

STORM DRAINAGE SYSTEM DESIGN

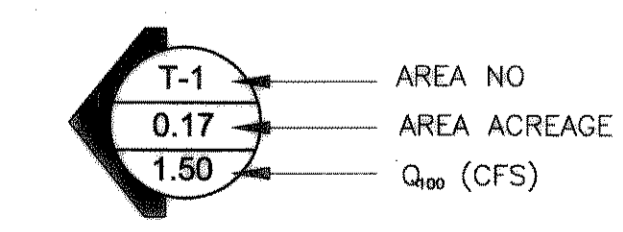
PROJECT: TUBBS ROAD IMPROVEMENTS
 STORM DATA REFERENCE: USWS Technical Paper No. 40
 PIPE MATERIAL: Class III - Reinforced Concrete Pipe
 DRAINAGE SYSTEM: Line "T"

DRAIN No.	AREA (AC)	RUNOFF COEFF (C)	TIME (MIN)	RAINFALL INT (IN)	Q-100 (CFS)	INLET TYPE	INLET CAP (CFS)	STATION (FT)	LINE LENGTH (FT)	Q-100 IN-PIPE (CFS)	PIPE SIZE (INCH)	PIPE AREA (SQ FT)	PIPE SLOPE (FT/FT)	Flowline IN Elev (FT)	Flowline OUT Elev (FT)	FLOW COEFF (m-01)	HGL SLOPE (FT/FT)	TOP OF PIPE Elev (FT)	HGL IN Elev (FT)	HGL OUT Elev (FT)	PIPE VEL (FPS)	PIPE CAP (CFS)	NOTES
T-1	0.09	0.90	10.00	9.80	0.79	5' INLET	25	375	45	0.79	18	1.77	0.0350	513.02	513.15	124	0.00004	516.34	515.03	515.03	13.13	23.20	Tunnel FL= 517.00 PARTIAL FLOW
T-2 & T-3	0.94	0.90	10.00	9.80	8.29	5' INLETS Y	10	330	32	9.08	21	2.41	0.0350	511.90	511.15	124	0.0054	513.65	515.03	516.26	9.65	23.20	PARTIAL FLOW
T-4	3.56	0.90	10.00	9.80	31.40	N/A	25	298	158	40.48	30	4.91	0.0350	504.79	505.79	172	0.0554	507.29	507.73	508.10	8.25	40.48	FULL FLOW
T-5	0.78	0.90	10.00	9.80	6.88	Y	10	140	96	47.36	42	9.62	0.0040	504.39	504.39	1,006	0.0022	507.89	507.89	507.77	6.61	63.63	PARTIAL FLOW
T-6	0.50	0.90	10.00	9.80	4.41	10' INLET	25	44	24	51.77	42	9.62	0.0040	504.29	504.29	1,006	0.0026	507.89	507.89	507.77	6.61	63.63	PARTIAL FLOW
T-7	0.85	0.90	10.00	9.80	7.50	10' INLET	10	20	20	59.27	42	9.62	0.0040	504.29	504.29	1,006	0.0035	507.79	507.79	507.78	6.61	63.63	PARTIAL FLOW at Line P
END								0						504.21					507.71				

DRAINAGE AREA CALCULATION

AREA	Tc (MIN)	C	I ₁₀₀ (IN/HR)	A (AC)	Q ₁₀₀ (CFS)
T-1	10	0.9	9.8	0.09	0.79
T-2	10	0.9	9.8	0.10	0.88
T-3	10	0.9	9.8	0.84	7.41
T-4	10	0.9	9.8	3.56	31.40
T-5	10	0.9	9.8	0.78	6.88
T-6	10	0.9	9.8	0.50	4.41
T-7	10	0.9	9.8	0.85	0.75
TOTAL					52.27

DRAINAGE LEGEND



AS BUILT
 THIS IS TO CERTIFY THAT CHANGES AND CORRECTIONS HAVE BEEN MADE TO CONFORM TO THE CONTRACTOR'S RECORD OF THIS PROJECT.



DRAINAGE AREA MAP FOR TUBBS ROAD

HORIZON ROAD (FM 3097), SUMMER LEE DRIVE, AND TUBBS ROAD IMPROVEMENTS

CITY OF ROCKWALL, TEXAS

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