

DESIGN FACTORS FOR A DESIGN SPEED OF 25 MPH (RURAL) USING E = 8% MAX.

DESIGN VELOCITY -25	DESIGN SOFTWARE EQUIVALENTS (NUMBER OF LANES AT LANE WIDTH)												INTERCHANGE RAMPS						
	WIDTH+ 18 FT			WIDTH+20 FT			WIDTH+22 FT			WIDTH+24 FT			WIDTH+48 FT			16 FT		18 FT	
	DESIGN SOFTWARE EQUIVALENTS (NUMBER OF LANES AT LANE WIDTH)			DESIGN SOFTWARE EQUIVALENTS (NUMBER OF LANES AT LANE WIDTH)			DESIGN SOFTWARE EQUIVALENTS (NUMBER OF LANES AT LANE WIDTH)			DESIGN SOFTWARE EQUIVALENTS (NUMBER OF LANES AT LANE WIDTH)			DESIGN SOFTWARE EQUIVALENTS (NUMBER OF LANES AT LANE WIDTH)			w		w	
	1 @ 9'	1 @ 9'	1 @ 9'	1 @ 10'	1 @ 10'	1 @ 10'	1 @ 11'	1 @ 11'	1 @ 11'	1 @ 12'	1 @ 12'	1 @ 12'	2 @ 12'	2 @ 12'	2 @ 12'	CR	LS	CR	LS
RADIUS(FT) E(%)	CR	LS	w	CR	LS	w	CR	LS	w	CR	LS	w	CR	LS	w	CR	LS	CR	LS
2500	NC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1756	2.0	26	26	29	0.0	29	32	32	32	35	35	35	35	52	52	40	40	43	43
1664	2.1	77	80	2.0	29	30	0.0	32	33	36	36	36	36	54	54	40	42	43	45
1579	2.2	73	80	2.0	29	32	0.0	32	35	38	38	38	38	57	57	40	44	43	48
1502	2.3	70	80	2.0	29	33	0.0	33	37	40	40	40	40	60	60	40	46	43	50
1431	2.4	67	80	2.1	29	35	0.0	32	38	42	42	42	42	62	62	40	48	43	52
1366	2.5	64	80	2.1	29	36	0.0	32	40	45	45	45	45	65	65	40	50	43	54
1306	2.6	62	80	2.1	29	38	0.0	32	41	47	47	47	47	67	67	40	52	43	56
1250	2.7	60	80	2.1	29	39	0.0	32	43	50	50	50	50	70	70	40	54	43	58
1198	2.8	58	80	2.2	29	40	0.0	32	44	53	53	53	53	72	72	40	56	43	60
1149	2.9	56	80	2.2	29	42	0.0	32	46	56	56	56	56	75	75	40	58	43	63
1104	3.0	54	80	2.2	29	43	0.0	32	48	60	60	60	60	78	78	40	60	43	65
1061	3.1	52	80	2.3	29	45	0.0	32	49	64	64	64	64	80	80	40	62	43	67
1021	3.2	50	80	2.3	29	46	0.0	32	51	69	69	69	69	83	83	40	64	43	69
983	3.3	49	80	2.3	29	48	0.0	32	52	74	74	74	74	85	85	40	66	43	71
948	3.4	48	80	2.4	29	49	0.0	32	54	80	80	80	80	88	88	40	68	43	73
914	3.5	46	80	2.4	29	50	0.0	32	55	85	85	85	85	90	90	40	70	43	75
882	3.6	45	80	2.4	29	52	0.0	32	57	90	90	90	90	93	93	40	72	43	78
852	3.7	44	80	2.5	29	53	0.0	32	59	96	96	96	96	96	96	40	74	43	80
823	3.8	43	80	2.5	29	55	0.0	32	60	102	102	102	102	98	98	40	76	43	82
795	3.9	42	80	2.6	29	56	0.0	32	62	108	108	108	108	101	101	40	78	43	84
769	4.0	40	80	2.6	29	58	0.0	32	63	115	115	115	115	103	103	40	80	43	86
744	4.1	40	80	2.6	29	59	0.0	32	65	122	122	122	122	106	106	40	82	43	88
720	4.2	39	80	2.7	29	60	0.0	32	66	130	130	130	130	108	108	40	84	43	90
696	4.3	38	80	2.7	29	62	0.0	32	68	138	138	138	138	111	111	40	86	43	93
674	4.4	37	80	2.7	29	63	0.0	32	70	147	147	147	147	114	114	40	88	43	95
652	4.5	36	80	2.8	29	65	0.0	32	71	156	156	156	156	116	116	40	90	43	97
632	4.6	35	80	2.8	29	66	0.0	32	73	166	166	166	166	119	119	40	92	43	99
