

Appendix L Consultation

Welcome

Hewitt's Secondary Plan Class Environmental Assessment Study

Public Information Centre

September 22, 2016

Members of the Project Team are available to discuss and answer any questions you may have

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Hewitt's Secondary Plan

- The Study Area encompasses the Hewitt's Secondary Plan Study Area, including the following:
 - Lockhart Road from Huronia Road to Collector 11
 - Mapleview Drive from Huronia Road to 200m west of 20th Sideroad
 - Big Bay Point Road from 900m east of Prince Edward Way to 200m west of 20th Sideroad
 - Yonge Street from Lockhart Road to Mapleview Drive
 - Railway Crossing at Lockhart Drive
 - Railway Crossing at Mapleview Drive East
 - Conceptual design for trunk watermain on Mapleview Drive East and Big Bay Point Road, as well as sanitary sewer on Mapleview Drive East



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Problem and Opportunity

- The City of Barrie population is expected to reach 210,000 and employment for 101,000 people by 2031, making it one of the fastest growing cities in Canada
- To support this growth, the City of Barrie annexed land from the Town of Innisfil, expanding the City limits to the south and east
- The anticipated population and employment increase will create additional demand on the City's transportation network that cannot be accommodated by the existing infrastructure
- To align with pertinent policies, there is an opportunity to improve the existing transportation network and incorporate multi-modal transportation opportunities for existing and future populations

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Ongoing Studies

The following studies were conducted to identify constraints and opportunities to improvements within the Study Area



Traffic and Transportation



Drainage & Stormwater Management



Noise Impact



Natural Environment – Terrestrial & Aquatic



Cultural Heritage Assessment



Geotechnical



Railway Crossing Assessment



Geomorphology



Structural Assessment



Stage 1 and 2 Archaeological Assessment

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Natural Environment

Terrestrial:

- Mapleview Drive East: majority of corridor consists of residential (51%) and agricultural (25%) communities
- Lockhart Road: majority of corridor consists of agricultural (49%) and residential (25%) communities
- Yonge Street: majority of corridor consists of agricultural (64%) and residential (30%) communities
- Big Bay Point Road: majority of corridor consists of cultural woodland (28%), residential (25%) and hedgerow (18%) communities

The logo for HATCH, featuring the word "HATCH" in a bold, red, sans-serif font.The logo for The City of Barrie, featuring the text "The City of" in a small, blue, serif font above the word "BARRIE" in a large, blue, serif font with a stylized sun or star above the letter 'A'.

Natural Environment

Aquatic Environment:

- There are three documented sensitive species within the Study Area including: Brook Trout, Darter Species and Sculpin Species
- One location within Lover's Creek and two locations within Hewitt's Creek have active spawning Brook Trout

Wildlife:

- Only wildlife observed were Squirrels
- Two amphibians were documented: Spring Peeper and Green Frog
- 28 different species of breeding birds were visually or vocally observed
 - Most are common to southern Ontario
 - Four species that have regional conservation status include: Eastern Wood Pewee, Eastern Kingbird, Savannah Sparrow and Hooded Warbler
 - Eastern Wood Pewee is also listed as Special Concern

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Natural Environment

Reptiles:

- Snapping Turtles have been documented within St. Paul's Swamp
- Eastern Garter Snake was identified along Lockhart Road

Species-at-Risk (SAR):

- A total of three SAR were identified by the Ministry of Natural Resources and Forestry, including:
 - Butternut (Endangered). No Butternut documented during field investigations
 - Snapping Turtle (Special Concern). No designated surveys were required, and no evidence observed along the roadway corridors
 - Hine's Emerald Dragonfly (Endangered). No targeted surveys were required and no observations were made, however habitat is present within the Study Area
 - Eastern Wood-Pewee (Special Concern). Suitable habitat exists within the Study Area, and the species was heard during breeding bird surveys

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Natural Environment

Natural Heritage Features:

- Two Provincially Significant Wetlands are located within the Study Area including:
 - St. Paul's Swamp (along Lockhart Road)
 - Lover's Creek Swamp (along Mapleview Dr East)
- There are 7 watercourse crossings within the Study Area - known to provide habitat for Brook Trout and Mottled Sculpin, both of which are coldwater fish – typically associated with springs and/or groundwater upwellings



Lockhart Road Lover's Creek



Lockhart Road Hewitt's Creek

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Natural Environment

Woodlands:

- Woodlands include treed areas, woodlots or forested areas
- Located along the north and south sides of Big Bay Point Road, Mapleview Drive East and Lockhart Road

Significant Valleylands:

- Two are located along the south side of Lockhart Road associated with Hewitt's Creek and Hewitt's Creek tributary
- One is part of Lover's Creek tributary on the north side of Lockhart Road

Wildlife Movement Corridors:

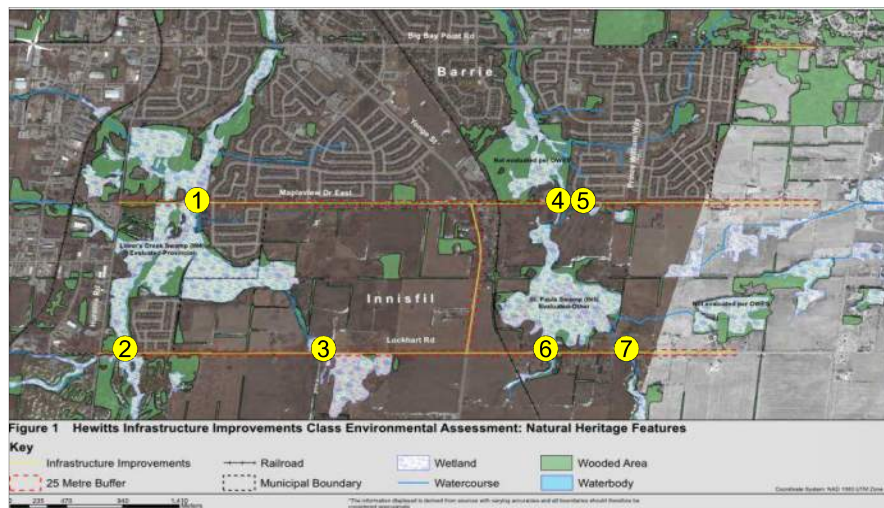
- Habitats that link two or more wildlife habitats that are critical for the maintenance of a population of a particular species or group of species
- Deer wintering habitat is located along Mapleview Drive East
- Amphibians were documented within wooded areas in proximity to those inundated with water during certain times of the year

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Geomorphology

Three crossings of Lover's Creek and four crossings of Hewitt's Creek were assessed for channel characterization, stream and meander belt assessment



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Geomorphology

Crossing	Channel Characterization	Creek Stability	Impact of Urbanization on Watercourse	Final Meander Belt Width
1	Single-thread channel, slightly entrenched with very low width-depth ratio; high sinuosity, gravel channel material. Some sections have moderate to high width to depth, and moderate to high sinuosity. Realignment proposed as part of previous study to facilitate construction of new bridge.	Transitional/Stressed	Fair	30m
2	Single-thread channel, slightly entrenched with very low width-depth ratio; high sinuosity, gravel channel material.	Transitional/Stressed	Good	29m
3	Channel regularly cleaned as part of road drainage or farm drainage. Banks steep and high which constrain channel and restrict meandering. Not sinuous but well vegetated with grasses. Typical sands and small gravels.	Transitional/Stressed	Poor	21m
4	Single-thread channel, slightly entrenched with very low width-depth ratio; high sinuosity, gravel channel material.	Transitional/Stressed	Good	39m
5	Single-thread channel, moderately entrenched with moderate sinuosity and gravel channel material.	Transitional/Stressed	Poor	18m
6	Single-thread channel, slightly entrenched with very low width-depth ratio; high sinuosity, gravel channel material.	Transitional/Stressed	Good	52m
7	Single-thread channel, slightly entrenched with very low width-depth ratio; high sinuosity, gravel channel material. Some sections have moderate to high width to depth, and moderate to high sinuosity.	Transitional/Stressed	Fair	36m




Archaeology

- There are 17 previously registered archaeological sites within one kilometre of the Study Area, four of which are within 50m
- The McDonald site is located in the Study Area
 - Archaeological resource of high heritage value
 - May provide significant insight into pre-contact Indigenous occupation in Study Area
 - Stage 3 Archaeological Assessment required to fully identify character, extent and significance of deposits
- A historical cemetery is located adjacent to the Study Area
- The majority of the Study Area has been previously disturbed by residential developments, recent grading and a gravel pit (impacted by deep and extensive land disturbance)
- Remaining area is subject to a Stage 2 Archaeological Assessment to confirm archaeological potential




Cultural Heritage

- There are 32 Cultural Heritage Resources (CHR) within the Study Area, including
 - Nine farmscapes
 - Ten residences
 - Four remnant farmscapes
 - One historic settlement area
 - One church with cemetery
 - One former school
 - One watercourse
 - Four roadscares; and
 - One rail line
- Two Cultural Heritage Resources were formerly listed by the Town of Innisfil, however were not transferred to the City of Barrie during the annexation of the land
- Proposed improvements should be planned to avoid impacts on Cultural Heritage Resources



CHR: St. Paul's Anglican Church-Innisfil
(3294 St. Paul's Cres.)



