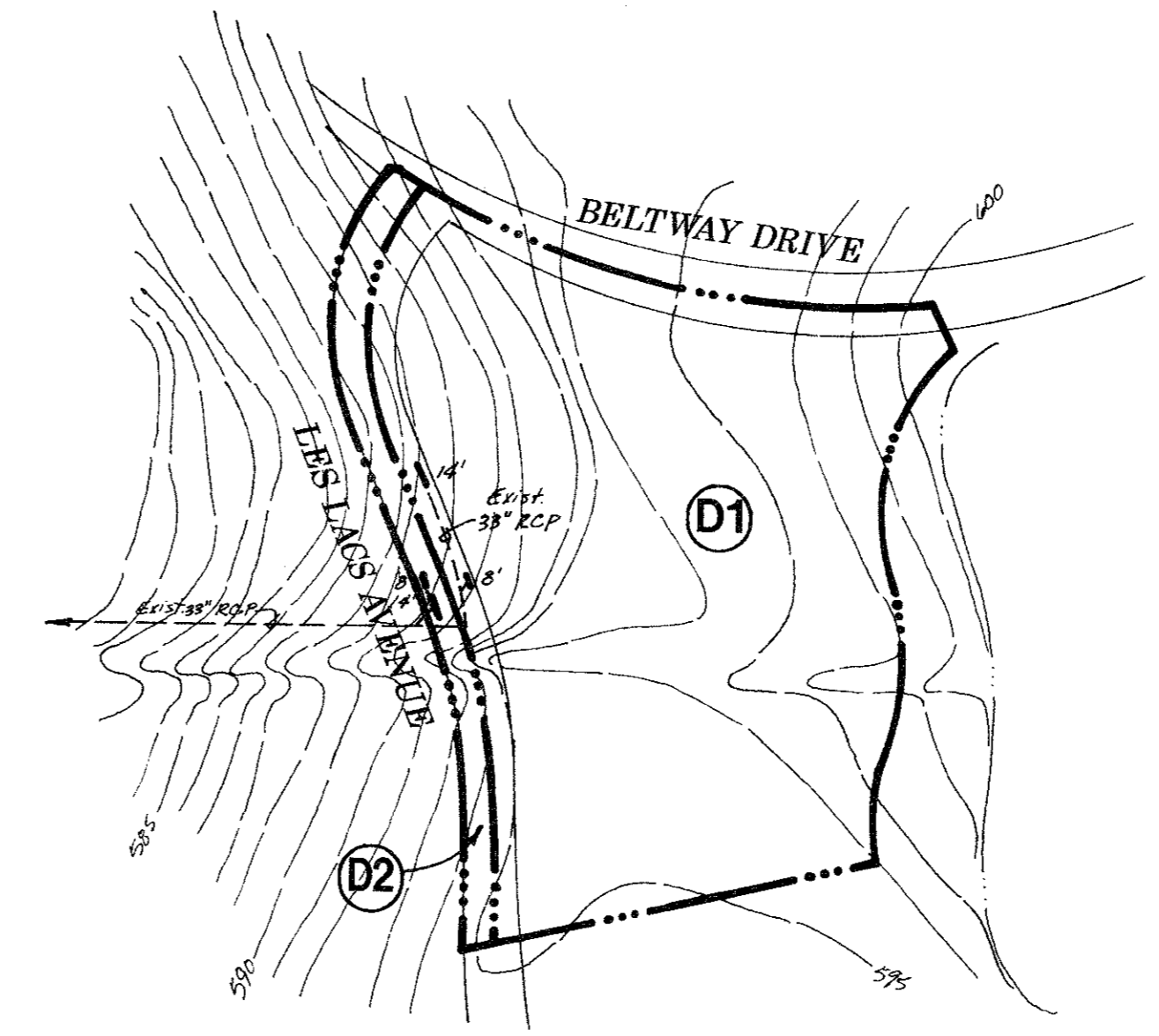
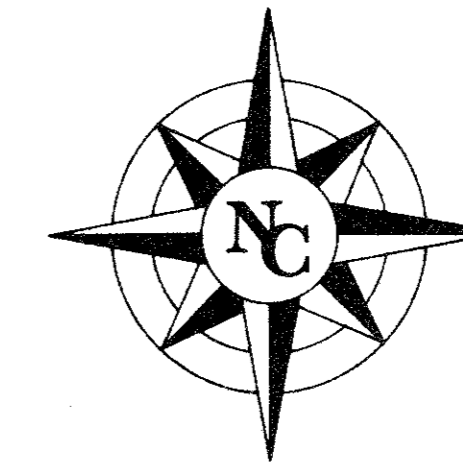


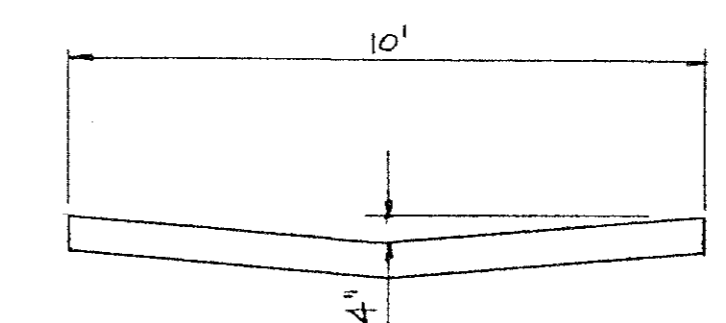
Revisions	Date	Description	Drawn By	Checked By



