LEVEL POOL ROUTING DATA

HYG Dir = H:\HAESTAD\ppkw\b7004\
Inflow HYG file = NONE STORED - POND IN 100yr
Outflow HYG file = NONE STORED - POND OUT 100yr

Pond Node Data = POND
Pond Volume Data = POND
Pond Outlet Data = Outlet 2

No Infiltration

INITIAL CONDITIONS

Starting WS Elev	=	500.43 ft
Starting Volume	=	0 cu.ft
Starting Outflow	=	.00 cfs
Starting Infiltr.	=	.00 cfs
Starting Total Qout	=	.00 cfs
Time Increment	=	.0500 hrs

Elevation ft	Outflow cfs	Storage cu.ft	Area sq.ft	Infilt. cfs	Q Total cfs	2S/t + O cfs
500.43	.00	0	10	.00	.00	.00
500.58	.06	8	111	.00	.06	.15
500.73	.23	39	320	.00	.23	.66
500.88	.50	109	638	.00	.50	1.71
501.03	.84	236	1064	.00	.84	3.46
501.18	1.26	434	1599	.00	1.26	6.08
501.33	1.73	721	2243	.00	1.73	9.74
501.48	2.22	1112	2994	.00	2.22	14.58
501.63	2.74	1625	3855	.00	2.74	20.79
501.78	3.25	2274	4824	.00	3.25	28.52
501.93	3.59	3077	5901	.00	3.59	37.78
502.08	3.90	4031	6618	.00	3.90	48.69
502.23	4.18	5049	6958	.00	4.18	60.29
502.38	4.46	6119	7306	.00	4.46	72.44
502.53	4.71	7241	7662	.00	4.71	85.17
502.68	4.95	8418	8027	.00	4.95	98.48
502.83	5.18	9650	8400	.00	5.18	112.40
502.98	5.40	10938	8781	.00	5.40	126.93
503.13	5.61	12285	9172	.00	5.61	142.11
503.28	5.81	13690	9570	.00	5.81	157.93
503.43	6.01	15156	9977	.00	6.01	174.41
503.58	6.20	16684	10393	.00	6.20	191.58
503.73	6.39	18274	10817	.00	6.39	209.43

Name.... POND
File.... H:\HAESTAD\ppkw\b7004\ELMER DETENTION DEV REVISED.PPW

LEVEL POOL ROUTING DATA

HYG Dir = H:\HAESTAD\ppkw\b7004\
Inflow HYG file = NONE STORED - POND IN 100yr
Outflow HYG file = NONE STORED - POND OUT 100yr

Pond Node Data = POND
Pond Volume Data = POND
Pond Outlet Data = Outlet 2

No Infiltration

INITIAL CONDITIONS

Starting WS Elev	=	500.43 ft
Starting Volume	=	0 cu.ft
Starting Outflow	=	.00 cfs
Starting Infiltr.	=	.00 cfs
Starting Total Qout	=	.00 cfs
Time Increment	=	.0500 hrs

Elevation ft	Outflow cfs	Storage cu.ft	Area sq.ft	Infilt. cfs	Q Total cfs	2S/t + O cfs
503.88	6.57	19930	11250	.00	6.57	228.01
504.03	6.74	21649	11640	.00	6.74	247.28
504.18	6.91	23409	11830	.00	6.91	267.01
504.33	7.08	25198	12021	.00	7.08	287.05
504.48	7.24	27015	12214	.00	7.24	307.41
504.50	7.26	27260	12239	.00	7.26	310.15
504.63	7.45	28862	12408	.00	7.45	328.15
504.78	7.81	30738	12604	.00	7.81	349.34
504.93	8.28	32643	12801	.00	8.28	370.98
505.08	8.86	34578	13000	.00	8.86	393.06
505.23	9.52	36543	13201	.00	9.52	415.55
505.38	10.21	38539	13403	.00	10.21	438.42
505.53	10.84	40565	13606	.00	10.84	461.56
505.68	11.25	42621	13811	.00	11.25	484.82
505.83	11.62	44708	14018	.00	11.62	508.38
505.98	11.98	46826	14226	.00	11.98	532.27
506.13	12.31	48976	14437	.00	12.31	556.49
506.25	12.57	50719	14606	.00	12.57	576.11
506.28	12.78	51157	14649	.00	12.78	581.19
506.43	14.74	53371	14862	.00	14.74	607.75
506.58	17.48	55616	15077	.00	17.48	635.43
506.73	19.39	57894	15294	.00	19.39	662.65
506.88	21.20	60205	15512	.00	21.20	690.13

LEVEL POOL ROUTING DATA

HYG Dir = H:\HAESTAD\ppkw\b7004\
Inflow HYG file = NONE STORED - POND IN 100yr
Outflow HYG file = NONE STORED - POND OUT 100yr

Pond Node Data = POND
Pond Volume Data = POND
Pond Outlet Data = Outlet 2

No Infiltration

INITIAL CONDITIONS

Starting WS Elev	=	500.43 ft
Starting Volume	=	0 cu.ft
Starting Outflow	=	.00 cfs
Starting Infiltr.	=	.00 cfs
Starting Total Qout	=	.00 cfs
Time Increment	=	.0500 hrs

Elevation ft	Outflow cfs	Storage cu.ft	Area sq.ft	Infilt. cfs	Q Total cfs	2S/t + O cfs
507.03	21.47	62548	15732	.00	21.47	716.45
507.18	21.74	64924	15954	.00	21.74	743.12
507.33	22.01	67334	16176	.00	22.01	770.16
507.48	22.28	69777	16401	.00	22.28	797.58
507.63	22.54	72254	16627	.00	22.54	825.37
507.78	22.80	74765	16854	.00	22.80	853.53
507.93	23.06	77311	17084	.00	23.06	882.06
508.08	23.31	79890	17318	.00	23.31	910.98
508.23	23.56	82506	17556	.00	23.56	940.29
508.38	23.81	85158	17797	.00	23.81	970.01
508.53	24.06	87845	18039	.00	24.06	1000.12
508.68	24.30	90569	18282	.00	24.30	1030.63
508.83	24.54	93330	18528	.00	24.54	1061.54
508.98	24.78	96127	18775	.00	24.78	1092.86
509.13	25.02	98963	19023	.00	25.02	1124.60
509.28	25.25	101835	19273	.00	25.25	1156.75
509.43	25.48	104745	19525	.00	25.48	1189.31
509.58	25.71	107692	19779	.00	25.71	1222.29
509.73	25.94	110678	20034	.00	25.94	1255.70
509.88	26.17	113703	20290	.00	26.17	1289.53
510.00	26.35	116150	20497	.00	26.35	1316.90

SUMMARY FOR HYDROGRAPH ADDITION
at Node: POND IN

HYG Directory: H:\HAESTAD\ppkw\b7004\

Upstream Link ID	Upstream Node ID	HYG file	HYG ID	HYG tag
A 10	SCS UH 10		SCS UH 10	15

INFLOWS TO: POND IN

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	SCS UH 10	15	111339	12.1000	29.47

TOTAL FLOW INTO: POND IN

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	POND IN	15	111339	12.1000	29.47

TOTAL NODE INFLOW...
HYG file =
HYG ID = POND IN
HYG Tag = 15

Peak Discharge =	29.47 cfs
Time to Peak =	12.1000 hrs
HYG Volume =	111339 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
5.1000	.00	.00	.00	.00	.01
5.3500	.01	.01	.02	.02	.02
5.6000	.03	.03	.03	.04	.04
5.8500	.05	.05	.05	.06	.06
6.1000	.07	.07	.07	.08	.08
6.3500	.09	.09	.10	.10	.11
6.6000	.11	.11	.12	.12	.13
6.8500	.13	.14	.14	.15	.15
7.1000	.16	.16	.17	.17	.18
7.3500	.18	.19	.19	.20	.20
7.6000	.21	.21	.22	.22	.23
7.8500	.23	.24	.24	.25	.25
8.1000	.26	.26	.27	.28	.29
8.3500	.29	.30	.31	.32	.34
8.6000	.35	.36	.37	.38	.40
8.8500	.41	.42	.43	.45	.46
9.1000	.48	.49	.50	.51	.53
9.3500	.54	.54	.55	.56	.57
9.6000	.58	.59	.60	.61	.62
9.8500	.64	.66	.67	.70	.72
10.1000	.74	.76	.79	.82	.84
10.3500	.88	.91	.94	.98	1.01
10.6000	1.05	1.09	1.13	1.18	1.23
10.8500	1.28	1.33	1.39	1.45	1.51
11.1000	1.58	1.65	1.74	1.83	1.94
11.3500	2.06	2.18	2.32	2.48	2.69
11.6000	3.02	3.60	4.56	6.00	8.08
11.8500	10.96	14.73	19.24	23.90	27.60
12.1000	29.47	29.02	26.52	22.92	19.21
12.3500	15.86	13.17	11.10	9.48	8.18
12.6000	7.11	6.24	5.53	4.96	4.49
12.8500	4.12	3.81	3.56	3.35	3.16
13.1000	2.99	2.85	2.72	2.62	2.53

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
13.3500	2.45	2.38	2.31	2.25	2.18
13.6000	2.13	2.07	2.01	1.96	1.92
13.8500	1.87	1.82	1.78	1.74	1.70
14.1000	1.66	1.62	1.59	1.56	1.53
14.3500	1.50	1.48	1.46	1.45	1.43
14.6000	1.41	1.40	1.38	1.37	1.35
14.8500	1.34	1.33	1.31	1.30	1.28
15.1000	1.27	1.26	1.24	1.23	1.21
15.3500	1.20	1.19	1.17	1.16	1.14
15.6000	1.13	1.12	1.10	1.09	1.08
15.8500	1.06	1.05	1.03	1.02	1.01
16.1000	.99	.98	.97	.96	.95
16.3500	.94	.93	.92	.92	.91
16.6000	.91	.90	.89	.89	.88
16.8500	.88	.87	.87	.86	.86
17.1000	.85	.85	.84	.84	.83
17.3500	.83	.82	.82	.81	.81
17.6000	.80	.80	.79	.79	.78
17.8500	.78	.77	.77	.76	.76
18.1000	.75	.75	.74	.74	.73
18.3500	.73	.72	.72	.71	.71
18.6000	.70	.70	.69	.69	.68
18.8500	.68	.67	.67	.66	.66
19.1000	.65	.65	.64	.64	.63
19.3500	.63	.62	.62	.61	.61
19.6000	.60	.60	.59	.59	.58
19.8500	.58	.57	.57	.56	.56
20.1000	.55	.55	.54	.54	.54
20.3500	.54	.53	.53	.53	.53
20.6000	.53	.53	.52	.52	.52
20.8500	.52	.52	.52	.52	.52
21.1000	.52	.52	.51	.51	.51
21.3500	.51	.51	.51	.51	.51
21.6000	.51	.51	.50	.50	.50
21.8500	.50	.50	.50	.50	.50
22.1000	.50	.50	.49	.49	.49
22.3500	.49	.49	.49	.49	.49
22.6000	.49	.49	.48	.48	.48
22.8500	.48	.48	.48	.48	.48
23.1000	.48	.48	.47	.47	.47
23.3500	.47	.47	.47	.47	.47
23.6000	.47	.47	.46	.46	.46
23.8500	.46	.46	.46	.46	.45
24.1000	.43	.39	.33	.27	.21
24.3500	.15	.11	.08	.06	.04
24.6000	.03	.02	.02	.01	.01
24.8500	.01	.00	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs	
25.1000	.00

SUMMARY FOR HYDROGRAPH ADDITION
at Node: POND IN

HYG Directory: H:\HAESTAD\ppkw\b7004\

Upstream Link ID	Upstream Node ID	HYG file	HYG ID	HYG tag
A 10	SCS UH 10		SCS UH 10	100yr

INFLOWS TO: POND IN

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	SCS UH 10	100yr	167208	12.1000	43.62

TOTAL FLOW INTO: POND IN

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	POND IN	100yr	167208	12.1000	43.62

TOTAL NODE INFLOW...
HYG file =
HYG ID = POND IN
HYG Tag = 100yr

Peak Discharge =	43.62 cfs
Time to Peak =	12.1000 hrs
HYG Volume =	167208 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
3.9500	.00	.00	.00	.01	.01
4.2000	.01	.02	.02	.03	.03
4.4500	.04	.04	.05	.05	.06
4.7000	.06	.07	.07	.08	.09
4.9500	.09	.10	.10	.11	.12
5.2000	.12	.13	.13	.14	.15
5.4500	.15	.16	.17	.17	.18
5.7000	.19	.19	.20	.21	.21
5.9500	.22	.23	.23	.24	.25
6.2000	.25	.26	.27	.27	.28
6.4500	.29	.30	.30	.31	.32
6.7000	.33	.33	.34	.35	.36
6.9500	.36	.37	.38	.39	.39
7.2000	.40	.41	.42	.42	.43
7.4500	.44	.45	.45	.46	.47
7.7000	.48	.49	.49	.50	.51
7.9500	.52	.53	.53	.54	.55
8.2000	.56	.57	.59	.60	.62
8.4500	.64	.65	.67	.69	.71
8.7000	.73	.75	.77	.80	.82
8.9500	.84	.86	.88	.91	.93
9.2000	.95	.97	.98	1.00	1.01
9.4500	1.02	1.03	1.05	1.06	1.07
9.7000	1.08	1.10	1.12	1.15	1.18
9.9500	1.21	1.24	1.27	1.31	1.35
10.2000	1.39	1.43	1.48	1.53	1.58
10.4500	1.63	1.69	1.74	1.80	1.86
10.7000	1.93	2.00	2.08	2.16	2.24
10.9500	2.33	2.43	2.52	2.63	2.74
11.2000	2.87	3.01	3.18	3.36	3.56
11.4500	3.77	4.01	4.33	4.85	5.75
11.7000	7.22	9.43	12.58	16.90	22.48
11.9500	29.09	35.83	41.09	43.62	42.77

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
12.2000	38.95	33.58	28.07	23.13	19.17
12.4500	16.13	13.75	11.84	10.28	9.01
12.7000	7.97	7.13	6.45	5.91	5.46
12.9500	5.10	4.79	4.52	4.28	4.07
13.2000	3.89	3.74	3.61	3.49	3.39
13.4500	3.29	3.20	3.11	3.03	2.95
13.7000	2.87	2.80	2.73	2.66	2.60
13.9500	2.53	2.47	2.42	2.36	2.31
14.2000	2.26	2.21	2.17	2.14	2.11
14.4500	2.08	2.05	2.03	2.01	1.98
14.7000	1.96	1.94	1.92	1.90	1.88
14.9500	1.86	1.84	1.82	1.80	1.78
15.2000	1.76	1.74	1.72	1.70	1.68
15.4500	1.66	1.64	1.62	1.60	1.58
15.7000	1.56	1.54	1.52	1.50	1.48
15.9500	1.46	1.44	1.42	1.41	1.39
16.2000	1.37	1.35	1.34	1.33	1.32
16.4500	1.31	1.30	1.29	1.28	1.27
16.7000	1.27	1.26	1.25	1.24	1.24
16.9500	1.23	1.22	1.22	1.21	1.20
17.2000	1.19	1.19	1.18	1.17	1.17
17.4500	1.16	1.15	1.14	1.14	1.13
17.7000	1.12	1.12	1.11	1.10	1.10
17.9500	1.09	1.08	1.07	1.07	1.06
18.2000	1.05	1.05	1.04	1.03	1.02
18.4500	1.02	1.01	1.00	1.00	.99
18.7000	.98	.97	.97	.96	.95
18.9500	.95	.94	.93	.92	.92
19.2000	.91	.90	.90	.89	.88
19.4500	.87	.87	.86	.85	.85
19.7000	.84	.83	.82	.82	.81
19.9500	.80	.80	.79	.78	.77
20.2000	.77	.76	.76	.76	.75
20.4500	.75	.75	.75	.74	.74
20.7000	.74	.74	.74	.74	.73
20.9500	.73	.73	.73	.73	.73
21.2000	.73	.72	.72	.72	.72
21.4500	.72	.72	.72	.71	.71
21.7000	.71	.71	.71	.71	.71
21.9500	.70	.70	.70	.70	.70
22.2000	.70	.70	.69	.69	.69
22.4500	.69	.69	.69	.69	.68
22.7000	.68	.68	.68	.68	.68
22.9500	.68	.67	.67	.67	.67
23.2000	.67	.67	.67	.66	.66
23.4500	.66	.66	.66	.66	.66
23.7000	.65	.65	.65	.65	.65

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
23.9500	.65	.64	.63	.60	.55
24.2000	.47	.38	.29	.21	.16
24.4500	.11	.08	.06	.04	.03
24.7000	.02	.02	.01	.01	.01
24.9500	.00	.00	.00	.00	.00

SUMMARY FOR HYDROGRAPH ADDITION
at Node: POND IN

HYG Directory: H:\HAESTAD\ppkw\b7004\

Upstream Link ID	Upstream Node ID	HYG file	HYG ID	HYG tag
A 10	SCS UH 10		SCS UH 10	2year

INFLOWS TO: POND IN

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	SCS UH 10	2year	63129	12.1000	16.85

TOTAL FLOW INTO: POND IN

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	POND IN	2year	63129	12.1000	16.85

TOTAL NODE INFLOW...
HYG file =
HYG ID = POND IN
HYG Tag = 2year

Peak Discharge =	16.85 cfs
Time to Peak =	12.1000 hrs
HYG Volume =	63129 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
6.9000	.00	.00	.00	.00	.01
7.1500	.01	.01	.01	.01	.02
7.4000	.02	.02	.02	.03	.03
7.6500	.03	.03	.04	.04	.04
7.9000	.05	.05	.05	.05	.06
8.1500	.06	.06	.07	.07	.07
8.4000	.08	.08	.09	.09	.10
8.6500	.10	.11	.11	.12	.12
8.9000	.13	.14	.14	.15	.15
9.1500	.16	.17	.17	.18	.19
9.4000	.19	.20	.20	.20	.21
9.6500	.22	.22	.23	.23	.24
9.9000	.25	.26	.27	.28	.29
10.1500	.31	.32	.33	.35	.36
10.4000	.38	.39	.41	.43	.45
10.6500	.47	.49	.51	.54	.56
10.9000	.59	.62	.65	.69	.72
11.1500	.76	.80	.85	.91	.97
11.4000	1.04	1.11	1.20	1.31	1.49
11.6500	1.79	2.29	3.07	4.20	5.80
11.9000	7.95	10.57	13.35	15.62	16.85
12.1500	16.73	15.39	13.37	11.25	9.32
12.4000	7.77	6.57	5.64	4.88	4.26
12.6500	3.75	3.33	2.99	2.72	2.50
12.9000	2.32	2.17	2.04	1.93	1.83
13.1500	1.74	1.67	1.60	1.55	1.50
13.4000	1.46	1.42	1.38	1.34	1.31
13.6500	1.27	1.24	1.21	1.18	1.15
13.9000	1.12	1.10	1.07	1.05	1.02
14.1500	1.00	.98	.96	.94	.93
14.4000	.92	.90	.89	.88	.87
14.6500	.86	.85	.85	.84	.83
14.9000	.82	.81	.80	.79	.79

