

Welcome to the Public Information Update for

**Municipal Class Environmental Assessment,
Phase 3 & 4 Barton Street and Fifty Road
Improvements**












Hamilton

Growth Management Division
Planning and Economic Development Department
www.hamilton.ca



Welcome to the Public Information Update

Tonight, we invite you to....

-  **01**
Sign-in and take a comment sheet
-  **02**
Learn about the process.
-  **03**
Review findings of previous studies.
-  **04**
Learn about future development and traffic.
-  **05**
Discover the problems and opportunities being addressed.
-  **06**
Ask questions and provide insight.
-  **07**
Provide feedback.
-  **08**
Let us know what is most important to you.
-  **09**
Find out where the study is going next...

Your feedback is important, and will be incorporated and considered in the design process!

Comment Deadline is October 6, 2017

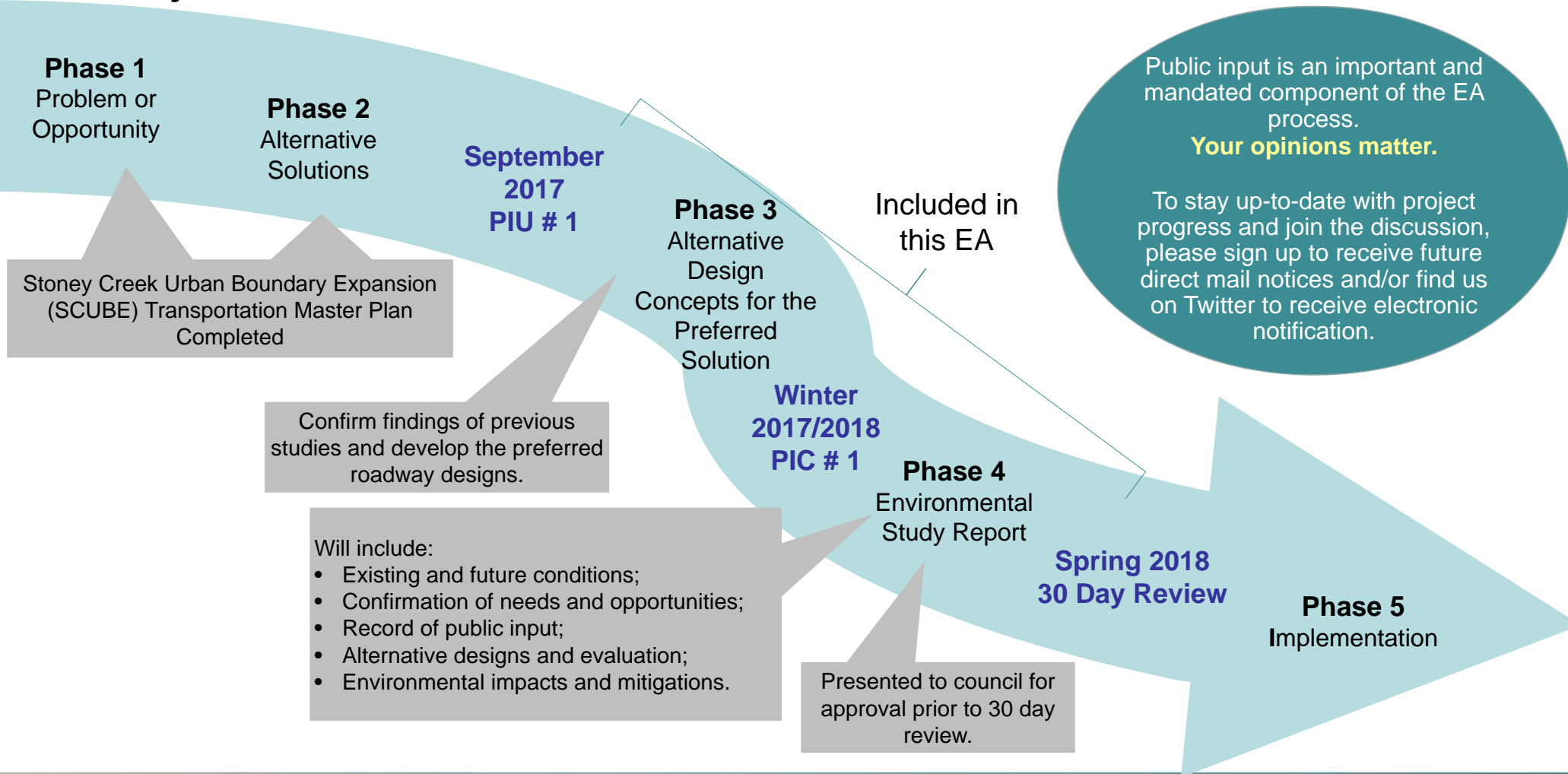


Study Area and Structure

- Within Stoney Creek, Hamilton
- Barton Street, from Fruitland Road to Fifty Road
- Fifty Road, from Highway 8 to South Service Road

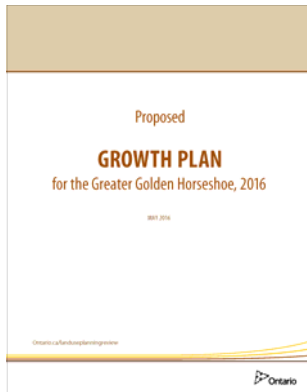


Project Timeline and Environmental Assessment Process

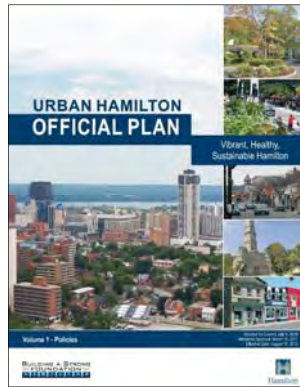


Planning and Policy Context

The current EA Study builds upon several other studies including:



- Hamilton to grow by 50% by 2041.



