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DEFERRAL OF PROPOSED CN RAIL GRADE SEPARATION ON 19TH AVENUE BAYVIEW AVENUE, ELGIN MILLS ROAD TO STOUFFVILLE ROAD 19TH AVENUE, LINDA MARGARET CRESCENT TO BAYVIEW AVENUE TOWN OF RICHMOND HILL

The Transportation Services Committee recommends:

- 1. Receipt of the presentation by Brian Titherington, Director, Roads; and**
- 2. Adoption of the recommendation contained in the following report dated April 18, 2012, from the Commissioner of Transportation and Community Planning.**

1. RECOMMENDATION

It is recommended that:

1. The Regional Clerk circulate this report to the Clerk of the Town of Richmond Hill and GO Transit for information.

2. PURPOSE

To inform Council of a change to the scope of the planned road improvements in the vicinity of 19th Avenue and Bayview Avenue, in the Town of Richmond Hill to defer the design and construction of the grade-separated crossing of the CN rail tracks located on 19th Avenue just west of Bayview Avenue. There are uncertainties associated with the future CN Rail/GO Transit design requirements for the grade separation which are delaying needed transportation improvements on Bayview Avenue and 19th Avenue.

A context plan and location plan are appended to this report (*see Attachments 1 and 2*).

3. BACKGROUND

A Municipal Class EA Study for improvements to Gamble Road / 19th Avenue between Bathurst Street and Leslie Street was completed in 2001

York Region completed a Municipal Class EA for Gamble Road/19th Avenue from Bathurst Street to Leslie Street in 2001. The Class Environmental Assessment (EA)

followed the process for a Schedule C project which concluded with the preparation and filing of an Environmental Study Report (ESR).

The Environmental Study Report recommended that Gamble Road/19th Avenue be widened to provide two traffic lanes in each direction with additional turning lanes at specific intersections, to address identified connectivity and capacity deficiencies. The Report also recommended that the CN Rail crossing, located just west of Bayview Avenue, be grade separated in the future with the road going over the rail corridor. At the time of study, there was only one existing track and space identified for a future second CN track. Therefore the grade separation needed to span only two tracks while meeting the minimum vertical clearance requirements.

A Municipal Class EA Study for improvements to Bayview Avenue between Elgin Mills Road and Stouffville Road was completed in 2008

York Region completed a Schedule C Municipal Class EA for the section of Bayview Avenue from Elgin Mills Road to Stouffville Road. This section of Bayview Avenue also intersected 19th Avenue within the limits of the Gamble Road/19th Avenue Class EA.

The Environmental Study Report recommended that Bayview Avenue should be widened to provide two traffic lanes in each direction with additional turning lanes at specific intersections to address identified connectivity and capacity deficiencies.

The reconstruction and improvement of Gamble Road / 19th Avenue to the west of Linda Margaret Crescent has already been completed

The Class EA for Gamble Road/19th Avenue allowed for staged construction. In 2004 Gamble Road was widened from two lanes to three lanes from 180m west of Bathurst Street to Rothbury Road, and to four lanes from Rothbury Road to Yonge Street.

The reconstruction and widening of 19th Avenue, from Yonge Street to Linda Margaret Crescent, was completed in 2011.

Transportation improvements for 19th Avenue and Bayview Avenue, within the identified limits, are planned to commence in 2014 and 2016, respectively

The transportation improvements for 19th Avenue, from Linda Margaret Crescent to Bayview Avenue, will include the reconstruction of Bayview Avenue in the vicinity of the intersection, and will also include the construction of a new watercourse along the east side of Bayview Avenue for a distance of approximately 1.5 km south of 19th Avenue. The east ditch of Bayview Avenue is an active watercourse that provides direct fish habitat, and the plan is to construct the new watercourse a year or two in advance of the widening of the road. This advanced construction ensures the new watercourse will be completely stabilized when the flows are redirected to it from the

roadside ditch. Current plans are to commence the construction of the new watercourse in 2013.

GO Transit has plans to improve rail service on this corridor with all-day train service to Bloomington Road

GO Transit completed an Environmental Assessment in 2009 to study improvements required to the rail corridor to improve service to northern Richmond Hill. This EA recommended the addition of a second track from Elgin Mills Road to Bloomington Road, as well as the construction of new stations at Stouffville Road and Bloomington Road.

As part of this program, CN Rail plans to add a second track to the existing rail corridor in 2012. This work will include improvements to the at-grade crossing at 19th Avenue to accommodate the second track at a four-lane crossing.

4. ANALYSIS AND OPTIONS

Uncertainty associated with future CN Rail / GO Transit requirements is delaying design of the grade separation

Detailed design work on these road sections has been ongoing since 2009. GO Transit has advised that future plans for the rail corridor may include a third track as well as electrification of at least one track. GO Transit has yet to undertake an EA to determine the need for these improvements. If required, these improvements will have a significant impact on the design of the grade separation in terms of span and vertical clearance of the structure.

The inability to finalize the grade separation design requirements is delaying the design work on the 19th Avenue and Bayview Avenue projects

The widening of 19th Avenue, between Linda Margaret Crescent and Bayview Avenue, and the widening of Bayview Avenue, from Elgin Mills to Stouffville Road, are being held up as a result of the inability to finalize the design requirements for the grade separation. It is therefore logical to proceed with an interim solution for the rail crossing to allow these projects to proceed.

Staff are moving forward with an at-grade crossing in the interim to address the immediate transportation deficiencies

The requirements for the grade separation and how they would impact the design of the crossing are still not finalized and may not be for some years.

Due to the uncertainties in the plans for improvements to the rail corridor and as traffic volumes on 19th Avenue are not anticipated to increase significantly until the Highway 404 interchange at 19th Avenue is constructed, staff have decided to defer the grade separation and to construct an interim at-grade crossing.

A four-lane at-grade crossing will provide the additional transportation capacity required in the area until the grade separation is constructed.

The interim at-grade work will be designed such that the roadway can be used as a construction detour when the ultimate grade-separated crossing is built

It was always anticipated that a construction detour on 19th Avenue would be required while the grade separation was being built. The interim at-grade solution will be designed such that it can function as that construction detour, resulting in reduced construction disruptions and costs when the grade separated crossing is built in the future.

