REVISED 1/04 REVISED 1/07

SPECIFICATION REFERENCE

TRANSITION CURVES - RURAL
25 MPH DESIGN SPEED

VIRGINIA DEPARTMENT OF TRANSPORTATION

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

DESIGN VELOCITY =25		WIDTH= 18 FT			WIDTH=20 FT			WIDTH=22 FT			WIDTH=24 FT			WIDTH=48 FT			INTERCHANGE RAMPS WIDTH			
		DESIGN SOFTWARE EQUIVALENTS (NUMBER OF LANES AT LANE WIDTH)															16 FT		18 FT	
		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	CR	LS
2500	NC	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0	0
1756	2.0	26	26	0.0	29	29	0.0	32	32	0.0	35	35	0.0	52	52	0.0	40	40	43	43
1664	2.1	71	74	2.0	29	30	0.0	32	33	0.0	35	36	0.0	52	54	0.0	40	42	43	45
1579	2.2	68	74	2.0	29	32	0.0	32	35	0.0	35	38	0.0	52	57	0.0	40	44	43	48
1502	2.3	65	74	2.0	29	33	0.0	33	37	0.0	35	40	0.0	52	60	0.0	40	46	43	50
1431	2.4	62	74	2.1	29	35	0.0	32	38	0.0	35	42	0.0	52	62	0.0	40	48	43	52
1366	2.5	60	74	2.1	29	36	0.0	32	40	0.0	35	43	0.0	52	65	0.0	40	50	43	54
1306	2.6	57	74	2.1	29	38	0.0	32	41	0.0	35	45	0.0	52	67	0.0	40	52	43	56
1250	2.7	55	74	2.1	29	39	0.0	32	43	0.0	35	47	0.0	52	70	0.0	40	54	43	58
1198	2.8	53	74	2.2	29	40	0.0	32	44	0.0	35	48	0.0	52	72	0.0	40	56	43	60
1149	2.9	52	74	2.2	29	42	0.0	32	46	0.0	35	50	0.0	52	75	0.0	40	58	43	63
1104	3.0	50	74	2.2	29	43	0.0	32	48	0.0	35	52	0.0	52	78	0.0	40	60	43	65
1061	3.1	48	74	2.3	29	45	0.0	32	49	0.0	35	54	0.0	52	80	0.0	40	62	43	67
1021	3.2	47	74	2.3	29	46	0.0	32	51	0.0	35	55	0.0	52	83	0.0	40	64	43	69
983	3.3	45	74	2.3	29	48	0.0	32	52	0.0	35	57	0.0	52	85	0.0	40	66	43	71
948	3.4	44	74	2.4	29	49	0.0	32	54	0.0	35	59	0.0	52	88	0.0	40	68	43	73
914	3.5	43	74	2.4	29	50	0.0	32	55	0.0	35	60	0.0	52	90	0.0	40	70	43	75
882	3.6	42	74	2.4	29	52	0.0	32	57	0.0	35	62	0.0	52	93	0.0	40	72	43	78
852	3.7	40	74	2.5	29	53	0.0	32	59	0.0	35	64	0.0	52	96	0.0	40	74	43	80
823	3.8	39	74	2.5	29	55	0.0	32	60	0.0	35	66	0.0	52	98	0.0	40	76	43	82
795	3.9	38	74	2.6	29	56	0.0	32	62	0.0	35	67	0.0	52	101	0.0	40	78	43	84
769	4.0	37	74	2.6	29	58	0.0	32	63	0.0	35	69	0.0	52	103	0.0	40	80	43	86
744	4.1	37	74	2.6	29	59	0.0	32	65	0.0	35	71	0.0	52	106	0.0	40	82	43	88
720	4.2	36	74	2.7	29	60	0.0	32	66	0.0	35	72	0.0	52	108	0.0	40	84	43	90
696	4.3	35	74	2.7	29	62	0.0	32	68	0.0	35	74	0.0	52	111	0.0	40	86	43	93
674	4.4	34	74	2.7	29	63	0.0	32	70	0.0	35	76	0.0	52	114	0.0	40	88	43	95
652	4.5	33	74	2.8	29	65	0.0	32	71	0.0	35	78	0.0	52	116	0.0	40	90	43	97
632	4.6	33	74	2.8	29	66	0.0	32	73	0.0	35	79	0.0	52	119	0.0	40	92	43	99
612	4.7	32	74	2.9	29	68	0.0	32	74	0.0	35	81	0.0	52	121	0.0	40	94	43	101