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
15.1500	.78	.77	.76	.75	.74
15.4000	.74	.73	.72	.71	.70
15.6500	.69	.68	.68	.67	.66
15.9000	.65	.64	.63	.62	.62
16.1500	.61	.60	.59	.59	.58
16.4000	.58	.57	.57	.57	.56
16.6500	.56	.56	.55	.55	.55
16.9000	.54	.54	.54	.54	.53
17.1500	.53	.53	.52	.52	.52
17.4000	.51	.51	.51	.50	.50
17.6500	.50	.50	.49	.49	.49
17.9000	.48	.48	.48	.47	.47
18.1500	.47	.46	.46	.46	.46
18.4000	.45	.45	.45	.44	.44
18.6500	.44	.43	.43	.43	.42
18.9000	.42	.42	.42	.41	.41
19.1500	.41	.40	.40	.40	.39
19.4000	.39	.39	.38	.38	.38
19.6500	.37	.37	.37	.37	.36
19.9000	.36	.36	.35	.35	.35
20.1500	.34	.34	.34	.34	.34
20.4000	.33	.33	.33	.33	.33
20.6500	.33	.33	.33	.33	.33
20.9000	.33	.33	.32	.32	.32
21.1500	.32	.32	.32	.32	.32
21.4000	.32	.32	.32	.32	.32
21.6500	.32	.32	.32	.32	.31
21.9000	.31	.31	.31	.31	.31
22.1500	.31	.31	.31	.31	.31
22.4000	.31	.31	.31	.31	.31
22.6500	.30	.30	.30	.30	.30
22.9000	.30	.30	.30	.30	.30
23.1500	.30	.30	.30	.30	.30
23.4000	.30	.30	.29	.29	.29
23.6500	.29	.29	.29	.29	.29
23.9000	.29	.29	.29	.28	.27
24.1500	.24	.21	.17	.13	.10
24.4000	.07	.05	.04	.03	.02
24.6500	.01	.01	.01	.01	.00
24.9000	.00	.00	.00	.00	

SUMMARY FOR HYDROGRAPH ADDITION
at Node: POND IN

HYG Directory: H:\HAESTAD\ppkw\b7004\

Upstream Link ID	Upstream Node ID	HYG file	HYG ID	HYG tag
A 10	SCS UH 10		SCS UH 10	25year

INFLOWS TO: POND IN

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	SCS UH 10	25year	121251	12.1000	32.01

TOTAL FLOW INTO: POND IN

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	POND IN	25year	121251	12.1000	32.01

TOTAL NODE INFLOW...
HYG file =
HYG ID = POND IN
HYG Tag = 25year

Peak Discharge =	32.01 cfs
Time to Peak =	12.1000 hrs
HYG Volume =	121251 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
4.8500	.00	.00	.00	.00	.01
5.1000	.01	.01	.02	.02	.02
5.3500	.03	.03	.04	.04	.04
5.6000	.05	.05	.06	.06	.07
5.8500	.07	.08	.08	.08	.09
6.1000	.09	.10	.10	.11	.11
6.3500	.12	.12	.13	.13	.14
6.6000	.14	.15	.15	.16	.16
6.8500	.17	.17	.18	.18	.19
7.1000	.19	.20	.20	.21	.22
7.3500	.22	.23	.23	.24	.24
7.6000	.25	.25	.26	.26	.27
7.8500	.28	.28	.29	.29	.30
8.1000	.30	.31	.32	.33	.34
8.3500	.35	.36	.37	.38	.39
8.6000	.40	.42	.43	.44	.46
8.8500	.47	.49	.50	.52	.53
9.1000	.55	.56	.58	.59	.60
9.3500	.61	.62	.63	.64	.65
9.6000	.66	.67	.68	.69	.71
9.8500	.73	.74	.77	.79	.81
10.1000	.84	.86	.89	.92	.95
10.3500	.99	1.02	1.06	1.10	1.14
10.6000	1.18	1.22	1.27	1.32	1.37
10.8500	1.43	1.49	1.55	1.62	1.69
11.1000	1.76	1.84	1.93	2.04	2.15
11.3500	2.29	2.43	2.58	2.75	2.98
11.6000	3.35	3.98	5.03	6.61	8.88
11.8500	12.01	16.11	21.00	26.04	30.02
12.1000	32.01	31.49	28.75	24.84	20.80
12.3500	17.17	14.25	12.00	10.25	8.84
12.6000	7.68	6.74	5.97	5.35	4.85
12.8500	4.44	4.11	3.84	3.61	3.41

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
13.1000	3.23	3.07	2.93	2.82	2.72
13.3500	2.64	2.56	2.49	2.42	2.35
13.6000	2.29	2.23	2.17	2.11	2.06
13.8500	2.01	1.96	1.92	1.87	1.83
14.1000	1.79	1.75	1.71	1.67	1.64
14.3500	1.62	1.60	1.57	1.55	1.54
14.6000	1.52	1.50	1.49	1.47	1.46
14.8500	1.44	1.43	1.41	1.40	1.38
15.1000	1.37	1.35	1.34	1.32	1.31
15.3500	1.29	1.28	1.26	1.25	1.23
15.6000	1.22	1.20	1.19	1.17	1.16
15.8500	1.14	1.13	1.11	1.10	1.08
16.1000	1.07	1.05	1.04	1.03	1.02
16.3500	1.01	1.00	.99	.99	.98
16.6000	.97	.97	.96	.96	.95
16.8500	.95	.94	.93	.93	.92
17.1000	.92	.91	.91	.90	.90
17.3500	.89	.89	.88	.88	.87
17.6000	.86	.86	.85	.85	.84
17.8500	.84	.83	.83	.82	.82
18.1000	.81	.81	.80	.79	.79
18.3500	.78	.78	.77	.77	.76
18.6000	.76	.75	.75	.74	.74
18.8500	.73	.72	.72	.71	.71
19.1000	.70	.70	.69	.69	.68
19.3500	.68	.67	.67	.66	.65
19.6000	.65	.64	.64	.63	.63
19.8500	.62	.62	.61	.61	.60
20.1000	.59	.59	.59	.58	.58
20.3500	.58	.57	.57	.57	.57
20.6000	.57	.56	.56	.56	.56
20.8500	.56	.56	.56	.56	.56
21.1000	.55	.55	.55	.55	.55
21.3500	.55	.55	.55	.55	.54
21.6000	.54	.54	.54	.54	.54
21.8500	.54	.54	.54	.54	.53
22.1000	.53	.53	.53	.53	.53
22.3500	.53	.53	.53	.52	.52
22.6000	.52	.52	.52	.52	.52
22.8500	.52	.52	.51	.51	.51
23.1000	.51	.51	.51	.51	.51
23.3500	.51	.51	.50	.50	.50
23.6000	.50	.50	.50	.50	.50
23.8500	.50	.49	.49	.49	.48
24.1000	.46	.42	.36	.29	.22
24.3500	.16	.12	.09	.06	.05
24.6000	.03	.02	.02	.01	.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
24.8500	.01	.00	.00	.00	.00
25.1000	.00				

LEVEL POOL ROUTING SUMMARY

HYG Dir = H:\HAESTAD\ppkw\b7004\
Inflow HYG file = NONE STORED - POND IN 15
Outflow HYG file = NONE STORED - POND OUT 15

Pond Node Data = POND
Pond Volume Data = POND
Pond Outlet Data = Outlet 2

No Infiltration

INITIAL CONDITIONS

Starting WS Elev	=	500.43 ft
Starting Volume	=	0 cu.ft
Starting Outflow	=	.00 cfs
Starting Infiltr.	=	.00 cfs
Starting Total Qout	=	.00 cfs
Time Increment	=	.0500 hrs

INFLOW/OUTFLOW HYDROGRAPH SUMMARY

Peak Inflow	=	29.47 cfs	at	12.1000 hrs
Peak Outflow	=	9.04 cfs	at	12.5000 hrs
Peak Elevation	=	505.12 ft		
Peak Storage	=	35127 cu.ft		

MASS BALANCE (cu.ft)

+ Initial Vol	=	0
+ HYG Vol IN	=	111339
- Infiltration	=	0
- HYG Vol OUT	=	111339
- Retained Vol	=	0
Unrouted Vol	= -	cu.ft (.000% of Inflow Volume)

POND ROUTED TOTAL OUTFLOW HYG...
HYG file =
HYG ID = POND OUT
HYG Tag = 15

Peak Discharge =	9.04 cfs
Time to Peak =	12.5000 hrs
HYG Volume =	111339 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
5.1000	.00	.00	.00	.00	.01
5.3500	.01	.01	.01	.02	.02
5.6000	.02	.03	.03	.04	.04
5.8500	.04	.05	.05	.05	.06
6.1000	.06	.07	.07	.07	.08
6.3500	.08	.09	.09	.10	.10
6.6000	.11	.11	.11	.12	.12
6.8500	.13	.13	.14	.14	.15
7.1000	.15	.16	.16	.17	.17
7.3500	.18	.18	.19	.19	.20
7.6000	.20	.21	.21	.22	.22
7.8500	.23	.23	.24	.24	.24
8.1000	.25	.26	.26	.27	.27
8.3500	.28	.29	.30	.31	.32
8.6000	.33	.34	.35	.37	.38
8.8500	.39	.40	.42	.43	.44
9.1000	.46	.47	.48	.50	.51
9.3500	.52	.53	.53	.54	.55
9.6000	.56	.57	.58	.59	.60
9.8500	.61	.62	.64	.66	.68
10.1000	.70	.72	.74	.77	.79
10.3500	.82	.85	.87	.90	.93
10.6000	.96	1.00	1.03	1.07	1.11
10.8500	1.16	1.20	1.25	1.30	1.34
11.1000	1.40	1.45	1.51	1.58	1.66
11.3500	1.74	1.82	1.91	2.01	2.12
11.6000	2.26	2.44	2.71	3.06	3.43
11.8500	3.82	4.26	4.78	5.34	5.88
12.1000	6.38	6.80	7.15	7.51	8.02
12.3500	8.46	8.78	8.96	9.04	9.03
12.6000	8.95	8.82	8.67	8.49	8.29
12.8500	8.12	7.93	7.76	7.62	7.47
13.1000	7.37	7.28	7.20	7.13	7.05

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs				
13.3500	6.98	6.90	6.82	6.74	6.66
13.6000	6.58	6.50	6.41	6.32	6.23
13.8500	6.14	6.04	5.94	5.84	5.74
14.1000	5.63	5.52	5.42	5.30	5.19
14.3500	5.07	4.95	4.82	4.70	4.57
14.6000	4.44	4.31	4.18	4.04	3.91
14.8500	3.76	3.62	3.47	3.31	3.09
15.1000	2.85	2.61	2.39	2.19	1.99
15.3500	1.83	1.70	1.56	1.46	1.38
15.6000	1.32	1.27	1.22	1.18	1.15
15.8500	1.12	1.10	1.08	1.06	1.05
16.1000	1.03	1.02	1.00	.99	.98
16.3500	.97	.96	.95	.94	.93
16.6000	.92	.92	.91	.90	.90
16.8500	.89	.89	.88	.88	.87
17.1000	.87	.86	.86	.85	.85
17.3500	.84	.84	.83	.83	.82
17.6000	.82	.81	.80	.80	.79
17.8500	.79	.78	.78	.77	.77
18.1000	.76	.76	.75	.75	.74
18.3500	.74	.73	.73	.72	.72
18.6000	.71	.71	.70	.70	.69
18.8500	.69	.68	.68	.67	.67
19.1000	.66	.66	.65	.65	.64
19.3500	.64	.63	.63	.62	.62
19.6000	.61	.61	.60	.60	.59
19.8500	.59	.58	.58	.57	.57
20.1000	.56	.56	.55	.55	.55
20.3500	.54	.54	.54	.53	.53
20.6000	.53	.53	.53	.53	.52
20.8500	.52	.52	.52	.52	.52
21.1000	.52	.52	.52	.52	.51
21.3500	.51	.51	.51	.51	.51
21.6000	.51	.51	.51	.51	.50
21.8500	.50	.50	.50	.50	.50
22.1000	.50	.50	.50	.50	.49
22.3500	.49	.49	.49	.49	.49
22.6000	.49	.49	.49	.49	.48
22.8500	.48	.48	.48	.48	.48
23.1000	.48	.48	.48	.48	.47
23.3500	.47	.47	.47	.47	.47
23.6000	.47	.47	.47	.47	.46
23.8500	.46	.46	.46	.46	.46
24.1000	.45	.43	.39	.35	.29
24.3500	.23	.17	.12	.09	.06
24.6000	.04	.03	.02	.02	.01
24.8500	.01	.01	.00	.00	.00

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs	
25.1000	.00

LEVEL POOL ROUTING SUMMARY

HYG Dir = H:\HAESTAD\ppkw\b7004\
Inflow HYG file = NONE STORED - POND IN 100yr
Outflow HYG file = NONE STORED - POND OUT 100yr

Pond Node Data = POND
Pond Volume Data = POND
Pond Outlet Data = Outlet 2

No Infiltration

INITIAL CONDITIONS

Starting WS Elev	=	500.43 ft
Starting Volume	=	0 cu.ft
Starting Outflow	=	.00 cfs
Starting Infiltr.	=	.00 cfs
Starting Total Qout	=	.00 cfs
Time Increment	=	.0500 hrs

INFLOW/OUTFLOW HYDROGRAPH SUMMARY

Peak Inflow	=	43.62 cfs	at	12.1000 hrs
Peak Outflow	=	15.29 cfs	at	12.4500 hrs
Peak Elevation	=	506.46 ft		
Peak Storage	=	53821 cu.ft		

MASS BALANCE (cu.ft)

+ Initial Vol	=	0
+ HYG Vol IN	=	167208
- Infiltration	=	0
- HYG Vol OUT	=	167208
- Retained Vol	=	0
Unrouted Vol	= -	cu.ft (.000% of Inflow Volume)

POND ROUTED TOTAL OUTFLOW HYG...
HYG file =
HYG ID = POND OUT
HYG Tag = 100yr

Peak Discharge =	15.29 cfs
Time to Peak =	12.4500 hrs
HYG Volume =	167208 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
3.9500	.00	.00	.00	.00	.01
4.2000	.01	.01	.02	.02	.03
4.4500	.03	.04	.04	.05	.05
4.7000	.06	.06	.07	.07	.08
4.9500	.09	.09	.10	.10	.11
5.2000	.12	.12	.13	.13	.14
5.4500	.15	.15	.16	.17	.17
5.7000	.18	.19	.19	.20	.21
5.9500	.21	.22	.23	.23	.24
6.2000	.24	.25	.26	.26	.27
6.4500	.28	.29	.29	.30	.31
6.7000	.31	.32	.33	.34	.34
6.9500	.35	.36	.37	.37	.38
7.2000	.39	.40	.40	.41	.42
7.4500	.43	.44	.44	.45	.46
7.7000	.47	.47	.48	.49	.50
7.9500	.50	.51	.52	.53	.53
8.2000	.54	.55	.56	.58	.59
8.4500	.60	.62	.64	.65	.67
8.7000	.69	.71	.73	.75	.77
8.9500	.80	.82	.84	.86	.88
9.2000	.90	.92	.94	.95	.97
9.4500	.98	1.00	1.01	1.02	1.04
9.7000	1.05	1.06	1.08	1.10	1.12
9.9500	1.14	1.17	1.20	1.23	1.26
10.2000	1.29	1.32	1.35	1.39	1.43
10.4500	1.48	1.52	1.57	1.62	1.68
10.7000	1.73	1.78	1.83	1.89	1.95
10.9500	2.02	2.09	2.17	2.25	2.32
11.2000	2.40	2.49	2.59	2.70	2.81
11.4500	2.92	3.05	3.20	3.32	3.47
11.7000	3.67	3.93	4.27	4.70	5.22
11.9500	5.79	6.38	6.96	7.72	9.51

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
12.2000	11.13	11.92	12.44	13.60	14.72
12.4500	15.29	15.22	14.74	14.20	13.52
12.7000	12.78	12.50	12.35	12.18	12.00
12.9500	11.80	11.60	11.38	11.15	10.90
13.2000	10.56	10.19	9.79	9.42	9.07
13.4500	8.75	8.46	8.20	7.97	7.77
13.7000	7.61	7.45	7.35	7.25	7.18
13.9500	7.10	7.03	6.95	6.88	6.80
14.2000	6.72	6.64	6.56	6.47	6.39
14.4500	6.30	6.21	6.12	6.03	5.93
14.7000	5.84	5.74	5.64	5.54	5.44
14.9500	5.34	5.23	5.12	5.01	4.90
15.2000	4.79	4.68	4.56	4.44	4.32
15.4500	4.20	4.08	3.96	3.84	3.71
15.7000	3.59	3.44	3.30	3.10	2.89
15.9500	2.69	2.49	2.31	2.15	2.00
16.2000	1.87	1.77	1.67	1.58	1.52
16.4500	1.46	1.42	1.39	1.36	1.34
16.7000	1.32	1.31	1.29	1.28	1.27
16.9500	1.26	1.25	1.24	1.23	1.22
17.2000	1.22	1.21	1.20	1.19	1.19
17.4500	1.18	1.17	1.16	1.16	1.15
17.7000	1.14	1.14	1.13	1.12	1.11
17.9500	1.11	1.10	1.09	1.09	1.08
18.2000	1.07	1.06	1.06	1.05	1.04
18.4500	1.04	1.03	1.02	1.01	1.01
18.7000	1.00	.99	.99	.98	.97
18.9500	.96	.96	.95	.94	.94
19.2000	.93	.92	.91	.91	.90
19.4500	.89	.89	.88	.87	.86
19.7000	.86	.85	.84	.83	.83
19.9500	.82	.81	.80	.80	.79
20.2000	.78	.78	.77	.77	.76
20.4500	.76	.75	.75	.75	.75
20.7000	.74	.74	.74	.74	.74
20.9500	.74	.73	.73	.73	.73
21.2000	.73	.73	.73	.72	.72
21.4500	.72	.72	.72	.72	.72
21.7000	.71	.71	.71	.71	.71
21.9500	.71	.71	.70	.70	.70
22.2000	.70	.70	.70	.70	.69
22.4500	.69	.69	.69	.69	.69
22.7000	.69	.68	.68	.68	.68
22.9500	.68	.68	.68	.67	.67
23.2000	.67	.67	.67	.67	.67
23.4500	.66	.66	.66	.66	.66
23.7000	.66	.66	.65	.65	.65

