

3. For existing roads, an empirical relationship has been derived which provides estimates of VISI given in bendiness and verge width (applicable up to VISI = 720m) i.e.

$$\text{Log}_{10} \text{VISI} = 2.46 + \text{VW}/25 - \text{B}/400$$

where:

VW = Average verge width (averaged for both sides of the road)

B = Bendiness (Degree per km - minimum Length of about 2 km)

Single Carriageways:
$$\text{Ac} = 12 - \text{VISI}/60 + 2\text{B}/45$$

where:

B = Bendiness Degrees/km

VISI = Harmonic Mean Visibility m (see Annex A).

Carriageway details							A96- Side Road Design Speed (TD9 method)					Inverness to Nairn Comparison		
Road Name	Carriageway x-section (m) (Used for LC)	Length (km)	Total Bendiness (Degrees)	Total no. of accesses	Total no. of accesses per Km	Design Section Split (S1 - S4)	VW (Average Verge Width) m	B- Bendiness (Degrees/Km)	VISI- Mean Visibility (m)	AC-Alignment Constraint	LC - Layout Constraint (TD9/93 Table 1)	Design Speed (TD9/93 Figure 1) KPH	Design Speed(RTGND-Table 5.2 Geometric requirements for rural road links) KPH	
Designer to input							Designer to input	Auto populates			Designer to input		Designer to input	
B9104	6.0m (S2)	1.3	69	8	6	S3	3	53.1	280.10	9.69	26	100B	DMRB	
C1E	6.0m (S2)	3.6	240	13	4	S3	1	66.7	215.44	11.37	28	85A	60	
A96T	10.0m (WS2)	1.4	39	6	4	S3	2.5	27.9	309.28	8.08	17	100A	DMRB	
U11E	6.0m (S2)	0.5	52	6	12	S3	3	104.0	208.93	13.14	29	85B	60	
C18E	6.0m (S2)	1.1	21	10	9	S3	0.5	19.1	270.57	8.34	30	85A	60	
U27E	6.0m (S2)	2	383	18	9	S3	1.5	191.5	109.96	18.68	28	85B	60	
U30E	6.0m (S2)	1.7	413	12	7	S3	1.5	242.9	81.78	21.43	28	85B	60	
A96T	10.0m (WS2)	2.4	88	8	3	S3	6	36.7	405.82	6.87	17	100A	DMRB	
U123E	6.0m (S2)	2	203	10	5	S3	2	101.5	193.31	13.29	26	85A	60	
A96T	10.0m (WS2)	2.2	8	6	3	S3	5	3.6	447.62	4.70	17	120B	DMRB	
B9103	6.0m (S2)	2.3	65	18	8	S3	1.5	28.3	281.42	8.57	28	100B	85	
U34E	6.0m (S2)	2.9	262	16	6	S3	2	90.3	206.13	12.58	26	85A	60	
U37E	6.0m (S2)	2	51	13	7	S3	2.5	25.5	313.51	7.91	26	100B	60	
C23E	6.0m (S2)	2.5	180	12	5	S3	1.5	72.0	218.78	11.55	28	85A	60	
S3.UN.1	6.0m (S2)	2.7	206	10	4	S3	1	76.3	203.83	11.99	28	85A	60	
A941	6.0m (S2)	2.3	96	8	3	S3	3	41.7	298.99	8.87	26	100B	DMRB	
C24E	6.0m (S2)	2.3	176	15	7	S3	1.5	76.5	213.16	11.85	28	85A	60	