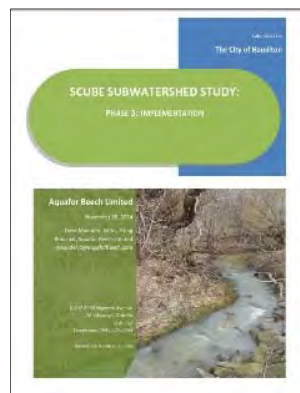
- Incorporates the Fruitland-Winona Secondary Plan
- Identifies Barton Street Pedestrian Promenade.



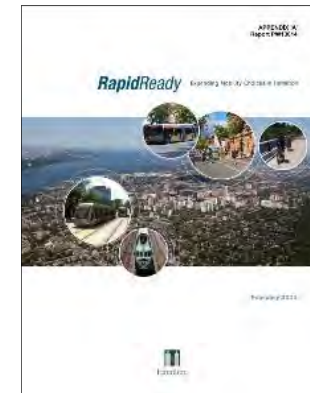
- Bike lanes recommended for Barton Street and Fifty Road
- Current 2009 study is being updated



- Stoney Creek transportation needs and opportunities.
- Plans based on growth up to 2031



- Stormwater controls
- Culvert improvements
- Species at risk habitats



- Fifty Road identified as terminus of the future 'B' Line.
- City of Hamilton *URBAN DRAW POLICY*

as well as the City of Hamilton Urban Trails Policy, Trails Master Plan (2016), Transportation Master Plan (2007, currently being updated), and the ongoing Block Servicing Studies (2016-17)

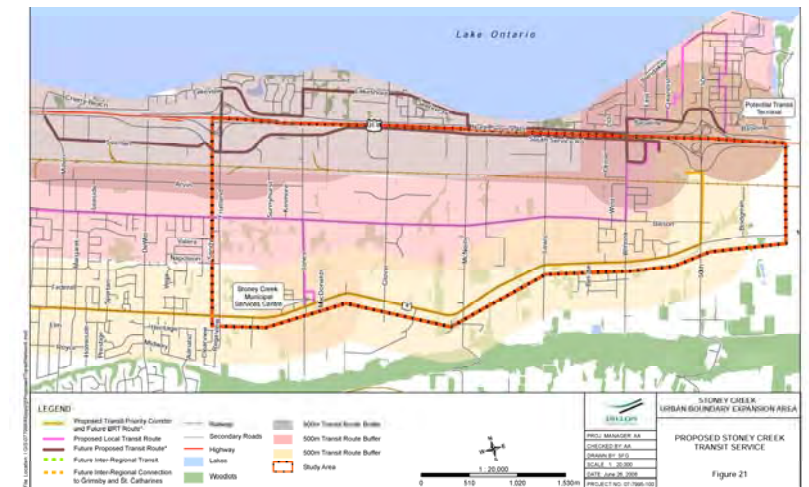


Planning and Policy Context

Stoney Creek Urban Boundary Expansion Transportation Master Plan (2008)

Recommends:

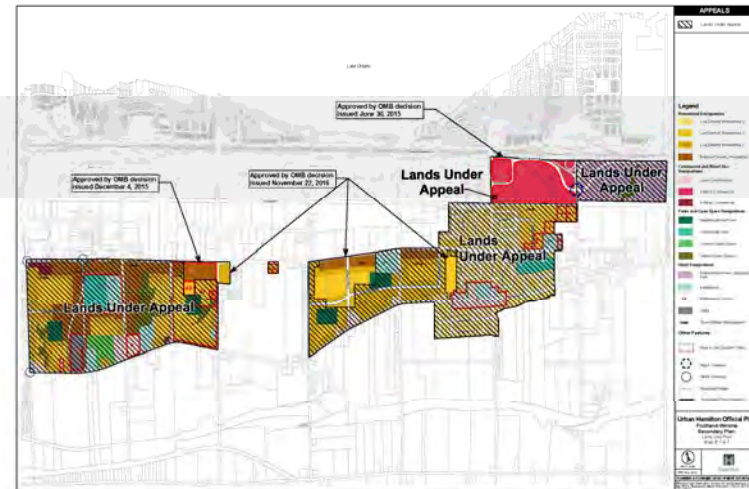
- Several intersections be considered for signals, turning lanes or roundabouts
- Barton Street be widened to include a two-way left turn centre lane.
- City to consider a potential interregional, multi-modal transit terminal at Fifty Road and South Service Road



Planning and Policy Context

Fruitland-Winona Secondary Plan (2013)

- Lands south of Barton Street;
- Recommends the Barton Street Pedestrian Promenade;
- Future Rapid Transit on Barton Street;
- Identifies current land use designations for future development;
- Identifies the transportation, transit and active transportation linkage objectives.



