Road Clearance Assessment

Option 1: Do Nothing
Description: • This option would see both Bridge 330 and 332 replaced with structures that have the substandard clearance. • Does not address clearance issue. • Removed from consideration.

Option 2: Raise the Bridge
Description: • The two bridges would be raised 0.6 to 0.7 metres to increase roadway vertical clearance. • This would have a significant impact on rail operations. • Removed from consideration.

Option 3: Lower the Road
Description: • Lower the existing roadway between 0.6 to 0.7 m to increase vertical clearance. • Does not preclude two-way conversion. • Allows for active transportation facilities to be installed for cyclists and pedestrians. • Grades on the south approach of Bridge 330 would be over 6%, which is steep. • Construction area impacts are comparable to Option 4. Limited to previously disturbed lands. • Would require more frequent pumping due to lower roadway. • The option is the least preferred feasible option assessment as the underpass elevations are below recorded highs in the lake, the exposed sewer depth is high, and requires a backwater flow preventer. • No impacts to surface water or aquatic habitat. • Not within a regulation area. • No impacts to significant wildlife/vegetation. • No species at risk identified in the area. • No impacts to cultural heritage resources. • No impacts to archaeology sites. • Direct impacts to area businesses (both bridges) and adjacent residential areas (Bridge 332) during construction (e.g. noise, dust). Comparable to Option 4. • Consistent with the Official Plan and Transportation Master Plan. • No property impacts expected; will require easements during construction. • Lower capital costs; replacement of two bridges already budgeted for. • Higher operating costs. • Viable but not recommended.

Option 4: Raise the Bridge and Lower the Road - Recommended
Description: • Raise the bridge by 0.3 m and lower the existing roadway by 0.4/0.5 m to increase clearance. • Does not preclude two-way conversion. • Allows for active transportation facilities to be installed for cyclists and pedestrians. • Roadway grades are comparable for both options. • Construction area impacts are comparable to Option 3. Limited to previously disturbed lands. • Frequent pumping is lower than Option 3. • The option is the preferred option from the assessment as the underpass elevations are still above lake levels, exposed sewer depth is lesser, and does not require backwater flow preventer. • No impacts to surface water or aquatic habitat. • Not within a regulation area. • No impacts to significant wildlife/vegetation. • No species at risk identified in the area. • Minimal impacts to CN Rail cultural heritage landscape due to track raising. • No impacts to archaeology sites. • Direct impacts to area businesses (both bridges) and adjacent residential areas (Bridge 332) during construction (e.g. noise, dust). Comparable to Option 3. • Consistent with the Official Plan and Transportation Master Plan. • No property impacts expected; will require easements during construction. • Higher capital costs; replacement of two bridges already budgeted for. • Lower operating costs. • This is the recommended option.

Option 5: Shallower Bridge Deck
Description: • Replace the existing bridge deck with a thinner option. This could free up vertical clearance without having to jack the bridge up or lower the roadway. • Does not address clearance issue. • Removed from consideration.