5. FINANCIAL IMPLICATIONS

The project work is funded from 90% development charges and 10% tax levy

The deferral of the grade-separated crossing will be reflected in the 2013 Capital Budget. This will result in a reduction in the scope for the current construction project.

The Department will bring forward a request to add the grade separation to the capital budget when the costs and timing can be estimated.

6. LOCAL MUNICIPAL IMPACT

The deferral of the grade-separated crossing has been communicated to staff at the Town of Richmond Hill. Town staff are not opposed to the deferral.

Throughout the course of the detail design assignment, Regional staff will work closely with staff from the Town of Richmond Hill to accommodate their needs for sidewalks, illumination, and other infrastructure on 19th Avenue and Bayview Avenue.

7. CONCLUSION

Due to continued uncertainty by CN Rail and GO Transit associated with the design requirements for the grade-separated crossing, staff have decided to defer the grade separation until such time as the design requirements are fully known.

The interim solution of the four-lane at-grade crossing will be designed such that it can function as the construction detour during the future construction of the grade-separated crossing.

For more information on this report, please contact Brian Titherington, Director of Roads at extension 5901.

The Senior Management Group has reviewed this report.

(The two attachments referred to in this clause are attached to this report.)

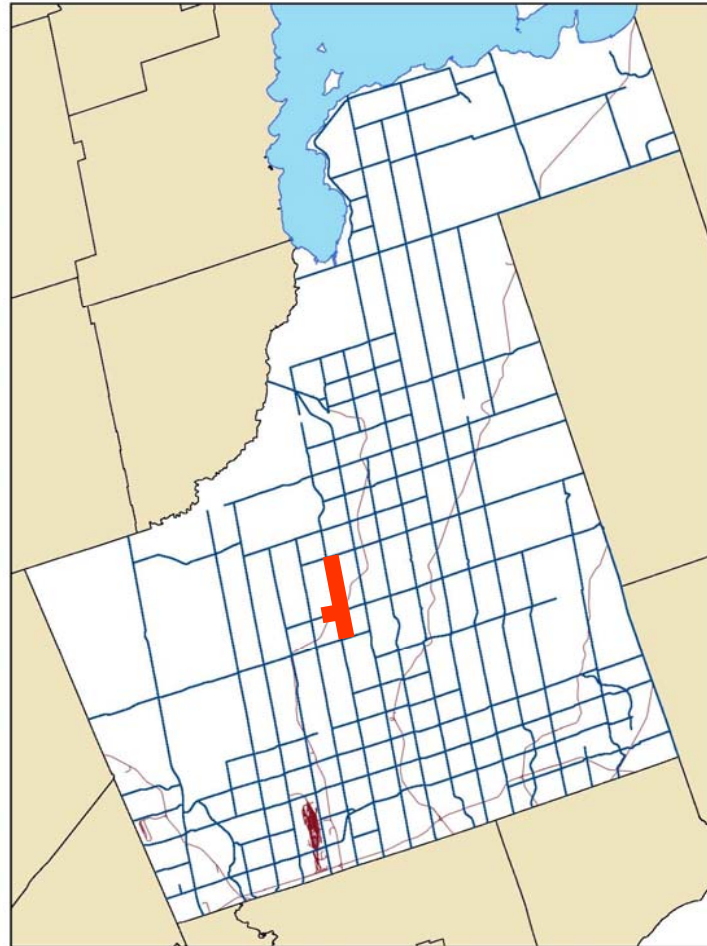
Bayview Avenue at 19th Avenue Deferral of CN Rail Grade Separation

