6,993	20,666	205.00	7,336	24,392
204.49	6,999	20,736			
204.50	7,006	20,806			
204.51	7,013	20,876			
204.52	7,019	20,946			
204.53	7,026	21,016			
204.54	7,032	21,087			
204.55	7,039	21,157			
204.56	7,046	21,228			
204.57	7,052	21,298			
204.58	7,059	21,369			
204.59	7,065	21,439			
204.60	7,072	21,510			
204.61	7,079	21,581			
204.62	7,085	21,651			
204.63	7,092	21,722			

Summary for Pond B-54: Basin #54

Inflow Area = 2.570 ac, 60.47% Impervious, Inflow Depth = 9.76" for Future 100 yr event
 Inflow = 24.63 cfs @ 12.17 hrs, Volume= 2.091 af
 Outflow = 20.52 cfs @ 12.24 hrs, Volume= 1.951 af, Atten= 17%, Lag= 4.1 min
 Primary = 20.52 cfs @ 12.24 hrs, Volume= 1.951 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 204.20' @ 12.24 hrs Surf.Area= 6,556 sf Storage= 17,616 cf

Plug-Flow detention time= 93.3 min calculated for 1.951 af (93% of inflow)
 Center-of-Mass det. time= 54.6 min (817.9 - 763.3)

Volume	Invert	Avail.Storage	Storage Description
#1	201.00'	23,042 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.00	4,440	0	0
202.00	5,100	4,770	4,770
203.00	5,760	5,430	10,200
204.00	6,421	6,091	16,291
205.00	7,081	6,751	23,042

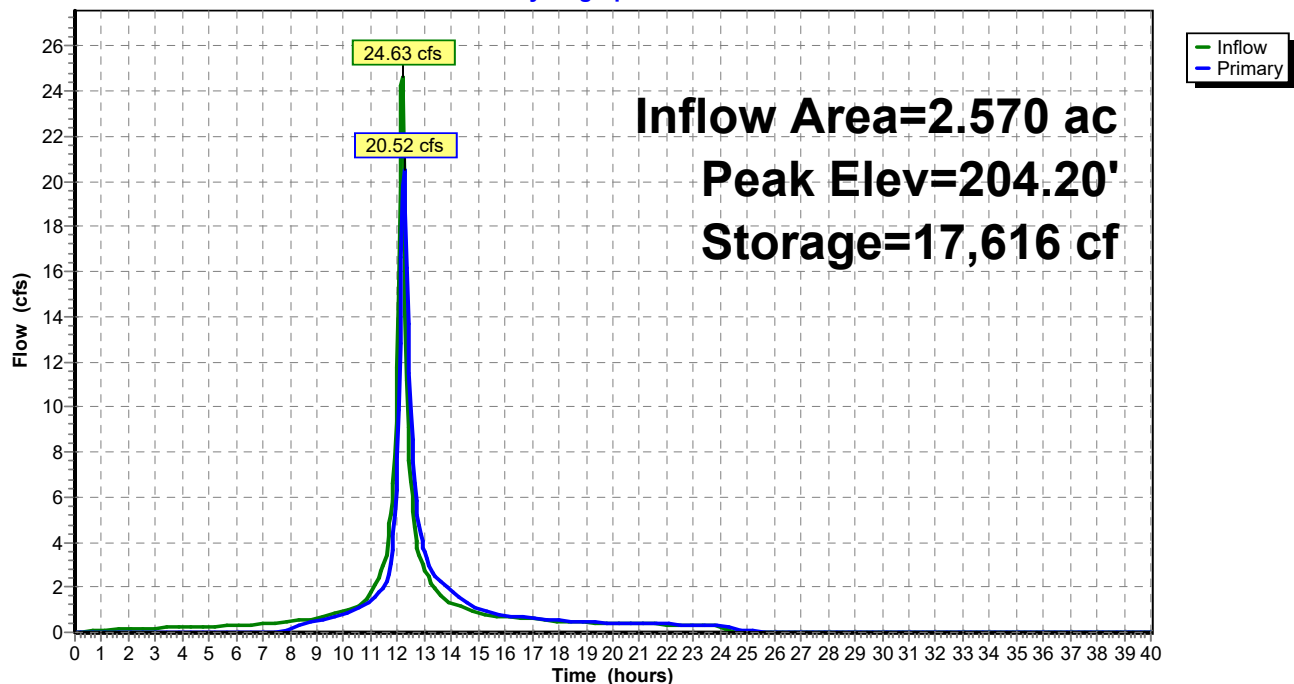
Device	Routing	Invert	Outlet Devices
#1	Primary	201.00'	24.0" Round Culvert L= 73.0' Ke= 0.500 Inlet / Outlet Invert= 201.00' / 200.10' S= 0.0123 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf
#2	Device 1	202.26'	24.0" W x 4.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	204.75'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=20.31 cfs @ 12.24 hrs HW=204.19' (Free Discharge)

1=Culvert (Passes 20.31 cfs of 22.41 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 4.27 cfs @ 6.40 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 16.05 cfs @ 3.57 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-54: Basin #54

Hydrograph



Stage-Discharge for Pond B-54: Basin #54

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.00	0.00	201.52	0.00	202.04	0.00	202.56	1.05
201.01	0.00	201.53	0.00	202.05	0.00	202.57	1.11
201.02	0.00	201.54	0.00	202.06	0.00	202.58	1.16
201.03	0.00	201.55	0.00	202.07	0.00	202.59	1.22
201.04	0.00	201.56	0.00	202.08	0.00	202.60	1.27
201.05	0.00	201.57	0.00	202.09	0.00	202.61	1.32
201.06	0.00	201.58	0.00	202.10	0.00	202.62	1.36
201.07	0.00	201.59	0.00	202.11	0.00	202.63	1.40
201.08	0.00	201.60	0.00	202.12	0.00	202.64	1.44
201.09	0.00	201.61	0.00	202.13	0.00	202.65	1.48
201.10	0.00	201.62	0.00	202.14	0.00	202.66	1.51
201.11	0.00	201.63	0.00	202.15	0.00	202.67	1.55
201.12	0.00	201.64	0.00	202.16	0.00	202.68	1.58
201.13	0.00	201.65	0.00	202.17	0.00	202.69	1.62
201.14	0.00	201.66	0.00	202.18	0.00	202.70	1.65
201.15	0.00	201.67	0.00	202.19	0.00	202.71	1.68
201.16	0.00	201.68	0.00	202.20	0.00	202.72	1.71
201.17	0.00	201.69	0.00	202.21	0.00	202.73	1.74
201.18	0.00	201.70	0.00	202.22	0.00	202.74	1.77
201.19	0.00	201.71	0.00	202.23	0.00	202.75	1.80
201.20	0.00	201.72	0.00	202.24	0.00	202.76	1.83
201.21	0.00	201.73	0.00	202.25	0.00	202.77	1.86
201.22	0.00	201.74	0.00	202.26	0.00	202.78	1.89
201.23	0.00	201.75	0.00	202.27	0.01	202.79	1.92
201.24	0.00	201.76	0.00	202.28	0.02	202.80	1.94
201.25	0.00	201.77	0.00	202.29	0.03	202.81	1.97
201.26	0.00	201.78	0.00	202.30	0.05	202.82	2.00
201.27	0.00	201.79	0.00	202.31	0.07	202.83	2.02
201.28	0.00	201.80	0.00	202.32	0.09	202.84	2.05
201.29	0.00	201.81	0.00	202.33	0.12	202.85	2.07
201.30	0.00	201.82	0.00	202.34	0.15	202.86	2.10
201.31	0.00	201.83	0.00	202.35	0.17	202.87	2.12
201.32	0.00	201.84	0.00	202.36	0.20	202.88	2.15
201.33	0.00	201.85	0.00	202.37	0.23	202.89	2.17
201.34	0.00	201.86	0.00	202.38	0.27	202.90	2.20
201.35	0.00	201.87	0.00	202.39	0.30	202.91	2.22
201.36	0.00	201.88	0.00	202.40	0.34	202.92	2.24
201.37	0.00	201.89	0.00	202.41	0.37	202.93	2.27
201.38	0.00	201.90	0.00	202.42	0.41	202.94	2.29
201.39	0.00	201.91	0.00	202.43	0.45	202.95	2.31
201.40	0.00	201.92	0.00	202.44	0.49	202.96	2.33
201.41	0.00	201.93	0.00	202.45	0.53	202.97	2.36
201.42	0.00	201.94	0.00	202.46	0.57	202.98	2.38
201.43	0.00	201.95	0.00	202.47	0.62	202.99	2.40
201.44	0.00	201.96	0.00	202.48	0.66	203.00	2.42
201.45	0.00	201.97	0.00	202.49	0.71	203.01	2.46
201.46	0.00	201.98	0.00	202.50	0.75	203.02	2.50
201.47	0.00	201.99	0.00	202.51	0.80	203.03	2.55
201.48	0.00	202.00	0.00	202.52	0.85	203.04	2.61
201.49	0.00	202.01	0.00	202.53	0.90	203.05	2.67
201.50	0.00	202.02	0.00	202.54	0.95	203.06	2.74
201.51	0.00	202.03	0.00	202.55	1.00	203.07	2.81

Stage-Discharge for Pond B-54: Basin #54 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.08	2.88	203.60	9.37	204.12	18.81	204.64	24.58
203.09	2.96	203.61	9.53	204.13	19.01	204.65	24.62
203.10	3.04	203.62	9.69	204.14	19.21	204.66	24.67
203.11	3.12	203.63	9.85	204.15	19.42	204.67	24.72
203.12	3.21	203.64	10.02	204.16	19.62	204.68	24.76
203.13	3.29	203.65	10.18	204.17	19.82	204.69	24.81
203.14	3.39	203.66	10.34	204.18	20.03	204.70	24.86
203.15	3.48	203.67	10.51	204.19	20.23	204.71	24.90
203.16	3.57	203.68	10.68	204.20	20.44	204.72	24.95
203.17	3.67	203.69	10.84	204.21	20.64	204.73	24.99
203.18	3.77	203.70	11.01	204.22	20.85	204.74	25.04
203.19	3.87	203.71	11.18	204.23	21.05	204.75	25.08
203.20	3.98	203.72	11.35	204.24	21.26	204.76	25.25
203.21	4.08	203.73	11.52	204.25	21.47	204.77	25.51
203.22	4.19	203.74	11.69	204.26	21.68	204.78	25.83
203.23	4.30	203.75	11.87	204.27	21.89	204.79	26.20
203.24	4.41	203.76	12.04	204.28	22.10	204.80	26.62
203.25	4.52	203.77	12.22	204.29	22.31	204.81	27.08
203.26	4.64	203.78	12.39	204.30	22.52	204.82	27.58
203.27	4.75	203.79	12.57	204.31	22.73	204.83	28.10
203.28	4.87	203.80	12.74	204.32	22.94	204.84	28.66
203.29	4.99	203.81	12.92	204.33	23.09	204.85	29.25
203.30	5.11	203.82	13.10	204.34	23.14	204.86	29.87
203.31	5.24	203.83	13.28	204.35	23.19	204.87	30.52
203.32	5.36	203.84	13.46	204.36	23.24	204.88	31.19
203.33	5.49	203.85	13.64	204.37	23.29	204.89	31.89
203.34	5.61	203.86	13.82	204.38	23.34	204.90	32.61
203.35	5.74	203.87	14.01	204.39	23.39	204.91	33.35
203.36	5.87	203.88	14.19	204.40	23.43	204.92	34.12
203.37	6.00	203.89	14.37	204.41	23.48	204.93	34.90
203.38	6.14	203.90	14.56	204.42	23.53	204.94	35.72
203.39	6.27	203.91	14.75	204.43	23.58	204.95	36.55
203.40	6.41	203.92	14.93	204.44	23.63	204.96	37.44
203.41	6.54	203.93	15.12	204.45	23.68	204.97	38.35
203.42	6.68	203.94	15.31	204.46	23.73	204.98	39.29
203.43	6.82	203.95	15.50	204.47	23.77	204.99	40.26
203.44	6.96	203.96	15.69	204.48	23.82	205.00	41.25
203.45	7.10	203.97	15.88	204.49	23.87		
203.46	7.25	203.98	16.07	204.50	23.92		
203.47	7.39	203.99	16.26	204.51	23.97		
203.48	7.54	204.00	16.45	204.52	24.01		
203.49	7.68	204.01	16.64	204.53	24.06		
203.50	7.83	204.02	16.84	204.54	24.11		
203.51	7.98	204.03	17.03	204.55	24.16		
203.52	8.13	204.04	17.23	204.56	24.20		
203.53	8.28	204.05	17.42	204.57	24.25		
203.54	8.43	204.06	17.62	204.58	24.30		
203.55	8.59	204.07	17.82	204.59	24.34		
203.56	8.74	204.08	18.01	204.60	24.39		
203.57	8.90	204.09	18.21	204.61	24.44		
203.58	9.05	204.10	18.41	204.62	24.48		
203.59	9.21	204.11	18.61	204.63	24.53		

Stage-Area-Storage for Pond B-54: Basin #54

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.00	4,440	0	201.52	4,783	2,398
201.01	4,447	44	201.53	4,790	2,446
201.02	4,453	89	201.54	4,796	2,494
201.03	4,460	133	201.55	4,803	2,542
201.04	4,466	178	201.56	4,810	2,590
201.05	4,473	223	201.57	4,816	2,638
201.06	4,480	268	201.58	4,823	2,686
201.07	4,486	312	201.59	4,829	2,734
201.08	4,493	357	201.60	4,836	2,783
201.09	4,499	402	201.61	4,843	2,831
201.10	4,506	447	201.62	4,849	2,880
201.11	4,513	492	201.63	4,856	2,928
201.12	4,519	538	201.64	4,862	2,977
201.13	4,526	583	201.65	4,869	3,025
201.14	4,532	628	201.66	4,876	3,074
201.15	4,539	673	201.67	4,882	3,123
201.16	4,546	719	201.68	4,889	3,172
201.17	4,552	764	201.69	4,895	3,221
201.18	4,559	810	201.70	4,902	3,270
201.19	4,565	856	201.71	4,909	3,319
201.20	4,572	901	201.72	4,915	3,368
201.21	4,579	947	201.73	4,922	3,417
201.22	4,585	993	201.74	4,928	3,466
201.23	4,592	1,039	201.75	4,935	3,516
201.24	4,598	1,085	201.76	4,942	3,565
201.25	4,605	1,131	201.77	4,948	3,614
201.26	4,612	1,177	201.78	4,955	3,664
201.27	4,618	1,223	201.79	4,961	3,714
201.28	4,625	1,269	201.80	4,968	3,763
201.29	4,631	1,315	201.81	4,975	3,813
201.30	4,638	1,362	201.82	4,981	3,863
201.31	4,645	1,408	201.83	4,988	3,913
201.32	4,651	1,455	201.84	4,994	3,962
201.33	4,658	1,501	201.85	5,001	4,012
201.34	4,664	1,548	201.86	5,008	4,062
201.35	4,671	1,594	201.87	5,014	4,113
201.36	4,678	1,641	201.88	5,021	4,163
201.37	4,684	1,688	201.89	5,027	4,213
201.38	4,691	1,735	201.90	5,034	4,263
201.39	4,697	1,782	201.91	5,041	4,314
201.40	4,704	1,829	201.92	5,047	4,364
201.41	4,711	1,876	201.93	5,054	4,415
201.42	4,717	1,923	201.94	5,060	4,465
201.43	4,724	1,970	201.95	5,067	4,516
201.44	4,730	2,017	201.96	5,074	4,567
201.45	4,737	2,065	201.97	5,080	4,617
201.46	4,744	2,112	201.98	5,087	4,668
201.47	4,750	2,160	201.99	5,093	4,719
201.48	4,757	2,207	202.00	5,100	4,770
201.49	4,763	2,255	202.01	5,107	4,821
201.50	4,770	2,303	202.02	5,113	4,872
201.51	4,777	2,350	202.03	5,120	4,923

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.04	5,126	4,975	202.56	5,470	7,729
202.05	5,133	5,026	202.57	5,476	7,784
202.06	5,140	5,077	202.58	5,483	7,839
202.07	5,146	5,129	202.59	5,489	7,894
202.08	5,153	5,180	202.60	5,496	7,949
202.09	5,159	5,232	202.61	5,503	8,004
202.10	5,166	5,283	202.62	5,509	8,059
202.11	5,173	5,335	202.63	5,516	8,114
202.12	5,179	5,387	202.64	5,522	8,169
202.13	5,186	5,439	202.65	5,529	8,224
202.14	5,192	5,490	202.66	5,536	8,280
202.15	5,199	5,542	202.67	5,542	8,335
202.16	5,206	5,594	202.68	5,549	8,391
202.17	5,212	5,647	202.69	5,555	8,446
202.18	5,219	5,699	202.70	5,562	8,502
202.19	5,225	5,751	202.71	5,569	8,557
202.20	5,232	5,803	202.72	5,575	8,613
202.21	5,239	5,856	202.73	5,582	8,669
202.22	5,245	5,908	202.74	5,588	8,725
202.23	5,252	5,960	202.75	5,595	8,781
202.24	5,258	6,013	202.76	5,602	8,837
202.25	5,265	6,066	202.77	5,608	8,893
202.26	5,272	6,118	202.78	5,615	8,949
202.27	5,278	6,171	202.79	5,621	9,005
202.28	5,285	6,224	202.80	5,628	9,061
202.29	5,291	6,277	202.81	5,635	9,118
202.30	5,298	6,330	202.82	5,641	9,174
202.31	5,305	6,383	202.83	5,648	9,230
202.32	5,311	6,436	202.84	5,654	9,287
202.33	5,318	6,489	202.85	5,661	9,343
202.34	5,324	6,542	202.86	5,668	9,400
202.35	5,331	6,595	202.87	5,674	9,457
202.36	5,338	6,649	202.88	5,681	9,514
202.37	5,344	6,702	202.89	5,687	9,570
202.38	5,351	6,756	202.90	5,694	9,627
202.39	5,357	6,809	202.91	5,701	9,684
202.40	5,364	6,863	202.92	5,707	9,741
202.41	5,371	6,916	202.93	5,714	9,798
202.42	5,377	6,970	202.94	5,720	9,856
202.43	5,384	7,024	202.95	5,727	9,913
202.44	5,390	7,078	202.96	5,734	9,970
202.45	5,397	7,132	202.97	5,740	10,027
202.46	5,404	7,186	202.98	5,747	10,085
202.47	5,410	7,240	202.99	5,753	10,142
202.48	5,417	7,294	203.00	5,760	10,200
202.49	5,423	7,348	203.01	5,767	10,258
202.50	5,430	7,403	203.02	5,773	10,315
202.51	5,437	7,457	203.03	5,780	10,373
202.52	5,443	7,511	203.04	5,786	10,431
202.53	5,450	7,566	203.05	5,793	10,489
202.54	5,456	7,620	203.06	5,800	10,547
202.55	5,463	7,675	203.07	5,806	10,605

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.08	5,813	10,663	203.60	6,157	13,775
203.09	5,819	10,721	203.61	6,163	13,837
203.10	5,826	10,779	203.62	6,170	13,898
203.11	5,833	10,838	203.63	6,176	13,960
203.12	5,839	10,896	203.64	6,183	14,022
203.13	5,846	10,954	203.65	6,190	14,084
203.14	5,853	11,013	203.66	6,196	14,146
203.15	5,859	11,071	203.67	6,203	14,208
203.16	5,866	11,130	203.68	6,209	14,270
203.17	5,872	11,189	203.69	6,216	14,332
203.18	5,879	11,248	203.70	6,223	14,394
203.19	5,886	11,306	203.71	6,229	14,456
203.20	5,892	11,365	203.72	6,236	14,519
203.21	5,899	11,424	203.73	6,243	14,581
203.22	5,905	11,483	203.74	6,249	14,643
203.23	5,912	11,542	203.75	6,256	14,706
203.24	5,919	11,601	203.76	6,262	14,768
203.25	5,925	11,661	203.77	6,269	14,831
203.26	5,932	11,720	203.78	6,276	14,894
203.27	5,938	11,779	203.79	6,282	14,957
203.28	5,945	11,839	203.80	6,289	15,020
203.29	5,952	11,898	203.81	6,295	15,082
203.30	5,958	11,958	203.82	6,302	15,145
203.31	5,965	12,017	203.83	6,309	15,208
203.32	5,972	12,077	203.84	6,315	15,272
203.33	5,978	12,137	203.85	6,322	15,335
203.34	5,985	12,197	203.86	6,328	15,398
203.35	5,991	12,256	203.87	6,335	15,461
203.36	5,998	12,316	203.88	6,342	15,525
203.37	6,005	12,376	203.89	6,348	15,588
203.38	6,011	12,437	203.90	6,355	15,652
203.39	6,018	12,497	203.91	6,362	15,715
203.40	6,024	12,557	203.92	6,368	15,779
203.41	6,031	12,617	203.93	6,375	15,843
203.42	6,038	12,678	203.94	6,381	15,906
203.43	6,044	12,738	203.95	6,388	15,970
203.44	6,051	12,798	203.96	6,395	16,034
203.45	6,057	12,859	203.97	6,401	16,098
203.46	6,064	12,920	203.98	6,408	16,162
203.47	6,071	12,980	203.99	6,414	16,226
203.48	6,077	13,041	204.00	6,421	16,291
203.49	6,084	13,102	204.01	6,428	16,355
203.50	6,091	13,163	204.02	6,434	16,419
203.51	6,097	13,224	204.03	6,441	16,483
203.52	6,104	13,285	204.04	6,447	16,548
203.53	6,110	13,346	204.05	6,454	16,612
203.54	6,117	13,407	204.06	6,461	16,677
203.55	6,124	13,468	204.07	6,467	16,742
203.56	6,130	13,529	204.08	6,474	16,806
203.57	6,137	13,591	204.09	6,480	16,871
203.58	6,143	13,652	204.10	6,487	16,936
203.59	6,150	13,713	204.11	6,494	17,001

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.12	6,500	17,066	204.64	6,843	20,535
204.13	6,507	17,131	204.65	6,850	20,604
204.14	6,513	17,196	204.66	6,857	20,672
204.15	6,520	17,261	204.67	6,863	20,741
204.16	6,527	17,326	204.68	6,870	20,809
204.17	6,533	17,392	204.69	6,876	20,878
204.18	6,540	17,457	204.70	6,883	20,947
204.19	6,546	17,522	204.71	6,890	21,016
204.20	6,553	17,588	204.72	6,896	21,085
204.21	6,560	17,653	204.73	6,903	21,154
204.22	6,566	17,719	204.74	6,909	21,223
204.23	6,573	17,785	204.75	6,916	21,292
204.24	6,579	17,851	204.76	6,923	21,361
204.25	6,586	17,916	204.77	6,929	21,430
204.26	6,593	17,982	204.78	6,936	21,500
204.27	6,599	18,048	204.79	6,942	21,569
204.28	6,606	18,114	204.80	6,949	21,639
204.29	6,612	18,180	204.81	6,956	21,708
204.30	6,619	18,247	204.82	6,962	21,778
204.31	6,626	18,313	204.83	6,969	21,847
204.32	6,632	18,379	204.84	6,975	21,917
204.33	6,639	18,445	204.85	6,982	21,987
204.34	6,645	18,512	204.86	6,989	22,057
204.35	6,652	18,578	204.87	6,995	22,127
204.36	6,659	18,645	204.88	7,002	22,197
204.37	6,665	18,711	204.89	7,008	22,267
204.38	6,672	18,778	204.90	7,015	22,337
204.39	6,678	18,845	204.91	7,022	22,407
204.40	6,685	18,912	204.92	7,028	22,477
204.41	6,692	18,979	204.93	7,035	22,547
204.42	6,698	19,046	204.94	7,041	22,618
204.43	6,705	19,113	204.95	7,048	22,688
204.44	6,711	19,180	204.96	7,055	22,759
204.45	6,718	19,247	204.97	7,061	22,829
204.46	6,725	19,314	204.98	7,068	22,900
204.47	6,731	19,381	204.99	7,074	22,971
204.48	6,738	19,449	205.00	7,081	23,042
204.49	6,744	19,516			
204.50	6,751	19,584			
204.51	6,758	19,651			
204.52	6,764	19,719			
204.53	6,771	19,786			
204.54	6,777	19,854			
204.55	6,784	19,922			
204.56	6,791	19,990			
204.57	6,797	20,058			
204.58	6,804	20,126			
204.59	6,810	20,194			
204.60	6,817	20,262			
204.61	6,824	20,330			
204.62	6,830	20,398			
204.63	6,837	20,467			

Summary for Pond B-55: Basin #55

Inflow Area = 2.301 ac, 47.33% Impervious, Inflow Depth = 9.36" for Future 100 yr event
 Inflow = 21.52 cfs @ 12.17 hrs, Volume= 1.794 af
 Outflow = 12.80 cfs @ 12.30 hrs, Volume= 1.691 af, Atten= 41%, Lag= 7.9 min
 Primary = 12.80 cfs @ 12.30 hrs, Volume= 1.691 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 195.39' @ 12.30 hrs Surf.Area= 5,997 sf Storage= 18,268 cf

Plug-Flow detention time= 88.9 min calculated for 1.689 af (94% of inflow)
 Center-of-Mass det. time= 56.0 min (827.8 - 771.8)

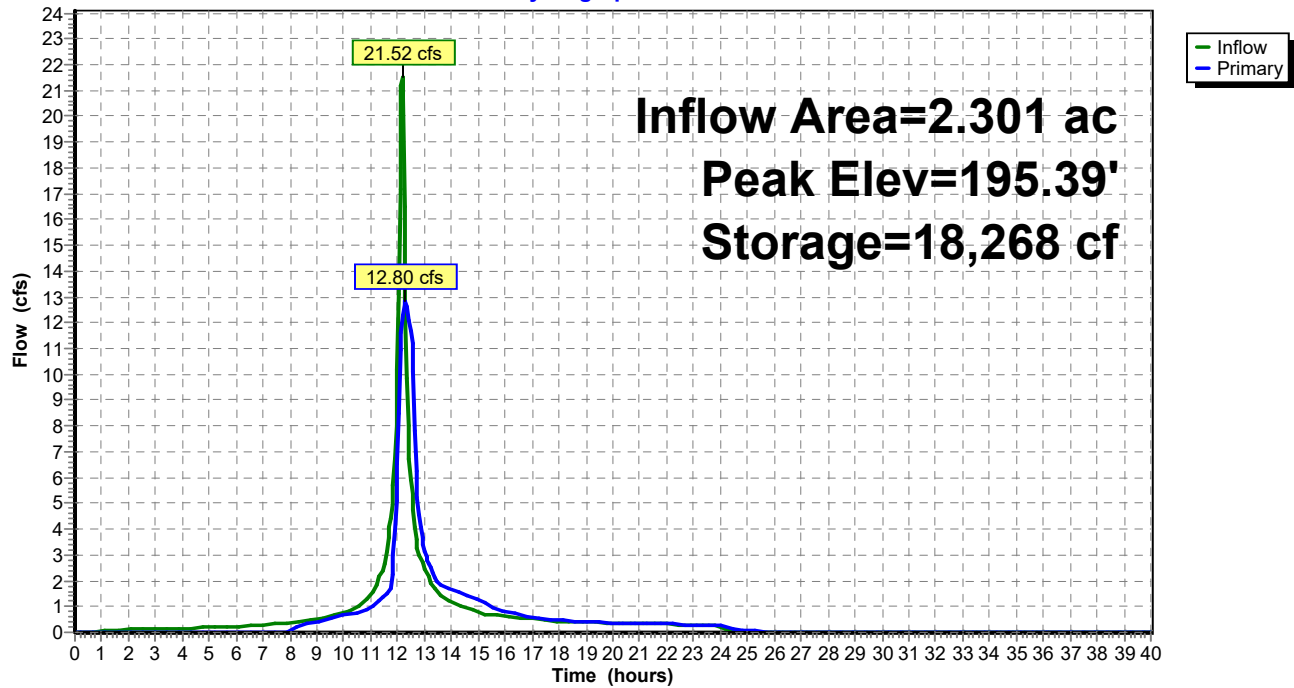
Volume	Invert	Avail.Storage	Storage Description
#1	191.56'	22,010 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.56	0	0	0
192.00	4,250	935	935
193.00	4,746	4,498	5,433
194.00	5,257	5,002	10,434
195.00	5,784	5,521	15,955
196.00	6,327	6,056	22,010

Device	Routing	Invert	Outlet Devices
#1	Primary	191.65'	18.0" Round Culvert L= 112.0' Ke= 0.500 Inlet / Outlet Invert= 191.65' / 191.00' S= 0.0058 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.80'	22.0" W x 2.5" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.82'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	195.45'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=12.80 cfs @ 12.30 hrs HW=195.39' (Free Discharge)

1=Culvert (Barrel Controls 12.80 cfs @ 7.24 fps)
 2=Orifice/Grate (Passes < 2.90 cfs potential flow)
 3=Sharp-Crested Rectangular Weir (Passes < 23.74 cfs potential flow)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-55: Basin #55**Hydrograph**

Stage-Discharge for Pond B-55: Basin #55

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.56	0.00	192.08	0.00	192.60	0.00	193.12	0.85
191.57	0.00	192.09	0.00	192.61	0.00	193.13	0.87
191.58	0.00	192.10	0.00	192.62	0.00	193.14	0.89
191.59	0.00	192.11	0.00	192.63	0.00	193.15	0.90
191.60	0.00	192.12	0.00	192.64	0.00	193.16	0.92
191.61	0.00	192.13	0.00	192.65	0.00	193.17	0.94
191.62	0.00	192.14	0.00	192.66	0.00	193.18	0.96
191.63	0.00	192.15	0.00	192.67	0.00	193.19	0.98
191.64	0.00	192.16	0.00	192.68	0.00	193.20	0.99
191.65	0.00	192.17	0.00	192.69	0.00	193.21	1.01
191.66	0.00	192.18	0.00	192.70	0.00	193.22	1.03
191.67	0.00	192.19	0.00	192.71	0.00	193.23	1.05
191.68	0.00	192.20	0.00	192.72	0.00	193.24	1.06
191.69	0.00	192.21	0.00	192.73	0.00	193.25	1.08
191.70	0.00	192.22	0.00	192.74	0.00	193.26	1.09
191.71	0.00	192.23	0.00	192.75	0.00	193.27	1.11
191.72	0.00	192.24	0.00	192.76	0.00	193.28	1.12
191.73	0.00	192.25	0.00	192.77	0.00	193.29	1.14
191.74	0.00	192.26	0.00	192.78	0.00	193.30	1.15
191.75	0.00	192.27	0.00	192.79	0.00	193.31	1.17
191.76	0.00	192.28	0.00	192.80	0.00	193.32	1.18
191.77	0.00	192.29	0.00	192.81	0.01	193.33	1.20
191.78	0.00	192.30	0.00	192.82	0.02	193.34	1.21
191.79	0.00	192.31	0.00	192.83	0.03	193.35	1.23
191.80	0.00	192.32	0.00	192.84	0.05	193.36	1.24
191.81	0.00	192.33	0.00	192.85	0.07	193.37	1.25
191.82	0.00	192.34	0.00	192.86	0.09	193.38	1.27
191.83	0.00	192.35	0.00	192.87	0.11	193.39	1.28
191.84	0.00	192.36	0.00	192.88	0.13	193.40	1.29
191.85	0.00	192.37	0.00	192.89	0.16	193.41	1.31
191.86	0.00	192.38	0.00	192.90	0.19	193.42	1.32
191.87	0.00	192.39	0.00	192.91	0.21	193.43	1.33
191.88	0.00	192.40	0.00	192.92	0.24	193.44	1.34
191.89	0.00	192.41	0.00	192.93	0.28	193.45	1.36
191.90	0.00	192.42	0.00	192.94	0.31	193.46	1.37
191.91	0.00	192.43	0.00	192.95	0.34	193.47	1.38
191.92	0.00	192.44	0.00	192.96	0.38	193.48	1.39
191.93	0.00	192.45	0.00	192.97	0.41	193.49	1.41
191.94	0.00	192.46	0.00	192.98	0.45	193.50	1.42
191.95	0.00	192.47	0.00	192.99	0.49	193.51	1.43
191.96	0.00	192.48	0.00	193.00	0.53	193.52	1.44
191.97	0.00	192.49	0.00	193.01	0.57	193.53	1.45
191.98	0.00	192.50	0.00	193.02	0.60	193.54	1.46
191.99	0.00	192.51	0.00	193.03	0.63	193.55	1.48
192.00	0.00	192.52	0.00	193.04	0.66	193.56	1.49
192.01	0.00	192.53	0.00	193.05	0.69	193.57	1.50
192.02	0.00	192.54	0.00	193.06	0.71	193.58	1.51
192.03	0.00	192.55	0.00	193.07	0.74	193.59	1.52
192.04	0.00	192.56	0.00	193.08	0.76	193.60	1.53
192.05	0.00	192.57	0.00	193.09	0.78	193.61	1.54
192.06	0.00	192.58	0.00	193.10	0.80	193.62	1.55
192.07	0.00	192.59	0.00	193.11	0.82	193.63	1.57

Stage-Discharge for Pond B-55: Basin #55 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.64	1.58	194.16	4.61	194.68	11.12	195.20	12.37
193.65	1.59	194.17	4.73	194.69	11.14	195.21	12.39
193.66	1.60	194.18	4.85	194.70	11.17	195.22	12.42
193.67	1.61	194.19	4.97	194.71	11.19	195.23	12.44
193.68	1.62	194.20	5.10	194.72	11.22	195.24	12.46
193.69	1.63	194.21	5.22	194.73	11.24	195.25	12.48
193.70	1.64	194.22	5.35	194.74	11.27	195.26	12.51
193.71	1.65	194.23	5.48	194.75	11.29	195.27	12.53
193.72	1.66	194.24	5.61	194.76	11.32	195.28	12.55
193.73	1.67	194.25	5.74	194.77	11.34	195.29	12.58
193.74	1.68	194.26	5.87	194.78	11.37	195.30	12.60
193.75	1.69	194.27	6.01	194.79	11.39	195.31	12.62
193.76	1.70	194.28	6.14	194.80	11.42	195.32	12.64
193.77	1.71	194.29	6.28	194.81	11.44	195.33	12.66
193.78	1.72	194.30	6.42	194.82	11.47	195.34	12.69
193.79	1.73	194.31	6.56	194.83	11.49	195.35	12.71
193.80	1.74	194.32	6.70	194.84	11.52	195.36	12.73
193.81	1.75	194.33	6.84	194.85	11.54	195.37	12.75
193.82	1.76	194.34	6.98	194.86	11.57	195.38	12.78
193.83	1.78	194.35	7.12	194.87	11.59	195.39	12.80
193.84	1.82	194.36	7.27	194.88	11.61	195.40	12.82
193.85	1.86	194.37	7.41	194.89	11.64	195.41	12.84
193.86	1.90	194.38	7.56	194.90	11.66	195.42	12.86
193.87	1.95	194.39	7.71	194.91	11.69	195.43	12.89
193.88	2.01	194.40	7.86	194.92	11.71	195.44	12.91
193.89	2.07	194.41	8.01	194.93	11.74	195.45	12.93
193.90	2.13	194.42	8.16	194.94	11.76	195.46	13.07
193.91	2.20	194.43	8.31	194.95	11.78	195.47	13.31
193.92	2.26	194.44	8.47	194.96	11.81	195.48	13.61
193.93	2.34	194.45	8.62	194.97	11.83	195.49	13.96
193.94	2.41	194.46	8.78	194.98	11.86	195.50	14.35
193.95	2.49	194.47	8.93	194.99	11.88	195.51	14.79
193.96	2.57	194.48	9.09	195.00	11.90	195.52	15.26
193.97	2.65	194.49	9.25	195.01	11.93	195.53	15.76
193.98	2.74	194.50	9.41	195.02	11.95	195.54	16.30
193.99	2.82	194.51	9.57	195.03	11.97	195.55	16.87
194.00	2.91	194.52	9.73	195.04	12.00	195.56	17.46
194.01	3.01	194.53	9.89	195.05	12.02	195.57	18.08
194.02	3.10	194.54	10.06	195.06	12.05	195.58	18.73
194.03	3.20	194.55	10.22	195.07	12.07	195.59	19.40
194.04	3.29	194.56	10.38	195.08	12.09	195.60	20.10
194.05	3.39	194.57	10.55	195.09	12.12	195.61	20.82
194.06	3.50	194.58	10.72	195.10	12.14	195.62	21.57
194.07	3.60	194.59	10.88	195.11	12.16	195.63	22.33
194.08	3.71	194.60	10.91	195.12	12.19	195.64	23.12
194.09	3.81	194.61	10.94	195.13	12.21	195.65	23.93
194.10	3.92	194.62	10.96	195.14	12.23	195.66	24.79
194.11	4.03	194.63	10.99	195.15	12.26	195.67	25.69
194.12	4.14	194.64	11.01	195.16	12.28	195.68	26.61
194.13	4.26	194.65	11.04	195.17	12.30	195.69	27.55
194.14	4.37	194.66	11.06	195.18	12.32	195.70	28.52
194.15	4.49	194.67	11.09	195.19	12.35	195.71	29.52

Stage-Discharge for Pond B-55: Basin #55 (continued)

Elevation (feet)	Primary (cfs)
195.72	30.53
195.73	31.58
195.74	32.65
195.75	33.74
195.76	34.86
195.77	36.00
195.78	37.17
195.79	38.36
195.80	39.57
195.81	40.81
195.82	42.08
195.83	43.36
195.84	44.67
195.85	46.01
195.86	47.40
195.87	48.81
195.88	50.25
195.89	51.71
195.90	53.20
195.91	54.72
195.92	56.26
195.93	57.83
195.94	59.43
195.95	61.05
195.96	62.70
195.97	64.37
195.98	66.07
195.99	67.80
196.00	69.56

