

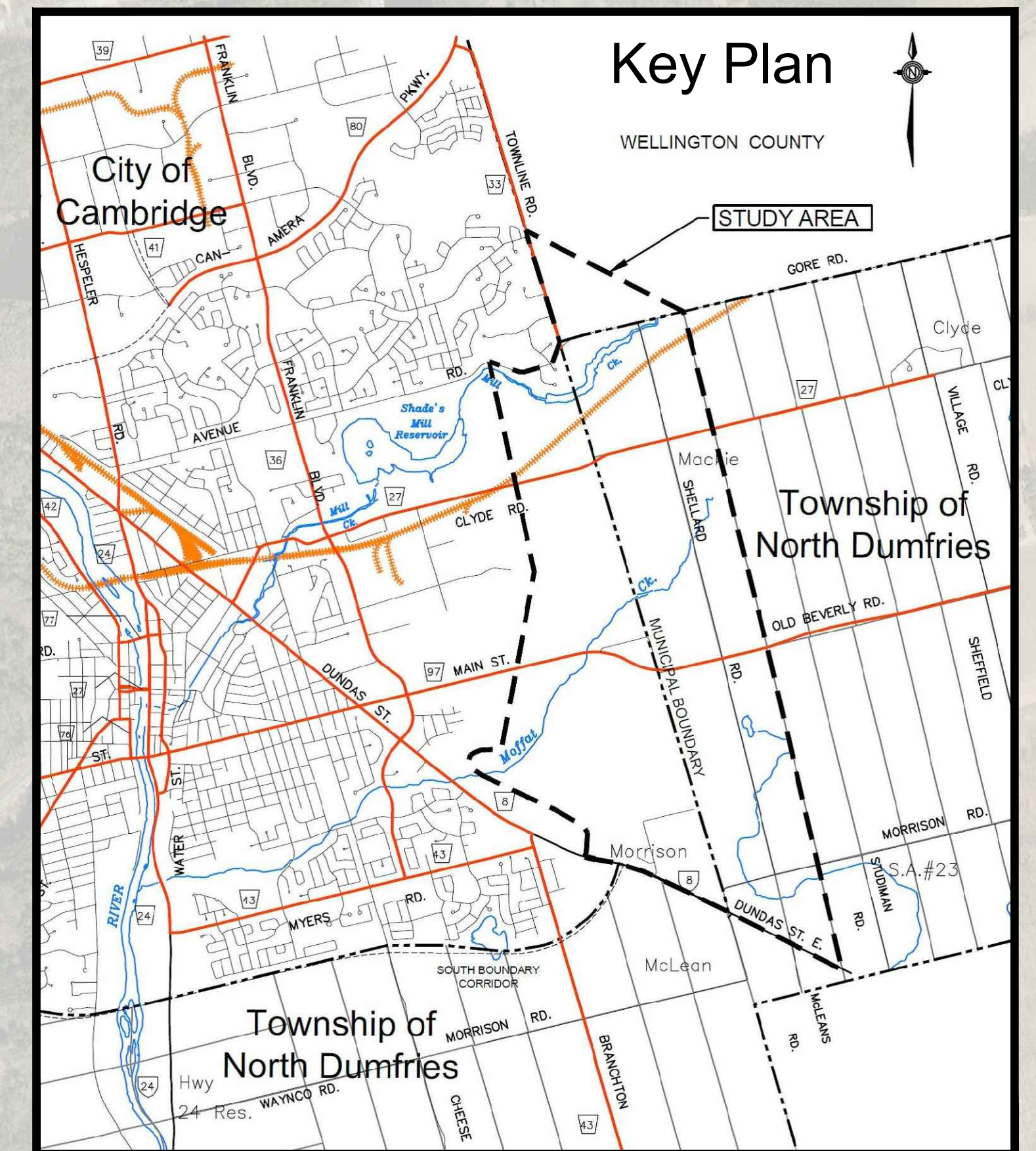
# EAST BOUNDARY ROAD CLASS EA

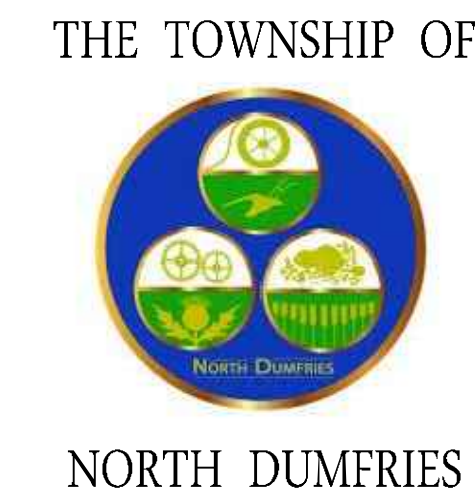
## PUBLIC CONSULTATION CENTRE (PCC) No. 3

# WELCOME

## Please ...

- ✓ Sign in
- ✓ Pick up an Information Package
- ✓ Review the displays and drawings illustrating the proposed alternatives and preferred route.
- ✓ Ask questions to Region staff and the Project Team
- ✓ Complete a comment sheet and place in the comment box or send to Justin Armstrong at the Region of Waterloo (see address on comment sheet).



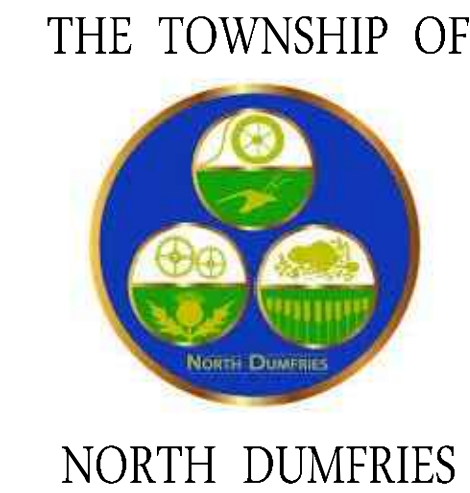


# EAST BOUNDARY ROAD CLASS EA

## PUBLIC CONSULTATION CENTRE (PCC) No. 3

### Purpose of Project

- South Cambridge has experienced rapid residential growth and new development continues to be planned for the south and east end of Cambridge.
- A transportation network that accommodates existing and future growth is critical for this area of the City of Cambridge and the Region.
- The need for an East Boundary Road has been established in several previous studies since 1967. The East Boundary Road is to tie into the South Boundary Road at Dundas Street and at Townline Road to provide a connection to Highway 401.