Problem and Opportunity Statement

The City is taking this opportunity improve Barton Street and Fifty Road in order to:

- Provide **safe, comfortable, accessible and efficient pedestrian and cycling facilities** to encourage active transportation and healthier lifestyles within the community;
- Ensure both commuter and recreational transportation needs are met across **all age groups and transportation modes**;
- **Improve connectivity** between residential areas, schools, work places and other community 'Points of Interest';
- **Improve safety and reduce delays** at intersections, including the intersection with the CN Rail and Metrolinx line on Fifty Road, for all vehicles and other modes of transportation;
- Create an **innovative, landscaped, linear green space** along the south side of Barton Street to encourage active transportation and provide a buffer between residential communities to the south and employment areas to the north;
- Plan, and reserve right-of-way, for future implementation of local and rapid **transit** within the study roadways.

City of Hamilton's 'Community Vision'

Theme 1: Community Engagement and Participation

Theme 2: Economic Prosperity and Growth

Theme 3: Healthy and Safe Communities

Theme 4: Clean and Green

Theme 5: Built Environment and Infrastructure

Theme 6: Culture and Diversity



Existing and Future Land Use

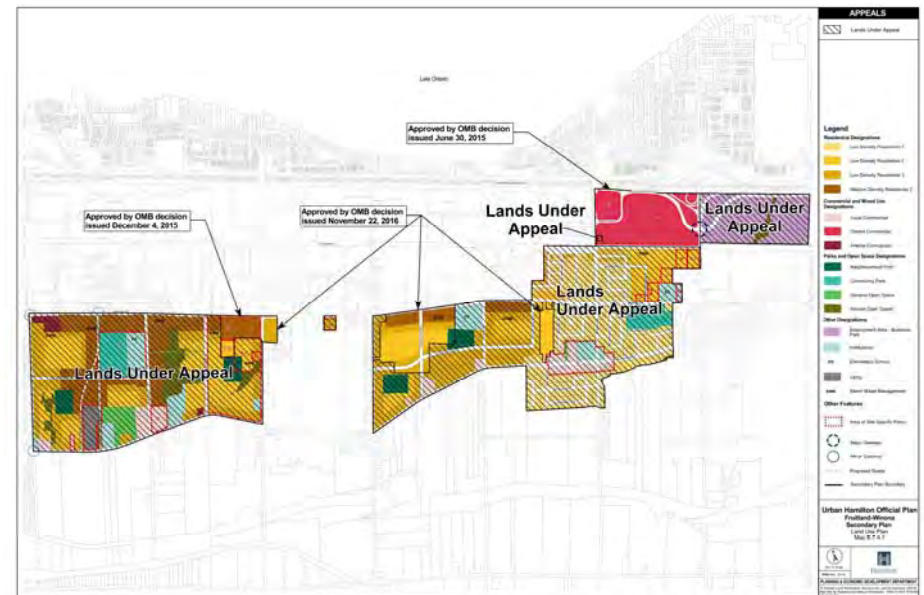
Existing Land Use

- Primarily low-density residential to the south and employment to the north.
- Intersection of Highway 8 and Fifty Road is part of the 'Escarpment Protection Area'
- Greenbelt areas between Glover Road and McNeilly Road, as well as along Fifty Road south of the rail corridor.



Future Land Use

- Future land use has been identified through the Fruitland-Winona Secondary Plan¹.



¹ Portions of this Secondary Plan are still under Appeal at the Ontario Municipal Board.

Existing and Future Traffic Volumes

Existing Traffic Volumes

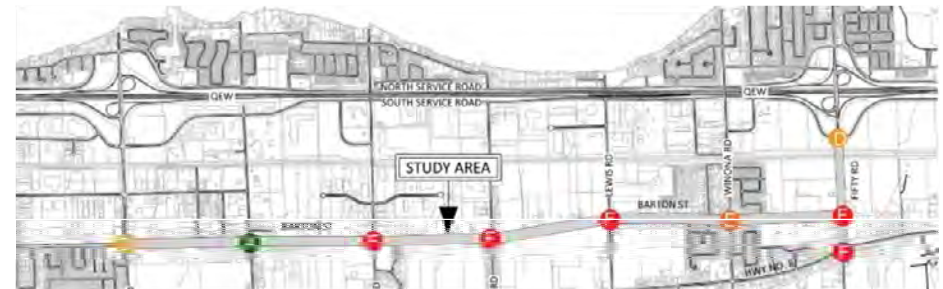
- Intersection of Fifty Road and South Service Road is extremely congested during peak periods.
- Remaining intersections generally function well.

Future Traffic Volumes

- By 2031, approximately 1500 vehicles will use the study roads during the p.m. peak period.
- Addition of traffic signals and/or turning lanes or conversion to roundabouts will be needed at:
 - Barton Street and each of Fruitland Road, Glover Road, McNeilly Road, Lewis Road and Winona Road.
 - Fifty Road and each of Highway 8, Barton Street and South Service Road.



Existing Intersection Levels of Service (LOS) During the p.m. Peak Period

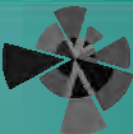


2031 Intersection Levels of Service (LOS) During the p.m. Peak Period Without Intersection Improvements



2031 Intersection Levels of Service (LOS) During the p.m. Peak Period With Intersection Improvements

LOS	Description of Operations	LOS	Description of Operations
A	Little to no delay at intersections	D	Frequent queuing and delay (< 55 sec/vehicle)
B	Minimal delay	E	Significant delay and queuing, occasionally vehicles may need to wait for a second green
C	Some queuing and delay (<35 sec/vehicle)	F	Intolerable delays and queues.



Existing and Future Transportation Network

Existing Transportation Network

- Barton Street and Fifty Road are two lane roads with gravel shoulders and ditches.
- Limited sidewalks.
- All intersections are currently stop controlled except:
 - Barton Street at Fruitland Road (signalized);
 - Fifty Road at Highway 8 (signalized);
 - Fifty Road at South Service Road (being signalized).