Presentation to
Transportation Services Committee

Brian Titherington

May 2, 2012

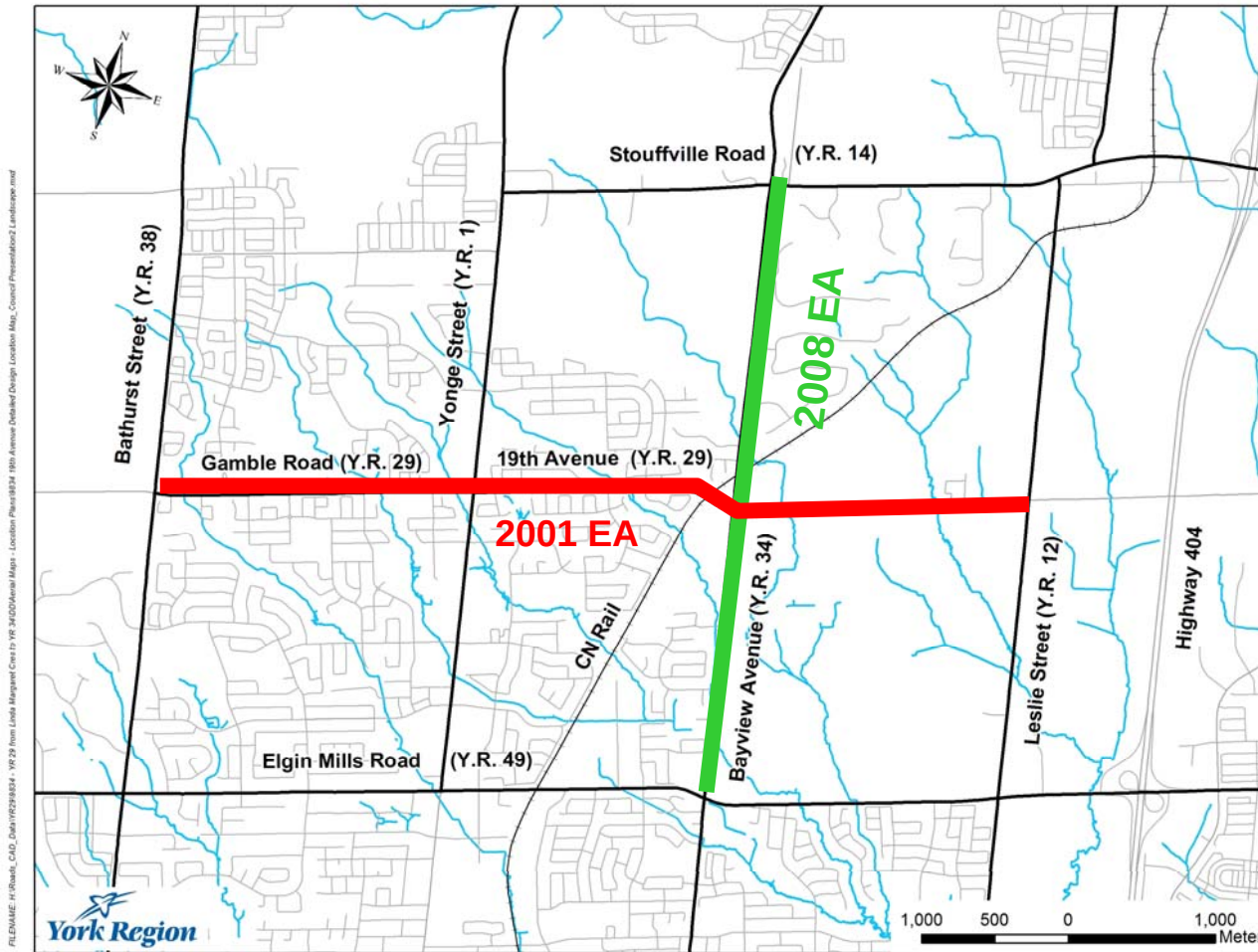
Project Location



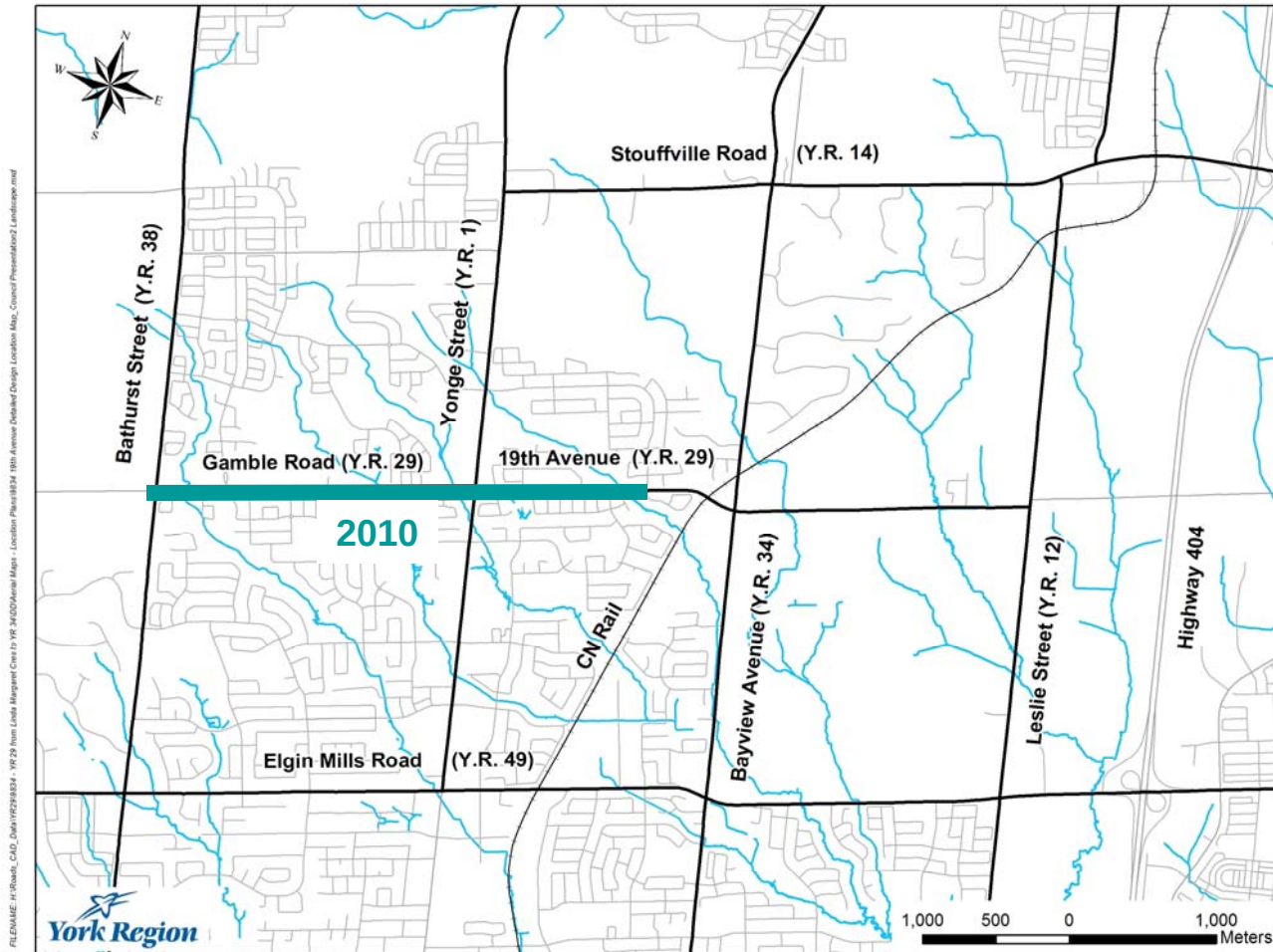
Outline

- ❑ Project History and Work Completed to Date
- ❑ Current Projects
- ❑ GO Transit Rail Service Improvement Plans
 - ❑ Known
 - ❑ Potential
- ❑ Effects of GO Transit Uncertainties on Regional Projects
- ❑ Traffic Volumes at At-Grade Crossings Throughout York Region
- ❑ Proposed Interim Solution

