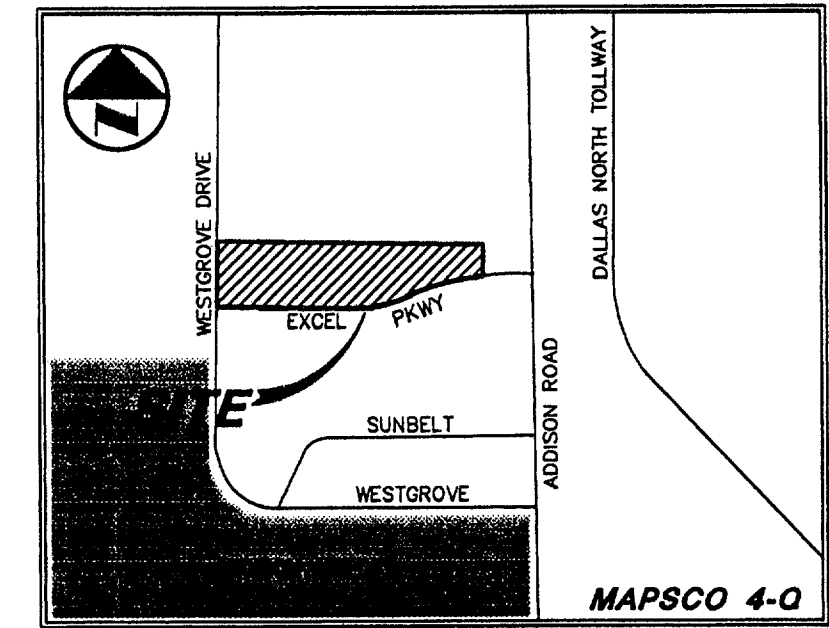
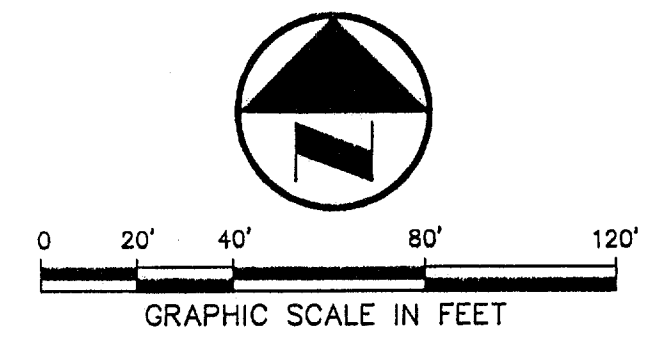


JOHN D. GOURLEY &
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PAMELA S. GOURLEY
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VICINITY MAP



LEGEND

- B BOLLARD
- EM ELECTRIC METER
- PP POWER POLE
- LS LIGHT STANDARD
- WM WATER METER
- WV WATER VALVE
- ICV IRRIGATION CONTROL VALVE
- FH FIRE HYDRANT
- CL CLEANOUT
- MH MANHOLE
- GM GAS METER
- TSC TRAFFIC SIGNAL CONTROL
- TRP TRAFFIC SIGNAL POLE
- TELE TELEPHONE BOX
- TV TV BOX
- FP FLAG POLE
- EM ELECTRIC METER
- TRF TRAFFIC SIGN
- PROPR PROPERTY LINE
- OH OH. POWER LINE
- TEL U/G TELEPHONE LINE
- U/G U/G WATER LINE
- U/G U/G GAS LINE
- FENCE
- B.F.R. BARRIER FREE RAMP
- DRAINAGE DIVIDE

DRAINAGE CRITERIA

Q	= cfs
C	= 0.80
T _c	= 10
Q ₁₀₀	= 8.74

INLET SIZE CALCULATIONS

Q = CA/2gh
 C = 0.65 (discharge coefficient)
 A = AREA INLET OPENING (sq ft)
 g = 32.2 ft/sec
 h = 0.25' (depth of water)
 AREA GRATE INLET No. 30 = 4.23 sq ft
 MAX Q GRATE INLET No. 30 = 16.80 cfs

REQUIRED DETENTION VOLUME:

(USING MODIFIED RATIONAL METHOD TO DETERMINE VOLUMES)
 Q₂₅ (NET ALLOWABLE RELEASE) = 82.23 cfs
 Q₁₀₀ (BYPASS) = 38.17 cfs
 Allowable Q out Detention = 44.05 cfs
 TOTAL REQUIRED DETENTION VOLUME = 19,191 cubic feet
 VOLUME PROVIDED IN PIPE = 6,579 cubic feet
 TOTAL ON GROUND STORAGE REQUIRED = 12,601 cubic feet
 VOLUME PROVIDED ON GROUND = 12,644 cubic feet

