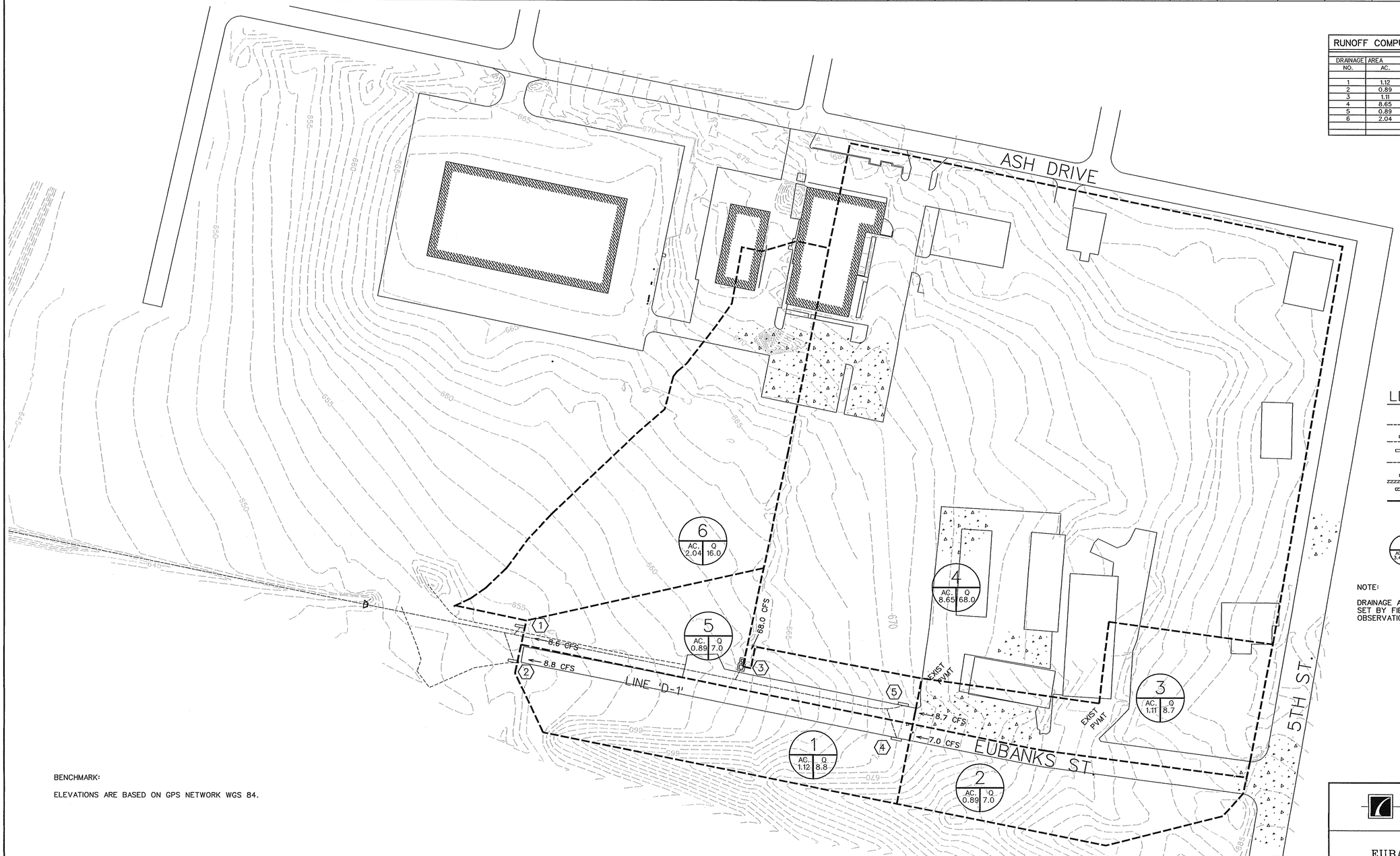
Upstream Station	Downstream Station	Distance between pts (ft)	AREA NO.	Total Area "A" (Acres)	Area Picked Up (Acres)	Runoff Coefficient C	Increm. CA Picked Up CA	Accumulated CA in system CA	Time at Upstream Station (Min)	Design Storm (Years)	Intensity I (in/hr)	Storm Water Runoff Q (CFS)	Slope of Hydraulic Gradient - S (ft/ft)	Selected Storm Sewer Size (in)	Velocity in Sewer (fps)	Velocity Head Loss @ U/S Sta. (ft)	Head Loss Coeff. (Kj)	Inlet, MH, Bend Junction Loss	Flow Time In Sewer (Min)	Time at D/S Station (Min)	Δ Velocity Head (ft)	Hydraulic Grade Upstream	Hydraulic Grade Downstream	Proposed Grade
Line D1																								
8+80.39	8+59.69	20.70	3	1.11	0.90	0.90	0.81	0.81	10.00	100	8.74	7.1	0.0045	18	4.0	0.25	1.25	0.31	0.09	10.09	0.25	658.19	657.88	668.89
8+59.69	6+67.10	192.59	2	0.89	0.89	0.90	0.80	1.61	10.09	100	8.72	14.0	0.0179	18	7.9	0.97	0.00	0.00	0.41	10.50	0.72	657.78	657.06	668.89
6+67.10	3+85.07	282.03	4	8.65	8.65	0.90	7.79	9.40	10.50	100	8.62	81.0	0.0148	36	11.5	2.05	0.35	0.72	0.41	10.91	1.08	653.62	652.90	659.12
3+85.07	3+72.94	12.13	5	0.89	1.04	0.90	0.94	10.34	10.91	100	8.52	88.1	0.0077	42	9.2	1.31	0.00	0.00	0.02	10.93	-0.37	648.74	649.11	654.23
3+72.94	0+00.00	172.94	1	1.12	1.06	0.90	0.95	11.29	10.93	100	8.51	96.1	0.0091	42	10.0	1.55	0.00	0.00	0.29	11.22	0.24	649.02	648.78	654.23
0+00.00	0+00.00	0.00						11.29	11.22	100	8.44	95.3	0.0090	42	9.9	1.52	0.00	0.00	0.00	11.22	-0.02	647.2		652.00