CHR: 1757 Lockhart Road

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Noise

- The maximum noise level for any Outdoor Living Area (OLA) is 55 dBA
- Six OLA's were selected to determine existing and future noise levels at a height of 1.5m, 3m from the 'most exposed side'
- Five of the OLA's existing condition exceed the limits identified by the Ministry of Environment and Climate Change (MOECC)
- The roadway expansions are predicted to produce marginal increase in current noise levels
- Noise levels currently exceed the limits and will continue without mitigation following construction
- City of Barrie to consider reducing noise levels to MOECC limits through noise controls

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Structures

- Seven culverts were assessed for their structural integrity. The following provides details of the culverts and recommendations for improvements:

Crossing	Type	Span	Condition	Action
1	Concrete, rigid frame	6.3m	Fair	Rehabilitate and extend
2	Concrete, rigid frame	6.1m	Fair	Rehabilitate and extend
3	CSP, round	0.9m	Fair	Replace
4	Concrete, rigid frame	4.3m	Good	Repair and extend
5	CSP, round	0.9m	Good	Extend
6	HDPE, round	0.9m	Good	Extend
7	Steel plate corrugated round pipe	3.6m	Fair	Replace



Geotechnical

- A Geotechnical Assessment was completed which included the following findings and recommendations:
- Groundwater:
 - Found to vary between 1.6m and 4.7m below ground surface
 - Higher groundwater levels were typically at watercourse crossings
 - Seasonal fluctuations are anticipated
 - Dewatering may be required to lower the groundwater level in areas of deep excavation
- Structure Foundations:
 - For Lockhart Road Grade Separation, footings should be at least 2.5m below existing surface if overpass recommended design concept
 - For Maplevue Road, footings should be 4.0 to 5.0m below existing ground if overpass recommended design concept



Geotechnical

- Earth Embankments:

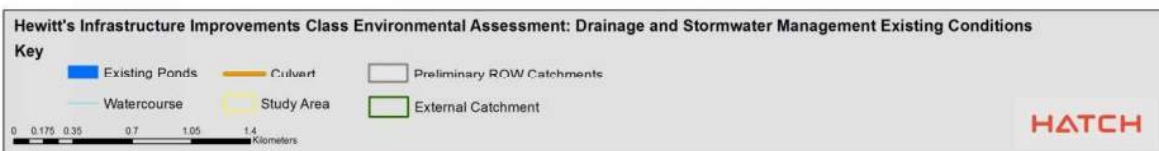
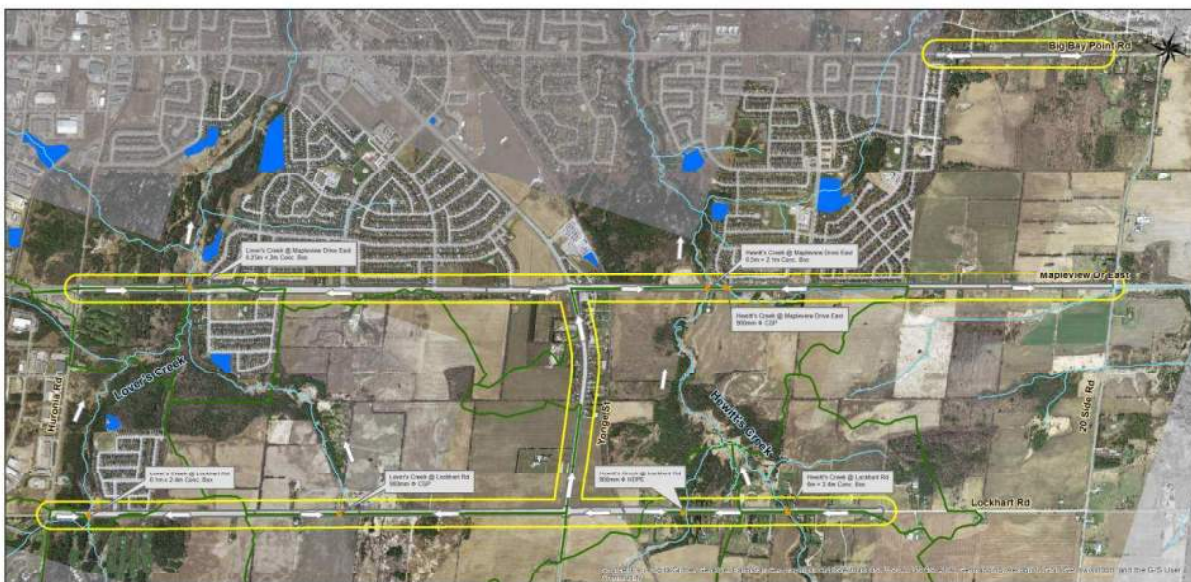
- Free draining granular fill to be used (Granular A or Granular B Type II)
- Longitudinal drains or weep holes should be provided to ensure positive drainage behind retaining walls
- Consideration should be given to preloading the base surface to reduce settlement

- Pavement Design:

- HL1 Surface Asphalt: 40mm
- HL4 or HL8 Binder Asphalt: 100mm
- Granular A: 150mm
- Granular B: 500mm to 600mm



Drainage/ SWM



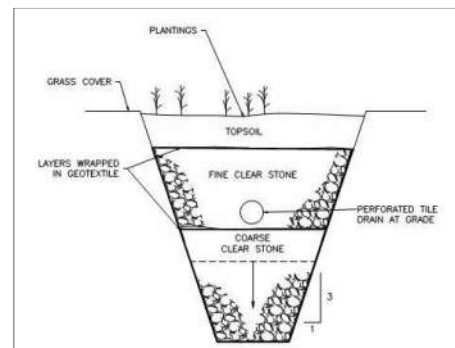
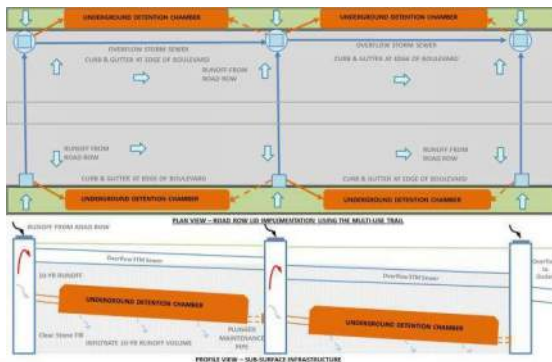
Drainage/ SWM

- Drainage and Stormwater Management (SWM) designs were developed and evaluated for:
 - Existing drainage features within the Study Area:
 - Main storm sewer network along Mapleview Drive East
 - Conveyance ditching along Lockhart Road, Yonge Street, Big Bay Point Road and portions of Mapleview Drive East
 - Four (4) major culvert watercourse crossings along Mapleview Drive and Lockhart Road at Lover's Creek and Hewitt's Creek
 - Existing and future proposed development drainage design can be divided into:
 - Right-of-Way (ROW) drainage catchments looking at drainage conveyance and SWM opportunities
 - External drainage catchments modeled on an approved hydrologic/hydraulic modeling basis for major culvert crossings
 - SWM Water Quantity and Quality control considered where feasible for post-development ROW conditions.



Drainage/SWM - LID

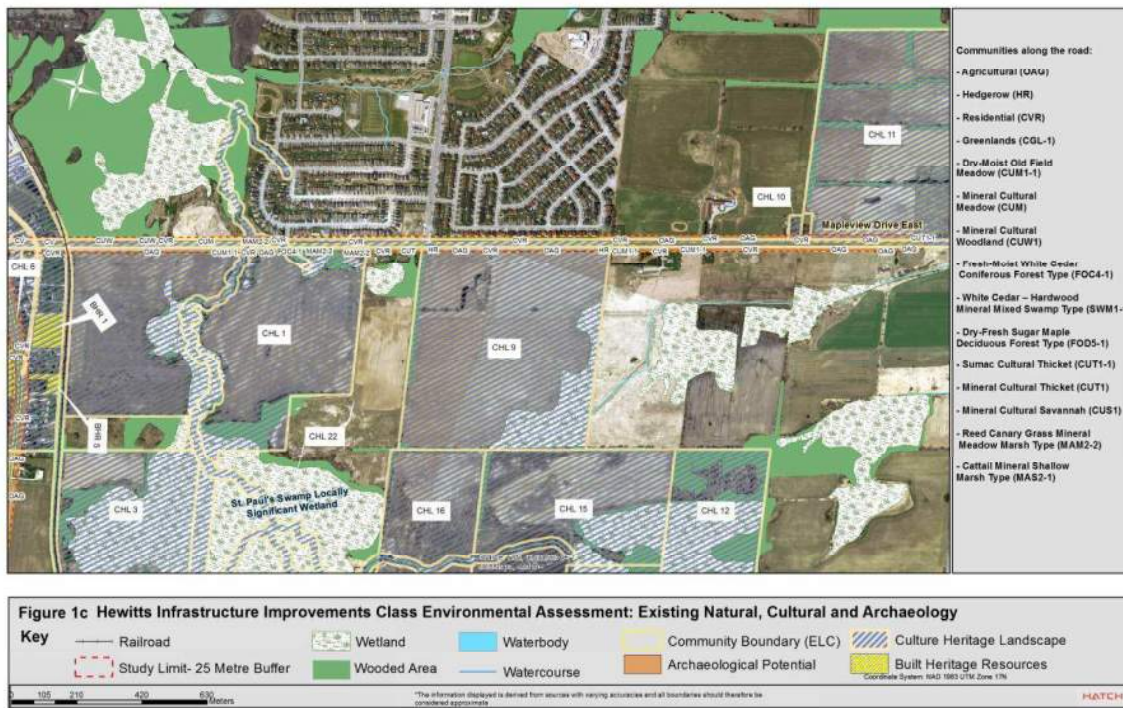
- Stormwater Management in the form of linear Low Impact Development (LID) and centralized peak flow quantity control facilities.
- LID concepts and target treatment volumes developed in consideration of the Lake Simcoe and Region Conservation Authority 2016 Guidelines (LSRCA, 2016).
- Recommended options for linear LID in the form of Underground Detention Chamber or Bioretention Facilities to treat required runoff where feasible.



