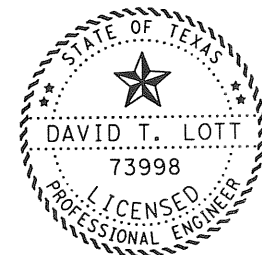


# RUNOFF CALCULATIONS

DRAINAGE AREA NO.	ACRES	ACRES-DRAINED				TOTAL CA	TIME OF CONCENTRATION (MIN)	FREQ. (YEARS)	I 5 (IN/HR)	Q 5 (CFS)	REMARKS
		PAVT. C=0.9	R. O. W. (avg) C=0.5	COMM. INDUST C=0.7	RESID C=0.5						
11	0.19	0.19			0.17	200/(3.0X60)=1.11	5	6.93	1.19	DRAINS INTO EAX CI-15 ON IH30 PROJECT	
12	0.17		0.17		0.09	80/(1.6X60)=0.83	5	6.93	0.59	DRAINS INTO EX DI 25 ON IH30 PROJECT	
13	0.3	0.24	0.06		0.25		5	6.93	1.70	DRAINS INTO OUTFALL W. OF FM740	
14	0.19	0.17	0.02		0.16	200/(2.2X60)=1.52	5	6.93	1.13		
15	0.26	0.26			0.23	200/(3.0X60)=1.11	5	6.93	1.62	DRAINS INTO EX CI 18 ON IH30 PROJECT	
16	1.53	1.22	0.31		1.25	450/(2.4X60)=3.13	5	6.93	8.68		
17	0.73	0.66	0.07		0.63	350/(3.5X60)=1.67	5	6.93	4.36		
18	2.5	0.5	0.5	1.5	1.75	600/(2.3X60)=4.35	5	6.93	12.13		
19	2.22	0.22	0.22	1.78	1.55	660/(2.1X60)=5.24	5	6.93	10.77		
20	2.7	0.27	0.27	2.16	1.89	730/(1.5X60)=8.11	5	6.93	13.10		
21	0.13	0.13			0.12	120/(3.0X60)=0.67	5	6.93	0.81		
22	0.22	0.22			0.20	100/(1.3X60)=1.28	5	6.93	1.37		
23	5.04			5.04	3.53	820/(2.8X60)=4.88	5	6.93	24.45		
24	5.34			5.34	3.74	750/(2.8X60)=4.46	5	6.93	25.90		
25	1			1	0.70	320/(3.7X60)=1.44	5	6.93	4.85		
26	0.7	0.49		0.21	0.59	200/(5.0X60)=0.67	5	6.93	4.07		
26A	0.3	0.3			0.27	280/(5.0X60)=0.93	5	6.93	1.87		
27	3.59	3.59		2.51	2.73	750/(2.0X60)=6.25	5	6.93	18.91		
28	0.29	0.29			0.26	220/(2.0X60)=1.83	5	6.93	1.81		
29	0.32	0.32			0.29	300/(3.4X60)=1.47	5	6.93	2.00	DRAINS TO EX CI ON TURTLE COVE	
30	0.3	0.3			0.27	200/(2.0X60)=1.67	5	6.93	1.87		
31	0.22	0.22			0.20	90/(1.5X60)=1.00	5	6.93	1.37		
32	0.54	0.54			0.49	350/(3.4X60)=1.72	5	6.93	3.37		
33	4.72	1.33		3.09	3.36	900/(3.5X60)=4.29	5	6.93	23.28		
34	0.76	0.61		0.15	0.65	330/(3.5X60)=1.57	5	6.93	4.53		
35	1.28	1.15		0.13	1.13	640/(4.5X60)=2.37	5	6.93	7.80		
36	0.9	0.81		0.09	0.79	420/(4.5X60)=1.56	5	6.93	5.49		
37	1.54	1.23		0.31	1.32	380/(3.9X60)=1.62	5	6.93	9.18		
38	3.57	0.36		3.21	2.57	800/(5.0X60)=2.67	5	6.93	17.82		
39	4.4			4.4	3.08	830/(1.7X60)=8.14	5	6.93	21.34		
