

Harvie Road / Big Bay Point Road / Highway 400 Transportation Improvements

Municipal Class Environmental Assessment, Phase 3 and 4

PRESENTED BY

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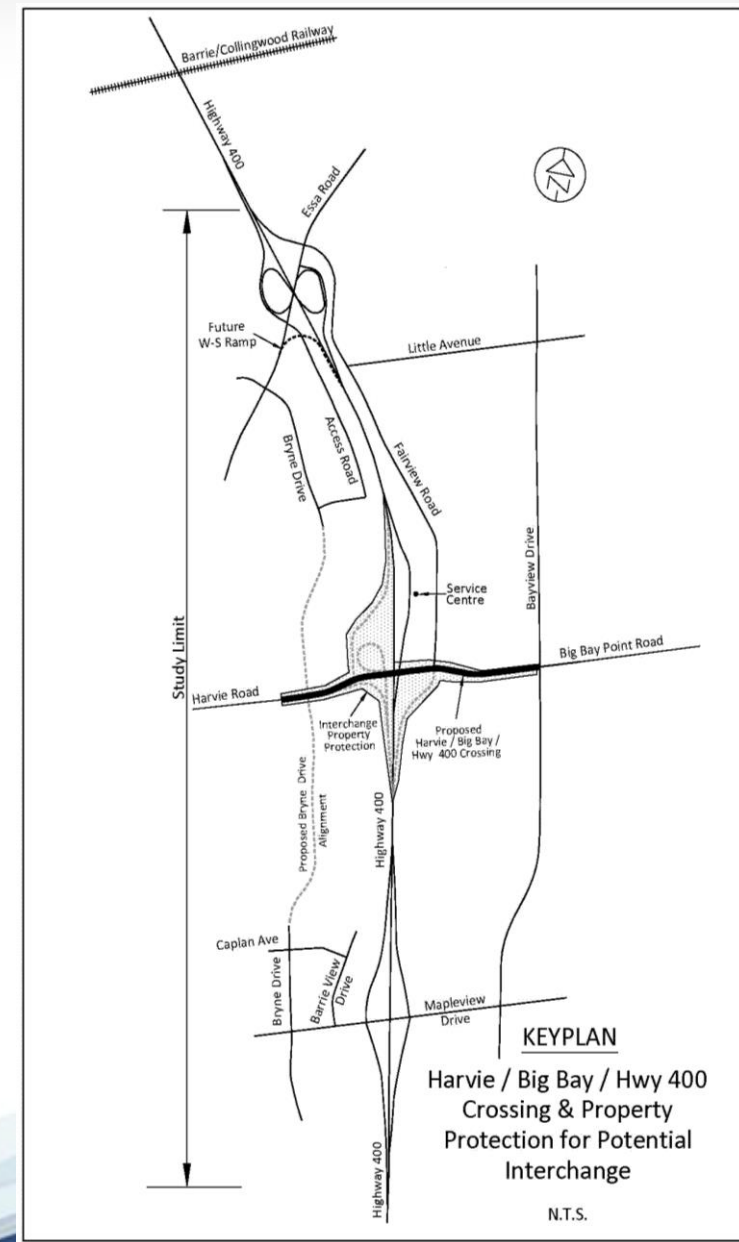
Senior Infrastructure Planning Engineer