Barton Street looking east beyond Escarpment Drive..



Fifty Road looking north towards the CN Rail crossing.

Future Transportation Network

The SCUBE TMP recommends:

- A two way left turn lane along Barton Street from Fruitland Road to Fifty Road.
- Fifty Road be widened for future rapid transit.

Based on the traffic analysis completed as part of the current study, it was confirmed that:

- A single lane in each direction (with centre two-way-left-turn lane on Barton Street) will be able to provide the required capacity to 2031 on both study roadways.
- Grade separation of Fifty Road and the CNR crossing will be required in the near future.



Planned Active Transportation and Transit

Active Transportation

- A need for improved pedestrian facilities has been identified. These will include:
 - 4.0 m-wide 'Pedestrian Promenade' on the south side of Barton Street, and
 - Continuous, wide, sidewalks along both study roadways.
- Cycling facilities will also be provided along both roadways.



Well-used multi-use pathway in Conyers, GA (left) and cycle lanes in Richmond, BC (right).

Transit

- Limited existing transit services (Trans-Cab)
 - Provides short distance service within three sections of Stoney Creek
 - Service provided along entire length of Barton Street study area
 - Service runs Monday-Saturday, 5am to 1:20 am
- Local transit services will ultimately be provided.
- Rapid transit corridor as part of the City of Hamilton BLAST program, to be implemented in the future pending budget approval
- Potential for a future multi-modal transit hub along Fifty Road between South Service Road and the CN Rail Line.
- While not currently warranted, extension of the 'B' line to Fifty Road has been contemplated (to follow Barton Street from east of Fruitland Road).
- Need to reserve right-of-way width that could support rapid transit.



Active Transportation Facility Alternatives

AODA-Compliant Pedestrian Facilities

- All proposed facilities would be compliant with the Association for Ontarians with Disabilities Act.

Cycling Facilities

- Provided as either on or off-road facilities, or a combination.

Standard Arterial Sidewalk

- 2.0 m wide concrete sidewalk.



Wide Arterial Sidewalk

- Ideally 3.5 m width to accommodate higher volumes.



Dedicated Cycle Lanes

- Generally 1.5 m wide and may have a buffer.



Cycle Track

- Physically separated facilities solely for use by cyclists.



Multi-Use Pathways

- Shared facilities for pedestrians and cyclists.
- Typical multi-use pathway width is 3.0 m.
- Multi-use pathway proposed for Barton Street is 4.0 m wide (referred to as a 'Promenade')



Barton Street Pedestrian Promenade

- Part of approximately 5 km long greenspace that will enhance the interface between the employment lands to the north, and the residential development to the south
- Will be designed with the principles of:
 - Place-making,
 - Walkability,
 - Seating and shade,
 - Linkages,
 - Innovative green technologies, and
 - Landscaping
- Will make Barton Street the prime pedestrian and cycling corridor in the area.



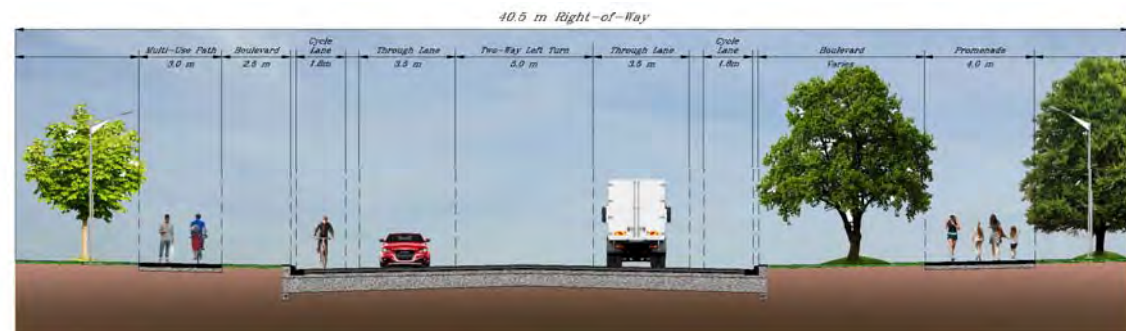
Fruitland-Winona Secondary Plan Concept of Barton Street, looking south towards the Pedestrian Promenade.



Grande Promenade, Hot Springs, AR



Pedestrian Promenade in Houston, TX.




Potential Barton Street alternative cross-section looking east with Pedestrian Promenade on south side.



Technical Studies Being Completed

The following investigations and inventories are being completed as part of the current Class EA:

<p>Natural Heritage Inventories</p> <p>Background studies and fieldwork will determine the presence of species-at-risk, sensitive vegetation communities, sensitivity of watercourse crossings, and critical features. Identification of where mitigation may be needed, including water crossings.</p>		<p>Archaeology</p> <p>Determine whether the land within the project limits is an archaeological site or has the potential to have archaeological resources.</p>	
<p>Fluvial Geomorphology</p> <p>To confirm stream channelization, flows and fish passage. Identification of mitigation measures as required.</p>		<p>Built and Cultural Heritage</p> <p>Determine whether any built or cultural heritage features exist within the project limits. Identification of where mitigation may be needed to protect these features.</p>	
<p>Hydrogeology</p> <p>Determine whether the project will present any risk to the existing water wells and apply mitigation measures as required.</p>		<p>Transportation & Traffic</p> <p>Identification of existing safety concerns. Modelling of existing and future traffic to determine lane requirements and test intersection configurations.</p>	 <p>Existing 2016 Traffic Volumes - PM Peak Hour</p>



Natural Heritage Investigations

Aquatic Investigations

- Aquatic habitat assessments were completed at 7 streams and Fifty Creek (locations illustrated on the next panel)
- Crossings 5.2, 6.1, and 7.2 are ephemeral (flow only after rainfall) and provide indirect fish habitat
- Crossings 5.0, 6.0, 7.0, 7.1 are intermittent (longer duration flow and dry parts of the year) and provide indirect fish habitat
- Fifty Creek is a permanent watercourse providing direct warm water fish habitat.
- No aquatic 'Species at Risk' in the study area.