612	4.7	35	80	2.9	29	68	0.0	32	74	176	176	176	176	121	121	40	94	43	101
592	4.8	34	80	2.9	29	69	0.0	32	76	187	187	187	187	124	124	40	96	43	103
573	4.9	33	80	2.9	29	70	0.0	32	77	198	198	198	198	126	126	40	98	43	105
555	5.0	32	80	3.0	32	80	2.0	32	79	209	209	209	209	129	129	40	100	43	108
537	5.1	32	80	3.0	32	81	2.0	32	81	221	221	221	221	132	132	40	102	43	110
519	5.2	31	80	3.1	32	83	2.1	32	82	233	233	233	233	134	134	40	104	43	112
502	5.3	31	80	3.1	32	84	2.1	32	84	245	245	245	245	137	137	40	106	43	114
485	5.4	31	82	3.2	32	86	2.2	32	85	257	257	257	257	139	139	40	108	43	116
468	5.5	31	84	3.2	32	88	2.2	32	87	270	270	270	270	142	142	40	110	43	118
452	5.6	31	86	3.3	33	90	2.3	32	88	283	283	283	283	144	144	40	112	43	120
437	5.7	31	88	3.4	33	92	2.4	32	90	296	296	296	296	147	147	40	114	43	123
423	5.8	31	89	3.4	33	93	2.4	32	92	309	309	309	309	150	150	40	116	43	125
409	5.9	31	91	3.5	33	95	2.5	32	93	322	322	322	322	152	152	40	118	43	127
396	6.0	31	93	3.5	33	97	2.5	32	95	335	335	335	335	155	155	40	120	43	129
383	6.1	32	95	3.6	33	99	2.6	32	96	348	348	348	348	157	157	40	122	43	131
371	6.2	32	97	3.7	33	101	2.7	32	98	361	361	361	361	160	160	40	124	43	133
359	6.3	32	98	3.7	33	103	2.7	32	99	374	374	374	374	162	162	40	126	43	135
347	6.4	32	100	3.8	33	105	2.8	32	101	387	387	387	387	165	165	40	128	43	138
336	6.5	32	102	3.9	33	103	2.9	32	103	400	400	400	400	168	168	40	130	43	140
326	6.6	32	104	3.9	33	108	2.9	32	104	413	413	413	413	170	170	40	132	43	142
315	6.7	32	106	4.0	34	111	3.0	35	115	426	426	426	426	172	172	40	134	43	144
305	6.8	32	108	4.1	34	113	3.1	35	117	439	439	439	439	175	175	40	136	43	146
295	6.9	32	110	4.2	34	115	3.2	35	120	452	452	452	452	178	178	40	138	43	148
286	7.0	32	111	4.2	34	116	3.2	35	121	465	465	465	465	181	181	40	140	43	150
276	7.1	33	114	4.3	34	119	3.3	35	124	478	478	478	478	184	184	40	142	43	153
267	7.2	33	116	4.4	34	121	3.4	35	126	491	491	491	491	187	187	40	144	43	155
258	7.3	33	118	4.5	34	123	3.5	36	128	504	504	504	504	190	190	40	146	43	157
248	7.4	33	120	4.6	34	125	3.6	36	131	517	517	517	517	192	192	40	148	43	159
239	7.5	33	122	4.7	34	127	3.7	36	133	530	530	530	530	195	195	40	150	43	161
229	7.6	33	124	4.8	35	130	3.8	36	135	543	543	543	543	198	198	40	152	43	163
219	7.7	33	127	5.0	35	132	4.0	36	138	556	556	556	556	201	201	40	154	43	165
209	7.8	34	129	5.1	35	135	4.1	36	140	569	569	569	569	204	204	40	156	43	168
196	7.9	34	132	5.3	35	138	4.3	37	143	582	582	582	582	207	207	40	158	43	170
172	8.0	34	136	5.8	36	142	4.8	37	148	608	608	608	608	212	212	40	160	43	172

NOTE: CR, LS & w VALUES IN FEET. LISTED RADIUS IS THE MINIMUM ALLOWABLE RADIUS FOR THE CORRESPONDING E, CR, LS, AND w VALUES.

TRANSITION CURVES - RURAL  
25 MPH DESIGN SPEED