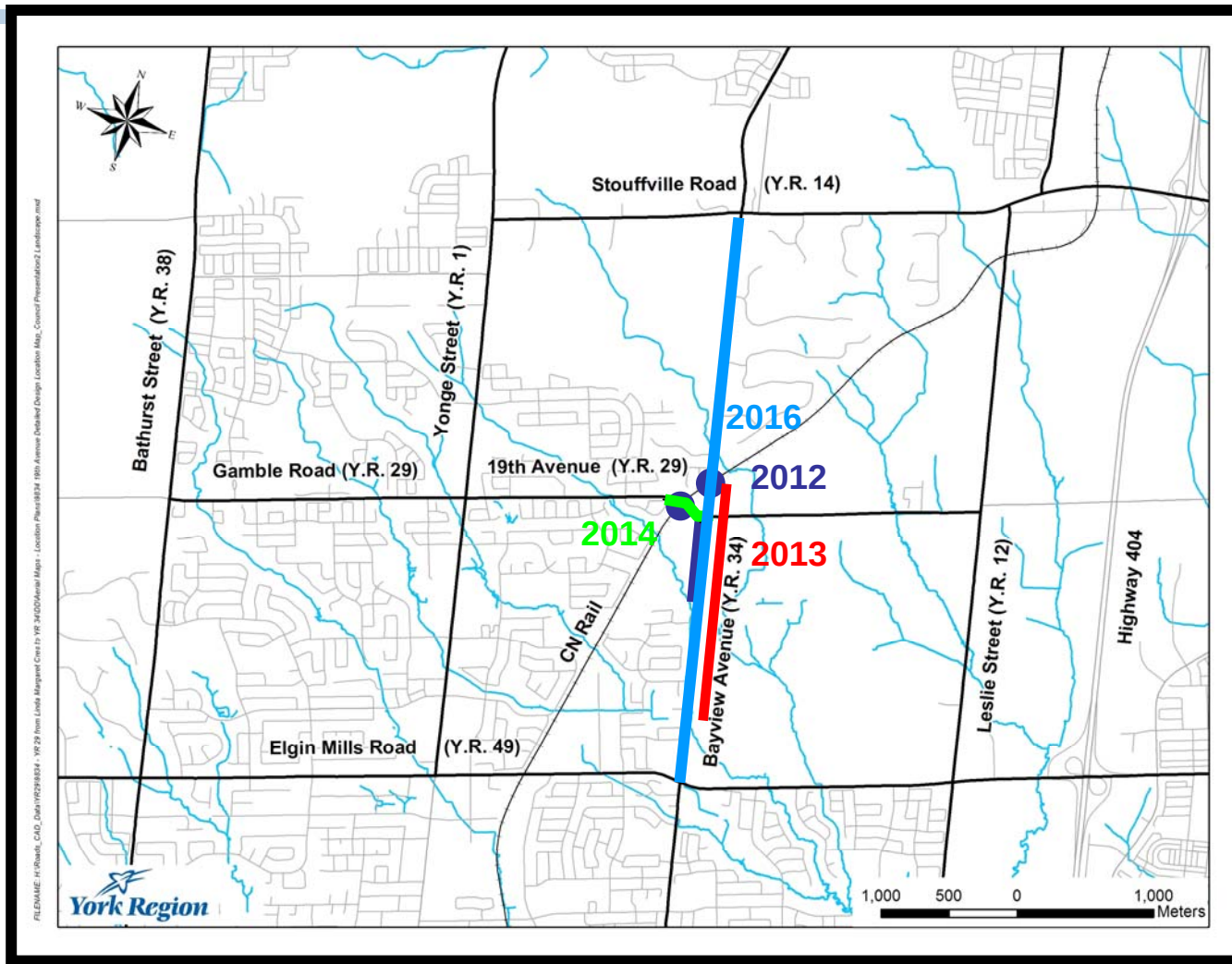
Background – Project History



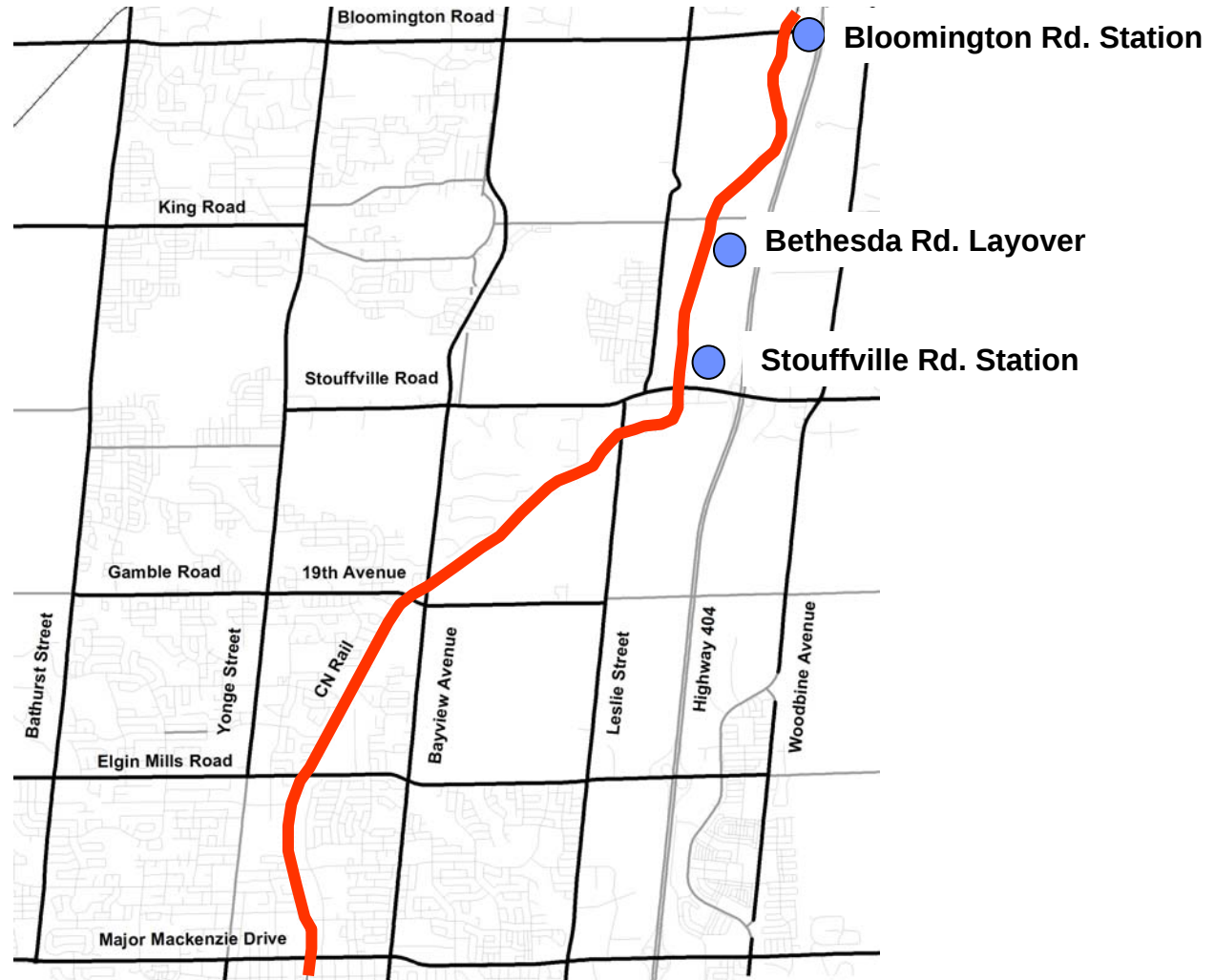
Background – Previous Construction



Background – Current Projects



GO Transit Rail Service Improvements - Known