Constraints: Maplevue Drive East



Constraints: Maplevue Drive East (2)



Constraints: Lockhart Road



Figure 1d Hewitts Infrastructure Improvements Class Environmental Assessment: Existing Natural, Cultural and Archaeology

Key

- Railroad
- Wetland
- Community Boundary (ELC)
- Waterbody
- Culture Heritage Landscape
- Study Limit- 25 Metre Buffer
- Wooded Area
- Archaeological Potential
- Watercourse

Coordinate System: NAD 1983 UTM Zone 17N

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Constraints: Lockhart Road (2)



Figure 1e Hewitts Infrastructure Improvements Class Environmental Assessment: Existing Natural, Cultural and Archaeology

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- Railroad
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- Archaeological Potential
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Coordinate System: NAD 1983 UTM Zone 17N

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Constraints: Big Bay Point Road



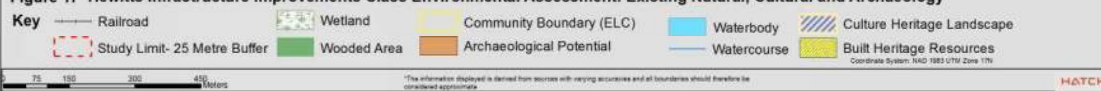
Figure 1a Hewitts Infrastructure Improvements Class Environmental Assessment: Existing Natural, Cultural and Archaeology



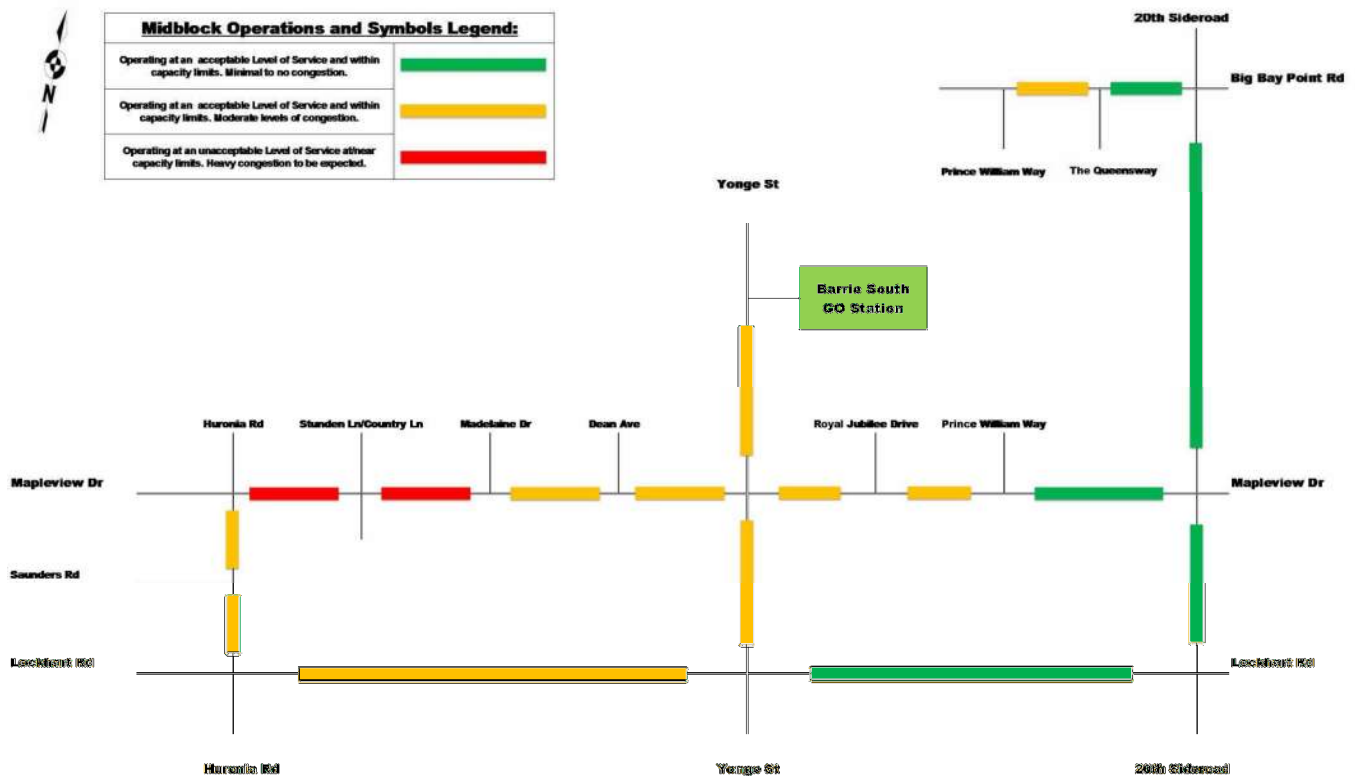
Constraints: Yonge Street



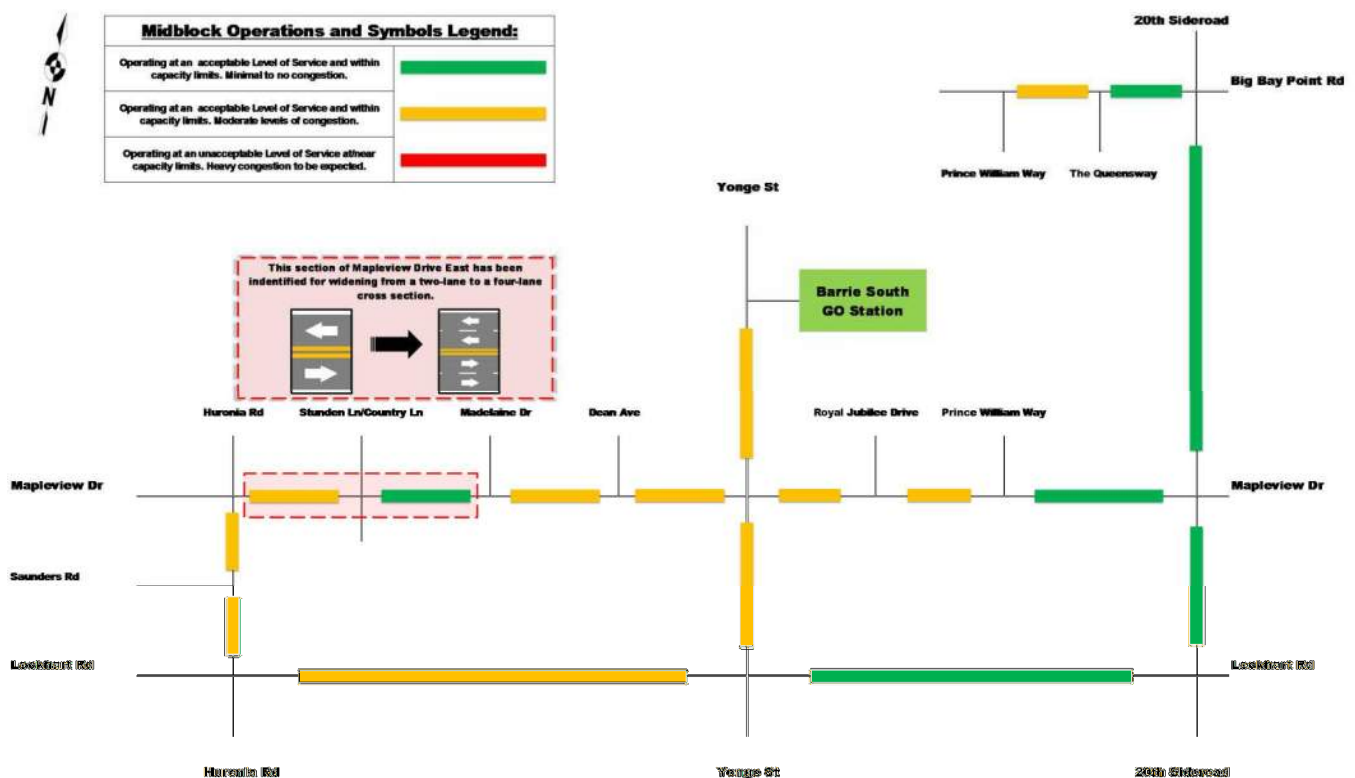
Figure 1f Hewitts Infrastructure Improvements Class Environmental Assessment: Existing Natural, Cultural and Archaeology



