SPECIFICATION REFERENCE

DESIGN FACTORS FOR A DESIGN SPEED OF 65 MPH (RURAL) USING E= 8% MAX.

DESIGN VELOCITY =65		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
12900	NC	0	0	2.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9566	2	49	49	2.9	47	47	0	52	52	0	56	56	0	84	84	0	112	112	0	66	66	70	70
9083	2.1	49	52	2.9	47	49	0	52	54	0	56	59	0	84	88	0	112	118	0	66	69	70	73
8643	2.2	49	54	3	52	57	2	52	57	0	56	62	0	84	93	0	112	123	0	66	72	70	77
8242	2.3	49	57	3	52	59	2	52	59	0	56	65	0	84	97	0	112	129	0	66	76	70	80
7873	2.4	49	59	3	52	62	2	52	62	0	56	67	0	84	101	0	112	134	0	66	79	70	84
7534	2.5	50	62	3.1	52	65	2.1	52	64	0	56	70	0	84	105	0	112	140	0	66	82	70	87
7221	2.6	50	64	3.1	52	67	2.1	52	67	0	56	73	0	84	109	0	112	146	0	66	85	70	90
6931	2.7	50	67	3.1	52	70	2.1	52	70	0	56	76	0	84	114	0	112	151	0	66	89	70	94
6662	2.8	50	69	3.1	52	72	2.1	52	72	0	56	79	0	84	118	0	112	157	0	66	92	70	97
6411	2.9	50	72	3.2	52	75	2.2	52	75	0	56	81	0	84	122	0	112	162	0	66	95	70	101
6176	3	50	74	3.2	52	78	2.2	52	77	0	56	84	0	84	126	0	112	168	0	66	98	70	104
5957	3.1	50	77	3.2	52	81	2.2	52	80	0	56	87	0	84	130	0	112	174	0	66	102	70	108
5751	3.2	50	79	3.2	52	83	2.2	52	82	0	56	90	0	84	134	0	112	179	0	66	105	70	111
5557	3.3	50	82	3.3	52	86	2.3	52	85	0	56	93	0	84	139	0	112	185	0	66	108	70	115
5375	3.4	50	85	3.3	52	89	2.3	52	87	0	56	95	0	84	143	0	112	190	0	66	112	70	118
5203	3.5	50	87	3.3	52	91	2.3	52	90	0	56	98	0	84	147	0	112	196	0	66	115	70	122
5040	3.6	50	90	3.3	52	94	2.3	52	93	0	56	101	0	84	151	0	112	201	0	66	118	70	125
4886	3.7	50	93	3.4	53	97	2.4	52	95	0	56	104	0	84	155	0	112	207	0	66	121	70	129
4740	3.8	50	95	3.4	53	99	2.4	52	98	0	56	107	0	84	160	0	112	213	0	66	125	70	132
4601	3.9	50	98	3.4	53	102	2.4	52	100	0	56	109	0	84	164	0	112	218	0	66	128	70	135
4469	4	50	100	3.5	53	105	2.5	52	103	0	56	112	0	84	168	0	112	224	0	66	131	70	139
4344	4.1	50	103	3.5	53	108	2.5	52	105	0	56	115	0	84	172	0	112	229	0	66	134	70	142
4224	4.2	50	105	3.5	53	110	2.5	52	108	0	56	118	0	84	176	0	112	235	0	66	138	70	146
4109	4.3	50	108	3.5	53	113	2.5	52	110	0	56	120	0	84	180	0	112	240	0	66	141	70	149
4000	4.4	51	111	3.6	53	116	2.6	52	113	0	56	123	0	84	185	0	112	246	0	66	144	70	153
3896	4.5	51	114	3.6	53	119	2.6	52	116	0	56	126	0	84	189	0	112	252	0	66	147	70	156
3795	4.6	51	116	3.6	53	121	2.6	52	118	0	56	129	0	84	193	0	112	257	0	66	151	70	160
3699	4.7	51	119	3.6	53	124	2.6	52	121	0	56	132	0	84	197	0	112	263	0	66	154	70	163
3607	4.8	51	122	3.7	53	127	2.7	52	123	0	56	134	0	84	201	0	112	268	0	66	157	70	167
3518	4.9	51	124	3.7	53	130	2.7	52	126	0	56	137	0	84	206	0	112	274	0	66	160	70	170
3433	5	51	127	3.7	53	132	2.7	52	128	0	56	140	0	84	210	0	112	280	0	66	164	70	174
3351	5.1	51	130	3.8	54	136	2.8	52	131	0	56	143	0	84	214	0	112	285	0	66	167	70	177
