

APPENDIX 10

DESIGN CRITERIA



DESIGN CRITERIA CHART

Project No. : 2024-T-100 (16-014 KTH)
Project Name: King St Road Reconstruction

Classification	Existing Condition	Design Standards	Proposed	Reference
Road Classification (Rural Arterial)	RAU80	RAU80	RAU80	TAC Table 2.6.2
Posted Speed (km/h)	60km/h	60km/h	60 km/h	
Design Speed (km/h)		70 km/h	70 km/h	TAC Table 2.6.4
Heavy Vehicle Usage	Truck Route		Truck Route	
Design Vehicle	Unknown		Wb-19	TAC Table 2.4.4
Normal Crown (-0.02 m/m) Rmin (m)		1680	N/A	TAC Tables 3.2.3 and 3.2.4
Curve Radius with Superelev. Rmin for e = 0.04 (m)		200	280	
Reverse Crown (+0.02 m/m) Rmin for e = 0.04 (m)		290	1000	
Stopping Sight Distance (m)		105	105	
Minimum "k" Factor		Crest: 17 Sag: 23	Crest: 26 Sag: 12	TAC Tables 3.3.2, 3.3.4 and 3.3.5
Left Turn Taper without Auxiliary Lane		15:1 - 42:1	15:1 - 42:1	TAC Table 9.17.1 & RMN Standards
Left Turn Taper with Parallel Lane		10:1 - 18:1	10:1 - 18:1	TAC Table 9.17.2 & RMN Standards
Through Lane (m)		3.30 - 3.70	3.30	TAC Table 4.2.3
Left Turn Lane (m)		3.25 - 3.50	3.30	TAC Section 4.3.2.3
Paved Shoulder with Marked Buffer - Width (m)		1.50-2.00 with 0.50 - 1.00 Buffer	1.50 with 0.50 marked Buffer	OTM Book 18 Table 4.11 & RMN Complete Streets Guidelines
Sidewalk Width (m)		1.50 - 2.30	1.50 & 1.80	TAC Section 4.6.1
Clear Zone Distances (m)		>6000ADT	5.50m	TAC Table 7.3.1
Tangent Section Cross Fall		2- 4%	2-4%	
Sidewalk Cross Fall		2%	2%	TAC Section 4.6.1
Driveway Grades (max)		8%	8% or Match Existing	TAC Figure 8.9.4
Maximum Grade (%)			5.85%	
Minimum Grade (%)			0.14% (on ditched sections), and 0.50% along curb sections	RMN Roadway Design Guidelines
Minimum Daylighting Triangle			5m X 5m	#5196 King St.