GO Transit Rail Service Improvements - Potential

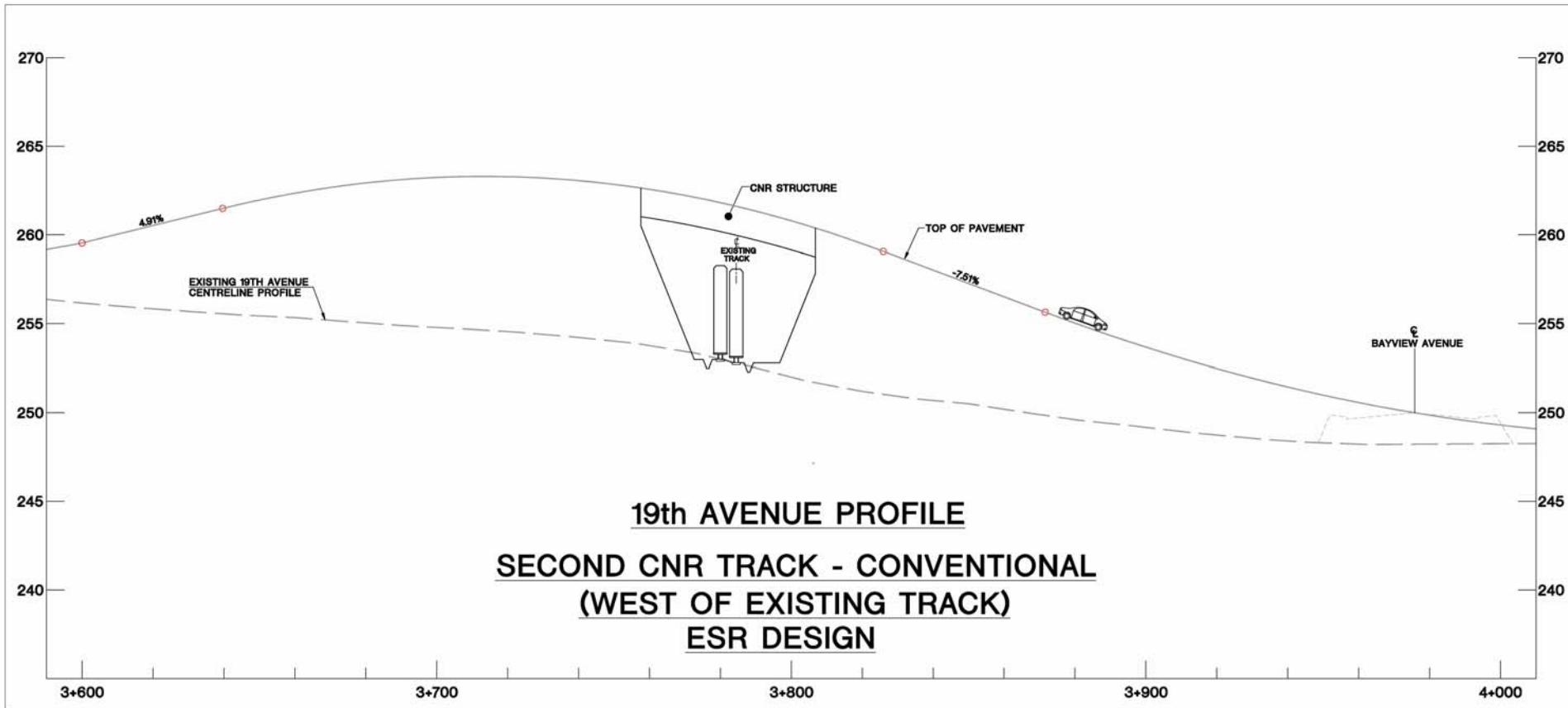
GO has advised of possible future improvements, and asked that we consider them in design of the 19th Avenue grade separation:

- ❑ Third track
- ❑ Electrification of one or more tracks

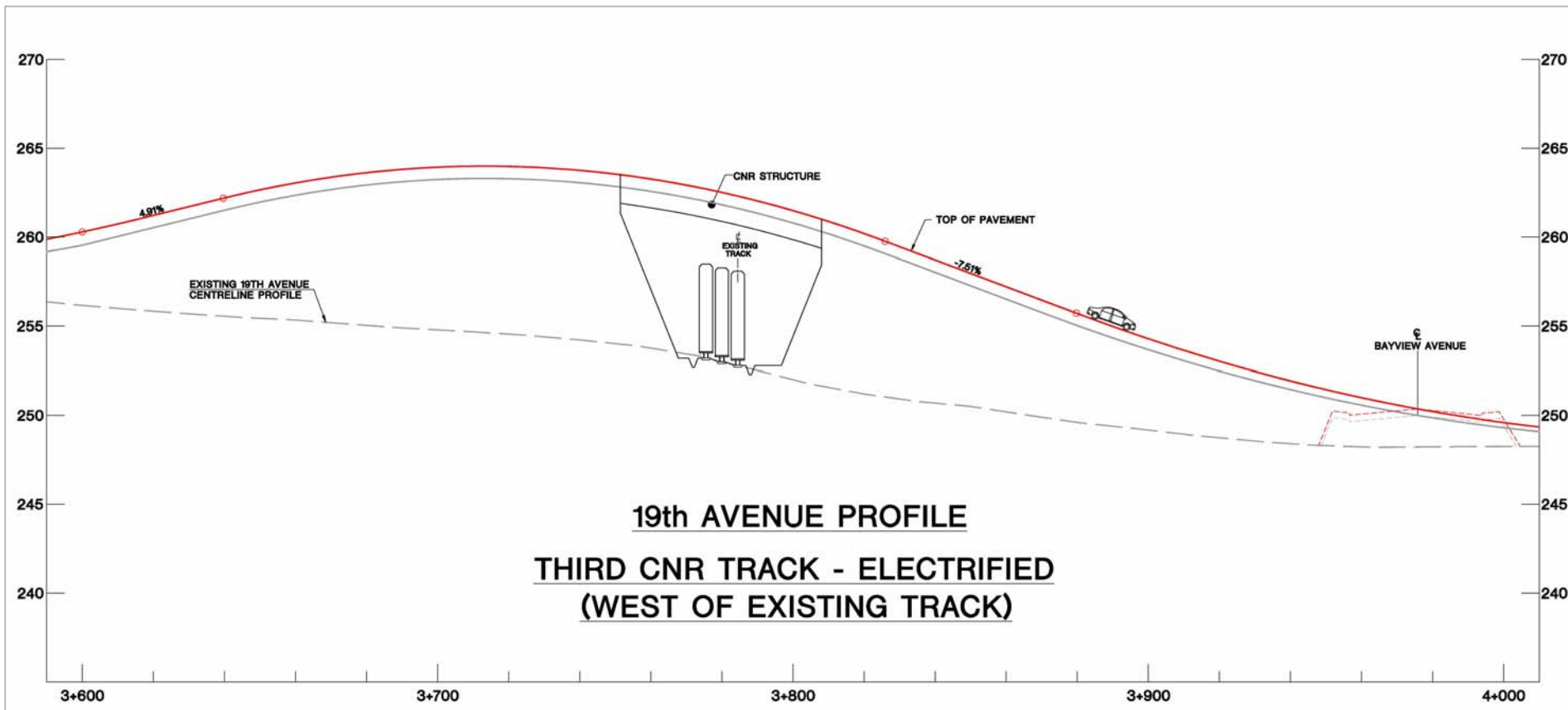
Unknowns include:

- ❑ timing of the improvements
- ❑ which side a third track would be placed
- ❑ Which track(s) would be electrified

