

Pond "A"											
C _p = 0.80		C _p = 0.80		C _p = 0.80		C _p = 0.80		C _p = 0.80			
Area = 3.84		Area = 11.2 cfs		Area = 11.2 cfs		Area = 11.2 cfs		Area = 11.2 cfs			
Out fall = 11.18 cfs		Out fall = 11.18 cfs		Out fall = 11.18 cfs		Out fall = 11.18 cfs		Out fall = 11.18 cfs			
TIME (Min)	Q-25 (CFM)	Q-50 (CFM)	Q-100 (CFM)	Q-25 (CFM)	Q-50 (CFM)	Q-100 (CFM)	Q-25 (CFM)	Q-50 (CFM)	Q-100 (CFM)		
15	7.9	24.27	21.842	10.940	11.802	15	8.65	26.57	23.916	10.940	11.802
20	6.82	20.66	25.141	11.719	13.426	20	7.47	22.95	27.537	11.719	13.426
30	5.42	18.65	29.670	15.060	14.911	30	5.65	18.28	32.801	15.060	17.842
40	4.54	13.66	33.473	18.406	16.384	40	4.60	13.27	36.760	18.406	18.384
50	3.93	12.07	36.219	21.753	14.466	50	4.32	13.27	39.613	21.753	18.080
60	3.49	10.72	38.597	25.096	13.487	60	3.83	11.77	42.257	25.096	17.259
70	3.14	9.65	40.514	28.446	12.066	70	3.48	10.63	44.640	28.446	16.187
80	2.86	8.79	42.172	31.792	10.380	80	3.15	9.68	46.449	31.792	14.656
90	2.64	8.11	43.764	35.136	8.656	90	2.91	8.94	48.273	35.136	13.135
Max Detention Pond St		15.066		Cu Ft		Max Detention Pond St		18.384		Cu Ft	
Average Surface Area		3066.62		Sq. Ft.		Average Surface Area		3066.62		Sq. Ft.	
Pond Depth Required		4.91		Fl.		Pond Depth Required		5.99		Fl.	