Terrestrial Investigations

- MNRF reported four bird 'Species at Risk' in the area:
 - Barn Owl,
 - Barn Swallow,
 - Bobolink, and
 - Chimney Swift.
- Common Nighthawk was also reported in City of Hamilton records.
- Breeding bird studies identified 44 species of birds.
- Barn Swallow, Eastern Meadowlark and Bank Swallow were identified. Each of these species are listed as 'threatened'

Key Natural Heritage Features

- Fifty Creek Valley Environmental Sensitive Area
- Dean Vista Park woodlands



Watercourse Crossing 12.0: Fifty Creek



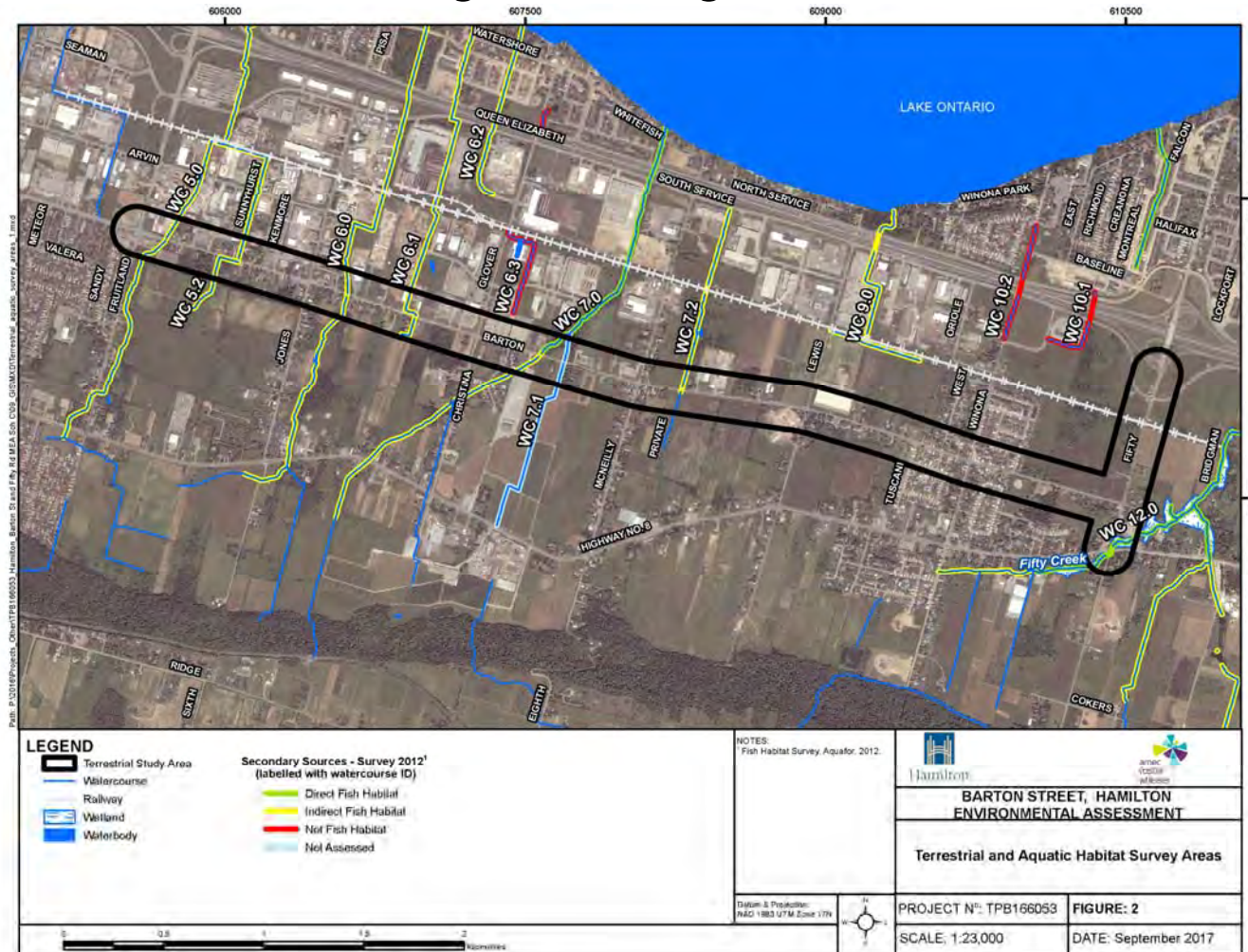
Watercourse Crossing 5.2-Upstream



Watercourse Crossing 5.0- Downstream



Natural Heritage Investigations, Continued



Preliminary Technical Study Findings



2
CONSTRAINT
Extensive existing overhead utilities located immediately behind the existing shoulder/sidewalk.



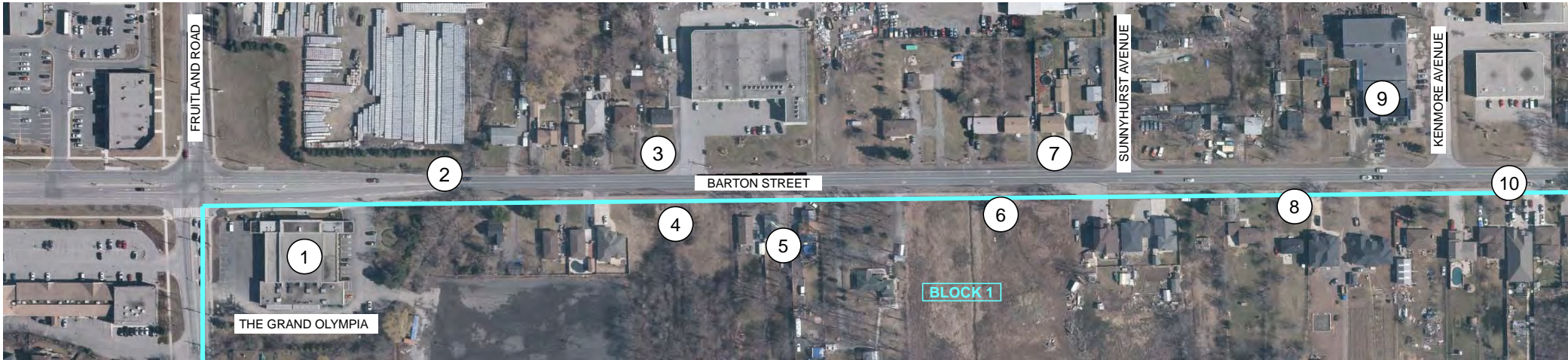
3
OPPORTUNITY
Provide sidewalk or multi-use path on north side to encourage active transportation.



7
OPPORTUNITY
Improve drainage



9
CONSTRAINT
Parking for commercial building fronts Barton Street, may be impacted by new ROW widening



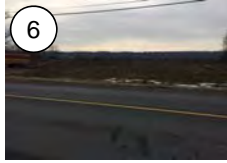
1
CONSTRAINT
Grand Olympia located in close proximity to the existing right-of-way limit.



4
OPPORTUNITY
Improve quality and type of active transportation facilities on south side.



5
CONSTRAINT
Homes are located in close proximity to existing right-of-way limit.



6
CONSTRAINT
Several Hamilton Conservation Authority (HCA) regulated features exist within the study limits. Permits will likely be required.



8
CONSTRAINT
Homes are located in close proximity to existing right-of-way limit



10
OPPORTUNITY
Improve drainage



Preliminary Technical Study Findings



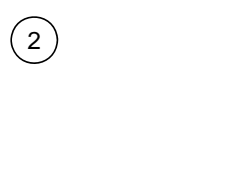
4
CONSTRAINT
Extensive existing overhead utilities located immediately behind the existing shoulder/sidewalk.



6
CONSTRAINT
Home is located in close proximity to existing right-of-way limit.



1
CONSTRAINT
Parking and access to bays for Barton Auto Service in close proximity to existing right-of-way.



2
OPPORTUNITY
Signalization or implementation of roundabouts at major intersections.



3
OPPORTUNITY
Mature trees could provide shade to future pedestrian facilities.