Thursday, September-24-15

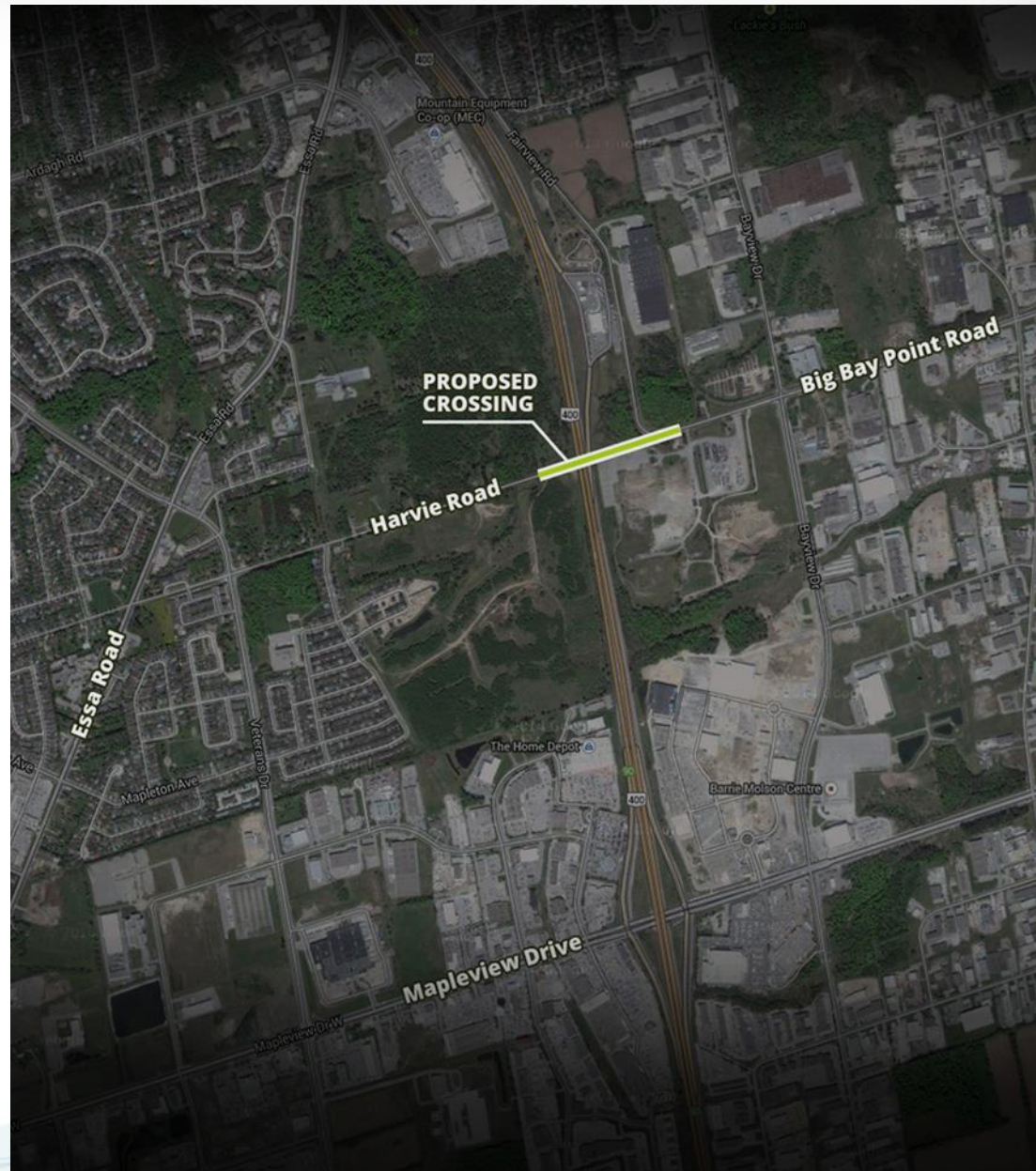


Background / Study Area / Purpose

- Phase 1 & 2 of the Harvie / Big Bay / 400 Transportation Improvements Class EA (completed in January 2012) recommended a Highway 400 crossing and protection of land for a future interchange.
- The City of Barrie retained Morrison Hershfield in July 2013 to complete Phase 3 & 4 of the Municipal Class EA process for the Highway 400 Crossing and to refine the land requirements for a potential future interchange. The study limits include the adjacent Maplevue Drive and Essa Road interchanges.
- Purpose of this Class EA is to assess transportation improvements that will reduce existing traffic congestion in the south end of Barrie and that will support growth.