Minimum Depth with Fr		5.91		Fl.		Minimum Depth with Fr		6.96		Fl.	
Q-25= 24.27		Q-50= 26.57		Q-100= 29.37		Q-25= 24.27		Q-50= 26.57		Q-100= 29.37	

Pond A Developed										Pond A Undeveloped									
Runoff Collect Point	Area No.	Slope	Drainage Area "A" (Acres)	Runoff coefficient "C"	Increase "CA"	Accum. "CA"	Time of Design Upset (min)	Storm Intensity "I" (in/hr)	Stormwater Runoff "Q" (cfs)	Runoff Collect Point	Area No.	Slope	Drainage Area "A" (Acres)	Runoff coefficient "C"	Increase "CA"	Accum. "CA"	Time of Design Upset (min)	Storm Intensity "I" (in/hr)	Stormwater Runoff "Q" (cfs)
A-1	2.09	0.8	1.872	0.35	0.732	20	100	9.8	16.30	A-1	2.09	0.8	1.872	0.35	0.732	20	100	9.8	6.07
A-2	1.09	0.8	0.872	0.35	0.362	20	100	8.3	3.17	A-2	1.09	0.8	0.872	0.35	0.362	20	100	8.3	3.17
A-3	0.66	0.8	0.536	0.35	0.231	20	100	8.3	1.92	A-3	0.66	0.8	0.536	0.35	0.231	20	100	8.3	1.92
Total	3.84								30.1	Total	3.84								11.18

Pond A design for 11.18 cfs

Pond "B"											
C _p = 0.80		C _p = 0.80		C _p = 0.80		C _p = 0.80		C _p = 0.80			
Area = 18.42		Area = 53.5 cfs		Area = 53.5 cfs		Area = 53.5 cfs		Area = 53.5 cfs			
Out fall = 63.6 cfs		Out fall = 63.6 cfs		Out fall = 63.6 cfs		Out fall = 63.6 cfs		Out fall = 63.6 cfs			