5
OPPORTUNITY
Improved drainage through provision of a single, properly sized culvert. Low impact development to be employed.



Preliminary Technical Study Findings



CONSTRAINT

Extensive existing overhead utilities located immediately behind the existing shoulder/sidewalk.



ISSUE

Hamilton Fire Station located on Barton Street. Emergency vehicles access will be required at all times.



OPPORTUNITY

Improved walking and cycling connectivity to Dean Vista Park and Glover Golf Club.



POTENTIAL CONSTRAINT

Cultural meadows and/or Orchards are common habitat for birds. Terrestrial studies will confirm presence



CONSTRAINT

Avoid adverse impacts to Dean Vista Park.



POTENTIAL CONSTRAINT

Since the study area is heavily disturbed due to anthropogenic activities, archaeological potential is deemed to be low.



CONSTRAINT

Driveway of home lies within current right-of-way



CONSTRAINT

Lands in this area fall under the protection of the provincial Greenbelt Plan as Tender Fruit and Grape Lands.



OPPORTUNITY

Design to try and maintain mature trees to provide shade for future pedestrian facilities.



Preliminary Technical Study Findings



CONSTRAINT

Home is located in close proximity to existing right-of-way limit.



CONSTRAINT

Extensive existing overhead utilities located immediately behind the existing shoulder/sidewalk.



CONSTRAINT

Access to local businesses, such as Hamilton Builders' Supply, has to be considered



CONSTRAINT

Design to try and maintain existing orchard.



OPPORTUNITY

Upgrade pedestrian walkway and increase offset from edge of travelled lanes.



OPPORTUNITY

Signalization or implementation of roundabouts at major intersections.



CONSTRAINT

Homes are located in close proximity to existing right-of-way limit.



Preliminary Technical Study Findings

2

OPPORTUNITY

Improve drainage throughout the study area.

3



CONSTRAINT

Barton Street is skewed through the Lewis Road intersection.

4

CONSTRAINT

Extensive existing overhead utilities located immediately behind the existing shoulder/sidewalk.

7



OPPORTUNITY

Improve active transportation infrastructure along north side of Barton Street

8

CONSTRAINT

New townhomes are being constructed at this location.

