

HYDRAULIC CALCULATIONS

COLLECTION POINT INLETS OR MANHOLES		DISTANCE BETWEEN COLLECTION POINTS	INCREMENTAL DRAINAGE AREA				TIME @ UPSTREAM STATION (MIN.)	INTENSITY "I-100" (IN./HR)	100 YR. STORM RUNOFF "Q"	SLOPE OF HYDRAULIC GRADIENT (FT./FT.)	STORM SEWER SIZE	VELOCITY "V" (F.P.S.)	FLOW TIME IN SEWER (MIN.)	TIME @ DOWNSTREAM STATION (MIN.)	VELOCITY HEAD (FEET)	HYDRAULIC GRADE AT UPSTREAM STATION	HYDRAULIC GRADE AT DOWNSTREAM STATION	HYDRAULIC GRADE AT INLETS	COMMENTS
UPSTREAM STATION	DOWNSTREAM STATION		INCREM. AREA NO.	AREA "A" (ACRES)	RUNOFF COEFF. "C"	INCREM. "CA"													
LINE 'F'																			
455.00	431.53	23.47	F-10	0.29	0.90	0.26	0.26	10.00	8.74	2.3	0.0002	21	0.95	0.41	10.41	0.01	627.53	627.53	FUT. LATERAL
431.53	415.93	15.60	F-9	0.79	0.50	0.40	0.66	10.41	8.64	5.7	0.0013	21	2.36	0.11	10.52	0.09	627.46	627.44	
415.93	334.73	81.20	F-8	0.59	0.90	0.53	1.19	10.52	8.61	10.2	0.0042	21	4.25	0.32	10.84	0.28	627.24	626.91	
334.73	279.54	55.19	F-7	0.42	0.90	0.38	1.57	10.84	8.53	13.3	0.0071	21	5.55	0.17	11.01	0.48	626.71	626.32	
279.54	205.83	73.71	F-6 & K-7	2.54	0.79	2.01	3.57	11.01	8.49	30.3	0.0096	27	7.62	0.16	11.17	0.90	625.89	625.19	
205.83	185.00	20.83	F-5	0.51	0.90	0.46	4.03	11.17	8.45	34.1	0.0121	27	8.56	0.04	11.21	1.14	624.95	624.70	
185.00	171.00	14.00	F-11	0.63	0.90	0.57	4.60	11.21	8.44	38.8	0.0157	27	9.76	0.02	11.23	1.48	624.36	624.14	
171.00	59.00	112.00	F-4	1.15	0.90	1.04	5.63	11.23	8.43	47.5	0.0134	30	9.68	0.19	11.43	1.45	624.15	622.65	
59.00	50.61	8.39	F-3	0.64	0.90	0.58	6.21	11.43	8.39	52.1	0.0097	33	8.77	0.02	11.44	1.19	622.78	622.70	
50.61	44.73	5.88	F-2	0.31	0.90	0.28	6.49	11.44	8.38	54.4	0.0106	33	9.16	0.01	11.45	1.30	622.59	622.53	
44.73	0.00	44.73	F-1	0.11	0.90	0.10	6.59	11.45	8.38	55.2	0.0109	33	9.29	0.08	11.53	1.34	622.49	622.00	
LAT. 'F-1'																			
31.47	0.00	31.47	F-1	0.11	0.90	0.10	0.10	10.00	8.74	0.9	0.0001	18	0.49	1.07	11.07	0.00	623.83	623.83	623.83
LAT. 'F-2'																			
14.87	0.00	14.87	F-2	0.31	0.90	0.28	0.28	10.00	8.74	2.4	0.0005	18	1.38	0.18	10.18	0.03	623.87	623.86	623.91
LAT. 'F-3'																			
26.89	0.00	26.89	F-3	0.64	0.90	0.58	0.58	10.00	8.74	5.0	0.0010	21	2.09	0.21	10.21	0.07	623.93	623.90	
LAT. 'F-4'																			
44.14	0.00	44.14	F-4	1.15	0.90	1.04	1.04	10.00	8.74	9.0	0.0033	21	3.76	0.20	10.20	0.22	625.53	625.38	
LAT. 'F-11'																			
26.89	0.00	26.89	F-11	0.63	0.90	0.57	0.57	10.00	8.74	5.0	0.0022	18	2.81	0.16	10.16	0.12	625.77	625.71	
LAT. 'F-5'																			
31.78	0.00	31.78	F-5	0.51	0.90	0.46	0.46	10.00	8.74	4.0	0.0015	18	2.27	0.23	10.23	0.08	626.05	626.01	626.17
LAT. 'F-6'																			
43.71	0.00	43.71	F-6 & K-7	2.54	0.79	2.01	2.01	10.00	8.74	17.5	0.0060	24	5.58	0.13	10.13	0.48	626.57	626.31	
LAT. 'F-7'																			
31.47	0.00	31.47	F-7	0.42	0.90	0.38	0.38	10.00	8.74	3.3	0.0010	18	1.87	0.28	10.28	0.05	627.16	627.13	627.24
LAT. 'F-8'																			
26.89	0.00	26.89	F-8	0.59	0.90	0.53	0.53	10.00	8.74	4.6	0.0009	21	1.93	0.23	10.23	0.06	627.49	627.47	
LAT. 'F-9'																			
43.71	0.00	43.71	F-9	0.79	0.50	0.40	0.40	10.00	8.74	3.5	0.0011	18	1.95	0.37	10.37	0.06	627.53	627.48	
LAT. 'F-10'																			
14.87	0.00	14.87	F-10	0.29	0.90	0.26	0.26	10.00	8.74	2.3	0.0002	21	0.95	0.26	10.26	0.01	627.54	627.53	627.56
LINE 'G'																			
98.00	7.17	90.83	G1	0.74	0.90	0.67	0.67	10.00	8.74	5.8	0.0002	30	1.19	1.28	11.28	0.02	618.48	618.46	
7.17	0.00	7.17	NA	NA	0.90	0.00	0.67	11.28	8.42	5.6	0.0002	30	1.14	0.10	11.38	0.02	618.45	618.45	
LAT. 'G-1'																			
29.72	0.00	29.72	G1	0.74	0.90	0.67	0.67	10.00	8.74	5.8	0.0002	30	1.19	0.42	10.42	0.02	619.01	619.00	619.04

RECORD DRAWING 5/1/98

ISSUED FOR CONSTRUCTION
MARCH 28, 1996

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY
KENNETH A. ROBERTS, P.E. 55446
ON MARCH 28, 1996.



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STORM WATER CALCULATIONS						
HYDRAULIC CALCULATIONS						
ADDISON CIRCLE						
PHASE I PUBLIC INFRASTRUCTURE						
TOWN OF ADDISON, TEXAS						
Huitt-Zollers, Inc./Engineering/Architecture Dallas, Fort Worth, Houston, El Paso, Phoenix, Tucson, Ontario, San Clemente						
DESIGN	DRAWN	APPR.	SCALE	DATE	PROJECT NO.	NO.
HZI	HZI	KAR	N.T.S.	JAN 96	1822-04	64
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