TIME (Min)	Q-25 (CFM)	Q-50 (CFM)	Q-100 (CFM)	Q-25 (CFM)	Q-50 (CFM)	Q-100 (CFM)	Q-25 (CFM)	Q-50 (CFM)	Q-100 (CFM)		
15	7.9	118.41	104.773	48.159	56.814	15	8.65	140.88	128.769	48.159	56.814
20	6.82	100.60	100.569	58.186	64.414	20	8.45	124.52	140.423	58.186	64.414
30	5.42	79.87	143.754	72.239	71.526	30	5.95	87.68	157.823	72.239	85.584
40	4.54	66.60	160.563	88.292	72.272	40	4.99	73.53	176.478	88.292	88.187
50	3.93	57.81	173.373	104.346	86.934	50	4.32	63.65	190.879	104.346	86.934
60	3.49	51.43	185.143	120.388	84.745	60	3.83	58.44	203.180	120.388	82.782
70	3.14	46.27	194.338	136.451	87.888	70	3.48	50.60	214.144	136.451	77.693
80	2.86	42.14	202.295	152.504	89.792	80	3.15	46.42	222.806	152.504	70.305
90	2.64	38.60	210.076	168.557	91.520	90	2.91	42.88	231.562	168.557	63.005
Max Detention Pond St		18.187		Cu Ft		Max Detention Pond St		24.021		Cu Ft	
Average Surface Area		2402.1		Sq. Ft.		Average Surface Area		2402.1		Sq. Ft.	
Pond Depth Required		3.67		Fl.		Pond Depth Required		4.67		Fl.	
Minimum Depth with Fr		4.61		Fl.		Minimum Depth with Fr		5.67		Fl.	
Q-25= 118.41		Q-50= 140.88		Q-100= 168.00		Q-25= 118.41		Q-50= 140.88		Q-100= 168.00	

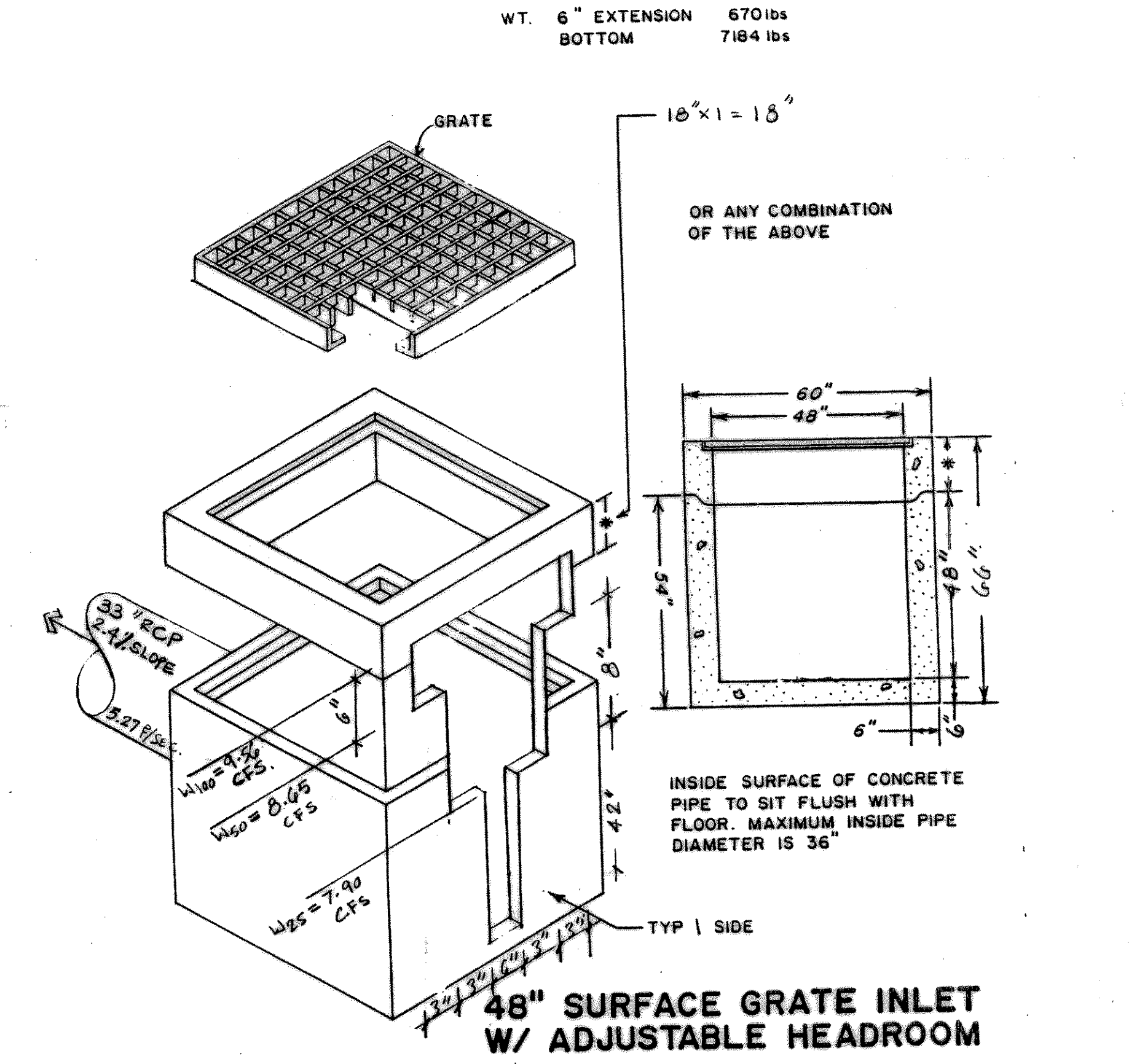