RECORD DRAWING

THIS DRAWING HAS BEEN REVISED TO REFLECT CONSTRUCTION RECORDS MAINTAINED AND PROVIDED BY THE CONTRACTOR FOR THIS PROJECT.
 CONTRACTOR: HILL & WILKINSON
 DATE REVISED: 05/04/01

REVIS 05/04/01
 REVIS 11/27/00

Pacheco Koch Consulting Engineers
 9401 LBJ FREEWAY SUITE 300 DALLAS, TEXAS 75243 972.235.3031

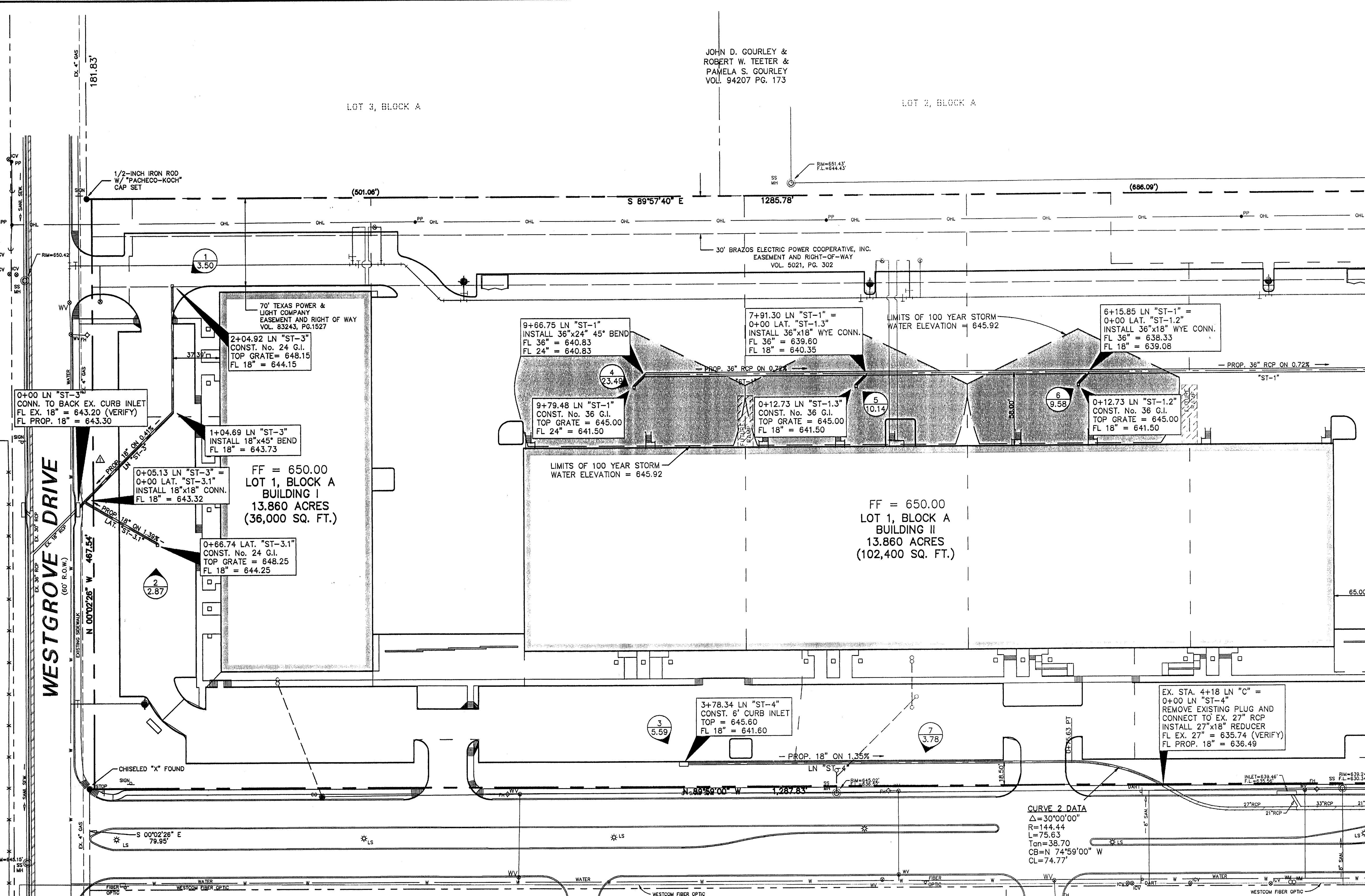
DRAINAGE PLAN
ADDISON OFFICE / WAREHOUSE COMPLEX
LOTS 1 & 2, BLOCK A
WESTGROVE/BENT TREE PLAZA ADDITION
TOWN OF ADDISON, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
CJE	JLM	JULY 26, 2000	1"=40'			C4.2