- This crossing will help reduce traffic congestion and support growth in the south end of Barrie by connecting Harvie Rd. to Big Bay Point Rd. across Highway 400.
- It is a critically important piece of infrastructure that has been in the City's Master Transportation Plan for at least 15 years.
- Barrie's Growth Plans depend on the Harvie Road Crossing being completed.



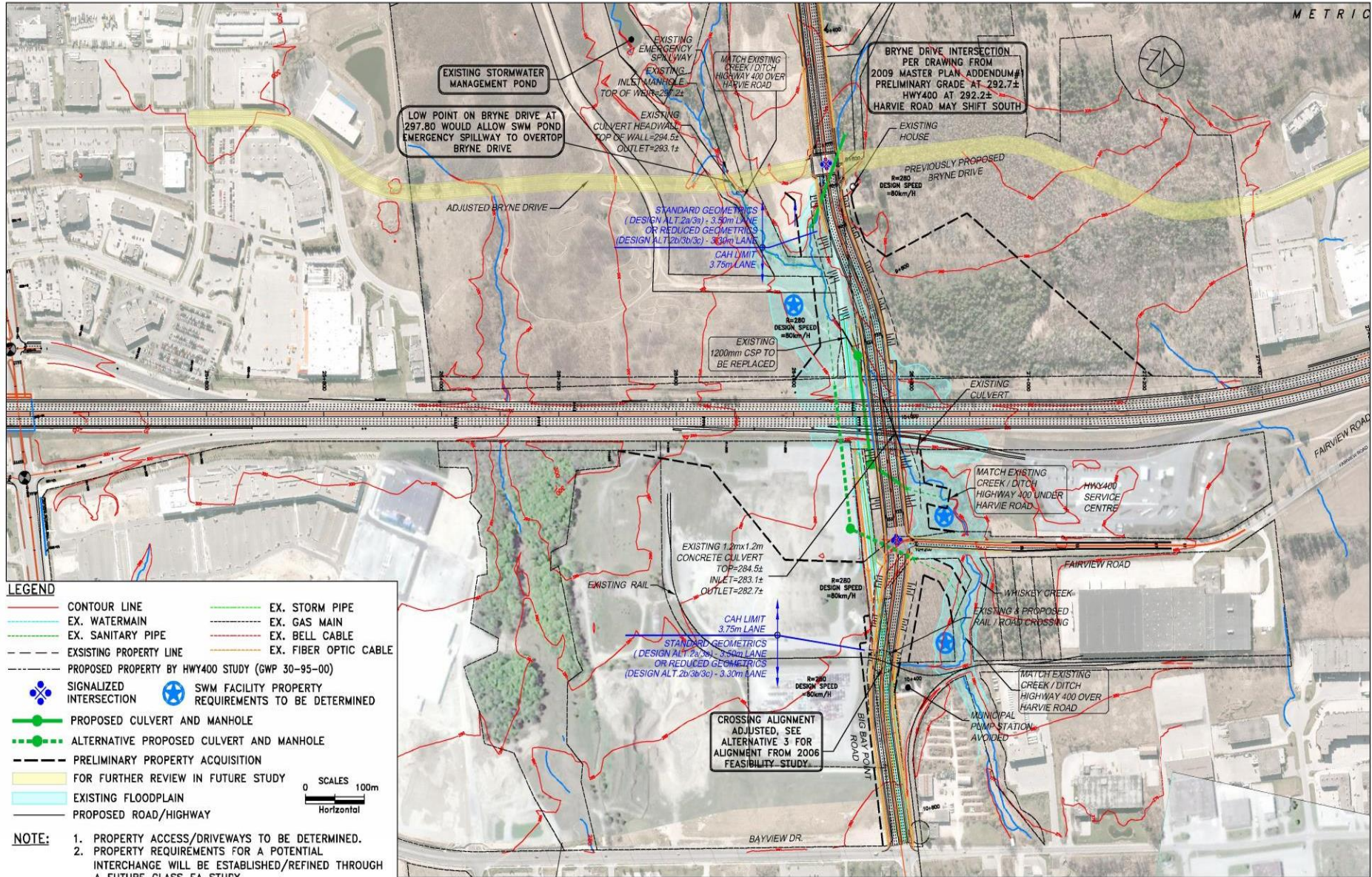
Preferred Highway 400 Overpass

Recommendations:

- 5 lane Highway Crossing over existing Highway 400 designed to be compatible with a potential future 7 lane interchange and widened Highway 400.
- Remove railway spur.
- Buffered Bike Lanes.
- Sidewalks on both sides.
- Protect land for a future potential interchange.