9

CONSTRAINT

Bell service station located in close proximity to the existing right-of-way



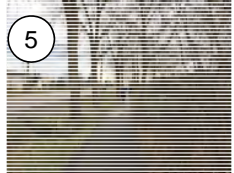
1



CONSTRAINT

Winona Elementary school property. Access and safety will be important considerations during design.

5



OPPORTUNITY

Improve active transportation linkages to school and employment areas to the east and west.

6

OPPORTUNITY

Potential extension of Escarpment Drive, in support of future rapid transit implementation.

10



CONSIDERATION

Neighborhoods are located in close proximity to existing right-of-way limit. Minimize property impacts.



Preliminary Technical Study Findings



CONSTRAINT
No sidewalk or asphalt path for active transportation.

CONSTRAINT
Auto repair shop parking located very close to existing right-of-way

CONSTRAINT
Residential development on both sides of Barton Street limits extent to which right of way can be widened.

CONSTRAINT
Private gardens located in close proximity to existing edge of pavement.

CONSTRAINT
Sidewalk in close proximity to roadway.

CONSTRAINT
Existing residential properties in close proximity to the current Barton Street right-of-way.

CONSTRAINT
St. Gabriel's Elementary School Property. Safe pedestrian access needs to be maintained at all times.



CONSTRAINT
Extensive existing overhead utilities located immediately behind the existing shoulder/sidewalk.



OPPORTUNITY
Improve drainage. Park floods in high rain.



OPPORTUNITY
Design to try and maintain existing mature trees to provide shade and interest.



OPPORTUNITY
Improved active transportation linkages to Winona Park.



OPPORTUNITY
Improve visibility of cross walk between Winona Park and sidewalk leading to St. Gabriel's Elementary School.



Preliminary Technical Study Findings



CONSTRAINT

Steep slope adjacent to roadway, would require retaining wall



CONSTRAINT

Extensive existing overhead utilities located immediately behind the existing shoulders on both sides of roadway



CONSTRAINT

Homes are located in close proximity to the existing right-of-way limit.



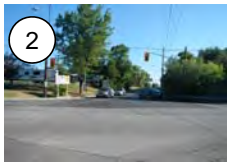
CONSTRAINT

Existing commercial property located in close proximity to existing edge of pavement on Barton St.



CONSTRAINT

Existing residential buildings located in close proximity to existing Barton Street edge of pavement.



CONSTRAINT

Environmentally Sensitive Area (ESA) south of Barton Street and Fifty Road intersection – Fifty Mile Wetland Complex.



CONSTRAINT

Existing creek crossing under intersection.



CONSTRAINT

Potential habitat for sensitive species.



CONSTRAINT

Stone wall with heritage value.



OPPORTUNITY

Potential for grade separation of CN Rail line being investigated.



OPPORTUNITY

Improved active transportation linkage from North of QEW to St. Gabriel Elementary school on Barton Street.



Investigate Innovative Solutions

- Theme 4 of the City of Hamilton's 'Community Vision' is 'Clean and Green'.
- Potential use of innovative materials will demonstrate what can be accomplished with sustainable alternatives. Cost/benefit analysis for potential materials will be completed as part of the EA and further investigated during detailed design.
- These include:
 - Use of solar panels along the pedestrian promenade
 - Solar-powered LED lighting
 - Permeable pavements
 - Handling of stormwater through Low Impact Development
 - Potential car share parking
 - Solar-powered electric car charging stations
 - Low impact development in green spaces



Solar-powered pavers at installation in Sandpoint, Idaho. Collected energy can be stored to power street lights and/or the light the actual panels themselves.



NATIONAL POST

Solar-panel roads to be built on four continents in 2017 with Calgary next in line

ANNA HIRTENSTEIN, BLOOMBERG NEWS | November 24, 2016 12:30 PM ET
More from Bloomberg News