Stage-Area-Storage for Pond B-55: Basin #55

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.56	0	0	192.08	4,290	1,277
191.57	97	0	192.09	4,295	1,320
191.58	193	2	192.10	4,300	1,362
191.59	290	4	192.11	4,305	1,406
191.60	386	8	192.12	4,310	1,449
191.61	483	12	192.13	4,314	1,492
191.62	580	17	192.14	4,319	1,535
191.63	676	24	192.15	4,324	1,578
191.64	773	31	192.16	4,329	1,621
191.65	869	39	192.17	4,334	1,665
191.66	966	48	192.18	4,339	1,708
191.67	1,063	58	192.19	4,344	1,751
191.68	1,159	70	192.20	4,349	1,795
191.69	1,256	82	192.21	4,354	1,838
191.70	1,352	95	192.22	4,359	1,882
191.71	1,449	109	192.23	4,364	1,926
191.72	1,545	124	192.24	4,369	1,969
191.73	1,642	140	192.25	4,374	2,013
191.74	1,739	156	192.26	4,379	2,057
191.75	1,835	174	192.27	4,384	2,101
191.76	1,932	193	192.28	4,389	2,144
191.77	2,028	213	192.29	4,394	2,188
191.78	2,125	234	192.30	4,399	2,232
191.79	2,222	255	192.31	4,404	2,276
191.80	2,318	278	192.32	4,409	2,320
191.81	2,415	302	192.33	4,414	2,365
191.82	2,511	326	192.34	4,419	2,409
191.83	2,608	352	192.35	4,424	2,453
191.84	2,705	379	192.36	4,429	2,497
191.85	2,801	406	192.37	4,434	2,541
191.86	2,898	435	192.38	4,438	2,586
191.87	2,994	464	192.39	4,443	2,630
191.88	3,091	495	192.40	4,448	2,675
191.89	3,188	526	192.41	4,453	2,719
191.90	3,284	558	192.42	4,458	2,764
191.91	3,381	592	192.43	4,463	2,808
191.92	3,477	626	192.44	4,468	2,853
191.93	3,574	661	192.45	4,473	2,898
191.94	3,670	697	192.46	4,478	2,942
191.95	3,767	735	192.47	4,483	2,987
191.96	3,864	773	192.48	4,488	3,032
191.97	3,960	812	192.49	4,493	3,077
191.98	4,057	852	192.50	4,498	3,122
191.99	4,153	893	192.51	4,503	3,167
192.00	4,250	935	192.52	4,508	3,212
192.01	4,255	978	192.53	4,513	3,257
192.02	4,260	1,020	192.54	4,518	3,302
192.03	4,265	1,063	192.55	4,523	3,348
192.04	4,270	1,105	192.56	4,528	3,393
192.05	4,275	1,148	192.57	4,533	3,438
192.06	4,280	1,191	192.58	4,538	3,483
192.07	4,285	1,234	192.59	4,543	3,529

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.60	4,548	3,574	193.12	4,807	6,006
192.61	4,553	3,620	193.13	4,812	6,054
192.62	4,558	3,665	193.14	4,818	6,102
192.63	4,562	3,711	193.15	4,823	6,151
192.64	4,567	3,757	193.16	4,828	6,199
192.65	4,572	3,802	193.17	4,833	6,247
192.66	4,577	3,848	193.18	4,838	6,296
192.67	4,582	3,894	193.19	4,843	6,344
192.68	4,587	3,940	193.20	4,848	6,392
192.69	4,592	3,986	193.21	4,853	6,441
192.70	4,597	4,032	193.22	4,858	6,489
192.71	4,602	4,078	193.23	4,864	6,538
192.72	4,607	4,124	193.24	4,869	6,587
192.73	4,612	4,170	193.25	4,874	6,635
192.74	4,617	4,216	193.26	4,879	6,684
192.75	4,622	4,262	193.27	4,884	6,733
192.76	4,627	4,308	193.28	4,889	6,782
192.77	4,632	4,355	193.29	4,894	6,831
192.78	4,637	4,401	193.30	4,899	6,880
192.79	4,642	4,447	193.31	4,904	6,929
192.80	4,647	4,494	193.32	4,910	6,978
192.81	4,652	4,540	193.33	4,915	7,027
192.82	4,657	4,587	193.34	4,920	7,076
192.83	4,662	4,633	193.35	4,925	7,125
192.84	4,667	4,680	193.36	4,930	7,175
192.85	4,672	4,727	193.37	4,935	7,224
192.86	4,677	4,773	193.38	4,940	7,273
192.87	4,682	4,820	193.39	4,945	7,323
192.88	4,686	4,867	193.40	4,950	7,372
192.89	4,691	4,914	193.41	4,956	7,422
192.90	4,696	4,961	193.42	4,961	7,471
192.91	4,701	5,008	193.43	4,966	7,521
192.92	4,706	5,055	193.44	4,971	7,571
192.93	4,711	5,102	193.45	4,976	7,620
192.94	4,716	5,149	193.46	4,981	7,670
192.95	4,721	5,196	193.47	4,986	7,720
192.96	4,726	5,244	193.48	4,991	7,770
192.97	4,731	5,291	193.49	4,996	7,820
192.98	4,736	5,338	193.50	5,002	7,870
192.99	4,741	5,386	193.51	5,007	7,920
193.00	4,746	5,433	193.52	5,012	7,970
193.01	4,751	5,480	193.53	5,017	8,020
193.02	4,756	5,528	193.54	5,022	8,070
193.03	4,761	5,576	193.55	5,027	8,121
193.04	4,766	5,623	193.56	5,032	8,171
193.05	4,772	5,671	193.57	5,037	8,221
193.06	4,777	5,719	193.58	5,042	8,272
193.07	4,782	5,766	193.59	5,047	8,322
193.08	4,787	5,814	193.60	5,053	8,373
193.09	4,792	5,862	193.61	5,058	8,423
193.10	4,797	5,910	193.62	5,063	8,474
193.11	4,802	5,958	193.63	5,068	8,524

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.64	5,073	8,575	194.16	5,341	11,282
193.65	5,078	8,626	194.17	5,347	11,336
193.66	5,083	8,677	194.18	5,352	11,389
193.67	5,088	8,728	194.19	5,357	11,443
193.68	5,093	8,778	194.20	5,362	11,496
193.69	5,099	8,829	194.21	5,368	11,550
193.70	5,104	8,880	194.22	5,373	11,604
193.71	5,109	8,931	194.23	5,378	11,658
193.72	5,114	8,983	194.24	5,383	11,711
193.73	5,119	9,034	194.25	5,389	11,765
193.74	5,124	9,085	194.26	5,394	11,819
193.75	5,129	9,136	194.27	5,399	11,873
193.76	5,134	9,188	194.28	5,405	11,927
193.77	5,139	9,239	194.29	5,410	11,981
193.78	5,145	9,290	194.30	5,415	12,035
193.79	5,150	9,342	194.31	5,420	12,089
193.80	5,155	9,393	194.32	5,426	12,144
193.81	5,160	9,445	194.33	5,431	12,198
193.82	5,165	9,497	194.34	5,436	12,252
193.83	5,170	9,548	194.35	5,441	12,307
193.84	5,175	9,600	194.36	5,447	12,361
193.85	5,180	9,652	194.37	5,452	12,416
193.86	5,185	9,704	194.38	5,457	12,470
193.87	5,191	9,755	194.39	5,463	12,525
193.88	5,196	9,807	194.40	5,468	12,579
193.89	5,201	9,859	194.41	5,473	12,634
193.90	5,206	9,911	194.42	5,478	12,689
193.91	5,211	9,963	194.43	5,484	12,744
193.92	5,216	10,016	194.44	5,489	12,799
193.93	5,221	10,068	194.45	5,494	12,854
193.94	5,226	10,120	194.46	5,499	12,908
193.95	5,231	10,172	194.47	5,505	12,963
193.96	5,237	10,225	194.48	5,510	13,019
193.97	5,242	10,277	194.49	5,515	13,074
193.98	5,247	10,329	194.50	5,521	13,129
193.99	5,252	10,382	194.51	5,526	13,184
194.00	5,257	10,434	194.52	5,531	13,239
194.01	5,262	10,487	194.53	5,536	13,295
194.02	5,268	10,540	194.54	5,542	13,350
194.03	5,273	10,592	194.55	5,547	13,406
194.04	5,278	10,645	194.56	5,552	13,461
194.05	5,283	10,698	194.57	5,557	13,517
194.06	5,289	10,751	194.58	5,563	13,572
194.07	5,294	10,804	194.59	5,568	13,628
194.08	5,299	10,857	194.60	5,573	13,684
194.09	5,304	10,910	194.61	5,578	13,739
194.10	5,310	10,963	194.62	5,584	13,795
194.11	5,315	11,016	194.63	5,589	13,851
194.12	5,320	11,069	194.64	5,594	13,907
194.13	5,326	11,122	194.65	5,600	13,963
194.14	5,331	11,176	194.66	5,605	14,019
194.15	5,336	11,229	194.67	5,610	14,075

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.68	5,615	14,131	195.20	5,893	17,123
194.69	5,621	14,187	195.21	5,898	17,182
194.70	5,626	14,244	195.22	5,903	17,241
194.71	5,631	14,300	195.23	5,909	17,300
194.72	5,636	14,356	195.24	5,914	17,359
194.73	5,642	14,413	195.25	5,920	17,418
194.74	5,647	14,469	195.26	5,925	17,477
194.75	5,652	14,525	195.27	5,931	17,536
194.76	5,658	14,582	195.28	5,936	17,596
194.77	5,663	14,639	195.29	5,941	17,655
194.78	5,668	14,695	195.30	5,947	17,715
194.79	5,673	14,752	195.31	5,952	17,774
194.80	5,679	14,809	195.32	5,958	17,834
194.81	5,684	14,866	195.33	5,963	17,893
194.82	5,689	14,922	195.34	5,969	17,953
194.83	5,694	14,979	195.35	5,974	18,013
194.84	5,700	15,036	195.36	5,979	18,072
194.85	5,705	15,093	195.37	5,985	18,132
194.86	5,710	15,150	195.38	5,990	18,192
194.87	5,715	15,208	195.39	5,996	18,252
194.88	5,721	15,265	195.40	6,001	18,312
194.89	5,726	15,322	195.41	6,007	18,372
194.90	5,731	15,379	195.42	6,012	18,432
194.91	5,737	15,437	195.43	6,017	18,492
194.92	5,742	15,494	195.44	6,023	18,553
194.93	5,747	15,551	195.45	6,028	18,613
194.94	5,752	15,609	195.46	6,034	18,673
194.95	5,758	15,666	195.47	6,039	18,733
194.96	5,763	15,724	195.48	6,045	18,794
194.97	5,768	15,782	195.49	6,050	18,854
194.98	5,773	15,839	195.50	6,056	18,915
194.99	5,779	15,897	195.51	6,061	18,975
195.00	5,784	15,955	195.52	6,066	19,036
195.01	5,789	16,013	195.53	6,072	19,097
195.02	5,795	16,071	195.54	6,077	19,158
195.03	5,800	16,129	195.55	6,083	19,218
195.04	5,806	16,187	195.56	6,088	19,279
195.05	5,811	16,245	195.57	6,094	19,340
195.06	5,817	16,303	195.58	6,099	19,401
195.07	5,822	16,361	195.59	6,104	19,462
195.08	5,827	16,419	195.60	6,110	19,523
195.09	5,833	16,478	195.61	6,115	19,584
195.10	5,838	16,536	195.62	6,121	19,645
195.11	5,844	16,595	195.63	6,126	19,707
195.12	5,849	16,653	195.64	6,132	19,768
195.13	5,855	16,712	195.65	6,137	19,829
195.14	5,860	16,770	195.66	6,142	19,891
195.15	5,865	16,829	195.67	6,148	19,952
195.16	5,871	16,887	195.68	6,153	20,014
195.17	5,876	16,946	195.69	6,159	20,075
195.18	5,882	17,005	195.70	6,164	20,137
195.19	5,887	17,064	195.71	6,170	20,199

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.72	6,175	20,260
195.73	6,180	20,322
195.74	6,186	20,384
195.75	6,191	20,446
195.76	6,197	20,508
195.77	6,202	20,570
195.78	6,208	20,632
195.79	6,213	20,694
195.80	6,218	20,756
195.81	6,224	20,818
195.82	6,229	20,880
195.83	6,235	20,943
195.84	6,240	21,005
195.85	6,246	21,068
195.86	6,251	21,130
195.87	6,256	21,193
195.88	6,262	21,255
195.89	6,267	21,318
195.90	6,273	21,381
195.91	6,278	21,443
195.92	6,284	21,506
195.93	6,289	21,569
195.94	6,294	21,632
195.95	6,300	21,695
195.96	6,305	21,758
195.97	6,311	21,821
195.98	6,316	21,884
195.99	6,322	21,947
196.00	6,327	22,010

Summary for Pond B-56: Basin #56

Inflow Area = 1.512 ac, 31.08% Impervious, Inflow Depth = 8.86" for Future 100 yr event
 Inflow = 13.72 cfs @ 12.17 hrs, Volume= 1.116 af
 Outflow = 7.82 cfs @ 12.31 hrs, Volume= 1.069 af, Atten= 43%, Lag= 8.4 min
 Primary = 7.82 cfs @ 12.31 hrs, Volume= 1.069 af
 Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 193.62' @ 12.31 hrs Surf.Area= 5,790 sf Storage= 9,818 cf

Plug-Flow detention time= 64.5 min calculated for 1.068 af (96% of inflow)
 Center-of-Mass det. time= 39.9 min (823.2 - 783.3)

Volume	Invert	Avail.Storage	Storage Description
#1	191.57'	25,032 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.57	0	0	0
192.00	5,021	1,080	1,080
193.00	5,490	5,256	6,335
194.00	5,976	5,733	12,068
195.00	6,478	6,227	18,295
196.00	6,995	6,737	25,032

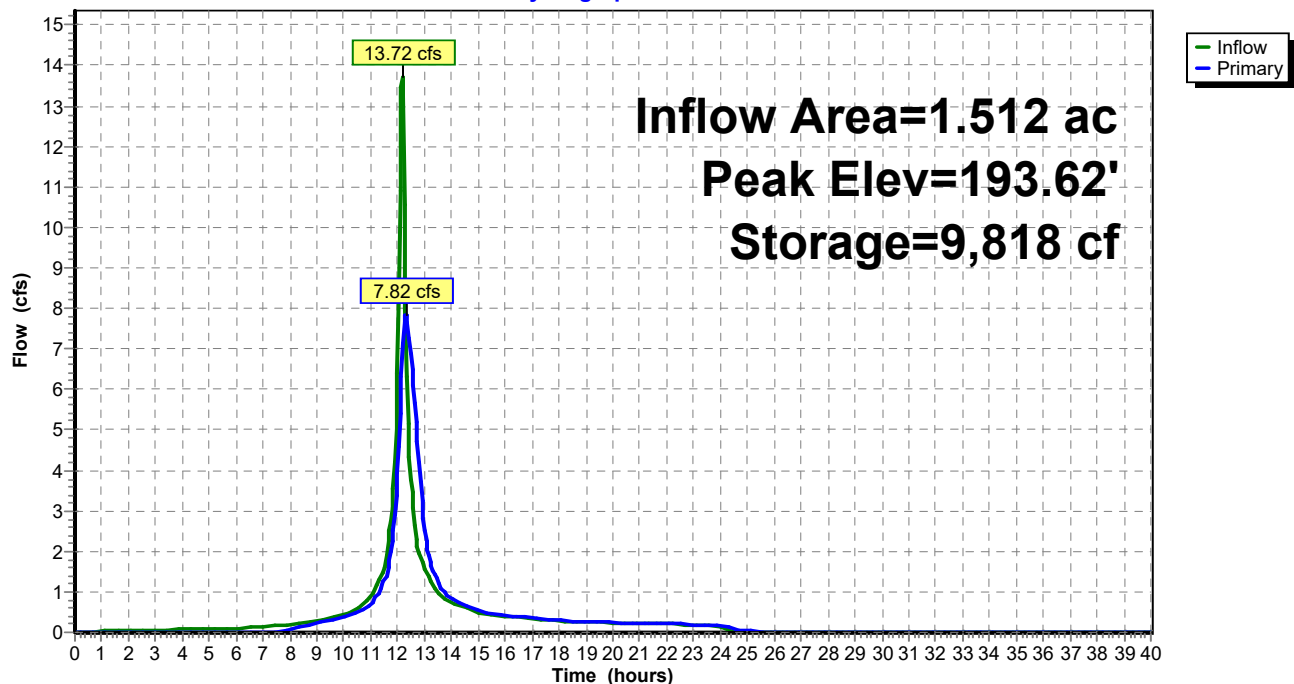
Device	Routing	Invert	Outlet Devices
#1	Primary	191.57'	18.0" Round Culvert L= 29.0' Ke= 0.500 Inlet / Outlet Invert= 191.57' / 191.42' S= 0.0052 ' / Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.19'	36.0" W x 6.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.62'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	194.99'	50.0' long + 3.0 ' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=7.80 cfs @ 12.31 hrs HW=193.61' (Free Discharge)

1=Culvert (Passes 7.80 cfs of 8.28 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 7.80 cfs @ 5.20 fps)
 3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-56: Basin #56

Hydrograph



Stage-Discharge for Pond B-56: Basin #56

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.57	0.00	192.09	0.00	192.61	2.62	193.13	5.97
191.58	0.00	192.10	0.00	192.62	2.72	193.14	6.01
191.59	0.00	192.11	0.00	192.63	2.81	193.15	6.05
191.60	0.00	192.12	0.00	192.64	2.91	193.16	6.10
191.61	0.00	192.13	0.00	192.65	3.00	193.17	6.14
191.62	0.00	192.14	0.00	192.66	3.10	193.18	6.18
191.63	0.00	192.15	0.00	192.67	3.20	193.19	6.23
191.64	0.00	192.16	0.00	192.68	3.30	193.20	6.27
191.65	0.00	192.17	0.00	192.69	3.40	193.21	6.31
191.66	0.00	192.18	0.00	192.70	3.50	193.22	6.35
191.67	0.00	192.19	0.00	192.71	3.58	193.23	6.39
191.68	0.00	192.20	0.01	192.72	3.67	193.24	6.43
191.69	0.00	192.21	0.03	192.73	3.74	193.25	6.47
191.70	0.00	192.22	0.05	192.74	3.82	193.26	6.51
191.71	0.00	192.23	0.08	192.75	3.89	193.27	6.55
191.72	0.00	192.24	0.11	192.76	3.97	193.28	6.59
191.73	0.00	192.25	0.14	192.77	4.04	193.29	6.63
191.74	0.00	192.26	0.18	192.78	4.10	193.30	6.67
191.75	0.00	192.27	0.22	192.79	4.17	193.31	6.71
191.76	0.00	192.28	0.26	192.80	4.24	193.32	6.75
191.77	0.00	192.29	0.30	192.81	4.30	193.33	6.79
191.78	0.00	192.30	0.35	192.82	4.36	193.34	6.83
191.79	0.00	192.31	0.40	192.83	4.43	193.35	6.87
191.80	0.00	192.32	0.45	192.84	4.49	193.36	6.91
191.81	0.00	192.33	0.50	192.85	4.55	193.37	6.94
191.82	0.00	192.34	0.56	192.86	4.61	193.38	6.98
191.83	0.00	192.35	0.62	192.87	4.66	193.39	7.02
191.84	0.00	192.36	0.67	192.88	4.72	193.40	7.06
191.85	0.00	192.37	0.74	192.89	4.78	193.41	7.09
191.86	0.00	192.38	0.80	192.90	4.83	193.42	7.13
191.87	0.00	192.39	0.86	192.91	4.89	193.43	7.17
191.88	0.00	192.40	0.93	192.92	4.94	193.44	7.20
191.89	0.00	192.41	0.99	192.93	5.00	193.45	7.24
191.90	0.00	192.42	1.06	192.94	5.05	193.46	7.28
191.91	0.00	192.43	1.13	192.95	5.10	193.47	7.31
191.92	0.00	192.44	1.20	192.96	5.16	193.48	7.35
191.93	0.00	192.45	1.28	192.97	5.21	193.49	7.38
191.94	0.00	192.46	1.35	192.98	5.26	193.50	7.42
191.95	0.00	192.47	1.43	192.99	5.31	193.51	7.45
191.96	0.00	192.48	1.50	193.00	5.36	193.52	7.49
191.97	0.00	192.49	1.58	193.01	5.41	193.53	7.52
191.98	0.00	192.50	1.66	193.02	5.46	193.54	7.56
191.99	0.00	192.51	1.74	193.03	5.50	193.55	7.59
192.00	0.00	192.52	1.83	193.04	5.55	193.56	7.63
192.01	0.00	192.53	1.91	193.05	5.60	193.57	7.66
192.02	0.00	192.54	1.99	193.06	5.65	193.58	7.70
192.03	0.00	192.55	2.08	193.07	5.69	193.59	7.73
192.04	0.00	192.56	2.17	193.08	5.74	193.60	7.76
192.05	0.00	192.57	2.26	193.09	5.79	193.61	7.80
192.06	0.00	192.58	2.35	193.10	5.83	193.62	7.83
192.07	0.00	192.59	2.44	193.11	5.88	193.63	7.88
192.08	0.00	192.60	2.53	193.12	5.92	193.64	7.93

Stage-Discharge for Pond B-56: Basin #56 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.65	8.00	194.17	11.13	194.69	13.10	195.21	26.75
193.66	8.07	194.18	11.17	194.70	13.13	195.22	27.67
193.67	8.14	194.19	11.22	194.71	13.15	195.23	28.62
193.68	8.22	194.20	11.26	194.72	13.18	195.24	29.59
193.69	8.30	194.21	11.30	194.73	13.21	195.25	30.59
193.70	8.39	194.22	11.35	194.74	13.24	195.26	31.61
193.71	8.48	194.23	11.39	194.75	13.26	195.27	32.66
193.72	8.57	194.24	11.43	194.76	13.29	195.28	33.74
193.73	8.66	194.25	11.48	194.77	13.32	195.29	34.83
193.74	8.76	194.26	11.52	194.78	13.35	195.30	35.95
193.75	8.86	194.27	11.56	194.79	13.37	195.31	37.10
193.76	8.97	194.28	11.61	194.80	13.40	195.32	38.27
193.77	9.07	194.29	11.65	194.81	13.43	195.33	39.46
193.78	9.18	194.30	11.69	194.82	13.45	195.34	40.68
193.79	9.28	194.31	11.73	194.83	13.48	195.35	41.93
193.80	9.34	194.32	11.78	194.84	13.51	195.36	43.19
193.81	9.39	194.33	11.82	194.85	13.53	195.37	44.48
193.82	9.44	194.34	11.86	194.86	13.56	195.38	45.80
193.83	9.49	194.35	11.90	194.87	13.59	195.39	47.14
193.84	9.55	194.36	11.94	194.88	13.61	195.40	48.53
193.85	9.60	194.37	11.98	194.89	13.64	195.41	49.94
193.86	9.65	194.38	12.03	194.90	13.67	195.42	51.39
193.87	9.70	194.39	12.07	194.91	13.69	195.43	52.85
193.88	9.75	194.40	12.11	194.92	13.72	195.44	54.35
193.89	9.80	194.41	12.15	194.93	13.75	195.45	55.87
193.90	9.85	194.42	12.19	194.94	13.77	195.46	57.42
193.91	9.90	194.43	12.23	194.95	13.80	195.47	58.99
193.92	9.95	194.44	12.27	194.96	13.83	195.48	60.59
193.93	10.00	194.45	12.31	194.97	13.85	195.49	62.21
193.94	10.05	194.46	12.35	194.98	13.88	195.50	63.87
193.95	10.10	194.47	12.39	194.99	13.90	195.51	65.55
193.96	10.15	194.48	12.43	195.00	14.05	195.52	67.25
193.97	10.20	194.49	12.47	195.01	14.29	195.53	68.98
193.98	10.25	194.50	12.51	195.02	14.59	195.54	70.74
193.99	10.29	194.51	12.55	195.03	14.94	195.55	72.53
194.00	10.34	194.52	12.59	195.04	15.34	195.56	74.34
194.01	10.39	194.53	12.63	195.05	15.78	195.57	76.18
194.02	10.44	194.54	12.67	195.06	16.26	195.58	78.04
194.03	10.49	194.55	12.71	195.07	16.77	195.59	79.94
194.04	10.53	194.56	12.73	195.08	17.31	195.60	81.59
194.05	10.58	194.57	12.76	195.09	17.88	195.61	83.25
194.06	10.63	194.58	12.79	195.10	18.48	195.62	84.93
194.07	10.67	194.59	12.82	195.11	19.10	195.63	86.62
194.08	10.72	194.60	12.85	195.12	19.76	195.64	88.32
194.09	10.77	194.61	12.88	195.13	20.43	195.65	90.04
194.10	10.81	194.62	12.90	195.14	21.13	195.66	91.77
194.11	10.86	194.63	12.93	195.15	21.86	195.67	93.51
194.12	10.90	194.64	12.96	195.16	22.61	195.68	95.27
194.13	10.95	194.65	12.99	195.17	23.38	195.69	97.04
194.14	10.99	194.66	13.02	195.18	24.17	195.70	98.82
194.15	11.04	194.67	13.04	195.19	24.98	195.71	100.61
194.16	11.08	194.68	13.07	195.20	25.85	195.72	102.42

Stage-Discharge for Pond B-56: Basin #56 (continued)

Elevation (feet)	Primary (cfs)
195.73	104.24
195.74	106.07
195.75	107.92
195.76	109.77
195.77	111.64
195.78	113.52
195.79	115.41
195.80	117.36
195.81	119.31
195.82	121.28
195.83	123.26
195.84	125.26
195.85	127.27
195.86	129.29
195.87	131.32
195.88	133.37
195.89	135.43
195.90	137.50
195.91	139.59
195.92	141.69
195.93	143.80
195.94	145.92
195.95	148.06
195.96	150.21
195.97	152.37
195.98	154.55
195.99	156.73
196.00	158.88

Stage-Area-Storage for Pond B-56: Basin #56

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.57	0	0	192.09	5,063	1,533
191.58	117	1	192.10	5,068	1,584
191.59	234	2	192.11	5,073	1,635
191.60	350	5	192.12	5,077	1,685
191.61	467	9	192.13	5,082	1,736
191.62	584	15	192.14	5,087	1,787
191.63	701	21	192.15	5,091	1,838
191.64	817	29	192.16	5,096	1,889
191.65	934	37	192.17	5,101	1,940
191.66	1,051	47	192.18	5,105	1,991
191.67	1,168	58	192.19	5,110	2,042
191.68	1,284	71	192.20	5,115	2,093
191.69	1,401	84	192.21	5,119	2,144
191.70	1,518	99	192.22	5,124	2,195
191.71	1,635	114	192.23	5,129	2,247
191.72	1,752	131	192.24	5,134	2,298
191.73	1,868	149	192.25	5,138	2,349
191.74	1,985	169	192.26	5,143	2,401
191.75	2,102	189	192.27	5,148	2,452
191.76	2,219	211	192.28	5,152	2,504
191.77	2,335	234	192.29	5,157	2,555
191.78	2,452	257	192.30	5,162	2,607
191.79	2,569	283	192.31	5,166	2,659
191.80	2,686	309	192.32	5,171	2,710
191.81	2,802	336	192.33	5,176	2,762
191.82	2,919	365	192.34	5,180	2,814
191.83	3,036	395	192.35	5,185	2,866
191.84	3,153	426	192.36	5,190	2,917
191.85	3,269	458	192.37	5,195	2,969
191.86	3,386	491	192.38	5,199	3,021
191.87	3,503	525	192.39	5,204	3,073
191.88	3,620	561	192.40	5,209	3,125
191.89	3,737	598	192.41	5,213	3,178
191.90	3,853	636	192.42	5,218	3,230
191.91	3,970	675	192.43	5,223	3,282
191.92	4,087	715	192.44	5,227	3,334
191.93	4,204	757	192.45	5,232	3,386
191.94	4,320	799	192.46	5,237	3,439
191.95	4,437	843	192.47	5,241	3,491
191.96	4,554	888	192.48	5,246	3,544
191.97	4,671	934	192.49	5,251	3,596
191.98	4,787	981	192.50	5,256	3,649
191.99	4,904	1,030	192.51	5,260	3,701
192.00	5,021	1,080	192.52	5,265	3,754
192.01	5,026	1,130	192.53	5,270	3,807
192.02	5,030	1,180	192.54	5,274	3,859
192.03	5,035	1,230	192.55	5,279	3,912
192.04	5,040	1,281	192.56	5,284	3,965
192.05	5,044	1,331	192.57	5,288	4,018
192.06	5,049	1,382	192.58	5,293	4,071
192.07	5,054	1,432	192.59	5,298	4,124
192.08	5,059	1,483	192.60	5,302	4,177

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.61	5,307	4,230	193.13	5,553	7,053
192.62	5,312	4,283	193.14	5,558	7,108
192.63	5,316	4,336	193.15	5,563	7,164
192.64	5,321	4,389	193.16	5,568	7,220
192.65	5,326	4,442	193.17	5,573	7,275
192.66	5,331	4,496	193.18	5,577	7,331
192.67	5,335	4,549	193.19	5,582	7,387
192.68	5,340	4,602	193.20	5,587	7,443
192.69	5,345	4,656	193.21	5,592	7,499
192.70	5,349	4,709	193.22	5,597	7,555
192.71	5,354	4,763	193.23	5,602	7,611
192.72	5,359	4,816	193.24	5,607	7,667
192.73	5,363	4,870	193.25	5,612	7,723
192.74	5,368	4,923	193.26	5,616	7,779
192.75	5,373	4,977	193.27	5,621	7,835
192.76	5,377	5,031	193.28	5,626	7,891
192.77	5,382	5,085	193.29	5,631	7,948
192.78	5,387	5,139	193.30	5,636	8,004
192.79	5,392	5,192	193.31	5,641	8,060
192.80	5,396	5,246	193.32	5,646	8,117
192.81	5,401	5,300	193.33	5,650	8,173
192.82	5,406	5,354	193.34	5,655	8,230
192.83	5,410	5,408	193.35	5,660	8,286
192.84	5,415	5,463	193.36	5,665	8,343
192.85	5,420	5,517	193.37	5,670	8,400
192.86	5,424	5,571	193.38	5,675	8,456
192.87	5,429	5,625	193.39	5,680	8,513
192.88	5,434	5,680	193.40	5,684	8,570
192.89	5,438	5,734	193.41	5,689	8,627
192.90	5,443	5,788	193.42	5,694	8,684
192.91	5,448	5,843	193.43	5,699	8,741
192.92	5,452	5,897	193.44	5,704	8,798
192.93	5,457	5,952	193.45	5,709	8,855
192.94	5,462	6,006	193.46	5,714	8,912
192.95	5,467	6,061	193.47	5,718	8,969
192.96	5,471	6,116	193.48	5,723	9,026
192.97	5,476	6,171	193.49	5,728	9,083
192.98	5,481	6,225	193.50	5,733	9,141
192.99	5,485	6,280	193.51	5,738	9,198
193.00	5,490	6,335	193.52	5,743	9,256
193.01	5,495	6,390	193.53	5,748	9,313
193.02	5,500	6,445	193.54	5,752	9,370
193.03	5,505	6,500	193.55	5,757	9,428
193.04	5,509	6,555	193.56	5,762	9,486
193.05	5,514	6,610	193.57	5,767	9,543
193.06	5,519	6,665	193.58	5,772	9,601
193.07	5,524	6,721	193.59	5,777	9,659
193.08	5,529	6,776	193.60	5,782	9,716
193.09	5,534	6,831	193.61	5,786	9,774
193.10	5,539	6,886	193.62	5,791	9,832
193.11	5,543	6,942	193.63	5,796	9,890
193.12	5,548	6,997	193.64	5,801	9,948

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.65	5,806	10,006	194.17	6,061	13,091
193.66	5,811	10,064	194.18	6,066	13,152
193.67	5,816	10,122	194.19	6,071	13,213
193.68	5,820	10,181	194.20	6,076	13,273
193.69	5,825	10,239	194.21	6,081	13,334
193.70	5,830	10,297	194.22	6,086	13,395
193.71	5,835	10,355	194.23	6,091	13,456
193.72	5,840	10,414	194.24	6,096	13,517
193.73	5,845	10,472	194.25	6,102	13,578
193.74	5,850	10,531	194.26	6,107	13,639
193.75	5,855	10,589	194.27	6,112	13,700
193.76	5,859	10,648	194.28	6,117	13,761
193.77	5,864	10,706	194.29	6,122	13,822
193.78	5,869	10,765	194.30	6,127	13,883
193.79	5,874	10,824	194.31	6,132	13,945
193.80	5,879	10,883	194.32	6,137	14,006
193.81	5,884	10,941	194.33	6,142	14,067
193.82	5,889	11,000	194.34	6,147	14,129
193.83	5,893	11,059	194.35	6,152	14,190
193.84	5,898	11,118	194.36	6,157	14,252
193.85	5,903	11,177	194.37	6,162	14,313
193.86	5,908	11,236	194.38	6,167	14,375
193.87	5,913	11,295	194.39	6,172	14,437
193.88	5,918	11,354	194.40	6,177	14,499
193.89	5,923	11,414	194.41	6,182	14,560
193.90	5,927	11,473	194.42	6,187	14,622
193.91	5,932	11,532	194.43	6,192	14,684
193.92	5,937	11,591	194.44	6,197	14,746
193.93	5,942	11,651	194.45	6,202	14,808
193.94	5,947	11,710	194.46	6,207	14,870
193.95	5,952	11,770	194.47	6,212	14,932
193.96	5,957	11,829	194.48	6,217	14,994
193.97	5,961	11,889	194.49	6,222	15,057
193.98	5,966	11,949	194.50	6,227	15,119
193.99	5,971	12,008	194.51	6,232	15,181
194.00	5,976	12,068	194.52	6,237	15,243
194.01	5,981	12,128	194.53	6,242	15,306
194.02	5,986	12,188	194.54	6,247	15,368
194.03	5,991	12,248	194.55	6,252	15,431
194.04	5,996	12,307	194.56	6,257	15,493
194.05	6,001	12,367	194.57	6,262	15,556
194.06	6,006	12,427	194.58	6,267	15,619
194.07	6,011	12,488	194.59	6,272	15,681
194.08	6,016	12,548	194.60	6,277	15,744
194.09	6,021	12,608	194.61	6,282	15,807
194.10	6,026	12,668	194.62	6,287	15,870
194.11	6,031	12,728	194.63	6,292	15,933
194.12	6,036	12,789	194.64	6,297	15,995
194.13	6,041	12,849	194.65	6,302	16,058
194.14	6,046	12,910	194.66	6,307	16,122
194.15	6,051	12,970	194.67	6,312	16,185
194.16	6,056	13,031	194.68	6,317	16,248

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.69	6,322	16,311	195.21	6,587	19,667
194.70	6,327	16,374	195.22	6,592	19,733
194.71	6,332	16,438	195.23	6,597	19,799
194.72	6,337	16,501	195.24	6,602	19,865
194.73	6,342	16,564	195.25	6,607	19,931
194.74	6,347	16,628	195.26	6,612	19,997
194.75	6,353	16,691	195.27	6,618	20,063
194.76	6,358	16,755	195.28	6,623	20,129
194.77	6,363	16,818	195.29	6,628	20,195
194.78	6,368	16,882	195.30	6,633	20,262
194.79	6,373	16,946	195.31	6,638	20,328
194.80	6,378	17,009	195.32	6,643	20,394
194.81	6,383	17,073	195.33	6,649	20,461
194.82	6,388	17,137	195.34	6,654	20,527
194.83	6,393	17,201	195.35	6,659	20,594
194.84	6,398	17,265	195.36	6,664	20,661
194.85	6,403	17,329	195.37	6,669	20,727
194.86	6,408	17,393	195.38	6,674	20,794
194.87	6,413	17,457	195.39	6,680	20,861
194.88	6,418	17,521	195.40	6,685	20,928
194.89	6,423	17,585	195.41	6,690	20,994
194.90	6,428	17,650	195.42	6,695	21,061
194.91	6,433	17,714	195.43	6,700	21,128
194.92	6,438	17,778	195.44	6,705	21,195
194.93	6,443	17,843	195.45	6,711	21,262
194.94	6,448	17,907	195.46	6,716	21,330
194.95	6,453	17,972	195.47	6,721	21,397
194.96	6,458	18,036	195.48	6,726	21,464
194.97	6,463	18,101	195.49	6,731	21,531
194.98	6,468	18,166	195.50	6,737	21,599
194.99	6,473	18,230	195.51	6,742	21,666
195.00	6,478	18,295	195.52	6,747	21,733
195.01	6,483	18,360	195.53	6,752	21,801
195.02	6,488	18,425	195.54	6,757	21,869
195.03	6,494	18,490	195.55	6,762	21,936
195.04	6,499	18,555	195.56	6,768	22,004
195.05	6,504	18,620	195.57	6,773	22,071
195.06	6,509	18,685	195.58	6,778	22,139
195.07	6,514	18,750	195.59	6,783	22,207
195.08	6,519	18,815	195.60	6,788	22,275
195.09	6,525	18,880	195.61	6,793	22,343
195.10	6,530	18,945	195.62	6,799	22,411
195.11	6,535	19,011	195.63	6,804	22,479
195.12	6,540	19,076	195.64	6,809	22,547
195.13	6,545	19,142	195.65	6,814	22,615
195.14	6,550	19,207	195.66	6,819	22,683
195.15	6,556	19,273	195.67	6,824	22,751
195.16	6,561	19,338	195.68	6,830	22,820
195.17	6,566	19,404	195.69	6,835	22,888
195.18	6,571	19,469	195.70	6,840	22,956
195.19	6,576	19,535	195.71	6,845	23,025
195.20	6,581	19,601	195.72	6,850	23,093

