

# VICTORIA AVENUE EVALUATION

**This memorandum provides an overview of the physical characteristics and limitations of Victoria Avenue as a permanent year-round transit route.**

There are three Blue Line BRT route alternatives south of Downtown: Broadway Avenue, Victoria Avenue and Idylwyld Drive (see Figure 1). The Traffic Bridge and Victoria Avenue are proposed for use as a short-term alternative transit route when Broadway Avenue has been closed for street activities or maintenance.

This memorandum provides an overview of the physical characteristics and limitations of Victoria Avenue as a permanent year-round transit route. A Victoria Avenue transit route would follow 3<sup>rd</sup> Avenue, Traffic Bridge and Victoria Avenue to 8<sup>th</sup> Street.

The 3<sup>rd</sup> Avenue and Traffic Bridge portion of the route are designed, in terms of lane widths and road gradient, to accommodate general traffic movements including transit vehicles; however, at the south bank of the river there is a

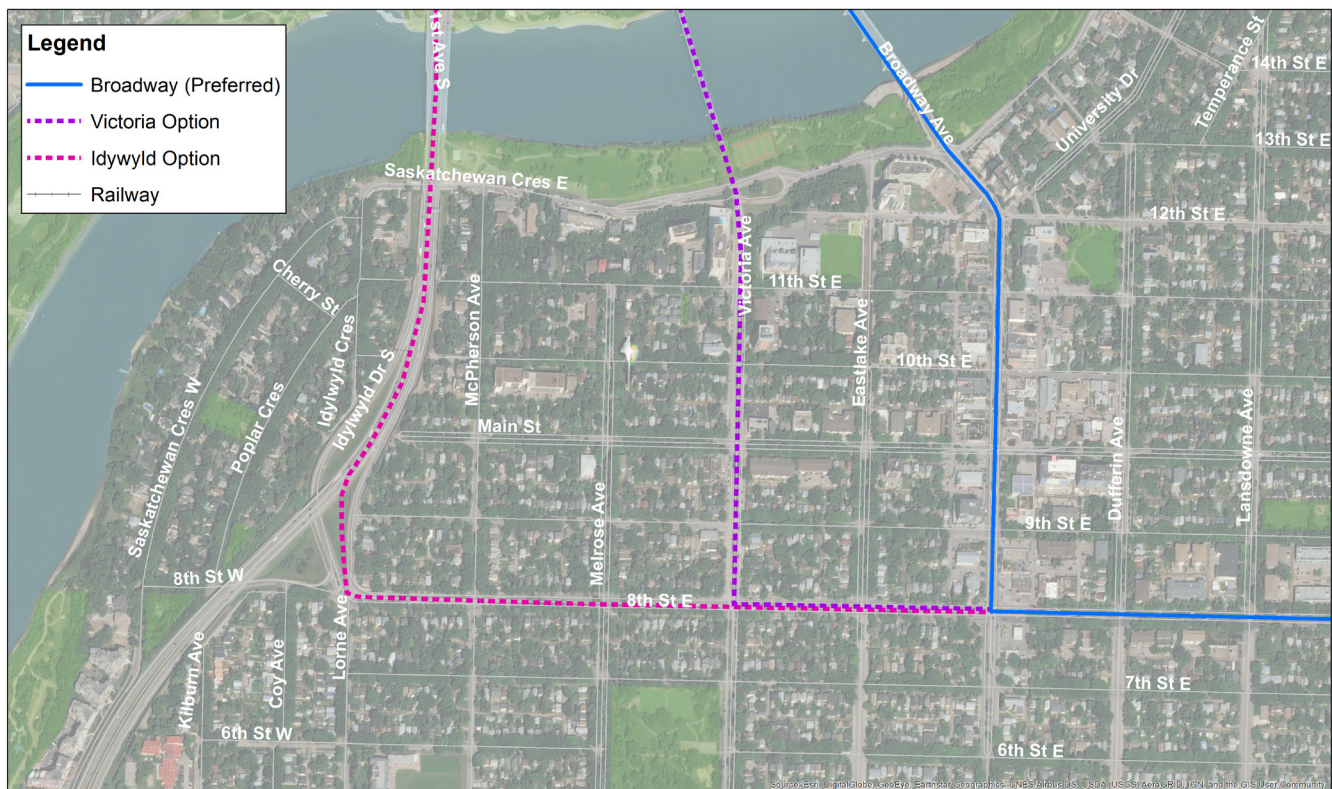


Figure 1. Blue Line BRT route alternatives

escarpment from the river valley to the 11th Street intersection. The south bank escarpment requires the roadway to climb 12.25 metres over a distance of 150 metres, an 8.2% gradient, to reach the 11th Street intersection (see Figure 2). The portion of the route from 11th Street to 8th Street poses no traffic operational issues.