- An exact alignment for an East Boundary Road must be established so that future development can proceed taking into account the location and capacity of this critical transportation link.
- Establishing the East Boundary Road alignment is being undertaken under the Schedule C Municipal Class Environmental Assessment process.

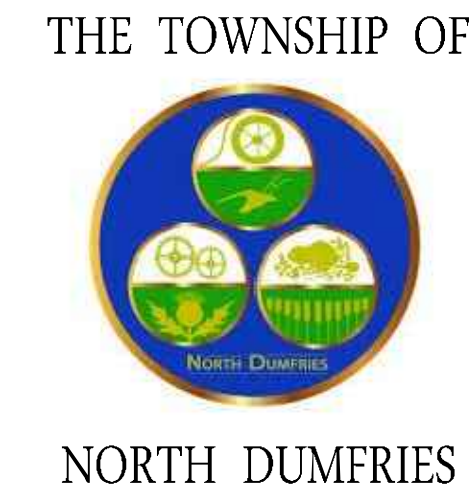


# EAST BOUNDARY ROAD CLASS EA

## PUBLIC CONSULTATION CENTRE (PCC) No. 3

# Other studies that identified the need for an East Boundary Road

- 1967 - Traffic Planning Study for the Joint Area of Galt and Preston
- 1993 - Cambridge Area Transportation Study (CATS)
- Late 1990's / Early 2000's - Cambridge Area Route Selection Study (CARSS)
- 2004 - Detailed Transportation Network Review of the Cambridge Area (DTNR)
- The 1995 and 2011 Region Official Plan - Identified an East Boundary Road tying into Dundas Street and Townline Road using Shellard Sideroad in North Dumfries.
- Highway 24 Bypass - The MTO has placed this study "on hold".  
However this East Boundary Road Study is addressing local and arterial road needs and a Highway 24 bypass will not impact the need for an East Boundary Road.