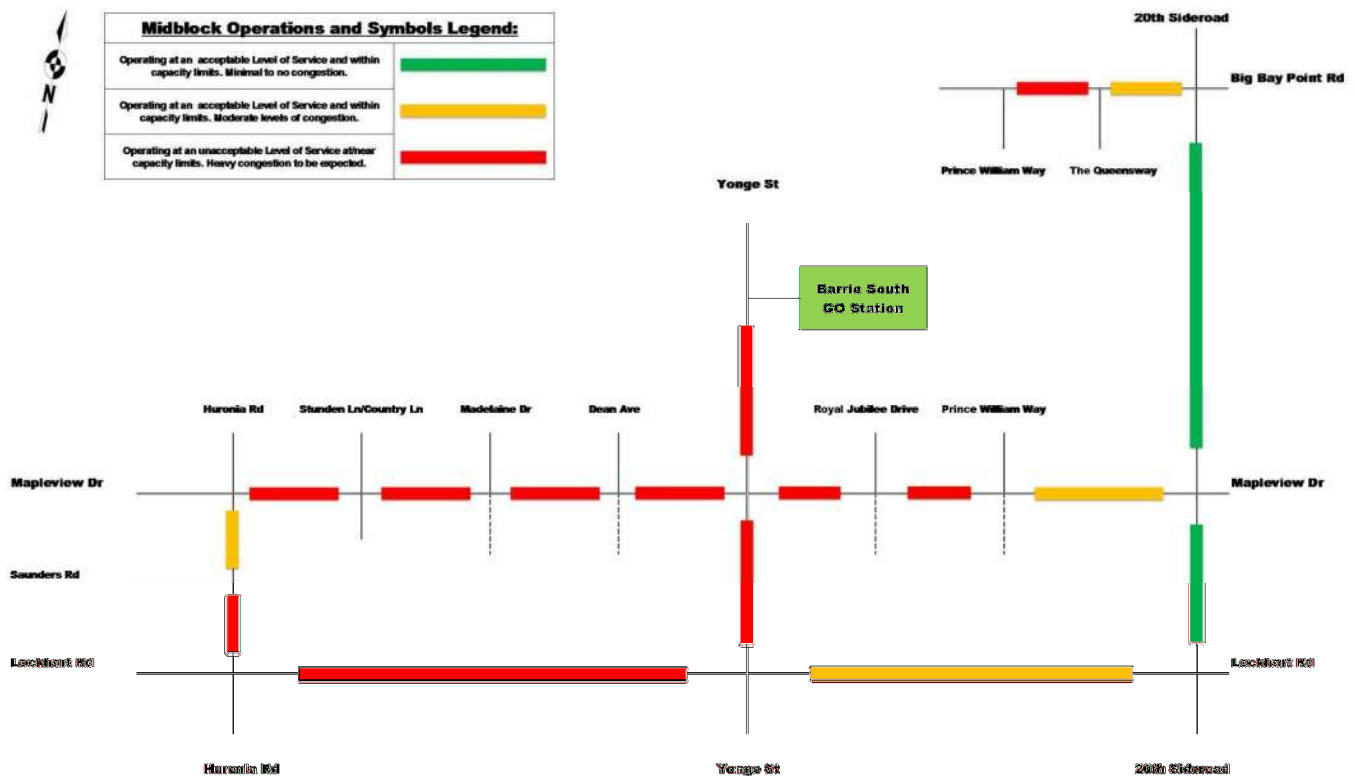
Traffic Analysis – Existing 2016 Conditions



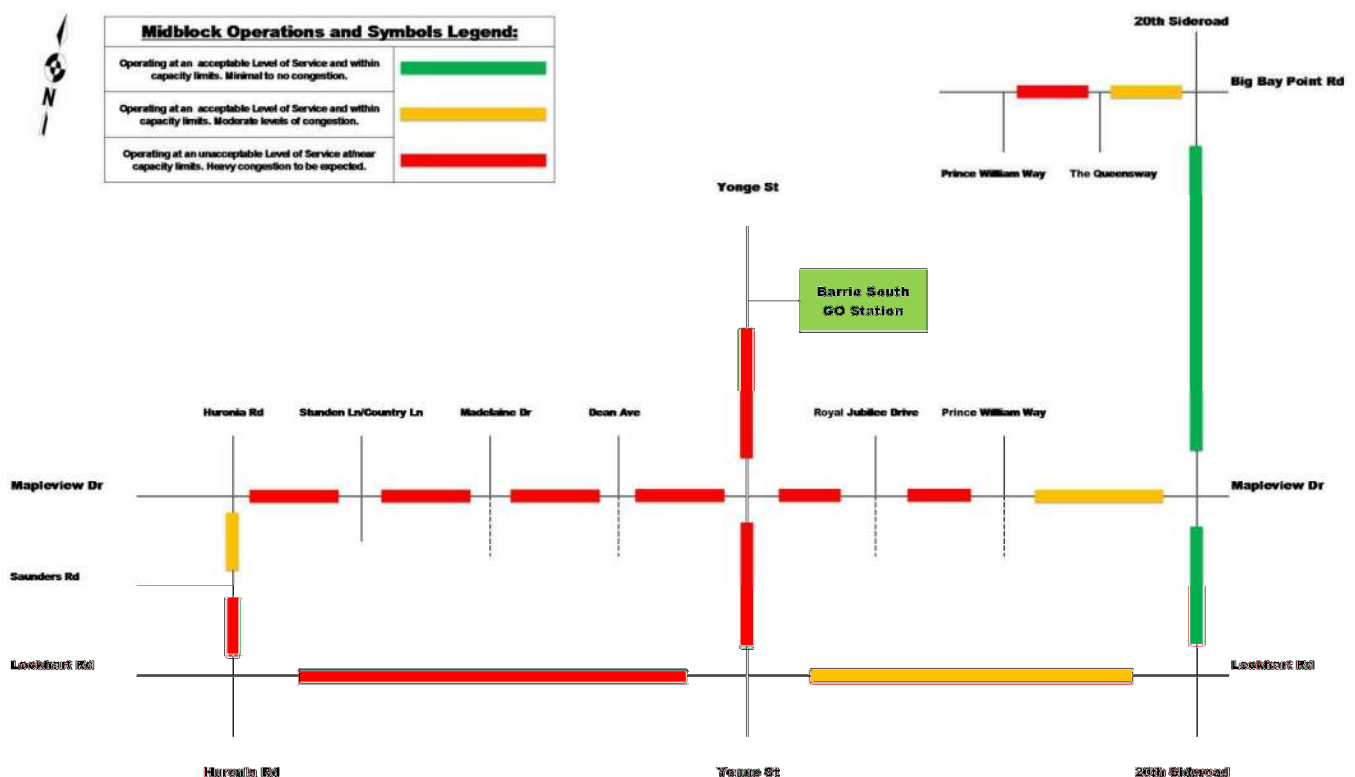
Traffic Analysis – 2016 Conditions (With Improvements)



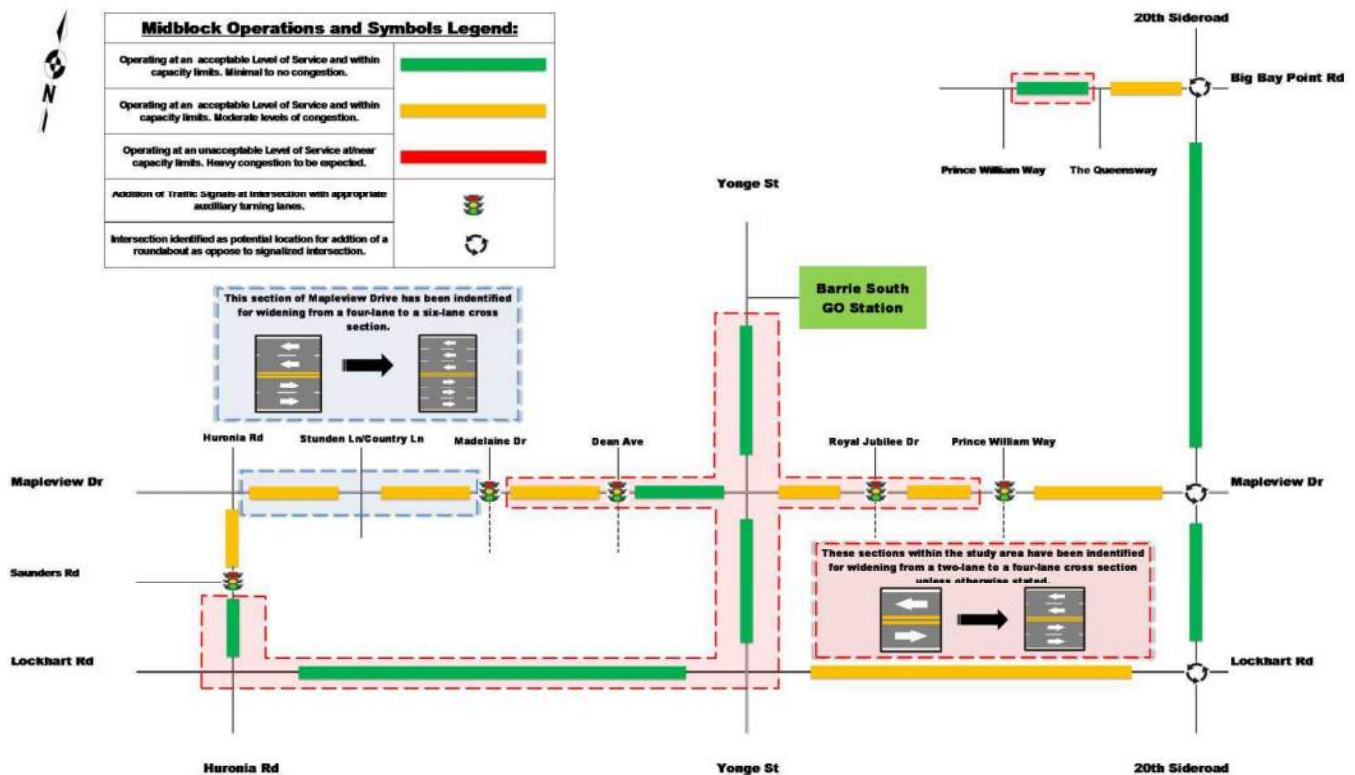
Traffic Analysis – 2021 Horizon (No Network Improvements)



