Appendix G
Roadway Geometric Analysis

Horizontal Curve Review of Radius and Stopping Sight Distance

Road	Design Speed (km/h)	Beginning of Horizontal Curve	End of Horizontal Curve	Existing Radius (m)	Minimum Radius, as per TAC (m)	Minimum Available Sight Distance (m)	Minimum Radius Sight Distance, as per TAC (m)
Mississauga Road	80	20+165.94	20+522.42	1170	250	237	115-140
Old Main Street	60	25+514.44	25+558.40	100	130	68	75-85
Old Main Street	50	26+226.37	26+251.37	50	90	45	60-65
Bush Street	90	10+109.095	10+288.764	255	340	151	130-171
Winston Churchill Boulevard	70	45+934.141	46+003.60	120	190	80	95-110

Notes:

1. As per Geometric Design Guide for Canadian Roads, TAC, Table 2.1.2.6, Superelevation and Minimum Spiral Parameters
2. As per Geometric Design Guide for Canadian Roads, TAC, Table 1.2.5.3, Stopping Sight Distance for Automobiles and Trucks with Antilock Braking Systems

Vertical Curve Review of Stopping Sight Distance

Road	Design Speed (km/h)	Beginning of Vertical Curve	End of Vertical Curve	Minimum Available Sight Distance (m)	Minimum Radius Sight Distance, as per TAC (m)
Mississauga Road	80	21+492.02	21+526.02	53	115-140
Mississauga Road	80	21+747.45	21+799.13	99	115-140
Mississauga Road	80	21+909.68	21+964.17	88	115-140
Mississauga Road	80	22+069.41	22+106.88	60	115-140
Mississauga Road	80	22+408.57	22+465.58	76	115-140
Mississauga Road	80	22+822.96	22+937.40	72	115-140
Mississauga Road	70	24+290.28	24+329.64	88	95-110
Mississauga Road	70	24+546.71	24+608.42	57	95-110
Mississauga Road	70	25+153.35	25+228.14	88	95-110
Old Main Street	60	25+904.32	25+932.95	69	75-85
Old Main Street	50	26+224.69	26+251.09	55	60-65
Bush Street	90	10+081.94	10+190.89	116	130-171
Bush Street	90	11+009.20	11+077.52	113	130-171
Bush Street	60	11+410.21	11+447.10	55	75-85
Winston Churchill Boulevard	80	40+007.28	40+061.57	79	115-140
Winston Churchill Boulevard	80	41+031.71	41+077.36	61	115-140
Winston Churchill Boulevard	80	41+256.16	41+290.39	95	115-140
Winston Churchill Boulevard	80	41+477.53	41+521.85	60	115-140
Winston Churchill Boulevard	80	42+647.37	42+718.34	104	115-140
Winston Churchill Boulevard	80	42+930.48	43+028.80	66	115-140
Olde Base Line Road	70	30+587.13	30+623.13	42	95-110
Olde Base Line Road	70	30+803.47	30+842.37	33	95-110
Olde Base Line Road	70	31+851.66	31+883.53	33	95-110
Olde Base Line Road	70	32+031.71	32+065.30	67	95-110

Notes:

1. As per Geometric Design Guide for Canadian Roads, TAC, Table 1.2.5.3, Stopping Sight Distance for Automobiles and Trucks with Antilock Braking Systems

Maximum Gradient Review

Road	Design Speed (km/h)	Beginning of Grade	End of Grade	Existing Grade	Maximum Grade, as per TAC
Mississauga Road	80	22+687.45	22+880.18	10.0%	8%
Bush Street	50	11+428.66	11+546.19	8.0%	8%
Winston Churchill Boulevard	80	40+007.28	40+061.57	8.0%	8%
Olde Base Line Road	70	30+727.43	30+822.92	10.0%	8%
Olde Base Line Road	70	30+822.92	30+885.79	10.0%	8%
Olde Base Line Road	70	31+867.59	31+957.74	10.5%	8%

Notes:

1. As per Geometric Design Guide for Canadian Roads, TAC, Table 2.1.3.1, Maximum Gradients