40	0.92	0.83	0.09		0.79	500/(3.7X60)=2.25	5	6.93	5.49		
41	0.81	0.73	0.08		0.70	600/(3.5X60)=2.86	5	6.93	4.83		
42	0.56	0.5	0.06		0.48	600/(3.5X60)=2.86	5	6.93	3.33		
43	0.3	0.3			0.27	140/(3.0X60)=0.78	5	6.93	1.87		
44	65.7			65.7	45.99	2100/(2.0X60)=17.5	5	6.93	318.71	Q IS IN EX 66" RCP	
45	0.76			0.76	0.38	250/(1.7X60)=2.45	5	6.93	2.63		
46											
47	0.28	0.25	0.03		0.24	280/(4.1X60)=1.14	5	6.93	1.66		
48	1.06	0.21		0.85	0.61	470/(2.3X60)=3.41	5	6.93	4.26		
49	1.4	0.7		0.7	0.98	420/(2.3X60)=3.04	5	6.93	6.79		
50	0.96	0.48		0.48	0.67	440/(3.2X60)=2.29	5	6.93	4.66		
51	1.09	0.76		0.33	0.85	760/(2.6X60)=4.87	5	6.93	5.88		
52	0.64	0.58	0.06		0.55	540/(2.1X60)=4.29	5	6.93	3.83		
53	0.61	0.55	0.06		0.53	530/(2.0X60)=4.42	5	6.93	3.64		
54	0.61	0.55	0.06		0.53	530/(2.0X60)=4.42	5	6.93	3.64		
55	0.67	0.6	0.07		0.58	550/(1.5X60)=6.11	5	6.93	3.98		
56	0.67	0.6	0.07		0.58	550/(1.5X60)=6.11	5	6.93	3.98		
57	0.51	0.46	0.05		0.44	500/(2.8X60)=2.98	5	6.93	3.04		
58	0.51	0.46	0.05		0.44	500/(2.8X60)=2.98	5	6.93	3.04		
59	0.96	0.27		0.69	0.59	250/(1.4X60)=2.98	5	6.93	4.07		
60	0.7	0.7			0.63	790/(1.8X60)=7.31	5	6.93	4.37		
61	0.85	0.51		0.34	0.63	500/(1.95X60)=4.27	5	6.93	4.36		
62	0.72	0.72			0.65	745/(2.1X60)=5.91	5	6.93	4.49		
63	0.83	0.33		0.5	0.55	480/(1.0X60)=8.0	5	6.93	3.79		
64	1.02	0.15		0.87	0.57	420/(0.9X60)=7.61	5	6.93	3.95		
65	1.55	0.16		1.39	0.84	500/(1.1X60)=7.58	5	6.93	5.81		
66	1.2	0.18		1.02	0.67	450/(1.0X60)=7.50	5	6.93	4.66		
67	2	0.8		1.2	1.32	500/(1.35X60)=6.17	5	6.93	9.15		
68	1.75			1.75	0.88	420/(1.0X60)=7.00	5	6.93	6.06		
69	1.4	0.49		0.91	0.90	400/(2.0X60)=3.33	5	6.93	6.21		
70	1.95	0.2		1.75	1.06	500/(1.2X60)=6.94	5	6.93	7.31		
71	1.55	0.16		1.39	0.84	450/(1.2X60)=6.25	5	6.93	5.81		
72	28.1			28.1	14.05	3300/(1.0X60)=55.0	5	6.93	37.37		
73	1.86		1.86		0.93	350/(1.2X60)=4.86	5	6.93	6.44		



8/16/1999  
David Lott, P.E.

## HYDRAULIC CALCULATIONS SHEET 1 OF 5

FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	SHEET NO.
6	STP 99(413)MM	84
STATE	STATE DIST. NO.	COUNTY
TEXAS	18	ROCKWALL
CONT.	SECT.	JOB
1014	03	033 FM 740