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
23.9500	.65	.65	.64	.63	.61
24.2000	.57	.51	.42	.34	.26
24.4500	.19	.13	.09	.07	.05
24.7000	.03	.02	.02	.01	.01
24.9500	.01	.00	.00	.00	.00

LEVEL POOL ROUTING SUMMARY

HYG Dir = H:\HAESTAD\ppkw\b7004\
Inflow HYG file = NONE STORED - POND IN 2year
Outflow HYG file = NONE STORED - POND OUT 2year

Pond Node Data = POND
Pond Volume Data = POND
Pond Outlet Data = Outlet 2

No Infiltration

INITIAL CONDITIONS

Starting WS Elev	=	500.43 ft
Starting Volume	=	0 cu.ft
Starting Outflow	=	.00 cfs
Starting Infiltr.	=	.00 cfs
Starting Total Qout	=	.00 cfs
Time Increment	=	.0500 hrs

INFLOW/OUTFLOW HYDROGRAPH SUMMARY

Peak Inflow	=	16.85 cfs	at	12.1000 hrs
Peak Outflow	=	6.20 cfs	at	12.4500 hrs
Peak Elevation	=	503.58 ft		
Peak Storage	=	16684 cu.ft		

MASS BALANCE (cu.ft)

+ Initial Vol	=	0
+ HYG Vol IN	=	63129
- Infiltration	=	0
- HYG Vol OUT	=	63128
- Retained Vol	=	0
Unrouted Vol	= -	cu.ft (.000% of Inflow Volume)

POND ROUTED TOTAL OUTFLOW HYG...
HYG file =
HYG ID = POND OUT
HYG Tag = 2year

Peak Discharge =	6.20 cfs
Time to Peak =	12.4500 hrs
HYG Volume =	63128 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
6.9000	.00	.00	.00	.00	.00
7.1500	.01	.01	.01	.01	.02
7.4000	.02	.02	.02	.03	.03
7.6500	.03	.03	.04	.04	.04
7.9000	.04	.05	.05	.05	.05
8.1500	.06	.06	.06	.07	.07
8.4000	.07	.08	.08	.09	.09
8.6500	.10	.10	.11	.11	.12
8.9000	.12	.13	.14	.14	.15
9.1500	.15	.16	.17	.17	.18
9.4000	.18	.19	.20	.20	.20
9.6500	.21	.22	.22	.23	.23
9.9000	.24	.25	.26	.27	.28
10.1500	.29	.30	.31	.33	.34
10.4000	.35	.37	.39	.40	.42
10.6500	.44	.46	.48	.50	.52
10.9000	.54	.57	.60	.63	.66
11.1500	.69	.73	.77	.81	.86
11.4000	.91	.96	1.02	1.09	1.19
11.6500	1.32	1.50	1.79	2.16	2.65
11.9000	3.23	3.66	4.10	4.56	4.99
12.1500	5.36	5.66	5.88	6.03	6.13
12.4000	6.18	6.20	6.20	6.18	6.14
12.6500	6.09	6.04	5.97	5.90	5.82
12.9000	5.73	5.64	5.54	5.45	5.34
13.1500	5.23	5.12	5.01	4.89	4.77
13.4000	4.64	4.52	4.38	4.25	4.11
13.6500	3.97	3.83	3.68	3.53	3.35
13.9000	3.14	2.87	2.61	2.35	2.11
14.1500	1.89	1.70	1.51	1.37	1.26
14.4000	1.15	1.07	1.02	.98	.95
14.6500	.92	.90	.89	.87	.86
14.9000	.85	.84	.82	.81	.81

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs				
15.1500	.80	.79	.78	.77	.76
15.4000	.75	.74	.74	.73	.72
15.6500	.71	.70	.69	.68	.68
15.9000	.67	.66	.65	.64	.63
16.1500	.63	.62	.61	.60	.60
16.4000	.59	.58	.58	.58	.57
16.6500	.57	.56	.56	.56	.55
16.9000	.55	.55	.54	.54	.54
17.1500	.54	.53	.53	.53	.52
17.4000	.52	.52	.51	.51	.51
17.6500	.50	.50	.50	.49	.49
17.9000	.49	.48	.48	.48	.48
18.1500	.47	.47	.47	.46	.46
18.4000	.46	.45	.45	.45	.44
18.6500	.44	.44	.44	.43	.43
18.9000	.43	.42	.42	.42	.41
19.1500	.41	.41	.40	.40	.40
19.4000	.39	.39	.39	.39	.38
19.6500	.38	.38	.37	.37	.37
19.9000	.36	.36	.36	.35	.35
20.1500	.35	.35	.34	.34	.34
20.4000	.34	.33	.33	.33	.33
20.6500	.33	.33	.33	.33	.33
20.9000	.33	.33	.33	.33	.32
21.1500	.32	.32	.32	.32	.32
21.4000	.32	.32	.32	.32	.32
21.6500	.32	.32	.32	.32	.32
21.9000	.31	.31	.31	.31	.31
22.1500	.31	.31	.31	.31	.31
22.4000	.31	.31	.31	.31	.31
22.6500	.31	.31	.30	.30	.30
22.9000	.30	.30	.30	.30	.30
23.1500	.30	.30	.30	.30	.30
23.4000	.30	.30	.30	.29	.29
23.6500	.29	.29	.29	.29	.29
23.9000	.29	.29	.29	.29	.28
24.1500	.27	.25	.21	.17	.13
24.4000	.10	.07	.05	.04	.03
24.6500	.02	.01	.01	.01	.01
24.9000	.00	.00	.00	.00	

LEVEL POOL ROUTING SUMMARY

HYG Dir = H:\HAESTAD\ppkw\b7004\
Inflow HYG file = NONE STORED - POND IN 25year
Outflow HYG file = NONE STORED - POND OUT 25year

Pond Node Data = POND
Pond Volume Data = POND
Pond Outlet Data = Outlet 2

No Infiltration

INITIAL CONDITIONS

Starting WS Elev	= 500.43	ft
Starting Volume	= 0	cu.ft
Starting Outflow	= .00	cfs
Starting Infiltr.	= .00	cfs
Starting Total Qout	= .00	cfs
Time Increment	= .0500	hrs

INFLOW/OUTFLOW HYDROGRAPH SUMMARY

Peak Inflow	= 32.01	cfs	at	12.1000 hrs
Peak Outflow	= 10.18	cfs	at	12.5000 hrs
Peak Elevation	= 505.37	ft		
Peak Storage	= 38453	cu.ft		

MASS BALANCE (cu.ft)

+ Initial Vol	=	0
+ HYG Vol IN	=	121251
- Infiltration	=	0
- HYG Vol OUT	=	121251
- Retained Vol	=	0
Unrouted Vol	= -	cu.ft (.000% of Inflow Volume)

POND ROUTED TOTAL OUTFLOW HYG...
HYG file =
HYG ID = POND OUT
HYG Tag = 25year

Peak Discharge =	10.18 cfs
Time to Peak =	12.5000 hrs
HYG Volume =	121251 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
4.8500	.00	.00	.00	.00	.01
5.1000	.01	.01	.01	.02	.02
5.3500	.03	.03	.03	.04	.04
5.6000	.05	.05	.05	.06	.06
5.8500	.07	.07	.08	.08	.08
6.1000	.09	.09	.10	.10	.11
6.3500	.11	.12	.12	.13	.13
6.6000	.14	.14	.15	.15	.16
6.8500	.16	.17	.17	.18	.18
7.1000	.19	.19	.20	.20	.21
7.3500	.21	.22	.23	.23	.24
7.6000	.24	.25	.25	.26	.26
7.8500	.27	.27	.28	.28	.29
8.1000	.30	.30	.31	.32	.32
8.3500	.33	.34	.35	.36	.37
8.6000	.39	.40	.41	.43	.44
8.8500	.45	.47	.48	.50	.51
9.1000	.52	.54	.55	.56	.58
9.3500	.59	.60	.61	.62	.63
9.6000	.64	.65	.66	.67	.68
9.8500	.70	.71	.73	.75	.77
10.1000	.79	.81	.84	.86	.89
10.3500	.91	.94	.97	1.01	1.04
10.6000	1.08	1.12	1.16	1.20	1.25
10.8500	1.29	1.33	1.38	1.44	1.49
11.1000	1.55	1.62	1.69	1.76	1.83
11.3500	1.91	2.00	2.10	2.21	2.32
11.6000	2.46	2.66	2.92	3.28	3.60
11.8500	3.98	4.45	4.98	5.54	6.10
12.1000	6.60	7.04	7.46	8.20	8.96
12.3500	9.55	9.92	10.12	10.18	10.14
12.6000	10.03	9.86	9.64	9.41	9.15
12.8500	8.89	8.64	8.40	8.18	7.97

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
13.1000	7.78	7.62	7.47	7.37	7.27
13.3500	7.19	7.12	7.04	6.97	6.89
13.6000	6.81	6.73	6.65	6.57	6.48
13.8500	6.40	6.31	6.22	6.12	6.03
14.1000	5.93	5.83	5.72	5.62	5.51
14.3500	5.40	5.29	5.18	5.06	4.94
14.6000	4.82	4.70	4.57	4.44	4.31
14.8500	4.18	4.05	3.92	3.78	3.64
15.1000	3.49	3.33	3.14	2.90	2.68
15.3500	2.45	2.26	2.06	1.90	1.77
15.6000	1.64	1.53	1.44	1.37	1.32
15.8500	1.28	1.23	1.20	1.17	1.14
16.1000	1.12	1.10	1.08	1.07	1.05
16.3500	1.04	1.03	1.02	1.01	1.00
16.6000	.99	.99	.98	.97	.97
16.8500	.96	.95	.95	.94	.94
17.1000	.93	.93	.92	.92	.91
17.3500	.91	.90	.90	.89	.88
17.6000	.88	.87	.87	.86	.86
17.8500	.85	.85	.84	.83	.83
18.1000	.82	.82	.81	.81	.80
18.3500	.80	.79	.78	.78	.77
18.6000	.77	.76	.76	.75	.75
18.8500	.74	.74	.73	.72	.72
19.1000	.71	.71	.70	.70	.69
19.3500	.69	.68	.68	.67	.67
19.6000	.66	.65	.65	.64	.64
19.8500	.63	.63	.62	.62	.61
20.1000	.61	.60	.60	.59	.59
20.3500	.58	.58	.58	.57	.57
20.6000	.57	.57	.57	.57	.56
20.8500	.56	.56	.56	.56	.56
21.1000	.56	.56	.55	.55	.55
21.3500	.55	.55	.55	.55	.55
21.6000	.55	.54	.54	.54	.54
21.8500	.54	.54	.54	.54	.54
22.1000	.54	.53	.53	.53	.53
22.3500	.53	.53	.53	.53	.53
22.6000	.52	.52	.52	.52	.52
22.8500	.52	.52	.52	.52	.52
23.1000	.51	.51	.51	.51	.51
23.3500	.51	.51	.51	.51	.50
23.6000	.50	.50	.50	.50	.50
23.8500	.50	.50	.50	.49	.49
24.1000	.48	.46	.42	.37	.31
24.3500	.25	.18	.13	.09	.07
24.6000	.05	.03	.02	.02	.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
24.8500	.01	.01	.00	.00	.00
25.1000	.00				

DIVERTED HYDROGRAPH...
HYG file =
HYG ID = PR 10
HYG Tag = 15

Peak Discharge =	9.04 cfs
Time to Peak =	12.5000 hrs
HYG Volume =	111339 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
5.1500	.00	.00	.00	.01	.01
5.4000	.01	.01	.02	.02	.02
5.6500	.03	.03	.04	.04	.04
5.9000	.05	.05	.05	.06	.06
6.1500	.07	.07	.07	.08	.08
6.4000	.09	.09	.10	.10	.11
6.6500	.11	.11	.12	.12	.13
6.9000	.13	.14	.14	.15	.15
7.1500	.16	.16	.17	.17	.18
7.4000	.18	.19	.19	.20	.20
7.6500	.21	.21	.22	.22	.23
7.9000	.23	.24	.24	.24	.25
8.1500	.26	.26	.27	.27	.28
8.4000	.29	.30	.31	.32	.33
8.6500	.34	.35	.37	.38	.39
8.9000	.40	.42	.43	.44	.46
9.1500	.47	.48	.50	.51	.52
9.4000	.53	.53	.54	.55	.56
9.6500	.57	.58	.59	.60	.61
9.9000	.62	.64	.66	.68	.70
10.1500	.72	.74	.77	.79	.82
10.4000	.85	.87	.90	.93	.96
10.6500	1.00	1.03	1.07	1.11	1.16
10.9000	1.20	1.25	1.30	1.34	1.40
11.1500	1.45	1.51	1.58	1.66	1.74
11.4000	1.82	1.91	2.01	2.12	2.26
11.6500	2.44	2.71	3.06	3.43	3.82
11.9000	4.26	4.78	5.34	5.88	6.38
12.1500	6.80	7.15	7.51	8.02	8.46
12.4000	8.78	8.96	9.04	9.03	8.95
12.6500	8.82	8.67	8.49	8.29	8.12
12.9000	7.93	7.76	7.62	7.47	7.37
13.1500	7.28	7.20	7.13	7.05	6.98

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs				
13.4000	6.90	6.82	6.74	6.66	6.58
13.6500	6.50	6.41	6.32	6.23	6.14
13.9000	6.04	5.94	5.84	5.74	5.63
14.1500	5.52	5.42	5.30	5.19	5.07
14.4000	4.95	4.82	4.70	4.57	4.44
14.6500	4.31	4.18	4.04	3.91	3.76
14.9000	3.62	3.47	3.31	3.09	2.85
15.1500	2.61	2.39	2.19	1.99	1.83
15.4000	1.70	1.56	1.46	1.38	1.32
15.6500	1.27	1.22	1.18	1.15	1.12
15.9000	1.10	1.08	1.06	1.05	1.03
16.1500	1.02	1.00	.99	.98	.97
16.4000	.96	.95	.94	.93	.92
16.6500	.92	.91	.90	.90	.89
16.9000	.89	.88	.88	.87	.87
17.1500	.86	.86	.85	.85	.84
17.4000	.84	.83	.83	.82	.82
17.6500	.81	.80	.80	.79	.79
17.9000	.78	.78	.77	.77	.76
18.1500	.76	.75	.75	.74	.74
18.4000	.73	.73	.72	.72	.71
18.6500	.71	.70	.70	.69	.69
18.9000	.68	.68	.67	.67	.66
19.1500	.66	.65	.65	.64	.64
19.4000	.63	.63	.62	.62	.61
19.6500	.61	.60	.60	.59	.59
19.9000	.58	.58	.57	.57	.56
20.1500	.56	.55	.55	.55	.54
20.4000	.54	.54	.53	.53	.53
20.6500	.53	.53	.53	.52	.52
20.9000	.52	.52	.52	.52	.52
21.1500	.52	.52	.52	.51	.51
21.4000	.51	.51	.51	.51	.51
21.6500	.51	.51	.51	.50	.50
21.9000	.50	.50	.50	.50	.50
22.1500	.50	.50	.50	.49	.49
22.4000	.49	.49	.49	.49	.49
22.6500	.49	.49	.49	.48	.48
22.9000	.48	.48	.48	.48	.48
23.1500	.48	.48	.48	.47	.47
23.4000	.47	.47	.47	.47	.47
23.6500	.47	.47	.47	.46	.46
23.9000	.46	.46	.46	.46	.45
24.1500	.43	.39	.35	.29	.23
24.4000	.17	.12	.09	.06	.04
24.6500	.03	.02	.02	.01	.01
24.9000	.01	.00	.00	.00	.00

DIVERTED HYDROGRAPH...
HYG file =
HYG ID = PR 10
HYG Tag = 100yr

Peak Discharge =	15.29 cfs
Time to Peak =	12.4500 hrs
HYG Volume =	167208 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
3.9500	.00	.00	.00	.00	.01
4.2000	.01	.01	.02	.02	.03
4.4500	.03	.04	.04	.05	.05
4.7000	.06	.06	.07	.07	.08
4.9500	.09	.09	.10	.10	.11
5.2000	.12	.12	.13	.13	.14
5.4500	.15	.15	.16	.17	.17
5.7000	.18	.19	.19	.20	.21
5.9500	.21	.22	.23	.23	.24
6.2000	.24	.25	.26	.26	.27
6.4500	.28	.29	.29	.30	.31
6.7000	.31	.32	.33	.34	.34
6.9500	.35	.36	.37	.37	.38
7.2000	.39	.40	.40	.41	.42
7.4500	.43	.44	.44	.45	.46
7.7000	.47	.47	.48	.49	.50
7.9500	.50	.51	.52	.53	.53
8.2000	.54	.55	.56	.58	.59
8.4500	.60	.62	.64	.65	.67
8.7000	.69	.71	.73	.75	.77
8.9500	.80	.82	.84	.86	.88
9.2000	.90	.92	.94	.95	.97
9.4500	.98	1.00	1.01	1.02	1.04
9.7000	1.05	1.06	1.08	1.10	1.12
9.9500	1.14	1.17	1.20	1.23	1.26
10.2000	1.29	1.32	1.35	1.39	1.43
10.4500	1.48	1.52	1.57	1.62	1.68
10.7000	1.73	1.78	1.83	1.89	1.95
10.9500	2.02	2.09	2.17	2.25	2.32
11.2000	2.40	2.49	2.59	2.70	2.81
11.4500	2.92	3.05	3.20	3.32	3.47
11.7000	3.67	3.93	4.27	4.70	5.22
11.9500	5.79	6.38	6.96	7.72	9.51

