SPECIFICATION REFERENCE

DESIGN FACTORS FOR A DESIGN SPEED OF 45 MPH (RURAL) USING E- 8% MAX.

DESIGN VELOCITY -45		WIDTH- 18 FT			WIDTH-20 FT			WIDTH-22 FT			WIDTH-24 FT			WIDTH-48 FT			WIDTH-72 FT			INTERCHANGE RAMPS WIDTH			
		DESIGN SOFTWARE EQUIVALENTS (NUMBER OF LANES AT LANE WIDTH)																					
		1 @ 9'			1 @ 10'			1 @ 11'			1 @ 12'			2 @ 12'			3 @ 12'			16 FT		18 FT	
RADIUS(FT)	E(%)	Lt	Lr	w	Lt	Lr	w	Lt	Lr	w	Lt	Lr	w	Lt	Lr	w	Lt	Lr	w	Lt	Lr	Lt	Lr
8000	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	0	0	0	0
4957	2.0	34	34	0.0	38	38	0.0	41	41	0.0	45	45	0.0	67	67	0.0	89	89	0.0	53	53	56	56
4702	2.1	34	35	0.0	38	39	0.0	41	43	0.0	45	47	0.0	67	70	0.0	89	94	0.0	53	56	56	59
4467	2.2	34	37	0.0	38	41	0.0	41	45	0.0	45	49	0.0	67	74	0.0	89	98	0.0	53	58	56	61
4254	2.3	34	39	0.0	38	43	0.0	41	47	0.0	45	52	0.0	67	77	0.0	89	103	0.0	53	61	56	64
4057	2.4	34	40	0.0	38	45	0.0	41	49	0.0	45	54	0.0	67	80	0.0	89	107	0.0	53	63	56	67
3876	2.5	34	42	0.0	38	47	0.0	41	51	0.0	45	56	0.0	67	84	0.0	89	112	0.0	53	66	56	70
3710	2.6	34	44	0.0	38	49	0.0	41	53	0.0	45	58	0.0	67	87	0.0	89	116	0.0	53	69	56	72
3554	2.7	34	45	0.0	38	50	0.0	41	55	0.0	45	60	0.0	67	90	0.0	89	120	0.0	53	71	56	75
3412	2.8	34	47	0.0	38	52	0.0	41	58	0.0	45	63	0.0	67	94	0.0	89	125	0.0	53	74	56	78
3278	2.9	34	49	0.0	38	54	0.0	41	60	0.0	45	65	0.0	67	97	0.0	89	129	0.0	53	77	56	81
3152	3.0	34	50	0.0	38	56	0.0	41	62	0.0	45	67	0.0	67	100	0.0	89	134	0.0	53	79	56	84
3035	3.1	34	52	0.0	38	58	0.0	41	64	0.0	45	69	0.0	67	104	0.0	89	138	0.0	53	82	56	86
2925	3.2	34	54	0.0	38	60	0.0	41	66	0.0	45	72	0.0	67	107	0.0	89	143	0.0	53	84	56	89
2866	3.3	34	55	0.0	38	62	0.0	41	68	0.0	45	74	0.0	67	110	0.0	89	147	0.0	53	87	56	92
2865	3.3	80	132	2.1	38	62	0.0	41	68	0.0	45	74	0.0	67	110	0.0	89	147	0.0	53	87	56	92
2822	3.3	80	132	2.1	38	62	0.0	41	68	0.0	45	74	0.0	67	110	0.0	89	147	0.0	53	87	56	92
2724	3.4	78	132	2.1	38	63	0.0	41	70	0.0	45	76	0.0	67	114	0.0	89	152	0.0	53	90	56	95
2631	3.5	76	132	2.1	38	65	0.0	41	72	0.0	45	78	0.0	67	117	0.0	89	156	0.0	53	92	56	97
2544	3.6	74	132	2.1	38	67	0.0	41	74	0.0	45	80	0.0	67	120	0.0	89	160	0.0	53	95	56	100
2461	3.7	72	132	2.2	38	69	0.0	41	76	0.0	45	83	0.0	67	124	0.0	89	165	0.0	53	98	56	103
2383	3.8	70	132	2.2	38	71	0.0	41	78	0.0	45	85	0.0	67	127	0.0	89	169	0.0	53	100	56	106
2308	3.9	68	132	2.2	38	73	0.0	41	80	0.0	45	87	0.0	67	130	0.0	89	174	0.0	53	103	56	108
2237	4.0	66	132	2.2	38	75	0.0	41	82	0.0	45	89	0.0	67	134	0.0	89	178	0.0	53	105	56	111
2169	4.1	65	132	2.2	38	76	0.0	41	84	0.0	45	92	0.0	67	137	0.0	89	183	0.0	53	108	56	114
2104	4.2	63	132	2.3	38	78	0.0	41	86	0.0	45	94	0.0	67	140	0.0	89	187	0.0	53	111	56	117
2041	4.3	62	132	2.3	38	80	0.0	41	88	0.0	45	96	0.0	67	144	0.0	89	192	0.0	53	113	56	120
1982	4.4	60	132	2.3	38	82	0.0	41	90	0.0	45	98	0.0	67	147	0.0	89	196	0.0	53	116	56	122
1924	4.5	59	132	2.3	38	84	0.0	41	92	0.0	45	100	0.0	67	150	0.0	89	200	0.0	53	119	56	125
1870	4.6	58	132	2.4	38	86	0.0	41	94	0.0	45	103	0.0	67	154	0.0	89	205	0.0	53	121	56	128
1817	4.7	57	132	2.4	38	88	0.0	41	96	0.0	45	105	0.0	67	157	0.0	89	209	0.0	53	124	56	131
1766	4.8	55	132	2.4	38	89	0.0	41	98	0.0	45	107	0.0	67	160	0.0	89	214	0.0	53	126	56	133
