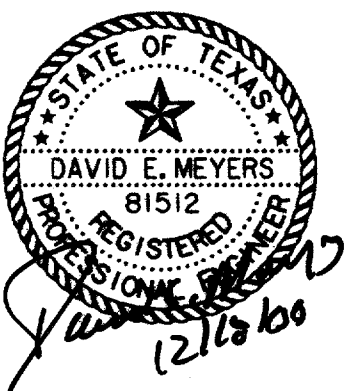


HYDRAULIC CALCULATIONS

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" (AC.)	RUNOFF COEFF. "C"	INCREM. "CA"														ACCUM. "CA"
LINE 'J'																				
195.76	177.48	18.28	J-3	0.34	0.90	0.31	0.31	10.00	8.74	2.7	0.0006	18	1.51	0.20	10.20	0.04	604.63	604.62		
177.48	171.48	6.00	J-2	1.27	0.90	1.14	1.45	10.20	8.69	12.6	0.0063	21	5.24	0.02	10.22	0.43	604.23	604.19		
171.48	106.00	65.48	J-1	0.61	0.90	0.55	2.00	10.22	8.69	17.4	0.0120	21	7.21	0.15	10.37	0.81	603.81	603.02		
LAT. 'J-1'																				
36.35	0.00	36.35	J-1	0.61	0.90	0.55	0.55	10.00	8.74	4.8	0.0021	18	2.72	0.22	10.22	0.11	604.57	604.50	604.72	PARTIAL FLOW
LAT. 'J-2'																				
31.76	0.00	31.76	J-2	1.27	0.90	1.14	1.14	10.00	8.74	10.0	0.0091	18	5.66	0.09	10.09	0.50	604.48	604.19		
LAT. 'J-3'																				
20.19	0.00	20.19	J-3	0.34	0.90	0.31	0.31	10.00	8.74	2.7	0.0006	18	1.51	0.22	10.22	0.04	604.64	604.63	604.69	PARTIAL FLOW
LINE 'L'																				
1230.00	984.00	246.00	LINE O	3.60	0.90	3.24	3.24	10.78	8.54	27.7	0.0080	27	6.96	0.59	11.37	0.75	611.75	609.78		
984.00	978.00	6.00	L-12	0.31	0.90	0.28	3.52	11.37	8.40	29.6	0.0091	27	7.44	0.01	11.38	0.86	609.68	609.62		
978.00	962.00	16.00	L-11	0.27	0.90	0.24	3.76	11.38	8.40	31.6	0.0104	27	7.95	0.03	11.42	0.98	609.50	609.34		
962.00	935.00	27.00	L-10	1.19	0.90	1.07	4.83	11.42	8.39	40.5	0.0037	36	5.74	0.08	11.49	0.51	609.57	609.47		
935.00	740.00	195.00	LINE N	3.97	0.83	3.30	8.13	11.49	8.37	68.0	0.0046	42	7.07	0.46	11.95	0.78	608.82	607.93		
740.00	612.00	128.00	L-9	0.31	0.90	0.28	8.41	11.95	8.27	69.5	0.0048	42	7.22	0.30	12.25	0.81	607.90	607.29		
612.00	590.00	22.00	L-8	1.85	0.90	1.67	10.07	12.25	8.20	82.6	0.0067	42	8.59	0.04	12.29	1.14	606.95	606.80		
590.00	502.00	88.00	L-7	0.31	0.90	0.28	10.35	12.29	8.19	84.8	0.0071	42	8.81	0.17	12.46	1.21	606.74	606.12		
502.00	474.16	27.84	L-6	0.19	0.90	0.17	10.52	12.46	8.16	85.8	0.0073	42	8.92	0.05	12.51	1.24	606.09	605.88		
474.16	447.54	26.62	L-5	1.21	0.90	1.09	11.61	12.51	8.15	94.6	0.0088	42	9.83	0.05	12.56	1.50	605.62	605.38		
447.54	340.44	107.10	LINE M	4.22	0.90	3.80	15.41	12.56	8.14	125.4	0.0041	54	7.88	0.23	12.78	0.96	604.79	604.36		
340.44	320.04	20.40	L-4	0.27	0.90	0.24	15.65	12.78	8.09	126.6	0.0041	54	7.96	0.04	12.82	0.98	604.34	604.26		
320.04	296.00	24.04	L-3	0.40	0.90	0.36	16.01	12.82	8.08	129.4	0.0043	54	8.13	0.05	12.87	1.03	604.21	604.11		
296.00	253.85	42.15	L-2	1.96	0.90	1.76	17.78	12.87	8.07	143.4	0.0053	54	9.02	0.08	12.95	1.26	603.87	603.65		
253.85	206.00	47.85	L-1	0.49	0.90	0.44	18.22	12.95	8.05	146.7	0.0056	54	9.22	0.09	13.04	1.32	603.59	603.32		
206.00	106.00	100.00	LINE S	0.72	0.90	0.65	18.87	13.04	8.04	151.6	0.0059	54	9.53	0.17	13.21	1.41	603.23	602.64		
LAT. 'L-1'																				
31.75	0.00	31.75	L-1	0.49	0.90	0.44	0.44	10.00	8.74	3.9	0.0013	18	2.18	0.24	10.24	0.07	604.88	604.84		
LAT. 'L-2'																				
