

DESIGN FACTORS FOR A DESIGN SPEED OF 35 MPH (RURAL) USING E= 8% MAX.

DESIGN VELOCITY =35	WIDTH= 18 FT		WIDTH=20 FT		WIDTH=22 FT		WIDTH=24 FT		WIDTH=48 FT		WIDTH=72 FT		INTERCHANGE RAMPS				
	DESIGN SOFTWARE EQUIVALENTS (NUMBER OF LANES AT LANE WIDTH)												WIDTH				
	1 @ 9'		1 @ 10'		1 @ 11'		1 @ 12'		2 @ 12'		3 @ 12'		16 FT		18 FT		
	Lt	Lr	w	Lt	Lr	w	Lt	Lr	w	Lt	Lr	w	Lt	Lr	w	Lt	Lr
RADIUS(FT)	E(%)																
5000	NC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3149	2.0	30	30	0.0	33	33	0.0	36	36	0.0	39	39	0.0	59	59	0.0	78
2866	2.1	30	31	0.0	33	34	0.0	36	38	0.0	39	41	0.0	59	61	0.0	78
2865	2.2	30	32	0.0	33	36	0.0	36	40	0.0	39	43	0.0	59	64	0.0	78
2835	2.2	30	32	0.0	33	36	0.0	36	40	0.0	39	43	0.0	59	64	0.0	78
2698	2.3	30	34	0.0	33	38	0.0	36	41	0.0	39	45	0.0	59	67	0.0	78
2573	2.4	30	35	0.0	33	39	0.0	36	43	0.0	39	47	0.0	59	70	0.0	78
2457	2.5	83	103	2.0	33	41	0.0	36	45	0.0	39	49	0.0	59	73	0.0	78
2350	2.6	80	103	2.0	33	42	0.0	36	47	0.0	39	51	0.0	59	76	0.0	78
2251	2.7	77	103	2.0	33	44	0.0	36	48	0.0	39	53	0.0	59	79	0.0	78
2159	2.8	74	103	2.0	33	46	0.0	36	50	0.0	39	55	0.0	59	82	0.0	78
2073	2.9	72	103	2.1	33	47	0.0	36	52	0.0	39	57	0.0	59	85	0.0	78
1993	3.0	69	103	2.1	33	49	0.0	36	54	0.0	39	59	0.0	59	88	0.0	78
1917	3.1	67	103	2.1	33	50	0.0	36	55	0.0	39	60	0.0	59	90	0.0	78
1847	3.2	65	103	2.1	33	52	0.0	36	57	0.0	39	62	0.0	59	93	0.0	78
1780	3.3	63	103	2.2	33	54	0.0	36	59	0.0	39	64	0.0	59	96	0.0	78
1717	3.4	61	103	2.2	33	55	0.0	36	61	0.0	39	66	0.0	59	99	0.0	78
1658	3.5	59	103	2.2	33	57	0.0	36	63	0.0	39	68	0.0	59	102	0.0	78
1602	3.6	58	103	2.2	33	59	0.0	36	64	0.0	39	70	0.0	59	105	0.0	78
1548	3.7	56	103	2.3	33	60	0.0	36	66	0.0	39	72	0.0	59	108	0.0	78
1497	3.8	55	103	2.3	33	62	0.0	36	68	0.0	39	74	0.0	59	111	0.0	78
1449	3.9	53	103	2.3	33	63	0.0	36	70	0.0	39	76	0.0	59	114	0.0	78
1403	4.0	52	103	2.3	33	65	0.0	36	71	0.0	39	78	0.0	59	117	0.0	78
1359	4.1	51	103	2.4	33	67	0.0	36	73	0.0	39	80	0.0	59	120	0.0	78
1317	4.2	50	103	2.4	33	68	0.0	36	75	0.0	39	82	0.0	59	122	0.0	78
1277	4.3	48	103	2.4	33	70	0.0	36	77	0.0	39	84	0.0	59	125	0.0	78
1238	4.4	47	103	2.4	33	71	0.0	36	79	0.0	39	86	0.0	59	128	0.0	78
1201	4.5	46	103	2.5	33	73	0.0	36	80	0.0	39	88	0.0	59	131	0.0	78
1165	4.6	45	103	2.5	33	75	0.0	36	82	0.0	39	90	0.0	59	134	0.0	78
1131	4.7	44	103	2.5	33	76	0.0	36	84	0.0	39	91	0.0	59	137	0.0	78