**EXISTING CONDITIONS**

Area No.	Area	Tc	Cp	Cp x A	I <sub>100</sub>	Q <sub>100</sub>
D1	10.2	15	.3	3.06	7.52	23.01 *
D2	0.1	15	.3	0.03	7.52	0.22 *

\* Gutter Flow Equalized  
 Total Flow per Gutter: 11.61 cfs  
 Based upon surrounding undeveloped area to the east, Chatham Court Dr will receive Q<sub>100</sub> = 8.0 cfs of off-site run-off. The remaining 3.62 cfs will be conveyed by the existing storm inlet.



$$Q = \frac{1.486}{n} A R^{2/3} S^{1/2}$$

$$Q = \frac{1.486}{0.016} (1.67) \left(\frac{157}{10}\right)^{2/3} S^{1/2}$$

$$Q_{Alley} = 47.04 S^{1/2}$$

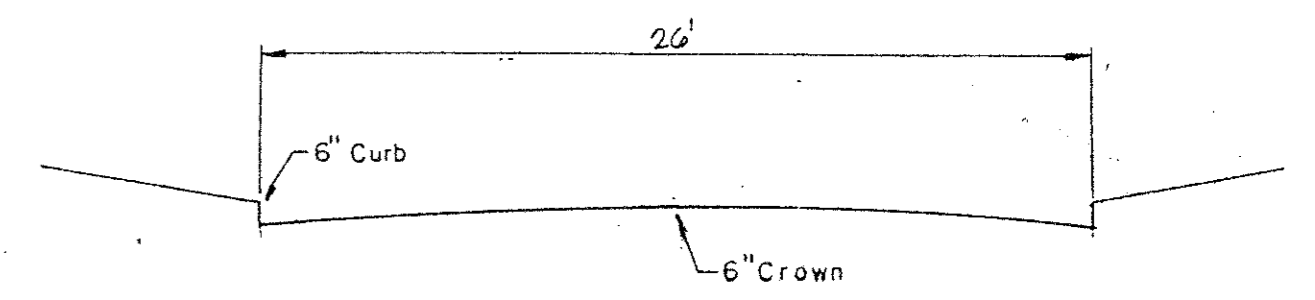
$$S = 0.44\%$$

$$Q = 3.12 \text{ cfs}$$

**ALLEY CAPACITY**

AREA NO.	AREA (AC)	Tc	Cp	Cp x A	I <sub>100</sub>	Q <sub>100</sub> (cfs)	Q <sub>100</sub>	INLET	INLET TYPE	BY-PASS
1	0.33	15	0.5	0.17	7.52	1.3	1.3			
2	0.89	15	0.5	0.45	7.52	3.9	5.2			
3	0.28	15	0.5	0.14	7.52	1.0	6.2			
4	0.55	15	0.5	0.28	7.52	2.1	8.3			
5	0.41	15	0.5	0.20	7.52	2.3	8.0	1-10'	I	2.6
6	0.80	15	0.5	0.40	7.52	3.0	8.0	1-10'	I	5.6
7	0.67	15	0.5	0.34	7.52	1.8	1.8			
8	1.18	15	0.5	0.59	7.52	4.4	6.2*	1-10'	IA	
9	0.92	15	0.5	0.46	7.52	3.5	3.5			
10	1.1	15	0.5	0.55	7.52	4.1	7.6	1-10'	III A	
11							8.2	1-14'	IA	

\* GUTTER FLOWS EQUALIZED  
 I - STD. CURB OPENING INLET ON GRADE  
 IA - STD. CURB OPENING INLET AT LOW POINT  
 III A - GATE INLET (CURB TYPE) AT LOW POINT



