

## Engineering Servicing Standards and Development Procedures

December 2016 Includes Addendum #1 June 9, 2017



Table 4.1B – Road Classifications and Geometric Guidelines - RURAL					
Classification	Rural Arterial / Municipal Highway	Collector (3)		Local (3)	
Sub-classification	Divided	Residential	Industrial / Commercial (1)	Residential	Industrial (1)
TAC Designation	RAD	RCU	RCU	RLU	RLU
Parking	No	No	No	No	No
Service	Through Traffic	Through & Access		Access Only	
Average Daily Volume	12000-30000	1000-5000	up to 1000		
No. of Housing Units		-	-	< 100	-
Flow Characteristic	Uninterrupted except traffic and pedestrian signals.	Interrupted Flow		Interrupted Flow	
ESALS (2)	Note 2	1.35 x 10 <sup>6</sup>	2.7 x 10 <sup>6</sup>	9.0 x 10 <sup>4</sup>	8.6 x 10⁵
Design Speed (km/h)	90	80	80	60	60
Posted Speed (km/h)	70-80	70	70	50	50
Road Width (m)	26.0	8.0	9.0	7.0	8.0
Travel Lanes (m)	4 to 6 @3.7	N/A	N/A	N/A	N/A
Parking Lanes (parallel)	N/A	N/A	N/A	N/A	N/A
Transit Service	Restricted, unless part of BRT	Permitted	Permitted	Restricted	Restricted
Curb & Gutter (mm) (Median)	700 SF	N/A	N/A	N/A	N/A
Gutter Width (mm) (Median)	500	N/A	N/A	N/A	N/A
Cul-de-Sac Radius (m)	Restricted	14.0 to EOP		14.0 to EOP	
Sidewalk	Regional Trail on back slope, where specified	Sidewalk on Back-slope, one side only. Hybrid with mono sidewalk and 450 mm SF curb and gutter may be used where specified, c/w catch basins to drain to ditch.			
Sidewalk Width (m)	3.0 Conc. or 3.0 ACP	2.5 ACP	2.5 ACP	1.5	1.5
Min ROW Width (m)	44.0	30.0	30.0	30.0	30.0
Max/Min Gradient (%)	8.0/0.5	6.0/0.5	6.0/0.5	8.0/0.58	8.0/0.5
Min Stop Sight Dist (m)	170	139.4	139.4	84.6	84.6
K. Crest (m)	55	36	36	13	13
k. Sag (m)	40	16	16	9	9
Max super- elevation(m/m)	0.08	0.08	0.08	0.02	0.02

Notes: 1) Industrial applies to light industrial. For heavy industrial application, provide suitable design

2) Equivalent Single Axle Loads (ESALS) for arterial roadways are to be determined by engineering analysis by the Developer's engineer, and approved by the Municipality

3) For emergency access roads use the Rural Local Standard. For Commercial Service Roads use Rural Collector Standard

4) For commercial land uses with street frontage, consider hard-surfacing the entire boulevard space from curb to building face.

5) Refer to Standard Detail Drawings 4-100 and 4-101

6) If the Area Structure Plan or Outline Plan contemplates a wider (2.5 m) sidewalk in Urban Commercial Areas, then the overall right of way for the road may increase to accommodate the wider sidewalk.