Preliminary Future Interchange Property Requirements



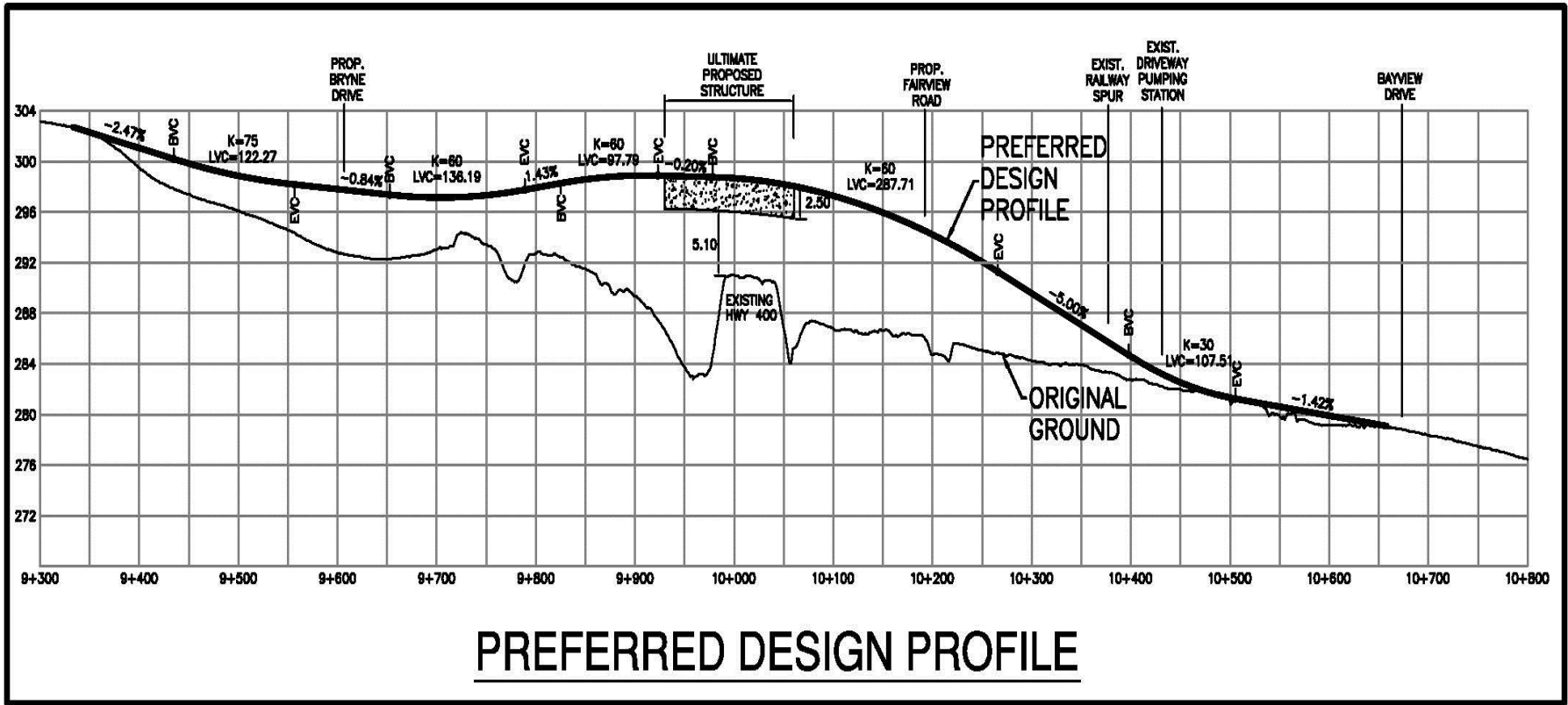
HARVIE ROAD / BIG BAY POINT ROAD / HIGHWAY 400 CROSSING
(HIGHWAY 400 UNDER REVIEW THROUGH OTHER STUDIES)