Uncertain Design Requirements for Bridge – Original EA Design

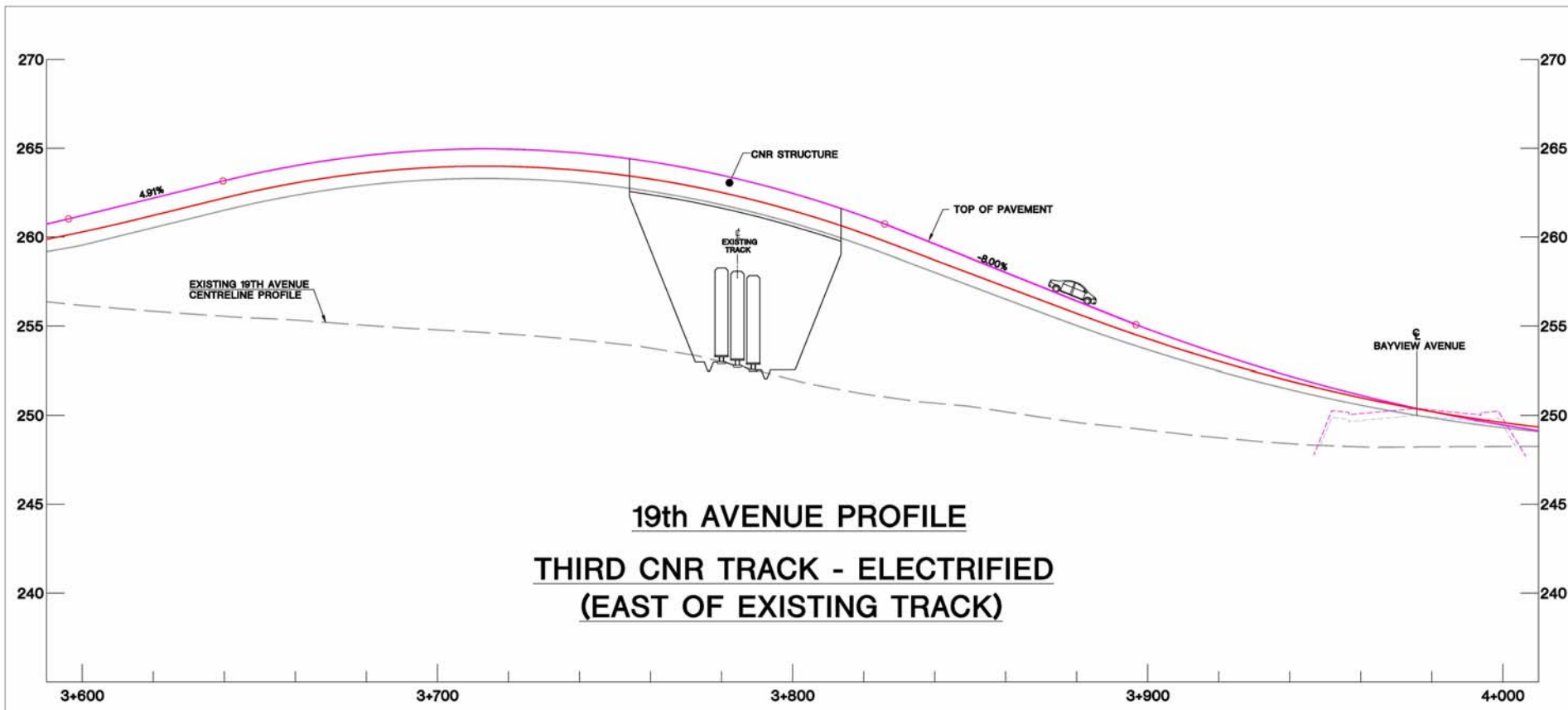


Uncertain Design Requirements for Bridge – Third Track, West Side, Electrified



Changes – road and bridge profile change

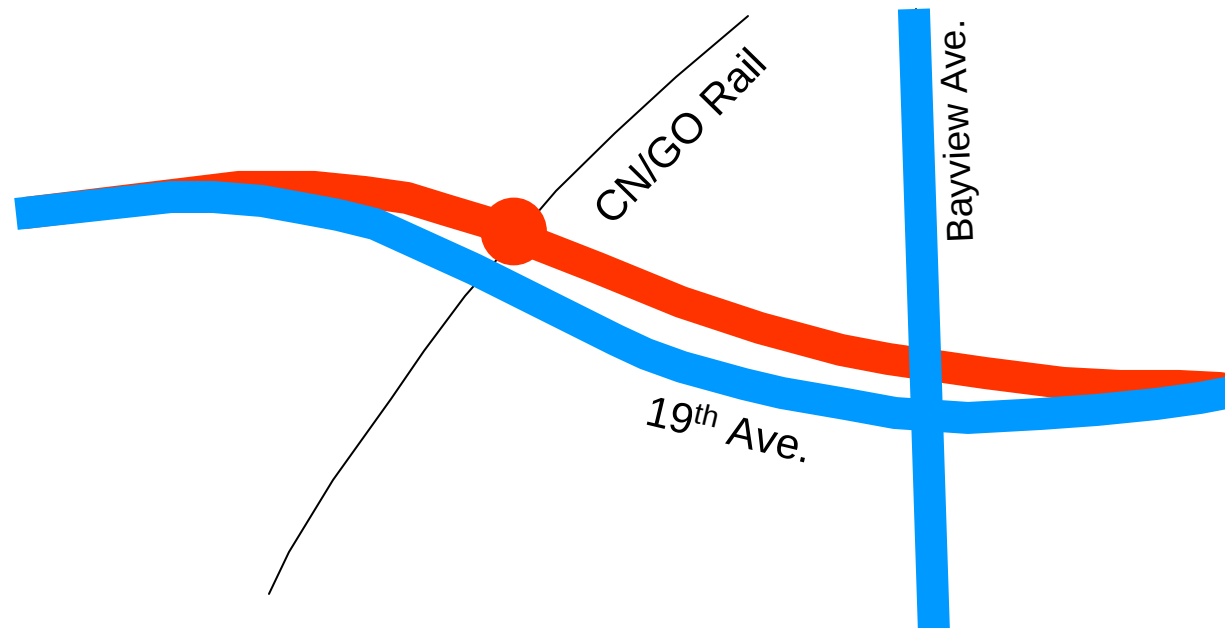
Uncertain Design Requirements for Bridge – Third Track, East Side, Electrified



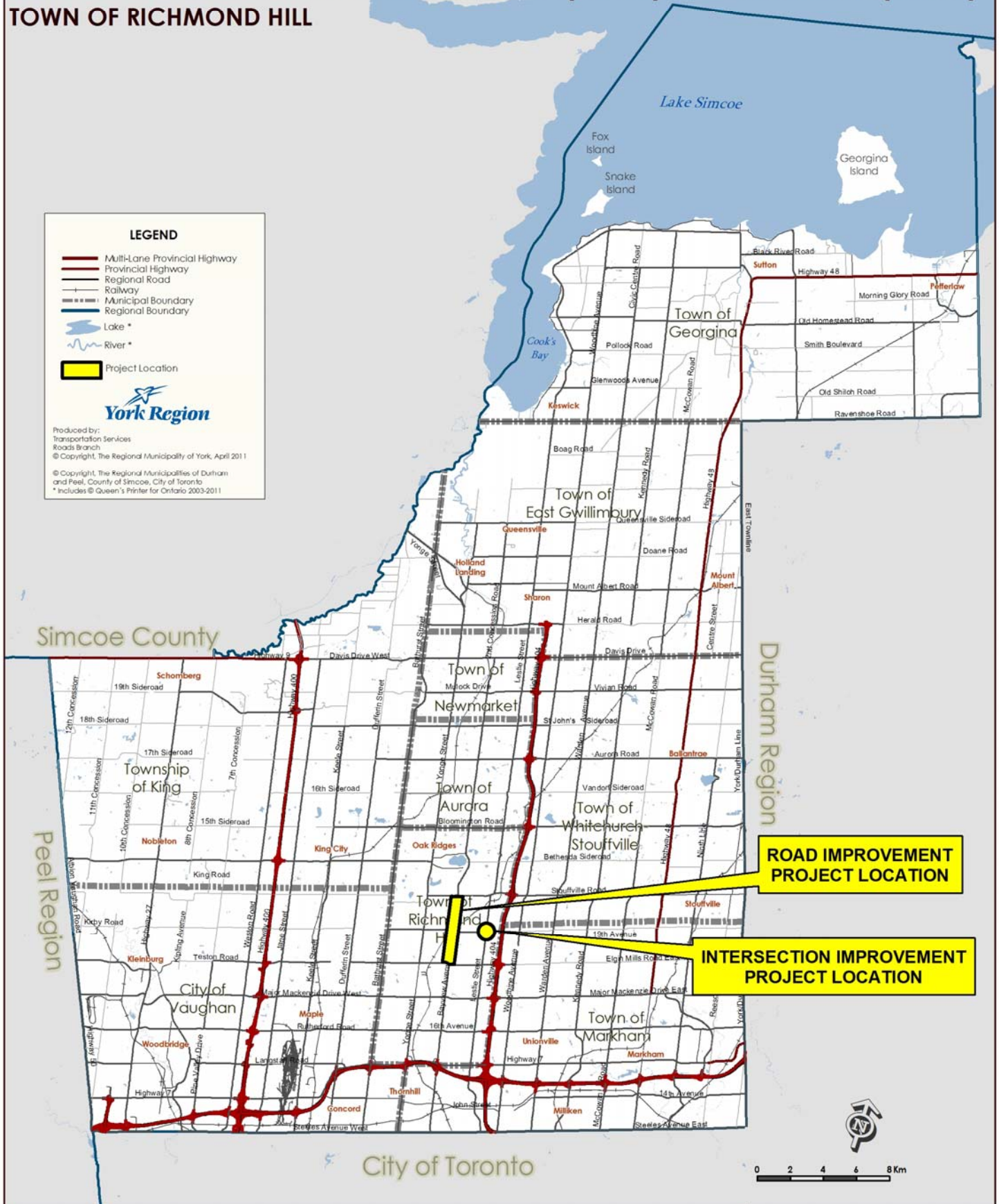
Changes – road and bridge profile change