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.73	6,855	23,162
195.74	6,861	23,230
195.75	6,866	23,299
195.76	6,871	23,368
195.77	6,876	23,436
195.78	6,881	23,505
195.79	6,886	23,574
195.80	6,892	23,643
195.81	6,897	23,712
195.82	6,902	23,781
195.83	6,907	23,850
195.84	6,912	23,919
195.85	6,917	23,988
195.86	6,923	24,057
195.87	6,928	24,127
195.88	6,933	24,196
195.89	6,938	24,265
195.90	6,943	24,335
195.91	6,948	24,404
195.92	6,954	24,474
195.93	6,959	24,543
195.94	6,964	24,613
195.95	6,969	24,682
195.96	6,974	24,752
195.97	6,979	24,822
195.98	6,985	24,892
195.99	6,990	24,962
196.00	6,995	25,032

Summary for Pond B-57: Basin #57

Inflow Area = 1.434 ac, 47.56% Impervious, Inflow Depth = 9.37" for Future 100 yr event
 Inflow = 13.42 cfs @ 12.17 hrs, Volume= 1.119 af
 Outflow = 11.43 cfs @ 12.23 hrs, Volume= 1.051 af, Atten= 15%, Lag= 3.8 min
 Primary = 11.43 cfs @ 12.23 hrs, Volume= 1.051 af
 Routed to Pond B-58 : Basin #58

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 203.93' @ 12.23 hrs Surf.Area= 4,997 sf Storage= 10,040 cf

Plug-Flow detention time= 140.3 min calculated for 1.051 af (94% of inflow)
 Center-of-Mass det. time= 105.1 min (876.7 - 771.6)

Volume	Invert	Avail.Storage	Storage Description
#1	201.30'	13,039 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

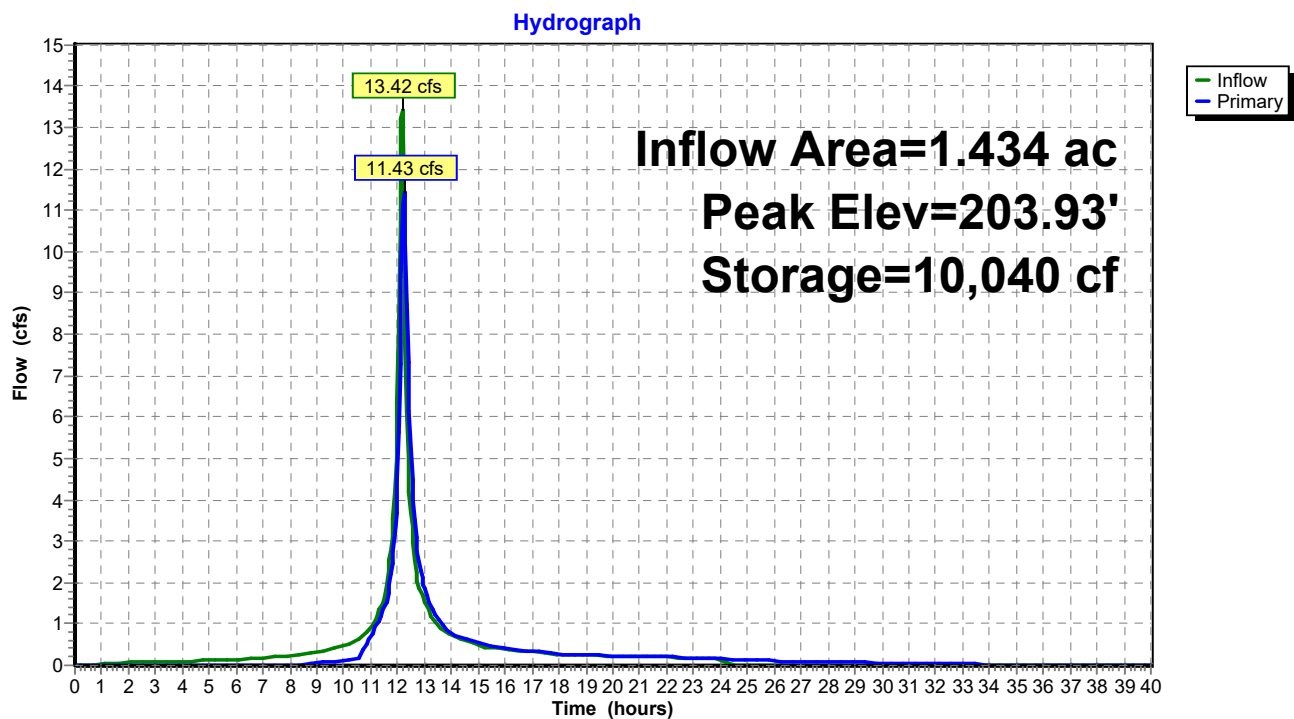
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.30	0	0	0
202.00	3,969	1,389	1,389
203.00	4,488	4,229	5,618
204.00	5,034	4,761	10,379
204.50	5,608	2,661	13,039

Device	Routing	Invert	Outlet Devices
#1	Primary	202.00'	36.0" Round Culvert L= 252.0' Ke= 0.500 Inlet / Outlet Invert= 202.00' / 199.00' S= 0.0119 '/' Cc= 0.900 n= 0.013, Flow Area= 7.07 sf
#2	Device 1	202.34'	2.5" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	204.25'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=11.28 cfs @ 12.23 hrs HW=203.92' (Free Discharge)

1=Culvert (Passes 11.28 cfs of 22.62 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.20 cfs @ 5.86 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 11.08 cfs @ 3.14 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-57: Basin #57



Stage-Discharge for Pond B-57: Basin #57

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.30	0.00	201.82	0.00	202.34	0.00	202.86	0.11
201.31	0.00	201.83	0.00	202.35	0.00	202.87	0.11
201.32	0.00	201.84	0.00	202.36	0.00	202.88	0.11
201.33	0.00	201.85	0.00	202.37	0.00	202.89	0.11
201.34	0.00	201.86	0.00	202.38	0.00	202.90	0.11
201.35	0.00	201.87	0.00	202.39	0.00	202.91	0.11
201.36	0.00	201.88	0.00	202.40	0.01	202.92	0.11
201.37	0.00	201.89	0.00	202.41	0.01	202.93	0.11
201.38	0.00	201.90	0.00	202.42	0.01	202.94	0.12
201.39	0.00	201.91	0.00	202.43	0.01	202.95	0.12
201.40	0.00	201.92	0.00	202.44	0.02	202.96	0.12
201.41	0.00	201.93	0.00	202.45	0.02	202.97	0.12
201.42	0.00	201.94	0.00	202.46	0.02	202.98	0.12
201.43	0.00	201.95	0.00	202.47	0.03	202.99	0.12
201.44	0.00	201.96	0.00	202.48	0.03	203.00	0.12
201.45	0.00	201.97	0.00	202.49	0.03	203.01	0.14
201.46	0.00	201.98	0.00	202.50	0.04	203.02	0.16
201.47	0.00	201.99	0.00	202.51	0.04	203.03	0.19
201.48	0.00	202.00	0.00	202.52	0.05	203.04	0.23
201.49	0.00	202.01	0.00	202.53	0.05	203.05	0.27
201.50	0.00	202.02	0.00	202.54	0.05	203.06	0.32
201.51	0.00	202.03	0.00	202.55	0.05	203.07	0.37
201.52	0.00	202.04	0.00	202.56	0.06	203.08	0.43
201.53	0.00	202.05	0.00	202.57	0.06	203.09	0.48
201.54	0.00	202.06	0.00	202.58	0.06	203.10	0.54
201.55	0.00	202.07	0.00	202.59	0.06	203.11	0.61
201.56	0.00	202.08	0.00	202.60	0.06	203.12	0.68
201.57	0.00	202.09	0.00	202.61	0.07	203.13	0.75
201.58	0.00	202.10	0.00	202.62	0.07	203.14	0.82
201.59	0.00	202.11	0.00	202.63	0.07	203.15	0.89
201.60	0.00	202.12	0.00	202.64	0.07	203.16	0.97
201.61	0.00	202.13	0.00	202.65	0.07	203.17	1.05
201.62	0.00	202.14	0.00	202.66	0.08	203.18	1.13
201.63	0.00	202.15	0.00	202.67	0.08	203.19	1.21
201.64	0.00	202.16	0.00	202.68	0.08	203.20	1.30
201.65	0.00	202.17	0.00	202.69	0.08	203.21	1.39
201.66	0.00	202.18	0.00	202.70	0.08	203.22	1.48
201.67	0.00	202.19	0.00	202.71	0.08	203.23	1.57
201.68	0.00	202.20	0.00	202.72	0.09	203.24	1.67
201.69	0.00	202.21	0.00	202.73	0.09	203.25	1.76
201.70	0.00	202.22	0.00	202.74	0.09	203.26	1.86
201.71	0.00	202.23	0.00	202.75	0.09	203.27	1.96
201.72	0.00	202.24	0.00	202.76	0.09	203.28	2.06
201.73	0.00	202.25	0.00	202.77	0.09	203.29	2.16
201.74	0.00	202.26	0.00	202.78	0.10	203.30	2.27
201.75	0.00	202.27	0.00	202.79	0.10	203.31	2.38
201.76	0.00	202.28	0.00	202.80	0.10	203.32	2.48
201.77	0.00	202.29	0.00	202.81	0.10	203.33	2.59
201.78	0.00	202.30	0.00	202.82	0.10	203.34	2.70
201.79	0.00	202.31	0.00	202.83	0.10	203.35	2.82
201.80	0.00	202.32	0.00	202.84	0.10	203.36	2.93
201.81	0.00	202.33	0.00	202.85	0.10	203.37	3.05

Stage-Discharge for Pond B-57: Basin #57 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.38	3.16	203.90	10.86	204.42	29.06	204.94	111.85
203.39	3.28	203.91	11.04	204.43	30.01	204.95	113.82
203.40	3.40	203.92	11.21	204.44	30.98	204.96	115.81
203.41	3.52	203.93	11.39	204.45	31.98	204.97	117.81
203.42	3.65	203.94	11.56	204.46	33.04	204.98	119.83
203.43	3.77	203.95	11.74	204.47	34.12	204.99	121.86
203.44	3.90	203.96	11.91	204.48	35.22	205.00	123.90
203.45	4.02	203.97	12.09	204.49	36.36		
203.46	4.15	203.98	12.27	204.50	37.52		
203.47	4.28	203.99	12.45	204.51	38.70		
203.48	4.41	204.00	12.63	204.52	39.91		
203.49	4.54	204.01	12.81	204.53	41.15		
203.50	4.68	204.02	12.99	204.54	42.41		
203.51	4.81	204.03	13.18	204.55	43.69		
203.52	4.95	204.04	13.36	204.56	45.00		
203.53	5.08	204.05	13.54	204.57	46.34		
203.54	5.22	204.06	13.73	204.58	47.70		
203.55	5.36	204.07	13.91	204.59	49.08		
203.56	5.50	204.08	14.10	204.60	50.49		
203.57	5.64	204.09	14.28	204.61	51.93		
203.58	5.79	204.10	14.47	204.62	53.39		
203.59	5.93	204.11	14.66	204.63	54.87		
203.60	6.07	204.12	14.85	204.64	56.38		
203.61	6.22	204.13	15.04	204.65	57.91		
203.62	6.37	204.14	15.23	204.66	59.49		
203.63	6.51	204.15	15.42	204.67	61.10		
203.64	6.66	204.16	15.61	204.68	62.74		
203.65	6.81	204.17	15.80	204.69	64.40		
203.66	6.96	204.18	15.99	204.70	66.09		
203.67	7.11	204.19	16.19	204.71	67.81		
203.68	7.27	204.20	16.38	204.72	69.55		
203.69	7.42	204.21	16.57	204.73	71.32		
203.70	7.58	204.22	16.77	204.74	73.12		
203.71	7.73	204.23	16.96	204.75	74.95		
203.72	7.89	204.24	17.16	204.76	76.80		
203.73	8.05	204.25	17.36	204.77	78.67		
203.74	8.21	204.26	17.67	204.78	80.58		
203.75	8.36	204.27	18.08	204.79	82.51		
203.76	8.53	204.28	18.56	204.80	84.47		
203.77	8.69	204.29	19.09	204.81	86.46		
203.78	8.85	204.30	19.66	204.82	88.47		
203.79	9.01	204.31	20.28	204.83	90.51		
203.80	9.18	204.32	20.93	204.84	92.58		
203.81	9.34	204.33	21.61	204.85	94.67		
203.82	9.51	204.34	22.33	204.86	96.53		
203.83	9.67	204.35	23.08	204.87	98.39		
203.84	9.84	204.36	23.85	204.88	100.27		
203.85	10.01	204.37	24.66	204.89	102.17		
203.86	10.18	204.38	25.49	204.90	104.08		
203.87	10.35	204.39	26.34	204.91	106.00		
203.88	10.52	204.40	27.23	204.92	107.94		
203.89	10.69	204.41	28.13	204.93	109.88		

Stage-Area-Storage for Pond B-57: Basin #57

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.30	0	0	201.82	2,948	767
201.31	57	0	201.83	3,005	796
201.32	113	1	201.84	3,062	827
201.33	170	3	201.85	3,119	858
201.34	227	5	201.86	3,175	889
201.35	284	7	201.87	3,232	921
201.36	340	10	201.88	3,289	954
201.37	397	14	201.89	3,345	987
201.38	454	18	201.90	3,402	1,021
201.39	510	23	201.91	3,459	1,055
201.40	567	28	201.92	3,515	1,090
201.41	624	34	201.93	3,572	1,125
201.42	680	41	201.94	3,629	1,161
201.43	737	48	201.95	3,686	1,198
201.44	794	56	201.96	3,742	1,235
201.45	851	64	201.97	3,799	1,273
201.46	907	73	201.98	3,856	1,311
201.47	964	82	201.99	3,912	1,350
201.48	1,021	92	202.00	3,969	1,389
201.49	1,077	102	202.01	3,974	1,429
201.50	1,134	113	202.02	3,979	1,469
201.51	1,191	125	202.03	3,985	1,508
201.52	1,247	137	202.04	3,990	1,548
201.53	1,304	150	202.05	3,995	1,588
201.54	1,361	163	202.06	4,000	1,628
201.55	1,418	177	202.07	4,005	1,668
201.56	1,474	192	202.08	4,011	1,708
201.57	1,531	207	202.09	4,016	1,748
201.58	1,588	222	202.10	4,021	1,789
201.59	1,644	238	202.11	4,026	1,829
201.60	1,701	255	202.12	4,031	1,869
201.61	1,758	272	202.13	4,036	1,910
201.62	1,814	290	202.14	4,042	1,950
201.63	1,871	309	202.15	4,047	1,990
201.64	1,928	328	202.16	4,052	2,031
201.65	1,985	347	202.17	4,057	2,071
201.66	2,041	367	202.18	4,062	2,112
201.67	2,098	388	202.19	4,068	2,153
201.68	2,155	409	202.20	4,073	2,193
201.69	2,211	431	202.21	4,078	2,234
201.70	2,268	454	202.22	4,083	2,275
201.71	2,325	477	202.23	4,088	2,316
201.72	2,381	500	202.24	4,094	2,357
201.73	2,438	524	202.25	4,099	2,398
201.74	2,495	549	202.26	4,104	2,439
201.75	2,551	574	202.27	4,109	2,480
201.76	2,608	600	202.28	4,114	2,521
201.77	2,665	626	202.29	4,120	2,562
201.78	2,722	653	202.30	4,125	2,603
201.79	2,778	681	202.31	4,130	2,644
201.80	2,835	709	202.32	4,135	2,686
201.81	2,892	737	202.33	4,140	2,727

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.34	4,145	2,769	202.86	4,415	4,994
202.35	4,151	2,810	202.87	4,421	5,039
202.36	4,156	2,852	202.88	4,426	5,083
202.37	4,161	2,893	202.89	4,431	5,127
202.38	4,166	2,935	202.90	4,436	5,171
202.39	4,171	2,977	202.91	4,441	5,216
202.40	4,177	3,018	202.92	4,446	5,260
202.41	4,182	3,060	202.93	4,452	5,305
202.42	4,187	3,102	202.94	4,457	5,349
202.43	4,192	3,144	202.95	4,462	5,394
202.44	4,197	3,186	202.96	4,467	5,439
202.45	4,203	3,228	202.97	4,472	5,483
202.46	4,208	3,270	202.98	4,478	5,528
202.47	4,213	3,312	202.99	4,483	5,573
202.48	4,218	3,354	203.00	4,488	5,618
202.49	4,223	3,396	203.01	4,493	5,663
202.50	4,229	3,439	203.02	4,499	5,708
202.51	4,234	3,481	203.03	4,504	5,753
202.52	4,239	3,523	203.04	4,510	5,798
202.53	4,244	3,566	203.05	4,515	5,843
202.54	4,249	3,608	203.06	4,521	5,888
202.55	4,254	3,651	203.07	4,526	5,933
202.56	4,260	3,693	203.08	4,532	5,978
202.57	4,265	3,736	203.09	4,537	6,024
202.58	4,270	3,778	203.10	4,543	6,069
202.59	4,275	3,821	203.11	4,548	6,115
202.60	4,280	3,864	203.12	4,554	6,160
202.61	4,286	3,907	203.13	4,559	6,206
202.62	4,291	3,950	203.14	4,564	6,251
202.63	4,296	3,993	203.15	4,570	6,297
202.64	4,301	4,036	203.16	4,575	6,343
202.65	4,306	4,079	203.17	4,581	6,388
202.66	4,312	4,122	203.18	4,586	6,434
202.67	4,317	4,165	203.19	4,592	6,480
202.68	4,322	4,208	203.20	4,597	6,526
202.69	4,327	4,251	203.21	4,603	6,572
202.70	4,332	4,295	203.22	4,608	6,618
202.71	4,337	4,338	203.23	4,614	6,664
202.72	4,343	4,381	203.24	4,619	6,710
202.73	4,348	4,425	203.25	4,625	6,757
202.74	4,353	4,468	203.26	4,630	6,803
202.75	4,358	4,512	203.27	4,635	6,849
202.76	4,363	4,555	203.28	4,641	6,896
202.77	4,369	4,599	203.29	4,646	6,942
202.78	4,374	4,643	203.30	4,652	6,989
202.79	4,379	4,687	203.31	4,657	7,035
202.80	4,384	4,730	203.32	4,663	7,082
202.81	4,389	4,774	203.33	4,668	7,128
202.82	4,395	4,818	203.34	4,674	7,175
202.83	4,400	4,862	203.35	4,679	7,222
202.84	4,405	4,906	203.36	4,685	7,269
202.85	4,410	4,950	203.37	4,690	7,316

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.38	4,695	7,363	203.90	4,979	9,878
203.39	4,701	7,409	203.91	4,985	9,928
203.40	4,706	7,457	203.92	4,990	9,978
203.41	4,712	7,504	203.93	4,996	10,028
203.42	4,717	7,551	203.94	5,001	10,078
203.43	4,723	7,598	203.95	5,007	10,128
203.44	4,728	7,645	203.96	5,012	10,178
203.45	4,734	7,693	203.97	5,018	10,228
203.46	4,739	7,740	203.98	5,023	10,278
203.47	4,745	7,787	203.99	5,029	10,328
203.48	4,750	7,835	204.00	5,034	10,379
203.49	4,756	7,882	204.01	5,045	10,429
203.50	4,761	7,930	204.02	5,057	10,480
203.51	4,766	7,978	204.03	5,068	10,530
203.52	4,772	8,025	204.04	5,080	10,581
203.53	4,777	8,073	204.05	5,091	10,632
203.54	4,783	8,121	204.06	5,103	10,683
203.55	4,788	8,169	204.07	5,114	10,734
203.56	4,794	8,217	204.08	5,126	10,785
203.57	4,799	8,265	204.09	5,137	10,836
203.58	4,805	8,313	204.10	5,149	10,888
203.59	4,810	8,361	204.11	5,160	10,939
203.60	4,816	8,409	204.12	5,172	10,991
203.61	4,821	8,457	204.13	5,183	11,043
203.62	4,827	8,505	204.14	5,195	11,095
203.63	4,832	8,553	204.15	5,206	11,147
203.64	4,837	8,602	204.16	5,218	11,199
203.65	4,843	8,650	204.17	5,229	11,251
203.66	4,848	8,699	204.18	5,241	11,303
203.67	4,854	8,747	204.19	5,252	11,356
203.68	4,859	8,796	204.20	5,264	11,408
203.69	4,865	8,844	204.21	5,275	11,461
203.70	4,870	8,893	204.22	5,287	11,514
203.71	4,876	8,942	204.23	5,298	11,567
203.72	4,881	8,991	204.24	5,310	11,620
203.73	4,887	9,039	204.25	5,321	11,673
203.74	4,892	9,088	204.26	5,332	11,726
203.75	4,898	9,137	204.27	5,344	11,780
203.76	4,903	9,186	204.28	5,355	11,833
203.77	4,908	9,235	204.29	5,367	11,887
203.78	4,914	9,284	204.30	5,378	11,941
203.79	4,919	9,334	204.31	5,390	11,994
203.80	4,925	9,383	204.32	5,401	12,048
203.81	4,930	9,432	204.33	5,413	12,102
203.82	4,936	9,481	204.34	5,424	12,157
203.83	4,941	9,531	204.35	5,436	12,211
203.84	4,947	9,580	204.36	5,447	12,265
203.85	4,952	9,630	204.37	5,459	12,320
203.86	4,958	9,679	204.38	5,470	12,374
203.87	4,963	9,729	204.39	5,482	12,429
203.88	4,968	9,779	204.40	5,493	12,484
203.89	4,974	9,828	204.41	5,505	12,539

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.42	5,516	12,594	204.94	5,608	13,039
204.43	5,528	12,649	204.95	5,608	13,039
204.44	5,539	12,705	204.96	5,608	13,039
204.45	5,551	12,760	204.97	5,608	13,039
204.46	5,562	12,816	204.98	5,608	13,039
204.47	5,574	12,871	204.99	5,608	13,039
204.48	5,585	12,927	205.00	5,608	13,039
204.49	5,597	12,983			
204.50	5,608	13,039			
204.51	5,608	13,039			
204.52	5,608	13,039			
204.53	5,608	13,039			
204.54	5,608	13,039			
204.55	5,608	13,039			
204.56	5,608	13,039			
204.57	5,608	13,039			
204.58	5,608	13,039			
204.59	5,608	13,039			
204.60	5,608	13,039			
204.61	5,608	13,039			
204.62	5,608	13,039			
204.63	5,608	13,039			
204.64	5,608	13,039			
204.65	5,608	13,039			
204.66	5,608	13,039			
204.67	5,608	13,039			
204.68	5,608	13,039			
204.69	5,608	13,039			
204.70	5,608	13,039			
204.71	5,608	13,039			
204.72	5,608	13,039			
204.73	5,608	13,039			
204.74	5,608	13,039			
204.75	5,608	13,039			
204.76	5,608	13,039			
204.77	5,608	13,039			
204.78	5,608	13,039			
204.79	5,608	13,039			
204.80	5,608	13,039			
204.81	5,608	13,039			
204.82	5,608	13,039			
204.83	5,608	13,039			
204.84	5,608	13,039			
204.85	5,608	13,039			
204.86	5,608	13,039			
204.87	5,608	13,039			
204.88	5,608	13,039			
204.89	5,608	13,039			
204.90	5,608	13,039			
204.91	5,608	13,039			
204.92	5,608	13,039			
204.93	5,608	13,039			

Summary for Pond B-58: Basin #58

Inflow Area = 3.083 ac, 36.46% Impervious, Inflow Depth > 8.75" for Future 100 yr event
 Inflow = 25.49 cfs @ 12.19 hrs, Volume= 2.249 af
 Outflow = 16.70 cfs @ 12.34 hrs, Volume= 2.194 af, Atten= 34%, Lag= 8.7 min
 Primary = 16.70 cfs @ 12.34 hrs, Volume= 2.194 af
 Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
 Peak Elev= 201.80' @ 12.34 hrs Surf.Area= 8,274 sf Storage= 22,435 cf

Plug-Flow detention time= 67.5 min calculated for 2.194 af (98% of inflow)
 Center-of-Mass det. time= 44.8 min (873.5 - 828.7)

Volume	Invert	Avail.Storage	Storage Description
#1	198.30'	32,924 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
198.30	0	0	0
199.00	6,230	2,180	2,180
200.00	6,932	6,581	8,761
201.00	7,670	7,301	16,062
202.00	8,426	8,048	24,110
203.00	9,201	8,814	32,924

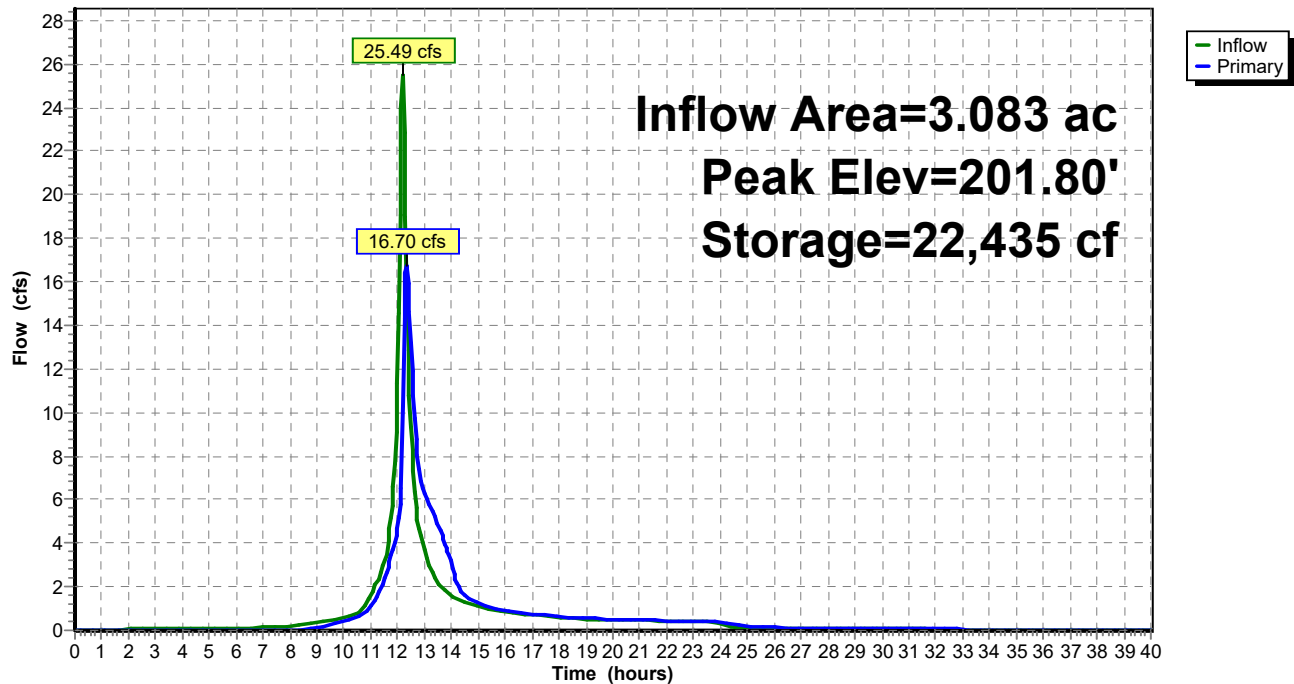
Device	Routing	Invert	Outlet Devices
#1	Primary	199.00'	36.0" Round Culvert L= 87.0' Ke= 0.500 Inlet / Outlet Invert= 199.00' / 198.00' S= 0.0115 '/' Cc= 0.900 n= 0.013, Flow Area= 7.07 sf
#2	Device 1	198.97'	24.0" W x 6.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	201.00'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#4	Primary	202.75'	50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=16.61 cfs @ 12.34 hrs HW=201.79' (Free Discharge)

1=Culvert (Passes 16.61 cfs of 38.95 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 7.72 cfs @ 7.72 fps)
 3=Sharp-Crested Rectangular Weir (Weir Controls 8.88 cfs @ 2.91 fps)
 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-58: Basin #58

Hydrograph



Stage-Discharge for Pond B-58: Basin #58

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
198.30	0.00	198.82	0.00	199.34	0.88	199.86	3.82
198.31	0.00	198.83	0.00	199.35	0.93	199.87	3.86
198.32	0.00	198.84	0.00	199.36	0.98	199.88	3.89
198.33	0.00	198.85	0.00	199.37	1.04	199.89	3.92
198.34	0.00	198.86	0.00	199.38	1.09	199.90	3.95
198.35	0.00	198.87	0.00	199.39	1.15	199.91	3.97
198.36	0.00	198.88	0.00	199.40	1.21	199.92	4.00
198.37	0.00	198.89	0.00	199.41	1.27	199.93	4.03
198.38	0.00	198.90	0.00	199.42	1.33	199.94	4.06
198.39	0.00	198.91	0.00	199.43	1.39	199.95	4.09
198.40	0.00	198.92	0.00	199.44	1.45	199.96	4.12
198.41	0.00	198.93	0.00	199.45	1.52	199.97	4.15
198.42	0.00	198.94	0.00	199.46	1.59	199.98	4.18
198.43	0.00	198.95	0.00	199.47	1.65	199.99	4.20
198.44	0.00	198.96	0.00	199.48	1.72	200.00	4.23
198.45	0.00	198.97	0.00	199.49	1.79	200.01	4.26
198.46	0.00	198.98	0.00	199.50	1.86	200.02	4.29
198.47	0.00	198.99	0.00	199.51	1.94	200.03	4.31
198.48	0.00	199.00	0.00	199.52	2.01	200.04	4.34
198.49	0.00	199.01	0.00	199.53	2.09	200.05	4.37
198.50	0.00	199.02	0.00	199.54	2.16	200.06	4.39
198.51	0.00	199.03	0.01	199.55	2.24	200.07	4.42
198.52	0.00	199.04	0.01	199.56	2.32	200.08	4.45
198.53	0.00	199.05	0.02	199.57	2.40	200.09	4.47
198.54	0.00	199.06	0.03	199.58	2.49	200.10	4.50
198.55	0.00	199.07	0.04	199.59	2.57	200.11	4.53
198.56	0.00	199.08	0.05	199.60	2.65	200.12	4.55
198.57	0.00	199.09	0.06	199.61	2.74	200.13	4.58
198.58	0.00	199.10	0.08	199.62	2.83	200.14	4.60
198.59	0.00	199.11	0.09	199.63	2.92	200.15	4.63
198.60	0.00	199.12	0.11	199.64	3.01	200.16	4.65
198.61	0.00	199.13	0.13	199.65	3.10	200.17	4.68
198.62	0.00	199.14	0.15	199.66	3.15	200.18	4.70
198.63	0.00	199.15	0.17	199.67	3.18	200.19	4.73
198.64	0.00	199.16	0.20	199.68	3.22	200.20	4.75
198.65	0.00	199.17	0.22	199.69	3.26	200.21	4.78
198.66	0.00	199.18	0.25	199.70	3.29	200.22	4.80
198.67	0.00	199.19	0.28	199.71	3.33	200.23	4.82
198.68	0.00	199.20	0.31	199.72	3.36	200.24	4.85
198.69	0.00	199.21	0.34	199.73	3.40	200.25	4.87
198.70	0.00	199.22	0.37	199.74	3.43	200.26	4.90
198.71	0.00	199.23	0.41	199.75	3.47	200.27	4.92
198.72	0.00	199.24	0.44	199.76	3.50	200.28	4.94
198.73	0.00	199.25	0.48	199.77	3.54	200.29	4.97
198.74	0.00	199.26	0.52	199.78	3.57	200.30	4.99
198.75	0.00	199.27	0.56	199.79	3.60	200.31	5.01
198.76	0.00	199.28	0.60	199.80	3.64	200.32	5.04
198.77	0.00	199.29	0.64	199.81	3.67	200.33	5.06
198.78	0.00	199.30	0.69	199.82	3.70	200.34	5.08
198.79	0.00	199.31	0.73	199.83	3.73	200.35	5.11
198.80	0.00	199.32	0.78	199.84	3.76	200.36	5.13
198.81	0.00	199.33	0.83	199.85	3.79	200.37	5.15

Stage-Discharge for Pond B-58: Basin #58 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.38	5.17	200.90	6.23	201.42	10.62	201.94	19.30
200.39	5.20	200.91	6.25	201.43	10.76	201.95	19.49
200.40	5.22	200.92	6.27	201.44	10.90	201.96	19.68
200.41	5.24	200.93	6.29	201.45	11.04	201.97	19.87
200.42	5.26	200.94	6.31	201.46	11.19	201.98	20.06
200.43	5.29	200.95	6.33	201.47	11.33	201.99	20.26
200.44	5.31	200.96	6.34	201.48	11.48	202.00	20.45
200.45	5.33	200.97	6.36	201.49	11.63	202.01	20.64
200.46	5.35	200.98	6.38	201.50	11.77	202.02	20.84
200.47	5.37	200.99	6.40	201.51	11.92	202.03	21.04
200.48	5.39	201.00	6.42	201.52	12.07	202.04	21.23
200.49	5.42	201.01	6.45	201.53	12.23	202.05	21.43
200.50	5.44	201.02	6.49	201.54	12.38	202.06	21.63
200.51	5.46	201.03	6.54	201.55	12.53	202.07	21.83
200.52	5.48	201.04	6.59	201.56	12.69	202.08	22.03
200.53	5.50	201.05	6.65	201.57	12.84	202.09	22.23
200.54	5.52	201.06	6.72	201.58	13.00	202.10	22.43
200.55	5.54	201.07	6.78	201.59	13.16	202.11	22.63
200.56	5.56	201.08	6.86	201.60	13.32	202.12	22.83
200.57	5.58	201.09	6.93	201.61	13.48	202.13	23.03
200.58	5.61	201.10	7.01	201.62	13.64	202.14	23.24
200.59	5.63	201.11	7.09	201.63	13.80	202.15	23.44
200.60	5.65	201.12	7.17	201.64	13.97	202.16	23.65
200.61	5.67	201.13	7.26	201.65	14.13	202.17	23.85
200.62	5.69	201.14	7.35	201.66	14.30	202.18	24.06
200.63	5.71	201.15	7.44	201.67	14.47	202.19	24.26
200.64	5.73	201.16	7.53	201.68	14.63	202.20	24.47
200.65	5.75	201.17	7.63	201.69	14.80	202.21	24.68
200.66	5.77	201.18	7.72	201.70	14.97	202.22	24.89
200.67	5.79	201.19	7.83	201.71	15.14	202.23	25.10
200.68	5.81	201.20	7.93	201.72	15.31	202.24	25.31
200.69	5.83	201.21	8.03	201.73	15.48	202.25	25.52
200.70	5.85	201.22	8.14	201.74	15.66	202.26	25.73
200.71	5.87	201.23	8.25	201.75	15.83	202.27	25.94
200.72	5.89	201.24	8.36	201.76	16.01	202.28	26.15
200.73	5.91	201.25	8.47	201.77	16.18	202.29	26.36
200.74	5.93	201.26	8.58	201.78	16.36	202.30	26.57
200.75	5.95	201.27	8.70	201.79	16.54	202.31	26.79
200.76	5.97	201.28	8.82	201.80	16.71	202.32	27.00
200.77	5.99	201.29	8.93	201.81	16.89	202.33	27.22
200.78	6.01	201.30	9.06	201.82	17.07	202.34	27.43
200.79	6.03	201.31	9.18	201.83	17.25	202.35	27.65
200.80	6.04	201.32	9.30	201.84	17.44	202.36	27.86
200.81	6.06	201.33	9.43	201.85	17.62	202.37	28.08
200.82	6.08	201.34	9.55	201.86	17.80	202.38	28.30
200.83	6.10	201.35	9.68	201.87	17.99	202.39	28.51
200.84	6.12	201.36	9.81	201.88	18.17	202.40	28.73
200.85	6.14	201.37	9.94	201.89	18.36	202.41	28.95
200.86	6.16	201.38	10.08	201.90	18.54	202.42	29.17
200.87	6.18	201.39	10.21	201.91	18.73	202.43	29.39
200.88	6.20	201.40	10.35	201.92	18.92	202.44	29.61
200.89	6.21	201.41	10.48	201.93	19.11	202.45	29.83

Stage-Discharge for Pond B-58: Basin #58 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
202.46	30.05	202.98	55.35
202.47	30.28	202.99	56.52
202.48	30.50	203.00	57.71
202.49	30.72		
202.50	30.94		
202.51	31.17		
202.52	31.39		
202.53	31.62		
202.54	31.84		
202.55	32.07		
202.56	32.29		
202.57	32.52		
202.58	32.75		
202.59	32.98		
202.60	33.20		
202.61	33.43		
202.62	33.66		
202.63	33.89		
202.64	34.12		
202.65	34.35		
202.66	34.58		
202.67	34.81		
202.68	35.04		
202.69	35.27		
202.70	35.51		
202.71	35.74		
202.72	35.97		
202.73	36.21		
202.74	36.44		
202.75	36.67		
202.76	37.03		
202.77	37.48		
202.78	37.99		
202.79	38.55		
202.80	39.16		
202.81	39.81		
202.82	40.50		
202.83	41.22		
202.84	41.97		
202.85	42.76		
202.86	43.57		
202.87	44.41		
202.88	45.27		
202.89	46.17		
202.90	47.08		
202.91	48.02		
202.92	48.98		
202.93	49.97		
202.94	50.98		
202.95	52.01		
202.96	53.09		
202.97	54.21		