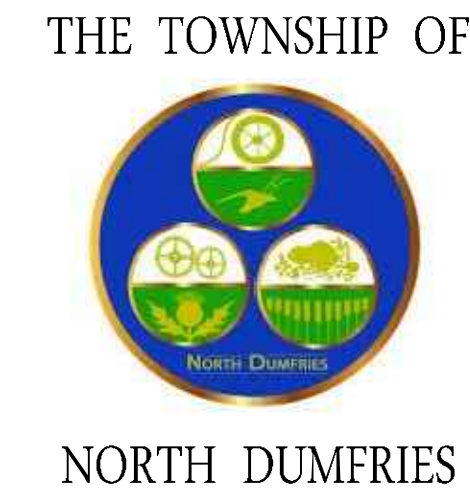


# EAST BOUNDARY ROAD CLASS EA

## PUBLIC CONSULTATION CENTRE (PCC) No. 3

# Current Transportation Analysis

- Current transportation demand modelling re-confirms the need for an East Boundary Road to:
  - ✓ Alleviate forecasted north-south capacity deficiencies for Franklin Boulevard and Hespeler Road.
  - ✓ Improve access to the Regional Road Network for the southeast Galt Community.
  - ✓ Provide alternative for goods movement through downtown Cambridge.
  - ✓ Facilitate proposed development on the south and east side of Cambridge.
- An East Boundary Road should connect to the South Boundary Road at Dundas Street (Highway 8) and Townline Road to provide access to and from Highway 401.
- Timing will depend somewhat on when development proceeds. Construction is not currently scheduled in the Region of Waterloo's Ten Year Capital Base and System Expansion Program.



# EAST BOUNDARY ROAD CLASS EA

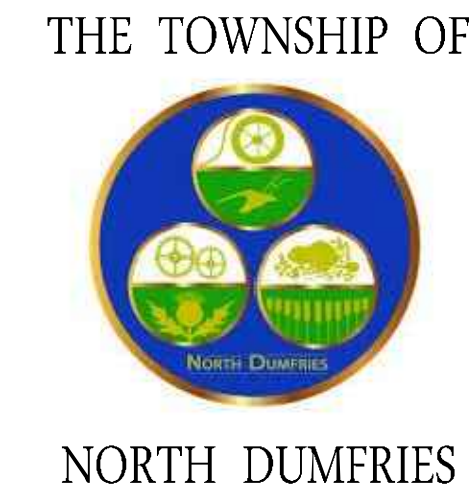
## PUBLIC CONSULTATION CENTRE (PCC) No. 3

# Project Problem Statement

The Project Team has developed the following Problem Statement :

*Regional transportation studies dating back to the 1960s have all identified a future need for an arterial road connection on the east side of Cambridge between the south end of the City to Highway 401. This arterial road has commonly been referred to as the “East Boundary Road”. Recent transportation demand modelling results have confirmed that an arterial road on the east side of Cambridge is needed to alleviate forecasted north-south roadway capacity deficiencies on Hespeler Road and Franklin Boulevard; improve access to the Regional road network for residents of the Southeast Galt Community area; and provide an alternative for goods movement to avoid traffic congestion in downtown Cambridge.*