PREFERRED DESIGN ALTERNATIVE PLAN - (280m RADIUS) -2b
HIGHWAY 400 FUTURE POTENTIAL INTERCHANGE UNDER OR OVER
HARVIE ROAD / BIG BAY POINT ROAD - PROPERTY PROTECTION
(PHASE 3 AND 4 EA)

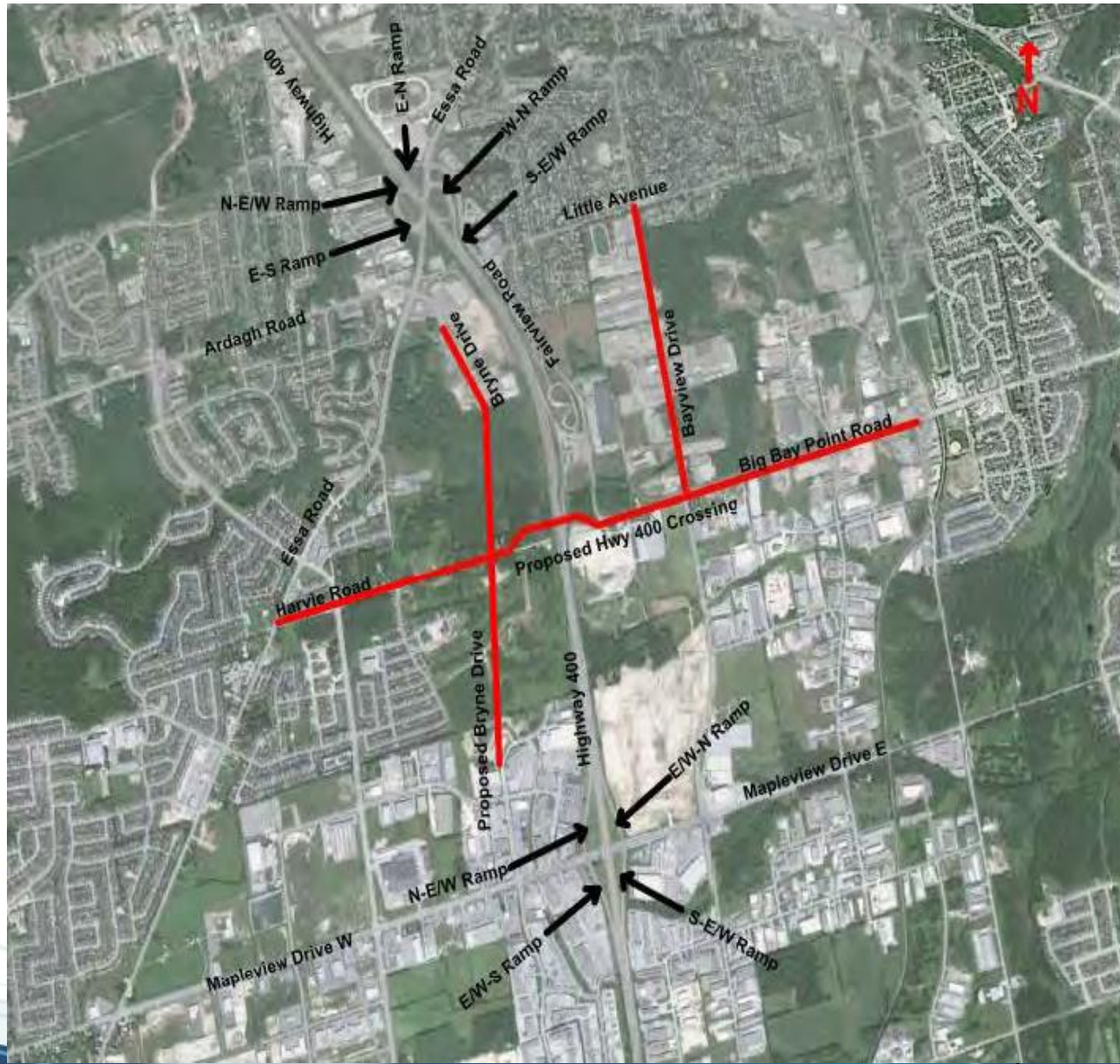
The City of
BARRIE

mh
MORRISON HERSHFIELD

Preferred Design Alternative Profile – 2b (Harvie / Big Bay Point Crossing Over Highway 400)



Transportation Improvements Associated with Hwy 400 Crossing



Alternative Design Concepts for the Proposed Harvie / Big Bay Point / Highway 400 Crossing for Phase 3 and 4 EA

The following Alternative Design concepts were presented as part of the second public consultation process :

- Alternative Design Concept 1 – Do Nothing
- Alternative Design Concept 2 (Over Highway 400) – Over/Remove Railway, Standard/Reduced Geometrics
- Alternative Design Concept 3 (Under Highway 400) – Standard/Reduced Geometrics, Raise Highway

A conceptual Partial Parclo A interchange was developed to identify preliminary general property requirements to protect for a potential future interchange, subject to further studies.

Public & Agency Consultation

- Public Information Centre #1 was held on November 17, 2010.
- Public Information Centre #2 was held on April 23, 2015.
- Property owners (residential and employment) and agencies (including MTO and LSCRA) were consulted as part the Class EA process
- Major issues raised throughout the EA process include the following:
 - a) Traffic impacts on existing roads
 - b) Railway impacts on proposed transportation improvements
 - c) Cost
 - d) Timing of transportation improvements including those on adjacent roads
 - e) Archeological Impacts
 - f) Impacts to the natural environment
 - g) Active Transportation linkages
 - h) Property Impacts
 - i) Impact on utilities

Proposed Highway 400 Staging

Staging to be reviewed as part of detail design but is proposed as follows:

