SPECIFICATION REFERENCE

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(%)	Lt	Lr	w	Lt	Lr	w	Lt	Lr	w	Lt	Lr	w	Lt	Lr	w	Lt	Lr	Lt	Lr
2370	NC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1745	2	29	29	2.1	29	29	0	32	32	0	35	35	0	52	52	0	40	40	43	43
1698	2.1	71	74	2.1	29	30	0	32	33	0	35	36	0	52	54	0	40	42	43	45
1580	2.2	68	74	2.1	29	32	0	32	35	0	35	38	0	52	57	0	40	44	43	48
1520	2.3	65	74	2.2	29	33	0	32	37	0	35	40	0	52	60	0	40	46	43	50
1432	2.4	62	74	2.2	29	35	0	32	38	0	35	42	0	52	62	0	40	48	43	52
1400	2.5	60	74	2.2	29	36	0	32	40	0	35	43	0	52	65	0	40	50	43	54
1290	2.6	57	74	2.3	29	38	0	32	41	0	35	45	0	52	67	0	40	52	43	56
1254	2.7	55	74	2.3	29	39	0	32	43	0	35	47	0	52	70	0	40	54	43	58
1220	2.8	53	74	2.4	29	40	0	32	44	0	35	48	0	52	72	0	40	56	43	60
1160	2.9	52	74	2.4	29	42	0	32	46	0	35	50	0	52	75	0	40	58	43	63
1080	3	50	74	2.5	29	43	0	32	48	0	35	52	0	52	78	0	40	60	43	65
1056	3.1	48	74	2.5	29	45	0	32	49	0	35	54	0	52	80	0	40	62	43	67
1008	3.2	47	74	2.6	29	46	0	32	51	0	35	55	0	52	83	0	40	64	43	69
990	3.3	45	74	2.6	29	48	0	32	52	0	35	57	0	52	85	0	40	66	43	71
950	3.4	44	74	2.6	29	49	0	32	54	0	35	59	0	52	88	0	40	68	43	73
910	3.5	43	74	2.7	29	50	0	32	55	0	35	60	0	52	90	0	40	70	43	75
870	3.6	42	74	2.7	29	52	0	32	57	0	35	62	0	52	93	0	40	72	43	78
830	3.7	40	74	2.8	29	53	0	32	59	0	35	64	0	52	96	0	40	74	43	80
807	3.8	39	74	2.8	29	55	0	32	60	0	35	66	0	52	98	0	40	76	43	82
781	3.9	38	74	2.9	29	56	0	32	62	0	35	67	0	52	101	0	40	78	43	84
752	4	37	74	2.9	29	58	0	32	63	0	35	69	0	52	103	0	40	80	43	86
718	4.1	37	74	3	32	65	2	32	65	0	35	71	0	52	106	0	40	82	43	88
690	4.2	36	74	3.1	32	67	2.1	32	66	0	35	72	0	52	108	0	40	84	43	90
662	4.3	35	74	3.1	32	68	2.1	32	68	0	35	74	0	52	111	0	40	86	43	93
652	4.4	34	74	3.2	32	70	2.2	32	70	0	35	76	0	52	114	0	40	88	43	95
626	4.5	33	74	3.2	32	72	2.2	32	71	0	35	78	0	52	116	0	40	90	43	97
599	4.6	33	74	3.3	32	74	2.3	32	73	0	35	79	0	52	119	0	40	92	43	99
588	4.7	32	74	3.3	32	75	2.3	32	74	0	35	81	0	52	121	0	40	94	43	101
562	4.8	31	74	3.4	32	77	2.4	32	76	0	35	83	0	52	124	0	40	96	43	103
535	4.9	32	76	3.5	33	79	2.5	32	77	0	35	84	0	52	126	0	40	98	43	105
524	5	31	77	3.5	33	81	2.5	32	79	0	35	86	0	52	129	0	40	100	43	108
498	5.1	31	79	3.6	33	83	2.6	32	81	0	35	88	0	52	132	0	40	102	43	110
470	5.2	32	81	3.8	33	85	2.8	32	82	0	35	90	0	52	134	0	40	104	43	112