Traffic Analysis – 2021 Horizon (With Improvements)



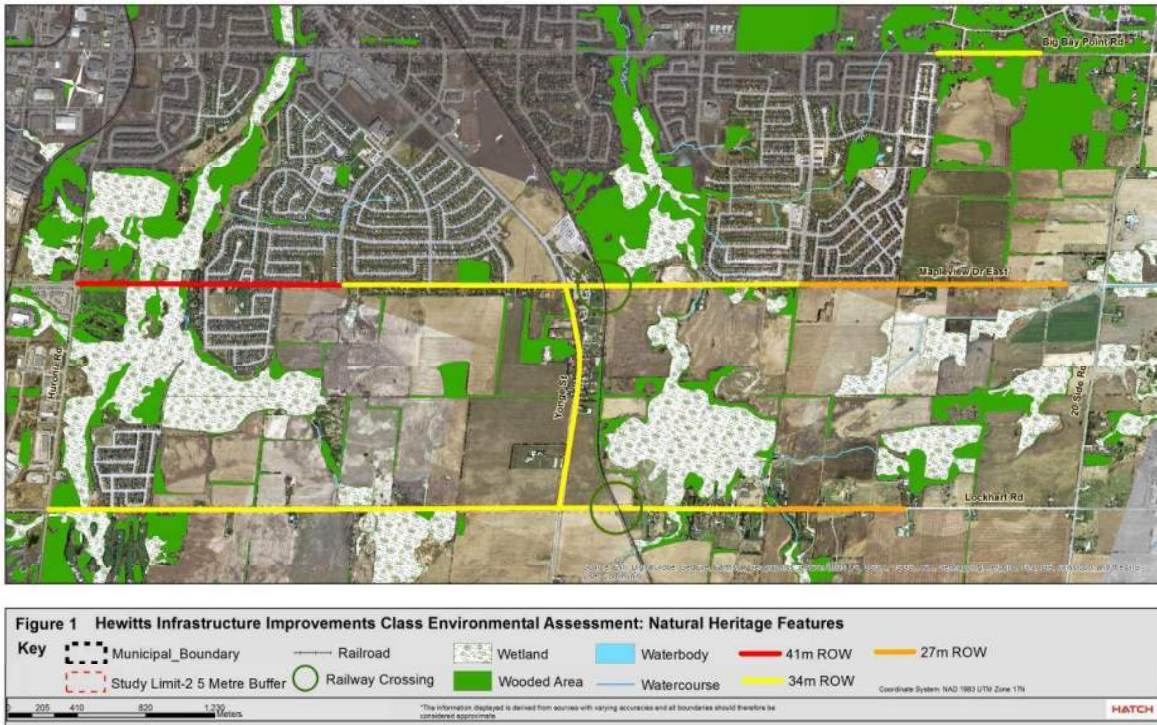
Traffic Analysis – 2031 Horizon (Ultimate Network)



Alternative Design Concepts

- Road improvements are recommended on the following roadways and crossings:
 - Lockhart Road from Huronia Road to Collector 11
 - Mapleview Drive East from Huronia Road to 200m west of 20th Sideroad
 - Big Bay Point Road from 900m east of Prince Edward Way to 200m west of 20th Sideroad
 - Yonge Street (between Lockhart Road and Mapleview Drive)
 - Railway Crossing at Lockhart Drive
 - Railway Crossing at Mapleview Drive East

Key Plan - Roadways



Alternatives for Mapleview Drive East

- Mapleview Drive East was divided into 5 segments detailed as follows:

	Alternative 1	Alternative 2	Alternative 3
Huron Road to Country Lane	7 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 41m ROW	7 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 2m LID features	7 lanes, 4.2m median, MUT, 41m ROW
Country Lane to Madelaine Drive	7 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 41m ROW	7 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 2m LID feature (per side)	7 lanes, 4.2m median, 3m MUT, 1.6m sidewalk, boulevard for snow removal, 41m ROW
Madelaine Drive to Yonge Street	5 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 34m ROW	5 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 2m LID features	5 lanes, 4m centre-left, 3m MUT, 1.6m sidewalk, boulevard for snow storage, 34m ROW
500m East of railway to Prince William Way	5 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 34m ROW	5 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 2m LID features	4 lanes, MUT, 1.6m sidewalk, turning lanes at intersections, 34m ROW
Prince William Way to 20 th Sideroad	3 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 27m ROW	3 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 2m LID features	3 lanes, MUT, 1.6m sidewalk, 4m centre-left, 27m ROW

Alternatives for Lockhart Drive

- Lockhart Drive was divided into 4 segments as detailed below:

	Alternative 1	Alternative 2	Alternative 3
Huronia Road to 600m East	5 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 34m ROW	5 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 2m LID features	4 lanes, MUT, south side ditch, turning lanes at intersections, 34m ROW
600m East of Huronia Road to Yonge Street	5 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 34m ROW	5 lanes, 2m bike lanes, 2m sidewalks, 4.2 median, 2m LID features	4 lanes, MUT, south ditch, turning lanes at intersection, 34m ROW
500m East of railway to Prince William Way	5 lanes, 2m bike lane, 2m sidewalks, 4.2m median, 34m ROW	5 lanes, 2m bike lane, 2m sidewalks, 4.2m median, 2m LID features	4 lanes, MUT, no sidewalk south side, south ditch, turning lanes at intersection, 34m ROW
Prince William Way to just east of Collector 11	3 lanes, 2m bike lane, 2m sidewalks, 4.2m median, 27m ROW	3 lanes, 2m bike lane, 2m sidewalks, 4.2m median, 2m LID features	3 lanes, MUT south side, 1.6m sidewalk, 4m centre-left, 27m ROW

Alternatives for Yonge Street and Big Bay Point Road

- Yonge Street alternatives extend between Lockhart Road and Mapleview Drive East

Alternative 1	Alternative 2
5 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 34m ROW	5 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 2m LID features

- Big Bay Point Road alternatives were divided into two segments:

	Alternative 1	Alternative 2	Alternative 3
City Boundary to Collector 11	5 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 34m ROW	5 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, with 2m LID features	5 lanes, MUT, no sidewalk on north, 4m centre-left, north fixed
Collector 11 to 200m west of 20 th Sideroad	3 lanes, 2m bike lane, 2m sidewalks, 4.2m centre left, 27m ROW	3 lanes, 2m bike lane, 2m sidewalks, 4.2m centre left, with 2m LID features	3 lanes, MUT south side, no sidewalk north side, 4m centre-left, north fixed, 27m ROW

Alternatives for Rail Crossings

- Mapleview Drive Rail Crossing:

Alternative 1	Alternative 2
Overpass with 5 lanes, centre median, 2.5m sidewalks, 2m side clearance and 2m bike lanes	Underpass with 4 lanes, centre pier, 2.5m sidewalks, 2m side clearance and 2m bike lanes

- Lockhart Road Rail Crossing:

Alternative 1	Alternative 2
Overpass including 5 lanes, centre median, 2.5m sidewalks, 2m side clearance and 2m bike lanes	Underpass including 4 lanes, centre pier, 2.5m sidewalks, 2m side clearance and 2m bike lanes

Welcome

Hewitt's Secondary Plan Class Environmental Assessment Study

Public Information Centre

April 6, 2017

Members of the Project Team are available to discuss and answer any questions you may have

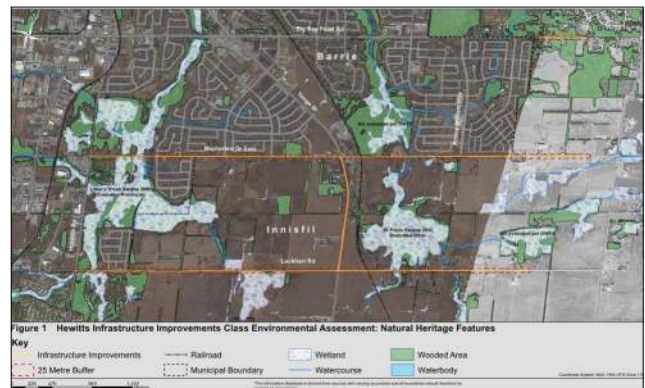
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Hewitt's Secondary Plan – Schedule 9D-1



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Amendment No. 39 (Hewitt's Secondary Plan) June 2014

9.6.3.1 General

- a) City streets shall be planned and developed as multi-modal transportation corridors that are designed within an urban cross section to safely accommodate pedestrian, bicycle, transit and vehicular movement for people of all ages and abilities, as well as complying with the City's streetscaping design policies in Section 9.4.4.4. Such facilities shall generally be designed to conform to the following standards and the other applicable policies of this Plan. Transportation facilities shall also be consistent with the recommendations of the City of Barrie Multi-Modal Active Transportation Master Plan.