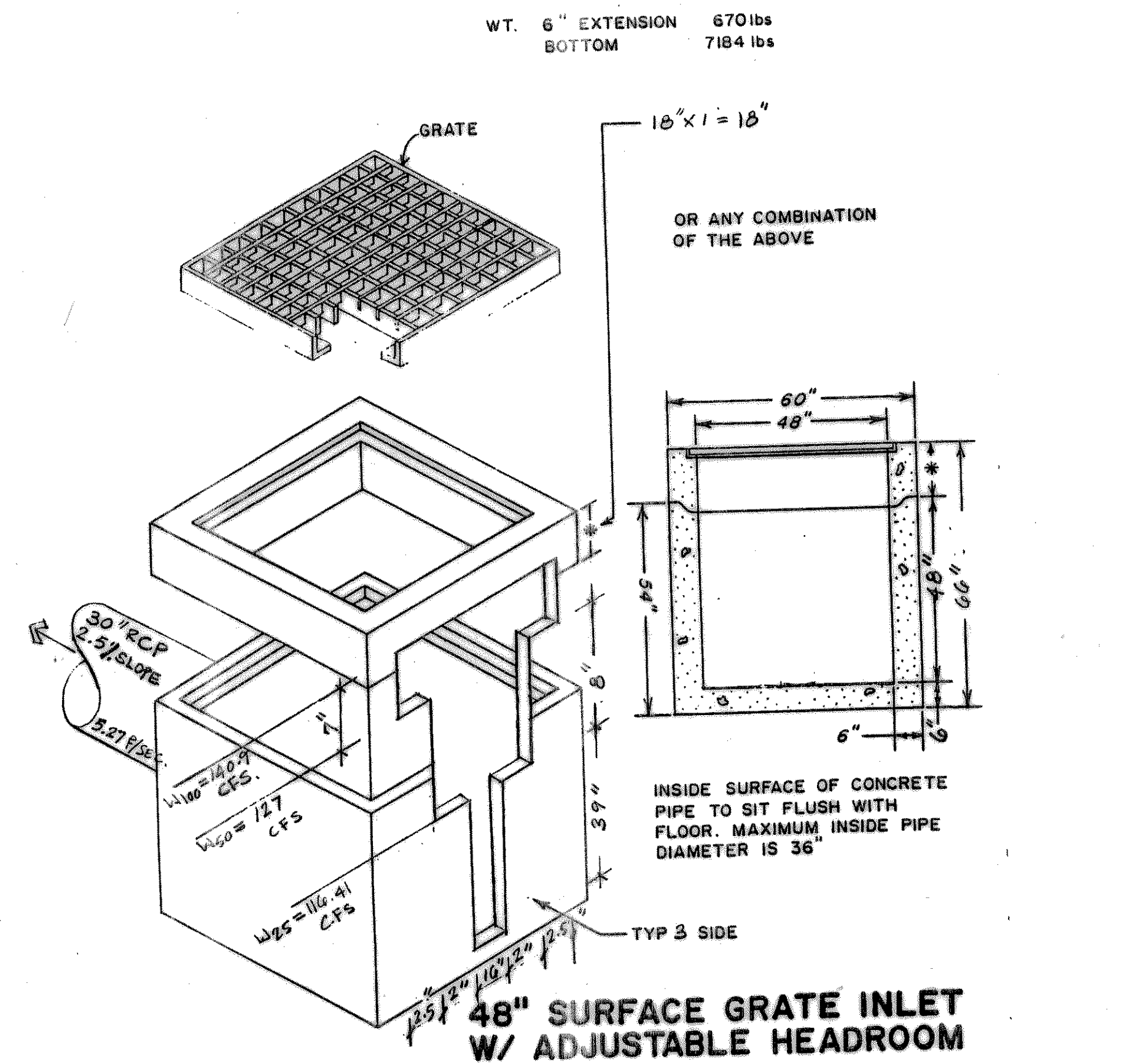
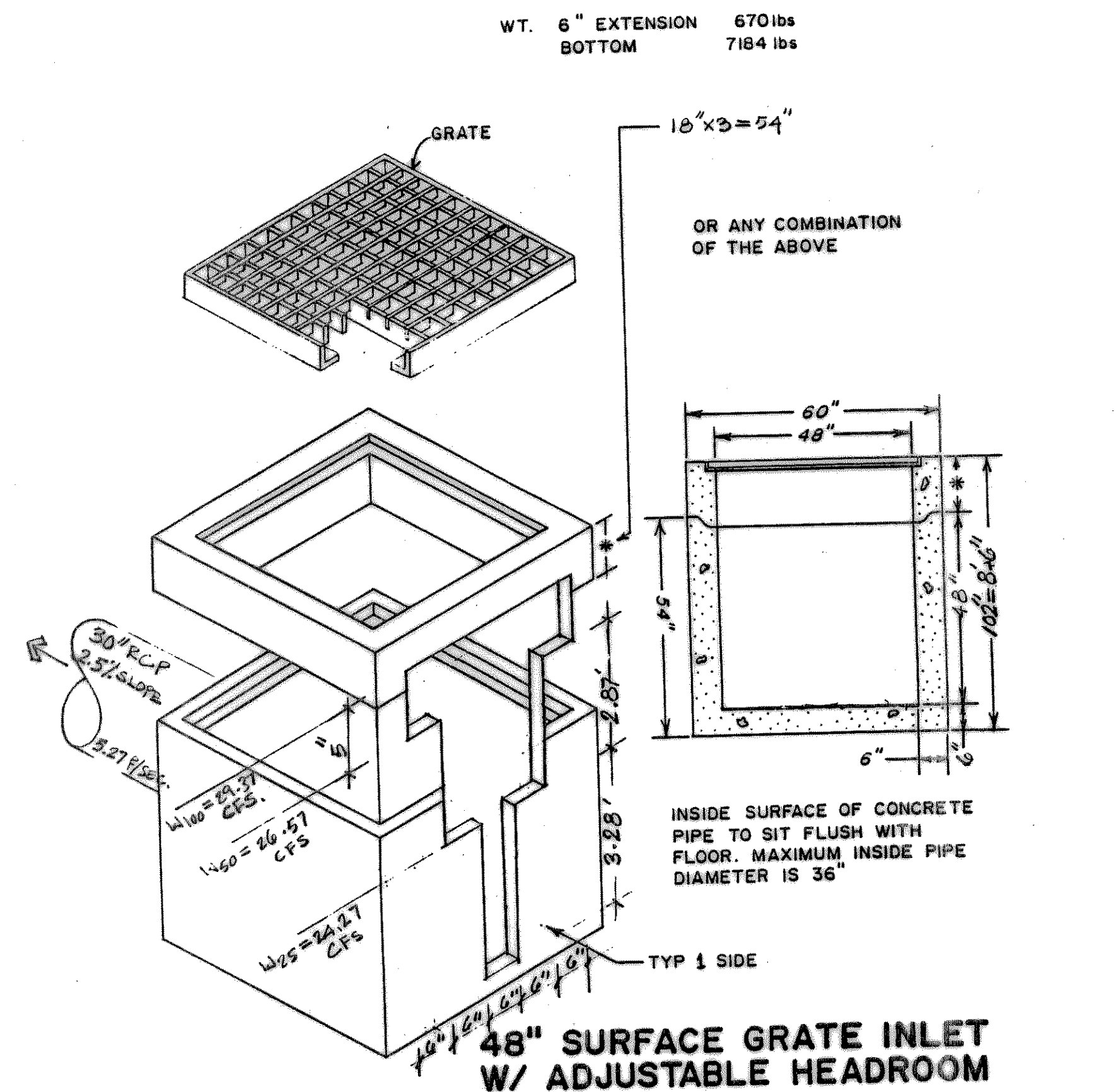
Pond B Developed										Pond B Undeveloped									
Runoff Collect Point	Area No.	Slope	Drainage Area "A" (Acres)	Runoff coefficient "C"	Increase "CA"	Accum. "CA"	Time of Design Upset (min)	Storm Intensity "I" (in/hr)	Stormwater Runoff "Q" (cfs)	Runoff Collect Point	Area No.	Slope	Drainage Area "A" (Acres)	Runoff coefficient "C"	Increase "CA"	Accum. "CA"	Time of Design Upset (min)	Storm Intensity "I" (in/hr)	Stormwater Runoff "Q" (cfs)
B-1	0.69	0.35	0.347	0.10	0.100	100	100	8.3	2.88	B-1	0.69	0.35	0.347	0.10	0.100	100	100	8.3	2.88
B-2	0.83	0.35	0.291	0.10	0.100	100	100	8.3	2.41	B-2	0.83	0.35	0.291	0.10	0.100	100	100	8.3	2.41
B-3	0.78	0.35	0.273	0.10	0.100	100	100	8.3	2.27	B-3	0.78	0.35	0.273	0.10	0.100	100	100	8.3	2.27
B-4	0.78	0.35	0.268	0.10	0.100	100	100	8.3	2.21	B-4	0.78	0.35	0.268	0.10	0.100	100	100	8.3	2.21
B-5	0.47	0.35	0.166	0.10	0.100	100	100	8.3	1.37	B-5	0.47	0.35	0.166	0.10	0.100	100	100	8.3	1.37
B-6	14.1	0.35	4.905	0.10	0.100	100	100	8.3	40.86	B-6	14.1	0.35	4.905	0.10	0.100	100	100	8.3	40.86
B-7	0.49	0.35	0.172	0.10	0.100	100	100	8.3	1.42	B-7	0.49	0.35	0.172	0.10	0.100	100	100	8.3	1.42