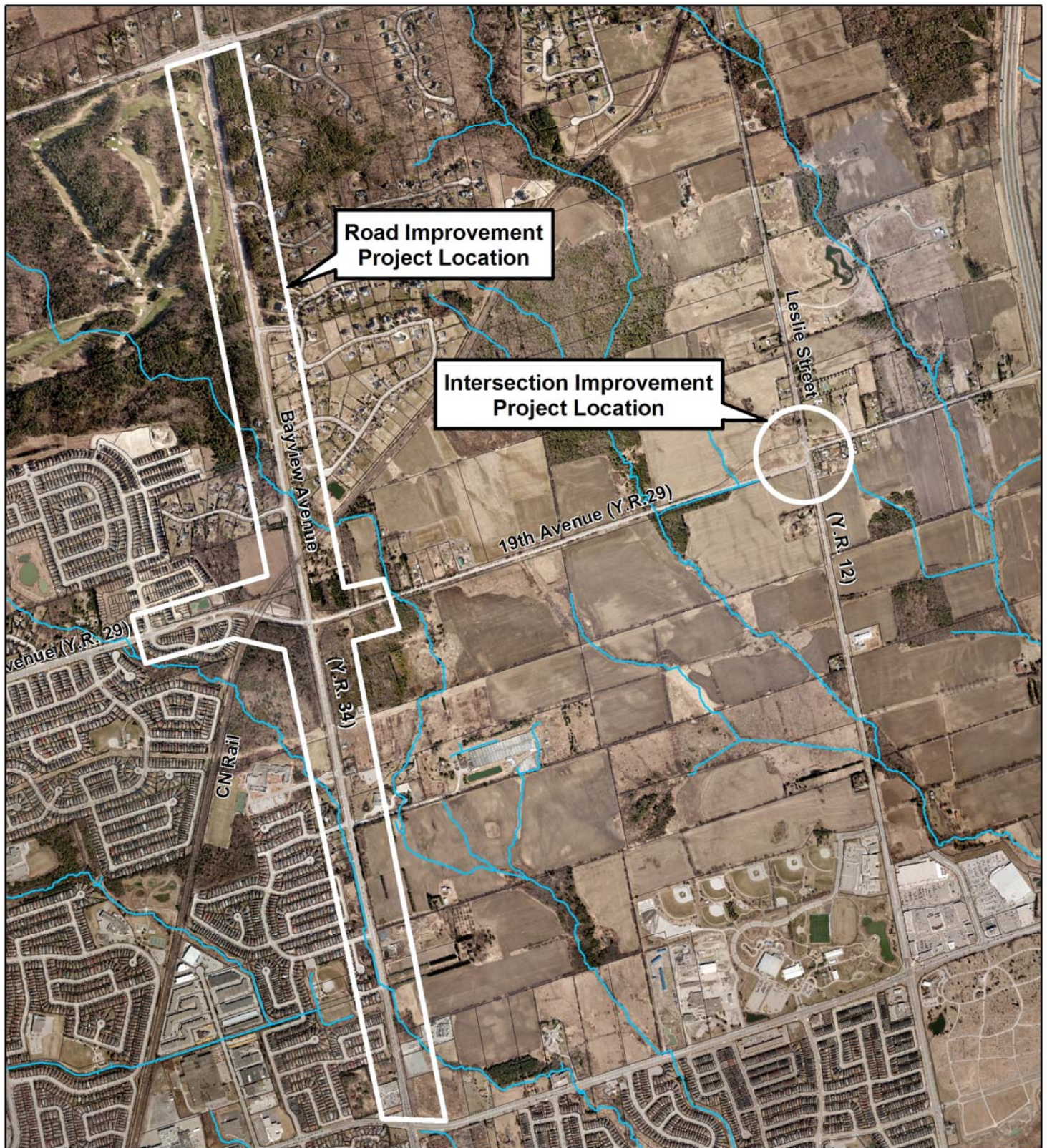
Proposed Interim Solution – At Grade Crossing

- ❑ Construct 4-lane at-grade crossing, and reconstruction of 19th Avenue from Linda Margaret Crescent to Bayview Avenue to 4 lanes along same alignment as current 2-lane road
- ❑ The future bridge and roadway will be constructed on the north side, with the interim 4-lane road used as the construction detour



ROAD IMPROVEMENTS ON 19TH AVENUE (Y.R. 29) AND BAYVIEW AVENUE (Y.R. 34) AND INTERSECTION IMPROVEMENTS AT 19TH AVENUE (Y.R. 29) AND LESLIE STREET (Y.R. 12) TOWN OF RICHMOND HILL





LOCATION PLAN

Project No. 98340

Road Improvements on 19th Avenue (Y.R. 29) and Bayview Avenue (Y.R. 34) and
Intersection improvements at 19th Avenue (Y. R. 29) and Leslie Street (Y.R. 12)
Town of Richmond Hill



1,000 500 0 1,000 Meters

ROADS BRANCH - CAPITAL DELIVERY

Produced By: Roads Branch - Capital Delivery
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