Arterials:

- Vehicular travel lanes – 7 maximum;
- ROW – 41m maximum;
- High degree of access control for individual properties with access being via collector or local streets wherever possible;
- Intersections with non-signalized intersections permitted generally no more frequently than every 100m;
- Intersections with signalized intersections permitted generally no more frequently than every 350m;
- On-street parking may be permitted in off-peak hours particularly in Mixed Use Nodes and Corridors and parking bays may also be provided

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Problem and Opportunity

- The City of Barrie population is expected to reach 210,000 and employment for 101,000 people by 2031, making it one of the fastest growing cities in Canada
- To support this growth, the City of Barrie annexed land from the Town of Innisfil, expanding the City limits to the south and east
- The anticipated population and employment increase will create additional demand on the City's transportation network that cannot be accommodated by the existing infrastructure
- To align with pertinent policies, there is an opportunity to improve the existing transportation network and incorporate multi-modal transportation opportunities to meet existing and future demands

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Technical Studies

The following studies were conducted to identify constraints and opportunities to improvements within the Study Area



Traffic and Transportation



Drainage & Stormwater Management



Noise Impact



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Geotechnical



Railway Crossing Assessment



Geomorphology



Structural Assessment



Stage 1 and 2 Archaeological Assessment

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Constraints: Maplevue Drive East



Figure 1b Hewitts Infrastructure Improvements Class Environmental Assessment: Existing Natural, Cultural and Archaeology

Key

- Railroad
- Study Limit- 25 Metre Buffer
- Wetland
- Wooded Area
- Waterbody
- Watercourse
- Deer Wintering Area
- Archaeological Potential
- Culture Heritage Landscape
- Community Boundary (ELC)
- Built Heritage Resources

*The information displayed is derived from sources with varying accuracies and all boundaries should therefore be considered approximate.

Coordinate System: NAD 1983 UTM Zone 17N

HATCH

Constraints: Maplevue Drive East (2)



Figure 1c Hewitts Infrastructure Improvements Class Environmental Assessment: Existing Natural, Cultural and Archaeology

Key

- Railroad
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- Watercourse
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Constraints: Lockhart Road



Figure 1d Hewitts Infrastructure Improvements Class Environmental Assessment: Existing Natural, Cultural and Archaeology

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- Culture Heritage Landscape
- Study Limit- 25 Metre Buffer
- Wooded Area
- Archaeological Potential
- Watercourse

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HATCH

Constraints: Lockhart Road (2)



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Coordinate System: NAD 1983 UTM Zone 17N

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Constraints: Big Bay Point Road



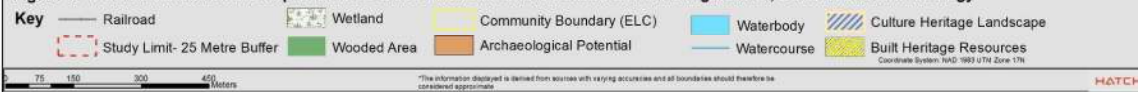
Figure 1a Hewitts Infrastructure Improvements Class Environmental Assessment: Existing Natural, Cultural and Archaeology



Constraints: Yonge Street



Figure 1f Hewitts Infrastructure Improvements Class Environmental Assessment: Existing Natural, Cultural and Archaeology



Key Plan - Roadways

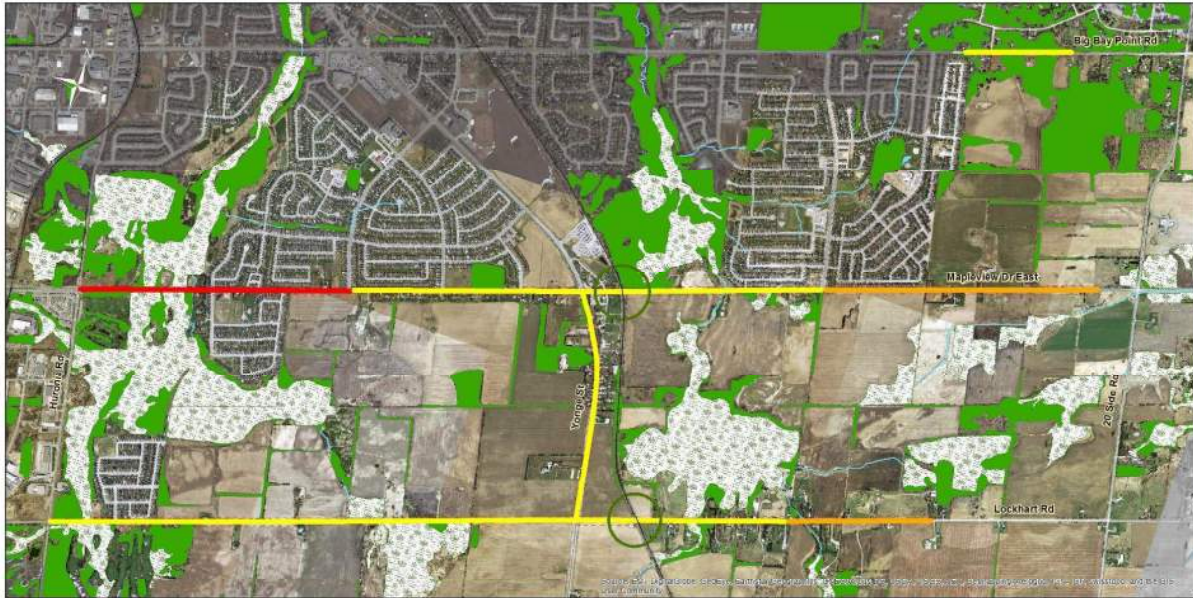


Figure 1 Hewitts Infrastructure Improvements Class Environmental Assessment: Natural Heritage Features



Frequently Asked Questions

Can Low Impact Development (LIDs) contaminate the watershed?

LIDs is a method of managing quality and quantity of stormwater runoff through infiltration, storing, and evaporating rather than relying on storm sewers to manage the water prior to reaching the watercourses. The only negative impact that LIDs could have on a watershed is if excessive salt is used which may get into the groundwater. LIDs are the preferred option by the Lake Simcoe Region Conservation Authority for water quality and quantity treatment. By contrast, storm sewers are less successful than LIDs at removing salt before the stormwater reaches the receiving watercourse.

How will those that live on the roads to be widened be impacted getting to/from our house? Could work be done during off hours? Maybe work could only occur on weekends.

Access will be provided to residents along the roads which will be widened throughout construction. Further details regarding the access will be prepared during detailed design.

All of the expansion to the south of Barrie makes the City look lopsided. How about expansion in Oro/Medonte/Springwater?

The current growth areas were defined after an exhausting planning process and consultation. This Study respects the conclusions for the planning process and works within the City's Official Plan as approved by Council to define transportation improvements to accommodate the planned growth.

Concerned about increased noise. The currently noise levels are quite high. Enforcing speed limits may help.

Suggest planting some large (spaded) conifer trees between your home and the front property line, which will provide some sound attenuation, as well as screening from headlights on vehicles at night.

Are sewer and water at the property line the City's Expense?

Typically when there is reconstruction or construction of a watermain along a corridor, to provide sewer and water to those previously on a well, the watermain would be connected up to the property line and then it is the responsibility of the homeowner to pay for the service to be connected to the house.

Terminology

Term	Explanation
LID	Low Impact Development – an engineering design approach to manage the quality and quantity of stormwater runoff through infiltration, storing and evaporating, rather than relying on stormsewers to manage the water prior to reaching the watercourses.
MUT	Multi-Use Trail is similar to a sidewalk, but can be used by cyclists and non-motorized vehicles for a safe mode of travel.
CHL	Cultural Heritage Landscape – a collection of individual built heritage resources and other related features that form farm complexes, roadsides or settlements (i.e., farm).
BHR	Built Heritage Resource – typically individual buildings or structures which may have been associated with human activities, including a historical settlement or architectural development (i.e., Barn).
ROW	Right-of-Way
MMATMP	Multi-Modal Active Transportation Master Plan completed by the City in 2014 to recommend improvements to the transportation network to meet the future needs and development.