RUNOFF COMPUTATIONS

DRAINAGE NO.	AREA AC.	RUNOFF COEFF. (C)	TOTAL CxA	Tc min.	I (100) in/hr	Q (100) cfs
1	1.12	0.9	1.01	10	8.74	8.8
2	0.89	0.9	0.80	10	8.74	7.0
3	1.11	0.9	1.00	10	8.74	8.7
4	8.65	0.9	7.79	10	8.74	68.0
5	0.89	0.9	0.80	10	8.74	7.0
6	2.04	0.9	1.84	10	8.74	16.0



N

0 30 60 120
SCALE: 1" = 60'

LEGEND

- PROP. STORM SEWER
- PROP. CURB INLETS
- PROP. CONC. HEADWALL
- EXIST. STORM SEWER
- DRAINAGE AREA DIVIDE
- FLOW ARROW
- DRAINAGE AREA NO.

NOTE:

DRAINAGE AREAS, DRAINAGE PATTERNS AND CONTOURS SET BY FIELD SURVEYING, AERIAL PHOTOGRAPHY AND FIELD OBSERVATION.

STATE OF TEXAS
WARREN L. CORWIN
57875
REGISTERED PROFESSIONAL ENGINEER
4-30-2010

The seal appearing on this document was authorized by Warren L. Corwin, P.E. 57875, on April 30, 2010

BENCHMARK:

ELEVATIONS ARE BASED ON GPS NETWORK WGS 84.

Inlet No.	Location	Design Storm Frequency (years)	Tc (min)	Intensity I (in/hr)	Runoff Coefficient C	Area A (acres)	Q cfs	Carry-over from Upstream Inlet cfs	Total Gutter Flow cfs	Gutter Capacity cfs	Gutter Slope ft/100ft	Crown Type	Length Li (ft)	Type	Inlet Capacity cfs	Carry-over to Downstream Inlet cfs
1	1+83.06	100	10	8.74	0.9	0.89	7.0	1.6	8.6	10.4	1.90%	6" pbl	12	STD.	8.3	0.3
2	1+83.06	100	10	8.74	0.9	1.12	8.8		8.8	10.4	1.90%	6" pbl	12	STD.	8.3	0.5
3	4+70.37	100	10	8.74	0.9	8.65	68.0		68.0		Low Pt	-		WYE		
4	6+73.76	100	10	8.74	0.9	0.89	7.0		7.0	16.9	5.00%	6" pbl	12	STD.	7.1	
5	6+73.76	100	10	8.74	0.9	1.11	8.7		8.7	16.9	5.00%	6" pbl	12	STD.	7.1	1.6

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TBPE FIRM #5951

DEVELOPMENT PLANS FOR

EUBANKS STREET IMPROVEMENTS

FRISCO, TEXAS

DRAINAGE AREA MAP

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
CEI	CEI	CEI	2 OF 9
JOB NUMBER	DATE	SCALE:	
07016	SEPTEMBER 2007	1"=60'	

...\07016 Eubanks Rd\07016map.dgn 4/30/2010 8:20:13 AM