

MEMORANDUM

TO: Andrew Bone, MCIP, LPP – Planner III

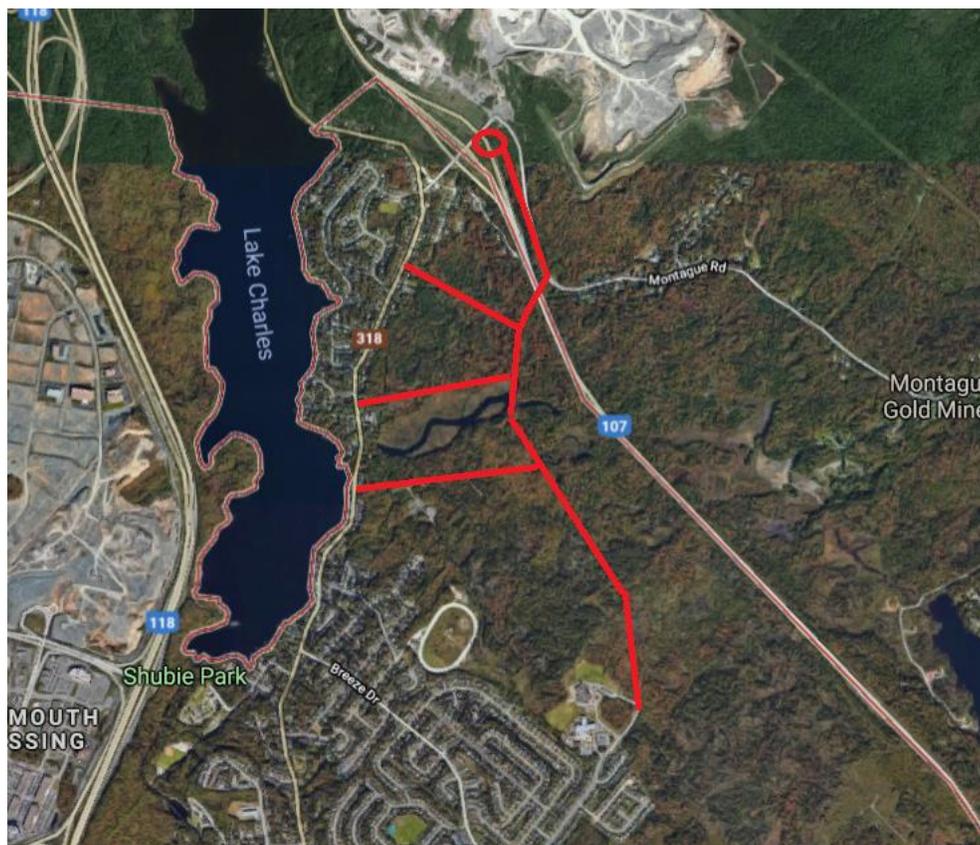
FROM: Paul Burgess, M.Eng., P.Eng, Program Manager



DATE: October 23, 2018

SUBJECT: Port Wallace Master Plan – Highway 107 Overpass

In response to the Public Participation Committee's request, I have examined the feasibility of connecting the internal loop road to Montague Road on the other side of Highway 107. The rationale for the request is that it would give motorists another option to access Highway 107 and potentially bypass a section of Waverley Road. I have used the following concept sketch provided by Adam Flick as a starting point:



I have assumed from Mr. Flick's sketch that there would be still three local street connections to Waverley Road, and that the internal collector road would connect to Montague Road which would Tee into the new collector road. I have assumed that the road network would look something like this:

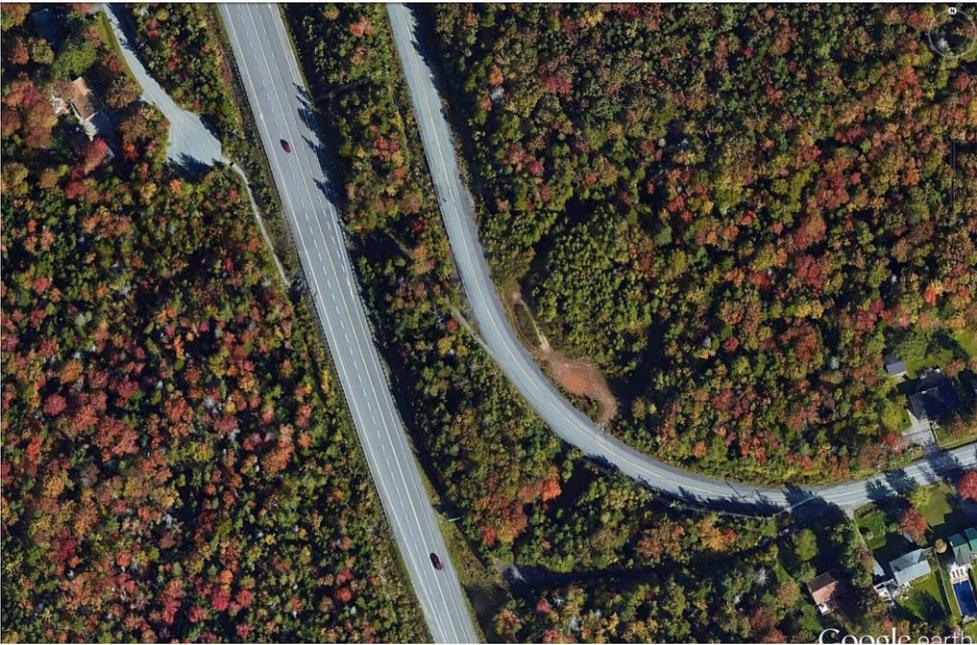


Figure 1 Approximate Crossing Point



The challenge with crossing Highway 107 at this location is the angle of crossing and the proximity to the Montague Road interchange. The proposed bridge would cross Highway 107 at an approximate 40-degree angle which would increase the span length. The on and off ramps to the Montague Road interchange would also need to be accommodated making the total span of roughly 60 metres.

Grades are also a challenge. To cross over Highway 107 would require an approach grade that exceeds 12%. The maximum grade for a minor collector road is 8%.

The cost of the bridge would be roughly \$5 - \$10 million. This does not include the re-grading and realignment of Montague Road would be another \$7 - \$10 million, making the total cost of the project \$12-\$20 million.

Given the grades and the cost, the option of connecting the internal loop road to Montague Road to the other side of Highway 107 is not feasible.