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
12.2000	11.13	11.92	12.44	13.60	14.72
12.4500	15.29	15.22	14.74	14.20	13.52
12.7000	12.78	12.50	12.35	12.18	12.00
12.9500	11.80	11.60	11.38	11.15	10.90
13.2000	10.56	10.19	9.79	9.42	9.07
13.4500	8.75	8.46	8.20	7.97	7.77
13.7000	7.61	7.45	7.35	7.25	7.18
13.9500	7.10	7.03	6.95	6.88	6.80
14.2000	6.72	6.64	6.56	6.47	6.39
14.4500	6.30	6.21	6.12	6.03	5.93
14.7000	5.84	5.74	5.64	5.54	5.44
14.9500	5.34	5.23	5.12	5.01	4.90
15.2000	4.79	4.68	4.56	4.44	4.32
15.4500	4.20	4.08	3.96	3.84	3.71
15.7000	3.59	3.44	3.30	3.10	2.89
15.9500	2.69	2.49	2.31	2.15	2.00
16.2000	1.87	1.77	1.67	1.58	1.52
16.4500	1.46	1.42	1.39	1.36	1.34
16.7000	1.32	1.31	1.29	1.28	1.27
16.9500	1.26	1.25	1.24	1.23	1.22
17.2000	1.22	1.21	1.20	1.19	1.19
17.4500	1.18	1.17	1.16	1.16	1.15
17.7000	1.14	1.14	1.13	1.12	1.11
17.9500	1.11	1.10	1.09	1.09	1.08
18.2000	1.07	1.06	1.06	1.05	1.04
18.4500	1.04	1.03	1.02	1.01	1.01
18.7000	1.00	.99	.99	.98	.97
18.9500	.96	.96	.95	.94	.94
19.2000	.93	.92	.91	.91	.90
19.4500	.89	.89	.88	.87	.86
19.7000	.86	.85	.84	.83	.83
19.9500	.82	.81	.80	.80	.79
20.2000	.78	.78	.77	.77	.76
20.4500	.76	.75	.75	.75	.75
20.7000	.74	.74	.74	.74	.74
20.9500	.74	.73	.73	.73	.73
21.2000	.73	.73	.73	.72	.72
21.4500	.72	.72	.72	.72	.72
21.7000	.71	.71	.71	.71	.71
21.9500	.71	.71	.70	.70	.70
22.2000	.70	.70	.70	.70	.69
22.4500	.69	.69	.69	.69	.69
22.7000	.69	.68	.68	.68	.68
22.9500	.68	.68	.68	.67	.67
23.2000	.67	.67	.67	.67	.67
23.4500	.66	.66	.66	.66	.66
23.7000	.66	.66	.65	.65	.65

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
23.9500	.65	.65	.64	.63	.61
24.2000	.57	.51	.42	.34	.26
24.4500	.19	.13	.09	.07	.05
24.7000	.03	.02	.02	.01	.01
24.9500	.01	.00	.00	.00	.00

DIVERTED HYDROGRAPH...
HYG file =
HYG ID = PR 10
HYG Tag = 2year

Peak Discharge =	6.20 cfs
Time to Peak =	12.4500 hrs
HYG Volume =	63128 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
6.9000	.00	.00	.00	.00	.00
7.1500	.01	.01	.01	.01	.02
7.4000	.02	.02	.02	.03	.03
7.6500	.03	.03	.04	.04	.04
7.9000	.04	.05	.05	.05	.05
8.1500	.06	.06	.06	.07	.07
8.4000	.07	.08	.08	.09	.09
8.6500	.10	.10	.11	.11	.12
8.9000	.12	.13	.14	.14	.15
9.1500	.15	.16	.17	.17	.18
9.4000	.18	.19	.20	.20	.20
9.6500	.21	.22	.22	.23	.23
9.9000	.24	.25	.26	.27	.28
10.1500	.29	.30	.31	.33	.34
10.4000	.35	.37	.39	.40	.42
10.6500	.44	.46	.48	.50	.52
10.9000	.54	.57	.60	.63	.66
11.1500	.69	.73	.77	.81	.86
11.4000	.91	.96	1.02	1.09	1.19
11.6500	1.32	1.50	1.79	2.16	2.65
11.9000	3.23	3.66	4.10	4.56	4.99
12.1500	5.36	5.66	5.88	6.03	6.13
12.4000	6.18	6.20	6.20	6.18	6.14
12.6500	6.09	6.04	5.97	5.90	5.82
12.9000	5.73	5.64	5.54	5.45	5.34
13.1500	5.23	5.12	5.01	4.89	4.77
13.4000	4.64	4.52	4.38	4.25	4.11
13.6500	3.97	3.83	3.68	3.53	3.35
13.9000	3.14	2.87	2.61	2.35	2.11
14.1500	1.89	1.70	1.51	1.37	1.26
14.4000	1.15	1.07	1.02	.98	.95
14.6500	.92	.90	.89	.87	.86
14.9000	.85	.84	.82	.81	.81

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
15.1500	.80	.79	.78	.77	.76
15.4000	.75	.74	.74	.73	.72
15.6500	.71	.70	.69	.68	.68
15.9000	.67	.66	.65	.64	.63
16.1500	.63	.62	.61	.60	.60
16.4000	.59	.58	.58	.58	.57
16.6500	.57	.56	.56	.56	.55
16.9000	.55	.55	.54	.54	.54
17.1500	.54	.53	.53	.53	.52
17.4000	.52	.52	.51	.51	.51
17.6500	.50	.50	.50	.49	.49
17.9000	.49	.48	.48	.48	.48
18.1500	.47	.47	.47	.46	.46
18.4000	.46	.45	.45	.45	.44
18.6500	.44	.44	.44	.43	.43
18.9000	.43	.42	.42	.42	.41
19.1500	.41	.41	.40	.40	.40
19.4000	.39	.39	.39	.39	.38
19.6500	.38	.38	.37	.37	.37
19.9000	.36	.36	.36	.35	.35
20.1500	.35	.35	.34	.34	.34
20.4000	.34	.33	.33	.33	.33
20.6500	.33	.33	.33	.33	.33
20.9000	.33	.33	.33	.33	.32
21.1500	.32	.32	.32	.32	.32
21.4000	.32	.32	.32	.32	.32
21.6500	.32	.32	.32	.32	.32
21.9000	.31	.31	.31	.31	.31
22.1500	.31	.31	.31	.31	.31
22.4000	.31	.31	.31	.31	.31
22.6500	.31	.31	.30	.30	.30
22.9000	.30	.30	.30	.30	.30
23.1500	.30	.30	.30	.30	.30
23.4000	.30	.30	.30	.29	.29
23.6500	.29	.29	.29	.29	.29
23.9000	.29	.29	.29	.29	.28
24.1500	.27	.25	.21	.17	.13
24.4000	.10	.07	.05	.04	.03
24.6500	.02	.01	.01	.01	.01
24.9000	.00	.00	.00	.00	

DIVERTED HYDROGRAPH...
HYG file =
HYG ID = PR 10
HYG Tag = 25year

Peak Discharge =	10.18 cfs
Time to Peak =	12.5000 hrs
HYG Volume =	121251 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
4.9000	.00	.00	.00	.01	.01
5.1500	.01	.01	.02	.02	.03
5.4000	.03	.03	.04	.04	.05
5.6500	.05	.05	.06	.06	.07
5.9000	.07	.08	.08	.08	.09
6.1500	.09	.10	.10	.11	.11
6.4000	.12	.12	.13	.13	.14
6.6500	.14	.15	.15	.16	.16
6.9000	.17	.17	.18	.18	.19
7.1500	.19	.20	.20	.21	.21
7.4000	.22	.23	.23	.24	.24
7.6500	.25	.25	.26	.26	.27
7.9000	.27	.28	.28	.29	.30
8.1500	.30	.31	.32	.32	.33
8.4000	.34	.35	.36	.37	.39
8.6500	.40	.41	.43	.44	.45
8.9000	.47	.48	.50	.51	.52
9.1500	.54	.55	.56	.58	.59
9.4000	.60	.61	.62	.63	.64
9.6500	.65	.66	.67	.68	.70
9.9000	.71	.73	.75	.77	.79
10.1500	.81	.84	.86	.89	.91
10.4000	.94	.97	1.01	1.04	1.08
10.6500	1.12	1.16	1.20	1.25	1.29
10.9000	1.33	1.38	1.44	1.49	1.55
11.1500	1.62	1.69	1.76	1.83	1.91
11.4000	2.00	2.10	2.21	2.32	2.46
11.6500	2.66	2.92	3.28	3.60	3.98
11.9000	4.45	4.98	5.54	6.10	6.60
12.1500	7.04	7.46	8.20	8.96	9.55
12.4000	9.92	10.12	10.18	10.14	10.03
12.6500	9.86	9.64	9.41	9.15	8.89
12.9000	8.64	8.40	8.18	7.97	7.78

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
13.1500	7.62	7.47	7.37	7.27	7.19
13.4000	7.12	7.04	6.97	6.89	6.81
13.6500	6.73	6.65	6.57	6.48	6.40
13.9000	6.31	6.22	6.12	6.03	5.93
14.1500	5.83	5.72	5.62	5.51	5.40
14.4000	5.29	5.18	5.06	4.94	4.82
14.6500	4.70	4.57	4.44	4.31	4.18
14.9000	4.05	3.92	3.78	3.64	3.49
15.1500	3.33	3.14	2.90	2.68	2.45
15.4000	2.26	2.06	1.90	1.77	1.64
15.6500	1.53	1.44	1.37	1.32	1.28
15.9000	1.23	1.20	1.17	1.14	1.12
16.1500	1.10	1.08	1.07	1.05	1.04
16.4000	1.03	1.02	1.01	1.00	.99
16.6500	.99	.98	.97	.97	.96
16.9000	.95	.95	.94	.94	.93
17.1500	.93	.92	.92	.91	.91
17.4000	.90	.90	.89	.88	.88
17.6500	.87	.87	.86	.86	.85
17.9000	.85	.84	.83	.83	.82
18.1500	.82	.81	.81	.80	.80
18.4000	.79	.78	.78	.77	.77
18.6500	.76	.76	.75	.75	.74
18.9000	.74	.73	.72	.72	.71
19.1500	.71	.70	.70	.69	.69
19.4000	.68	.68	.67	.67	.66
19.6500	.65	.65	.64	.64	.63
19.9000	.63	.62	.62	.61	.61
20.1500	.60	.60	.59	.59	.58
20.4000	.58	.58	.57	.57	.57
20.6500	.57	.57	.57	.56	.56
20.9000	.56	.56	.56	.56	.56
21.1500	.56	.55	.55	.55	.55
21.4000	.55	.55	.55	.55	.55
21.6500	.54	.54	.54	.54	.54
21.9000	.54	.54	.54	.54	.54
22.1500	.53	.53	.53	.53	.53
22.4000	.53	.53	.53	.53	.52
22.6500	.52	.52	.52	.52	.52
22.9000	.52	.52	.52	.52	.51
23.1500	.51	.51	.51	.51	.51
23.4000	.51	.51	.51	.50	.50
23.6500	.50	.50	.50	.50	.50
23.9000	.50	.50	.49	.49	.48
24.1500	.46	.42	.37	.31	.25
24.4000	.18	.13	.09	.07	.05
24.6500	.03	.02	.02	.01	.01

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
24.9000	.01	.00	.00	.00	.00

Index of Starting Page Numbers for ID Names

[redacted]

POST-DEVELOPED

DETENTION BASIN AT SW CORNER

LOW-FLOW BLOCKED

Job File: H:\HAESTAD\ppkw\b7004\ELMER DETENTION DEV REV LF BLOCK 2.PPW
Rain Dir: H:\HAESTAD\ppkw\b7004\

==========
JOB TITLE
==========

Revisions to proposed detention basin to account for flows from new church and parking lot.

LOW FLOWS BLOCKED WITH 100-YEAR, 24-HOUR STORM

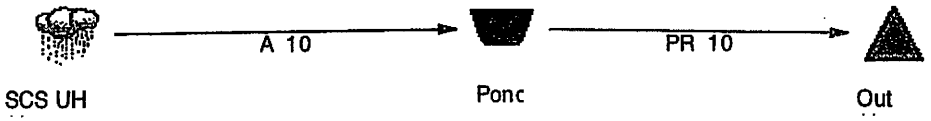
A 10
PR 10
SCS UH
Ponc
Out

Table of Contents

Table of Contents (continued)

Table of Contents (continued)

MASTER DESIGN STORM SUMMARY

Network Storm Collection: MSD

Return Event	Total Depth in	Rainfall Type	RNF ID
100yr	7.2000	Synthetic Curve	TypeII 24hr

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol cu.ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage cu.ft
*OUT 10	JCT	100	167201		12.3500	23.37		
POND IN	POND	100	167208		12.1000	43.62		
POND OUT	POND	100	167201		12.3500	23.37	508.11	80486
SCS UH 10	AREA	100	167208		12.1000	43.62		

NETWORK SUMMARY -- NODES
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = MSD

Storm Tag Name = 100yr

Data Type, File, ID = Synthetic Storm TypeII 24hr
Storm Frequency = 100 yr
Total Rainfall Depth= 7.2000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

	Node ID		Type	HYG Vol cu.ft	Trun.	Qpeak hrs	Qpeak cfs	Max WSEL ft
Outfall	OUT 10		JCT	167201		12.3500	23.37	
	POND	IN	POND	167208		12.1000	43.62	
	POND	OUT	POND	167201		12.3500	23.37	508.11
	SCS UH 10		AREA	167208		12.1000	43.62	

NETWORK SUMMARY -- LINKS
(UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = MSD

Storm Tag Name = 100yr

Data Type, File, ID = Synthetic Storm TypeII 24hr
Storm Frequency = 100 yr
Total Rainfall Depth= 7.2000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Link ID	Type		HYG Vol cu.ft	Trun.	Peak Time hrs	Peak Q cfs	End Points	
A 10	ADD	UN	167208		12.1000	43.62	SCS UH 10	
		DL	167208		12.1000	43.62		
		DN	167208		12.1000	43.62	POND	IN
PR 10	PONDrt	UN	167208		12.1000	43.62	POND	IN
PR 10			167201		12.3500	23.37	POND	OUT
		DL	167201		12.3500	23.37		
		DN	167201		12.3500	23.37	OUT 10	

NETWORK RUNOFF NODE SEQUENCE

Runoff Data	Apply to Node	Receiving Link
SCS UH SCS UH 10	Subarea SCS UH 10	Add Hyd SCS UH 10

NETWORK ROUTING SEQUENCE

Link Operation	UPstream Node	DNstream Node
Add Hyd A 10	Subarea SCS UH 10	Pond POND IN
POND ROUTE TOTAL OUTFLOW...		
Total Pond Outflow	Pond POND IN	Outflow POND OUT
SET POND ROUTING LINK TO TOTAL POND OUTFLOW...		
Outlet PR 10	Outflow POND OUT	Jct OUT 10

File.... H:\HAESTAD\ppkw\b7004\
Title... Revisions to proposed detention basin to account for
flows from new church and parking lot.

LOW FLOWS BLOCKED WITH 100-YEAR, 24-HOUR STORM

DESIGN STORMS SUMMARY

Design Storm File,ID = MSD

Storm Tag Name = 100yr

Data Type, File, ID = Synthetic Storm TypeII 24hr
Storm Frequency = 100 yr
Total Rainfall Depth= 7.2000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

DESIGN STORMS SUMMARY

Design Storm File,ID = MSD

Storm Tag Name = 100yr

Data Type, File, ID = Synthetic Storm TypeII 24hr
Storm Frequency = 100 yr
Total Rainfall Depth= 7.2000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

CUMULATIVE RAINFALL FRACTIONS
Output Time increment = .1000 hrs
Time on left represents time for first value in each row.

Time hrs					
.0000	.000	.001	.002	.003	.004
.5000	.005	.006	.007	.008	.009
1.0000	.011	.012	.013	.014	.015
1.5000	.016	.017	.018	.020	.021
2.0000	.022	.023	.024	.026	.027
2.5000	.028	.029	.031	.032	.033
3.0000	.035	.036	.037	.038	.040
3.5000	.041	.042	.044	.045	.047
4.0000	.048	.049	.051	.052	.054
4.5000	.055	.057	.058	.060	.061
5.0000	.063	.065	.066	.068	.070
5.5000	.071	.073	.075	.076	.078
6.0000	.080	.082	.084	.085	.087
6.5000	.089	.091	.093	.095	.097
7.0000	.099	.101	.103	.105	.107
7.5000	.109	.111	.113	.116	.118
8.0000	.120	.122	.125	.127	.130
8.5000	.132	.135	.138	.141	.144
9.0000	.147	.150	.153	.157	.160
9.5000	.163	.166	.170	.173	.177
10.0000	.181	.185	.189	.194	.199
10.5000	.204	.209	.215	.221	.228
11.0000	.235	.243	.251	.261	.271
11.5000	.283	.307	.354	.431	.568
12.0000	.663	.682	.699	.713	.725
12.5000	.735	.743	.751	.759	.766
13.0000	.772	.778	.784	.789	.794
13.5000	.799	.804	.808	.812	.816
14.0000	.820	.824	.827	.831	.834
14.5000	.838	.841	.844	.847	.850
15.0000	.854	.856	.859	.862	.865
15.5000	.868	.870	.873	.875	.878
16.0000	.880	.882	.885	.887	.889
16.5000	.891	.893	.895	.898	.900
17.0000	.902	.904	.906	.908	.910
17.5000	.912	.914	.915	.917	.919
18.0000	.921	.923	.925	.926	.928
18.5000	.930	.931	.933	.935	.936
19.0000	.938	.939	.941	.942	.944
19.5000	.945	.947	.948	.949	.951
20.0000	.952	.953	.955	.956	.957
20.5000	.958	.960	.961	.962	.964
21.0000	.965	.966	.967	.968	.970
21.5000	.971	.972	.973	.975	.976
22.0000	.977	.978	.979	.981	.982
22.5000	.983	.984	.985	.986	.988

CUMULATIVE RAINFALL FRACTIONS
Output Time increment = .1000 hrs
Time on left represents time for first value in each row.

Time hrs					
23.0000	.989	.990	.991	.992	.993
23.5000	.994	.996	.997	.998	.999
24.0000	1.000				

CUMULATIVE RAINFALL DEPTHS (in)
Output Time increment = .1000 hrs
Time on left represents time for first value in each row.

