

TC-5		DESIGN FACTORS FOR A DESIGN SPEED OF 20 MPH (RURAL) USING E= 8% MAX.																		
DESIGN VELOCITY=20		WIDTH-16 FT			WIDTH- 18 FT			WIDTH-20 FT			WIDTH-22 FT			WIDTH-24 FT			WIDTH-48 FT			
		IGRDS EQUIVALENTS (NUMBER OF LANES AT LANE WIDTH)																		
		1 @ 8'			1 @ 9'			1 @ 10'			1 @ 11'			1 @ 12'			2 @ 12'			
RADIUS(FT)	E(%)	CR	LS	w	CR	LS	w	CR	LS	w	CR	LS	w	CR	LS	w	CR	LS	w	
20000	2.1	60	60	0.0	60	60	0.0	60	60	0.0	60	60	0.0	60	60	0.0	60	60	0.0	
15000	2.1	60	60	0.0	60	60	0.0	60	60	0.0	60	60	0.0	60	60	0.0	60	60	0.0	
10000	2.1	60	60	0.0	60	60	0.0	60	60	0.0	60	60	0.0	60	60	0.0	60	60	0.0	
7000	2.1	60	60	0.0	60	60	0.0	60	60	0.0	60	60	0.0	60	60	0.0	60	60	0.0	
5000	2.1	60	60	0.0	60	60	0.0	60	60	0.0	60	60	0.0	60	60	0.0	60	60	0.0	
4000	2.1	60	60	0.0	60	60	0.0	60	60	0.0	60	60	0.0	60	60	0.0	60	60	0.0	
3000	2.1	60	60	0.0	60	60	0.0	60	60	0.0	60	60	0.0	60	60	0.0	60	60	0.0	
2500	2.1	13	60	3.6	14	60	2.6	60	60	0.0	60	60	0.0	60	60	0.0	60	60	0.0	
2250	2.1	13	60	3.7	14	60	2.7	60	60	0.0	60	60	0.0	60	60	0.0	60	60	0.0	
2000	2.1	13	60	3.7	14	60	2.7	60	60	0.0	60	60	0.0	60	60	0.0	60	60	0.0	
1750	2.1	13	60	3.8	14	60	2.8	60	60	0.0	60	60	0.0	60	60	0.0	60	60	0.0	
1500	2.1	13	60	3.9	14	60	2.9	60	60	0.0	60	60	0.0	60	60	0.0	60	60	0.0	
1300	2.1	13	60	4.0	14	60	3.0	15	60	2.0	60	60	0.0	60	60	0.0	60	60	0.0	
1150	2.1	13	60	4.1	14	60	3.1	15	60	2.1	60	60	0.0	60	60	0.0	60	60	0.0	
1000	2.4	13	60	4.2	14	60	3.2	15	60	2.2	53	60	0.0	53	60	0.0	53	60	0.0	
900	2.6	13	60	4.3	14	60	3.3	15	60	2.3	49	60	0.0	49	60	0.0	65	80	0.0	
800	2.9	13	60	4.4	14	60	3.4	15	60	2.4	44	60	0.0	44	60	0.0	58	80	0.0	
750	3.1	13	60	4.4	14	60	3.4	15	60	2.4	41	60	0.0	41	60	0.0	55	80	0.0	
700	3.3	13	60	4.5	14	60	3.5	14	60	2.5	39	60	0.0	39	60	0.0	51	80	0.0	
650	3.4	13	60	4.6	14	60	3.6	14	60	2.6	38	60	0.0	38	60	0.0	62	100	0.0	
600	3.7	13	60	4.7	14	60	3.7	14	60	2.7	35	60	0.0	35	60	0.0	57	100	0.0	
550	3.9	13	60	4.8	14	60	3.8	14	60	2.8	33	60	0.0	44	80	0.0	54	100	0.0	
500	4.2	13	60	4.9	18	80	3.9	19	80	2.9	40	80	0.0	40	80	0.0	60	120	0.0	
475	4.3	16	80	5.0	18	80	4.0	19	80	3.0	20	80	2.0	40	80	0.0	31	120	2.0	
450	4.5	16	80	5.1	18	80	4.1	19	80	3.1	20	80	2.1	38	80	0.0	31	120	2.2	
425	4.7	16	80	5.2	18	80	4.2	19	80	3.2	20	80	2.2	36	80	0.0	30	120	2.4	
400	4.8	16	80	5.3	17	80	4.3	19	80	3.3	20	80	2.3	35	80	0.0	35	140	2.6	
375	5.0	16	80	5.4	17	80	4.4	18	80	3.4	24	100	2.4	34	80	0.0	35	140	2.8	
350	5.2	16	80	5.5	17	80	4.5	23	100	3.5	24	100	2.5	41	100	0.0	35	140	3.0	
325	5.4	16	80	5.7	21	100	4.7	23	100	3.7	24	100	2.7	39	100	0.0	35	140	3.4	
300	5.6	20	100	5.8	21	100	4.8	23	100	3.8	24	100	2.8	38	100	0.0	40	160	3.6	
280	5.8	20	100	6.0	21	100	5.0	22	100	4.0	24	100	3.0	30	120	2.0	39	160	4.0	
265	6.0	20	100	6.1	21	100	5.1	22	100	4.1	28	120	3.1	29	120	2.1	39	160	4.2	
250	6.1	19	100	6.3	21	100	5.3	22	100	4.3	28	120	3.3	29	120	2.3	44	180	4.6	
235	6.3	19	100	6.4	21	100	5.4	26	120	4.4	28	120	3.4	29	120	2.4	43	180	4.8	
220	6.5	19	100	6.6	25	120	5.6	26	120	4.6	28	120	3.6	29	120	2.6	43	180	5.2	
205	6.7	23	120	6.8	24	120	5.8	26	120	4.8	27	120	3.8	29	120	2.8	43	180	5.6	
190	6.9	22	120	7.1	24	120	6.1	26	120	5.1	31	140	4.1	33	140	3.1	47	200	6.2	
175	7.2	22	120	7.4	24	120	6.4	29	120	5.4	31	140	4.4	33	140	3.4	46	200	6.8	
160	7.4	22	120	7.7	27	140	6.7	29	140	5.7	31	140	4.7	32	140	3.7	51	220	7.4	
145	7.6	25	140	8.1	27	140	7.1	29	140	6.1	30	140	5.1	36	160	4.1	50	220	8.2	
130	7.9	24	140	8.6	26	140	7.6	32	160	6.6	34	160	5.6	36	160	4.6	53	240	9.2	
115	8.0	24	140	9.2	26	140	8.2	31	160	7.2	33	160	6.2	35	160	5.2	52	240	10.4	
107 ⊗	8.0	23	140	9.6	29	160	8.6	31	160	7.6	33	160	6.6	35	160	5.6	52	240	11.2	

NOTE:
CR, LS & w VALUES IN FEET.

⊗ MINIMUM ALLOWABLE RADIUS