PROJECT NO.: 9956
 PREPARED BY: JLM
 CHECKED BY: CJE
 DATE: 7/26/00
 REVISIONS:
 SHEET NO. + TITLE: C4.2
 DRAINAGE PLAN



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY STEVEN A. MARKUSSEN, P.E. 70090 ON 07/26/00. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.



EXCEL PARKWAY
 (80' R.O.W.) (Volume 83220, Page 2655)

RUNOFF CALCULATIONS

DRAINAGE AREA	AREA (ACRES)	T _c (Minutes)	C	I ₂₄ (in/hr)	I ₁₀₀ (in/hr)	Q ₂₅ (cfs)	Q ₁₀₀ (cfs)
1	0.50	10	0.8	7.29	8.74	2.92	3.50
2	0.41	10	0.8	7.29	8.74	2.39	2.87
3	0.80	10	0.8	7.29	8.74	4.67	5.59
4	3.36	10	0.8	7.29	8.74	19.60	23.49
5	1.45	10	0.8	7.29	8.74	8.46	10.14
6	1.37	10	0.8	7.29	8.74	7.99	9.58
7	0.54	10	0.8	7.29	8.74	3.15	3.78
8	0.68	10	0.8	7.29	8.74	3.97	4.75
9	2.46	10	0.8	7.29	8.74	14.35	17.20
10	0.46	10	0.8	7.29	8.74	2.68	3.22
11	0.25	10	0.8	7.29	8.74	1.46	1.75
12	0.34	10	0.8	7.29	8.74	3.21	3.85
13	0.62	10	0.8	7.29	8.74	3.62	4.34
14	0.55	10	0.8	7.29	8.74	3.21	3.85
15	0.59	10	0.8	7.29	8.74	3.44	4.13
16	0.53	10	0.8	7.29	8.74	3.09	3.71
17	0.36	10	0.8	7.29	8.74	2.10	2.52
18	0.48	10	0.8	7.29	8.74	2.80	3.36
19	0.82	10	0.8	7.29	8.74	4.78	5.73
20	0.25	10	0.8	7.29	8.74	1.46	1.75
21	15.7	10	0.8	7.29	8.74	91.56	109.77

LOT 4
 PORTION OF TRACT II
 VOL. 92115, PG. 4018

STORM SEWER CALCULATIONS

LINE / STATION	SIZE	Q ₁₀₀ (cfs)	C (cfs)	V (fps)	V ² /2g	S _f
LINE "ST-1" (0+00.00 - 0+34.52)	36"	44.05	56.95	6.23	0.60	0.004362
LINE "ST-1" (0+34.52 - 3+58.48)	36"	44.05	56.95	6.23	0.60	0.004362
LINE "ST-1" (3+58.48 - 6+15.85)	36"	43.21	56.95	6.11	0.58	0.004197
LINE "ST-1" (6+15.85 - 7+91.30)	36"	33.63	56.95	4.76	0.35	0.002543
LINE "ST-1" (7+91.30 - 9+66.75)	36"	23.49	56.95	3.32	0.17	0.001240
LINE "ST-1" (9+66.75 - 9+79.48)	24"	23.49	51.83	7.48	0.87	0.010783
LAT "ST-1" (0+00.00 - 0+6.36)	18"	17.20	63.58	9.73	1.47	0.025814
LAT "ST-1.2" (0+00.00 - 0+12.73)	18"	9.58	40.79	5.42	0.46	0.003318
LAT "ST-1.3" (0+00.00 - 0+12.73)	18"	10.14	23.74	5.74	0.51	0.003319
LINE "ST-3" (0+00.00 - 0+5.13)	18"	6.37	17.45	3.60	0.20	0.003678
LINE "ST-3" (0+5.13 - 2+04.92)	18"	3.50	17.45	1.98	0.06	0.001110
LAT "ST-3" (0+00.00 - 0+66.74)	18"	2.87	30.46	1.62	0.04	0.000747
LINE "ST-4" (0+00.00 - 3+78.34)	18"	5.59	12.20	3.16	0.16	0.002832

* REFER TO SHEET C4.3 FOR THE PLAN VIEW OF THIS PORTION OF LINE "ST-1"