Time hrs					
.0000	.0000	.0073	.0145	.0220	.0294
.5000	.0369	.0445	.0522	.0599	.0678
1.0000	.0756	.0836	.0916	.0997	.1079
1.5000	.1161	.1244	.1328	.1413	.1498
2.0000	.1584	.1671	.1758	.1847	.1935
2.5000	.2025	.2115	.2207	.2298	.2391
3.0000	.2484	.2578	.2673	.2768	.2864
3.5000	.2961	.3059	.3157	.3256	.3356
4.0000	.3456	.3558	.3660	.3765	.3871
4.5000	.3978	.4087	.4197	.4308	.4422
5.0000	.4536	.4652	.4769	.4888	.5008
5.5000	.5130	.5253	.5378	.5504	.5631
6.0000	.5760	.5890	.6022	.6155	.6290
6.5000	.6426	.6564	.6702	.6843	.6985
7.0000	.7128	.7273	.7419	.7566	.7716
7.5000	.7866	.8018	.8171	.8326	.8482
8.0000	.8640	.8802	.8971	.9148	.9331
8.5000	.9522	.9720	.9925	1.0138	1.0357
9.0000	1.0584	1.0814	1.1045	1.1275	1.1506
9.5000	1.1736	1.1972	1.2220	1.2479	1.2750
10.0000	1.3032	1.3329	1.3643	1.3974	1.4322
10.5000	1.4688	1.5077	1.5494	1.5941	1.6416
11.0000	1.6920	1.7473	1.8095	1.8786	1.9547
11.5000	2.0376	2.2092	2.5514	3.1017	4.0886
12.0000	4.7736	4.9101	5.0302	5.1339	5.2212
12.5000	5.2920	5.3528	5.4098	5.4631	5.5126
13.0000	5.5584	5.6013	5.6422	5.6811	5.7180
13.5000	5.7528	5.7859	5.8176	5.8478	5.8766
14.0000	5.9040	5.9304	5.9563	5.9817	6.0065
14.5000	6.0309	6.0548	6.0782	6.1010	6.1234
15.0000	6.1452	6.1666	6.1874	6.2078	6.2276
15.5000	6.2469	6.2657	6.2841	6.3019	6.3192
16.0000	6.3360	6.3525	6.3688	6.3849	6.4008
16.5000	6.4166	6.4321	6.4475	6.4627	6.4778
17.0000	6.4926	6.5073	6.5218	6.5361	6.5502
17.5000	6.5642	6.5779	6.5915	6.6049	6.6182
18.0000	6.6312	6.6441	6.6568	6.6693	6.6816
18.5000	6.6938	6.7057	6.7175	6.7291	6.7406
19.0000	6.7518	6.7629	6.7738	6.7845	6.7950
19.5000	6.8054	6.8155	6.8255	6.8353	6.8450
20.0000	6.8544	6.8638	6.8730	6.8823	6.8916
20.5000	6.9008	6.9099	6.9191	6.9281	6.9372
21.0000	6.9462	6.9552	6.9641	6.9731	6.9819
21.5000	6.9908	6.9996	7.0083	7.0170	7.0258
22.0000	7.0344	7.0430	7.0516	7.0602	7.0687
22.5000	7.0772	7.0856	7.0940	7.1024	7.1107

CUMULATIVE RAINFALL DEPTHS (in)
Output Time increment = .1000 hrs
Time on left represents time for first value in each row.

Time hrs					
23.0000	7.1190	7.1273	7.1355	7.1437	7.1518
23.5000	7.1600	7.1680	7.1761	7.1841	7.1921
24.0000	7.2000				

File.... H:\HAESTAD\ppkw\b7004\ELMER DETENTION DEV REV LF BLOCK 2.PPW

TIME OF CONCENTRATION CALCULATOR

Segment #1: Tc: TR-55 Sheet

Mannings n	.2400	
Hydraulic Length	300.00	ft
2yr, 24hr P	3.5000	in
Slope	.050000	ft/ft
Avg.Velocity	.22	ft/sec

Segment #1 Time: .3796 hrs

Segment #2: Tc: TR-55 Channel

Flow Area	1.7670	sq.ft
Wetted Perimeter	4.71	ft
Hydraulic Radius	.38	ft
Slope	.035000	ft/ft
Mannings n	.0130	
Hydraulic Length	595.00	ft
Avg.Velocity	11.15	ft/sec

Segment #2 Time: .0148 hrs

Total Tc: .3944 hrs

File.... H:\HAESTAD\ppkw\b7004\ELMER DETENTION DEV REV LF BLOCK 2.PPW

Tc Equations used...

==== SCS TR-55 Sheet Flow ==========

Tc = (.007 * ((n * Lf)**0.8)) / ((P**.5) * (Sf**.4))

Where: Tc = Time of concentration, hrs
n = Mannings n
Lf = Flow length, ft
P = 2yr, 24hr Rain depth, inches
Sf = Slope, %

==== SCS Channel Flow ==========

R = Aq / Wp
V = (1.49 * (R**(2/3)) * (Sf**-0.5)) / n

Tc = (Lf / V) / (3600sec/hr)

Where: R = Hydraulic radius
Aq = Flow area, sq.ft.
Wp = Wetted perimeter, ft
V = Velocity, ft/sec
Sf = Slope, ft/ft
n = Mannings n
Tc = Time of concentration, hrs
Lf = Flow length, ft

File.... H:\HAESTAD\ppkw\b7004\ELMER DETENTION DEV REV LF BLOCK 2.PPW

RUNOFF CURVE NUMBER DATA

Soil/Surface Description	CN	Area acres	Impervious Adjustment %C	%UC	Adjusted CN
Multi Family Soil Group B	85	2.100			85.00
1/4 Acre Lots Soil Group B	75	.300			75.00
Pavement	98	3.000			98.00
Open Space Soil Group B	61	1.100			61.00
Impervious, roof/pave, Soil B	98	1.150			98.00
pervious, Soil Group B	61	.630			61.00
COMPOSITE AREA & WEIGHTED CN --->		8.280			86.14 (86)

SCS UNIT HYDROGRAPH METHOD
(Computational Notes)

DEFINITION OF TERMS: ----------

At = Total area (acres): At = Ai+Ap
Ai = Impervious area (acres)
Ap = Pervious area (acres)
CNi = Runoff curve number for impervious area
CNp = Runoff curve number for pervious area
fLoss = f loss constant infiltration (depth/time)
gKs = Saturated Hydraulic Conductivity (depth/time)
Md = Volumetric Moisture Deficit
Psi = Capillary Suction (length)
hK = Horton Infiltration Decay Rate (time^-1)
fo = Initial Infiltration Rate (depth/time)
fc = Ultimate(capacity)Infiltration Rate (depth/time)
Ia = Initial Abstraction (length)
dt = Computational increment (duration of unit excess rainfall)
Default dt is smallest value of 0.1333Tc, rtm, and th
(Smallest dt is then adjusted to match up with Tp)
UDdt = User specified override computational main time increment
(only used if UDdt is => .1333Tc)
D(t) = Point on distribution curve (fraction of P) for time step t

K = 2 / (1 + (Tr/Tp)): default K = 0.75: (for Tr/Tp = 1.67)
Ks = Hydrograph shape factor
= Unit Conversions * K:
= ((1hr/3600sec) * (1ft/12in) * ((5280ft)**2/sq.mi)) * K
Default Ks = 645.333 * 0.75 = 484

Lag = Lag time from center of excess runoff (dt) to Tp: Lag = 0.6Tc
P = Total precipitation depth, inches
Pa(t) = Accumulated rainfall at time step t
Pi(t) = Incremental rainfall at time step t
qp = Peak discharge (cfs) for 1in. runoff, for 1hr, for 1 sq.mi.
= (Ks * A * Q) / Tp (where Q = 1in. runoff, A=sq.mi.)
Qu(t) = Unit hydrograph ordinate (cfs) at time step t
Q(t) = Final hydrograph ordinate (cfs) at time step t
Rai(t)= Accumulated runoff (inches) at time step t for impervious area
Rap(t)= Accumulated runoff (inches) at time step t for pervious area
Rii(t)= Incremental runoff (inches) at time step t for impervious area
Rip(t)= Incremental runoff (inches) at time step t for pervious area
R(t) = Incremental weighted total runoff (inches)
Rtm = Time increment for rainfall table
Si = S for impervious area: Si = (1000/CNi) - 10
Sp = S for pervious area: Sp = (1000/CNp) - 10
t = Time step (row) number
Tc = Time of concentration
Tb = Time (hrs) of entire unit hydrograph: Tb = Tp + Tr
Tp = Time (hrs) to peak of a unit hydrograph: Tp = (dt/2) + Lag
Tr = Time (hrs) of receding limb of unit hydrograph: Tr = ratio of Tp

SCS UNIT HYDROGRAPH METHOD
(Computational Notes)

PRECIPITATION: ----------
Column (1): Time for time step t
Column (2): D(t) = Point on distribution curve for time step t
Column (3): Pi(t) = Pa(t) - Pa(t-1): Col.(4) - Preceding Col.(4)
Column (4): Pa(t) = D(t) x P: Col.(2) x P

PERVIOUS AREA RUNOFF (using SCS Runoff CN Method) ----------
Column (5): Rap(t) = Accumulated pervious runoff for time step t
If (Pa(t) is <= 0.2Sp) then use: Rap(t) = 0.0
If (Pa(t) is > 0.2Sp) then use:

Rap(t) = (Col.(4)-0.2Sp)**2 / (Col.(4)+0.8Sp)

Column (6): Rip(t) = Incremental pervious runoff for time step t
Rip(t) = Rap(t) - Rap(t-1)
Rip(t) = Col.(5) for current row - Col.(5) for preceding row.

IMPERVIOUS AREA RUNOFF ----------
Column (7 & 8)... Did not specify to use impervious areas.

INCREMENTAL WEIGHTED RUNOFF: ----------
Column (9): R(t) = (Ap/At) x Rip(t) + (Ai/At) x Rii(t)
R(t) = (Ap/At) x Col.(6) + (Ai/At) x Col.(8)

SCS UNIT HYDROGRAPH METHOD: ----------
Column (10): Q(t) is computed with the SCS unit hydrograph method
using R() and Qu().

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 100 year storm
Duration = 24.0000 hrs Rain Depth = 7.2000 in
Rain Dir = H:\HAESTAD\ppkw\b7004\
Rain File -ID = - TypeII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = H:\HAESTAD\ppkw\b7004\
HYG File - ID = - SCS UH 10 100yr
Tc = .3944 hrs
Drainage Area = 8.280 acres Runoff CN= 86

==========
Computational Time Increment = .05259 hrs
Computed Peak Time = 12.0960 hrs
Computed Peak Flow = 43.68 cfs

Time Increment for HYG File = .0500 hrs
Peak Time, Interpolated Output = 12.1000 hrs
Peak Flow, Interpolated Output = 43.62 cfs
==========

DRAINAGE AREA

ID:SCS UH 10
CN = 86
Area = 8.280 acres
S = 1.6279 in
0.2S = .3256 in

Cumulative Runoff

5.5582 in
167060 cu.ft

HYG Volume... 167208 cu.ft (area under HYG curve)

***** SCS UNIT HYDROGRAPH PARAMETERS *****

Time Concentration, Tc = .39444 hrs (ID: SCS UH 10)
Computational Incr, Tm = .05259 hrs = 0.20000 Tp

Unit Hyd. Shape Factor = 483.432 (37.46% under rising limb)
K = 483.43/645.333, K = .7491 (also, K = 2/(1+(Tr/Tp))
Receding/Rising, Tr/Tp = 1.6698 (solved from K = .7491)

Unit peak, qp = 23.78 cfs
Unit peak time Tp = .26296 hrs
Unit receding limb, Tr = 1.05183 hrs
Total unit time, Tb = 1.31479 hrs

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 100 year storm
Duration = 24.0000 hrs Rain Depth = 7.2000 in
Rain Dir = H:\HAESTAD\ppkw\b7004\
Rain File -ID = - TypeII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = H:\HAESTAD\ppkw\b7004\
HYG File - ID = - SCS UH 10 100yr
Tc = .3944 hrs
Drainage Area = 8.280 acres Runoff CN= 86
Calc.Increment= .05259 hrs Out.Incr.= .0500 hrs
HYG Volume = 167208 cu.ft

HYDROGRAPH ORDINATES (cfs)

Time hrs	Output Time increment = .0500 hrs Time on left represents time for first value in each row.				
3.9500	.00	.00	.00	.01	.01
4.2000	.01	.02	.02	.03	.03
4.4500	.04	.04	.05	.05	.06
4.7000	.06	.07	.07	.08	.09
4.9500	.09	.10	.10	.11	.12
5.2000	.12	.13	.13	.14	.15
5.4500	.15	.16	.17	.17	.18
5.7000	.19	.19	.20	.21	.21
5.9500	.22	.23	.23	.24	.25
6.2000	.25	.26	.27	.27	.28
6.4500	.29	.30	.30	.31	.32
6.7000	.33	.33	.34	.35	.36
6.9500	.36	.37	.38	.39	.39
7.2000	.40	.41	.42	.42	.43
7.4500	.44	.45	.45	.46	.47
7.7000	.48	.49	.49	.50	.51
7.9500	.52	.53	.53	.54	.55
8.2000	.56	.57	.59	.60	.62
8.4500	.64	.65	.67	.69	.71
8.7000	.73	.75	.77	.80	.82
8.9500	.84	.86	.88	.91	.93
9.2000	.95	.97	.98	1.00	1.01
9.4500	1.02	1.03	1.05	1.06	1.07
9.7000	1.08	1.10	1.12	1.15	1.18
9.9500	1.21	1.24	1.27	1.31	1.35
10.2000	1.39	1.43	1.48	1.53	1.58
10.4500	1.63	1.69	1.74	1.80	1.86
10.7000	1.93	2.00	2.08	2.16	2.24
10.9500	2.33	2.43	2.52	2.63	2.74
11.2000	2.87	3.01	3.18	3.36	3.56
11.4500	3.77	4.01	4.33	4.85	5.75
11.7000	7.22	9.43	12.58	16.90	22.48

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
11.9500	29.09	35.83	41.09	43.62	42.77
12.2000	38.95	33.58	28.07	23.13	19.17
12.4500	16.13	13.75	11.84	10.28	9.01
12.7000	7.97	7.13	6.45	5.91	5.46
12.9500	5.10	4.79	4.52	4.28	4.07
13.2000	3.89	3.74	3.61	3.49	3.39
13.4500	3.29	3.20	3.11	3.03	2.95
13.7000	2.87	2.80	2.73	2.66	2.60
13.9500	2.53	2.47	2.42	2.36	2.31
14.2000	2.26	2.21	2.17	2.14	2.11
14.4500	2.08	2.05	2.03	2.01	1.98
14.7000	1.96	1.94	1.92	1.90	1.88
14.9500	1.86	1.84	1.82	1.80	1.78
15.2000	1.76	1.74	1.72	1.70	1.68
15.4500	1.66	1.64	1.62	1.60	1.58
15.7000	1.56	1.54	1.52	1.50	1.48
15.9500	1.46	1.44	1.42	1.41	1.39
16.2000	1.37	1.35	1.34	1.33	1.32
16.4500	1.31	1.30	1.29	1.28	1.27
16.7000	1.27	1.26	1.25	1.24	1.24
16.9500	1.23	1.22	1.22	1.21	1.20
17.2000	1.19	1.19	1.18	1.17	1.17
17.4500	1.16	1.15	1.14	1.14	1.13
17.7000	1.12	1.12	1.11	1.10	1.10
17.9500	1.09	1.08	1.07	1.07	1.06
18.2000	1.05	1.05	1.04	1.03	1.02
18.4500	1.02	1.01	1.00	1.00	.99
18.7000	.98	.97	.97	.96	.95
18.9500	.95	.94	.93	.92	.92
19.2000	.91	.90	.90	.89	.88
19.4500	.87	.87	.86	.85	.85
19.7000	.84	.83	.82	.82	.81
19.9500	.80	.80	.79	.78	.77
20.2000	.77	.76	.76	.76	.75
20.4500	.75	.75	.75	.74	.74
20.7000	.74	.74	.74	.74	.73
20.9500	.73	.73	.73	.73	.73
21.2000	.73	.72	.72	.72	.72
21.4500	.72	.72	.72	.71	.71
21.7000	.71	.71	.71	.71	.71
21.9500	.70	.70	.70	.70	.70
22.2000	.70	.70	.69	.69	.69
22.4500	.69	.69	.69	.69	.68
22.7000	.68	.68	.68	.68	.68
22.9500	.68	.67	.67	.67	.67
23.2000	.67	.67	.67	.66	.66
23.4500	.66	.66	.66	.66	.66

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
23.7000	.65	.65	.65	.65	.65
23.9500	.65	.64	.63	.60	.55
24.2000	.47	.38	.29	.21	.16
24.4500	.11	.08	.06	.04	.03
24.7000	.02	.02	.01	.01	.01
24.9500	.00	.00	.00	.00	.00

SUMMARY FOR HYDROGRAPH ADDITION
at Node: OUT 10

HYG Directory: H:\HAESTAD\ppkw\b7004\

Upstream Link ID	Upstream Node ID	HYG file	HYG ID	HYG tag
PR 10	POND	IN	PR 10	100yr

INFLOWS TO: OUT 10

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	PR 10	100yr	167201	12.3500	23.37

TOTAL FLOW INTO: OUT 10

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	OUT 10	100yr	167201	12.3500	23.37

TOTAL NODE INFLOW...
HYG file =
HYG ID = OUT 10
HYG Tag = 100yr

Peak Discharge =	23.37 cfs
Time to Peak =	12.3500 hrs
HYG Volume =	167201 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
4.1000	.00	.00	.00	.00	.00
4.3500	.01	.01	.01	.01	.01
4.6000	.02	.02	.02	.02	.03
4.8500	.03	.04	.04	.04	.05
5.1000	.05	.06	.06	.06	.07
5.3500	.07	.08	.08	.09	.09
5.6000	.10	.11	.11	.12	.12
5.8500	.13	.13	.14	.15	.15
6.1000	.16	.16	.17	.18	.18
6.3500	.20	.21	.23	.24	.25
6.6000	.26	.27	.28	.29	.30
6.8500	.31	.31	.32	.33	.34
7.1000	.35	.35	.36	.37	.38
7.3500	.39	.39	.40	.41	.42
7.6000	.42	.43	.44	.45	.46
7.8500	.46	.47	.48	.49	.49
8.1000	.50	.51	.52	.53	.54
8.3500	.55	.56	.57	.59	.60
8.6000	.61	.63	.65	.66	.68
8.8500	.70	.72	.74	.76	.78
9.1000	.80	.82	.85	.87	.89
9.3500	.91	.92	.94	.96	.97
9.6000	.99	1.00	1.01	1.03	1.04
9.8500	1.06	1.08	1.10	1.12	1.15
10.1000	1.17	1.20	1.23	1.27	1.30
10.3500	1.34	1.38	1.42	1.46	1.51
10.6000	1.56	1.61	1.66	1.72	1.78
10.8500	1.84	1.91	1.98	2.05	2.13
11.1000	2.21	2.30	2.39	2.49	2.60
11.3500	2.75	2.95	3.14	3.35	3.57
11.6000	3.85	4.25	4.86	5.81	7.36
11.8500	9.80	13.24	17.79	21.49	21.83
12.1000	22.23	22.63	22.96	23.20	23.33