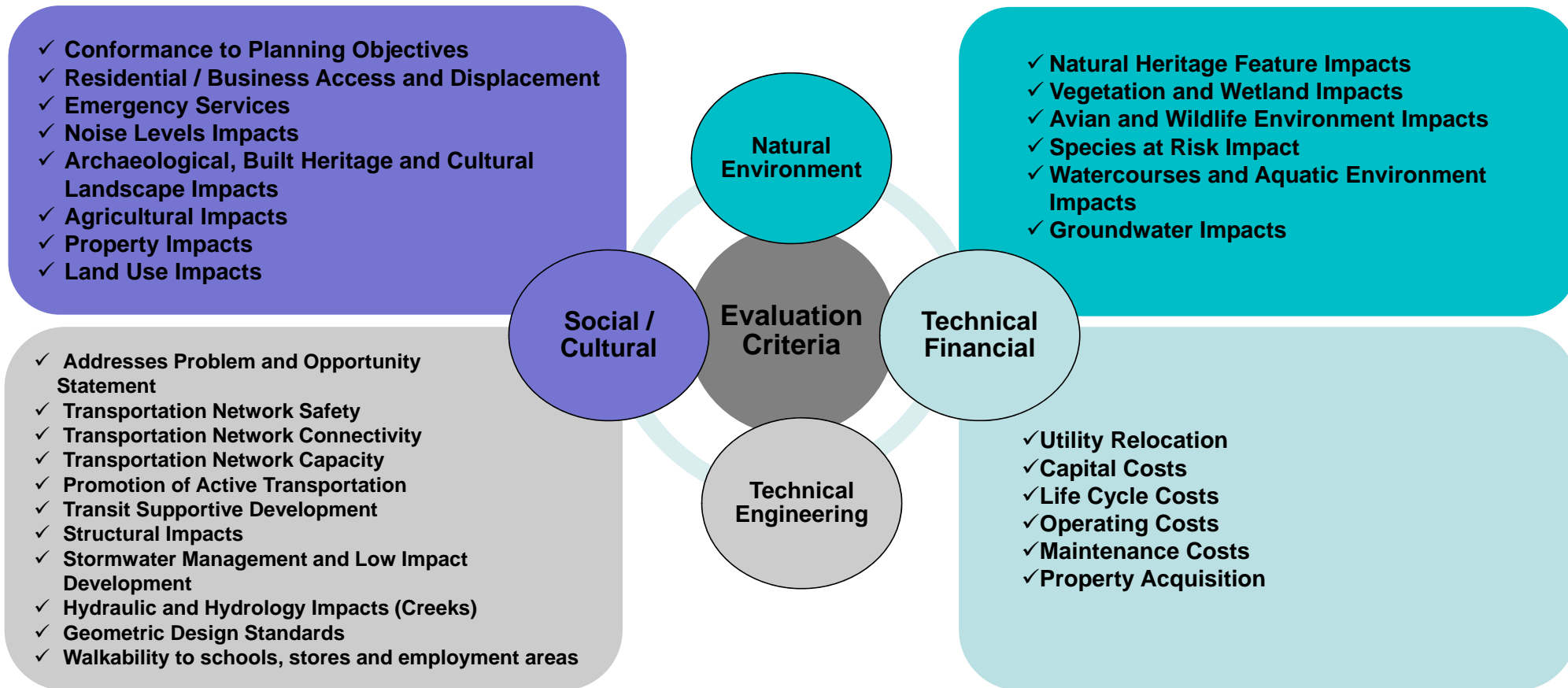
The Colas Group, a subsidiary of France's Bouygues SA, has developed 'Wattway', the world's first photovoltaic road surface which can be applied directly onto existing roadway surfaces. Under ideal conditions, a single home could be powered for every 20 m² of Wattway installed (equivalent to ~ 3 m length of standard local roadway).

The use of solar-powered LED street lighting reduces electrical needs by an estimated 950 kWh /year/ light. Additionally, no trenching is required for installation of wiring.



Moving Towards a Preferred Design

As we move towards a preferred design, alternatives will be evaluated according to the following criteria:



Thank you for your Participation !

Over the coming year, the Study Team will:

- 1. Complete the Environmental Inventory** through field investigations to confirm findings of the SCUBE and Fruitland-Winona Secondary Plan studies.
- 2. Develop the preferred design concepts and cross-sections.** Using comments received, the conceptual designs will be developed.
- 3. Present and gather input on the preliminary designs at PIC #2,** anticipated in **Winter 2017/2018.**
- 4. Complete the preliminary designs** based on feedback from PIC#2, the conceptual designs will be advanced to the preliminary design stage. Anticipated impacts and mitigation methods will be fully documented.
- 5. Prepare the Environmental Study Report (ESR)** and present to council for approval
- 6. Once approved, file the ESR** for review and comment during a 30 day review period.

The ESR will be available to the public for comment and if anyone is strongly opposed to the report, an appeal may be made to the Minister of the Environment and Climate Change under the EA Act.

We Want to Hear From You!

Let us know what is most important to you, your family and/or your business.

Please place comment sheets in the Comment Box or send to one of the mailing or email addresses listed on the comment sheet and project website.

www.hamilton.ca/barton-fifty-ea

Only those that express interest and provide contact information will be notified directly of future steps in the study process.

**Comment
Deadline
October 6, 2017**



Results of Ecological Investigations

Fisheries and Aquatic Ecosystems

- Aquatic habitat assessments were completed at 7 streams and Fifty Creek (locations illustrated on the next panel)
- Crossings 5.2, 6.1, and 7.2 are ephemeral (flow only after rainfall) and provide indirect fish habitat
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- No aquatic 'Species at Risk' in the study area.

Terrestrial Ecology And Species at Risk

- MNRF reported four bird 'Species at Risk' in the area:
 - Barn Owl,
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 - Chimney Swift.
- Common Nighthawk was also reported in City of Hamilton records.
- Breeding bird studies identified 44 species of birds.
- Barn Swallow, Eastern Meadowlark and Bank Swallow were identified. Each of these species are listed as 'threatened'

Key Natural Heritage Features

- Fifty Creek Valley Environmental Sensitive Area – Devils Punchbowl Escarpment
- Green Belt
- Winona Park
- Hamilton Region Conservation Regulated Limits.



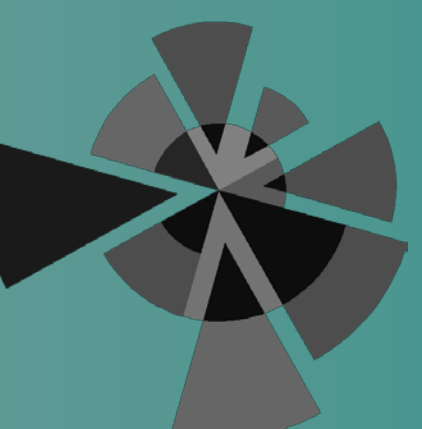
Watercourse Crossing 12.0: Fifty Creek



Watercourse Crossing 5.2-Upstream



Watercourse Crossing 5.0- Downstream



Results of Ecological Investigations, Continued