- Stage 1 - Shift Highway approximately to the east. Implement concrete median barriers. Adjust access to service centre.
- Stage 2 - Build east structure abutment and centre pier and construct Highway Crossing over the realigned existing 6 lane Hwy 400.
- Future Stage 3 - Construct Highway Crossing west of the centre pier in advance of Highway widening.
- The timing for Highway 400 widening is not known at this time and is being reviewed as part of the Highway 400 PDR Update. It is anticipated that Hwy 400 would be widen within 20-30 years.


Preferred Design Alternative (Over Highway 400) - Estimated Costs

- The interim total cost \$33.6 million (75% of the ultimate cost).

2015-2017	Design	\$ 1.5 million
2018	Property	\$ 2.0 million
2019	Utilities	\$ 2.25 million
2020-2021	Construction	\$27.85 million
	Total	\$33.60 million
- The ultimate interchange total cost: \$61 to \$71 million (depending on timing / scope additions / limits of work).

Next Steps

- Subject to endorsement of City of Barrie General Committee and Council, a 30 day Notice of Completion will be filed for this project in October 2015.
- Subject to available budgets, a consultant to undertake detail design will be retained this fall.
- The proposed transportation improvements related to the Highway Crossing at Harvie / Big Bay / 400 may be influenced by the Highway 400 PDR update currently underway.
- Subject to available budgets, Barrie will continue to work with the MTO on the need / justification and technical feasibility of a potential future interchange. The interchange will also be subject a future Municipal EA study.
- Subject to available budgets, staff will complete the Bryne Dr. Class EA.
- Implement transportation improvements on area roads surrounding the Hwy 400 Crossing.



Thank you!
Questions?

The City of
BARRIE