

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

DESIGN FACTORS FOR A DESIGN SPEED OF 50 MPH (RURAL) USING E= 8% MAX.

DESIGN VELOCITY -50	DESIGN SOFTWARE EQUIVALENTS (NUMBER OF LANES AT LANE WIDTH)												INTERCHANGE RAMPS			
	WIDTH-20 FT			WIDTH-22 FT			WIDTH-24 FT			WIDTH-48 FT			WIDTH-72 FT		18 FT	
	L _t	L _r	w	L _t	L _r	w	L _t	L _r	w	L _t	L _r	w	L _t	L _r	L _t	L _r
8150	NC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6013	2	44	44	2	44	44	0	48	48	0	72	72	0	96	96	0
5703	2.1	45	47	2.1	44	47	0	48	51	0	72	76	0	96	101	0
5420	2.2	45	49	2.1	44	49	0	48	53	0	72	80	0	96	106	0
5162	2.3	45	51	2.1	44	51	0	48	56	0	72	83	0	96	111	0
4926	2.4	45	54	2.2	44	53	0	48	58	0	72	87	0	96	116	0
4708	2.5	45	56	2.2	44	55	0	48	60	0	72	90	0	96	120	0
4507	2.6	45	58	2.2	44	58	0	48	63	0	72	94	0	96	125	0
4320	2.7	45	61	2.3	44	60	0	48	65	0	72	98	0	96	130	0
4146	2.8	45	63	2.3	44	62	0	48	68	0	72	101	0	96	135	0
3985	2.9	45	65	2.3	44	64	0	48	70	0	72	105	0	96	140	0
3834	3	45	68	2.4	44	66	0	48	72	0	72	108	0	96	144	0
3692	3.1	45	70	2.4	44	69	0	48	75	0	72	112	0	96	149	0
3560	3.2	45	72	2.4	44	71	0	48	77	0	72	116	0	96	154	0
3434	3.3	45	75	2.5	44	73	0	48	80	0	72	119	0	96	159	0
3316	3.4	45	77	2.5	44	75	0	48	82	0	72	123	0	96	164	0
3205	3.5	45	79	2.5	44	77	0	48	84	0	72	126	0	96	168	0
3099	3.6	46	82	2.6	44	80	0	48	87	0	72	130	0	96	173	0
2999	3.7	46	84	2.6	44	82	0	48	89	0	72	134	0	96	178	0
2904	3.8	46	86	2.6	44	84	0	48	92	0	72	137	0	96	183	0
2814	3.9	46	89	2.7	44	86	0	48	94	0	72	141	0	96	188	0
2728	4	46	91	2.7	44	88	0	48	96	0	72	144	0	96	192	0
2646	4.1	46	94	2.8	44	91	0	48	99	0	72	148	0	96	197	0
2568	4.2	46	96	2.8	44	93	0	48	101	0	72	152	0	96	202	0
2493	4.3	46	99	2.8	44	95	0	48	104	0	72	155	0	96	207	0
2422	4.4	46	101	2.9	44	97	0	48	106	0	72	159	0	96	212	0
2353	4.5	46	104	2.9	44	99	0	48	108	0	72	162	0	96	216	0
2287	4.6	46	106	2.9	44	102	0	48	111	0	72	166	0	96	221	0
2224	4.7	46	109	3	48	113	2	48	113	0	72	170	0	96	226	0
2163	4.8	46	111	3	48	116	2	48	116	0	72	173	0	96	231	0
2104	4.9	47	114	3.1	49	119	2.1	48	118	0	72	177	0	96	236	0
2047	5	47	116	3.1	49	121	2.1	48	120	0	72	180	0	96	240	0
1992	5.1	47	118	3.1	49	123	2.1	48	123	0	72	184	0	96	245	0
1939	5.2	47	121	3.2	49	126	2.2	48	125	0	72	188	0	96	250	0
1888	5.3	47	123	3.2	49	129	2.2	48	128	0	72	191	0	96	255	0
1838	5.4	47	126	3.3	49	132	2.3	48	130	0	72	195	0	96	260	0
1790	5.5	47	129	3.3	49	134	2.3	48	132	0	72	198	0	96	264	0
1743	5.6	47	132	3.4	49	137	2.4	48	135	0	72	202	0	96	269	0
1698	5.7	47	134	3.4	49	140	2.4	48	137	0	72	206	0	96	274	0
1653	5.8	47	137	3.5	49	143	2.5	48	140	0	72	209	0	96	279	0
1610	5.9	47	139	3.5	49	145	2.5	48	142	0	72	213	0	96	284	0
1568	6	47	141	3.5	49	147	2.5	48	144	0	72	216	0	96	288	0
1527	6.1	48	144	3.6	50	151	2.6	48	147	0	72	220	0	96	293	0
1487	6.2	48	147	3.6	50	153	2.6	48	149	0	72	224	0	96	298	0
1448	6.3	48	150	3.7	50	156	2.7	48	152	0	72	227	0	96	303	0
1410	6.4	48	153	3.8	50	159	2.8	48	154	0	72	231	0	96	308	0
1372	6.5	48	155	3.8	50	162	2.8	48	156	0	72	234	0	96	312	0
1336	6.6	48	158	3.9	50	165	2.9	48	159	0	72	238	0	96	317	0
1300	6.7	48	161	3.9	50	167	2.9	48	161	0	72	242	0	96	322	0
1265	6.8	48	164	4	50	170	3	52	177	2	78	266	4	104	354	6
1230	6.9	48	166	4	50	173	3	52	180	2	78	270	4	104	359	6
1196	7	49	169	4.1	51	176	3.1	53	183	2.1	79	275	4.2	105	366	6.3
1162	7.1	49	172	4.2	51	179	3.2	53	187	2.2	79	280	4.4	105	373	6.6
1128	7.2	49	175	4.3	51	183	3.3	53	190	2.3	79	285	4.6	106	379	6.9
1094	7.3	49	178	4.3	51	185	3.3	53	192	2.3	79	288	4.6	106	384	6.9
1059	7.4	49	181	4.4	51	188	3.4	53	196	2.4	80	294	4.8	106	391	7.2
1024	7.5	50	184	4.5	51	192	3.5	53	199	2.5	80	299	5	106	398	7.5
988	7.6	50	187	4.6	52	195	3.6	54	203	2.6	80	304	5.2	107	405	7.8
950	7.7	50	191	4.7	52	198	3.7	54	206	2.7	81	309	5.4	107	412	8.1
908	7.8	50	194	4.8	52	202	3.8	54	210	2.8	81	314	5.6	108	419	8.4
860	7.9	51	198	5	52	206	4	54	214	3	81	320	6	108	427	9
760	8	51	204	5.4	53	212	4.4	55	220	3.4	83	329	6.8	110	439	10.2

SPECIFICATION REFERENCE



ROAD AND BRIDGE STANDARDS

TRANSITION CURVES - RURAL
50 MPH DESIGN SPEED

VIRGINIA DEPARTMENT OF TRANSPORTATION

SHEET 1 OF 1

REVISION DATE

803.38

01/13