Stage-Area-Storage for Pond B-58: Basin #58

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
198.30	0	0	198.82	4,628	1,203
198.31	89	0	198.83	4,717	1,250
198.32	178	2	198.84	4,806	1,298
198.33	267	4	198.85	4,895	1,346
198.34	356	7	198.86	4,984	1,396
198.35	445	11	198.87	5,073	1,446
198.36	534	16	198.88	5,162	1,497
198.37	623	22	198.89	5,251	1,549
198.38	712	28	198.90	5,340	1,602
198.39	801	36	198.91	5,429	1,656
198.40	890	44	198.92	5,518	1,711
198.41	979	54	198.93	5,607	1,766
198.42	1,068	64	198.94	5,696	1,823
198.43	1,157	75	198.95	5,785	1,880
198.44	1,246	87	198.96	5,874	1,938
198.45	1,335	100	198.97	5,963	1,998
198.46	1,424	114	198.98	6,052	2,058
198.47	1,513	129	198.99	6,141	2,119
198.48	1,602	144	199.00	6,230	2,180
198.49	1,691	161	199.01	6,237	2,243
198.50	1,780	178	199.02	6,244	2,305
198.51	1,869	196	199.03	6,251	2,368
198.52	1,958	215	199.04	6,258	2,430
198.53	2,047	235	199.05	6,265	2,493
198.54	2,136	256	199.06	6,272	2,556
198.55	2,225	278	199.07	6,279	2,618
198.56	2,314	301	199.08	6,286	2,681
198.57	2,403	324	199.09	6,293	2,744
198.58	2,492	349	199.10	6,300	2,807
198.59	2,581	374	199.11	6,307	2,870
198.60	2,670	401	199.12	6,314	2,933
198.61	2,759	428	199.13	6,321	2,996
198.62	2,848	456	199.14	6,328	3,060
198.63	2,937	485	199.15	6,335	3,123
198.64	3,026	514	199.16	6,342	3,186
198.65	3,115	545	199.17	6,349	3,250
198.66	3,204	577	199.18	6,356	3,313
198.67	3,293	609	199.19	6,363	3,377
198.68	3,382	643	199.20	6,370	3,441
198.69	3,471	677	199.21	6,377	3,504
198.70	3,560	712	199.22	6,384	3,568
198.71	3,649	748	199.23	6,391	3,632
198.72	3,738	785	199.24	6,398	3,696
198.73	3,827	823	199.25	6,406	3,760
198.74	3,916	862	199.26	6,413	3,824
198.75	4,005	901	199.27	6,420	3,888
198.76	4,094	942	199.28	6,427	3,952
198.77	4,183	983	199.29	6,434	4,017
198.78	4,272	1,025	199.30	6,441	4,081
198.79	4,361	1,068	199.31	6,448	4,146
198.80	4,450	1,113	199.32	6,455	4,210
198.81	4,539	1,157	199.33	6,462	4,275

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
199.34	6,469	4,339	199.86	6,834	7,798
199.35	6,476	4,404	199.87	6,841	7,866
199.36	6,483	4,469	199.88	6,848	7,935
199.37	6,490	4,534	199.89	6,855	8,003
199.38	6,497	4,599	199.90	6,862	8,072
199.39	6,504	4,664	199.91	6,869	8,140
199.40	6,511	4,729	199.92	6,876	8,209
199.41	6,518	4,794	199.93	6,883	8,278
199.42	6,525	4,859	199.94	6,890	8,347
199.43	6,532	4,924	199.95	6,897	8,416
199.44	6,539	4,990	199.96	6,904	8,485
199.45	6,546	5,055	199.97	6,911	8,554
199.46	6,553	5,121	199.98	6,918	8,623
199.47	6,560	5,186	199.99	6,925	8,692
199.48	6,567	5,252	200.00	6,932	8,761
199.49	6,574	5,317	200.01	6,939	8,831
199.50	6,581	5,383	200.02	6,947	8,900
199.51	6,588	5,449	200.03	6,954	8,970
199.52	6,595	5,515	200.04	6,962	9,039
199.53	6,602	5,581	200.05	6,969	9,109
199.54	6,609	5,647	200.06	6,976	9,179
199.55	6,616	5,713	200.07	6,984	9,249
199.56	6,623	5,779	200.08	6,991	9,318
199.57	6,630	5,846	200.09	6,998	9,388
199.58	6,637	5,912	200.10	7,006	9,458
199.59	6,644	5,978	200.11	7,013	9,528
199.60	6,651	6,045	200.12	7,021	9,599
199.61	6,658	6,111	200.13	7,028	9,669
199.62	6,665	6,178	200.14	7,035	9,739
199.63	6,672	6,245	200.15	7,043	9,810
199.64	6,679	6,311	200.16	7,050	9,880
199.65	6,686	6,378	200.17	7,057	9,951
199.66	6,693	6,445	200.18	7,065	10,021
199.67	6,700	6,512	200.19	7,072	10,092
199.68	6,707	6,579	200.20	7,080	10,163
199.69	6,714	6,646	200.21	7,087	10,233
199.70	6,721	6,713	200.22	7,094	10,304
199.71	6,728	6,781	200.23	7,102	10,375
199.72	6,735	6,848	200.24	7,109	10,446
199.73	6,742	6,915	200.25	7,117	10,518
199.74	6,749	6,983	200.26	7,124	10,589
199.75	6,757	7,050	200.27	7,131	10,660
199.76	6,764	7,118	200.28	7,139	10,731
199.77	6,771	7,186	200.29	7,146	10,803
199.78	6,778	7,253	200.30	7,153	10,874
199.79	6,785	7,321	200.31	7,161	10,946
199.80	6,792	7,389	200.32	7,168	11,018
199.81	6,799	7,457	200.33	7,176	11,089
199.82	6,806	7,525	200.34	7,183	11,161
199.83	6,813	7,593	200.35	7,190	11,233
199.84	6,820	7,661	200.36	7,198	11,305
199.85	6,827	7,730	200.37	7,205	11,377

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.38	7,212	11,449	200.90	7,596	15,299
200.39	7,220	11,521	200.91	7,604	15,375
200.40	7,227	11,593	200.92	7,611	15,451
200.41	7,235	11,666	200.93	7,618	15,527
200.42	7,242	11,738	200.94	7,626	15,604
200.43	7,249	11,810	200.95	7,633	15,680
200.44	7,257	11,883	200.96	7,640	15,756
200.45	7,264	11,956	200.97	7,648	15,833
200.46	7,271	12,028	200.98	7,655	15,909
200.47	7,279	12,101	200.99	7,663	15,986
200.48	7,286	12,174	201.00	7,670	16,062
200.49	7,294	12,247	201.01	7,678	16,139
200.50	7,301	12,320	201.02	7,685	16,216
200.51	7,308	12,393	201.03	7,693	16,293
200.52	7,316	12,466	201.04	7,700	16,370
200.53	7,323	12,539	201.05	7,708	16,447
200.54	7,331	12,612	201.06	7,715	16,524
200.55	7,338	12,686	201.07	7,723	16,601
200.56	7,345	12,759	201.08	7,730	16,679
200.57	7,353	12,833	201.09	7,738	16,756
200.58	7,360	12,906	201.10	7,746	16,833
200.59	7,367	12,980	201.11	7,753	16,911
200.60	7,375	13,054	201.12	7,761	16,988
200.61	7,382	13,127	201.13	7,768	17,066
200.62	7,390	13,201	201.14	7,776	17,144
200.63	7,397	13,275	201.15	7,783	17,222
200.64	7,404	13,349	201.16	7,791	17,299
200.65	7,412	13,423	201.17	7,799	17,377
200.66	7,419	13,497	201.18	7,806	17,455
200.67	7,426	13,572	201.19	7,814	17,533
200.68	7,434	13,646	201.20	7,821	17,612
200.69	7,441	13,720	201.21	7,829	17,690
200.70	7,449	13,795	201.22	7,836	17,768
200.71	7,456	13,869	201.23	7,844	17,847
200.72	7,463	13,944	201.24	7,851	17,925
200.73	7,471	14,019	201.25	7,859	18,004
200.74	7,478	14,093	201.26	7,867	18,082
200.75	7,486	14,168	201.27	7,874	18,161
200.76	7,493	14,243	201.28	7,882	18,240
200.77	7,500	14,318	201.29	7,889	18,319
200.78	7,508	14,393	201.30	7,897	18,398
200.79	7,515	14,468	201.31	7,904	18,477
200.80	7,522	14,543	201.32	7,912	18,556
200.81	7,530	14,619	201.33	7,919	18,635
200.82	7,537	14,694	201.34	7,927	18,714
200.83	7,545	14,769	201.35	7,935	18,793
200.84	7,552	14,845	201.36	7,942	18,873
200.85	7,559	14,920	201.37	7,950	18,952
200.86	7,567	14,996	201.38	7,957	19,032
200.87	7,574	15,072	201.39	7,965	19,111
200.88	7,581	15,147	201.40	7,972	19,191
200.89	7,589	15,223	201.41	7,980	19,271

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.42	7,988	19,351	201.94	8,381	23,606
201.43	7,995	19,430	201.95	8,388	23,690
201.44	8,003	19,510	201.96	8,396	23,774
201.45	8,010	19,591	201.97	8,403	23,858
201.46	8,018	19,671	201.98	8,411	23,942
201.47	8,025	19,751	201.99	8,418	24,026
201.48	8,033	19,831	202.00	8,426	24,110
201.49	8,040	19,912	202.01	8,434	24,195
201.50	8,048	19,992	202.02	8,442	24,279
201.51	8,056	20,073	202.03	8,449	24,364
201.52	8,063	20,153	202.04	8,457	24,448
201.53	8,071	20,234	202.05	8,465	24,533
201.54	8,078	20,315	202.06	8,473	24,617
201.55	8,086	20,395	202.07	8,480	24,702
201.56	8,093	20,476	202.08	8,488	24,787
201.57	8,101	20,557	202.09	8,496	24,872
201.58	8,108	20,638	202.10	8,504	24,957
201.59	8,116	20,719	202.11	8,511	25,042
201.60	8,124	20,801	202.12	8,519	25,127
201.61	8,131	20,882	202.13	8,527	25,212
201.62	8,139	20,963	202.14	8,535	25,298
201.63	8,146	21,045	202.15	8,542	25,383
201.64	8,154	21,126	202.16	8,550	25,469
201.65	8,161	21,208	202.17	8,558	25,554
201.66	8,169	21,289	202.18	8,566	25,640
201.67	8,177	21,371	202.19	8,573	25,725
201.68	8,184	21,453	202.20	8,581	25,811
201.69	8,192	21,535	202.21	8,589	25,897
201.70	8,199	21,617	202.22	8,597	25,983
201.71	8,207	21,699	202.23	8,604	26,069
201.72	8,214	21,781	202.24	8,612	26,155
201.73	8,222	21,863	202.25	8,620	26,241
201.74	8,229	21,945	202.26	8,628	26,327
201.75	8,237	22,028	202.27	8,635	26,414
201.76	8,245	22,110	202.28	8,643	26,500
201.77	8,252	22,193	202.29	8,651	26,587
201.78	8,260	22,275	202.30	8,659	26,673
201.79	8,267	22,358	202.31	8,666	26,760
201.80	8,275	22,440	202.32	8,674	26,847
201.81	8,282	22,523	202.33	8,682	26,933
201.82	8,290	22,606	202.34	8,690	27,020
201.83	8,297	22,689	202.35	8,697	27,107
201.84	8,305	22,772	202.36	8,705	27,194
201.85	8,313	22,855	202.37	8,713	27,281
201.86	8,320	22,938	202.38	8,721	27,368
201.87	8,328	23,022	202.39	8,728	27,456
201.88	8,335	23,105	202.40	8,736	27,543
201.89	8,343	23,188	202.41	8,744	27,630
201.90	8,350	23,272	202.42	8,752	27,718
201.91	8,358	23,355	202.43	8,759	27,805
201.92	8,366	23,439	202.44	8,767	27,893
201.93	8,373	23,523	202.45	8,775	27,981

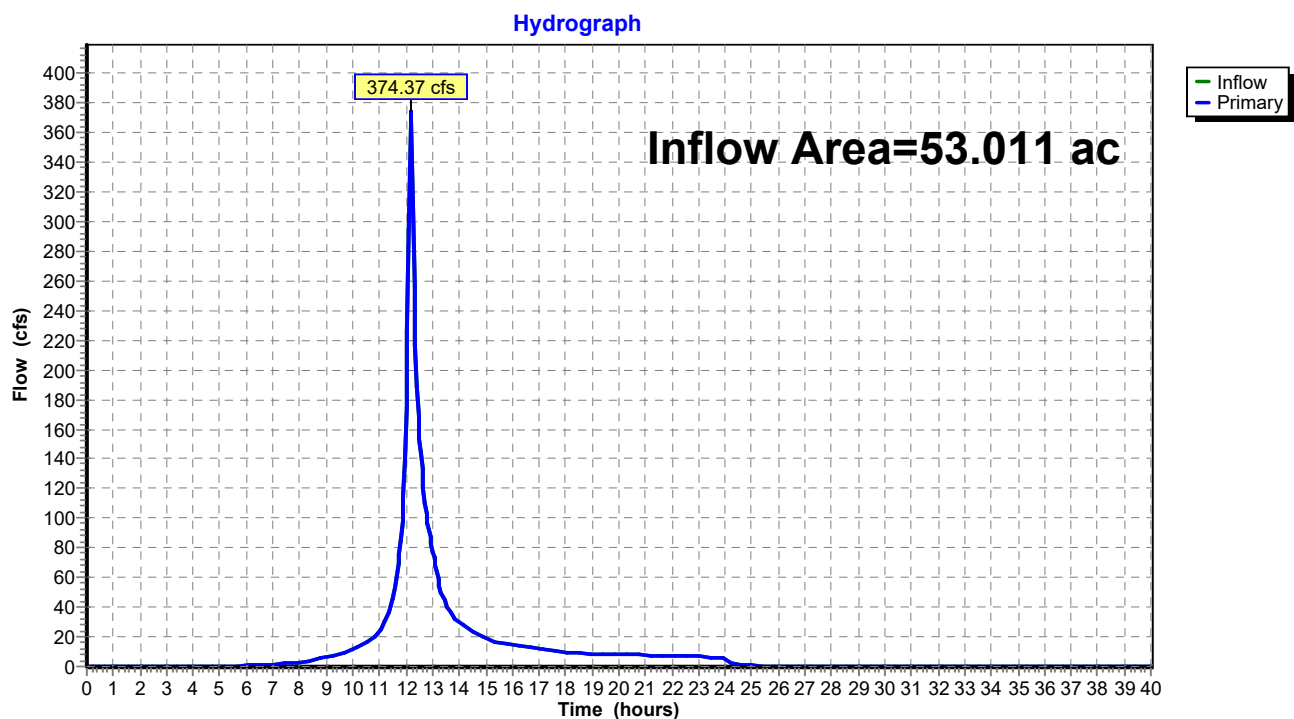
Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.46	8,783	28,068	202.98	9,186	32,740
202.47	8,790	28,156	202.99	9,193	32,832
202.48	8,798	28,244	203.00	9,201	32,924
202.49	8,806	28,332			
202.50	8,814	28,420			
202.51	8,821	28,509			
202.52	8,829	28,597			
202.53	8,837	28,685			
202.54	8,845	28,774			
202.55	8,852	28,862			
202.56	8,860	28,951			
202.57	8,868	29,039			
202.58	8,876	29,128			
202.59	8,883	29,217			
202.60	8,891	29,306			
202.61	8,899	29,395			
202.62	8,907	29,484			
202.63	8,914	29,573			
202.64	8,922	29,662			
202.65	8,930	29,751			
202.66	8,938	29,840			
202.67	8,945	29,930			
202.68	8,953	30,019			
202.69	8,961	30,109			
202.70	8,969	30,199			
202.71	8,976	30,288			
202.72	8,984	30,378			
202.73	8,992	30,468			
202.74	9,000	30,558			
202.75	9,007	30,648			
202.76	9,015	30,738			
202.77	9,023	30,828			
202.78	9,031	30,919			
202.79	9,038	31,009			
202.80	9,046	31,099			
202.81	9,054	31,190			
202.82	9,062	31,280			
202.83	9,069	31,371			
202.84	9,077	31,462			
202.85	9,085	31,553			
202.86	9,093	31,643			
202.87	9,100	31,734			
202.88	9,108	31,825			
202.89	9,116	31,917			
202.90	9,124	32,008			
202.91	9,131	32,099			
202.92	9,139	32,190			
202.93	9,147	32,282			
202.94	9,154	32,373			
202.95	9,162	32,465			
202.96	9,170	32,557			
202.97	9,178	32,648			

Summary for Link PDA-6: Proposed Drainage Area #6

Inflow Area = 53.011 ac, 11.21% Impervious, Inflow Depth = 8.11" for Future 100 yr event
Inflow = 374.37 cfs @ 12.18 hrs, Volume= 35.820 af
Primary = 374.37 cfs @ 12.18 hrs, Volume= 35.820 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-6: Proposed Drainage Area #6

APPENDIX 4
GROUNDWATER RECHARGE CALCULATIONS

Annual Groundwater Recharge Analysis (based on GSR-32)

Select Township ↓	Average Annual P (in)	Climatic Factor
MERCER CO., HOPEWELL TWP	44.6	1.42

Project Name: Venue at Hopewell

Description: Subdivision

Analysis Date: 12/18/24

Pre-Developed Conditions

Land Segment	Area (acres)	TR-55 Land Cover	Soil	Annual Recharge (in)	Annual Recharge (cu.ft)
1	4.58	Impervious areas	Bucks	0.0	-
2	6.44	Open space	Bucks	12.8	298,335
3	49.47	Woods	Quakertown	10.7	1,923,583
4	31.08	Row Crop	Bucks	11.1	1,256,413
5	35.2	Row Crop	Penn	9.6	1,223,736
6	6.11	Woods	Penn	12.0	265,823
7	16.02	Row Crop	Quakertown	8.1	470,676
8	25.7	Woods	Reaville	12.0	1,118,652
9	9.25	Row Crop	Bucks	11.1	373,932
10	8.76	Row Crop	Bucks	11.1	354,124
11	22.01	Woods	Chalfont	12.2	975,262
12	34.31	Row Crop	Bucks	11.1	1,386,986
13	0.76	Impervious areas	Bucks	0.0	-
14	0				
15	0				
Total =	249.7			Total Annual Recharge (in)	Total Annual Recharge (cu-ft)
				10.6	9,647,524

Post-Developed Conditions

Land Segment	Area (acres)	TR-55 Land Cover	Soil	Annual Recharge (in)	Annual Recharge (cu.ft)
1	15.073	Impervious areas	Bucks	0.0	-
2	75.275	Open space	Bucks	12.8	3,487,140
3	9.129	Impervious areas	Bucks	0.0	-
4	24.805	Open space	Penn	11.5	1,034,620
5	11.293	Impervious areas	Quakertown	0.0	-
6	18.326	Open space	Quakertown	10.5	698,695
7	5.65	Impervious areas	Bucks	0.0	-
8	18.699	Open space	Bucks	12.8	866,237
9	2.351	Impervious areas	Bucks	0.0	-
10	4.922	Open space	Bucks	12.8	228,013
11	5.941	Impervious areas	Bucks	0.0	-
12	47.07	Open space	Bucks	12.8	2,180,533
13					
14					
15					
Total =	238.5	Warning: make total area equal to Pre-Developed Conditions		Total Annual Recharge (in)	Total Annual Recharge (cu.ft)
				9.4	8,495,239

Procedure to fill the Pre-Development and Post-Development Conditions Tables

For each land segment, first enter the area, then select TR-55 Land Cover, then select Soil. Start from the top of the table and proceed downward. Don't leave blank rows (with A=0) in between your segment entries. Rows with A=0 will not be displayed or used in calculations. For impervious areas outside of standard lots select "Impervious Areas" as the Land Cover. Soil type for impervious areas are only required if an infiltration facility will be built within these areas.

Annual Recharge Requirements Calculation ↓			
% of Pre-Developed Annual Recharge to Preserve =	100%	Total Impervious Area (sq.ft)	2,153,476
Post-Development Annual Recharge Deficit=	1,152,285	(cubic feet)	
Recharge Efficiency Parameters Calculations (area averages)			
RWC= 6.21	(in)	DRWC= 6.21	(in)
ERWC = 1.80	(in)	EDRWC= 1.80	(in)

Project Name		Description		Analysis Date		BMP or LID Type					
Venue at Hopewell		Subdivision		12/18/24		Basin 1					
Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	13126.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	15.9	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-36.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	2	unitless								
				BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
				ABMP/Aimp	Aratio	0.01	unitless	Volume Balance--> OK			
				BMP Volume	VBMP	17,337	cu.ft	dBMP Check----> OK			
Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters				dEXC Check----> OK			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		1,152,285	cu.ft	BMP Location----> OK			
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged	OTHER NOTES			
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%	Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion			
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		20.7%	%	of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are			
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		18.5%	%	sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land			
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		14.4%	%	Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by			
Recharge Requirement over Imp. Area	dr	6.4	in					the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.			
How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.											

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 2

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	10376.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	15.9	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-36.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	2	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
BMP Volume	VBMP	13,748	cu.ft				

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		910,872	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		16.4%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		14.7%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		11.4%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 3

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	21104.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	15.9	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-45.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	2	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
ABMP/Aimp	Aratio	0.01	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check----> OK dEXC Check----> OK BMP Location----> OK			
BMP Volume	VBMP	27,963	cu.ft				

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		1,852,645	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		33.3%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		29.8%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		23.1%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name		Description		Analysis Date		BMP or LID Type					
Venue at Hopewell		Subdivision		12/18/24		Basin 4A					
Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	21104.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	45.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-45.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	2	unitless								
				BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
				ABMP/Aimp	Aratio	0.01	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
				BMP Volume	VBMP	79,140	cu.ft				
Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters							
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		1,852,645	cu.ft	OTHER NOTES Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.			
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged				
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%				
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		33.3%	%				
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		29.8%	%				
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		23.1%	%				
Recharge Requirement over Imp. Area	dr	6.4	in								
How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.											

Project Name		Description		Analysis Date	BMP or LID Type	
Venue at Hopewell		Subdivision		12/18/24	Basin 4B	

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	6934.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	66.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-66.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	2	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
BMP Volume	VBMP	38,137	cu.ft				
Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		608,711	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		10.9%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		9.8%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		7.6%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 5

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	19275.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	72.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-72.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	2	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES	
ABMP/Aimp	Aratio	0.01	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK	
BMP Volume	VBMP	115,650	cu.ft		

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		1,692,084	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		30.4%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		27.2%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		21.1%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name		Description		Analysis Date	BMP or LID Type	
Venue at Hopewell		Subdivision		12/18/24	Basin 6	

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	9032.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	60.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-60.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	2	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
BMP Volume	VBMP	45,160	cu.ft				
Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		792,887	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		14.2%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		12.8%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		9.9%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES							
Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.							

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 7

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	14023.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	15.9	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-48.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	2	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES	
ABMP/Aimp	Aratio	0.01	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check----> OK dEXC Check----> OK BMP Location----> OK	
BMP Volume	VBMP	18,580	cu.ft		

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		1,231,030	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		22.1%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		19.8%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		15.4%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 8

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	16341.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	36.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-36.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	2	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES
ABMP/Aimp	Aratio	0.01	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK
BMP Volume	VBMP	49,023	cu.ft	

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		1,434,519	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		25.8%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		23.1%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		17.9%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP.

To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 9

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	13745.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	36.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-36.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	2	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES	
ABMP/Aimp	Aratio	0.01	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK	
BMP Volume	VBMP	41,235	cu.ft		

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		1,206,625	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		21.7%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		19.4%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		15.1%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name		Description		Analysis Date	BMP or LID Type	
Venue at Hopewell		Subdivision		12/18/24	Basin 10	

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	7633.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	36.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-36.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	2	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
BMP Volume	VBMP	22,899	cu.ft				
Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		670,074	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		12.0%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		10.8%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		8.4%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

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How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name		Description		Analysis Date		BMP or LID Type					
Venue at Hopewell		Subdivision		12/18/24		Basin 11					
Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	9882.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	72.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-72.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	2	unitless								
				BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
				ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
				BMP Volume	VBMP	59,292	cu.ft				
Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters							
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		867,506	cu.ft	OTHER NOTES Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.			
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged				
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%				
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		15.6%	%				
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		14.0%	%				
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		10.8%	%				
Recharge Requirement over Imp. Area	dr	6.4	in								
How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.											

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 12

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	7674.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	48.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-48.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	2	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
BMP Volume	VBMP	30,696	cu.ft				

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		673,673	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		12.1%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		10.8%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		8.4%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

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Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 13

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	11399.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	48.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-48.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	2	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
ABMP/Aimp	Aratio	0.01	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
BMP Volume	VBMP	45,596	cu.ft				

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		1,000,678	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		18.0%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		16.1%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		12.5%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

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Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 14

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	8160.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	48.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-48.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	2	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES	
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check----> OK dEXC Check----> OK BMP Location----> OK	
BMP Volume	VBMP	32,640	cu.ft		

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		716,338	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		12.9%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		11.5%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		9.0%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

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Project Name		Description		Analysis Date	BMP or LID Type	
Venue at Hopewell		Subdivision		12/18/24	Basin 15	

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	6002.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	48.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-48.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	2	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
BMP Volume	VBMP	24,008	cu.ft				

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		526,894	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		9.5%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		8.5%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		6.6%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

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Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 16A

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	5685.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	48.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-48.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	2	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
BMP Volume	VBMP	22,740	cu.ft				

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		499,066	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		9.0%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		8.0%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		6.2%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

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How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP.

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Project Name		Description		Analysis Date		BMP or LID Type					
Venue at Hopewell		Subdivision		12/18/24		Basin 16B					
Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	5877.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	48.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-48.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	2	unitless								
				BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
				ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
				BMP Volume	VBMP	23,508	cu.ft				
Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters							
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		515,921	cu.ft	OTHER NOTES Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.			
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged				
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%				
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		9.3%	%				
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		8.3%	%				
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		6.4%	%				
Recharge Requirement over Imp. Area	dr	6.4	in								
How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.											

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 17A

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	9821.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	48.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-48.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	2	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES	
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK	
BMP Volume	VBMP	39,284	cu.ft		

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		862,151	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		15.5%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		13.9%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		10.8%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 17B

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	11907.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	48.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-48.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	2	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES	
ABMP/Aimp	Aratio	0.01	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK	
BMP Volume	VBMP	47,628	cu.ft		

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		1,045,273	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		18.8%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		16.8%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		13.1%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP.

To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name		Description		Analysis Date	BMP or LID Type	
Venue at Hopewell		Subdivision		12/18/24	Basin 18	

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	3908.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.18	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	60.0	in	ERWC Modified to consider dEXC	EDRWC	1.18	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-60.0	in	Empty Portion of RWC under Infil. BMP	RERWC	0.93	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	4	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
BMP Volume	VBMP	19,540	cu.ft				
Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		343,069	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	4.07	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	4.07	in	%Runoff Infiltrated		6.2%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		5.5%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		4.3%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name		Description		Analysis Date		BMP or LID Type					
Venue at Hopewell		Subdivision		12/18/24		Basin 19					
Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	4548.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.18	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	48.0	in	ERWC Modified to consider dEXC	EDRWC	1.18	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-48.0	in	Empty Portion of RWC under Infil. BMP	RERWC	0.93	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	4	unitless								
				BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
				ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
				BMP Volume	VBMP	18,192	cu.ft				
Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters							
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		399,253	cu.ft	OTHER NOTES Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.			
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged				
Root Zone Water Capacity	RWC	4.07	in	%Rainfall became Runoff		77.7%	%				
RWC Modified to consider dEXC	DRWC	4.07	in	%Runoff Infiltrated		7.2%	%				
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		6.4%	%				
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		5.0%	%				
Recharge Requirement over Imp. Area	dr	6.4	in								
How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.											

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 20

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	9643.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.18	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	54.0	in	ERWC Modified to consider dEXC	EDRWC	1.18	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-54.0	in	Empty Portion of RWC under Infil. BMP	RERWC	0.93	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	4	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES	
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK	
BMP Volume	VBMP	43,394	cu.ft		

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		846,525	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	4.07	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	4.07	in	%Runoff Infiltrated		15.2%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		13.6%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		10.6%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP.

To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 21

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	10653.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.18	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	66.0	in	ERWC Modified to consider dEXC	EDRWC	1.18	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-66.0	in	Empty Portion of RWC under Infil. BMP	RERWC	0.93	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	4	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
BMP Volume	VBMP	58,592	cu.ft				

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		935,189	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	4.07	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	4.07	in	%Runoff Infiltrated		16.8%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		15.0%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		11.7%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 22

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	12540.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.18	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	60.0	in	ERWC Modified to consider dEXC	EDRWC	1.18	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-60.0	in	Empty Portion of RWC under Infil. BMP	RERWC	0.93	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	4	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES	
ABMP/Aimp	Aratio	0.01	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK	
BMP Volume	VBMP	62,700	cu.ft		

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		1,100,842	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	4.07	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	4.07	in	%Runoff Infiltrated		19.8%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		17.7%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		13.8%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name		Description		Analysis Date		BMP or LID Type					
Venue at Hopewell		Subdivision		12/18/24		Basin 23					
Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	8727.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.18	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	36.0	in	ERWC Modified to consider dEXC	EDRWC	1.18	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-36.0	in	Empty Portion of RWC under Infil. BMP	RERWC	0.93	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	4	unitless								
				BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
				ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
				BMP Volume	VBMP	26,181	cu.ft				
Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters							
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		766,112	cu.ft	OTHER NOTES Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.			
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged				
Root Zone Water Capacity	RWC	4.07	in	%Rainfall became Runoff		77.7%	%				
RWC Modified to consider dEXC	DRWC	4.07	in	%Runoff Infiltrated		13.8%	%				
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		12.3%	%				
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		9.6%	%				
Recharge Requirement over Imp. Area	dr	6.4	in								
How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.											

Project Name		Description		Analysis Date		BMP or LID Type					
Venue at Hopewell		Subdivision		12/18/24		Basin 24					
Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	11488.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.18	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	48.0	in	ERWC Modified to consider dEXC	EDRWC	1.18	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-48.0	in	Empty Portion of RWC under Infil. BMP	RERWC	0.93	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	4	unitless								
				BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
				ABMP/Aimp	Aratio	0.01	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
				BMP Volume	VBMP	45,952	cu.ft				
Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters							
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		1,008,491	cu.ft	OTHER NOTES Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.			
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged				
Root Zone Water Capacity	RWC	4.07	in	%Rainfall became Runoff		77.7%	%				
RWC Modified to consider dEXC	DRWC	4.07	in	%Runoff Infiltrated		18.1%	%				
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		16.2%	%				
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		12.6%	%				
Recharge Requirement over Imp. Area	dr	6.4	in								
How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.											

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 25

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	9386.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.18	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	60.0	in	ERWC Modified to consider dEXC	EDRWC	1.18	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-60.0	in	Empty Portion of RWC under Infil. BMP	RERWC	0.93	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	4	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
BMP Volume	VBMP	46,930	cu.ft				

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		823,964	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	4.07	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	4.07	in	%Runoff Infiltrated		14.8%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		13.3%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		10.3%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP.

To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 26

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	8120.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.18	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	59.4	in	ERWC Modified to consider dEXC	EDRWC	1.18	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-59.4	in	Empty Portion of RWC under Infil. BMP	RERWC	0.93	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	4	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
BMP Volume	VBMP	40,194	cu.ft				

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		712,826	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	4.07	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	4.07	in	%Runoff Infiltrated		12.8%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		11.5%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		8.9%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP.

To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name		Description		Analysis Date		BMP or LID Type					
Venue at Hopewell		Subdivision		12/18/24		Basin 27					
Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	4064.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.18	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	59.4	in	ERWC Modified to consider dEXC	EDRWC	1.18	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-59.4	in	Empty Portion of RWC under Infil. BMP	RERWC	0.93	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	4	unitless								
				BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
				ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
				BMP Volume	VBMP	20,117	cu.ft				
Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters							
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		356,764	cu.ft	OTHER NOTES Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.			
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged				
Root Zone Water Capacity	RWC	4.07	in	%Rainfall became Runoff		77.7%	%				
RWC Modified to consider dEXC	DRWC	4.07	in	%Runoff Infiltrated		6.4%	%				
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		5.7%	%				
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		4.5%	%				
Recharge Requirement over Imp. Area	dr	6.4	in								
How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.											

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 28

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	4334.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.18	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	54.0	in	ERWC Modified to consider dEXC	EDRWC	1.18	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-54.0	in	Empty Portion of RWC under Infil. BMP	RERWC	0.93	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	4	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
BMP Volume	VBMP	19,503	cu.ft				

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		380,467	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	4.07	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	4.07	in	%Runoff Infiltrated		6.8%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		6.1%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		4.8%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 29

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	8311.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	2.10	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	24.0	in	ERWC Modified to consider dEXC	EDRWC	2.10	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-24.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.64	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	6	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES	
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK	
BMP Volume	VBMP	16,622	cu.ft		

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		729,593	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	7.23	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	7.23	in	%Runoff Infiltrated		13.1%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		11.7%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		9.1%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

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How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP.

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Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 30

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	16667.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	2.10	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	48.0	in	ERWC Modified to consider dEXC	EDRWC	2.10	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-48.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.64	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	6	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES	
ABMP/Aimp	Aratio	0.01	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK	
BMP Volume	VBMP	66,668	cu.ft		

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		1,463,137	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	7.23	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	7.23	in	%Runoff Infiltrated		26.3%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		23.5%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		18.3%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 31

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	3980.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	2.10	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	36.0	in	ERWC Modified to consider dEXC	EDRWC	2.10	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-36.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.64	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	6	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES	
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK	
BMP Volume	VBMP	11,940	cu.ft		

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		349,390	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	7.23	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	7.23	in	%Runoff Infiltrated		6.3%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		5.6%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		4.4%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name		Description		Analysis Date		BMP or LID Type					
Venue at Hopewell		Subdivision		12/18/24		Basin 32					
Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	5206.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	2.10	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	60.0	in	ERWC Modified to consider dEXC	EDRWC	2.10	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-60.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.64	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	6	unitless								
				BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
				ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
				BMP Volume	VBMP	26,030	cu.ft				
Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters							
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		457,016	cu.ft	OTHER NOTES Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.			
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged				
Root Zone Water Capacity	RWC	7.23	in	%Rainfall became Runoff		77.7%	%				
RWC Modified to consider dEXC	DRWC	7.23	in	%Runoff Infiltrated		8.2%	%				
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		7.4%	%				
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		5.7%	%				
Recharge Requirement over Imp. Area	dr	6.4	in								
How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.											

Project Name		Description		Analysis Date		BMP or LID Type					
Venue at Hopewell		Subdivision		12/18/24		Basin 33					
Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	6631.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	2.10	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	48.0	in	ERWC Modified to consider dEXC	EDRWC	2.10	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-48.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.64	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	6	unitless								
				BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
				ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
				BMP Volume	VBMP	26,524	cu.ft				
Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters							
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		582,112	cu.ft	OTHER NOTES Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.			
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged				
Root Zone Water Capacity	RWC	7.23	in	%Rainfall became Runoff		77.7%	%				
RWC Modified to consider dEXC	DRWC	7.23	in	%Runoff Infiltrated		10.5%	%				
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		9.4%	%				
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		7.3%	%				
Recharge Requirement over Imp. Area	dr	6.4	in								
How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.											

Project Name		Description		Analysis Date		BMP or LID Type					
Venue at Hopewell		Subdivision		12/18/24		Basin 34					
Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	9205.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	2.10	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	48.0	in	ERWC Modified to consider dEXC	EDRWC	2.10	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-48.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.64	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	6	unitless								
				BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
				ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
				BMP Volume	VBMP	36,820	cu.ft				
Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters							
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		808,074	cu.ft	OTHER NOTES Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.			
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged				
Root Zone Water Capacity	RWC	7.23	in	%Rainfall became Runoff		77.7%	%				
RWC Modified to consider dEXC	DRWC	7.23	in	%Runoff Infiltrated		14.5%	%				
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		13.0%	%				
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		10.1%	%				
Recharge Requirement over Imp. Area	dr	6.4	in								
How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.											

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 35

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	8099.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	2.10	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	60.0	in	ERWC Modified to consider dEXC	EDRWC	2.10	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-60.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.64	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	6	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES	
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK	
BMP Volume	VBMP	40,495	cu.ft		

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		710,983	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	7.23	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	7.23	in	%Runoff Infiltrated		12.8%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		11.4%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		8.9%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP.

To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name		Description		Analysis Date		BMP or LID Type					
Venue at Hopewell		Subdivision		12/18/24		Basin 36A					
Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	5644.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	2.10	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	51.0	in	ERWC Modified to consider dEXC	EDRWC	2.10	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-51.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.64	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	6	unitless								
				BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
				ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
				BMP Volume	VBMP	23,987	cu.ft				
Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters							
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		495,467	cu.ft	OTHER NOTES Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.			
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged				
Root Zone Water Capacity	RWC	7.23	in	%Rainfall became Runoff		77.7%	%				
RWC Modified to consider dEXC	DRWC	7.23	in	%Runoff Infiltrated		8.9%	%				
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		8.0%	%				
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		6.2%	%				
Recharge Requirement over Imp. Area	dr	6.4	in								
How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.											

Project Name		Description		Analysis Date		BMP or LID Type					
Venue at Hopewell		Subdivision		12/18/24		Basin 36B					
Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	6113.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	2.10	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	51.0	in	ERWC Modified to consider dEXC	EDRWC	2.10	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-51.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.64	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	6	unitless								
				BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
				ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
				BMP Volume	VBMP	25,980	cu.ft				
Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters							
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		536,639	cu.ft	OTHER NOTES Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.			
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged				
Root Zone Water Capacity	RWC	7.23	in	%Rainfall became Runoff		77.7%	%				
RWC Modified to consider dEXC	DRWC	7.23	in	%Runoff Infiltrated		9.6%	%				
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		8.6%	%				
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		6.7%	%				
Recharge Requirement over Imp. Area	dr	6.4	in								
How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.											