458	5.3	32	83	3.8	33	87	2.8	32	84	0	35	91	0	52	137	0	40	106	43	114
446	5.4	32	85	3.9	33	89	2.9	32	85	0	35	93	0	52	139	0	40	108	43	116
420	5.5	32	87	4	34	91	3	35	95	2	35	95	0	52	142	0	40	110	43	118
408	5.6	32	89	4.1	34	93	3.1	35	97	2.1	35	96	0	52	144	0	40	112	43	120
392	5.7	32	91	4.2	34	95	3.2	35	99	2.2	35	98	0	52	147	0	40	114	43	123
376	5.8	33	93	4.3	34	97	3.3	35	101	2.3	35	100	0	52	150	0	40	116	43	125
360	5.9	33	95	4.4	34	99	3.4	35	103	2.4	35	102	0	52	152	0	40	118	43	127
340	6	33	97	4.6	34	102	3.6	36	106	2.6	35	103	0	52	155	0	40	120	43	129
337	6.1	33	99	4.6	34	103	3.6	36	108	2.6	35	105	0	52	157	0	40	122	43	131
322	6.2	33	101	4.7	34	105	3.7	36	110	2.7	35	107	0	52	160	0	40	124	43	133
308	6.3	34	104	4.9	35	108	3.9	36	113	2.9	35	108	0	52	162	0	40	126	43	135
299	6.4	34	106	5	35	110	4	36	115	3	38	119	2	60	192	4	40	128	43	138
290	6.5	33	107	5	35	112	4	36	117	3	38	121	2	60	195	4	40	130	43	140
273	6.6	34	110	5.3	35	115	4.3	37	120	3.3	38	124	2.3	62	203	4.6	40	132	43	142
267	6.7	34	112	5.3	35	117	4.3	37	122	3.3	38	126	2.3	62	206	4.6	40	134	43	144
259	6.8	34	114	5.4	35	119	4.4	37	124	3.4	38	129	2.4	62	210	4.8	40	136	43	146
251	6.9	34	117	5.6	36	122	4.6	37	127	3.6	38	132	2.6	63	216	5.2	40	138	43	148
242	7	34	119	5.7	36	124	4.7	37	129	3.7	39	134	2.7	64	221	5.4	40	140	43	150
234	7.1	35	121	5.8	36	126	4.8	37	131	3.8	39	136	2.8	64	226	5.6	40	142	43	153
225	7.2	35	124	6	36	129	5	38	134	4	39	139	3	65	232	6	40	144	43	155
216	7.3	35	127	6.2	37	132	5.2	38	137	4.2	39	142	3.2	66	238	6.4	40	146	43	157
209	7.4	35	129	6.3	37	134	5.3	38	140	4.3	39	145	3.3	66	243	6.6	40	148	43	159
199	7.5	36	132	6.5	37	137	5.5	38	142	4.5	40	148	3.5	67	250	7	40	150	43	161
191	7.6	36	135	6.7	37	140	5.7	39	145	4.7	40	151	3.7	68	256	7.4	40	152	43	163
177	7.7	37	139	7.1	38	144	6.1	39	150	5.1	41	155	4.1	70	266	8.2	40	154	43	165
168	7.8	37	142	7.4	38	148	6.4	40	153	5.4	41	159	4.4	71	275	8.8	40	156	43	168
159	7.9	37	146	7.7	39	151	6.7	40	157	5.7	42	162	4.7	72	283	9.4	40	158	43	170
135	8	39	153	8.7	40	159	7.7	41	164	6.7	43	170	5.7	76	304	11.4	40	160	43	172

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 SU-40 DESIGN VEHICLE.

TRANSITION CURVES - RURAL
25 MPH DESIGN SPEED

VIRGINIA DEPARTMENT OF TRANSPORTATION

VDOT ROAD AND BRIDGE STANDARDS

REVISION DATE

803.33

SHEET 1 OF 1

TC-5.11