3272	5.2	51	132	3.8	54	138	2.8	52	134	0	56	146	0	84	218	0	112	291	0	66	170	70	180
3196	5.3	51	135	3.8	54	141	2.8	52	136	0	56	148	0	84	222	0	112	296	0	66	174	70	184
3122	5.4	51	137	3.8	54	144	2.8	52	139	0	56	151	0	84	227	0	112	302	0	66	177	70	187
3051	5.5	51	141	3.9	54	147	2.9	52	141	0	56	154	0	84	231	0	112	307	0	66	180	70	191
2982	5.6	51	143	3.9	54	150	2.9	52	144	0	56	157	0	84	235	0	112	313	0	66	183	70	194
2916	5.7	51	146	3.9	54	152	2.9	52	146	0	56	160	0	84	239	0	112	319	0	66	187	70	198
2852	5.8	66	191	3.9	54	155	2.9	52	149	0	56	162	0	84	243	0	112	324	0	66	190	70	201
2789	5.9	65	191	4	54	158	3	56	165	2	56	165	0	84	247	0	112	330	0	66	193	70	205
2729	6	64	191	4	54	161	3	56	168	2	56	168	0	84	252	0	112	335	0	66	196	70	208
2670	6.1	63	191	4	54	164	3	56	171	2	56	171	0	84	256	0	112	341	0	66	200	70	212
2613	6.2	62	191	4.1	54	167	3.1	57	174	2.1	56	174	0	84	260	0	112	347	0	66	203	70	215
2558	6.3	61	191	4.1	54	170	3.1	57	177	2.1	56	176	0	84	264	0	112	352	0	66	206	70	219
2504	6.4	60	191	4.1	54	172	3.1	57	180	2.1	56	179	0	84	268	0	112	358	0	66	209	70	222
2451	6.5	59	191	4.2	54	176	3.2	57	183	2.2	56	182	0	84	273	0	112	363	0	66	213	70	225
2398	6.6	58	191	4.2	54	179	3.2	57	186	2.2	56	185	0	84	277	0	112	369	0	66	216	70	229
2346	6.7	58	191	4.2	54	181	3.2	57	189	2.2	56	187	0	84	281	0	112	374	0	66	219	70	232
2294	6.8	57	191	4.3	55	185	3.3	57	193	2.3	56	190	0	84	285	0	112	380	0	66	223	70	236
2242	6.9	56	191	4.3	55	187	3.3	57	195	2.3	56	193	0	84	289	0	112	386	0	66	226	70	239
2191	7	55	191	4.3	55	190	3.3	57	198	2.3	56	196	0	84	294	0	112	391	0	66	229	70	243
2139	7.1	54	191	4.4	55	194	3.4	57	202	2.4	56	199	0	84	298	0	112	397	0	66	232	70	246
2087	7.2	54	191	4.4	55	196	3.4	57	205	2.4	56	201	0	84	302	0	112	402	0	66	236	70	250
2034	7.3	53	191	4.4	55	199	3.4	57	208	2.4	56	204	0	84	306	0	112	408	0	66	239	70	253
1980	7.4	53	194	4.5	55	203	3.5	57	211	2.5	56	207	0	84	310	0	112	414	0	66	242	70	257
1924	7.5	53	197	4.5	55	205	3.5	57	214	2.5	56	210	0	84	314	0	112	419	0	66	245	70	260
1867	7.6	53	200	4.6	55	209	3.6	58	218	2.6	56	213	0	84	319	0	112	425	0	66	249	70	264
1805	7.7	53	204	4.7	56	213	3.7	58	222	2.7	56	215	0	84	323	0	112	430	0	66	252	70	267
1737	7.8	53	206	4.7	56	215	3.7	58	225	2.7	56	218	0	84	327	0	112	436	0	66	255	70	270
1656	7.9	54	210	4.8	56	219	3.8	58	228	2.8	56	221	0	84	331	0	112	441	0	66	258	70	274
1488	8	54	214	5	56	224	4	59	233	3	61	242	2	98	391	4	140	559	6	66	262	70	277

NOTE:
Lt, Lr & w VALUES IN FEET. LISTED RADIUS IS THE MINIMUM ALLOWABLE RADIUS FOR THE CORRESPONDING E, Lt, Lr, AND w VALUES.
WIDENING SHOWN IS BASED ON A WB-62 DESIGN VEHICLE.

TC-5.11

TRANSITION CURVES - RURAL
65 MPH DESIGN SPEED

VIRGINIA DEPARTMENT OF TRANSPORTATION

VDOT ROAD AND BRIDGE STANDARDS

REVISION DATE

803.41

SHEET 1 OF 1