1097	4.8	43	103	2.6	33	78	0.0	36	86	0.0	39	93	0.0	59	140	0.0	78
1065	4.9	43	103	2.6	33	80	0.0	36	87	0.0	39	95	0.0	59	143	0.0	78
1034	5.0	42	103	2.6	33	81	0.0	36	89	0.0	39	97	0.0	59	146	0.0	78
1004	5.1	41	103	2.6	33	83	0.0	36	91	0.0	39	99	0.0	59	149	0.0	78
975	5.2	40	103	2.7	33	84	0.0	36	93	0.0	39	101	0.0	59	151	0.0	78
946	5.3	39	103	2.7	33	86	0.0	36	95	0.0	39	103	0.0	59	154	0.0	78
918	5.4	39	103	2.7	33	88	0.0	36	96	0.0	39	105	0.0	59	157	0.0	78
891	5.5	38	103	2.8	33	89	0.0	36	98	0.0	39	107	0.0	59	160	0.0	78
864	5.6	37	103	2.8	33	91	0.0	36	100	0.0	39	109	0.0	59	163	0.0	78
838	5.7	37	103	2.8	33	92	0.0	36	102	0.0	39	111	0.0	59	166	0.0	78
813	5.8	36	103	2.9	33	94	0.0	36	103	0.0	39	113	0.0	59	169	0.0	78
789	5.9	35	103	2.9	33	96	0.0	36	105	0.0	39	115	0.0	59	172	0.0	78
766	6.0	35	103	3.0	36	107	2.0	36	107	0.0	39	117	0.0	59	175	0.0	78
743	6.1	35	104	3.0	36	109	2.0	36	109	0.0	39	119	0.0	59	178	0.0	78
722	6.2	34	105	3.0	36	110	2.0	36	110	0.0	39	120	0.0	59	180	0.0	78
701	6.3	35	108	3.1	36	113	2.1	36	112	0.0	39	122	0.0	59	183	0.0	78
680	6.4	35	109	3.1	36	115	2.1	36	114	0.0	39	124	0.0	59	186	0.0	78
660	6.5	35	112	3.2	36	117	2.2	36	116	0.0	39	126	0.0	59	189	0.0	78
641	6.6	35	113	3.2	37	119	2.2	36	118	0.0	39	128	0.0	59	192	0.0	78
622	6.7	35	115	3.2	36	120	2.2	36	119	0.0	39	130	0.0	59	195	0.0	78
603	6.8	35	117	3.3	37	123	2.3	36	121	0.0	39	132	0.0	59	198	0.0	78
585	6.9	35	119	3.3	37	125	2.3	36	123	0.0	39	134	0.0	59	201	0.0	78
567	7.0	35	121	3.4	37	127	2.4	36	125	0.0	39	136	0.0	59	204	0.0	78
550	7.1	35	123	3.4	37	129	2.4	36	126	0.0	39	138	0.0	59	207	0.0	78
532	7.2	35	125	3.5	37	131	2.5	36	128	0.0	39	140	0.0	59	210	0.0	78
515	7.3	35	127	3.5	37	133	2.5	36	130	0.0	39	142	0.0	59	212	0.0	78
497	7.4	35	129	3.6	37	135	2.6	36	132	0.0	39	144	0.0	59	215	0.0	78
480	7.5	35	132	3.7	37	138	2.7	36	134	0.0	39	146	0.0	59	218	0.0	78
461	7.6	35	133	3.7	37	140	2.7	36	135	0.0	39	148	0.0	59	221	0.0	78
442	7.7	36	136	3.8	37	142	2.8	36	137	0.0	39	150	0.0	59	224	0.0	78
422	7.8	36	138	3.9	38	145	2.9	36	139	0.0	39	151	0.0	59	227	0.0	78
397	7.9	36	141	4.0	38	147	3.0	39	153	2.0	39	153	0.0	64	249	2.0	85
350	8.0	36	144	4.3	38	151	3.3	40	157	2.3	39	155	0.0	65	258	2.6	86

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

TRANSITION CURVES - RURAL
35 MPH DESIGN SPEED
VIRGINIA DEPARTMENT OF TRANSPORTATION