Mitigated Cross Sections

- Cross-sections have been mitigated to:
 - Integrate roads with planned and built form
 - Minimize the impact on surrounding land uses, and natural heritage features
- Treatments proposed include:
 - Narrow painted or raised median to reduce road footprint
 - Removal of unwarranted turn lanes
 - Narrow TWLTL

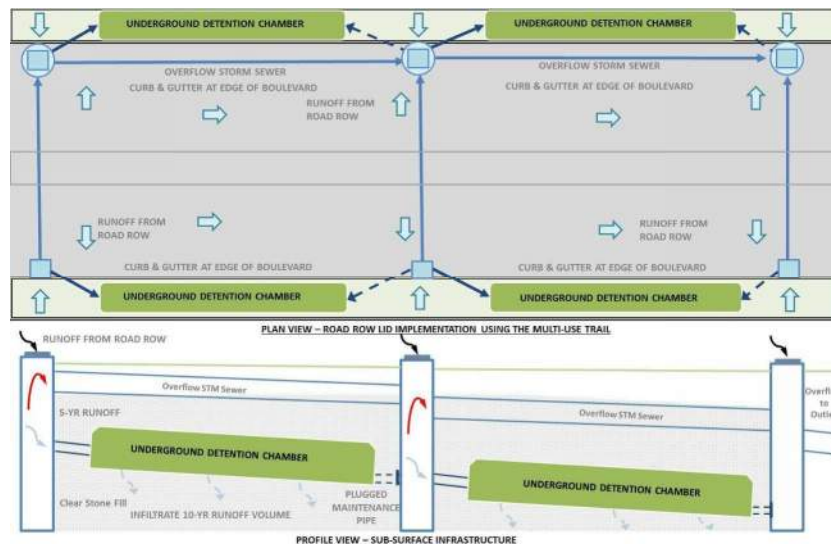
Stormwater Management: Low Impact Development

- Centralized LID
 - Infiltration Facilities located at proposed stormwater management facilities.



Stormwater Management: Low Impact Development

- Linear LID
 - Infiltration galleries, chambers, and/or trenches located within the municipal ROW,
 - Perforated piping located at the bottom of manholes below the main storm sewer line.



Project Schedule and Next Steps



Address comments received
 Refine preferred design based on comments received
 Prepare Environmental Study Report (ESR)



Thank You for Attending

- We value your input and encourage you to stay connected
 - Visit the Project website at: www.barrie.ca/eastudies
 - Join our mailing list – leave us an email or mailing address so we can update you as the Study progresses
- Contact the Project Manager with any additional comments at any time:

Alvaro Almuina, P.Eng.
 Project Manager, City of Barrie
 Phone: 705-739-4220 Ext. 4458
 Email: Alvaro.Almuina@barrie.ca

Please remember to drop off your completed Comment Form in the Comment Box before you leave or send it to us by April 20th, 2017.

**Ministry of Tourism,
Culture and Sport**

Heritage Program Unit
Programs and Services Branch
401 Bay Street, Suite 1700
Toronto ON M7A 0A7
Tel: 416 314 7147
Fax: 416 212 1802

**Ministère du Tourisme,
de la Culture et du Sport**

Unité des programmes patrimoine
Direction des programmes et des services
401, rue Bay, Bureau 1700
Toronto ON M7A 0A7
Tél: 416 314 7147
Télé: 416 212 1802



October 6, 2016 (EMAIL ONLY)

Mr. Alvaro Almuina, P.Eng., PMP
City of Barrie
Engineering Department
70 Collier Street, P.O. Box 400
Barrie, ON L4M 4T5
E: Alvaro.Almuina@barrie.ca

RE: MTCS file #: 0005619
Proponent: City of Barrie
Subject: Notice of Public Information Centre
Hewitt's Secondary Plan Area
Location: City of Barrie, Ontario

Dear Mr. Almuina:

Thank you for providing the Ministry of Tourism, Culture and Sport (MTCS) with the Notice of Public Information Centre for your project. MTCS's interest in this EA project relates to its mandate of conserving Ontario's cultural heritage, which includes:

- Archaeological resources, including land-based and marine;
- Built heritage resources, including bridges and monuments; and,
- Cultural heritage landscapes.

Under the EA process, the proponent is required to determine a project's potential impact on cultural heritage resources.

While some cultural heritage resources may have already been formally identified, others may be identified through screening and evaluation. Aboriginal communities may have knowledge that can contribute to the identification of cultural heritage resources, and we suggest that any engagement with Aboriginal communities includes a discussion about known or potential cultural heritage resources that are of value to these communities. Municipal Heritage Committees, historical societies and other local heritage organizations may also have knowledge that contributes to the identification of cultural heritage resources.

Archaeological Resources

Your EA project may impact archaeological resources and you should screen the project with the MTCS [Criteria for Evaluating Archaeological Potential](#) to determine if an archaeological assessment is needed. MTCS archaeological sites data are available at archaeology@ontario.ca. If your EA project area exhibits archaeological potential, then an archaeological assessment (AA) should be undertaken by an archaeologist licenced under the *OHA*, who is responsible for submitting the report directly to MTCS for review.

Built Heritage and Cultural Heritage Landscapes

The MTCS [Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes](#) should be completed to help determine whether your EA project may impact cultural heritage resources. The Clerk for the City of Barrie can provide information on property registered or designated

under the *Ontario Heritage Act*. Municipal Heritage Planners can also provide information that will assist you in completing the checklist.

If potential or known heritage resources exist, MTCS recommends that a Heritage Impact Assessment (HIA), prepared by a qualified consultant, should be completed to assess potential project impacts. Our Ministry's [Info Sheet #5: Heritage Impact Assessments and Conservation Plans](#) outlines the scope of HIAs. Please send the HIA to MTCS for review, and make it available to local organizations or individuals who have expressed interest in heritage.

Environmental Assessment Reporting

All technical heritage studies and their recommendations are to be addressed and incorporated into EA projects. Please advise MTCS whether any technical heritage studies will be completed for your EA project, and provide them to MTCS before issuing a Notice of Completion. If your screening has identified no known or potential cultural heritage resources, or no impacts to these resources, please include the completed checklists and supporting documentation in the EA report or file.

Thank you for consulting MTCS on this project: please continue to do so through the EA process, and contact me for any questions or clarification.

Sincerely,

Dan Minkin
Heritage Planner
Dan.Minkin@Ontario.ca

It is the sole responsibility of proponents to ensure that any information and documentation submitted as part of their EA report or file is accurate. MTCS makes no representation or warranty as to the completeness, accuracy or quality of the any checklists, reports or supporting documentation submitted as part of the EA process, and in no way shall MTCS be liable for any harm, damages, costs, expenses, losses, claims or actions that may result if any checklists, reports or supporting documents are discovered to be inaccurate, incomplete, misleading or fraudulent.

Please notify MTCS if archaeological resources are impacted by EA project work. All activities impacting archaeological resources must cease immediately, and a licensed archaeologist is required to carry out an archaeological assessment in accordance with the Ontario Heritage Act and the Standards and Guidelines for Consultant Archaeologists.

If human remains are encountered, all activities must cease immediately and the local police as well as the Cemeteries Regulation Unit of the Ministry of Government and Consumer Services must be contacted. In situations where human remains are associated with archaeological resources, MTCS should also be notified to ensure that the site is not subject to unlicensed alterations which would be a contravention of the Ontario Heritage Act.



Technical Memorandum

To: Frank Palka, C.E.T. – City of Barrie From: John Northcote, P.Eng.
 Date: October 21st, 2016 Project #: 1302
 Project Name: Hewitt's Landowner Group
 Subject: Hewitt's Secondary Plan Class Environmental Assessment Study Review
 Distribution: Hewitt's Landowner Group

On behalf of the Hewitt's Landowner Group [HLOG], we have reviewed the Hewitt's Secondary Plan Class Environmental Assessment Study [Hewitt's EA] and we offer the following comments for your consideration. These comments have been compiled with input from the following individuals, also acting on behalf of the Hewitt's Landowner Group:

- Bryan Richardson – R.J. Burnside & Associates Ltd.
- Ray Duhamel – The Jones Consulting Group Ltd.
- Duncan Richardson – The Jones Consulting Group Ltd.¹
- Keith MacKinnon – KLM Planning Partners Inc.²
- Harold Reinthaler – Schaeffer & Associates Ltd.²
- Nelson Lee – Schaeffer & Associates Ltd.²
- John Northcote – JD Engineering

The Manual Reference column is intended to identify the location in the TD Manual, for ease of reference.

GENERAL COMMENTS	
1.	The Hewitt's EA does not include an option for a continuous centre median along Mapleview Drive East from Madelaine Drive to east of Goodwin Drive and note that the HLOG is in support of the removal of the continuous centre median.
2.	There are a number of locations where there is a long section of road with a 4.2 metre wide median. This is an inefficient use of land. In these areas, we would like to see an alternative where the wide median is eliminated either by narrowing the road width, extending the adjacent left turn storage lanes or using the additional ROW width for LID.
3.	In addition to the requested additional justification in support of the LID options, we request clarification on how storm water flood control is proposed to be handled for all roadways.

¹ Acting on behalf of a number of the landowners within the Hewitt's Landowner Group.

² Acting on behalf 1901369 Ontario Inc.