Project Name		Description		Analysis Date	BMP or LID Type	
Venue at Hopewell		Subdivision		12/18/24	Basin 37A	

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	5901.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	2.10	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	48.0	in	ERWC Modified to consider dEXC	EDRWC	2.10	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-48.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.64	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	6	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
BMP Volume	VBMP	23,604	cu.ft				

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		518,028	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	7.23	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	7.23	in	%Runoff Infiltrated		9.3%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		8.3%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		6.5%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name		Description		Analysis Date		BMP or LID Type					
Venue at Hopewell		Subdivision		12/18/24		Basin 37B					
Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	8108.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	2.10	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	48.0	in	ERWC Modified to consider dEXC	EDRWC	2.10	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-48.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.64	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	6	unitless								
				BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
				ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
				BMP Volume	VBMP	32,432	cu.ft				
Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters							
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		711,773	cu.ft	OTHER NOTES Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.			
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged				
Root Zone Water Capacity	RWC	7.23	in	%Rainfall became Runoff		77.7%	%				
RWC Modified to consider dEXC	DRWC	7.23	in	%Runoff Infiltrated		12.8%	%				
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		11.4%	%				
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		8.9%	%				
Recharge Requirement over Imp. Area	dr	6.4	in								
How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.											

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 38

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	8916.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	2.10	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	48.0	in	ERWC Modified to consider dEXC	EDRWC	2.10	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-48.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.64	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	6	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
BMP Volume	VBMP	35,664	cu.ft				

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		782,704	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	7.23	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	7.23	in	%Runoff Infiltrated		14.1%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		12.6%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		9.8%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP.

To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name		Description		Analysis Date	BMP or LID Type		
Venue at Hopewell		Subdivision		12/18/24	Basin 39		

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	5019.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	2.10	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	48.0	in	ERWC Modified to consider dEXC	EDRWC	2.10	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-48.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.64	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	6	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
BMP Volume	VBMP	20,076	cu.ft				

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		440,600	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	7.23	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	7.23	in	%Runoff Infiltrated		7.9%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		7.1%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		5.5%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name		Description		Analysis Date		BMP or LID Type	
Venue at Hopewell		Subdivision		12/18/24		Basin 40	

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	5069.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	2.10	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	48.0	in	ERWC Modified to consider dEXC	EDRWC	2.10	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-48.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.64	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	6	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
BMP Volume	VBMP	20,276	cu.ft				

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		444,990	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	7.23	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	7.23	in	%Runoff Infiltrated		8.0%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		7.2%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		5.6%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name		Description		Analysis Date	BMP or LID Type	
Venue at Hopewell		Subdivision		12/18/24	Basin 41	

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	6502.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	54.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-54.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	8	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES	
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK	
BMP Volume	VBMP	29,259	cu.ft		

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		570,788	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		10.3%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		9.2%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		7.1%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name		Description		Analysis Date	BMP or LID Type	
Venue at Hopewell		Subdivision		12/18/24	Basin 42	

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	5468.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	72.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-72.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	8	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
BMP Volume	VBMP	32,808	cu.ft				

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		480,016	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		8.6%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		7.7%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		6.0%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 43

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	8168.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	48.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-48.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	8	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
BMP Volume	VBMP	32,672	cu.ft				

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		717,040	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		12.9%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		11.5%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		9.0%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP.

To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 44

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	9381.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	48.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-48.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	8	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES	
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK	
BMP Volume	VBMP	37,524	cu.ft		

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		823,525	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		14.8%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		13.2%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		10.3%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP.

To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name		Description		Analysis Date		BMP or LID Type					
Venue at Hopewell		Subdivision		12/18/24		Basin 45					
Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	6235.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	48.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-48.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	8	unitless								
				BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
				ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
				BMP Volume	VBMP	24,940	cu.ft				
Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters							
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		547,349	cu.ft	OTHER NOTES Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.			
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged				
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%				
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		9.8%	%				
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		8.8%	%				
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		6.8%	%				
Recharge Requirement over Imp. Area	dr	6.4	in								
How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.											

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 46A

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	19310.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	84.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-84.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	8	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES	
ABMP/Aimp	Aratio	0.01	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK	
BMP Volume	VBMP	135,170	cu.ft		

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		1,695,157	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		30.4%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		27.3%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		21.2%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name		Description		Analysis Date		BMP or LID Type					
Venue at Hopewell		Subdivision		12/18/24		Basin 46B					
Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	16772.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	48.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-48.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	8	unitless								
				BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
				ABMP/Aimp	Aratio	0.01	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
				BMP Volume	VBMP	67,088	cu.ft				
Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters							
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		1,472,355	cu.ft	OTHER NOTES Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.			
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged				
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%				
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		26.4%	%				
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		23.7%	%				
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		18.4%	%				
Recharge Requirement over Imp. Area	dr	6.4	in								
How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.											

Project Name		Description		Analysis Date		BMP or LID Type					
Venue at Hopewell		Subdivision		12/18/24		Basin 47					
Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	27382.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	36.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-36.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	8	unitless								
				BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
				ABMP/Aimp	Aratio	0.01	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
				BMP Volume	VBMP	82,146	cu.ft				
Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters							
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		2,403,769	cu.ft	OTHER NOTES Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.			
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged				
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%				
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		43.2%	%				
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		38.7%	%				
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		30.0%	%				
Recharge Requirement over Imp. Area	dr	6.4	in								
How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.											

Project Name		Description		Analysis Date		BMP or LID Type					
Venue at Hopewell		Subdivision		12/18/24		Basin 48					
Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	12731.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	36.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-36.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	10	unitless								
				BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
				ABMP/Aimp	Aratio	0.01	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
				BMP Volume	VBMP	38,193	cu.ft				
Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters							
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		1,117,609	cu.ft	OTHER NOTES Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.			
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged				
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%				
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		20.1%	%				
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		18.0%	%				
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		14.0%	%				
Recharge Requirement over Imp. Area	dr	6.4	in								
How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.											

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 49

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	12956.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	66.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-66.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	10	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
ABMP/Aimp	Aratio	0.01	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
BMP Volume	VBMP	71,258	cu.ft				

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		1,137,361	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		20.4%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		18.3%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		14.2%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 50

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	14966.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	54.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-54.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	10	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES	
ABMP/Aimp	Aratio	0.01	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK	
BMP Volume	VBMP	67,347	cu.ft		

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		1,313,812	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		23.6%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		21.1%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		16.4%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name		Description		Analysis Date		BMP or LID Type					
Venue at Hopewell		Subdivision		12/18/24		Basin 51					
Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	15098.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	70.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-70.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	12	unitless								
				BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
				ABMP/Aimp	Aratio	0.01	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
				BMP Volume	VBMP	88,072	cu.ft				
Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters							
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		1,325,400	cu.ft	OTHER NOTES Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.			
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged				
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%				
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		23.8%	%				
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		21.3%	%				
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		16.6%	%				
Recharge Requirement over Imp. Area	dr	6.4	in								
How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.											

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 52

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	15098.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	70.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-70.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	12	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES
ABMP/Aimp	Aratio	0.01	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK
BMP Volume	VBMP	88,072	cu.ft	

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		1,325,400	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		23.8%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		21.3%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		16.6%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP.

To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name		Description		Analysis Date	BMP or LID Type	
Venue at Hopewell		Subdivision		12/18/24	Basin 53	

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	7666.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	66.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-66.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	12	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES	
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge	
BMP Volume	VBMP	42,163	cu.ft	dBMP Check--> OK	
				dEXC Check--> OK	

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		672,971	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		12.1%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		10.8%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		8.4%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name		Description		Analysis Date		BMP or LID Type					
Venue at Hopewell		Subdivision		12/18/24		Basin 54					
Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	7411.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	66.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-66.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	12	unitless								
				BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
				ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
				BMP Volume	VBMP	40,761	cu.ft				
Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters							
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		650,585	cu.ft	OTHER NOTES Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.			
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged				
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%				
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		11.7%	%				
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		10.5%	%				
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		8.1%	%				
Recharge Requirement over Imp. Area	dr	6.4	in								
How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.											

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 55

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	6327.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	48.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-48.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	12	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES	
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK	
BMP Volume	VBMP	25,308	cu.ft		

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		555,425	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		10.0%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		8.9%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		6.9%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.

Project Name		Description		Analysis Date		BMP or LID Type					
Venue at Hopewell		Subdivision		12/18/24		Basin 56					
Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	6995.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	48.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-48.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	12	unitless								
				BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
				ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
				BMP Volume	VBMP	27,980	cu.ft				
Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters							
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		614,066	cu.ft	OTHER NOTES Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.			
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged				
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%				
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		11.0%	%				
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		9.9%	%				
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		7.7%	%				
Recharge Requirement over Imp. Area	dr	6.4	in								
How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.											

Project Name		Description		Analysis Date		BMP or LID Type					
Venue at Hopewell		Subdivision		12/18/24		Basin 57					
Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	5608.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	36.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-36.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	12	unitless								
				BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
				ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
				BMP Volume	VBMP	16,824	cu.ft				
Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters							
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		492,306	cu.ft	OTHER NOTES Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.			
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged				
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%				
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		8.8%	%				
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		7.9%	%				
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		6.2%	%				
Recharge Requirement over Imp. Area	dr	6.4	in								
How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP. To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration click the "Default Vdef & Aimp" button.											

Project Name	Description	Analysis Date	BMP or LID Type
Venue at Hopewell	Subdivision	12/18/24	Basin 58

Recharge BMP Input Parameters				Root Zone Water capacity Calculated Parameters				Recharge Design Parameters			
Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit	Parameter	Symbol	Value	Unit
BMP Area	ABMP	9201.0	sq.ft	Empty Portion of RWC under Post-D Natural Recharge	ERWC	1.99	in	Inches of Runoff to capture	Qdesign	0.10	in
BMP Effective Depth, this is the design variable	dBMP	36.0	in	ERWC Modified to consider dEXC	EDRWC	1.99	in	Inches of Rainfall to capture	Pdesign	0.16	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-36.0	in	Empty Portion of RWC under Infil. BMP	RERWC	1.56	in	Recharge Provided Avg. over Imp. Area		6.4	in
Depth of lower surface of BMP, must be >= dBMPu	dEXC	0.0	in					Runoff Captured Avg. over imp. Area		7.2	in
Post-development Land Segment Location of BMP, Input Zero if Location is distributed or undetermined	SegBMP	12	unitless								

BMP Calculated Size Parameters				CALCULATION CHECK MESSAGES			
ABMP/Aimp	Aratio	0.00	unitless	Volume Balance--> Solve Problem to satisfy Annual Recharge dBMP Check--> OK dEXC Check--> OK BMP Location--> OK			
BMP Volume	VBMP	27,603	cu.ft				

Parameters from Annual Recharge Worksheet				System Performance Calculated Parameters			
Post-D Deficit Recharge (or desired recharge volume)	Vdef	1,152,285	cu.ft	Annual BMP Recharge Volume		807,723	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	2,153,476	sq.ft	Avg BMP Recharge Efficiency		89.5%	Represents % Infiltration Recharged
Root Zone Water Capacity	RWC	6.85	in	%Rainfall became Runoff		77.7%	%
RWC Modified to consider dEXC	DRWC	6.85	in	%Runoff Infiltrated		14.5%	%
Climatic Factor	C-factor	1.42	no units	%Runoff Recharged		13.0%	%
Average Annual P	Pavg	44.6	in	%Rainfall Recharged		10.1%	%
Recharge Requirement over Imp. Area	dr	6.4	in				

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensitive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

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APPENDIX 5
STORM SEWER CONVEYANCE CALCULATIONS

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	252.311	0.00	0.00	0.00	0.00	0.00	0.0	0.4	0.0	22.55	25.02	5.98	30	0.32	201.50	202.30	203.19	204.22	203.71	210.45	Pipe - (2)
2	1	110.084	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	22.55	89.43	6.01	30	4.05	202.40	206.86	204.42	208.47	210.45	210.86	Pipe - (1)
</																						

Storm Sewer Tabulation

Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (I) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr (min)	Total (min)	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	31.266	0.71	0.97	0.98	0.70	0.95	10.0	16.4	5.8	5.53	6.00	5.52	15	0.74	209.00	209.23	209.95	210.18	210.94	212.78	Pipe - (5)
2	1	293.966	0.20	0.20	0.98	0.20	0.20	10.0	10.0	6.9	1.36	11.98	2.25	18	1.11	209.33	212.59	210.18	213.03	212.78	215.69	Pipe - (492)
3	1	23.655	0.06	0.06	0.98	0.06	0.06	10.0	10.0	6.9	0.41	4.98	1.41	15	0.51	209.33	209.45	210.18	209.70	212.78	212.79	Pipe - (4)
Project File: 2-inflow.stm																Number of lines: 3				Run Date: 3/28/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	43.639	0.60	0.82	0.98	0.59	0.80	10.0	10.6	6.8	5.48	10.27	5.49	15	2.15	208.00	208.94	208.95	209.89	209.94	213.58	Pipe - (31)
2	1	42.081	0.22	0.22	0.98	0.22	0.22	10.0	10.0	6.9	1.50	0.00	1.70	15	-0.50	209.15	208.94	209.89	209.95	213.58	213.09	Pipe - (30)

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	151.264	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	14.29	22.66	8.37	18	3.97	202.00	208.00	203.39	209.39	206.21	217.00	Pipe - (29)
Project File: 3-outflow.stm																Number of lines: 1				Run Date: 3/27/2025		
NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	104.293	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	51.38	62.29	12.50	30	1.97	197.95	200.00	199.68	202.32	200.16	202.21	Pipe - (8)
Project File: 4-5-outflow.stm																Number of lines: 1				Run Date: 3/28/2025		
NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Project File: 6-8-9-outflow.stm																						
Station	Len	Drg Area		Rnoff coeff	Area x C		Tc	(I) Rain	Total flow	Cap full	Vel	Pipe	Size	Slope	Invert Elev	HGL Elev	Grnd / Rim Elev	Line ID	Line To	Line	Station	Len
		Total	Incr		Total	Incr																
1	End	19.773	0.00	0.00	0.00	0.00	0.00	0.0	4.0	0.0	44.24	54.73	9.63	30	1.52	177.50	177.80	-2.73	182.32	Pipe - (26)	Proposed Storm-P	183.75
2	1	90.773	0.00	0.00	0.00	0.00	0.00	0.0	3.6	0.0	11.37	32.53	4.96	24	1.76	178.40	180.00	182.32	183.75	Proposed Storm-P	196.00	
3	2	185.414	0.00	0.00	0.00	0.00	0.00	0.0	2.7	0.0	11.37	39.83	6.04	24	2.64	180.10	185.00	183.75	196.00	Proposed Storm-P	197.50	
4	3	84.206	0.00	0.00	0.00	0.00	0.00	0.0	2.3	0.0	11.37	36.81	6.04	24	2.26	185.10	187.00	196.00	197.50	Proposed Storm-P	205.50	
5	4	277.023	0.00	0.00	0.00	0.00	0.00	0.0	1.1	0.0	11.37	43.92	6.04	24	3.21	187.10	196.00	197.21	205.50	Proposed Storm-P	204.50	
6	5	166.956	0.00	0.00	0.00	0.00	0.00	0.0	0.3	0.0	11.37	26.14	6.04	24	1.14	196.10	198.00	199.21	205.50	Proposed Storm-P	203.00	
7	6	65.218	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	11.37	22.50	6.04	24	0.84	198.10	198.65	199.86	204.50	Pipe - (23)	183.00	
8	1	32.763	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	18.67	21.40	7.01	24	0.76	178.40	178.65	180.20	182.32	Pipe - (27)	183.00	
9	1	28.521	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	14.20	22.94	5.75	24	0.88	178.40	178.65	180.01	182.32	Pipe - (25)	183.00	
NOTES: Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period = Yrs. 100 ; c = cir e = ellip b = box																						

NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	96.000	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	15.05	19.87	3.08	30	0.20	204.91	205.10	207.41	207.51	-3.39	207.00	Pipe - (23) (1)
Project File: 7-outflow.stm																Number of lines: 1				Run Date: 3/27/2025		
NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (I) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr (min)	Total (min)	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	9.412	0.00	1.10	0.74	0.00	0.81	10.0	17.5	5.7	4.60	14.42	5.06	15	4.25	179.00	179.40	179.87	180.27	180.94	183.46	Pipe - (22)
2	1	20.894	0.08	1.10	0.74	0.06	0.81	10.0	17.5	5.7	4.61	8.52	5.44	15	1.48	179.50	179.81	180.27	180.68	183.46	191.16	Proposed Storm-P
3	2	55.079	0.12	1.02	0.74	0.09	0.75	10.0	17.2	5.7	4.30	12.11	5.17	15	3.00	179.91	181.56	180.68	182.40	191.16	191.46	Pipe - (21)
4	3	54.962	0.12	0.90	0.74	0.09	0.67	10.0	17.0	5.7	3.82	12.12	4.87	15	3.00	181.66	183.31	182.40	184.10	191.46	193.46	Pipe - (20)
5	4	55.026	0.12	0.78	0.74	0.09	0.58	10.0	16.7	5.8	3.33	12.11	4.62	15	3.00	183.41	185.06	184.10	185.80	193.46	195.58	Pipe - (19)
6	5	54.901	0.12	0.66	0.74	0.09	0.49	10.0	16.3	5.8	2.84	12.13	4.37	15	3.01	185.16	186.81	185.80	187.49	195.58	197.66	Pipe - (18)
7	6	55.165	0.12	0.54	0.74	0.09	0.40	10.0	15.9	5.9	2.35	12.10	4.09	15	2.99	186.91	188.56	187.49	189.17	197.66	199.46	Pipe - (17)
8	7	54.952	0.12	0.42	0.74	0.09	0.31	10.0	15.4	6.0	1.85	12.12	3.78	15	3.00	188.66	190.31	189.17	190.85	199.46	200.96	Pipe - (16)
9	8	53.551	0.12	0.30	0.74	0.09	0.22	10.0	14.6	6.1	1.35	12.17	3.40	15	3.03	190.41	192.03	190.85	192.49	200.96	201.86	Pipe - (15)
10	9	52.813	0.12	0.18	0.74	0.09	0.13	10.0	13.5	6.3	0.84	12.14	2.88	15	3.01	192.13	193.72	192.49	194.08	201.86	202.86	Pipe - (14)
11	10	52.320	0.06	0.06	0.74	0.04	0.04	10.0	10.0	6.9	0.31	12.08	1.94	15	2.98	193.82	195.38	194.08	195.59	202.86	202.04	Pipe - (13)
Project File: 8-inflow.stm																Number of lines: 11				Run Date: 3/27/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	18.624	0.00	1.82	0.00	0.00	1.78	0.0	22.5	5.1	9.02	32.56	4.92	30	0.54	179.00	179.10	180.00	180.10	180.94	192.30	Pipe - (12)
2	1	22.027	1.27	1.82	0.98	1.24	1.78	10.0	22.3	5.1	9.05	51.85	5.30	30	1.36	179.20	179.50	180.10	180.50	192.30	191.90	Proposed Storm-P
3	2	406.054	0.13	0.55	0.98	0.13	0.54	10.0	13.1	6.3	3.42	80.29	2.93	30	3.27	179.60	192.86	180.50	193.47	191.90	203.09	Pipe - (11)
4	3	239.981	0.21	0.42	0.98	0.21	0.41	10.0	10.6	6.8	2.81	8.08	4.05	18	0.50	196.00	197.21	196.61	197.85	203.09	201.27	Pipe - (10)
5	4	27.985	0.21	0.21	0.98	0.21	0.21	10.0	10.0	6.9	1.43	8.05	3.33	18	0.50	198.11	198.25	198.54	198.70	201.27	201.43	Pipe - (9)
Project File: 9-inflow.stm																Number of lines: 5				Run Date: 3/28/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	15.378	0.25	1.61	0.98	0.25	1.58	10.0	21.8	5.1	8.09	39.52	5.07	24	2.60	179.00	179.40	180.01	180.41	181.21	185.68	Pipe - (40)
2	1	73.032	0.00	1.36	0.00	0.00	1.33	0.0	21.3	5.2	6.91	39.52	4.88	24	2.60	179.50	181.40	180.41	182.33	185.68	186.66	Pipe - (39)
3	2	163.246	0.00	1.36	0.00	0.00	1.33	0.0	20.3	5.3	7.07	38.74	5.29	24	2.50	181.50	185.58	182.33	186.52	186.66	191.60	Pipe - (38)
4	3	85.207	0.04	1.36	0.98	0.04	1.33	10.0	19.7	5.4	7.16	38.74	5.28	24	2.50	185.68	187.81	186.52	188.76	191.60	194.16	Pipe - (37)
5	4	55.000	0.00	1.32	0.00	0.00	1.29	0.0	19.4	5.4	7.00	38.81	5.18	24	2.51	187.91	189.29	188.76	190.23	194.16	195.81	Pipe - (36)
6	5	271.742	0.08	1.14	0.98	0.08	1.12	10.0	17.4	5.7	6.34	31.39	4.88	24	1.64	189.39	193.85	190.23	194.74	195.81	208.98	Pipe - (35)
7	6	70.110	0.00	1.06	0.00	0.00	1.04	0.0	16.9	5.7	5.97	17.31	4.80	24	0.50	193.95	194.30	194.76	195.16	208.98	212.17	Pipe - (34)
8	7	57.322	0.41	0.78	0.98	0.40	0.76	10.0	16.3	5.8	4.46	44.61	4.55	24	3.31	194.50	196.40	195.16	197.14	212.17	211.76	Pipe - (42)
9	8	302.228	0.37	0.37	0.98	0.36	0.36	10.0	10.0	6.9	2.52	36.54	3.23	24	2.22	196.50	203.22	197.14	203.77	211.76	209.41	Pipe - (41)
10	7	118.868	0.00	0.28	0.00	0.00	0.27	0.0	12.3	6.5	1.78	24.41	3.88	24	0.99	196.90	198.08	197.27	198.54	212.17	212.86	Pipe - (33)
11	10	84.585	0.28	0.28	0.98	0.27	0.27	10.0	10.0	6.9	1.91	24.13	3.94	24	0.97	198.18	199.00	198.56	199.48	212.86	213.48	Pipe - (32)
12	5	28.000	0.18	0.18	0.98	0.18	0.18	10.0	10.0	6.9	1.23	25.36	3.54	24	1.07	192.00	192.30	192.30	192.68	195.81	195.81	Pipe - (43)
Project File: 10-inflow.stm																Number of lines: 12				Run Date: 3/27/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	48.042	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	15.93	28.43	9.19	18	6.24	176.00	179.00	177.42	180.42	178.21	183.00	Pipe - (483)
Project File: 10-outflow.stm																Number of lines: 1				Run Date: 3/27/2025		
NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	188.237	0.00	1.32	0.98	0.00	1.29	10.0	13.1	6.3	8.19	23.45	5.86	18	4.25	180.00	188.00	181.11	189.11	205.74	208.49	Proposed Storm-P
2	1	115.476	0.33	1.32	0.98	0.32	1.29	10.0	12.7	6.4	8.29	23.19	6.23	18	4.16	188.10	192.90	189.11	194.01	208.49	208.50	Proposed Storm-P
3	2	229.474	0.12	0.79	0.98	0.12	0.77	10.0	11.5	6.6	5.14	21.77	4.43	18	3.66	193.00	201.40	194.01	202.27	208.50	208.80	Pipe - (130)
4	3	71.290	0.21	0.21	0.98	0.21	0.21	10.0	10.0	6.9	1.43	21.30	2.39	18	3.51	201.50	204.00	202.27	204.45	208.80	210.00	Pipe - (136)
5	3	43.909	0.46	0.46	0.98	0.45	0.45	10.0	10.0	6.9	3.13	21.03	3.75	18	3.42	201.50	203.00	202.27	203.67	208.80	208.18	Pipe - (131)
6	2	71.305	0.20	0.20	0.98	0.20	0.20	10.0	10.0	6.9	1.36	23.33	2.13	18	4.21	193.00	196.00	194.01	196.44	208.50	210.00	Pipe - (129)
Project File: 11-inflow.stm																Number of lines: 6				Run Date: 3/27/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	97.576	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	21.28	40.76	7.68	24	2.77	176.80	179.50	178.45	181.15	179.51	184.00	Pipe - (44)
Project File: 11-outflow.stm																Number of lines: 1				Run Date: 3/27/2025		
NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	23.262	0.00	0.00	0.00	0.00	0.00	0.0	1.3	0.0	86.98	109.0	17.74	30	6.02	187.00	188.40	189.50	190.87	-2.78	197.87	Pipe - (68) (1)
2	1	142.300	0.00	0.00	0.00	0.00	0.00	0.0	1.0	0.0	22.58	34.68	7.58	24	2.00	188.75	191.60	190.87	193.29	197.87	197.97	Proposed Storm-P
3	2	168.426	0.00	0.00	0.00	0.00	0.00	0.0	0.6	0.0	22.58	34.66	8.19	24	2.00	191.70	195.07	193.29	196.76	197.97	205.05	Proposed Storm-P
4	3	169.386	0.00	0.00	0.00	0.00	0.00	0.0	0.2	0.0	22.58	34.61	8.19	24	2.00	195.17	198.55	196.76	200.24	205.05	205.15	Proposed Storm-P
5	4	62.460	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	22.58	62.85	5.94	30	2.00	198.15	199.40	200.24	201.02	205.15	205.00	Pipe - (72)
6	1	46.345	0.00	0.00	0.00	0.00	0.00	0.0	1.0	0.0	41.80	75.05	6.95	36	1.08	188.00	188.50	190.87	190.60	197.87	198.18	Proposed Storm-P
7	6	51.418	0.00	0.00	0.00	0.00	0.00	0.0	0.9	0.0	41.80	63.73	8.11	36	0.78	188.60	189.00	190.60	191.10	198.18	198.53	Proposed Storm-P
8	7	56.982	0.00	0.00	0.00	0.00	0.00	0.0	0.7	0.0	41.80	60.54	8.11	36	0.70	189.10	189.50	191.10	191.60	198.53	198.92	Proposed Storm-P
9	8	116.315	0.00	0.00	0.00	0.00	0.00	0.0	0.4	0.0	41.80	56.05	8.11	36	0.60	189.60	190.30	191.60	192.40	198.92	200.25	Pipe - (81)
10	9	14.501	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	19.21	20.35	7.30	24	0.69	191.40	191.50	192.95	193.08	200.25	194.21	Pipe - (84)
11	9	100.237	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	22.59	81.83	7.03	30	3.39	190.90	194.30	192.40	195.92	200.25	197.86	Pipe - (85)
12	1	30.526	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	22.60	27.63	13.07	18	5.90	189.50	191.30	190.87	192.78	197.87	196.00	Pipe - (68)
Project File: 12-15-outflow.stm																Number of lines: 12				Run Date: 3/27/2025		
NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	27.192	0.28	0.48	0.98	0.27	0.47	10.0	10.4	6.9	3.22	21.04	4.38	15	9.05	201.00	203.46	201.72	204.18	203.49	208.68	Pipe - (124)
2	1	28.716	0.20	0.20	0.98	0.20	0.20	10.0	10.0	6.9	1.36	5.06	3.40	15	0.52	205.36	205.51	205.80	205.97	208.68	208.51	Pipe - (123)

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	18.523	0.15	1.14	0.98	0.15	0.98	10.0	13.7	6.2	6.13	8.90	6.72	15	1.62	201.00	201.30	201.78	202.30	202.94	205.95	Pipe - (71)
2	1	28.034	0.43	0.99	0.98	0.42	0.84	10.0	13.6	6.3	5.23	4.94	4.55	15	0.50	201.40	201.54	202.51	202.65	205.95	205.94	Pipe - (70)
3	2	25.680	0.00	0.56	0.00	0.00	0.41	10.0	13.4	6.3	2.61	4.98	2.13	15	0.51	201.64	201.77	203.13	203.17	205.94	206.63	Proposed Storm-P
4	3	117.644	0.08	0.56	0.74	0.06	0.41	10.0	12.5	6.4	2.67	4.95	2.46	15	0.50	201.87	202.46	203.24	203.38	206.63	205.56	Pipe - (145)
5	4	55.006	0.16	0.48	0.74	0.12	0.36	10.0	12.1	6.5	2.32	4.99	3.06	15	0.51	202.56	202.84	203.56	203.45	205.56	205.84	Pipe - (144)
6	5	54.994	0.16	0.32	0.74	0.12	0.24	10.0	11.4	6.7	1.58	4.99	3.42	15	0.51	202.94	203.22	203.45	203.72	205.84	206.11	Pipe - (143)
7	6	55.006	0.16	0.16	0.74	0.12	0.12	10.0	10.0	6.9	0.82	4.99	2.66	15	0.51	203.32	203.60	203.72	203.96	206.11	206.39	Pipe - (142)
Project File: 12B-inflow.stm																Number of lines: 7				Run Date: 3/27/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	21.196	1.78	1.78	0.98	1.74	1.74	10.0	10.0	6.9	12.12	17.65	5.87	24	0.52	192.00	192.11	193.25	193.36	193.25	195.48	Pipe - (69)
Project File: 13-inflow.stm																Number of lines: 1				Run Date: 3/27/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	14.435	0.00	1.15	0.00	0.00	0.85	10.0	15.9	5.9	5.00	16.29	4.52	21	0.90	192.00	192.13	192.82	192.95	-2.57	196.25	Pipe - (83)
2	1	63.887	0.13	1.15	0.74	0.10	0.85	10.0	15.5	6.0	5.06	25.22	4.98	21	2.16	192.23	193.61	192.95	194.43	196.25	196.50	Pipe - (82)
3	2	55.000	0.16	1.02	0.74	0.12	0.75	10.0	15.0	6.0	4.54	23.60	4.61	21	1.89	193.71	194.75	194.43	195.53	196.50	197.64	Pipe - (78)
4	3	55.000	0.16	0.86	0.74	0.12	0.64	10.0	14.5	6.1	3.88	19.77	4.34	21	1.33	194.85	195.58	195.53	196.30	197.64	199.80	Pipe - (77)
5	4	55.000	0.16	0.70	0.74	0.12	0.52	10.0	13.9	6.2	3.21	12.24	4.09	21	0.51	195.68	195.96	196.30	196.61	199.80	200.00	Pipe - (76)
6	5	55.000	0.16	0.54	0.74	0.12	0.40	10.0	13.1	6.3	2.53	17.16	3.79	21	1.00	196.06	196.61	196.61	197.19	200.00	199.50	Pipe - (75)
7	6	55.000	0.16	0.38	0.74	0.12	0.28	10.0	11.9	6.6	1.84	35.85	3.42	21	4.36	196.71	199.11	197.19	199.60	199.50	202.00	Pipe - (74)
8	7	55.000	0.22	0.22	0.74	0.16	0.16	10.0	10.0	6.9	1.13	32.73	2.89	21	3.64	199.21	201.21	199.60	201.59	202.00	204.00	Pipe - (73)
Project File: 14-inflow.stm																Number of lines: 8				Run Date: 3/27/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station	Len	Drng Area		Rnoff coeff	Area x C		Tc	Rain (l)	Total flow	Cap full	Vel	Pipe		Line ID
		Incr	Total		Incr	Total						Size	Slope	
Line To	Line	(ac)		(C)			Inlet (min)	Syst (min)	(in/hr)	(cfs)	(ft/s)	(in)	(%)	

Project File: 15-Inflow.stm																								Number of lines: 15						Run Date: 3/27/2025					
1	End	12.604	0.12	3.01	0.00	0.00	2.83	10.0	16.8	5.8	16.31	79.15	4.64	30	3.17	194.75	195.15	197.24	196.51	197.94	201.50	Pipe - (90) (1)													
2	1	23.336	0.12	2.89	0.98	0.12	2.83	10.0	16.7	5.8	16.35	19.88	4.52	30	0.20	195.15	196.75	197.75	196.88	196.92	201.50	Pipe - (90)													
3	2	28.007	0.19	2.77	0.98	0.19	2.71	10.0	16.6	5.8	15.69	21.50	11.17	18	3.57	196.75	197.75	197.70	199.17	200.72	200.71	Pipe - (89)													
4	3	23.137	0.06	0.63	0.98	0.06	0.62	10.0	13.8	6.2	3.84	8.60	3.95	15	1.51	198.00	198.35	199.17	199.14	200.71	201.50	Pipe - (99)													
5	4	52.826	0.09	0.57	0.98	0.09	0.56	10.0	13.5	6.3	3.50	8.61	4.40	15	1.51	198.35	199.15	199.14	199.90	201.50	203.16	Pipe - (98)													
6	5	55.477	0.09	0.48	0.98	0.09	0.47	10.0	13.2	6.3	2.98	8.56	4.05	15	1.50	199.15	199.98	200.67	203.16	203.99	204.82	Pipe - (97)													
7	6	54.542	0.09	0.39	0.98	0.09	0.38	10.0	12.7	6.4	2.45	8.63	3.74	15	1.52	199.98	200.81	201.44	203.99	204.82	205.64	Pipe - (96)													
8	7	54.915	0.09	0.30	0.98	0.09	0.29	10.0	12.2	6.5	1.91	8.60	3.40	15	1.51	200.81	201.64	202.19	204.82	205.64	206.48	Pipe - (95)													
9	8	55.040	0.09	0.21	0.98	0.09	0.21	10.0	11.4	6.7	1.37	8.59	2.98	15	1.51	201.64	202.47	202.19	205.64	206.48	207.31	Pipe - (94)													
10	9	55.151	0.12	0.12	0.98	0.12	0.12	10.0	10.0	6.9	0.82	8.58	2.42	15	1.50	202.47	203.30	202.93	206.48	207.31	208.15	Pipe - (93)													
11	3	164.647	0.26	1.95	0.98	0.25	1.91	10.0	16.2	5.8	11.15	13.96	6.70	18	1.51	197.75	200.23	199.17	200.71	201.51	202.35	204.63	Pipe - (88)												
12	11	52.769	0.54	1.25	0.98	0.53	1.23	10.0	16.1	5.9	7.17	8.45	6.53	15	1.46	200.48	201.25	201.51	204.63	204.25	207.92	204.25	207.92	Pipe - (87)											
13	12	244.226	0.12	0.12	0.98	0.12	0.12	10.0	10.0	6.9	0.82	8.56	1.80	15	1.50	201.25	204.91	202.32	204.25	204.25	207.92	204.25	207.92	Pipe - (86)											
14	12	27.495	0.59	0.59	0.98	0.58	0.58	10.0	10.0	6.9	4.02	6.40	4.18	15	0.84	201.25	201.48	202.29	204.25	204.25	204.24	204.24	204.24	Pipe - (91)											
15	15	31.054	0.44	0.44	0.98	0.43	0.43	10.0	10.0	6.9	2.99	8.61	3.52	15	1.51	200.48	200.95	201.51	204.63	204.63	204.41	204.41	204.41	Pipe - (92)											
NOTES: Intensity = 102.61 / (inlet time + 16.50) ^ 0.82; Return period = Yrs. 25 ; c = cir e = ellip b = box																																			

NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box

Storm Sewer Tabulation

Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr (min)	Total (min)	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	35.933	0.00	0.77	0.00	0.00	0.58	0.0	17.8	5.6	3.28	31.44	3.70	30	0.50	178.00	178.18	178.59	178.77	-2.50	189.40	Pipe - (51)
2	1	62.179	0.11	0.77	0.74	0.08	0.58	10.0	16.4	5.8	3.39	134.8	4.33	30	9.20	178.28	184.00	178.77	184.60	189.40	188.50	Pipe - (50)
3	2	55.000	0.11	0.66	0.74	0.08	0.50	10.0	16.1	5.9	2.95	15.27	4.63	15	4.76	184.00	186.62	184.60	187.31	188.50	189.87	Pipe - (49)
4	3	55.000	0.11	0.55	0.74	0.08	0.42	10.0	15.7	5.9	2.49	10.71	3.80	15	2.35	186.62	187.91	187.31	188.54	189.87	191.16	Pipe - (48)
5	4	55.000	0.11	0.44	0.74	0.08	0.34	10.0	15.2	6.0	2.04	10.71	3.52	15	2.35	187.91	189.20	188.54	189.77	191.16	192.45	Pipe - (47)
6	5	55.000	0.11	0.33	0.74	0.08	0.26	10.0	14.6	6.1	1.58	10.71	3.18	15	2.35	189.20	190.49	189.77	190.99	192.45	194.00	Pipe - (46)
7	6	54.319	0.10	0.22	0.74	0.07	0.18	10.0	13.6	6.2	1.11	9.05	3.21	15	1.68	190.59	191.50	190.99	191.91	194.00	196.59	Proposed Storm-P
8	7	69.451	0.06	0.12	0.74	0.04	0.10	10.0	11.7	6.6	0.68	9.57	2.77	15	1.87	191.60	192.90	191.91	193.22	196.59	196.50	Pipe - (64)
9	8	33.012	0.06	0.06	0.98	0.06	0.06	10.0	10.0	6.9	0.41	6.09	2.56	15	0.76	193.00	193.25	193.22	193.50	196.50	197.45	Pipe - (63)
Project File: 16A-inflow.stm																Number of lines: 9				Run Date: 3/27/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (I) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr (min)	Total (min)	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	94.062	0.00	3.00	0.00	0.00	2.76	10.0	18.8	5.5	15.11	26.23	8.78	18	5.32	178.00	183.00	179.41	184.41	185.64	187.92	Proposed Storm-P
2	1	64.002	0.54	3.00	0.98	0.53	2.76	10.0	18.7	5.5	15.15	14.91	9.20	18	1.72	184.00	185.10	185.25	186.51	187.92	189.85	Pipe - (62)
3	2	340.794	0.00	2.03	0.98	0.00	1.80	10.0	17.8	5.6	10.13	16.12	6.38	18	2.01	185.20	192.04	186.51	193.26	189.85	196.96	Pipe - (61)
4	3	25.599	0.08	0.85	0.98	0.08	0.65	10.0	17.7	5.6	3.65	8.11	3.43	18	0.51	192.14	192.27	193.26	193.00	196.96	197.21	Pipe - (60)
5	4	97.186	0.10	0.77	0.74	0.07	0.57	10.0	17.1	5.7	3.25	4.92	4.29	15	0.49	192.27	192.75	193.01	193.49	197.21	196.00	Pipe - (59)
6	5	60.554	0.10	0.67	0.74	0.07	0.50	10.0	16.7	5.8	2.86	12.55	3.30	15	3.22	192.75	194.70	193.92	195.38	196.00	197.95	Pipe - (58)
7	6	54.536	0.10	0.57	0.74	0.07	0.42	10.0	16.3	5.8	2.46	8.63	3.80	15	1.52	194.70	195.53	195.38	196.16	197.95	198.78	Pipe - (57)
8	7	55.119	0.10	0.47	0.74	0.07	0.35	10.0	15.9	5.9	2.05	8.53	3.54	15	1.49	195.53	196.35	196.16	196.92	198.78	199.60	Pipe - (56)
9	8	55.393	0.10	0.37	0.74	0.07	0.27	10.0	15.2	6.0	1.64	8.51	3.26	15	1.48	196.35	197.17	196.92	197.68	199.60	200.42	Pipe - (55)
10	9	54.648	0.10	0.27	0.74	0.07	0.20	10.0	14.4	6.1	1.22	8.62	2.91	15	1.52	197.17	198.00	197.68	198.44	200.42	201.25	Pipe - (54)
11	10	55.524	0.10	0.17	0.74	0.07	0.13	10.0	13.1	6.3	0.80	8.55	2.47	15	1.49	198.00	198.83	198.44	199.18	201.25	202.08	Pipe - (53)
12	11	54.786	0.07	0.07	0.74	0.05	0.05	10.0	10.0	6.9	0.36	8.56	1.78	15	1.50	198.83	199.65	199.18	199.88	202.08	202.90	Pipe - (52)
13	3	28.063	0.62	1.18	0.98	0.61	1.16	10.0	10.2	6.9	7.99	29.83	5.70	18	6.88	192.14	194.07	193.26	195.16	196.96	197.56	Pipe - (66)
14	13	30.865	0.56	0.56	0.98	0.55	0.55	10.0	10.0	6.9	3.81	8.81	4.01	15	1.59	194.07	194.56	195.16	195.35	197.56	197.84	Pipe - (65)
15	2	41.433	0.43	0.43	0.98	0.42	0.42	10.0	10.0	6.9	2.93	17.23	2.89	18	2.29	185.20	186.15	186.51	186.80	189.85	189.25	Pipe - (67)
Project File: 16B-inflow.stm																Number of lines: 15				Run Date: 3/27/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

[illegible]

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	163.721	0.00	0.59	0.74	0.00	0.44	10.0	22.9	5.0	2.19	31.44	3.31	30	0.50	179.00	179.82	179.48	180.30	187.74	194.15	Pipe - (110)
2	1	55.036	0.10	0.59	0.74	0.07	0.44	10.0	21.3	5.2	2.26	31.69	3.53	30	0.51	179.92	180.20	180.37	180.69	194.15	193.70	Pipe - (109)
3	2	55.000	0.10	0.49	0.74	0.07	0.36	10.0	19.5	5.4	1.96	31.70	3.39	30	0.51	180.30	180.58	180.72	181.04	193.70	193.14	Pipe - (108)
4	3	55.000	0.10	0.39	0.74	0.07	0.29	10.0	17.1	5.7	1.65	31.70	3.23	30	0.51	180.68	180.96	181.07	181.38	193.14	192.26	Pipe - (107)
5	4	55.000	0.10	0.29	0.74	0.07	0.21	10.0	15.2	6.0	1.29	17.48	3.11	24	0.51	181.06	181.34	181.43	181.73	192.26	191.39	Pipe - (106)
6	5	55.000	0.10	0.19	0.74	0.07	0.14	10.0	13.5	6.3	0.88	8.12	2.91	18	0.51	181.44	181.72	181.77	182.07	191.39	194.52	Pipe - (105)
7	6	55.000	0.09	0.09	0.74	0.07	0.07	10.0	10.0	6.9	0.46	8.12	2.38	18	0.51	181.82	182.10	182.07	182.35	194.52	193.40	Pipe - (104)
Project File: 17A-inflow.stm																Number of lines: 7				Run Date: 3/27/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (I) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr (min)	Total (min)	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	30.605	0.00	0.87	0.74	0.00	0.64	10.0	14.4	6.1	3.94	11.79	4.74	15	2.84	179.00	179.87	179.80	180.67	180.94	186.00	Pipe - (118)
2	1	55.000	0.09	0.71	0.74	0.07	0.53	10.0	14.1	6.2	3.24	11.40	4.48	15	2.65	179.97	181.43	180.67	182.16	186.00	187.18	Pipe - (117)
3	2	55.000	0.09	0.62	0.74	0.07	0.46	10.0	13.7	6.2	2.86	11.40	4.43	15	2.65	181.53	182.99	182.16	183.67	187.18	188.80	Pipe - (116)
4	3	55.000	0.09	0.53	0.74	0.07	0.39	10.0	13.3	6.3	2.47	11.40	4.23	15	2.65	183.09	184.55	183.67	185.18	188.80	189.47	Pipe - (115)
5	4	55.000	0.09	0.44	0.74	0.07	0.33	10.0	12.8	6.4	2.08	11.40	4.00	15	2.65	184.65	186.11	185.18	186.69	189.47	190.66	Pipe - (114)
6	5	55.000	0.09	0.35	0.74	0.07	0.26	10.0	12.1	6.5	1.69	11.40	3.74	15	2.65	186.21	187.67	186.69	188.19	190.66	191.84	Pipe - (113)
7	6	55.000	0.09	0.26	0.74	0.07	0.19	10.0	11.3	6.7	1.29	11.40	3.43	15	2.65	187.77	189.23	188.19	189.68	191.84	192.88	Pipe - (112)
8	7	55.000	0.17	0.17	0.74	0.13	0.13	10.0	10.0	6.9	0.87	11.40	3.03	15	2.65	189.33	190.79	189.68	191.16	192.88	193.58	Pipe - (111)
9	1	55.000	0.16	0.16	0.74	0.12	0.12	10.0	10.0	6.9	0.82	13.93	2.01	15	3.96	179.97	182.15	180.67	182.50	186.00	184.94	Pipe - (119)
Project File: 17B-inflow.stm																Number of lines: 9				Run Date: 3/27/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr (min)	Total (min)	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	33.005	0.00	2.65	0.00	0.00	0.00	0.0	0.1	0.0	24.34	38.39	8.38	24	2.45	176.50	177.31	178.24	179.05	179.21	181.83	Pipe - (120) (1)
2	1	27.245	1.30	1.30	0.00	0.00	0.00	0.0	0.0	0.0	12.71	22.75	8.21	18	4.00	177.91	179.00	179.05	180.34	181.83	183.00	Pipe - (120)
3	1	25.723	1.35	1.35	0.00	0.00	0.00	0.0	0.0	0.0	11.63	19.30	7.60	18	2.88	177.91	178.65	179.05	179.95	181.83	183.00	Proposed Storm-P
Project File: 17-outflow.stm																Number of lines: 3				Run Date: 3/27/2025		
NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station	Len	Drng Area		Rnoff coeff	Area x C		Tc	Rain (l)	Total flow (cfs)	Cap full (cfs)	Vel	Pipe		Invert Elev	HGL Elev	Grnd / Rim Elev	Line ID
		Incr	Total		Incr	Total						Size	Slope				
Line To	Line	(ac)		(C)			(min)	(min)	(in/hr)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	Up

1	End	68.214	0.00	0.00	0.00	0.00	0.0	0.0	226.7	324.0	9.50	72	0.50	137.00	137.34	142.90	141.46	146.92	Proposed Storm-P
2	1	40.916	0.00	0.00	0.00	0.00	1.6	0.0	159.7	208.7	20.30	42	3.67	139.44	140.94	141.73	144.35	146.92	Proposed Storm-P
3	2	106.964	0.00	0.00	0.00	0.00	1.4	0.0	137.6	179.6	9.65	54	0.71	140.04	140.80	144.35	149.25	149.50	Proposed Storm-P
4	3	39.623	0.00	0.00	0.00	0.00	1.4	0.0	96.94	104.7	21.99	30	5.55	142.90	145.10	144.80	147.58	153.15	Proposed Storm-P
5	4	52.697	0.00	0.00	0.00	0.00	1.3	0.0	74.54	71.77	10.89	36	0.99	144.70	145.22	147.58	153.15	153.15	Proposed Storm-P
6	5	147.619	0.00	0.00	0.00	0.00	1.1	0.0	74.54	70.36	11.16	36	0.95	145.32	146.72	147.98	153.15	155.25	Proposed Storm-P
7	6	136.747	0.00	0.00	0.00	0.00	0.8	0.0	51.67	57.49	11.28	30	1.67	147.32	149.61	149.43	155.25	155.40	Proposed Storm-P
8	7	88.445	0.00	0.00	0.00	0.00	0.7	0.0	28.78	53.96	9.77	24	4.85	150.21	154.50	151.93	155.40	160.10	Proposed Storm-P
9	8	127.115	0.00	0.00	0.00	0.00	0.5	0.0	28.78	30.10	16.30	18	7.00	154.85	163.75	156.34	160.10	168.50	Proposed Storm-P
10	9	135.540	0.00	0.00	0.00	0.00	0.4	0.0	28.78	32.26	16.56	18	8.04	163.85	174.75	165.24	168.50	185.50	Proposed Storm-P
11	10	71.026	0.00	0.00	0.00	0.00	0.3	0.0	28.78	32.79	16.30	18	8.31	174.75	180.65	176.24	185.50	189.50	Proposed Storm-P
12	11	86.345	0.00	0.00	0.00	0.00	0.2	0.0	28.78	57.53	9.97	24	5.51	180.50	185.26	182.14	189.50	191.15	Pipe - (101)
13	12	28.208	0.00	0.00	0.00	0.00	0.0	0.0	12.81	17.26	5.21	24	0.50	185.36	185.50	187.10	186.79	191.15	Pipe - (100)
14	12	136.008	0.00	0.00	0.00	0.00	0.0	0.0	15.97	17.43	14.16	15	6.21	186.11	194.55	187.10	195.79	191.15	Pipe - (316) (1)
15	3	84.624	0.00	0.00	0.00	0.00	0.8	0.0	40.63	53.93	15.93	24	4.84	143.15	147.25	144.45	149.20	151.50	Proposed Storm-P
16	15	239.076	0.00	0.00	0.00	0.00	0.5	0.0	40.63	59.08	13.19	24	5.81	147.35	161.25	149.20	163.20	166.60	Proposed Storm-P
17	16	116.720	0.00	0.00	0.00	0.00	0.2	0.0	40.63	61.00	8.78	30	1.88	160.85	163.05	163.20	166.60	168.85	Proposed Storm-P
18	17	46.451	0.00	0.00	0.00	0.00	0.1	0.0	40.63	33.52	5.75	36	0.22	162.65	162.75	165.65	168.85	168.69	Proposed Storm-P
19	18	61.143	0.00	0.00	0.00	0.00	0.0	0.0	19.31	22.96	11.53	18	4.07	164.91	167.40	166.19	168.69	172.00	Proposed Storm-P
20	18	30.071	0.00	0.00	0.00	0.00	0.0	0.0	21.32	31.28	7.46	24	1.63	164.41	164.90	166.19	168.69	170.00	Proposed Storm-P
21	7	36.093	0.00	0.00	0.00	0.00	0.0	0.0	22.89	39.82	5.87	30	0.80	149.71	150.00	151.93	155.40	154.00	Proposed Storm-P
22	6	24.047	0.00	0.00	0.00	0.00	0.0	0.0	22.87	49.46	8.23	24	4.08	147.82	148.80	149.43	155.25	154.00	Pipe - (367)

Project File: 18-28-outflow.stm

Number of lines: 28

Run Date: 3/27/2025

NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box

Storm Sewer Tabulation

Station	Len	Incr	Drng Area		Rnoff coeff	Area x C		Tc	Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev	HGL Elev	Grnd / Rim Elev	Line ID
			Total	(ac)		Incr	Total						Size	Slope				
Line To	Line			(ft)				(min)	(min)	(in/hr)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	
23	4	24.010	0.00	0.00	0.00	0.00	0.00	0.0	0.0	22.40	24.35	12.93	18	4.58	146.20	147.30	153.15	Proposed Storm-P
24	2	22.389	0.00	0.00	0.00	0.00	0.00	0.0	0.0	22.11	26.99	13.03	18	5.63	143.04	144.30	149.25	Pipe - (452)
25	1	106.733	0.00	0.00	0.00	0.00	0.00	0.2	0.0	44.67	44.48	10.02	30	1.00	140.44	142.50	146.92	Proposed Storm-P
26	25	23.363	0.00	0.00	0.00	0.00	0.00	0.0	0.0	22.85	27.75	14.57	18	5.95	142.61	143.73	145.77	Pipe - (451)
27	25	92.642	0.00	0.00	0.00	0.00	0.00	0.0	0.0	21.82	25.96	7.47	24	1.12	141.86	142.90	148.00	Proposed Storm-P
28	1	45.088	0.00	0.00	0.00	0.00	0.00	0.0	0.0	22.32	28.65	15.29	18	6.34	141.44	142.44	149.00	Pipe - (453)
Project File: 18-28-outflow.stm																		
Number of lines: 28																		
Run Date: 3/27/2025																		

NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	41.955	0.00	0.80	0.74	0.00	0.59	10.0	17.0	5.7	3.39	4.83	4.30	15	0.48	186.00	186.20	186.74	186.99	188.18	189.30	Proposed Storm-P
2	1	54.617	0.22	0.80	0.74	0.16	0.59	10.0	16.7	5.8	3.42	9.88	4.07	15	2.00	186.30	187.39	187.19	188.14	189.30	190.49	Pipe - (323)
3	2	55.125	0.00	0.58	0.74	0.00	0.43	10.0	16.3	5.8	2.50	8.94	3.97	15	1.63	187.49	188.39	188.14	189.02	190.49	191.49	Pipe - (322)
4	3	54.921	0.00	0.58	0.74	0.00	0.43	10.0	15.9	5.9	2.53	8.50	4.55	15	1.47	188.49	189.30	189.02	189.94	191.49	192.40	Pipe - (321)
5	4	54.938	0.00	0.58	0.74	0.00	0.43	10.0	15.5	6.0	2.56	12.12	4.56	15	3.00	189.40	191.05	189.94	191.69	192.40	194.15	Pipe - (320)
6	5	55.083	0.00	0.58	0.74	0.00	0.43	10.0	15.1	6.0	2.58	13.66	4.57	15	3.81	191.15	193.25	191.69	193.89	194.15	196.35	Pipe - (319)
7	6	54.965	0.10	0.58	0.74	0.07	0.43	10.0	14.7	6.1	2.61	13.51	4.58	15	3.73	193.35	195.40	193.89	196.05	196.35	198.50	Pipe - (318)
8	7	55.660	0.24	0.48	0.74	0.18	0.36	10.0	14.2	6.2	2.19	11.13	4.04	15	2.53	195.50	196.91	196.05	197.50	198.50	200.01	Pipe - (317)
9	8	54.794	0.04	0.24	0.74	0.03	0.18	10.0	13.3	6.3	1.12	5.35	2.82	15	0.58	197.01	197.33	197.50	197.75	200.01	200.43	Pipe - (315)
10	9	55.472	0.10	0.20	0.74	0.07	0.15	10.0	12.2	6.5	0.96	7.97	3.47	15	1.30	197.43	198.15	197.75	198.54	200.43	201.25	Pipe - (314)
11	10	54.462	0.10	0.10	0.74	0.07	0.07	10.0	10.0	6.9	0.51	8.64	2.48	15	1.52	198.25	199.08	198.54	199.36	201.25	202.08	Pipe - (313)
Project File: 18-inflow.stm																Number of lines: 11				Run Date: 3/27/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Project File: 19A-Inflow.stm																						
Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line To Line	(ft)	Incr	Total	(C)	Incr	Total	Inlet	Syst	(cfs)		(cfs)	(fts)	Size	Slope	Dn	Up	Dn	Up	Dn	Up	(ft)	
1	End	40.383	0.00	0.96	0.00	0.00	0.71	10.0	14.6	6.1	4.32	9.97	4.92	15	2.03	195.00	195.82	196.66	196.66	203.44	198.92	Pipe - (337)
2	1	54.638	0.09	0.96	0.74	0.07	0.71	10.0	14.4	6.1	4.35	10.71	5.33	15	2.34	195.92	197.20	196.66	198.04	200.30	198.92	Pipe - (336)
3	2	55.478	0.09	0.87	0.74	0.07	0.64	10.0	14.1	6.2	3.97	9.53	4.98	15	1.86	197.30	198.33	198.04	199.14	201.43	201.43	Pipe - (335)
4	3	54.590	0.09	0.78	0.74	0.07	0.58	10.0	13.8	6.2	3.59	8.36	4.80	15	1.43	198.43	199.21	199.14	199.97	202.31	202.31	Pipe - (334)
5	4	54.816	0.09	0.69	0.74	0.07	0.51	10.0	13.5	6.3	3.20	8.34	4.61	15	1.42	199.31	200.09	199.97	200.81	202.31	203.19	Pipe - (333)
6	5	54.993	0.09	0.60	0.74	0.07	0.44	10.0	13.1	6.3	2.82	8.33	4.41	15	1.42	200.19	200.97	200.81	201.64	203.19	204.07	Pipe - (332)
7	6	55.485	0.09	0.51	0.74	0.07	0.38	10.0	12.6	6.4	2.42	7.97	4.19	15	1.30	201.07	201.79	201.64	202.41	204.07	204.95	Pipe - (331)
8	7	110.293	0.09	0.42	0.74	0.07	0.31	10.0	11.6	6.6	2.06	4.94	3.80	15	0.50	201.89	202.44	202.45	203.01	204.95	205.54	Pipe - (312)
9	8	54.979	0.09	0.33	0.74	0.07	0.24	10.0	10.9	6.8	1.65	8.70	3.70	15	1.55	202.54	203.39	203.01	203.90	205.54	206.49	Pipe - (311)
10	9	55.142	0.24	0.24	0.74	0.18	0.18	10.0	10.0	6.9	1.23	8.58	3.38	15	1.51	203.49	204.32	203.90	204.76	206.49	207.32	Pipe - (310)
Run Date: 3/27/2025																						
Number of lines: 10																						
NOTES: Intensity = 102.61 / (inlet time + 16.50) ^ 0.82; Return period = Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Line To	Len	Drng Area		Rnoff coeff	Area x C		Tc	Syst	Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev	HGL Elev	Grnd / Rim Elev		Line ID
		(ft)	(ft)	Incr	Total (ac)	(C)	Incr	Total	Inlet (min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	2	27.561	0.00	0.00	0.00	0.00	0.00	0.0	11.3	6.7	10.21	16.22	6.59	18	2.03	194.75	195.31	195.98	196.54	Pipe - (309) (1)
2	1	427.799	0.72	1.56	0.72	0.98	0.71	1.53	10.0	10.1	6.9	10.59	15.52	7.07	18	1.86	195.41	196.54	204.62	205.67	Pipe - (309)
3	2	28.000	0.84	0.84	0.84	0.98	0.82	0.82	10.0	10.0	6.9	5.72	7.00	5.83	15	1.00	203.72	204.00	204.62	207.00	Pipe - (308)
Project File: 19b-inflow.stm																					
Number of lines: 3																					
Run Date: 3/28/2025																					
NOTES: Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period = Yrs. 25 ; c = cir e = ellip b = box																					

Storm Sewer Tabulation

Station		Len (ft)			Rnoff coeff (C)	Area x C		Tc		Rain (l)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr (ac)	Total (ac)	Inlet (ft)	Syst (ft)					Size (in)	 (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	32.182	0.00	1.96	0.00	0.00	1.92	0.0	42.0	3.6	6.94	24.35	6.28	15	12.12	151.00	154.90	152.06	155.96	152.94	160.50	
2	1	41.329	0.00	1.96	0.00	0.00	1.92	0.0	41.9	3.6	6.95	20.79	6.59	15	8.83	155.00	158.65	155.96	159.71	160.50	161.50	
3	2	111.548	0.21	1.96	0.98	0.21	1.92	0.0	41.7	3.6	6.97	23.76	6.61	15	11.54	158.75	171.62	159.71	172.68	161.50	176.20	
4	3	242.684	0.08	1.75	0.98	0.08	1.71	10.0	41.2	3.7	6.26	15.67	6.05	15	5.02	171.72	183.90	172.68	184.91	176.20	188.18	
5	4	41.501	0.62	1.67	0.98	0.61	1.63	10.0	41.2	3.7	5.98	14.32	6.00	15	4.19	184.00	185.74	184.91	186.73	188.18	187.28	
6	5	235.229	0.39	1.03	0.98	0.38	1.01	10.0	11.4	6.7	6.72	6.55	6.07	15	0.88	185.84	187.90	186.90	188.96	187.28	192.94	
7	6	243.941	0.29	0.64	0.98	0.28	0.63	10.0	10.2	6.9	4.32	13.99	4.22	15	4.00	188.00	197.76	189.24	198.60	192.94	201.00	
8	7	28.000	0.35	0.35	0.98	0.34	0.34	10.0	10.0	6.9	2.38	4.95	3.54	15	0.50	197.86	198.00	198.60	198.62	201.00	201.00	
9	5	111.328	0.01	0.02	0.74	0.01	0.01	10.0	18.9	5.5	0.08	13.14	0.82	15	3.53	185.84	189.77	186.73	189.88	187.28	192.87	
10	9	22.439	0.01	0.01	0.74	0.01	0.01	10.0	10.0	6.9	0.05	15.63	2.14	15	4.99	189.87	190.99	189.92	191.08	192.87	193.99	
Project File: 20-inflow.stm																Number of lines: 10				Run Date: 3/27/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc	Rain (l)		Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID	Line To Line
		(ft)	Incr	Total	(C)	Incr	Total	Inlet	Syst	(in/hr)	(cfs)	(cfs)	(ft/s)	Size	Slope	Dn	Up	Dn	Up	Dn	Up		
1	End	25.343	0.00	2.01	0.00	0.00	1.97	0.0	11.7	6.6	13.01	27.68	7.76	18	5.92	150.00	151.35	152.85	-3.80	157.75	Proposed Storm-F		
2	1	90.298	0.00	2.01	0.00	0.00	1.97	0.0	11.4	6.6	13.10	27.82	8.06	18	5.98	151.60	152.85	158.35	163.10	Proposed Storm-F			
3	2	106.539	0.01	2.01	0.98	0.01	1.97	10.0	11.2	6.7	13.19	30.98	8.11	18	7.42	157.10	158.35	166.36	175.75	Proposed Storm-F			
4	3	39.538	0.00	2.00	0.00	0.00	1.96	0.0	11.1	6.7	13.16	30.81	8.08	18	7.33	165.10	166.36	169.36	175.75	Proposed Storm-F			
5	4	191.087	0.29	2.00	0.98	0.28	1.96	10.0	10.7	6.8	13.34	27.34	8.18	18	5.78	168.10	169.36	180.50	181.97	Pipe - (343)			
6	5	257.547	0.15	1.71	0.98	0.15	1.68	10.0	10.2	6.9	11.56	17.50	9.47	15	6.26	179.24	180.50	196.57	199.75	Pipe - (339)			
7	6	39.909	0.72	1.56	0.98	0.71	1.53	10.0	10.1	6.9	10.57	16.27	8.96	15	5.41	195.46	196.57	199.75	200.43	Pipe - (341)			
8	7	36.911	0.84	0.84	0.98	0.82	0.82	10.0	10.0	6.9	5.72	5.02	4.66	15	0.51	197.72	198.97	200.43	200.91	Pipe - (338)			
Project File: 21-Inflow.stm																							
Number of lines: 8																							
Run Date: 3/27/2025																							
NOTES: Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																							

Storm Sewer Tabulation

Project File: 22-Inflow.stm																				Run Date: 3/27/2025	
Station	Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev	HGL Elev	Grnd / Rim Elev	Line ID	Line To Line		
		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope							
1	End	52.005	0.00	1.29	0.00	1.04	0.0	16.4	5.8	6.06	22.31	5.13	18	3.85	148.00	150.00	148.95	Pipe - (357)			
2	1	97.764	0.00	1.29	0.00	1.04	0.0	16.0	5.9	6.13	27.95	5.54	18	6.03	150.10	156.00	156.96	Pipe - (356)			
3	2	104.307	0.00	1.29	0.00	1.04	0.0	15.5	5.9	6.20	23.76	5.57	18	4.36	156.10	160.65	161.61	Pipe - (356) (1)			
4	3	104.292	0.00	1.29	0.00	1.04	0.0	15.1	6.0	6.28	24.81	5.59	18	4.76	160.75	165.71	166.68	Pipe - (355)			
5	4	41.411	0.00	0.92	0.00	0.68	0.0	14.8	6.1	4.13	31.92	4.18	18	7.87	165.81	169.07	173.40	Proposed Storm-P			
6	5	81.297	0.00	0.92	0.00	0.68	0.0	14.2	6.1	4.18	21.23	4.94	18	3.48	169.17	172.00	172.82	Pipe - (365)			
7	6	70.106	0.13	0.92	0.74	0.10	0.68	13.9	6.2	4.22	18.04	8.43	15	6.65	174.67	179.33	180.16	Pipe - (364)			
8	7	55.807	0.13	0.79	0.74	0.10	0.58	13.6	6.2	3.65	15.24	4.75	15	4.75	179.43	182.08	182.85	Pipe - (363)			
9	8	55.288	0.13	0.66	0.74	0.10	0.49	13.3	6.3	3.08	15.32	4.45	15	4.79	182.18	184.83	182.85	Pipe - (362)			
10	9	53.849	0.13	0.53	0.74	0.10	0.39	12.9	6.4	2.50	7.86	4.85	15	1.26	187.00	187.68	188.31	Pipe - (361)			
11	10	55.426	0.13	0.40	0.74	0.10	0.30	12.3	6.5	1.92	15.30	3.38	15	4.78	187.68	190.33	190.88	Pipe - (360)			
12	11	53.929	0.13	0.27	0.74	0.10	0.20	11.5	6.6	1.33	11.71	3.31	15	2.80	190.43	191.94	192.39	Pipe - (359)			
13	12	53.033	0.14	0.14	0.74	0.10	0.10	10.0	6.9	0.72	11.28	2.64	15	2.60	192.04	193.42	192.39	Pipe - (358)			
14	4	66.744	0.37	0.37	0.98	0.36	0.36	10.0	10.0	2.52	15.19	3.09	18	1.78	165.81	167.00	166.68	Pipe - (353)			
NOTES: Intensity = 102.61 / (inlet time + 16.50) ^ 0.82; Return period = Yrs. 25 ; c = cir e = ellip b = box																					

NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc	Syst	Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line To	Line	(ft)	Incr	Total	(C)	Incr	Total	Inlet	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	Size	Slope	Dn	Up	Dn	Up	Up	Up	
1	End	124.314	0.00	0.80	0.00	0.00	0.78	0.0	12.2	6.5	5.10	8.29	4.13	18	0.53	147.75	148.41	148.92	149.28	149.94	152.50	Pipe - (447)
2	1	234.662	0.00	0.80	0.00	0.00	0.78	0.0	10.9	6.8	5.30	27.68	5.35	18	5.92	148.51	162.40	149.28	163.29	152.50	166.40	Pipe - (446)
3	2	118.258	0.00	0.80	0.00	0.00	0.78	0.0	10.2	6.9	5.41	15.20	5.34	18	1.78	162.50	164.61	163.29	165.51	166.40	168.76	Pipe - (445)
4	3	13.086	0.08	0.80	0.98	0.08	0.78	10.0	10.2	6.9	5.42	7.03	4.39	18	0.38	164.71	164.76	165.70	165.75	168.76	168.35	Proposed Storm-P
5	4	26.618	0.72	0.72	0.98	0.71	0.71	10.0	10.0	6.9	4.90	7.31	3.90	18	0.41	164.86	164.97	165.90	165.94	168.35	168.34	Pipe - (444)
Project File: 23-Inflow.stm																						
Number of lines: 5																Run Date: 3/27/2025						
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len			Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size		Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)						(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	36.887	0.00	2.28	0.00	0.00	1.89	0.0	15.2	6.0	11.33	12.10	5.22	24	0.24	143.16	143.25	144.38	144.66	145.85	147.75	Proposed Storm-P
2	1	260.981	0.05	2.28	0.98	0.05	1.89	10.0	14.1	6.2	11.68	60.29	5.28	24	6.05	143.35	159.15	144.80	160.38	147.75	169.52	
3	2	44.429	0.26	2.23	0.98	0.25	1.84	10.0	13.9	6.2	11.44	25.99	6.01	24	1.13	159.25	159.75	160.38	160.96	169.52	170.46	
4	3	31.950	0.28	1.97	0.98	0.27	1.59	10.0	13.7	6.2	9.91	17.34	5.57	24	0.50	165.83	165.99	166.91	167.11	170.46	170.25	
5	4	132.976	0.15	1.43	0.74	0.11	1.06	10.0	13.3	6.3	6.68	8.56	6.92	15	1.50	166.84	168.83	167.67	169.87	170.25	171.72	
6	5	80.152	0.15	1.28	0.74	0.11	0.95	10.0	13.0	6.4	6.02	10.01	5.93	15	2.05	168.93	170.57	169.87	171.56	171.72	173.46	
7	6	54.425	0.15	1.13	0.74	0.11	0.84	10.0	12.8	6.4	5.34	13.74	5.57	15	3.86	170.67	172.77	171.56	173.71	173.46	175.66	
8	7	55.796	0.15	0.98	0.74	0.11	0.73	10.0	12.6	6.4	4.67	13.57	5.22	15	3.76	172.87	174.97	173.71	175.85	175.66	177.86	
9	8	54.172	0.15	0.83	0.74	0.11	0.61	10.0	12.3	6.5	3.98	13.77	4.87	15	3.88	175.07	177.17	175.85	177.98	177.86	180.06	
10	9	54.445	0.15	0.68	0.74	0.11	0.50	10.0	12.0	6.5	3.29	13.74	4.51	15	3.86	177.27	179.37	177.98	180.10	180.06	182.26	
11	10	55.593	0.15	0.53	0.74	0.11	0.39	10.0	11.6	6.6	2.60	13.60	4.12	15	3.78	179.47	181.57	180.10	182.22	182.26	184.46	
12	11	53.750	0.15	0.38	0.74	0.11	0.28	10.0	11.0	6.7	1.89	13.83	3.67	15	3.91	181.67	183.77	182.22	184.32	184.46	186.66	
13	12	57.338	0.23	0.23	0.74	0.17	0.17	10.0	10.0	6.9	1.18	10.57	3.09	15	2.28	183.87	185.18	184.32	185.61	186.66	187.97	
14	4	30.792	0.26	0.26	0.98	0.25	0.25	10.0	10.0	6.9	1.77	5.04	3.67	15	0.52	166.84	167.00	167.35	167.53	170.25	170.02	Proposed Storm-P
Project File: 24-inflow.stm																Number of lines: 14				Run Date: 3/27/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len			Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size		Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)						(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	23.350	0.00	1.89	0.00	0.00	1.65	10.0	16.8	5.8	9.51	11.21	7.96	15	2.57	144.00	144.60	145.17	145.77	-3.73	0.00	Proposed Storm-P
2	1	202.147	0.05	1.89	0.74	0.04	1.65	10.0	16.4	5.8	9.61	17.94	8.31	15	6.58	144.70	158.00	145.77	159.17	0.00	169.57	Proposed Storm-P
3	2	174.310	0.00	1.84	0.00	0.00	1.61	10.0	16.0	5.9	9.47	12.76	8.19	15	3.33	158.10	163.90	159.17	165.07	169.57	171.97	Proposed Storm-P
4	3	33.463	0.09	1.84	0.74	0.07	1.61	10.0	15.9	5.9	9.49	13.19	8.22	15	3.56	164.00	165.19	165.07	166.36	171.97	172.25	Proposed Storm-P
5	4	85.356	0.10	0.70	0.74	0.07	0.52	10.0	15.4	6.0	3.09	16.06	3.54	15	5.27	165.29	169.79	166.36	170.50	172.25	173.00	
6	5	54.928	0.10	0.60	0.74	0.07	0.44	10.0	15.1	6.0	2.67	15.65	3.92	15	5.01	169.79	172.54	170.50	173.20	173.00	175.38	
7	6	55.420	0.10	0.50	0.74	0.07	0.37	10.0	14.6	6.1	2.25	15.58	3.67	15	4.96	172.54	175.29	173.20	175.89	175.38	184.00	
8	7	54.683	0.10	0.40	0.74	0.07	0.30	10.0	14.0	6.2	1.83	15.69	3.39	15	5.03	175.29	178.04	175.89	178.58	184.00	186.90	
9	8	56.078	0.10	0.30	0.74	0.07	0.22	10.0	13.3	6.3	1.40	15.49	3.06	15	4.90	178.04	180.79	178.58	181.26	186.90	188.91	
10	9	54.339	0.10	0.20	0.74	0.07	0.15	10.0	12.2	6.5	0.96	15.74	2.65	15	5.06	180.79	183.54	181.26	183.93	188.91	189.86	
11	10	55.000	0.10	0.10	0.74	0.07	0.07	10.0	10.0	6.9	0.51	15.64	2.06	15	5.00	183.54	186.29	183.93	186.57	189.86	189.04	
12	4	100.190	0.63	1.05	0.98	0.62	1.03	10.0	10.2	6.9	7.10	18.10	6.36	15	6.70	165.29	172.00	166.36	173.07	172.25	176.79	
13	12	28.092	0.42	0.42	0.98	0.41	0.41	10.0	10.0	6.9	2.86	13.20	3.38	15	3.56	172.00	173.00	173.07	173.68	176.79	177.02	
Project File: 25-inflow.stm																Number of lines: 13				Run Date: 3/27/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station	Len	Drng Area		Rnoff coeff	Area x C		Tc	Rain (l)	Total flow	Cap full	Vel	Pipe		Line ID
		Incr	Total		Incr	Total						Size	Slope	
Line To Line	(ft)	(ac)	(ac)	(C)			Inlet (min)	Syst (min)	(in/hr)	(cfs)	(ft/s)	(in)	(%)	

Project File: 26-Inflow.stm																							
1	End	6.000	0.00	1.54	0.74	0.00	1.14	10.0	17.2	5.7	6.49	9.03	6.03	15	1.67	144.00	144.10	145.03	145.13	-411.62	162.50	Pipe - (407)	
2	1	58.495	0.10	1.54	0.74	0.07	1.14	10.0	17.0	5.7	6.52	9.64	6.05	15	1.90	144.10	145.21	145.13	146.24	162.50	164.75	Pipe - (406)	
3	2	56.032	0.10	1.44	0.74	0.07	1.07	10.0	16.9	5.7	6.12	6.99	5.75	15	1.00	145.21	146.77	146.24	146.77	164.75	164.00	Pipe - (405)	
4	3	73.392	0.10	1.34	0.74	0.07	0.99	10.0	16.6	5.8	5.73	13.95	5.54	15	3.98	146.77	148.69	146.77	149.66	164.00	165.00	Pipe - (404)	
5	4	116.097	0.12	1.24	0.74	0.09	0.92	10.0	16.2	5.8	5.36	13.99	5.34	15	4.00	148.69	153.33	149.66	154.27	165.00	166.00	Pipe - (403)	
6	5	98.102	0.08	1.12	0.74	0.06	0.83	10.0	15.8	5.9	4.89	13.98	5.07	15	4.00	153.33	157.25	154.27	158.15	166.00	160.00	Pipe - (402)	
7	6	83.764	0.12	1.04	0.74	0.09	0.77	10.0	15.5	6.0	4.58	17.09	4.96	15	5.97	157.25	162.25	158.15	163.12	160.00	165.00	Pipe - (401)	
8	7	120.935	0.08	0.92	0.74	0.06	0.68	10.0	14.9	6.0	4.11	14.92	4.67	15	4.55	162.25	167.75	163.12	168.57	165.00	170.50	Pipe - (400)	
9	8	74.787	0.12	0.84	0.74	0.09	0.62	10.0	14.5	6.1	3.79	12.79	4.55	15	3.34	167.75	170.25	168.57	171.04	170.50	173.00	Pipe - (399)	
10	9	55.000	0.12	0.72	0.74	0.09	0.53	10.0	14.2	6.2	3.28	21.96	4.22	15	9.85	170.25	175.67	171.04	176.40	173.00	179.32	Pipe - (398)	
11	10	55.000	0.12	0.60	0.74	0.09	0.44	10.0	13.8	6.2	2.76	13.99	3.93	15	4.00	175.67	177.87	176.40	178.54	179.32	185.48	Pipe - (397)	
12	11	55.000	0.12	0.48	0.74	0.09	0.36	10.0	13.4	6.3	2.24	13.99	3.61	15	4.00	177.87	180.07	180.67	185.48	187.84	187.84	Pipe - (396)	
13	12	55.000	0.12	0.36	0.74	0.09	0.27	10.0	12.7	6.4	1.71	13.99	3.25	15	4.00	180.07	182.27	182.79	187.84	189.41	189.41	Pipe - (395)	
14	13	55.000	0.12	0.24	0.74	0.09	0.18	10.0	11.8	6.6	1.17	13.99	2.80	15	4.00	182.27	184.47	184.90	189.41	190.24	190.24	Pipe - (394)	
15	14	55.000	0.12	0.12	0.74	0.09	0.09	10.0	10.0	6.9	0.62	13.99	2.16	15	4.00	184.47	186.67	184.90	189.42	190.24	189.42	Pipe - (393)	
NOTES: Intensity = 102.61 / (inlet time + 16.50) ^ 0.82; Return period = Yrs. 25 ; c = cir e = ellip b = box																							

NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box

Storm Sewer Tabulation

Line To Line	Station	Len	(ft)	Drng Area		Rnoff coeff	(C)	Area x C		Tc	Rain (l)	Total flow	Cap full	Vel	Pipe		HGL Elev		Grnd / Rim Elev		Line ID	
				Incr	Total			Incr	Total						Size	Slope	(ft)	(ft)	(ft)	(ft)		(ft)
				(ac)	(ac)					(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	

1	End	34.271	0.26	1.77	0.74	0.19	1.47	10.0	15.4	6.0	8.76	11.95	7.43	15	2.92	168.00	169.15	170.15	182.88	172.55	Proposed Storm-P
2	1	142.076	0.09	0.93	0.98	0.09	0.71	10.0	14.8	6.1	4.30	5.57	4.41	15	0.63	169.10	170.15	170.84	172.55	176.90	Proposed Storm-P
3	2	54.158	0.12	0.84	0.74	0.09	0.62	10.0	14.5	6.1	3.79	12.65	4.84	15	3.27	170.10	171.87	170.84	172.66	176.90	Proposed Storm-P
4	3	56.299	0.12	0.72	0.74	0.09	0.53	10.0	14.2	6.2	3.28	14.83	4.22	15	4.49	171.87	174.40	172.66	175.13	174.62	Pipe - (351)
5	4	54.957	0.12	0.60	0.74	0.09	0.44	10.0	13.8	6.2	2.76	17.78	4.30	15	6.46	174.50	178.05	175.13	178.72	177.25	Pipe - (349)
6	5	54.479	0.12	0.48	0.74	0.09	0.36	10.0	13.4	6.3	2.24	15.43	4.00	15	4.86	178.15	180.80	178.72	181.40	180.90	Pipe - (348)
7	6	55.612	0.12	0.36	0.74	0.09	0.27	10.0	12.8	6.4	1.71	15.27	3.65	15	4.77	180.90	183.55	181.40	184.07	183.65	Pipe - (347)
8	7	54.502	0.12	0.24	0.74	0.09	0.18	10.0	11.8	6.6	1.17	12.17	3.21	15	3.03	183.65	185.30	184.07	185.73	186.40	Pipe - (346)
9	8	55.513	0.12	0.12	0.74	0.09	0.09	10.0	10.0	6.9	0.62	15.28	2.54	15	4.77	185.40	188.05	185.73	188.36	188.15	Pipe - (345)
10	1	238.653	0.27	0.58	0.98	0.26	0.57	10.0	10.3	6.9	3.91	16.31	4.15	15	5.43	169.10	182.07	170.15	182.87	185.95	Proposed Storm-P
11	10	28.000	0.31	0.31	0.98	0.30	0.30	10.0	10.0	6.9	2.11	7.00	3.39	15	1.00	182.17	182.45	182.87	183.03	185.95	Pipe - (433)

Project File: 27-Inflow.stm

Number of lines: 11

Run Date: 3/27/2025

NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box

Storm Sewer Tabulation

Station		Len			Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size		Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)						(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	60.552	0.00	0.63	0.00	0.00	0.62	0.0	11.3	6.7	4.12	13.93	4.82	15	3.96	166.00	168.40	166.82	169.22	-2.80	171.51	Proposed Storm-P
2	1	235.139	0.24	0.63	0.98	0.24	0.62	10.0	10.2	6.9	4.26	14.50	5.35	15	4.30	168.50	178.60	169.22	179.44	171.51	181.79	
3	2	28.020	0.39	0.39	0.98	0.38	0.38	10.0	10.0	6.9	2.65	4.94	3.81	15	0.50	178.70	178.84	179.44	179.49	181.79	181.84	
Project File: 28A-inflow.stm																Number of lines: 3				Run Date: 3/27/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drg Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line To	Line	(ft)	Incr	Total	(C)	Incr	Total	Inlet	Syst	(in/hr)	(cfs)	(cfs)	(ft/s)	Size	Slope	Dn	Up	Dn	Up	Dn	Up	
1	End	37.837	0.00	1.63	0.00	0.00	1.21	10.0	12.3	6.5	7.83	19.70	6.82	15	7.93	166.00	167.11	170.11	167.19	171.75	Pipe - (443)	
2	1	55.074	0.22	1.63	0.74	0.16	1.21	10.0	12.1	6.5	7.86	14.14	6.84	15	4.09	169.00	170.11	172.36	171.75	174.00	Pipe - (442)	
3	2	56.229	0.22	1.41	0.74	0.16	1.04	10.0	12.0	6.5	6.83	13.96	6.08	15	3.98	171.25	172.36	174.54	174.00	176.24	Pipe - (441)	
4	3	54.523	0.22	1.19	0.74	0.16	0.88	10.0	11.8	6.6	5.80	16.02	5.46	15	5.25	173.49	177.32	176.24	179.10	179.10	Pipe - (440)	
5	4	19.577	0.02	0.97	0.74	0.01	0.72	10.0	11.7	6.6	4.74	20.92	4.87	15	8.94	176.35	178.98	179.10	180.85	181.67	Pipe - (439)	
6	5	19.795	0.23	0.95	0.74	0.17	0.70	10.0	11.6	6.6	4.65	14.24	5.05	15	4.14	178.10	179.79	180.85	181.67	183.71	Pipe - (438)	
7	6	55.553	0.23	0.72	0.74	0.17	0.53	10.0	11.3	6.7	3.56	13.41	4.22	15	3.67	178.92	181.72	181.67	183.71	186.13	Pipe - (437)	
8	7	54.019	0.23	0.49	0.74	0.17	0.36	10.0	10.8	6.8	2.45	14.81	3.56	15	4.48	180.96	183.38	184.01	186.13	188.55	Pipe - (436)	
9	8	55.428	0.26	0.26	0.74	0.19	0.19	10.0	10.0	6.9	1.34	15.50	2.73	15	4.91	183.38	186.10	186.56	188.55	188.55	Pipe - (435)	
Project File: 28B-Inflow.stm																						
Number of lines: 9																						
Run Date: 3/27/2025																						

NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box

NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box

Storm Sewer Tabulation

Project File: 29-30-outflow.stm																			
Station	Line To Line	Len	Drng Area		Rnoff coeff	Area x C		Tc	Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev	HGL Elev		Grnd / Rim Elev	Line ID
			Incr	Total		Inlet	Syst						Size	Slope		Dn	Up		
1	End	74.406	0.00	0.00	0.00	0.00	0.00	0.00	0.0	31.27	31.76	10.20	24	1.68	173.75	174.38	-2.93	180.08	Pipe - (390) (1)
2	1	168.605	0.00	0.00	0.00	0.00	0.00	0.00	0.5	9.84	19.34	5.81	24	0.62	176.73	176.69	180.08	181.22	Proposed Storm-P
3	2	90.779	0.00	0.00	0.00	0.00	0.00	0.00	0.2	9.84	9.01	5.57	18	0.63	177.90	178.83	181.22	182.17	Proposed Storm-P
4	3	73.151	0.00	0.00	0.00	0.00	0.00	0.00	0.0	9.84	37.03	6.01	18	10.59	186.00	179.76	182.17	188.21	Pipe - (389)
5	1	19.852	0.00	0.00	0.00	0.00	0.00	0.00	0.0	21.43	33.78	12.39	18	8.82	174.25	175.63	180.08	180.00	Pipe - (390)
NOTES: Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period = Yrs. 100 ; c = cir e = ellip b = box																			

Storm Sewer Tabulation

Station		Len			Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size		Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)						(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	37.466	0.26	0.26	0.98	0.25	0.25	10.0	10.0	6.9	1.77	13.08	3.59	15	3.50	186.00	187.31	186.53	187.84	187.94	190.04	
Project File: 29-inflow.stm																Number of lines: 1				Run Date: 3/27/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc	Syst (min)	Inlet (min)	Rain (l)	Total flow	Total Cap	Vel	Pipe	Invert Elev	HGL Elev	Grnd / Rim Elev	Line ID	Line To Line
Line To	Line		Incr	Total		Incr	Total													
Project File: 30B-Inflow.stm																				
NOTES: Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period = Yrs. 25 ; c = cir e = ellip b = box																				
Number of lines: 11																			Run Date: 3/27/2025	
1	End	58.496	0.04	2.08	0.74	0.03	1.54	10.0	12.8	6.4	9.84	17.84	5.43	24	0.53	175.25	175.56	176.37	1.94	Pipe - (386)
2	1	60.188	0.10	2.04	0.74	0.07	1.51	10.0	12.7	6.4	9.68	14.76	10.46	15	4.45	176.41	179.09	180.27	181.84	Pipe - (385)
3	2	55.000	0.10	1.94	0.74	0.07	1.44	10.0	12.6	6.4	9.24	8.59	7.74	15	1.51	179.09	180.27	181.84	182.67	Pipe - (384)
4	3	54.940	0.10	1.84	0.74	0.07	1.36	10.0	12.5	6.5	8.79	8.65	7.42	15	1.53	179.92	180.76	181.91	182.67	Pipe - (383)
5	4	55.060	0.12	1.74	0.74	0.09	1.29	10.0	12.3	6.5	8.35	8.64	7.12	15	1.53	180.76	181.60	182.73	183.51	Pipe - (382)
6	5	66.784	0.17	1.62	0.74	0.13	1.20	10.0	12.1	6.5	7.81	7.66	6.75	15	1.20	181.60	182.40	183.51	184.35	Pipe - (381)
7	6	73.907	0.27	1.45	0.74	0.20	1.07	10.0	11.9	6.6	7.03	11.07	6.23	15	2.50	182.40	184.25	185.31	185.15	Pipe - (380)
8	7	110.328	0.30	1.18	0.74	0.22	0.87	10.0	11.6	6.6	5.79	6.66	5.43	15	0.91	184.25	185.25	186.22	187.00	Pipe - (379)
9	8	75.685	0.27	0.54	0.74	0.20	0.40	10.0	11.0	6.7	2.69	7.41	3.37	15	1.12	185.25	186.10	186.22	186.67	Pipe - (378)
10	9	66.922	0.27	0.27	0.74	0.20	0.20	10.0	10.0	6.9	1.39	8.64	2.98	15	1.52	186.20	187.22	186.76	189.67	Pipe - (377)
11	8	56.793	0.34	0.34	0.74	0.25	0.25	10.0	10.0	6.9	1.75	32.55	2.43	18	8.19	185.25	189.90	186.22	192.21	Pipe - (388)

Storm Sewer Tabulation

Project File: 31-32-outflow to 30.stm																					
Station	Line To Line	Len	Drng Area		Rnoff coeff	Area x C		Tc	Syst (l)	Rain (in/hr)	Total flow	Cap full	Vel	Pipe		Invert Elev	HGL Elev		Grnd / Rim Elev	Line ID	
			Incr	Total		Incr	Total							Inlet (min)	Syst (min)		Size (in)	Slope (%)			Dn (ft)
1	End	86.381	0.00	0.00	0.00	0.00	0.00	0.00	0.0	2.0	0.0	24.75	79.27	6.99	30	3.18	176.00	177.69	180.44	193.83	Proposed Storm-P
2	1	321.257	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.9	0.0	24.75	74.98	7.24	30	2.85	178.85	180.44	189.69	193.83	Proposed Storm-P
3	2	139.233	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.4	0.0	24.75	61.64	7.24	30	1.92	188.10	189.69	192.47	197.70	Proposed Storm-P
4	3	82.526	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.1	0.0	21.43	46.40	7.27	24	3.59	190.38	192.47	194.99	197.86	Pipe - (344) (4)
5	4	42.576	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	21.43	38.66	7.94	24	2.49	193.44	194.99	196.16	197.86	Pipe - (344)
6	3	50.654	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	3.32	19.05	3.02	18	2.80	190.88	192.30	192.47	197.00	Pipe - (387)
Run Date: 3/28/2025																					
Number of lines: 6																					
NOTES: Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period = Yrs. 100 ; c = cir e = ellip b = box																					

NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID								
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up									
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)									
1	End	30.835	0.07	0.13	0.98	0.07	0.13	10.0	11.4	6.7	0.85	7.77	2.89	15	1.23	193.00	193.38	193.36	193.74	-2.87	196.34	Pipe - (376)								
2	1	28.327	0.06	0.06	0.98	0.06	0.06	10.0	10.0	6.9	0.41	4.92	1.88	15	0.49	193.38	193.52	193.74	193.77	196.34	196.27	Pipe - (375)								
																						</								

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	27.048	0.00	1.21	0.00	0.00	1.14	10.0	12.8	6.4	7.29	36.80	4.90	24	2.26	192.25	192.86	193.21	193.82	195.94	197.81	Pipe - (369) (1)
2	1	61.087	0.52	1.21	0.98	0.51	1.14	10.0	12.4	6.5	7.38	17.45	5.12	24	0.51	192.96	193.27	193.87	194.23	197.81	197.25	Pipe - (369)
3	2	28.000	0.20	0.69	0.98	0.20	0.63	10.0	12.2	6.5	4.10	8.04	4.51	18	0.50	193.87	194.01	194.63	194.79	197.25	197.23	Pipe - (368)
4	3	38.610	0.06	0.49	0.74	0.04	0.43	10.0	11.9	6.6	2.85	9.75	5.54	15	1.94	194.36	195.11	194.82	195.79	197.23	198.00	Pipe - (371)
5	4	62.411	0.13	0.13	0.74	0.10	0.10	10.0	10.0	6.9	0.67	10.48	1.95	15	2.24	195.21	196.61	195.79	196.93	198.00	199.36	Pipe - (370)
6	4	120.805	0.14	0.30	0.98	0.14	0.29	10.0	10.6	6.8	2.01	4.97	3.68	15	0.50	195.21	195.82	195.79	196.38	198.00	199.05	Proposed Storm-P
7	6	29.505	0.16	0.16	0.98	0.16	0.16	10.0	10.0	6.9	1.09	4.99	2.87	15	0.51	195.92	196.07	196.38	196.48	199.05	198.86	Pipe - (306)
Project File: 31B-inflow.stm																Number of lines: 7				Run Date: 3/28/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID								
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up									
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)									
1	End	27.711	0.61	0.97	0.98	0.60	0.95	10.0	10.2	6.9	6.56	6.51	6.05	15	0.87	187.00	187.24	188.03	188.28	188.94	189.96	Pipe - (373)								
2	1	26.759	0.36	0.36	0.98	0.35	0.35	10.0	10.0	6.9	2.45	10.12	2.98	15	2.09	187.34	187.90	188.60	188.53	189.96	190.69	Pipe - (372)								

Storm Sewer Tabulation

Line To Line	Station	Len	Drng Area		Rnoff coeff	Area x C		Tc	Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev	HGL Elev	Grnd / Rim Elev	Line ID
			Incr	Total		Incr	Total						Size	Slope				
(ft)	(ac)		(ac)	(C)	(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
Up	Dn	Up	Dn	Up	Dn	Up	Dn	Up	Dn	Up	Dn	Up	Dn	Up	Dn	Up	Dn	Up

1	End	33.696	0.00	2.47	0.00	0.00	1.83	0.0	18.5	5.5	10.09	23.50	5.48	24	0.92	186.25	186.56	187.39	187.70	188.94	190.73	Proposed Storm-P
2	1	115.910	0.00	2.47	0.00	0.00	1.83	0.0	18.0	5.6	10.23	17.33	5.62	24	0.50	186.66	187.24	187.77	188.38	190.73	192.33	Proposed Storm-P
3	2	55.031	0.06	2.47	0.74	0.04	1.83	10.0	17.7	5.6	10.30	17.48	5.65	24	0.51	187.34	187.62	188.44	188.77	192.33	192.45	Proposed Storm-P
4	3	55.099	0.06	2.41	0.74	0.04	1.78	10.0	17.4	5.7	10.11	17.47	5.62	24	0.51	187.72	188.00	188.81	189.14	192.45	192.26	Proposed Storm-P
5	4	55.000	0.06	2.35	0.74	0.04	1.74	10.0	17.1	5.7	9.93	18.10	5.67	24	0.55	188.10	188.40	189.16	189.53	192.26	192.33	Proposed Storm-P
6	5	65.000	0.06	2.29	0.74	0.04	1.69	10.0	16.8	5.8	9.75	17.46	5.56	24	0.51	188.50	188.83	189.57	189.95	192.33	192.78	Proposed Storm-P
7	6	100.001	0.13	2.23	0.74	0.10	1.65	10.0	16.3	5.8	9.62	17.33	5.52	24	0.50	188.93	189.43	190.00	190.54	192.78	192.97	Pipe - (254)
8	7	55.000	0.14	2.10	0.74	0.10	1.55	10.0	16.0	5.9	9.13	17.48	5.46	24	0.51	189.53	189.81	190.56	190.89	192.97	193.13	Pipe - (253)
9	8	55.000	0.14	1.96	0.74	0.10	1.45	10.0	15.7	5.9	8.59	17.48	5.36	24	0.51	189.91	190.19	190.90	191.23	193.13	193.29	Pipe - (252)
10	9	55.000	0.14	1.82	0.74	0.10	1.35	10.0	15.3	6.0	8.05	17.48	5.26	24	0.51	190.29	190.57	191.24	191.58	193.29	193.72	Pipe - (251)
11	10	55.000	0.14	1.68	0.74	0.10	1.24	10.0	15.1	6.0	7.47	8.12	5.21	18	0.51	191.17	191.45	192.30	192.58	194.17	194.17	Pipe - (250)
12	11	55.000	0.14	1.54	0.74	0.10	1.14	10.0	14.9	6.0	6.89	8.12	4.64	18	0.51	191.55	191.83	192.80	192.95	194.17	194.47	Pipe - (249)
13	12	55.000	0.14	1.40	0.74	0.10	1.04	10.0	14.7	6.1	6.30	8.12	4.48	18	0.51	191.93	192.21	193.13	193.25	194.47	194.82	Pipe - (248)
14	13	55.000	0.14	1.26	0.74	0.10	0.93	10.0	14.4	6.1	5.71	8.12	4.47	18	0.51	192.31	192.59	193.43	193.53	194.82	196.06	Pipe - (247)
15	14	55.000	0.14	1.12	0.74	0.10	0.83	10.0	14.2	6.2	5.10	4.99	4.63	15	0.51	192.94	193.22	193.99	194.27	196.06	197.00	Pipe - (246)
16	15	55.000	0.14	0.98	0.74	0.10	0.73	10.0	13.9	6.2	4.49	4.99	4.05	15	0.51	193.32	193.60	194.44	194.61	197.00	197.70	Pipe - (245)
17	16	55.000	0.14	0.84	0.74	0.10	0.62	10.0	13.7	6.2	3.88	4.22	3.60	15	0.36	193.70	193.90	194.75	194.90	197.70	198.79	Pipe - (244)
18	17	55.000	0.14	0.70	0.74	0.10	0.52	10.0	13.3	6.3	3.26	4.99	3.49	15	0.51	194.00	194.28	195.01	195.09	198.79	199.40	Pipe - (243)
19	18	55.000	0.14	0.56	0.74	0.10	0.41	10.0	12.9	6.4	2.64	4.99	3.58	15	0.51	194.38	194.66	195.20	195.31	199.40	199.88	Pipe - (242)
20	19	60.298	0.14	0.42	0.74	0.10	0.31	10.0	12.4	6.5	2.01	4.93	3.78	15	0.50	194.76	195.06	195.32	195.62	200.56	200.56	Pipe - (241)
21	20	39.720	0.14	0.28	0.74	0.10	0.21	10.0	11.8	6.6	1.36	4.96	3.30	15	0.50	195.16	195.36	195.62	195.82	200.56	201.19	Pipe - (240)
22	21	62.843	0.14	0.14	0.74	0.10	0.10	10.0	10.0	6.9	0.72	4.99	2.60	15	0.51	195.46	195.78	195.82	196.11	201.19	202.13	Pipe - (239)

Project File: 33B-Inflow.stm

Number of lines: 22

Run Date: 3/28/2025

NOTES:Intensity = 102.61 / (inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	104.138	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	16.58	15.77	9.53	18	1.92	182.00	184.00	183.43	185.43	187.21	191.00	Pipe - (374)
Project File: 33-outflow.stm																Number of lines: 1				Run Date: 3/28/2025		
NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station	Len	Drng Area		Rnoff coeff	Area x C		Tc	Rain (l)	Total flow (cfs)	Cap full (cfs)	Vel	Pipe		Invert Elev	HGL Elev	Grnd / Rim Elev	Line ID	Line To Line	
		Incr	Total		Incr	Total						Size	Slope						
	(ft)	(ac)		(C)			(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	Slope (%)	(ft)	(ft)	(ft)		(1)	
		Incr	Total		Incr	Total													
1	End	54.316	0.00	0.00	0.00	0.00	0.0	0.0	152.6	198.9	9.99	60	0.50	183.00	183.27	186.73	186.81	Pipe - (344) (1) (1)	
2	1	72.576	0.00	0.00	0.00	0.00	0.0	4.7	152.6	198.7	10.44	60	0.50	183.37	183.73	186.81	187.27	Pipe - (344) (1) (1)	
3	2	76.088	0.00	0.00	0.00	0.00	0.0	4.6	152.6	199.4	10.44	60	0.50	183.83	184.21	187.75	191.99	Pipe - (344) (1) (1)	
4	3	132.856	0.00	0.00	0.00	0.00	0.0	4.3	152.6	200.4	10.44	60	0.50	184.31	184.98	187.75	192.24	Pipe - (344) (1)	
5	4	17.464	0.00	0.00	0.00	0.00	0.0	4.2	152.6	202.6	10.05	60	0.52	184.83	184.92	188.52	194.84	Proposed Storm-P	
6	5	49.069	0.00	0.00	0.00	0.00	0.0	4.1	152.6	201.4	10.44	60	0.51	185.02	185.27	188.46	192.77	Proposed Storm-P	
7	6	75.502	0.00	0.00	0.00	0.00	0.0	3.9	117.7	200.2	8.70	60	0.50	185.37	185.75	188.81	194.25	Proposed Storm-P	
8	7	122.785	0.00	0.00	0.00	0.00	0.0	3.6	94.70	109.7	9.68	48	0.50	186.85	187.46	190.41	194.50	Proposed Storm-P	
9	8	75.277	0.00	0.00	0.00	0.00	0.0	3.5	94.70	110.6	9.71	48	0.50	187.56	187.94	190.89	197.05	Proposed Storm-P	
10	9	295.371	0.00	0.00	0.00	0.00	0.0	2.8	94.70	109.8	9.68	48	0.50	188.04	189.51	190.91	194.71	Proposed Storm-P	
11	10	169.104	0.00	0.00	0.00	0.00	0.0	2.3	74.09	109.7	8.15	48	0.50	189.61	190.45	192.46	197.17	Proposed Storm-P	
12	11	96.760	0.00	0.00	0.00	0.00	0.0	2.1	54.41	76.77	8.37	42	0.50	191.05	191.53	193.23	204.50	Proposed Storm-P	
13	12	79.966	0.00	0.00	0.00	0.00	0.0	1.8	54.41	77.08	8.30	42	0.50	191.63	192.03	193.84	204.50	Proposed Storm-P	
14	13	52.064	0.00	0.00	0.00	0.00	0.0	1.7	54.41	77.02	8.30	42	0.50	192.13	192.39	194.34	204.75	Proposed Storm-P	
15	14	151.355	0.00	0.00	0.00	0.00	0.0	1.2	54.41	76.72	8.30	42	0.50	192.49	193.24	194.70	205.90	Proposed Storm-P	
16	15	431.882	0.00	0.00	0.00	0.00	0.0	0.1	19.32	33.99	9.21	24	1.92	194.84	203.15	195.92	209.00	Proposed Storm-P	
17	16	37.013	0.00	0.00	0.00	0.00	0.0	0.0	19.32	18.70	11.52	18	2.70	204.00	205.00	206.46	209.00	Pipe - (260)	
18	15	92.705	0.00	0.00	0.00	0.00	0.0	0.1	35.09	83.95	11.63	30	3.57	194.34	197.65	199.66	205.35	Proposed Storm-P	
19	18	47.043	0.00	0.00	0.00	0.00	0.0	0.0	17.43	21.31	11.71	18	3.51	198.75	200.40	199.78	205.00	Proposed Storm-P	
20	18	70.225	0.00	0.00	0.00	0.00	0.0	0.0	17.66	22.10	12.00	18	3.77	198.75	201.40	199.76	206.00	Proposed Storm-P	
21	11	25.761	0.00	0.00	0.00	0.00	0.0	0.0	19.68	31.56	6.58	30	0.50	192.27	192.40	193.70	198.00	Proposed Storm-P	
22	10	19.695	0.00	0.00	0.00	0.00	0.0	0.0	20.61	40.19	10.20	24	2.69	191.97	192.50	194.13	195.86	Pipe - (300)	

Project File: 36-40-outflow.stm

Number of lines: 25

Run Date: 3/28/2025

NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box

Storm Sewer Tabulation

Station	Len (ft)	Line To Line	Drng Area		Rnoff coeff (C)	Area x C		Tc	Rain (I)	Total flow full Cap (cfs)	Vel (ft/s)	Pipe		Invert Elev	HGL Elev	Grnd / Rim Elev	Line ID
			Incr	Total		Incr	Total					Size	Slope				
			(ac)	(ac)				(min)	(in/hr)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	
23	7		29.104	0.00	0.00	0.00	0.00	0.0	0.0	23.00	11.42	24	3.61	188.85	189.90	194.25	Proposed Storm-P
24	6		41.585	0.00	0.00	0.00	0.00	0.0	0.0	18.97	27.66	24	1.27	188.37	189.59	192.77	Proposed Storm-P
25	6		41.383	0.00	0.00	0.00	0.00	0.0	0.0	15.91	35.73	24	2.13	188.37	189.25	192.77	Proposed Storm-P
Project File: 36-40-outflow.stm																	
Number of lines: 25													Run Date: 3/28/2025				

NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box

Storm Sewer Tabulation

Station	Len	Drng Area		Rnoff coeff	Area x C		Tc	Rain (l)	Total flow	Cap full	Vel	Pipe		Line ID
		Incr	Total		Incr	Total						Size	Slope	
Line To	Line	(ac)		(C)			(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	

1	End	35.672	0.00	1.56	0.00	0.00	1.15	0.0	26.2	4.7	5.41	11.23	5.46	15	2.58	191.00	191.92	191.94	192.86	192.94	194.80	Proposed Storm-P
2	1	65.430	0.19	1.56	0.74	0.14	1.15	10.0	26.0	4.7	5.43	8.56	5.82	15	1.50	192.02	193.00	192.86	193.94	194.80	197.55	Proposed Storm-P
3	2	60.121	0.19	1.37	0.74	0.14	1.01	10.0	25.9	4.7	4.79	8.56	5.29	15	1.50	193.10	194.00	193.94	194.89	197.55	199.23	Proposed Storm-P
4	3	63.667	0.19	1.18	0.74	0.14	0.87	10.0	25.6	4.7	4.14	8.59	4.96	15	1.51	194.10	195.06	194.89	195.88	199.23	201.35	Proposed Storm-P
5	4	63.472	0.19	0.99	0.74	0.14	0.73	10.0	25.3	4.8	3.50	8.56	4.63	15	1.50	195.16	196.11	195.88	196.86	201.35	202.90	Proposed Storm-P
6	5	63.025	0.19	0.80	0.74	0.14	0.59	10.0	25.0	4.8	2.84	8.59	4.28	15	1.51	196.21	197.16	196.86	197.84	202.90	202.60	Pipe - (482)
7	6	113.359	0.34	0.61	0.74	0.25	0.45	10.0	24.2	4.9	2.20	8.57	3.91	15	1.50	197.26	198.96	197.84	199.55	202.60	207.00	Pipe - (466)
8	7	30.740	0.03	0.27	0.74	0.02	0.20	10.0	23.7	4.9	0.98	8.56	2.61	15	1.50	199.06	199.52	199.55	199.91	207.00	207.00	Pipe - (465)
9	8	27.793	0.03	0.24	0.74	0.02	0.18	10.0	23.3	5.0	0.88	8.60	3.51	15	1.51	199.62	200.04	199.91	200.41	207.00	207.00	Pipe - (464)
10	9	25.760	0.02	0.21	0.74	0.01	0.16	10.0	22.8	5.0	0.78	8.61	3.43	15	1.51	200.14	200.53	200.41	200.88	207.00	207.00	Pipe - (463)
11	10	44.707	0.02	0.19	0.74	0.01	0.14	10.0	21.8	5.1	0.72	8.56	3.50	15	1.50	200.63	201.30	201.63	201.63	207.00	207.50	Pipe - (462)
12	11	30.740	0.02	0.17	0.74	0.01	0.13	10.0	21.0	5.2	0.66	8.56	3.41	15	1.50	201.40	201.86	202.18	202.18	207.50	207.50	Pipe - (461)
13	12	27.793	0.03	0.15	0.74	0.02	0.11	10.0	20.3	5.3	0.59	8.60	3.31	15	1.51	201.96	202.38	202.18	202.68	207.50	207.50	Pipe - (460)
14	13	25.760	0.03	0.12	0.74	0.02	0.09	10.0	19.4	5.4	0.48	8.61	3.12	15	1.51	202.48	202.87	203.14	203.88	207.50	207.50	Pipe - (459)
15	14	44.707	0.02	0.09	0.74	0.01	0.07	10.0	17.4	5.7	0.38	8.56	2.91	15	1.50	202.97	203.64	203.15	203.88	207.50	208.00	Pipe - (458)
16	15	30.740	0.02	0.07	0.74	0.01	0.05	10.0	15.6	5.9	0.31	8.56	2.74	15	1.50	203.74	204.20	203.90	204.41	208.00	208.00	Pipe - (457)
17	16	27.793	0.02	0.05	0.74	0.01	0.04	10.0	13.4	6.3	0.23	8.60	2.53	15	1.51	204.30	204.72	204.44	204.91	208.00	208.00	Pipe - (456)
18	17	25.760	0.03	0.03	0.74	0.02	0.02	10.0	10.0	6.9	0.15	8.61	2.25	15	1.51	204.82	205.21	204.94	205.36	208.00	208.00	Pipe - (455)
Project File: 34-Inflow.stm																						
Number of lines: 18																Run Date: 3/28/2025						

NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box

Storm Sewer Tabulation

Station	Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev	HGL Elev	Grnd / Rim Elev	Line ID
		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope				
Line To	Line	(ac)		(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	Up

Project File: 35-Inflow.stm																					Number of lines: 18					Run Date: 3/28/2025			
1	End	165.663	0.00	1.78	0.00	1.69	0.00	29.2	7.48	16.08	5.61	18	2.00	190.00	193.31	191.06	194.37	204.86	Pipe - (469)										
2	1	123.682	0.00	1.78	0.74	0.00	1.69	10.0	29.0	4.5	7.51	9.70	7.03	15	1.92	193.41	195.79	194.37	204.86	Pipe - (468)									
3	2	56.373	0.02	0.24	0.74	0.01	0.18	10.0	28.0	4.5	0.81	9.95	1.81	15	2.02	195.89	197.03	196.88	205.88	Pipe - (481)									
4	3	30.740	0.02	0.22	0.74	0.01	0.16	10.0	27.4	4.6	0.75	10.01	3.51	15	2.05	197.13	197.76	198.10	207.00	Pipe - (480)									
5	4	27.793	0.02	0.20	0.74	0.01	0.15	10.0	26.9	4.6	0.69	10.02	3.47	15	2.05	197.86	198.43	198.75	207.00	Pipe - (479)									
6	5	25.760	0.02	0.18	0.74	0.01	0.13	10.0	26.3	4.7	0.62	10.03	3.43	15	2.06	198.53	199.06	198.75	207.00	Pipe - (478)									
7	6	44.707	0.02	0.16	0.74	0.01	0.12	10.0	25.1	4.8	0.57	9.98	3.41	15	2.04	199.16	200.07	199.37	207.00	Pipe - (477)									
8	7	30.740	0.02	0.14	0.74	0.01	0.10	10.0	24.2	4.9	0.51	10.01	3.35	15	2.05	200.17	200.80	201.08	207.50	Pipe - (476)									
9	8	27.793	0.02	0.12	0.74	0.01	0.09	10.0	23.3	5.0	0.44	10.02	3.26	15	2.05	200.90	201.47	201.73	207.50	Pipe - (475)									
10	9	25.760	0.02	0.10	0.74	0.01	0.07	10.0	22.2	5.1	0.38	10.03	3.07	15	2.06	201.56	202.09	202.33	207.50	Pipe - (474)									
11	10	44.707	0.02	0.08	0.74	0.01	0.06	10.0	20.0	5.3	0.32	9.98	2.95	15	2.04	202.19	203.10	203.32	207.50	Pipe - (473)									
12	11	30.740	0.02	0.06	0.74	0.01	0.04	10.0	17.9	5.6	0.25	10.01	2.76	15	2.05	203.20	203.83	204.02	208.00	Pipe - (472)									
13	12	27.793	0.02	0.04	0.74	0.01	0.03	10.0	15.1	6.0	0.18	10.02	2.50	15	2.05	203.93	204.50	204.66	208.00	Pipe - (471)									
14	13	25.760	0.02	0.02	0.74	0.01	0.01	10.0	10.0	6.9	0.10	10.03	1.37	15	2.06	204.50	205.03	205.15	208.00	Pipe - (470)									
15	2	71.253	0.47	1.54	0.98	0.46	1.51	10.0	11.8	6.6	9.93	9.66	8.61	15	1.91	195.89	197.25	198.43	205.88	Pipe - (467)									
16	15	84.500	0.21	1.07	0.98	0.21	1.05	10.0	11.6	6.6	9.72	9.66	6.22	15	1.93	198.98	198.43	200.04	205.88	Pipe - (488)									
17	16	155.500	0.44	0.86	0.98	0.43	0.84	10.0	11.0	6.7	5.68	9.68	5.61	15	1.92	199.08	202.06	203.02	206.10	Pipe - (454)									
18	17	139.000	0.42	0.42	0.98	0.41	0.41	10.0	10.0	6.9	2.86	9.70	3.68	15	1.92	202.16	204.83	205.51	206.87	Pipe - (487)									
NOTES: Intensity = 102.61 / (inlet time + 16.50) ^ 0.82; Return period = Yrs. 25 ; c = cir e = ellip b = box																													

NOTES:Intensity = 102.61 / (inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box

Storm Sewer Tabulation

Station	Len	Drng Area		Rnoff coeff	Area x C		Tc	Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev	HGL Elev	Grnd / Rim Elev	Line ID
		Incr	Total		Incr	Total						Size	Slope				
Line To	Line	(ac)		(C)			(min)	(min)	(in/hr)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	Up

Project File: 36A-Inflow.stm																				Number of lines: 14				Run Date: 3/28/2025			
1	End	88.120	0.24	0.60	0.98	0.24	0.50	10.0	23.4	5.0	2.49	14.90	4.01	15	4.54	191.00	195.00	191.63	Pipe - (287)								
2	1	94.536	0.00	0.36	0.00	0.27	0.27	10.0	22.3	5.1	1.35	17.46	2.74	15	6.23	195.00	200.89	195.63	Pipe - (286)								
3	2	25.000	0.03	0.36	0.74	0.02	0.27	10.0	22.0	5.1	1.36	5.04	3.32	15	0.52	200.89	201.02	201.35	Pipe - (285)								
4	3	30.740	0.03	0.33	0.74	0.02	0.24	10.0	21.6	5.2	1.26	4.89	3.15	15	0.49	201.02	201.17	201.48	Pipe - (284)								
5	4	27.793	0.03	0.30	0.74	0.02	0.22	10.0	21.2	5.2	1.15	4.97	3.06	15	0.50	201.17	201.31	201.61	Pipe - (283)								
6	5	25.760	0.03	0.27	0.74	0.02	0.20	10.0	20.8	5.2	1.05	4.97	2.97	15	0.50	201.31	201.44	201.73	Pipe - (282)								
7	6	44.707	0.03	0.24	0.74	0.02	0.18	10.0	20.1	5.3	0.95	5.02	2.88	15	0.51	201.44	201.67	201.84	Pipe - (281)								
8	7	30.740	0.03	0.21	0.74	0.02	0.16	10.0	19.5	5.4	0.84	5.05	2.76	15	0.52	201.67	201.83	202.05	Pipe - (280)								
9	8	27.793	0.03	0.18	0.74	0.02	0.13	10.0	18.8	5.5	0.73	4.97	2.64	15	0.50	201.83	201.97	202.19	Pipe - (279)								
10	9	25.760	0.03	0.15	0.74	0.02	0.11	10.0	18.1	5.6	0.62	4.97	2.50	15	0.50	201.97	202.10	202.30	Pipe - (278)								
11	10	44.709	0.03	0.12	0.74	0.02	0.09	10.0	16.6	5.8	0.51	5.02	2.36	15	0.51	202.10	202.33	202.41	Pipe - (277)								
12	11	30.740	0.03	0.09	0.74	0.02	0.07	10.0	15.3	6.0	0.40	4.89	2.15	15	0.49	202.33	202.48	202.61	Pipe - (276)								
13	12	27.793	0.03	0.06	0.74	0.02	0.04	10.0	13.4	6.3	0.28	4.97	1.89	15	0.50	202.48	202.62	202.72	Pipe - (275)								
14	13	25.760	0.03	0.03	0.74	0.02	0.02	10.0	10.0	6.9	0.15	3.65	1.48	15	0.27	202.68	202.75	202.86	Pipe - (274)								
NOTES: Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period = Yrs. 25 ; c = cir e = ellip b = box																											

NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	20.183	0.00	0.88	0.00	0.00	0.86	0.0	12.8	6.4	5.52	10.45	5.51	15	2.23	191.00	191.45	191.95	192.40	192.64	194.87	Proposed Storm-P
2	1	253.083	0.18	0.45	0.98	0.18	0.44	10.0	10.3	6.9	3.03	14.44	3.48	18	1.61	191.55	195.63	192.40	196.29	194.87	198.87	Pipe - (301)
3	2	28.070	0.27	0.27	0.98	0.26	0.26	10.0	10.0	6.9	1.84	4.94	3.53	15	0.50	195.73	195.87	196.29	196.41	198.87	199.00	Pipe - (304)
4	1	119.323	0.20	0.43	0.98	0.20	0.42	10.0	10.5	6.8	2.88	8.07	3.38	18	0.50	191.55	192.15	192.40	192.79	194.87	196.00	Pipe - (301) (1)
5	4	38.039	0.23	0.23	0.98	0.23	0.23	10.0	10.0	6.9	1.57	4.94	3.25	15	0.50	192.25	192.44	192.79	192.94	196.00	195.54	Proposed Storm-P
Project File: 36B-inflow.stm																Number of lines: 5				Run Date: 3/28/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc	Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev	Line ID
Line To	Line		Incr	Total		Incr	Total						Inlet	Syst	Size	Slope	Dn	Up		
1	End	65.191	0.18	1.96	0.98	0.18	1.92	10.0	17.6	5.6	10.84	6.83	18	2.01	193.75	195.06	195.01	195.94	203.50	Pipe - (259)
2	1	38.887	0.65	1.62	0.98	0.64	1.59	10.0	17.5	5.7	8.99	12.90	18	1.29	200.25	200.75	201.17	203.50	204.00	Pipe - (258)
3	2	289.279	0.44	0.97	0.98	0.43	0.95	10.0	16.1	5.9	5.57	8.87	18	0.61	200.85	202.61	201.91	204.00	206.20	Pipe - (265)
4	3	246.319	0.16	0.40	0.98	0.16	0.39	10.0	14.2	6.1	2.41	5.90	15	0.71	202.96	204.71	203.52	206.20	208.00	Pipe - (262)
5	4	107.715	0.11	0.11	0.98	0.11	0.11	10.0	10.0	6.9	0.75	9.56	18	0.71	204.81	205.57	205.33	208.00	208.57	Pipe - (261)
6	4	28.448	0.13	0.13	0.98	0.13	0.13	10.0	10.0	6.9	0.88	5.08	15	0.53	204.81	204.96	205.33	208.00	208.00	Pipe - (272)
7	3	28.394	0.13	0.13	0.98	0.13	0.13	10.0	10.0	6.9	0.88	5.08	15	0.53	202.96	203.11	203.52	206.20	206.20	Pipe - (494)
8	1	44.278	0.16	0.16	0.98	0.16	0.16	10.0	10.0	6.9	1.09	4.93	15	0.50	199.98	200.20	200.38	203.50	203.20	Pipe - (267)
Project File: 37A-Inflow.stm																				
Number of lines: 8																				
Run Date: 3/28/2025																				

NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box

NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box

Storm Sewer Tabulation

Station	Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev	HGL Elev	Grnd / Rim Elev	Line ID
		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope				
Line To	Line						(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	Up

Project File: 37B-Inflow.stm																				Run Date: 3/28/2025		
1	End	158.940	0.00	1.93	0.00	0.00	1.81	0.0	22.2	5.1	9.18	18.05	5.76	18	2.52	193.75	197.75	195.16	198.92	-4.17	-1.68	Proposed Storm-P
2	1	61.819	0.00	1.93	0.00	0.00	1.81	0.0	22.1	5.1	9.21	17.12	6.52	18	2.26	197.85	199.25	198.92	200.42	-1.68	-1.38	Proposed Storm-P
3	2	22.306	0.03	1.93	0.74	0.02	1.81	10.0	22.0	5.1	9.22	16.16	6.52	18	2.02	199.35	199.80	200.42	200.97	-1.38	205.00	Proposed Storm-P
4	3	30.740	0.03	0.33	0.74	0.02	0.24	10.0	21.6	5.2	1.26	11.07	2.35	15	2.50	200.15	200.92	200.97	201.36	205.00	205.00	Pipe - (298)
5	4	27.793	0.03	0.30	0.74	0.02	0.22	10.0	21.2	5.2	1.15	5.78	3.42	15	0.68	201.02	201.21	201.40	201.63	205.00	205.00	Pipe - (297)
6	5	25.760	0.03	0.27	0.74	0.02	0.20	10.0	20.8	5.2	1.05	4.97	3.14	15	0.50	201.31	201.44	201.70	201.84	205.00	205.00	Pipe - (296)
7	6	44.707	0.03	0.24	0.74	0.02	0.18	10.0	20.1	5.3	0.95	5.02	2.88	15	0.51	201.44	201.67	201.84	202.05	205.00	205.50	Pipe - (295)
8	7	30.740	0.03	0.21	0.74	0.02	0.16	10.0	19.5	5.4	0.84	5.05	2.76	15	0.52	201.67	201.83	202.05	202.19	205.50	205.50	Pipe - (294)
9	8	27.793	0.03	0.18	0.74	0.02	0.13	10.0	18.8	5.5	0.73	4.97	2.64	15	0.50	201.83	201.97	202.19	202.30	205.50	205.50	Pipe - (293)
10	9	25.760	0.03	0.15	0.74	0.02	0.11	10.0	18.1	5.6	0.62	4.97	2.50	15	0.50	201.97	202.10	202.30	202.41	205.50	205.50	Pipe - (292)
11	10	44.709	0.03	0.12	0.74	0.02	0.09	10.0	16.6	5.8	0.51	5.02	2.36	15	0.51	202.10	202.33	202.41	202.61	206.00	206.00	Pipe - (291)
12	11	30.740	0.03	0.09	0.74	0.02	0.07	10.0	15.3	6.0	0.40	4.89	2.15	15	0.49	202.33	202.48	202.61	202.72	206.00	206.00	Pipe - (290)
13	12	27.793	0.03	0.06	0.74	0.02	0.04	10.0	13.4	6.3	0.28	4.97	1.89	15	0.50	202.48	202.62	202.72	202.82	206.00	206.00	Pipe - (289)
14	13	25.760	0.03	0.03	0.74	0.02	0.02	10.0	10.0	6.9	0.15	4.97	1.49	15	0.50	202.62	202.75	202.82	202.90	206.00	206.00	Pipe - (288)
15	3	74.368	0.71	1.57	0.98	0.70	1.54	10.0	12.2	6.5	10.01	13.84	6.95	18	1.48	199.90	201.00	200.97	202.22	205.00	204.27	Proposed Storm-P
16	15	155.500	0.43	0.86	0.98	0.42	0.84	10.0	11.4	6.7	5.61	8.11	4.48	18	0.51	201.10	201.89	202.22	202.80	205.03	205.03	Pipe - (273)
17	16	139.000	0.43	0.43	0.98	0.42	0.42	10.0	10.0	6.9	2.93	8.36	3.49	18	0.54	201.99	202.74	202.80	203.39	205.03	205.78	Pipe - (489)
NOTES: Intensity = 102.61 / (inlet time + 16.50) ^ 0.82; Return period = Yrs. 25 ; c = cir e = ellip b = box																						

NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box

Storm Sewer Tabulation

Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (I) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr (min)	Total (min)	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	34.278	0.13	0.13	0.98	0.13	0.13	10.0	10.0	6.9	0.88	11.95	2.93	15	2.92	201.00	202.00	201.37	202.37	198.24	206.55	Pipe - (257)
Project File: 39-inflow.stm																Number of lines: 1				Run Date: 3/28/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	23.439	0.00	0.75	0.00	0.00	0.74	0.0	10.7	6.8	4.99	6.93	5.25	15	0.98	202.00	202.23	202.91	203.14	-2.62	205.92	Proposed Storm-P Pipe - (255)
2	1	124.907	0.75	0.75	0.98	0.74	0.74	10.0	10.0	6.9	5.10	11.69	5.05	18	1.06	202.33	203.65	203.14	204.52	205.92	206.65	
Project File: 40-inflow.stm																Number of lines: 2				Run Date: 3/28/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (I) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr (min)	Total (min)	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	50.239	0.00	0.00	0.00	0.00	0.00	0.0	0.1	0.0	28.55	31.49	9.45	24	1.65	179.50	180.33	181.34	182.17	182.21	185.50	Pipe - (223)
2	1	35.391	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	21.40	35.67	8.35	24	2.12	180.75	181.50	182.17	183.15	185.50	186.00	Pipe - (222)
3	1	26.765	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	7.15	9.07	4.90	18	0.64	180.83	181.00	182.17	182.03	185.50	185.00	Pipe - (224)
Project File: 41&42-outflow.stm																Number of lines: 3				Run Date: 3/28/2025		
NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	90.996	0.00	1.80	0.00	0.00	1.76	0.0	10.1	6.9	12.22	13.99	10.03	15	4.00	182.00	185.64	183.22	186.86	-43.41	192.50	Pipe - (221)
2	1	43.908	1.80	1.80	0.98	1.76	1.76	10.0	10.0	6.9	12.25	14.01	10.31	15	4.01	185.74	187.50	186.86	188.72	192.50	192.44	Pipe - (220)

Storm Sewer Tabulation

Station	Len (ft)	Drg Area Total (ac)	Rnoff coeff (C)	Area x C		Tc	Rain (I) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev (ft)	HGL Elev (ft)	Grnd / Rim Elev (ft)	Line ID	Line To Line
				Incr	Total						Size (in)	Slope (%)					
1	End	32.574	0.00	0.00	0.00	0.00	0.0	35.54	59.18	11.45	24	5.83	162.50	164.40	164.42	166.32	Pipe - (236)
2	1	29.860	0.00	0.00	0.00	0.00	0.2	24.73	44.84	8.35	24	3.35	164.50	165.50	166.32	170.10	Pipe - (235)
3	2	200.287	0.00	0.00	0.00	0.00	0.0	24.73	26.54	15.49	18	5.44	166.10	177.00	167.25	170.10	Pipe - (234)
4	1	23.298	0.00	0.00	0.00	0.00	0.0	10.81	23.57	6.68	18	4.29	165.00	166.00	166.32	170.10	Pipe - (237)
Project File: 43-44-outflow.stm																	
Number of lines: 4										Run Date: 3/28/2025							

NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID				
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up					
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)					
1	End	194.159	0.00	2.32	0.00	0.00	2.27	0.0	12.5	6.5	14.67	17.58	6.27	24	0.52	176.50	177.50	177.88	178.91	-3.53	186.59	Pipe - (227)				
2	1	65.352	0.96	2.32	0.98	0.94	2.27	10.0	12.2	6.5	14.77	24.44	5.04	24	0.99	177.35	178.00	179.50	179.64	186.59	185.70	Pipe - (226)				
3	2	397.236	1.36	1.36	0.98	1.33	1.33	10.0	10.0	6.9	9.26	18.03	4.19	24	0.54	178.10	180.25	179.95	181.34	185.70	186.20	Pipe - (225)				

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	15.082	0.68	0.68	0.98	0.67	0.67	10.0	10.0	6.9	4.63	25.47	5.07	15	13.26	166.00	168.00	166.87	168.87	-2.72	174.60	Pipe - (233)
Project File: 44-inflow.stm																Number of lines: 1				Run Date: 3/28/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	291.007	0.34	1.36	0.98	0.33	1.33	10.0	14.0	6.2	8.24	20.01	5.87	18	3.09	166.00	175.00	167.11	176.11	168.21	185.60	Pipe - (231)
2	1	179.655	0.00	0.28	0.00	0.00	0.27	0.0	12.1	6.5	1.79	7.00	2.64	15	1.00	175.10	176.90	176.11	177.43	185.60	184.90	Pipe - (230)
3	2	152.654	0.00	0.28	0.00	0.00	0.27	0.0	10.4	6.9	1.88	11.32	4.33	15	2.62	177.00	181.00	177.43	181.55	184.90	185.03	Pipe - (229)
4	3	26.776	0.28	0.28	0.98	0.27	0.27	10.0	10.0	6.9	1.91	13.90	3.92	18	1.49	181.10	181.50	181.55	182.02	185.03	186.20	Pipe - (228)
5	1	53.848	0.74	0.74	0.98	0.73	0.73	10.0	10.0	6.9	5.04	7.07	5.00	15	1.02	175.10	175.65	176.11	176.56	185.60	185.58	Pipe - (232)
Project File: 45-inflow.stm																Number of lines: 5				Run Date: 3/28/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	48.009	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	22.08	28.44	12.53	18	6.25	163.00	166.00	164.48	167.48	166.21	170.00	Pipe - (238)
Project File: 45-outflow.stm																Number of lines: 1				Run Date: 3/28/2025		
NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (I) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr (min)	Total (min)	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	75.702	0.67	2.13	0.98	0.66	1.91	10.0	19.9	5.4	10.23	28.16	5.52	24	1.32	179.25	180.25	180.39	181.39	185.30	187.14	Pipe - (215)
2	1	260.459	0.36	1.46	0.98	0.35	1.26	10.0	18.2	5.6	6.99	17.31	4.52	24	0.50	180.35	181.65	181.39	182.59	187.14	193.00	Pipe - (214)
3	2	28.000	0.37	0.37	0.98	0.36	0.36	10.0	10.0	6.9	2.52	7.24	4.69	15	1.07	185.70	186.00	186.21	186.64	193.00	193.00	Pipe - (216)
4	2	114.876	0.05	0.73	0.74	0.04	0.54	10.0	17.5	5.7	3.06	4.93	4.23	15	0.50	182.50	183.07	183.21	183.78	193.00	193.04	Pipe - (213)
5	4	85.000	0.11	0.68	0.74	0.08	0.50	10.0	17.0	5.7	2.89	4.98	3.33	15	0.51	183.17	183.60	184.19	184.32	193.04	194.96	Pipe - (212)
6	5	85.000	0.11	0.57	0.74	0.08	0.42	10.0	16.3	5.8	2.46	4.98	3.62	15	0.51	183.70	184.13	184.44	184.76	194.96	196.60	Pipe - (211)
7	6	85.000	0.11	0.46	0.74	0.08	0.34	10.0	15.6	5.9	2.02	4.98	3.79	15	0.51	184.23	184.66	184.78	185.23	196.60	195.32	Pipe - (210)
8	7	85.000	0.12	0.35	0.74	0.09	0.26	10.0	14.6	6.1	1.58	4.98	1.35	15	0.51	183.76	184.19	185.23	185.26	195.32	188.00	Pipe - (209)
9	8	85.000	0.12	0.23	0.74	0.09	0.17	10.0	13.1	6.3	1.08	4.98	2.07	15	0.51	184.29	184.72	185.28	185.13	188.00	188.00	Pipe - (208)
10	9	85.000	0.11	0.11	0.74	0.08	0.08	10.0	10.0	6.9	0.57	4.98	2.49	15	0.51	184.82	185.25	185.13	185.54	188.00	188.00	Pipe - (207)
Project File: 46-inflow.stm																Number of lines: 10				Run Date: 3/28/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Project File: 46-Outflow.stm																								
Station		Line To	Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID	
		(ft)		Incr	Total	(C)	Incr	Total		Inlet	Syst	(in/hr)	(cfs)	(cfs)	(ft/s)	Size	Slope	Dn	Up	Dn	Up	Dn		Up
1	End		60.629	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	28.02	27.91	15.87	18	6.02	176.00	179.65	177.49	181.14	-2.81	184.00	Pipe - (217)
NOTES: Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period = Yrs. 100 ; c = cir e = ellip b = box																								

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	29.881	0.65	0.65	0.98	0.64	0.64	10.0	10.0	6.9	4.42	4.96	4.73	15	0.50	189.00	189.15	189.85	190.09	191.04	191.90	Pipe - (219)
Project File: 47-inflow.stm																Number of lines: 1				Run Date: 3/28/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	61.796	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	22.08	32.36	12.53	18	8.09	184.00	189.00	185.48	190.48	189.96	189.00	Pipe - (218)
Project File: 47-outflow.stm																Number of lines: 1				Run Date: 3/28/2025		
NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	87.558	0.00	0.00	0.00	0.00	0.00	0.0	1.0	0.0	60.54	77.26	8.47	42	0.50	180.50	180.94	182.94	183.38	185.21	187.81	Pipe - (202) (1)
2	1	34.453	0.00	0.00	0.00	0.00	0.00	0.0	0.9	0.0	40.09	50.75	7.27	36	0.49	181.04	181.21	183.38	183.27	187.81	191.20	Proposed Storm-P
3	2	160.208	0.00	0.00	0.00	0.00	0.00	0.0	0.5	0.0	20.67	45.56	10.70	24	3.46	182.31	187.85	183.27	189.48	191.20	192.37	Proposed Storm-P
4	3	184.339	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	20.67	28.82	7.78	24	1.38	187.95	190.50	189.48	192.13	192.37	195.00	Pipe - (203)
5	1	21.285	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	20.45	55.96	11.95	24	5.21	182.54	183.65	183.38	185.27	187.81	188.00	Pipe - (202)
6	2	25.083	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	19.42	21.33	7.49	24	0.76	182.06	182.25	183.56	183.83	191.20	187.00	Proposed Storm-P
Project File: 48-50-outflow.stm																Number of lines: 6				Run Date: 3/28/2025		
NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	28.407	0.12	0.90	0.98	0.12	0.88	10.0	10.2	6.9	6.10	7.99	4.02	18	0.49	190.75	190.89	192.00	192.05	188.94	196.67	Pipe - (206)
2	1	28.000	0.78	0.78	0.98	0.76	0.76	10.0	10.0	6.9	5.31	8.04	3.41	18	0.50	190.89	191.03	192.18	192.22	196.67	196.58	Pipe - (205)
Project File: 48-inflow.stm																Number of lines: 2				Run Date: 3/28/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Line To	Len	Drng Area		Rnoff coeff	Area x C		Tc	Syst	Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	Line To	(ft)	Incr	Total	(ac)	(C)	Incr	Total	Inlet	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	Size	Slope	Dn	Up	Dn	Up	Dn	Up	
1	End	2	11.431	0.00	1.70	0.98	0.00	0.00	0.00	10.0	6.9	11.50	25.10	5.75	24	1.05	183.00	183.12	184.22	185.75	193.97	Pipe - (204)	
2	1	12.443	0.85	1.70	0.98	0.83	1.67	10.0	10.1	6.9	11.52	32.58	6.07	24	1.77	183.22	183.44	184.34	184.66	193.97	194.00	Pipe - (493)	
3	2	27.002	0.85	0.85	0.00	0.98	0.83	0.83	10.0	10.0	6.9	11.58	4.57	18	1.04	183.54	183.82	184.66	184.75	194.00	194.00	Pipe - (485)	
Project File: 49-Inflow.stm																							
Number of lines: 3																							
Run Date: 3/28/2025																							
NOTES: Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period = Yrs. 25 ; c = cir e = ellip b = box																							

Storm Sewer Tabulation

Station		Len (ft)	Incr (ac)	Total (ac)	Rnoff coeff (C)	Area x C		Tc	Rain (l)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev (ft)	HGL Elev (ft)	Grnd / Rim Elev (ft)	Line ID	
Line To	Line					Incr	Total						Size (in)	Slope (%)					
1	End	7.291	0.00	1.93	0.00	0.00	1.67	10.0	14.1	6.2	10.31	18.15	5.52	24	0.55	184.04	185.15	186.05	Pipe - (200)
2	1	155.037	0.18	1.93	0.98	0.18	1.67	10.0	13.3	6.3	10.52	65.77	5.60	24	7.20	184.04	185.19	195.37	Pipe - (199)
3	2	33.924	0.83	1.75	0.98	0.81	1.49	10.0	13.2	6.3	9.46	17.35	4.26	24	0.50	194.56	196.37	198.84	Pipe - (198)
4	3	108.464	0.30	0.92	0.74	0.22	0.68	10.0	12.7	6.4	4.37	4.94	4.54	15	0.50	195.58	196.12	198.84	Pipe - (197)
5	4	84.948	0.30	0.62	0.74	0.22	0.46	10.0	12.1	6.5	2.99	4.98	2.65	15	0.51	196.22	197.52	201.35	Pipe - (196)
6	5	170.004	0.32	0.32	0.74	0.24	0.24	10.0	10.0	6.9	1.64	4.95	2.57	15	0.50	196.75	197.71	201.35	Pipe - (195)
Project File: 50-inflow.stm																			
													Number of lines: 6			Run Date: 3/28/2025			
NOTES: Intensity = 102.61 / (inlet time + 16.50) ^ 0.82; Return period = Yrs. 25 ; c = cir e = ellip b = box																			

Storm Sewer Tabulation

Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc (min)	Inlet (min)	Syst (min)	Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe Size (in)	Slope (%)	Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID	
Line To	Line		Incr (ac)	Total (ac)		Incr	Total										Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)		
1	End	188.197	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.7	0.0	48.23	52.72	10.29	30	1.41	185.75	188.40	188.02	188.94	0.00	197.57	196.15	Proposed Storm-F
2	1	72.878	0.00	0.00	0.00	0.00	0.00	0.0	0.6	0.1	0.0	48.23	49.10	10.46	30	1.22	188.50	189.39	190.67	191.66	0.00	197.57	196.00	Proposed Storm-F
3	2	124.245	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0	13.72	17.31	5.94	24	0.50	190.24	190.86	191.66	192.20	197.57	196.15	196.00	Pipe - (189)
4	3	35.855	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0	13.72	17.84	5.72	24	0.53	190.96	191.15	192.50	192.48	196.15	196.00	196.00	Pipe - (190)
5	2	25.402	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0	21.52	21.53	13.05	18	3.58	190.74	191.65	191.97	193.13	197.57	0.00	199.00	Pipe - (188)
6	2	111.378	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0	12.99	13.11	11.41	15	3.51	190.74	194.65	191.75	195.88	197.57	199.00	199.00	Proposed Storm-F
Project File: 51-Inflow.stm																								
Number of lines: 6																								
Run Date: 3/28/2025																								
NOTES: Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period = Yrs. 100 ; c = cir e = ellip b = box																								

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	147.500	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	34.15	51.74	8.17	30	1.36	181.00	183.00	182.99	184.99	186.21	191.00	Pipe - (201)
Project File: 51-outflow.stm																Number of lines: 1				Run Date: 3/28/2025		
NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	25.827	0.28	0.28	0.98	0.27	0.27	10.0	10.0	6.9	1.91	5.51	3.67	15	0.62	195.00	195.16	195.55	195.71	196.94	196.60	Pipe - (187)
Project File: 52-inflow.stm																Number of lines: 1				Run Date: 3/28/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev	HGL Elev	Grnd / Rim Elev		Line ID
Line To	Line	(ft)	Incr	Total	(C)	Incr	Total	Inlet	Syst	(in/hr)	(cfs)	(cfs)	(ft/s)	Size	Slope	(ft)	(ft)	(ft)	(ft)	
1	End	245.740	0.00	0.00	0.00	0.00	0.00	0.00	0.0	1.8	0.0	48.41	65.18	8.46	36	0.81	184.50	186.50	-7.95	Proposed Storm-P
2	1	95.136	0.00	0.00	0.00	0.00	0.00	0.00	0.0	1.6	0.0	48.41	70.27	8.66	36	0.95	186.60	187.50	209.80	Proposed Storm-P
3	2	267.887	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.9	0.0	48.41	60.85	8.66	36	0.71	187.60	189.50	209.97	Proposed Storm-P
4	3	324.673	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.1	0.0	48.41	73.94	8.66	36	1.05	189.60	193.00	204.48	Proposed Storm-P
5	4	24.714	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.1	0.0	48.41	58.32	18.10	24	5.66	194.10	195.50	204.60	Proposed Storm-P
6	5	40.199	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	24.63	27.33	9.15	24	1.24	197.00	197.50	202.00	Proposed Storm-P
7	5	53.556	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	23.78	44.92	11.37	24	3.36	197.00	198.80	204.00	Proposed Storm-P

Project File: 53-54-outflow.stm

Number of lines: 7

Run Date: 3/28/2025

NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box

Storm Sewer Tabulation

Station	Len	Drng Area		Rnoff coeff	Area x C		Tc	Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev	HGL Elev	Grnd / Rim Elev	Line ID
		Incr	Total		Incr	Total						Size	Slope				
Line To	Line	(ac)		(C)			(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	Up

1	End	46.884	0.06	0.56	0.74	0.04	0.41	10.0	31.6	4.3	1.76	3.23	3.09	15	0.21	200.00	200.10	200.53	201.94	202.90	Pipe - (156)
2	1	55.000	0.06	0.50	0.74	0.04	0.37	10.0	31.2	4.3	1.59	4.99	2.68	15	0.51	200.10	200.38	200.91	200.88	202.90	Pipe - (155)
3	2	55.000	0.06	0.44	0.74	0.04	0.33	10.0	30.6	4.3	1.41	4.99	3.22	15	0.51	200.38	200.66	201.13	203.10	204.00	Pipe - (154)
4	3	55.000	0.06	0.38	0.74	0.04	0.28	10.0	30.0	4.4	1.23	4.99	3.07	15	0.51	200.66	200.94	201.13	203.20	204.00	Pipe - (153)
5	4	55.000	0.06	0.32	0.74	0.04	0.24	10.0	29.3	4.4	1.05	4.99	2.91	15	0.51	200.94	201.22	201.38	203.20	203.50	Pipe - (152)
6	5	55.000	0.06	0.26	0.74	0.04	0.19	10.0	28.4	4.5	0.87	4.99	2.72	15	0.51	201.22	201.50	201.62	203.50	203.50	Pipe - (151)
7	6	55.000	0.06	0.20	0.74	0.04	0.15	10.0	27.3	4.6	0.68	4.99	2.50	15	0.51	201.50	201.78	201.86	203.50	203.50	Pipe - (150)
8	7	55.000	0.06	0.14	0.74	0.04	0.10	10.0	25.7	4.7	0.49	4.99	2.22	15	0.51	201.78	202.06	202.10	203.70	203.70	Pipe - (149)
9	8	55.000	0.06	0.08	0.74	0.04	0.06	10.0	22.9	5.0	0.30	4.99	1.84	15	0.51	202.06	202.34	202.33	203.70	203.70	Pipe - (148)
10	9	65.006	0.02	0.02	0.74	0.01	0.01	10.0	10.0	6.9	0.10	4.59	1.18	15	0.43	202.34	202.62	202.55	203.70	203.70	Pipe - (147)

Project File: 53A-Inflow.stm

Number of lines: 10

Run Date: 3/28/2025

NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box

Storm Sewer Tabulation

Station		Len	Drg Area		Rnoff coeff	Area x C		Tc	Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev	HGL Elev	Grnd / Rim Elev		Line ID	Line To Line
		(ft)	Incr	Total	(C)	Incr	Total	Inlet (min)	Syst (min)	(in/hr)	(cfs)	(ft/s)	Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)		
1	End	21.644	0.00	3.27	0.00	0.00	3.09	10.0	14.8	6.1	18.72	25.80	7.14	24	1.11	199.25	199.49	201.05	201.94	Pipe - (134) (1)
2	1	44.973	1.08	3.27	0.98	1.06	3.09	10.0	14.7	6.1	18.77	24.78	7.41	24	1.02	199.59	200.05	201.05	204.09	Pipe - (134)
3	2	27.885	0.83	2.19	0.98	0.81	2.03	10.0	14.6	6.1	12.36	14.45	8.33	18	1.61	200.65	201.10	201.72	204.23	Pipe - (133)
4	3	121.000	0.12	0.60	0.98	0.12	0.47	10.0	13.8	6.2	2.94	6.85	3.55	15	0.96	201.45	202.61	203.30	204.23	Pipe - (141)
5	4	55.006	0.12	0.48	0.74	0.09	0.36	10.0	13.4	6.3	2.24	6.19	3.90	15	0.78	203.14	203.30	203.74	205.29	Pipe - (140)
6	5	54.994	0.12	0.36	0.74	0.09	0.27	10.0	12.7	6.4	1.71	6.19	3.25	15	0.78	203.14	203.57	204.09	206.15	Pipe - (139)
7	6	54.997	0.12	0.24	0.74	0.09	0.18	10.0	11.8	6.6	1.17	6.26	2.80	15	0.80	204.01	204.44	204.44	206.59	Pipe - (138)
8	7	55.009	0.12	0.12	0.74	0.09	0.09	10.0	10.0	6.9	0.62	6.19	2.16	15	0.78	204.01	204.44	204.75	207.02	Pipe - (137)
9	3	278.610	0.76	0.76	0.98	0.74	0.74	10.0	10.0	6.9	5.17	6.27	5.18	15	0.80	201.45	203.69	204.61	206.48	Pipe - (146)
Project File: 53B-Inflow.stm																				
Number of lines: 9																				
Run Date: 3/28/2025																				

NOTES: Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period = Yrs. 25 ; c = cir e = ellip b = box

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	56.927	0.05	0.55	0.74	0.04	0.41	10.0	31.6	4.3	1.73	4.91	3.56	15	0.49	198.00	198.28	198.52	198.80	199.94	201.07	Pipe - (166)
2	1	54.919	0.06	0.50	0.74	0.04	0.37	10.0	31.2	4.3	1.59	4.90	3.52	15	0.49	198.38	198.65	198.87	199.15	201.07	202.00	Pipe - (165)
3	2	55.000	0.06	0.44	0.74	0.04	0.33	10.0	30.6	4.3	1.41	11.78	3.76	15	2.84	198.75	200.31	199.15	200.78	202.00	203.10	Pipe - (164)
4	3	55.000	0.06	0.38	0.74	0.04	0.28	10.0	30.0	4.4	1.23	8.17	3.64	15	1.36	200.41	201.16	200.78	201.60	203.10	204.40	Pipe - (163)
5	4	55.000	0.06	0.32	0.74	0.04	0.24	10.0	29.3	4.4	1.05	10.76	2.91	15	2.36	201.16	202.46	201.60	202.86	204.40	205.70	Pipe - (162)
6	5	55.000	0.06	0.26	0.74	0.04	0.19	10.0	28.4	4.5	0.87	10.29	2.72	15	2.16	202.46	203.65	202.86	204.01	205.70	206.90	Pipe - (161)
7	6	55.000	0.06	0.20	0.74	0.04	0.15	10.0	27.3	4.6	0.68	8.44	2.50	15	1.45	203.65	204.45	204.01	204.77	206.90	207.70	Pipe - (160)
8	7	55.000	0.06	0.14	0.74	0.04	0.10	10.0	25.7	4.7	0.49	8.44	2.22	15	1.45	204.45	205.25	204.77	205.52	207.70	208.50	Pipe - (159)
9	8	55.000	0.06	0.08	0.74	0.04	0.06	10.0	22.9	5.0	0.30	6.67	1.84	15	0.91	205.25	205.75	205.52	205.96	208.50	209.00	Pipe - (158)
10	9	65.000	0.02	0.02	0.74	0.01	0.01	10.0	10.0	6.9	0.10	8.59	1.20	15	1.51	205.75	206.73	205.96	206.85	209.00	209.98	Pipe - (157)
Project File: 54A-inflow.stm																Number of lines: 10				Run Date: 3/28/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	50.359	0.00	0.44	0.00	0.00	0.43	0.0	11.7	6.6	2.85	9.35	4.19	15	1.79	198.00	198.90	198.68	199.58	201.94	205.05	Proposed Storm-P
2	1	246.181	0.44	0.44	0.98	0.43	0.43	10.0	10.0	6.9	2.99	10.92	4.84	15	2.44	199.00	205.00	199.58	205.70	205.05	209.38	Proposed Storm-P
Project File: 54B-inflow.stm																Number of lines: 2				Run Date: 3/28/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (I) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr (min)	Total (min)	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	24.349	0.04	0.04	0.98	0.04	0.04	10.0	10.0	6.9	0.27	10.02	2.12	15	2.05	192.00	192.50	192.20	192.70	197.24	196.58	Pipe - (186)
Project File: 55A-inflow.stm																Number of lines: 1				Run Date: 3/28/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID								
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up									
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)									
1	End	24.702	0.48	1.30	0.98	0.47	1.27	10.0	10.1	6.9	8.81	11.89	6.07	18	1.09	191.75	192.02	192.90	193.17	193.94	195.61	Pipe - (182)								
2	1	28.157	0.82	0.82	0.98	0.80	0.80	10.0	10.0	6.9	5.58	8.02	4.47	18	0.50	192.12	192.26	193.17	193.21	195.61	195.44	Pipe - (181)								
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Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	49.209	0.00	1.20	0.00	0.00	0.89	0.0	22.1	5.1	4.52	57.35	4.02	30	1.67	192.00	192.82	192.70	193.52	194.21	196.76	Pipe - (180)
2	1	84.597	0.00	0.90	0.00	0.00	0.67	0.0	20.6	5.3	3.51	31.68	3.81	30	0.51	192.92	193.35	193.52	193.96	196.76	198.63	Pipe - (179)
3	2	84.900	0.00	0.60	0.00	0.00	0.44	0.0	18.3	5.6	2.47	31.25	3.40	30	0.49	193.45	193.87	193.96	194.38	198.63	200.53	Pipe - (178)
4	3	85.865	0.00	0.30	0.00	0.00	0.22	0.0	13.7	6.2	1.39	27.54	2.76	30	0.38	193.97	194.30	194.38	194.68	200.53	202.44	Pipe - (177)
5	4	68.853	0.30	0.30	0.74	0.22	0.22	10.0	10.0	6.9	1.54	29.33	3.08	30	0.44	194.31	194.61	194.70	195.01	202.44	202.50	Pipe - (183)
6	3	68.833	0.30	0.30	0.74	0.22	0.22	10.0	10.0	6.9	1.54	29.33	2.95	30	0.44	193.97	194.27	194.38	194.67	200.53	200.60	Pipe - (184)
7	2	68.451	0.30	0.30	0.74	0.22	0.22	10.0	10.0	6.9	1.54	29.41	2.56	30	0.44	193.45	193.75	193.96	194.15	198.63	198.71	Pipe - (491)
8	1	69.073	0.30	0.30	0.74	0.22	0.22	10.0	10.0	6.9	1.54	29.28	2.35	30	0.43	192.92	193.22	193.52	193.62	196.76	196.81	Pipe - (185)
Project File: 56-inflow.stm																Number of lines: 8				Run Date: 3/28/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						

Storm Sewer Tabulation

Project File: 57-58-outflow.stm																				Run Date: 3/28/2025			
Station	Line To Line	Len	Drng Area		Rnoff coeff	Area x C		Tc	Syst	Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev	HGL Elev	Grnd / Rim Elev	Line ID				
			Incr	Total		Incr	Total							Size	Slope								
1	End	105.032	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	28.26	52.28	6.75	36	0.52	196.60	197.15	200.15	Pipe - (171)				
2	1	135.003	0.00	0.00	0.00	0.00	0.00	0.0	0.8	0.0	13.42	33.94	8.14	24	1.92	198.25	200.84	201.00	Pipe - (170)				
3	2	211.819	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	13.42	17.33	6.09	24	0.50	200.94	202.00	204.40	Pipe - (169)				
4	1	58.643	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	14.84	27.71	7.67	24	1.28	198.25	199.00	203.00	Pipe - (172)				
NOTES: Intensity = 127.16 / (inlet time + 17.80) ^ 0.82; Return period = Yrs. 100 ; c = cir e = ellip b = box																							

NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc	Syst	Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev	HGL Elev	Grnd / Rim Elev	Line ID
Line To	Line	(ft)	Incr	Total	(C)	Incr	Total		Inlet	(in/hr)	(cfs)	(cfs)	(ft/s)	Size	Slope	(ft)	(ft)	(ft)	
1	End	12.523	0.00	0.86	0.98	0.00	0.84	0.0	10.0	6.9	5.81	4.84	5.37	15	0.48	200.49	200.55	202.43	204.57
2	1	25.886	0.25	0.86	0.98	0.25	0.84	10.0	10.1	6.9	5.83	10.25	4.23	18	0.81	200.65	200.86	204.57	204.00
3	2	28.089	0.61	0.61	0.98	0.60	0.60	10.0	10.0	6.9	4.15	4.94	4.33	15	0.50	200.86	201.00	204.00	Pipe - (168)
Project File: 57-inflow.stm																			
Number of lines: 3														Run Date: 3/28/2025					
NOTES:Intensity = 102.61 / (inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																			

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	29.968	0.00	0.58	0.00	0.00	0.43	0.0	22.5	5.1	2.17	9.04	3.83	15	1.67	190.00	190.50	190.59	191.09	191.94	200.50	Pipe - (176)
2	1	170.152	0.37	0.58	0.74	0.27	0.43	10.0	21.3	5.2	2.23	4.49	3.65	15	0.41	191.00	191.70	191.62	192.32	200.50	195.00	Pipe - (175)
3	2	84.996	0.14	0.21	0.74	0.10	0.16	10.0	19.7	5.4	0.84	7.59	2.01	15	1.18	191.70	192.70	192.42	193.06	195.00	195.95	Pipe - (174)
4	3	169.786	0.07	0.07	0.74	0.05	0.05	10.0	10.0	6.9	0.36	6.58	1.76	15	0.88	192.70	194.20	193.06	194.43	195.95	197.40	Pipe - (173)
Project File: 58-inflow.stm																Number of lines: 4				Run Date: 3/28/2025		
NOTES:Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period =Yrs. 25 ; c = cir e = ellip b = box																						