Total	18.42								63.6	Total	18.42								63.6

Pond B design for 63.6 cfs

Pond "C"											
C _p = 0.80		C _p = 0.80		C _p = 0.80		C _p = 0.80		C _p = 0.80			
Area = 9.09		Area = 26.4 cfs		Area = 26.4 cfs		Area = 26.4 cfs		Area = 26.4 cfs			
Out fall = 28.4 cfs		Out fall = 28.4 cfs		Out fall = 28.4 cfs		Out fall = 28.4 cfs		Out fall = 28.4 cfs			
TIME (Min)	Q-25 (CFM)	Q-50 (CFM)	Q-100 (CFM)	Q-25 (CFM)	Q-50 (CFM)	Q-100 (CFM)	Q-25 (CFM)	Q-50 (CFM)	Q-100 (CFM)		
15	7.90	57.4	51.704	23.766	27.938	15	8.65	62.9	56.613	23.766	27.938
20	6.82	46.6	56.514	27.727	31.787	20	7.47	54.3	65.186	27.727	31.787
30	5.42	38.4	70.948	36.649	35.297	30	5.95	43.3	77.860	36.649	42.234
40	4.54	33.0	79.236	43.571	35.655	40	4.99	36.3	87.086	43.571	43.519
50	4.32	31.4	84.245	51.493	42.753	50	4.32	31.4	94.245	51.493	42.753
60	3.49	25.4	91.365	59.415	40.852	60	3.83	27.9	100.266	59.415	40.852
70	3.14	22.9	96.933	67.336	38.342	70	3.48	25.2	105.877	67.336	38.342
80	2.86	20.8	99.830	75.258	34.684	80	3.15	22.9	109.953	75.258	34.684
90	2.64	19.2	103.670	83.180	31.092	90	2.91	21.2	114.272	83.180	31.092
Max Detention Pond St		35.668		Cu Ft		Max Detention Pond St		43.519		Cu Ft	
Average Surface Area		1200.6		Sq. Ft.		Average Surface Area		1200.6		Sq. Ft.	
