

**DESIGN FACTORS FOR A DESIGN SPEED OF 50 km/h
(URBAN) USING E= 4% MAX.**

RADIUS (METERS)	E (%)	PAVEMENT WIDTH											
		7.2 m		10.8 m		14.4 m		18.0 m		19.8 m		21.6 m	
		DESIGN SOFTWARE EQUIVALENTS (NUMBER OF LANES AT LANE WIDTH)											
		1 @ 3.6 m		1.5 @ 3.6 m		2 @ 3.6 m		3 @ 3.0 m		3 @ 3.3 m		3 @ 3.6 m	
		Lt	Lr	Lt	Lr	Lt	Lr	Lt	Lr	Lt	Lr	Lt	Lr
1000	NC	0	0	0	0	0	0	0	0	0	0	0	0
642	2.0	12	12	14	14	17	17	19	19	21	21	23	23
594	2.1	12	12	14	15	17	18	19	20	21	22	23	24
549	2.2	12	13	14	16	17	19	19	21	21	23	23	25
505	2.3	12	13	14	16	17	20	19	22	21	24	23	26
460	2.4	12	14	14	17	17	20	19	23	21	25	23	27
414	2.5	12	14	14	18	17	21	19	24	21	26	23	28
374	2.6	12	15	14	18	17	22	19	24	21	27	23	29
339	2.7	12	15	14	19	17	23	19	25	21	28	23	30
310	2.8	12	16	14	20	17	24	19	26	21	29	23	32
284	2.9	12	17	14	20	17	25	19	27	21	30	23	33
261	3.0	12	17	14	21	17	25	19	28	21	31	23	34
241	3.1	12	18	14	22	17	26	19	29	21	32	23	35
222	3.2	12	18	14	23	17	27	19	30	21	33	23	36
206	3.3	12	19	14	23	17	28	19	31	21	34	23	37
191	3.4	12	19	14	24	17	29	19	32	21	35	23	38
176	3.5	12	20	14	25	17	30	19	33	21	36	23	39
163	3.6	12	20	14	25	17	30	19	34	21	37	23	40
150	3.7	12	21	14	26	17	31	19	35	21	38	23	41
137	3.8	12	22	14	27	17	32	19	36	21	39	23	43
123	3.9	12	22	14	27	17	33	19	36	21	40	23	44
99	4.0	12	24	14	28	17	34	19	38	21	42	23	46

NOTE:

Lt AND Lr VALUES IN METERS.

FOR PAVEMENT WIDTHS GREATER THAN 21.6 METERS USE Lr VALUES DEVELOPED BY DESIGN SOFTWARE.

LISTED RADIUS IS THE MINIMUM ALLOWABLE RADIUS FOR THE CORRESPONDING E, Lt, AND Lr VALUES.

**TRANSITION CURVES - URBAN
50 km/h DESIGN SPEED**

VIRGINIA DEPARTMENT OF TRANSPORTATION