*A route for an “East Boundary Road” needs to be confirmed to facilitate any proposed developments in the area to proceed and to protect the land for this future roadway. With the recent approval of the South Boundary Road between Highway 24 and Dundas Street south of Myers Road and the upgrades to Townline Road south of Highway 401, a route between Dundas Street in the south, to Townline Road must be identified for this Regional Road.*



# EAST BOUNDARY ROAD CLASS EA

## PUBLIC CONSULTATION CENTRE (PCC) No. 3

# What evaluation criteria has been used to evaluate the various alignment alternatives?

### 1) NATURAL ENVIRONMENT

- How does the alternative affect existing vegetation, water quality, source (ground) water resources, wildlife and aquatic habitat, wetlands, terrestrial resources, woodlands, species at risk, surface drainage and existing floodplains?

### 2) SOCIAL ENVIRONMENT

- Community Impacts - What impacts will the alternative have on the local community i.e. noise, property requirements, etc.?
- Access - How does the alternative impact access to existing residences, businesses and industries?
- Development / Property - Will the alternative fragment land and/or limit development opportunities?

### 3) HERITAGE / ARCHAEOLOGICAL / CULTURAL ENVIRONMENT

- What are the potential impacts on the heritage significance of heritage structures or landscapes and the potential disturbance of archaeological resources?

### 4) TRAFFIC CAPACITY, OPERATIONS AND SAFETY

- How does the alternative serve the expected vehicular, transit, pedestrian and cycling traffic needs?
- Does the alternative efficiently and safely handle the forecasted traffic from existing and future development properties?

### 5) COSTS

- How does the alternative compare with anticipated capital costs, property costs and utility relocation costs?



Region of Waterloo



THE TOWNSHIP OF



NORTH DUMFRIES

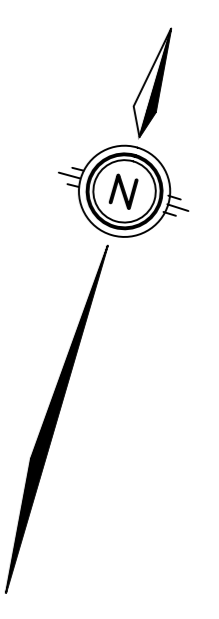


# EAST BOUNDARY ROAD CLASS EA

## PUBLIC CONSULTATION CENTRE (PCC) No. 3

### What has happened since PCC No. 2 (December 2015)

- Route C1 was identified as Preferred Alternative at PCC No. 2
- Comments were received following PCC No. 2 focused on minimizing impacts to the Natural Environment. Through additional discussion with review agencies, significant Natural Environment challenges associated with Alternative Route C1 were identified.
- As a result of PCC No. 2 feedback and additional discussion with review agencies, Alternative Route B1 was re-evaluated. Alternative Route B1 had previously compared well with Alternative Route C1, with some Social Environment challenges.
- Through extensive consultation with the Project Team and other stakeholders, Alternative Route B4 was developed to minimize impacts to both the Natural and Social Environment.
- Alternative Route B4 has now been identified by the Project Team as the Preferred Alternative.