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
12.3500	23.37	23.33	23.23	23.09	22.90
12.6000	22.69	22.44	22.18	21.89	21.59
12.8500	18.87	14.52	11.15	9.10	7.63
13.1000	6.58	5.92	5.39	4.95	4.60
13.3500	4.31	4.08	3.87	3.70	3.55
13.6000	3.42	3.30	3.19	3.09	3.00
13.8500	2.92	2.84	2.76	2.69	2.64
14.1000	2.59	2.55	2.50	2.45	2.40
14.3500	2.36	2.31	2.27	2.23	2.20
14.6000	2.17	2.13	2.10	2.08	2.05
14.8500	2.02	2.00	1.98	1.95	1.93
15.1000	1.91	1.89	1.87	1.85	1.82
15.3500	1.80	1.78	1.76	1.74	1.72
15.6000	1.70	1.68	1.66	1.64	1.62
15.8500	1.60	1.58	1.56	1.54	1.52
16.1000	1.50	1.48	1.46	1.45	1.43
16.3500	1.41	1.39	1.38	1.37	1.35
16.6000	1.34	1.33	1.32	1.31	1.30
16.8500	1.29	1.28	1.27	1.26	1.26
17.1000	1.25	1.24	1.23	1.22	1.22
17.3500	1.21	1.20	1.20	1.19	1.18
17.6000	1.17	1.17	1.16	1.15	1.14
17.8500	1.14	1.13	1.12	1.12	1.11
18.1000	1.10	1.09	1.09	1.08	1.07
18.3500	1.07	1.06	1.05	1.05	1.04
18.6000	1.03	1.02	1.02	1.01	1.00
18.8500	1.00	.99	.98	.97	.97
19.1000	.96	.95	.95	.94	.93
19.3500	.92	.92	.91	.90	.90
19.6000	.89	.88	.87	.87	.86
19.8500	.85	.84	.84	.83	.82
20.1000	.82	.81	.80	.80	.79
20.3500	.78	.78	.77	.77	.76
20.6000	.76	.76	.75	.75	.75
20.8500	.75	.74	.74	.74	.74
21.1000	.74	.74	.73	.73	.73
21.3500	.73	.73	.73	.72	.72
21.6000	.72	.72	.72	.72	.72
21.8500	.71	.71	.71	.71	.71
22.1000	.71	.71	.70	.70	.70
22.3500	.70	.70	.70	.70	.69
22.6000	.69	.69	.69	.69	.69
22.8500	.69	.68	.68	.68	.68
23.1000	.68	.68	.68	.67	.67
23.3500	.67	.67	.67	.67	.67
23.6000	.66	.66	.66	.66	.66
23.8500	.66	.66	.65	.65	.65

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
24.1000	.64	.63	.61	.57	.53
24.3500	.48	.42	.37	.32	.28
24.6000	.23	.20	.18	.16	.15
24.8500	.14	.13	.12	.12	.11
25.1000	.10	.09	.09	.08	.07
25.3500	.07	.06	.06	.06	.05
25.6000	.05	.04	.04	.04	.04
25.8500	.03	.03	.03	.03	.02
26.1000	.02	.02	.02	.02	.02
26.3500	.02	.01	.01	.01	.01
26.6000	.01	.01	.01	.01	.01
26.8500	.01	.01	.01	.01	.01
27.1000	.01	.00	.00	.00	.00
27.3500	.00	.00	.00	.00	

TIME vs. ELEVATION (ft)

Time hrs	Output Time increment = .0500 hrs Time on left represents time for first value in each row.				
3.9500	506.25	506.25	506.25	506.25	506.25
4.2000	506.25	506.25	506.25	506.25	506.25
4.4500	506.25	506.25	506.25	506.25	506.25
4.7000	506.25	506.25	506.25	506.26	506.26
4.9500	506.26	506.26	506.26	506.26	506.26
5.2000	506.26	506.26	506.26	506.26	506.26
5.4500	506.26	506.26	506.27	506.27	506.27
5.7000	506.27	506.27	506.27	506.27	506.27
5.9500	506.27	506.27	506.28	506.28	506.28
6.2000	506.28	506.28	506.28	506.28	506.28
6.4500	506.28	506.28	506.28	506.28	506.29
6.7000	506.29	506.29	506.29	506.29	506.29
6.9500	506.29	506.29	506.29	506.29	506.29
7.2000	506.29	506.29	506.29	506.29	506.29
7.4500	506.29	506.29	506.29	506.29	506.30
7.7000	506.30	506.30	506.30	506.30	506.30
7.9500	506.30	506.30	506.30	506.30	506.30
8.2000	506.30	506.30	506.30	506.30	506.30
8.4500	506.30	506.30	506.31	506.31	506.31
8.7000	506.31	506.31	506.31	506.31	506.31
8.9500	506.31	506.31	506.32	506.32	506.32
9.2000	506.32	506.32	506.32	506.32	506.32
9.4500	506.33	506.33	506.33	506.33	506.33
9.7000	506.33	506.33	506.33	506.33	506.33
9.9500	506.34	506.34	506.34	506.34	506.34
10.2000	506.34	506.35	506.35	506.35	506.35
10.4500	506.35	506.36	506.36	506.36	506.37
10.7000	506.37	506.37	506.38	506.38	506.38
10.9500	506.39	506.39	506.40	506.40	506.41
11.2000	506.41	506.42	506.43	506.43	506.44
11.4500	506.45	506.46	506.46	506.47	506.49
11.7000	506.51	506.55	506.60	506.67	506.77
11.9500	506.89	507.04	507.23	507.45	507.68
12.2000	507.87	508.01	508.09	508.11	508.09
12.4500	508.03	507.95	507.84	507.71	507.57
12.7000	507.42	507.26	507.09	506.93	506.80
12.9500	506.72	506.65	506.61	506.58	506.55
13.2000	506.53	506.52	506.50	506.49	506.48
13.4500	506.48	506.47	506.46	506.46	506.45
13.7000	506.45	506.45	506.44	506.44	506.44
13.9500	506.43	506.43	506.43	506.43	506.42
14.2000	506.42	506.42	506.41	506.41	506.41
14.4500	506.41	506.40	506.40	506.40	506.40
14.7000	506.40	506.39	506.39	506.39	506.39
14.9500	506.39	506.39	506.39	506.38	506.38

TIME vs. ELEVATION (ft)

Time hrs	Output Time increment = .0500 hrs Time on left represents time for first value in each row.				
15.2000	506.38	506.38	506.38	506.38	506.38
15.4500	506.38	506.37	506.37	506.37	506.37
15.7000	506.37	506.37	506.37	506.37	506.36
15.9500	506.36	506.36	506.36	506.36	506.36
16.2000	506.36	506.36	506.36	506.35	506.35
16.4500	506.35	506.35	506.35	506.35	506.35
16.7000	506.35	506.35	506.35	506.35	506.35
16.9500	506.35	506.35	506.34	506.34	506.34
17.2000	506.34	506.34	506.34	506.34	506.34
17.4500	506.34	506.34	506.34	506.34	506.34
17.7000	506.34	506.34	506.34	506.34	506.34
17.9500	506.34	506.34	506.34	506.34	506.34
18.2000	506.33	506.33	506.33	506.33	506.33
18.4500	506.33	506.33	506.33	506.33	506.33
18.7000	506.33	506.33	506.33	506.33	506.33
18.9500	506.33	506.33	506.33	506.33	506.33
19.2000	506.33	506.33	506.33	506.32	506.32
19.4500	506.32	506.32	506.32	506.32	506.32
19.7000	506.32	506.32	506.32	506.32	506.32
19.9500	506.32	506.32	506.32	506.32	506.32
20.2000	506.32	506.32	506.32	506.32	506.32
20.4500	506.32	506.32	506.32	506.31	506.31
20.7000	506.31	506.31	506.31	506.31	506.31
20.9500	506.31	506.31	506.31	506.31	506.31
21.2000	506.31	506.31	506.31	506.31	506.31
21.4500	506.31	506.31	506.31	506.31	506.31
21.7000	506.31	506.31	506.31	506.31	506.31
21.9500	506.31	506.31	506.31	506.31	506.31
22.2000	506.31	506.31	506.31	506.31	506.31
22.4500	506.31	506.31	506.31	506.31	506.31
22.7000	506.31	506.31	506.31	506.31	506.31
22.9500	506.31	506.31	506.31	506.31	506.31
23.2000	506.31	506.31	506.31	506.31	506.31
23.4500	506.31	506.31	506.31	506.31	506.31
23.7000	506.31	506.31	506.31	506.31	506.31
23.9500	506.31	506.31	506.31	506.31	506.31
24.2000	506.31	506.30	506.30	506.30	506.29
24.4500	506.29	506.29	506.29	506.28	506.28
24.7000	506.28	506.28	506.28	506.27	506.27
24.9500	506.27	506.27	506.27	506.27	506.27
25.2000	506.26	506.26	506.26	506.26	506.26
25.4500	506.26	506.26	506.26	506.26	506.26
25.7000	506.26	506.26	506.26	506.26	506.26
25.9500	506.25	506.25	506.25	506.25	506.25
26.2000	506.25	506.25	506.25	506.25	506.25
26.4500	506.25	506.25	506.25	506.25	506.25

TIME vs. ELEVATION (ft)

Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
26.7000	506.25	506.25	506.25	506.25	506.25
26.9500	506.25	506.25	506.25	506.25	506.25
27.2000	506.25	506.25	506.25	506.25	506.25
27.4500	506.25	506.25			

TIME vs. VOLUME (cu.ft)

Time hrs	Output Time increment = .0500 hrs Time on left represents time for first value in each row.				
3.9500	50719	50719	50719	50720	50721
4.2000	50723	50725	50728	50731	50735
4.4500	50740	50745	50751	50757	50764
4.7000	50771	50778	50786	50795	50804
4.9500	50813	50822	50832	50843	50853
5.2000	50864	50875	50886	50898	50910
5.4500	50922	50934	50947	50960	50973
5.7000	50986	51000	51013	51027	51041
5.9500	51055	51070	51084	51099	51114
6.2000	51129	51144	51159	51173	51186
6.4500	51198	51208	51218	51227	51236
6.7000	51244	51252	51260	51267	51275
6.9500	51282	51289	51296	51303	51309
7.2000	51317	51323	51330	51337	51344
7.4500	51351	51357	51364	51371	51378
7.7000	51385	51392	51398	51406	51412
7.9500	51420	51426	51433	51440	51447
8.2000	51455	51463	51471	51480	51491
8.4500	51502	51513	51526	51540	51553
8.7000	51568	51584	51600	51616	51633
8.9500	51651	51669	51687	51706	51724
9.2000	51743	51762	51780	51797	51813
9.4500	51828	51843	51856	51869	51881
9.7000	51894	51906	51920	51935	51951
9.9500	51970	51990	52011	52035	52060
10.2000	52087	52116	52147	52180	52215
10.4500	52252	52291	52332	52375	52420
10.7000	52467	52517	52570	52626	52685
10.9500	52748	52814	52884	52957	53035
11.2000	53118	53209	53308	53415	53524
11.4500	53635	53751	53878	54036	54260
11.7000	54606	55146	55942	57050	58521
11.9500	60371	62679	65700	69359	73096
12.2000	76346	78719	80083	80486	80092
12.4500	79076	77599	75760	73647	71322
12.7000	68833	66226	63536	61008	59025
12.9500	57668	56733	56066	55581	55206
13.2000	54903	54659	54459	54296	54161
13.4500	54047	53950	53866	53791	53724
13.7000	53663	53607	53556	53508	53464
13.9500	53421	53381	53341	53300	53257
14.2000	53213	53170	53128	53087	53048
14.4500	53012	52978	52947	52917	52889
14.7000	52862	52838	52814	52791	52769
14.9500	52748	52727	52708	52688	52669

TIME vs. VOLUME (cu.ft)

Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
15.2000	52650	52631	52613	52594	52576
15.4500	52558	52540	52522	52504	52486
15.7000	52469	52451	52433	52415	52398
15.9500	52380	52362	52344	52327	52309
16.2000	52292	52275	52260	52244	52230
16.4500	52217	52204	52193	52182	52172
16.7000	52162	52153	52145	52137	52129
16.9500	52122	52114	52107	52100	52093
17.2000	52086	52080	52073	52066	52060
17.4500	52054	52047	52041	52034	52028
17.7000	52021	52015	52009	52002	51996
17.9500	51990	51983	51977	51971	51965
18.2000	51958	51952	51946	51939	51933
18.4500	51927	51921	51914	51908	51901
18.7000	51895	51889	51882	51876	51870
18.9500	51864	51857	51851	51845	51838
19.2000	51832	51825	51819	51813	51806
19.4500	51800	51794	51788	51781	51775
19.7000	51768	51762	51756	51749	51743
19.9500	51737	51731	51724	51718	51712
20.2000	51706	51700	51694	51689	51684
20.4500	51679	51675	51672	51669	51666
20.7000	51663	51661	51658	51656	51654
20.9500	51653	51651	51649	51648	51646
21.2000	51645	51643	51642	51640	51639
21.4500	51638	51636	51635	51634	51632
21.7000	51631	51630	51629	51627	51626
21.9500	51625	51623	51622	51621	51620
22.2000	51618	51617	51616	51615	51614
22.4500	51612	51611	51610	51609	51607
22.7000	51606	51605	51603	51602	51601
22.9500	51600	51598	51597	51596	51595
23.2000	51593	51592	51591	51590	51588
23.4500	51587	51586	51584	51584	51582
23.7000	51581	51579	51578	51577	51576
23.9500	51575	51573	51571	51565	51554
24.2000	51533	51503	51464	51419	51372
24.4500	51325	51280	51240	51204	51172
24.7000	51143	51117	51090	51065	51042
24.9500	51019	50998	50979	50960	50943
25.2000	50927	50912	50898	50885	50873
25.4500	50862	50851	50842	50833	50825
25.7000	50817	50810	50804	50797	50792
25.9500	50786	50781	50777	50773	50769
26.2000	50765	50762	50759	50756	50753
26.4500	50751	50748	50746	50744	50743

TIME vs. VOLUME (cu.ft)

Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
26.7000	50741	50739	50738	50736	50735
26.9500	50734	50733	50731	50731	50730
27.2000	50729	50728	50727	50727	50726
27.4500	50726	50725			

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Elevation (ft)	Planimeter (sq.in)	Area (sq.ft)	A1+A2+sqr(A1*A2) (sq.ft)	Volume (cu.ft)	Volume Sum (cu.ft)
500.43	-----	10	0	0	0
502.00	-----	6441	6705	3509	3509
504.00	-----	11602	26688	17792	21301
506.00	-----	14254	38716	25811	47111
508.00	-----	17191	47099	31399	78510
510.00	-----	20497	56459	37640	116150

POND VOLUME EQUATIONS

* Incremental volume computed by the Conic Method for Reservoir Volumes.

Volume = (1/3) * (EL2-EL1) * (Area1 + Area2 + sq.rt.(Area1*Area2))

where: EL1, EL2 = Lower and upper elevations of the increment
Area1,Area2 = Areas computed for EL1, EL2, respectively
Volume = Incremental volume between EL1 and EL2

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REQUESTED POND WS ELEVATIONS:

Min. Elev.= 500.43 ft
Increment = .15 ft
Max. Elev.= 510.00 ft

****
OUTLET CONNECTIVITY
****

---> Forward Flow Only (UpStream to DnStream)
<--- Reverse Flow Only (DnStream to UpStream)
<---> Forward and Reverse Both Allowed

Structure	No.		Outfall	E1, ft	E2, ft
Inlet Box	3	--->	4	506.250	510.000
Culvert-Circular	4	--->	TW	500.150	510.000

TW SETUP, DS Channel

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OUTLET STRUCTURE INPUT DATA

Structure ID	= 3	
Structure Type	= Inlet Box	
# of Openings	= 1	
Invert Elev.	= 506.25	ft
Orifice Area	= 5.8300	sq.ft
Orifice Coeff.	= .600	
Weir Length	= 11.67	ft
Weir Coeff.	= 3.000	
K, Submerged	= .000	
K, Reverse	= 1.000	
Kb,Barrel	= .000000	(per ft of full flow)
Barrel Length	= .00	ft
Mannings n	= .0000	

OUTLET STRUCTURE INPUT DATA

Structure ID = 4
Structure Type = Culvert-Circular

No. Barrels	=	1	
Barrel Diameter	=	1.5000	ft
Upstream Invert	=	500.15	ft
Dnstream Invert	=	499.64	ft
Horiz. Length	=	51.31	ft
Barrel Length	=	51.31	ft
Barrel Slope	=	.00994	ft/ft

OUTLET CONTROL DATA...

Mannings n	=	.0130	
Ke	=	.5000	(forward entrance loss)
Kb	=	.018213	(per ft of full flow)
Kr	=	.5000	(reverse entrance loss)
HW Convergence	=	.001	+/- ft

INLET CONTROL DATA...

Equation form	=	1	
Inlet Control K	=	.0098	
Inlet Control M	=	2.0000	
Inlet Control c	=	.03980	
Inlet Control Y	=	.6700	
T1 ratio (HW/D)	=	1.160	
T2 ratio (HW/D)	=	1.306	
Slope Factor	=	-.050	

Use unsubmerged inlet control Form 1 equ. below T1 elev.
Use submerged inlet control Form 1 equ. above T2 elev.

In transition zone between unsubmerged and submerged inlet control,
interpolate between flows at T1 & T2...
At T1 Elev = 501.89 ft ---> Flow = 7.58 cfs
At T2 Elev = 502.11 ft ---> Flow = 8.66 cfs

Structure ID = TW
Structure Type = TW SETUP, DS Channel

FREE OUTFALL CONDITIONS SPECIFIED

CONVERGENCE TOLERANCES...