Pond Depth Required		2.97		Fl.		Pond Depth Required		3.63		Fl.	
Minimum Depth with Fr		3.97		Fl.		Minimum Depth with Fr		4.63		Fl.	
Q-25= 57.4		Q-50= 62.9		Q-100= 68.5		Q-25= 57.4		Q-50= 62.9		Q-100= 68.5	

Pond C Developed										Pond C Undeveloped									
Runoff Collect Point	Area No.	Slope	Drainage Area "A" (Acres)	Runoff coefficient "C"	Increase "CA"	Accum. "CA"	Time of Design Upset (min)	Storm Intensity "I" (in/hr)	Stormwater Runoff "Q" (cfs)	Runoff Collect Point	Area No.	Slope	Drainage Area "A" (Acres)	Runoff coefficient "C"	Increase "CA"	Accum. "CA"	Time of Design Upset (min)	Storm Intensity "I" (in/hr)	Stormwater Runoff "Q" (cfs)
C-1	0.8	0.8	0.640	0.35	0.224	20	100	9.8	8.27	C-1	0.8	0.8	0.640	0.35	0.224	20	100	9.8	8.27
C-2	1.06	0.8	0.848	0.35	0.297	20	100	9.8	8.31	C-2	1.06	0.8	0.848	0.35	0.297	20	100	9.8	8.31
C-3	1.02	0.35	0.357	0.10	0.100	100	100	8.3	2.98	C-3	1.02	0.35	0.357	0.10	0.100	100	100	8.3	2.98
C-4	0.5	0.8	0.400	0.35	0.140	20	100	8.3	3.92	C-4	0.5	0.8	0.400	0.35	0.140	20	100	8.3	3.92
C-5	0.36	0.35	0.126	0.10	0.100	100	100	8.3	1.05	C-5	0.36	0.35	0.126	0.10	0.100	100	100	8.3	1.05
C-6	2.08	0.35	0.728	0.10	0.100	100	100	8.3	6.04	C-6	2.08	0.35	0.728	0.10	0.100	100	100	8.3	6.04
C-7	0.75	0.35	0.263	0.10	0.100	100	100	8.3	2.18	C-7	0.75	0.35	0.263	0.10	0.100	100	100	8.3	2.18
C-8	1.53	0.35	0.536	0.10	0.100	100	100	8.3	4.44	C-8	1.53	0.35	0.536	0.10	0.100	100	100	8.3	4.44
C-9	0.99	0.8	0.792	0.35	0.277	20	100	9.8	7.76	C-9	0.99	0.8	0.792	0.35	0.277	20	100	9.8	7.76
Total	9.09								28.4	Total	9.09								28.4

Pond C design for 28.4 cfs



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BENCH MARK(S):		LEGEND:		REVISIONS:		CITY OF ROCKWALL, TEXAS LA JOLLA POINTE ADDITION	
PROP. STM. SWR.	RIGHT-OF-WAY	PROP. FIRE HYDRANT	EXIST. FIRE HYDRANT	REV. NO.	DESCRIPTION	DATE	DRWN. BY
EX. STM. SWR.	LOT LINE	PROP. GATE VALVE	EXIST. GATE VALVE				
PROP. SAN. SWR.	DITCH FLOWLINE	PROP. MANHOLE	EXIST. MANHOLE				
EX. SAN. SWR.	EX. GAS	POWER POLE	CLEANOUT				
PROP. WATER	EX. BURIED TELEPHONE	WATER METER	WATER METER				
EX. WATER	EX. BURIED ELECTRICAL	PHONE BOX	GAS METER				
FENCE		ROW-MARKER	ROAD SIGN				
		IRON PIN	BENCHMARK				
		TRAVERSE POINT	TREE				
		MAILBOX					