1717	4.9	54	132	2.4	38	91	0.0	41	100	0.0	45	109	0.0	67	164	0.0	89	218	0.0	53	129	56	136
1669	5.0	53	132	2.4	38	93	0.0	41	102	0.0	45	112	0.0	67	167	0.0	89	223	0.0	53	132	56	139
1624	5.1	52	132	2.5	38	95	0.0	41	104	0.0	45	114	0.0	67	170	0.0	89	227	0.0	53	134	56	142
1579	5.2	51	132	2.5	38	97	0.0	41	106	0.0	45	116	0.0	67	174	0.0	89	232	0.0	53	137	56	144
1536	5.3	50	132	2.5	38	99	0.0	41	108	0.0	45	118	0.0	67	177	0.0	89	236	0.0	53	140	56	147
1495	5.4	49	132	2.5	38	100	0.0	41	110	0.0	45	120	0.0	67	180	0.0	89	240	0.0	53	142	56	150
1454	5.5	48	132	2.6	38	102	0.0	41	113	0.0	45	123	0.0	67	184	0.0	89	245	0.0	53	145	56	153
1415	5.6	48	132	2.6	38	104	0.0	41	115	0.0	45	125	0.0	67	187	0.0	89	249	0.0	53	147	56	156
1376	5.7	47	132	2.6	38	106	0.0	41	117	0.0	45	127	0.0	67	190	0.0	89	254	0.0	53	150	56	158
1339	5.8	46	132	2.6	38	108	0.0	41	119	0.0	45	129	0.0	67	194	0.0	89	258	0.0	53	153	56	161
1302	5.9	45	132	2.7	38	110	0.0	41	121	0.0	45	132	0.0	67	197	0.0	89	263	0.0	53	155	56	164
1266	6.0	44	132	2.7	38	112	0.0	41	123	0.0	45	134	0.0	67	200	0.0	89	267	0.0	53	158	56	167
1232	6.1	44	132	2.7	38	113	0.0	41	125	0.0	45	136	0.0	67	204	0.0	89	272	0.0	53	160	56	169
1199	6.2	43	132	2.8	38	115	0.0	41	127	0.0	45	138	0.0	67	207	0.0	89	276	0.0	53	163	56	172
1166	6.3	42	132	2.8	38	117	0.0	41	129	0.0	45	140	0.0	67	210	0.0	89	280	0.0	53	166	56	175
1135	6.4	42	132	2.8	38	119	0.0	41	131	0.0	45	143	0.0	67	214	0.0	89	285	0.0	53	168	56	178
1104	6.5	41	132	2.8	38	121	0.0	41	133	0.0	45	145	0.0	67	217	0.0	89	289	0.0	53	171	56	180
1073	6.6	40	132	2.9	38	123	0.0	41	135	0.0	45	147	0.0	67	220	0.0	89	294	0.0	53	174	56	183
1044	6.7	40	132	2.9	38	125	0.0	41	137	0.0	45	149	0.0	67	224	0.0	89	298	0.0	53	176	56	186
1015	6.8	39	132	2.9	38	126	0.0	41	139	0.0	45	152	0.0	67	227	0.0	89	303	0.0	53	179	56	189
986	6.9	40	135	3.0	41	141	2.0	41	141	0.0	45	154	0.0	67	230	0.0	89	307	0.0	53	181	56	192
957	7.0	40	137	3.0	41	143	2.0	41	143	0.0	45	156	0.0	67	234	0.0	89	312	0.0	53	184	56	194
929	7.1	40	139	3.1	42	146	2.1	41	145	0.0	45	158	0.0	67	237	0.0	89	316	0.0	53	187	56	197
902	7.2	40	141	3.1	42	148	2.1	41	147	0.0	45	160	0.0	67	240	0.0	89	320	0.0	53	189	56	200
874	7.3	40	143	3.1	42	150	2.1	41	149	0.0	45	163	0.0	67	244	0.0	89	325	0.0	53	192	56	203
845	7.4	40	146	3.2	42	153	2.2	41	151	0.0	45	165	0.0	67	247	0.0	89	329	0.0	53	195	56	205
817	7.5	40	148	3.2	42	155	2.2	41	153	0.0	45	167	0.0	67	250	0.0	89	334	0.0	53	197	56	208
787	7.6	40	150	3.3	42	157	2.3	41	155	0.0	45	169	0.0	67	254	0.0	89	338	0.0	53	200	56	211
756	7.7	40	152	3.3	42	159	2.3	41	157	0.0	45	172	0.0	67	257	0.0	89	343	0.0	53	202	56	214
723	7.8	40	155	3.4	42	162	2.4	41	159	0.0	45	174	0.0	67	260	0.0	89	347	0.0	53	205	56	216
683	7.9	40	158	3.5	42	165	2.5	41	161	0.0	45	176	0.0	67	264	0.0	89	352	0.0	53	208	56	219
602	8.0	41	161	3.7	43	169	2.7	41	163	0.0	45	178	0.0	67	267	0.0	95	377	2.1	53	210	56	222

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

TC-5.01

TRANSITION CURVES - RURAL
45 MPH DESIGN SPEED

VIRGINIA DEPARTMENT OF TRANSPORTATION

VDOT ROAD AND BRIDGE STANDARDS

REVISION DATE

SHEET 1 OF 1

802.37