Maximum Iterations=	30	
Min. TW tolerance =	.01	ft
Max. TW tolerance =	.01	ft
Min. HW tolerance =	.01	ft
Max. HW tolerance =	.01	ft
Min. Q tolerance =	.10	cfs
Max. Q tolerance =	.10	cfs

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = 3 (Inlet Box)

Upstream ID = (Pond Water Surface)
DNstream ID = 4 (Culvert-Circular)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
500.43	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
500.58	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
500.73	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
500.88	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
501.03	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
501.18	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
501.33	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
501.48	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
501.63	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
501.78	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
501.93	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
502.08	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
502.23	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
502.38	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
502.53	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
502.68	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
502.83	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
502.98	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = 3 (Inlet Box)

Upstream ID = (Pond Water Surface)
DNstream ID = 4 (Culvert-Circular)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
503.13	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
503.28	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
503.43	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
503.58	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
503.73	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
503.88	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
504.03	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
504.18	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
504.33	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
504.48	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
504.63	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
504.78	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
504.93	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
505.08	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
505.23	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
505.38	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
505.53	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
505.68	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = 3 (Inlet Box)

Upstream ID = (Pond Water Surface)
DNstream ID = 4 (Culvert-Circular)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
505.83	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
505.98	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
506.13	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
506.25	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
506.28	.18	506.28	Free	500.39	.000	.000	Free Outfall	
		Weir: H =.03						
506.43	2.67	506.43	Free	501.12	.000	.000	Free Outfall	
		Weir: H =.18						
506.58	6.64	506.58	Free	501.81	.000	.000	Free Outfall	
		Weir: H =.33						
506.73	11.64	506.73	Free	502.88	.000	.000	Free Outfall	
		Weir: H =.48						
506.88	17.51	506.88	Free	505.06	.000	.000	Free Outfall	
		Weir: H =.63						
507.03	21.47	507.03	507.03	507.03	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						
507.18	21.74	507.18	507.18	507.18	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						
507.33	22.01	507.33	507.33	507.33	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						
507.48	22.28	507.48	507.48	507.48	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						
507.63	22.54	507.63	507.63	507.63	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						
507.78	22.80	507.78	507.78	507.78	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						
507.93	23.06	507.93	507.93	507.93	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						
508.08	23.31	508.08	508.08	508.08	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						
508.23	23.56	508.23	508.23	508.23	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = 3 (Inlet Box)

Upstream ID = (Pond Water Surface)
DNstream ID = 4 (Culvert-Circular)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
508.38	23.81	508.38	508.38	508.38	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						
508.53	24.06	508.53	508.53	508.53	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						
508.68	24.30	508.68	508.68	508.68	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						
508.83	24.54	508.83	508.83	508.83	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						
508.98	24.78	508.98	508.98	508.98	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						
509.13	25.02	509.13	509.13	509.13	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						
509.28	25.25	509.28	509.28	509.28	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						
509.43	25.48	509.43	509.43	509.43	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						
509.58	25.71	509.58	509.58	509.58	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						
509.73	25.94	509.73	509.73	509.73	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						
509.88	26.17	509.88	509.88	509.88	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						
510.00	26.35	510.00	510.00	510.00	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = 4 (Culvert-Circular)

Mannings open channel maximum capacity: 11.26 cfs
UPstream ID = 3 (Inlet Box)
DNstream ID = TW (Pond Outfall)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
500.43	.00	500.15	Free	Free	.000	.000	Free Outfall	
500.58	.00	500.15	Free	Free	.000	.000	Free Outfall	
500.73	.00	500.15	Free	Free	.000	.000	Free Outfall	
500.88	.00	500.15	Free	Free	.000	.000	Free Outfall	
501.03	.00	500.15	Free	Free	.000	.000	Free Outfall	
501.18	.00	500.15	Free	Free	.000	.000	Free Outfall	
501.33	.00	500.15	Free	Free	.000	.000	Free Outfall	
501.48	.00	500.15	Free	Free	.000	.000	Free Outfall	
501.63	.00	500.15	Free	Free	.000	.000	Free Outfall	
501.78	.00	500.15	Free	Free	.000	.000	Free Outfall	
501.93	.00	500.15	Free	Free	.000	.000	Free Outfall	
502.08	.00	500.15	Free	Free	.000	.000	Free Outfall	
502.23	.00	500.15	Free	Free	.000	.000	Free Outfall	
502.38	.00	500.15	Free	Free	.000	.000	Free Outfall	
502.53	.00	500.15	Free	Free	.000	.000	Free Outfall	
502.68	.00	500.15	Free	Free	.000	.000	Free Outfall	
502.83	.00	500.15	Free	Free	.000	.000	Free Outfall	
502.98	.00	500.15	Free	Free	.000	.000	Free Outfall	

File.... H:\HAESTAD\ppkw\b7004\ELMER DETENTION DEV REV LF BLOCK 2.PPW

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = 4 (Culvert-Circular)

Mannings open channel maximum capacity: 11.26 cfs
UPstream ID = 3 (Inlet Box)
DNstream ID = TW (Pond Outfall)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
503.13	.00	500.15	Free	Free	.000	.000	Free Outfall	
503.28	.00	500.15	Free	Free	.000	.000	Free Outfall	
503.43	.00	500.15	Free	Free	.000	.000	Free Outfall	
503.58	.00	500.15	Free	Free	.000	.000	Free Outfall	
503.73	.00	500.15	Free	Free	.000	.000	Free Outfall	
503.88	.00	500.15	Free	Free	.000	.000	Free Outfall	
504.03	.00	500.15	Free	Free	.000	.000	Free Outfall	
504.18	.00	500.15	Free	Free	.000	.000	Free Outfall	
504.33	.00	500.15	Free	Free	.000	.000	Free Outfall	
504.48	.00	500.15	Free	Free	.000	.000	Free Outfall	
504.63	.00	500.15	Free	Free	.000	.000	Free Outfall	
504.78	.00	500.15	Free	Free	.000	.000	Free Outfall	
504.93	.00	500.15	Free	Free	.000	.000	Free Outfall	
505.08	.00	500.15	Free	Free	.000	.000	Free Outfall	
505.23	.00	500.15	Free	Free	.000	.000	Free Outfall	
505.38	.00	500.15	Free	Free	.000	.000	Free Outfall	
505.53	.00	500.15	Free	Free	.000	.000	Free Outfall	
505.68	.00	500.15	Free	Free	.000	.000	Free Outfall	

File.... H:\HAESTAD\ppkw\b7004\ELMER DETENTION DEV REV LF BLOCK 2.PPW

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = 4 (Culvert-Circular)

Mannings open channel maximum capacity: 11.26 cfs
UPstream ID = 3 (Inlet Box)
DNstream ID = TW (Pond Outfall)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
505.83	.00	500.15	Free	Free	.000	.000	Free Outfall	
505.98	.00	500.15	Free	Free	.000	.000	Free Outfall	
506.13	.00	500.15	Free	Free	.000	.000	Free Outfall	
506.25	.00	500.15	Free	Free	.000	.000	Free Outfall	
506.28	.18	500.39	Free	Free	.000	.000	Free Outfall	
		CRIT.DEPTH	CONTROL	Vh= .053ft	Dcr= .157ft		CRIT.DEPTH	
506.43	2.67	501.12	Free	Free	.000	.000	Free Outfall	
		CRIT.DEPTH	CONTROL	Vh= .233ft	Dcr= .620ft		CRIT.DEPTH	
506.58	6.64	501.81	Free	Free	.000	.000	Free Outfall	
		CRIT.DEPTH	CONTROL	Vh= .440ft	Dcr= .997ft		CRIT.DEPTH	
506.73	11.64	502.88	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...		Submerged:	HW =2.73			
506.88	17.51	505.06	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...		Submerged:	HW =4.91			
507.03	21.47	507.03	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...		Submerged:	HW =6.88			
507.18	21.74	507.18	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...		Submerged:	HW =7.03			
507.33	22.01	507.33	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...		Submerged:	HW =7.18			
507.48	22.28	507.48	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...		Submerged:	HW =7.33			
507.63	22.54	507.63	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...		Submerged:	HW =7.48			
507.78	22.80	507.78	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...		Submerged:	HW =7.63			
507.93	23.06	507.93	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...		Submerged:	HW =7.78			
508.08	23.31	508.08	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...		Submerged:	HW =7.93			
508.23	23.56	508.23	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...		Submerged:	HW =8.08			

File.... H:\HAESTAD\ppkw\b7004\ELMER DETENTION DEV REV LF BLOCK 2.PPW

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = 4 (Culvert-Circular)

Mannings open channel maximum capacity: 11.26 cfs
UPstream ID = 3 (Inlet Box)
DNstream ID = TW (Pond Outfall)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
508.38	23.81	508.38	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...		Submerged:	HW =8.23			
508.53	24.06	508.53	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...		Submerged:	HW =8.38			
508.68	24.30	508.68	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...		Submerged:	HW =8.53			
508.83	24.54	508.83	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...		Submerged:	HW =8.68			
508.98	24.78	508.98	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...		Submerged:	HW =8.83			
509.13	25.02	509.13	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...		Submerged:	HW =8.98			
509.28	25.25	509.28	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...		Submerged:	HW =9.13			
509.43	25.48	509.43	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...		Submerged:	HW =9.28			
509.58	25.71	509.58	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...		Submerged:	HW =9.43			
509.73	25.94	509.73	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...		Submerged:	HW =9.58			
509.88	26.17	509.88	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...		Submerged:	HW =9.73			
510.00	26.35	510.00	Free	Free	.000	.000	Free Outfall	
		INLET CONTROL...		Submerged:	HW =9.85			

File.... H:\HAESTAD\ppkw\b7004\ELMER DETENTION DEV REV LF BLOCK 2.PPW

***** COMPOSITE OUTFLOW SUMMARY ****

WS Elev, Total Q		Converge		Notes
Elev. ft	Q cfs	TW Elev ft	Error +/-ft	Contributing Structures
500.43	.00	Free Outfall		(no Q: 3,4)
500.58	.00	Free Outfall		(no Q: 3,4)
500.73	.00	Free Outfall		(no Q: 3,4)
500.88	.00	Free Outfall		(no Q: 3,4)
501.03	.00	Free Outfall		(no Q: 3,4)
501.18	.00	Free Outfall		(no Q: 3,4)
501.33	.00	Free Outfall		(no Q: 3,4)
501.48	.00	Free Outfall		(no Q: 3,4)
501.63	.00	Free Outfall		(no Q: 3,4)
501.78	.00	Free Outfall		(no Q: 3,4)
501.93	.00	Free Outfall		(no Q: 3,4)
502.08	.00	Free Outfall		(no Q: 3,4)
502.23	.00	Free Outfall		(no Q: 3,4)
502.38	.00	Free Outfall		(no Q: 3,4)
502.53	.00	Free Outfall		(no Q: 3,4)
502.68	.00	Free Outfall		(no Q: 3,4)
502.83	.00	Free Outfall		(no Q: 3,4)
502.98	.00	Free Outfall		(no Q: 3,4)
503.13	.00	Free Outfall		(no Q: 3,4)
503.28	.00	Free Outfall		(no Q: 3,4)
503.43	.00	Free Outfall		(no Q: 3,4)
503.58	.00	Free Outfall		(no Q: 3,4)
503.73	.00	Free Outfall		(no Q: 3,4)
503.88	.00	Free Outfall		(no Q: 3,4)
504.03	.00	Free Outfall		(no Q: 3,4)
504.18	.00	Free Outfall		(no Q: 3,4)
504.33	.00	Free Outfall		(no Q: 3,4)
504.48	.00	Free Outfall		(no Q: 3,4)
504.63	.00	Free Outfall		(no Q: 3,4)
504.78	.00	Free Outfall		(no Q: 3,4)
504.93	.00	Free Outfall		(no Q: 3,4)
505.08	.00	Free Outfall		(no Q: 3,4)
505.23	.00	Free Outfall		(no Q: 3,4)
505.38	.00	Free Outfall		(no Q: 3,4)
505.53	.00	Free Outfall		(no Q: 3,4)
505.68	.00	Free Outfall		(no Q: 3,4)
505.83	.00	Free Outfall		(no Q: 3,4)
505.98	.00	Free Outfall		(no Q: 3,4)

File.... H:\HAESTAD\ppkw\b7004\ELMER DETENTION DEV REV LF BLOCK 2.PPW

***** COMPOSITE OUTFLOW SUMMARY ****

WS Elev, Total Q		Converge		Notes
Elev. ft	Q cfs	TW Elev ft	Error +/-ft	Contributing Structures
506.13	.00	Free Outfall		(no Q: 3,4)
506.25	.00	Free Outfall		(no Q: 3,4)
506.28	.18	Free Outfall		3,4
506.43	2.67	Free Outfall		3,4
506.58	6.64	Free Outfall		3,4
506.73	11.64	Free Outfall		3,4
506.88	17.51	Free Outfall		3,4
507.03	21.47	Free Outfall		3,4
507.18	21.74	Free Outfall		3,4
507.33	22.01	Free Outfall		3,4
507.48	22.28	Free Outfall		3,4
507.63	22.54	Free Outfall		3,4
507.78	22.80	Free Outfall		3,4
507.93	23.06	Free Outfall		3,4
508.08	23.31	Free Outfall		3,4
508.23	23.56	Free Outfall		3,4
508.38	23.81	Free Outfall		3,4
508.53	24.06	Free Outfall		3,4
508.68	24.30	Free Outfall		3,4
508.83	24.54	Free Outfall		3,4
508.98	24.78	Free Outfall		3,4
509.13	25.02	Free Outfall		3,4
509.28	25.25	Free Outfall		3,4
509.43	25.48	Free Outfall		3,4
509.58	25.71	Free Outfall		3,4
509.73	25.94	Free Outfall		3,4
509.88	26.17	Free Outfall		3,4
510.00	26.35	Free Outfall		3,4

LEVEL POOL ROUTING DATA

HYG Dir = H:\HAESTAD\ppkw\b7004\
Inflow HYG file = NONE STORED - POND IN 100yr
Outflow HYG file = NONE STORED - POND OUT 100yr

Pond Node Data = POND
Pond Volume Data = POND
Pond Outlet Data = Outlet 2

No Infiltration

INITIAL CONDITIONS

Starting WS Elev	=	506.25 ft
Starting Volume	=	50719 cu.ft
Starting Outflow	=	.00 cfs
Starting Infiltr.	=	.00 cfs
Starting Total Qout	=	.00 cfs
Time Increment	=	.0500 hrs

Elevation ft	Outflow cfs	Storage cu.ft	Area sq.ft	Infilt. cfs	Q Total cfs	2S/t + O cfs
500.43	.00	0	10	.00	.00	.00
500.58	.00	8	111	.00	.00	.09
500.73	.00	39	320	.00	.00	.43
500.88	.00	109	638	.00	.00	1.21
501.03	.00	236	1064	.00	.00	2.62
501.18	.00	434	1599	.00	.00	4.82
501.33	.00	721	2243	.00	.00	8.01
501.48	.00	1112	2994	.00	.00	12.36
501.63	.00	1625	3855	.00	.00	18.05
501.78	.00	2274	4824	.00	.00	25.27
501.93	.00	3077	5901	.00	.00	34.19
502.08	.00	4031	6618	.00	.00	44.79
502.23	.00	5049	6958	.00	.00	56.10
502.38	.00	6119	7306	.00	.00	67.99
502.53	.00	7241	7662	.00	.00	80.46
502.68	.00	8418	8027	.00	.00	93.53
502.83	.00	9650	8400	.00	.00	107.22
502.98	.00	10938	8781	.00	.00	121.53
503.13	.00	12285	9172	.00	.00	136.50
503.28	.00	13690	9570	.00	.00	152.11
503.43	.00	15156	9977	.00	.00	168.40
503.58	.00	16684	10393	.00	.00	185.38
503.73	.00	18274	10817	.00	.00	203.05

LEVEL POOL ROUTING DATA

HYG Dir = H:\HAESTAD\ppkw\b7004\
Inflow HYG file = NONE STORED - POND IN 100yr
Outflow HYG file = NONE STORED - POND OUT 100yr

Pond Node Data = POND
Pond Volume Data = POND
Pond Outlet Data = Outlet 2

No Infiltration

INITIAL CONDITIONS

Starting WS Elev	=	506.25 ft
Starting Volume	=	50719 cu.ft
Starting Outflow	=	.00 cfs
Starting Infiltr.	=	.00 cfs
Starting Total Qout	=	.00 cfs
Time Increment	=	.0500 hrs

Elevation ft	Outflow cfs	Storage cu.ft	Area sq.ft	Infilt. cfs	Q Total cfs	2S/t + O cfs
503.88	.00	19930	11250	.00	.00	221.44
504.03	.00	21649	11640	.00	.00	240.55
504.18	.00	23409	11830	.00	.00	260.10
504.33	.00	25198	12021	.00	.00	279.98
504.48	.00	27015	12214	.00	.00	300.17
504.63	.00	28862	12408	.00	.00	320.69
504.78	.00	30738	12604	.00	.00	341.53
504.93	.00	32643	12801	.00	.00	362.70
505.08	.00	34578	13000	.00	.00	384.20
505.23	.00	36543	13201	.00	.00	406.04
505.38	.00	38539	13403	.00	.00	428.21
505.53	.00	40565	13606	.00	.00	450.72
505.68	.00	42621	13811	.00	.00	473.56
505.83	.00	44708	14018	.00	.00	496.75
505.98	.00	46826	14226	.00	.00	520.29
506.13	.00	48976	14437	.00	.00	544.18
506.25	.00	50719	14606	.00	.00	563.54
506.28	.18	51157	14649	.00	.18	568.60
506.43	2.67	53371	14862	.00	2.67	595.68
506.58	6.64	55616	15077	.00	6.64	624.59
506.73	11.64	57894	15294	.00	11.64	654.90
506.88	17.51	60205	15512	.00	17.51	686.45
507.03	21.47	62548	15732	.00	21.47	716.45

LEVEL POOL ROUTING DATA

HYG Dir = H:\HAESTAD\ppkw\b7004\
Inflow HYG file = NONE STORED - POND IN 100yr
Outflow HYG file = NONE STORED - POND OUT 100yr

Pond Node Data = POND
Pond Volume Data = POND
Pond Outlet Data = Outlet 2

No Infiltration

INITIAL CONDITIONS

Starting WS Elev	=	506.25 ft
Starting Volume	=	50719 cu.ft
Starting Outflow	=	.00 cfs
Starting Infiltr.	=	.00 cfs
Starting Total Qout	=	.00 cfs
Time Increment	=	.0500 hrs