$$Q = \frac{1.486}{n} A R^{2/3} S^{1/2}$$

$$n = 0.016$$

$$A = 4.33 \text{ Ft.}^2$$

$$Q = \frac{1.486}{0.016} (4.33) \left(\frac{4.33}{27}\right)^{2/3} S^{1/2}$$

$$Q_{Str.Cap} = 118.70 S^{1/2}$$

$$S = 1.45\%$$

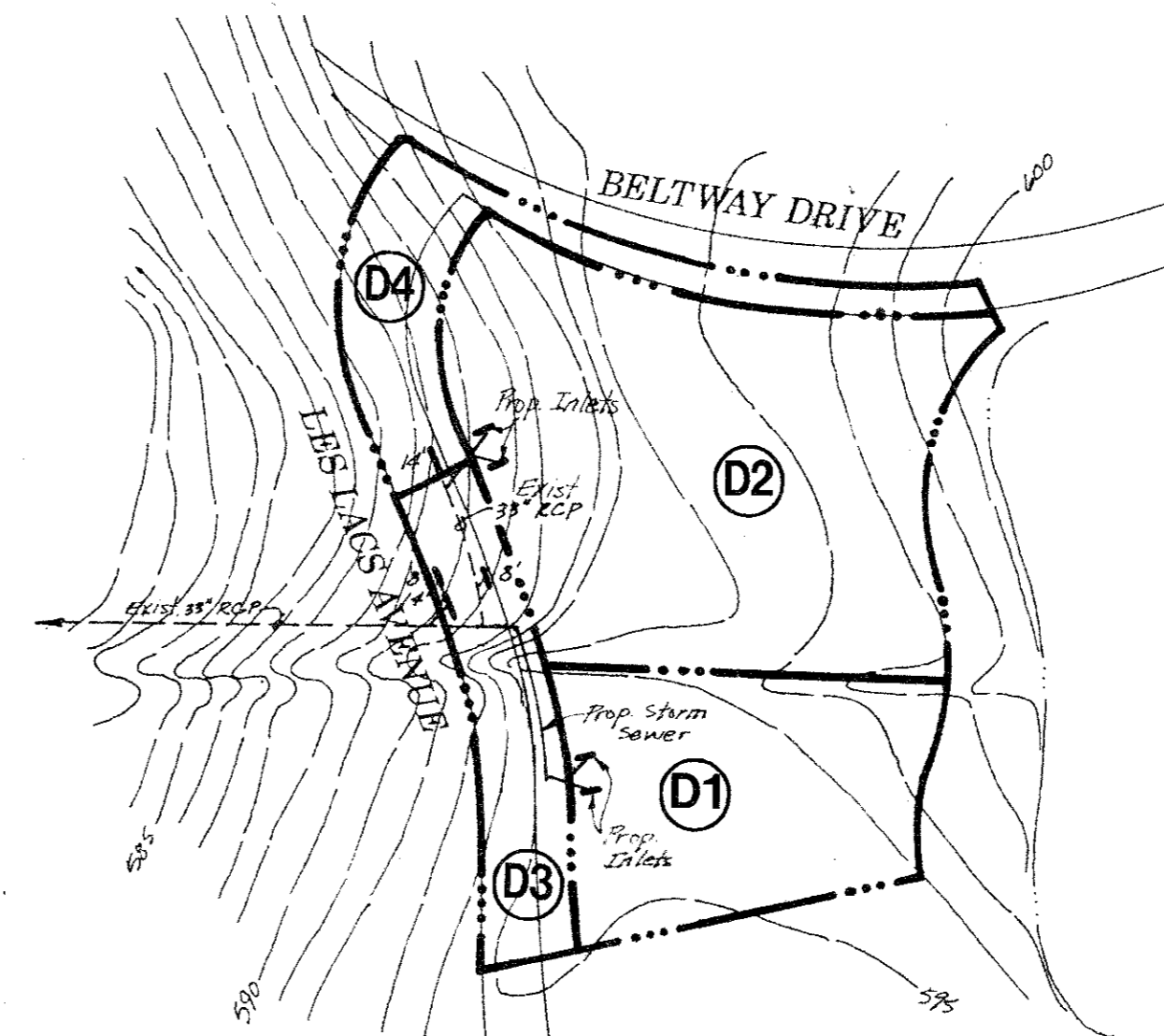
$$Q = 14.3 \text{ cfs (715 cfs/ft side)}$$

**STREET CAPACITY**

**LEGEND**

- DRAINAGE AREA LINE
- - - EXIST. CONTOUR LINE
- PROP. STORM SEWER LINE
- EXIST. STORM SEWER LINE
- ① DRAINAGE AREA

AS BUILT  
 I CERTIFY THIS PROJECT WAS CONSTRUCTED IN GENERAL CONFORMANCE WITH THESE CONSTRUCTION PLANS AND WILL FUNCTION AS DESIGNED.



**DEVELOPED CONDITION**

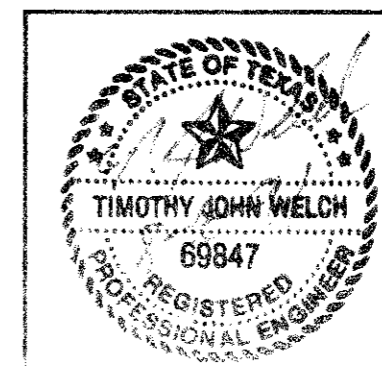
Area No.	Area	Tc	Cp	Cp x A	I <sub>100</sub>	Q <sub>100</sub>
D1	2.46	15	.5	1.23	7.52	9.25
D2	4.95	15	.5	2.48	7.52	18.65
D3	1.35	15	.5	0.68	7.52	5.11
D4	1.44	15	.5	0.72	7.52	5.41

Areas D1 & D2, when developed, will be collected by a proposed storm sewer system located in Les Lacs Avenue. Chatham Court Drive will collect 5.0 cfs of off-site run-off.

**DRAINAGE AREA MAP**

**CHATHAM COURT**  
 TOWN OF ADDISON, TEXAS

Date: AUGUST, 1991	Scale: 1" = 50'	SHEET OF
Drawn By: TNC	Approved By: TNC	DA-1 SHEETS



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