LID Alternative	
4.	Based on the alternatives presented, it is our understanding that the LID features proposed at the 2031 works would be eliminated in 2051 for all roads requiring road widenings. Consequently, the HLOG does not support LID features provided in a temporary capacity. LID options should be explored which wouldn't require and/or minimize the extent of future removals.
5.	Additional details on the following topics are requested for the LID alternative: <ul style="list-style-type: none"> a. Justification for the width of ROW required b. How the LID will function in low areas with high groundwater table c. How the LID will function in the winter
6.	It is noted that there appears to be an inconsistency in the design for the LID between the Salem and Hewitt's EA.
BIG BAY POINT ROAD	
7.	No preliminary engineering drawings were provided for the Big Bay Point Road widening. Although the constraints for this area are less complicated than some of the other areas, we request that preliminary engineering drawings be provided to help assess the impact of the design alternatives.
8.	The option for a Multi-Use Trail [MUT] on Big Bay Point Road was not recommended in the City's Multi-Modal Active Transportation Master Plan [MMATMP] or discussed in any of our previous correspondence with the City for this area. The HLOG has no issue in principle with the use of a MUT on Big Bay Point Road, in lieu of bike lanes.
YONGE STREET	
9.	Based on our review of the future traffic volume projections on Yonge Street between Lockhart Road and Mapleview Drive East, further justification is requested to demonstrate the warrant for the 7-lane cross-section alternative.
10.	The preliminary engineering design drawings include only one break in the median (which allows for a full-movement intersection) between Mapleview Drive East and Lockhart Road. The location of the break in the median does not appear to align with the road network in the Secondary Plan or the proposed full-movement commercial driveway provided in the conformity plans prepared by the HLOG. We request the inclusion of an alternative with a shorter median at Mapleview Drive East, which would allow for two full-movement intersections on Yonge Street between Mapleview Drive East and the east/west collector intersection on Yonge Street.
11.	Based on the road layout identified in the conformity plan prepared by the HLOG, at least one or two additional breaks in the median appear to be warranted south of the one opening illustrated on the plans.
12.	The long, wide median along Yonge Street is an inefficient use of land, we request the inclusion of an alternative that reduces the width of the road to minimize the width of the median and/or extends the left turn storage length at the intersections to allow for additional vehicle queuing.
MAPLEVIEW DRIVE EAST – Huronia Road to Country Lane	
13.	We request the inclusion of an alternative without a median or a reduced median width in order to reduce the ROW requirement.

14.	In Alternative 3, there appears to be additional ROW width on the south side of the road. We request additional justification for this additional land. If it is required for grading, we request that an alternative is provided that includes an easement in the area to accommodate the additional grading.
15.	We request additional justification for the warrant for the westbound right turn lane at Country Lane. We request the inclusion of an alternative with a through / right turn lane, two through lanes and a left turn auxiliary lane in each direction.
MAPLEVIEW DRIVE EAST – Country Lane to Madelaine Drive	
16.	The HLOG is in support of the TWLTL proposed between Seline Crescent and the driveway for 430 Mapleview Drive East, as illustrated in Alternative 3.
17.	The HLOG does not support the TWLTL proposed east of Seline Crescent. There are no proposed side street connections in this area; consequently, a TWLTL does not appear to be justified. The HLOG is in support of Alternative 1; however would prefer to have the left turn lane storage length increase at Madelaine Drive, so that the left turn lane is back-to-back with the one at Seline Crescent.
18.	In all options presented in the Hewitt's EA, the widening along Mapleview Drive East will have a significant impact on the 10 existing single detached residential units on Danielle Crescent, west of Seline Crescent. It is unclear what the expectation would be for the remaining lands on the north side of Danielle Crescent. We request the inclusion of an alternative with a reduced right-of-way [ROW] and a realignment of Mapleview Drive East to the north to ensure the land north of Danielle Crescent can remain in their current form or be redeveloped.
19.	In Alternative 3 for Mapleview Drive East, additional ROW width is provided for boulevard snow removal. It was our understanding that the one of the benefits of the road cross-section in Alternative 3 was to allow for a reduced ROW. By maintaining the ROW width and providing more space for snow storage, a key advantage of this alternative is lost.
MAPLEVIEW DRIVE EAST – Madelaine Drive to Dean Avenue	
20.	The HLOG does not support the TWLTL proposed east of Madelaine Drive. There are no proposed side street connections in this area; consequently, a TWLTL does not appear to be justified. We request the inclusion of an alternative where the wide median is eliminated either by narrowing the road width, extending the adjacent left turn storage lanes or using the additional ROW width for LID.
MAPLEVIEW DRIVE EAST – Dean Avenue to Goodwin Drive	
21.	The HLOG does not support the TWLTL proposed east of Dean Avenue. There are no proposed side street connections in this area; consequently, a TWLTL does not appear to be justified. We request the inclusion of an alternative where the wide median is eliminated either by narrowing the road width, extending the adjacent left turn storage lanes or using the additional ROW width for LID.
22.	We request the inclusion of an alternative with the alignment of Mapleview Drive East shifted to the north starting near Dean Avenue, to avoid the impact of the expropriation on the lots south of Mapleview Drive East.
MAPLEVIEW DRIVE EAST – Goodwin Drive to Yonge Street	
23.	The HLOG is in support of the five-lane cross-section with a TWLTL, east of Goodwin Drive.

24.	Based on our review of the future traffic volume projections on Yonge Street and Mapleview Drive East, further justification is requested to demonstrate the warrant for the 8-lane cross-section alternative.
MAPLEVIEW DRIVE EAST – Yonge Street to Prince William Way	
25.	Based on our review of the future traffic volume projections on Mapleview Drive East, further justification is requested to demonstrate the warrant for the 7-lane cross-section alternative in this area.
26.	We request additional justification for the warrant for the westbound right turn lane at Prince William Way.
MAPLEVIEW DRIVE EAST – Prince William Way to Collector 11	
27.	We request the inclusion of an alternative with a three-lane cross-section with a TWLTL and a MUT. Based on the number of side street connections along Mapleview Drive East in this section, the TWLTL will provide additional capacity for left turn movements on the Mapleview Drive East and (two-part) left turn movements from some of the side streets.
MAPLEVIEW DRIVE EAST – Collector 11 to 20th Sideroad	
28.	Details for the intersection of Mapleview Drive East and 20 th Sideroad were not included. We request the inclusion of alternatives showing how the drainage and grading would work with the proposed roundabout. The additional engineering cost to complete this analysis has been approved by the HLOG.
MAPLEVIEW DRIVE EAST – Railway Crossing	
29.	It does not appear that the work completed on the Sub-watershed Impact Study [SIS] has been taken into account in the proposed alternatives.
30.	We request additional detail demonstrating how the proposed grading will work north and south of Mapleview Drive East, east of the railway tracks.
31.	It appears that the location of the service road has not been adjusted according to the profile. It is our expectation that the underpass option would allow for the service road to connect significantly further west, compared to the overpass option.
32.	We have a number of concerns with the road configuration provided in Option 2, including: <ul style="list-style-type: none"> • the spacing between the intersection of Goodwin Drive and the Proposed Road; • the access limitations for the properties on Mapleview Drive East, east and west of Yonge Street; • the impact of grading on the adjacent properties; and • the Proposed Road does not conform with the road layout in the Hewitt's Secondary Plan. The HLOG does not support this option.
33.	HLOG requests that an option be provided that incorporates the north-south roadway (southern lands) identified in the conformity plan and the draft plan approved roadway connection from the lands north of MVD. The serpentine roadway proposed in all presented options is not supported by the HLOG nor the landowner to the north (700 MVD East).

34.	We request clarification as to extent of the lands required for the under and over pass bridge structure options as we understand that the municipality would likely elect to construct the railway/roadway crossing structure to accommodate projected traffic volumes past the 2031 time frame irrespective of whether or not the rest of MVD is constructed to the post 2031 traffic projections. This would likely require the railway crossing structure to be sized and constructed to the 2051 width rather than the 2031 width.
35.	The HLOG supports the underpass option.
36.	The fiscal evaluation of the underpass vs overpass options should reflect the specific design challenges associates with the site specifics, not to be limited to, but should include stormwater management (incorporating the findings and recommendation of the SIS), and retaining walls / land acquisitions required to accommodate the proposed road platform including the grading/walls to accommodate the existing adjacent topography.
37.	The HLOG request confirmation that the proposed railway crossing options have accounted for the MetroLinx track widening works also being completed by HATCH.
LOCKHART ROAD – Huronia Road to Railway Tracks	
38.	We request the inclusion of an alternative with a five-lane cross-section, with a two-way left-turn lane [TWLTL] and buffered bike lanes. Based on the number of side street connections along Lockhart Road in this section, the TWLTL will provide additional capacity for eastbound left turn movements and southbound (two-part) left turn movements.
LOCKHART ROAD – Railway Tracks to Prince William Way	
39.	We request the inclusion of an alternative with a four-lane cross-section, with widenings at major intersections for auxiliary lanes and a MUT, with the ROW centered over the existing ROW. This option reflects a more efficient use of the ROW where there are a limited number of side street entrances.
LOCKHART ROAD – Prince William Way to Collector 11	
40.	We request the inclusion of an alternative with a three-lane cross-section with a TWLTL and a continuation of the MUT noted above.
LOCKHART ROAD – Railway Crossing	
41.	The HLOG supports the underpass option provided in Alternative 3.
42.	The HLOG does not consider the overpass option to be feasible, based on the alignment of the service road, north of Lockhart Road and the requirement for a service road outside of the City limits. The HLOG requests additional justification to demonstrate that this alternative is financially feasible.
FOLLOW-UP COMMENTS	
43.	The HLOG is awaiting clarification on the major and minor collector road ROW requirements.
44.	The HLOG is awaiting clarification the 12 metre and 8 metre public road standards.
45.	Further to our meeting on October 18, 2016 with the Hewitt's EA design team, we understand that there is more refined traffic volume data. We respectfully request that this information is provided at the earliest convenience.

Please feel free to contact JD Engineering with any questions or concerns.