Elevation ft	Outflow cfs	Storage cu.ft	Area sq.ft	Infilt. cfs	Q Total cfs	2S/t + O cfs
507.18	21.74	64924	15954	.00	21.74	743.12
507.33	22.01	67334	16176	.00	22.01	770.16
507.48	22.28	69777	16401	.00	22.28	797.58
507.63	22.54	72254	16627	.00	22.54	825.37
507.78	22.80	74765	16854	.00	22.80	853.53
507.93	23.06	77311	17084	.00	23.06	882.06
508.08	23.31	79890	17318	.00	23.31	910.98
508.23	23.56	82506	17556	.00	23.56	940.29
508.38	23.81	85158	17797	.00	23.81	970.01
508.53	24.06	87845	18039	.00	24.06	1000.12
508.68	24.30	90569	18282	.00	24.30	1030.63
508.83	24.54	93330	18528	.00	24.54	1061.54
508.98	24.78	96127	18775	.00	24.78	1092.86
509.13	25.02	98963	19023	.00	25.02	1124.60
509.28	25.25	101835	19273	.00	25.25	1156.75
509.43	25.48	104745	19525	.00	25.48	1189.31
509.58	25.71	107692	19779	.00	25.71	1222.29
509.73	25.94	110678	20034	.00	25.94	1255.70
509.88	26.17	113703	20290	.00	26.17	1289.53
510.00	26.35	116150	20497	.00	26.35	1316.90

SUMMARY FOR HYDROGRAPH ADDITION
at Node: POND IN

HYG Directory: H:\HAESTAD\ppkw\b7004\

Upstream Link ID	Upstream Node ID	HYG file	HYG ID	HYG tag
A 10	SCS UH 10		SCS UH 10	100yr

INFLOWS TO: POND IN

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	SCS UH 10	100yr	167208	12.1000	43.62

TOTAL FLOW INTO: POND IN

HYG file	HYG ID	HYG tag	Volume cu.ft	Peak Time hrs	Peak Flow cfs
	POND IN	100yr	167208	12.1000	43.62

TOTAL NODE INFLOW...
HYG file =
HYG ID = POND IN
HYG Tag = 100yr

Peak Discharge =	43.62 cfs
Time to Peak =	12.1000 hrs
HYG Volume =	167208 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
3.9500	.00	.00	.00	.01	.01
4.2000	.01	.02	.02	.03	.03
4.4500	.04	.04	.05	.05	.06
4.7000	.06	.07	.07	.08	.09
4.9500	.09	.10	.10	.11	.12
5.2000	.12	.13	.13	.14	.15
5.4500	.15	.16	.17	.17	.18
5.7000	.19	.19	.20	.21	.21
5.9500	.22	.23	.23	.24	.25
6.2000	.25	.26	.27	.27	.28
6.4500	.29	.30	.30	.31	.32
6.7000	.33	.33	.34	.35	.36
6.9500	.36	.37	.38	.39	.39
7.2000	.40	.41	.42	.42	.43
7.4500	.44	.45	.45	.46	.47
7.7000	.48	.49	.49	.50	.51
7.9500	.52	.53	.53	.54	.55
8.2000	.56	.57	.59	.60	.62
8.4500	.64	.65	.67	.69	.71
8.7000	.73	.75	.77	.80	.82
8.9500	.84	.86	.88	.91	.93
9.2000	.95	.97	.98	1.00	1.01
9.4500	1.02	1.03	1.05	1.06	1.07
9.7000	1.08	1.10	1.12	1.15	1.18
9.9500	1.21	1.24	1.27	1.31	1.35
10.2000	1.39	1.43	1.48	1.53	1.58
10.4500	1.63	1.69	1.74	1.80	1.86
10.7000	1.93	2.00	2.08	2.16	2.24
10.9500	2.33	2.43	2.52	2.63	2.74
11.2000	2.87	3.01	3.18	3.36	3.56
11.4500	3.77	4.01	4.33	4.85	5.75
11.7000	7.22	9.43	12.58	16.90	22.48
11.9500	29.09	35.83	41.09	43.62	42.77

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
12.2000	38.95	33.58	28.07	23.13	19.17
12.4500	16.13	13.75	11.84	10.28	9.01
12.7000	7.97	7.13	6.45	5.91	5.46
12.9500	5.10	4.79	4.52	4.28	4.07
13.2000	3.89	3.74	3.61	3.49	3.39
13.4500	3.29	3.20	3.11	3.03	2.95
13.7000	2.87	2.80	2.73	2.66	2.60
13.9500	2.53	2.47	2.42	2.36	2.31
14.2000	2.26	2.21	2.17	2.14	2.11
14.4500	2.08	2.05	2.03	2.01	1.98
14.7000	1.96	1.94	1.92	1.90	1.88
14.9500	1.86	1.84	1.82	1.80	1.78
15.2000	1.76	1.74	1.72	1.70	1.68
15.4500	1.66	1.64	1.62	1.60	1.58
15.7000	1.56	1.54	1.52	1.50	1.48
15.9500	1.46	1.44	1.42	1.41	1.39
16.2000	1.37	1.35	1.34	1.33	1.32
16.4500	1.31	1.30	1.29	1.28	1.27
16.7000	1.27	1.26	1.25	1.24	1.24
16.9500	1.23	1.22	1.22	1.21	1.20
17.2000	1.19	1.19	1.18	1.17	1.17
17.4500	1.16	1.15	1.14	1.14	1.13
17.7000	1.12	1.12	1.11	1.10	1.10
17.9500	1.09	1.08	1.07	1.07	1.06
18.2000	1.05	1.05	1.04	1.03	1.02
18.4500	1.02	1.01	1.00	1.00	.99
18.7000	.98	.97	.97	.96	.95
18.9500	.95	.94	.93	.92	.92
19.2000	.91	.90	.90	.89	.88
19.4500	.87	.87	.86	.85	.85
19.7000	.84	.83	.82	.82	.81
19.9500	.80	.80	.79	.78	.77
20.2000	.77	.76	.76	.76	.75
20.4500	.75	.75	.75	.74	.74
20.7000	.74	.74	.74	.74	.73
20.9500	.73	.73	.73	.73	.73
21.2000	.73	.72	.72	.72	.72
21.4500	.72	.72	.72	.71	.71
21.7000	.71	.71	.71	.71	.71
21.9500	.70	.70	.70	.70	.70
22.2000	.70	.70	.69	.69	.69
22.4500	.69	.69	.69	.69	.68
22.7000	.68	.68	.68	.68	.68
22.9500	.68	.67	.67	.67	.67
23.2000	.67	.67	.67	.66	.66
23.4500	.66	.66	.66	.66	.66
23.7000	.65	.65	.65	.65	.65

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
23.9500	.65	.64	.63	.60	.55
24.2000	.47	.38	.29	.21	.16
24.4500	.11	.08	.06	.04	.03
24.7000	.02	.02	.01	.01	.01
24.9500	.00	.00	.00	.00	.00

LEVEL POOL ROUTING SUMMARY

HYG Dir = H:\HAESTAD\ppkw\b7004\
Inflow HYG file = NONE STORED - POND IN 100yr
Outflow HYG file = NONE STORED - POND OUT 100yr

Pond Node Data = POND
Pond Volume Data = POND
Pond Outlet Data = Outlet 2

No Infiltration

INITIAL CONDITIONS

Starting WS Elev	=	506.25 ft
Starting Volume	=	50719 cu.ft
Starting Outflow	=	.00 cfs
Starting Infiltr.	=	.00 cfs
Starting Total Qout	=	.00 cfs
Time Increment	=	.0500 hrs

INFLOW/OUTFLOW HYDROGRAPH SUMMARY

Peak Inflow	=	43.62 cfs	at	12.1000 hrs
Peak Outflow	=	23.37 cfs	at	12.3500 hrs
Peak Elevation	=	508.11 ft		
Peak Storage	=	80486 cu.ft		

MASS BALANCE (cu.ft)

+ Initial Vol	=	50719
+ HYG Vol IN	=	167208
- Infiltration	=	0
- HYG Vol OUT	=	167201
- Retained Vol	=	50725
Unrouted Vol	= -	cu.ft (.000% of Inflow Volume)

POND ROUTED TOTAL OUTFLOW HYG...
HYG file =
HYG ID = POND OUT
HYG Tag = 100yr

Peak Discharge =	23.37 cfs
Time to Peak =	12.3500 hrs
HYG Volume =	167201 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
3.9500	.00	.00	.00	.00	.00
4.2000	.00	.00	.00	.01	.01
4.4500	.01	.01	.01	.02	.02
4.7000	.02	.02	.03	.03	.04
4.9500	.04	.04	.05	.05	.06
5.2000	.06	.06	.07	.07	.08
5.4500	.08	.09	.09	.10	.11
5.7000	.11	.12	.12	.13	.13
5.9500	.14	.15	.15	.16	.16
6.2000	.17	.18	.18	.20	.21
6.4500	.23	.24	.25	.26	.27
6.7000	.28	.29	.30	.31	.31
6.9500	.32	.33	.34	.35	.35
7.2000	.36	.37	.38	.39	.39
7.4500	.40	.41	.42	.42	.43
7.7000	.44	.45	.46	.46	.47
7.9500	.48	.49	.49	.50	.51
8.2000	.52	.53	.54	.55	.56
8.4500	.57	.59	.60	.61	.63
8.7000	.65	.66	.68	.70	.72
8.9500	.74	.76	.78	.80	.82
9.2000	.85	.87	.89	.91	.92
9.4500	.94	.96	.97	.99	1.00
9.7000	1.01	1.03	1.04	1.06	1.08
9.9500	1.10	1.12	1.15	1.17	1.20
10.2000	1.23	1.27	1.30	1.34	1.38
10.4500	1.42	1.46	1.51	1.56	1.61
10.7000	1.66	1.72	1.78	1.84	1.91
10.9500	1.98	2.05	2.13	2.21	2.30
11.2000	2.39	2.49	2.60	2.75	2.95
11.4500	3.14	3.35	3.57	3.85	4.25
11.7000	4.86	5.81	7.36	9.80	13.24
11.9500	17.79	21.49	21.83	22.23	22.63

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
12.2000	22.96	23.20	23.33	23.37	23.33
12.4500	23.23	23.09	22.90	22.69	22.44
12.7000	22.18	21.89	21.59	18.87	14.52
12.9500	11.15	9.10	7.63	6.58	5.92
13.2000	5.39	4.95	4.60	4.31	4.08
13.4500	3.87	3.70	3.55	3.42	3.30
13.7000	3.19	3.09	3.00	2.92	2.84
13.9500	2.76	2.69	2.64	2.59	2.55
14.2000	2.50	2.45	2.40	2.36	2.31
14.4500	2.27	2.23	2.20	2.17	2.13
14.7000	2.10	2.08	2.05	2.02	2.00
14.9500	1.98	1.95	1.93	1.91	1.89
15.2000	1.87	1.85	1.82	1.80	1.78
15.4500	1.76	1.74	1.72	1.70	1.68
15.7000	1.66	1.64	1.62	1.60	1.58
15.9500	1.56	1.54	1.52	1.50	1.48
16.2000	1.46	1.45	1.43	1.41	1.39
16.4500	1.38	1.37	1.35	1.34	1.33
16.7000	1.32	1.31	1.30	1.29	1.28
16.9500	1.27	1.26	1.26	1.25	1.24
17.2000	1.23	1.22	1.22	1.21	1.20
17.4500	1.20	1.19	1.18	1.17	1.17
17.7000	1.16	1.15	1.14	1.14	1.13
17.9500	1.12	1.12	1.11	1.10	1.09
18.2000	1.09	1.08	1.07	1.07	1.06
18.4500	1.05	1.05	1.04	1.03	1.02
18.7000	1.02	1.01	1.00	1.00	.99
18.9500	.98	.97	.97	.96	.95
19.2000	.95	.94	.93	.92	.92
19.4500	.91	.90	.90	.89	.88
19.7000	.87	.87	.86	.85	.84
19.9500	.84	.83	.82	.82	.81
20.2000	.80	.80	.79	.78	.78
20.4500	.77	.77	.76	.76	.76
20.7000	.75	.75	.75	.75	.74
20.9500	.74	.74	.74	.74	.74
21.2000	.73	.73	.73	.73	.73
21.4500	.73	.72	.72	.72	.72
21.7000	.72	.72	.72	.71	.71
21.9500	.71	.71	.71	.71	.71
22.2000	.70	.70	.70	.70	.70
22.4500	.70	.70	.69	.69	.69
22.7000	.69	.69	.69	.69	.68
22.9500	.68	.68	.68	.68	.68
23.2000	.68	.67	.67	.67	.67
23.4500	.67	.67	.67	.66	.66
23.7000	.66	.66	.66	.66	.66

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
23.9500	.65	.65	.65	.64	.63
24.2000	.61	.57	.53	.48	.42
24.4500	.37	.32	.28	.23	.20
24.7000	.18	.16	.15	.14	.13
24.9500	.12	.12	.11	.10	.09
25.2000	.09	.08	.07	.07	.06
25.4500	.06	.06	.05	.05	.04
25.7000	.04	.04	.04	.03	.03
25.9500	.03	.03	.02	.02	.02
26.2000	.02	.02	.02	.02	.01
26.4500	.01	.01	.01	.01	.01
26.7000	.01	.01	.01	.01	.01
26.9500	.01	.01	.01	.01	.00
27.2000	.00	.00	.00	.00	.00
27.4500	.00	.00			

DIVERTED HYDROGRAPH...
HYG file =
HYG ID = PR 10
HYG Tag = 100yr

Peak Discharge = 23.37 cfs
Time to Peak = 12.3500 hrs
HYG Volume = 167201 cu.ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
4.1000	.00	.00	.00	.00	.00
4.3500	.01	.01	.01	.01	.01
4.6000	.02	.02	.02	.02	.03
4.8500	.03	.04	.04	.04	.05
5.1000	.05	.06	.06	.06	.07
5.3500	.07	.08	.08	.09	.09
5.6000	.10	.11	.11	.12	.12
5.8500	.13	.13	.14	.15	.15
6.1000	.16	.16	.17	.18	.18
6.3500	.20	.21	.23	.24	.25
6.6000	.26	.27	.28	.29	.30
6.8500	.31	.31	.32	.33	.34
7.1000	.35	.35	.36	.37	.38
7.3500	.39	.39	.40	.41	.42
7.6000	.42	.43	.44	.45	.46
7.8500	.46	.47	.48	.49	.49
8.1000	.50	.51	.52	.53	.54
8.3500	.55	.56	.57	.59	.60
8.6000	.61	.63	.65	.66	.68
8.8500	.70	.72	.74	.76	.78
9.1000	.80	.82	.85	.87	.89
9.3500	.91	.92	.94	.96	.97
9.6000	.99	1.00	1.01	1.03	1.04
9.8500	1.06	1.08	1.10	1.12	1.15
10.1000	1.17	1.20	1.23	1.27	1.30
10.3500	1.34	1.38	1.42	1.46	1.51
10.6000	1.56	1.61	1.66	1.72	1.78
10.8500	1.84	1.91	1.98	2.05	2.13
11.1000	2.21	2.30	2.39	2.49	2.60
11.3500	2.75	2.95	3.14	3.35	3.57
11.6000	3.85	4.25	4.86	5.81	7.36
11.8500	9.80	13.24	17.79	21.49	21.83
12.1000	22.23	22.63	22.96	23.20	23.33

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
12.3500	23.37	23.33	23.23	23.09	22.90
12.6000	22.69	22.44	22.18	21.89	21.59
12.8500	18.87	14.52	11.15	9.10	7.63
13.1000	6.58	5.92	5.39	4.95	4.60
13.3500	4.31	4.08	3.87	3.70	3.55
13.6000	3.42	3.30	3.19	3.09	3.00
13.8500	2.92	2.84	2.76	2.69	2.64
14.1000	2.59	2.55	2.50	2.45	2.40
14.3500	2.36	2.31	2.27	2.23	2.20
14.6000	2.17	2.13	2.10	2.08	2.05
14.8500	2.02	2.00	1.98	1.95	1.93
15.1000	1.91	1.89	1.87	1.85	1.82
15.3500	1.80	1.78	1.76	1.74	1.72
15.6000	1.70	1.68	1.66	1.64	1.62
15.8500	1.60	1.58	1.56	1.54	1.52
16.1000	1.50	1.48	1.46	1.45	1.43
16.3500	1.41	1.39	1.38	1.37	1.35
16.6000	1.34	1.33	1.32	1.31	1.30
16.8500	1.29	1.28	1.27	1.26	1.26
17.1000	1.25	1.24	1.23	1.22	1.22
17.3500	1.21	1.20	1.20	1.19	1.18
17.6000	1.17	1.17	1.16	1.15	1.14
17.8500	1.14	1.13	1.12	1.12	1.11
18.1000	1.10	1.09	1.09	1.08	1.07
18.3500	1.07	1.06	1.05	1.05	1.04
18.6000	1.03	1.02	1.02	1.01	1.00
18.8500	1.00	.99	.98	.97	.97
19.1000	.96	.95	.95	.94	.93
19.3500	.92	.92	.91	.90	.90
19.6000	.89	.88	.87	.87	.86
19.8500	.85	.84	.84	.83	.82
20.1000	.82	.81	.80	.80	.79
20.3500	.78	.78	.77	.77	.76
20.6000	.76	.76	.75	.75	.75
20.8500	.75	.74	.74	.74	.74
21.1000	.74	.74	.73	.73	.73
21.3500	.73	.73	.73	.72	.72
21.6000	.72	.72	.72	.72	.72
21.8500	.71	.71	.71	.71	.71
22.1000	.71	.71	.70	.70	.70
22.3500	.70	.70	.70	.70	.69
22.6000	.69	.69	.69	.69	.69
22.8500	.69	.68	.68	.68	.68
23.1000	.68	.68	.68	.67	.67
23.3500	.67	.67	.67	.67	.67
23.6000	.66	.66	.66	.66	.66
23.8500	.66	.66	.65	.65	.65

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
24.1000	.64	.63	.61	.57	.53
24.3500	.48	.42	.37	.32	.28
24.6000	.23	.20	.18	.16	.15
24.8500	.14	.13	.12	.12	.11
25.1000	.10	.09	.09	.08	.07
25.3500	.07	.06	.06	.06	.05
25.6000	.05	.04	.04	.04	.04
25.8500	.03	.03	.03	.03	.02
26.1000	.02	.02	.02	.02	.02
26.3500	.02	.01	.01	.01	.01
26.6000	.01	.01	.01	.01	.01
26.8500	.01	.01	.01	.01	.01
27.1000	.01	.00	.00	.00	.00
27.3500	.00	.00	.00	.00	

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