592	4.8	31	74	2.9	29	69	0.0	32	76	0.0	35	83	0.0	52	124	0.0	40	96	43	103
573	4.9	31	75	2.9	29	70	0.0	32	77	0.0	35	84	0.0	52	126	0.0	40	98	43	105
555	5.0	30	75	3.0	32	79	2.0	32	79	0.0	35	86	0.0	52	129	0.0	40	100	43	108
537	5.1	31	77	3.0	32	81	2.0	32	81	0.0	35	88	0.0	52	132	0.0	40	102	43	110
519	5.2	31	79	3.1	32	83	2.1	32	82	0.0	35	90	0.0	52	134	0.0	40	104	43	112
502	5.3	31	80	3.1	32	84	2.1	32	84	0.0	35	91	0.0	52	137	0.0	40	106	43	114
485	5.4	31	82	3.2	32	86	2.2	32	85	0.0	35	93	0.0	52	139	0.0	40	108	43	116
468	5.5	31	84	3.2	32	88	2.2	32	87	0.0	35	95	0.0	52	142	0.0	40	110	43	118
452	5.6	31	86	3.3	33	90	2.3	32	88	0.0	35	96	0.0	52	144	0.0	40	112	43	120
437	5.7	31	88	3.4	33	92	2.4	32	90	0.0	35	98	0.0	52	147	0.0	40	114	43	123
423	5.8	31	89	3.4	33	93	2.4	32	92	0.0	35	100	0.0	52	150	0.0	40	116	43	125
409	5.9	31	91	3.5	33	95	2.5	32	93	0.0	35	102	0.0	52	152	0.0	40	118	43	127
396	6.0	31	93	3.5	33	97	2.5	32	95	0.0	35	103	0.0	52	155	0.0	40	120	43	129
383	6.1	32	95	3.6	33	99	2.6	32	96	0.0	35	105	0.0	52	157	0.0	40	122	43	131
371	6.2	32	97	3.7	33	101	2.7	32	98	0.0	35	107	0.0	52	160	0.0	40	124	43	133
359	6.3	32	98	3.7	33	103	2.7	32	99	0.0	35	108	0.0	52	162	0.0	40	126	43	135
347	6.4	32	100	3.8	33	105	2.8	32	101	0.0	35	110	0.0	52	165	0.0	40	128	43	138
336	6.5	32	102	3.9	33	103	2.9	32	103	0.0	35	112	0.0	52	168	0.0	40	130	43	140
326	6.6	32	104	3.9	33	108	2.9	32	104	0.0	35	114	0.0	52	170	0.0	40	132	43	142
315	6.7	32	106	4.0	34	111	3.0	35	115	2.0	35	115	0.0	56	187	2.0	40	134	43	144
305	6.8	32	108	4.1	34	113	3.1	35	118	2.1	35	117	0.0	57	191	2.2	40	136	43	146
295	6.9	32	110	4.2	34	115	3.2	35	120	2.2	35	119	0.0	57	196	2.4	40	138	43	148
286	7.0	32	111	4.2	34	116	3.2	35	121	2.2	35	120	0.0	57	198	2.4	40	140	43	150
276	7.1	33	114	4.3	34	119	3.3	35	124	2.3	35	122	0.0	58	203	2.6	40	142	43	153
267	7.2	33	116	4.4	34	121	3.4	35	126	2.4	35	124	0.0	58	207	2.8	40	144	43	155
258	7.3	33	118	4.5	34	123	3.5	36	128	2.5	35	126	0.0	59	212	3.0	40	146	43	157
248	7.4	33	120	4.6	34	125	3.6	36	131	2.6	35	127	0.0	59	216	3.2	40	148	43	159
239	7.5	33	122	4.7	34	127	3.7	36	133	2.7	35	129	0.0	59	221	3.4	40	150	43	161
229	7.6	33	124	4.8	35	130	3.8	36	135	2.8	35	131	0.0	60	225	3.6	40	152	43	163
219	7.7	33	127	5.0	35	132	4.0	36	138	3.0	38	143	2.0	60	231	4.0	40	154	43	165
209	7.8	34	129	5.1	35	135	4.1	36	140	3.1	38	146	2.1	61	236	4.2	40	156	43	168
196	7.9	34	132	5.3	35	138	4.3	37	143	3.3	38	149	2.3	62	243	4.6	40	158	43	170
172	8.0	34	136	5.8	36	142	4.8	37	148	3.8	39	154	2.8	64	254	5.6	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.