47.92	0.00	47.92	L-2	1.96	0.90	1.76	1.76	10.00	8.74	15.4	0.0046	24	4.91	0.16	10.16	0.37	604.98	604.76		
LAT. 'L-3'																				
36.35	0.00	36.35	L-3	0.40	0.90	0.36	0.36	10.00	8.74	3.1	0.0009	18	1.78	0.34	10.34	0.05	605.22	605.19	605.28	PARTIAL FLOW
LAT. 'L-4'																				
20.19	0.00	20.19	L-4	0.27	0.90	0.24	0.24	10.00	8.74	2.1	0.0004	18	1.20	0.28	10.28	0.02	605.31	605.30	605.34	PARTIAL FLOW
LAT. 'L-5'																				
31.75	0.00	31.75	L-5	1.21	0.90	1.09	1.09	10.00	8.74	9.5	0.0082	18	5.39	0.10	10.10	0.45	606.93	606.67		
LINE 'M'																				
465.32	452.80	12.52	M-8	0.32	0.90	0.29	0.29	10.00	8.74	2.5	0.0006	18	1.42	0.15	10.15	0.03	611.56	611.55		
452.80	435.00	17.80	M-7	0.11	0.90	0.10	0.39	10.15	8.70	3.4	0.0010	18	1.91	0.16	10.30	0.06	611.53	611.51		
435.00	405.00	30.00	M-6, N-7	2.06	0.77	1.59	1.97	10.30	8.66	17.1	0.0116	21	7.11	0.07	10.37	0.78	610.78	610.43		
405.00	325.80	79.20	M-5	1.04	0.90	0.94	2.91	10.37	8.65	25.2	0.0124	24	8.01	0.16	10.54	1.00	610.22	609.24		
325.80	178.54	147.26	M-4	0.53	0.90	0.48	3.39	10.54	8.60	29.1	0.0166	24	9.27	0.26	10.80	1.34	608.90	606.46		
178.54	165.80	12.74	M-3	0.37	0.90	0.33	3.72	10.80	8.54	31.8	0.0105	27	7.99	0.03	10.83	0.99	606.63	606.50		
165.80	140.00	25.80	M-2	0.12	0.90	0.11	3.83	10.83	8.53	32.6	0.0111	27	8.21	0.05	10.88	1.05	606.44	606.15		
140.00	100.00	40.00	M-1	0.36	0.90	0.32	4.15	10.88	8.52	35.4	0.0130	27	8.89	0.07	10.96	1.23	605.97	605.45		
LAT. 'M-1'																				
27.14	0.00	27.14	M-1	0.36	0.90	0.32	0.32	10.00	8.74	2.8	0.0007	18	1.60	0.28	10.28	0.04	607.18	607.16		
LAT. 'M-2'																				
31.18	0.00	31.18	M-2	0.12	0.90	0.11	0.11	10.00	8.74	0.9	0.0001	18	0.53	0.97	10.97	0.00	607.49	607.48	607.49	PARTIAL FLOW
LAT. 'M-3'																				
15.01	0.00	15.01	M-3	0.37	0.90	0.33	0.33	10.00	8.74	2.9	0.0008	18	1.65	0.15	10.15	0.04	607.59	607.58	607.64	PARTIAL FLOW
LAT. 'M-4'																				
31.18	0.00	31.18	M-4	0.53	0.90	0.48	0.48	10.00	8.74	4.2	0.0016	18	2.36	0.22	10.22	0.09	610.20	610.15	610.31	PARTIAL FLOW
LAT. 'M-5'																				
27.14	0.00	27.14	M-5	1.04	0.90	0.94	0.94	10.00	8.74	8.2	0.0027	21	3.40	0.13	10.13	0.18	611.11	611.04		
LAT. 'M-6'																				
43.30	0.00	43.30	M-6 & N-7	1.37	0.90	1.23	1.23	10.00	8.74	10.8	0.0046	21	4.48	0.16	10.16	0.31	611.45	611.25		
LAT. 'M-7'																				
31.18	0.00	31.18	M-7	0.11	0.79	0.09	0.09	10.00	8.74	0.8	0.0001	18	0.43	1.21	11.21	0.00	611.58	611.58	611.59	PARTIAL FLOW

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY DAVID E. MEYERS, P.E. 81512



RECORD DRAWING

DATE	DESCRIPTION	REF. NO.				
10/3/97	ISSUED FOR CONSTRUCTION	N/A				
7/14/97	ISSUED FOR BID	N/A				
STORM WATER CALCULATIONS						
HYDRAULIC CALCULATIONS						
ADDISON CIRCLE						
PHASE II PUBLIC INFRASTRUCTURE						
TOWN OF ADDISON, TEXAS						
Huitl-Zollars, Inc./Engineering/Architecture Dallas, Fort Worth, Houston, El Paso, Phoenix, Tustin, Ontario						
DESIGN	DRAWN	APPR.	SCALE	DATE	PROJECT NO.	NO.
HZI	HZI	DEM	N.T.S.	OCT. 97	01-1822-21	SW6