The normal maximum road gradient for year-round traffic activity is 6%. Road grades above 6% will experience increased incidents of vehicle slippage during periods of ice and snow, and/or extreme cold. The presence of excessive road sand, gravel and wet leaves will also increase incidents of vehicle slippage. Longer vehicles, such as transit buses, will experience greater problems than automobiles with good winter tires. As well, due to the length of a transit bus there is also a greater risk of the vehicle slipping sideways when road traction is lost. This increases the risk of vehicle collisions and roadway blockages.

For the reasons noted above Saskatoon Transit buses operating on Victoria Avenue during winter months may experience operational problems, schedule delay and service reliability issues. Accordingly, the Victoria Avenue route is not recommended for regular winter use by transit buses. The route could be used as a detour route during summer closures of Broadway Avenue for street activities or maintenance.

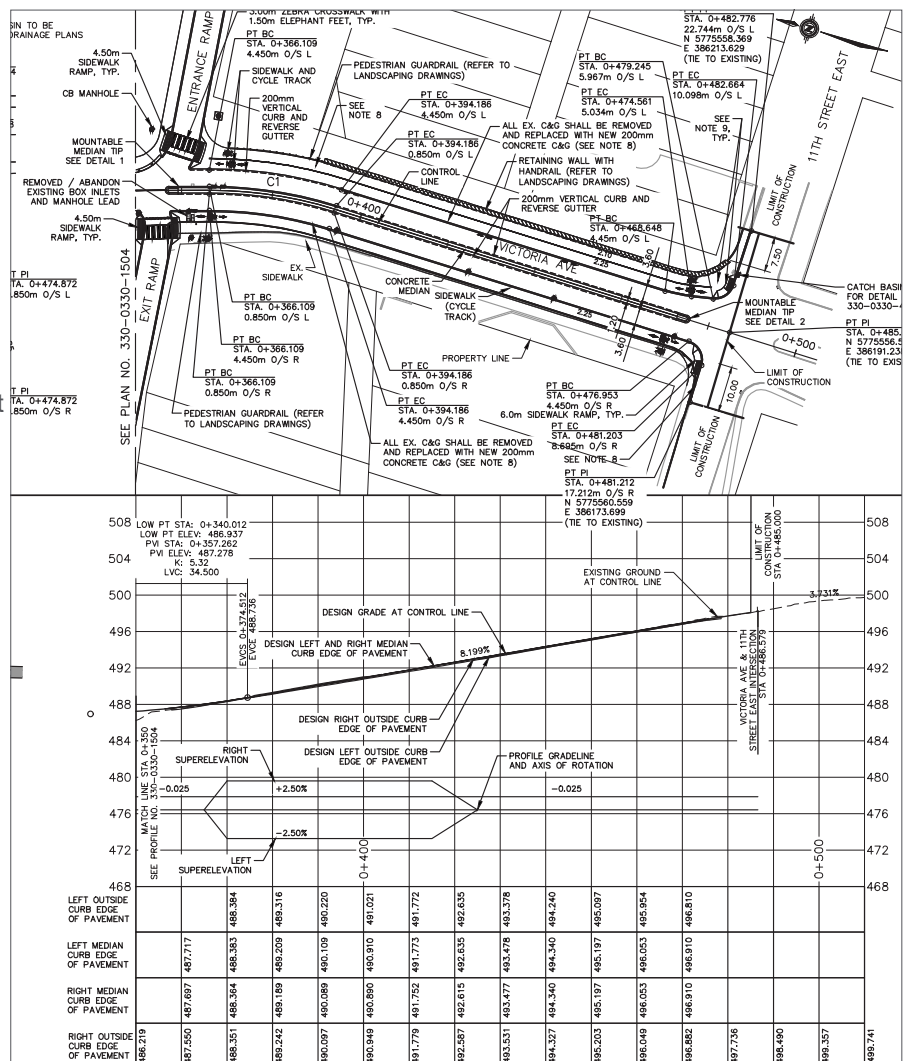


Figure 2. Plan and profile from Traffic Bridge Roadway Drawings for Victoria Avenue (Source: City of Saskatoon)