

Appendix DD – Pembina Highway Underpass: Geometric Design Criteria

Pembina Highway Underpass: GEOMETRIC DESIGN CRITERIA

Road	From	To	Route Classification TAC	Design Speed km/h	Posted Speed km/h	Lanes	Lane Width (1)			Min Radius (TAC) m	Vertical Curve		Normal Cross fall %	Longitudinal Gradient (3)		Stopping Sight Dist. m (4)	Super - elevation (m/m)	Shy line Offset (5)		Sidewalk/Multi-Use		Vertical Clearance at Underpass
							curb m	center m	median m		Min K Sag (TAC) (2)	Min K Crest (TAC)		Min %	Max %			left m	right m	Width m	Location	
<i>Pembina Highway</i>	Point Road	Jubilee Ave.	UAD	70	60	3	3.50	3.50	3.50	200	10-12	16-23	2	0.5	4.0	95-110	0.04	N/A	N/A	Full width	both sides	N/A
	Jubilee Ave.	Stafford Ave.	UAD	70	60	3	3.50	3.50	3.50	200	10-12	16-23	2	0.5	4.0	95-110	0.04	0.5	1	4.5	both sides	5.0

Notes:

- 1) Lane width's to comply with City of Winnipeg Design Manual (CWDM). Dimensions reflect clear width of lane.
- 2) Based on comfort control
- 3) Max grade to comply with CWDM table 4.2
- 4) Stopping site distance from TAC table 1.2.5.3 Stopping Sight Distance for Automobiles and Trucks with Antilock Braking System.
- 5) Shy line offset's represent minimum desirable distance at the pinch point between existing piers at Jubilee Overpass.