**Legend**

■ ■ ■ Limit of Proposed Study Area

0 100m 200m

MS2.1 Jan. 2018

Region of Waterloo

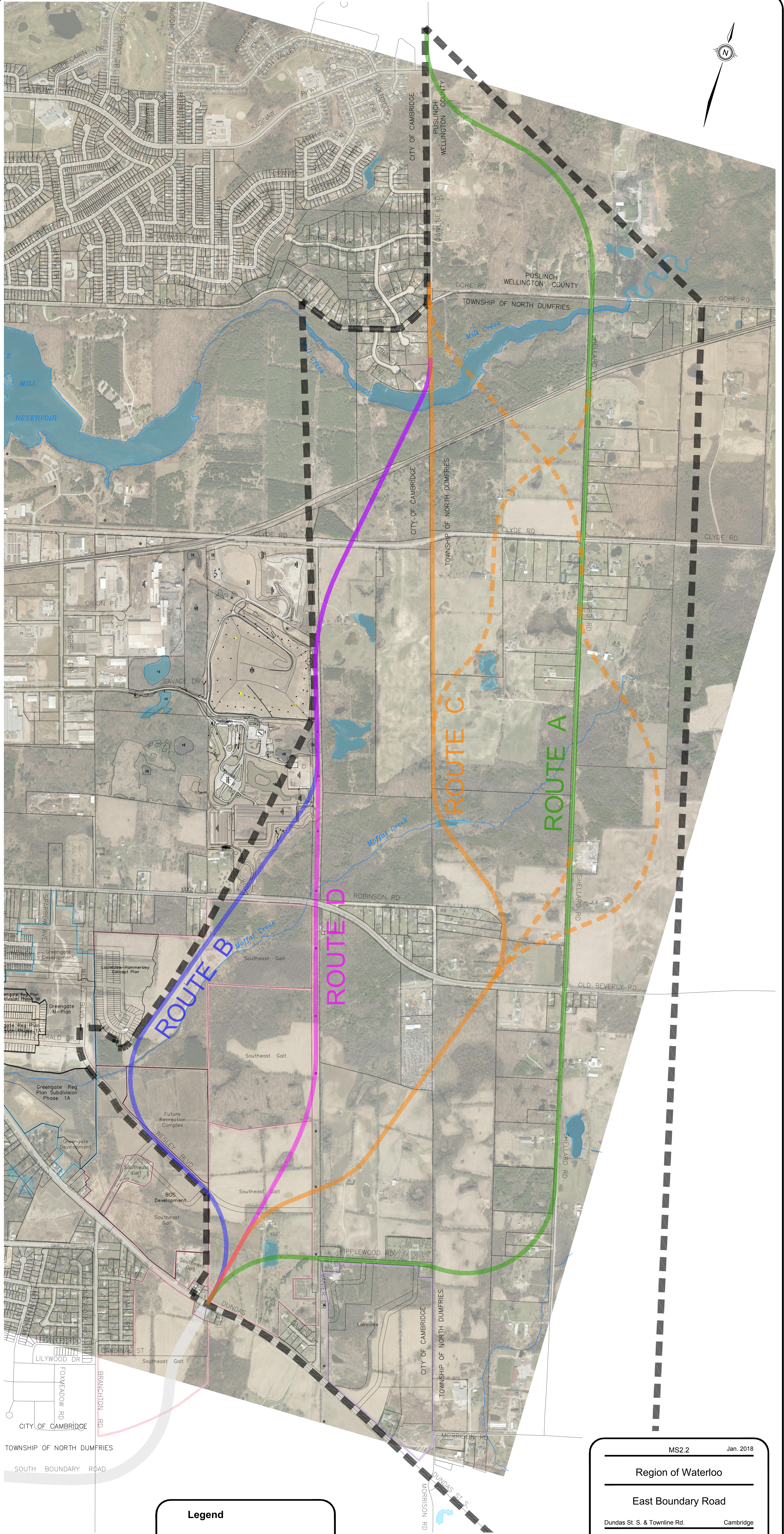
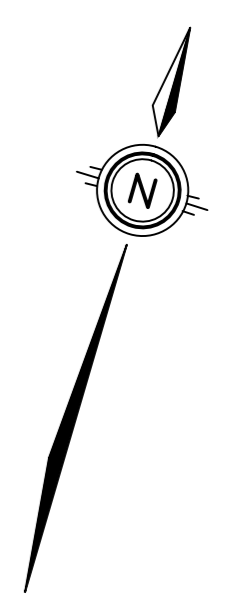
East Boundary Road

Dundas St. S. & Townline Rd. Cambridge

Study Area  
PCC No. 3



Region of Waterloo



**Legend**

- Original Route Alternatives
- 
- 
- Limit of Proposed Study Area

0 100m 200m

MS2.2 Jan. 2018

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Region of Waterloo

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East Boundary Road

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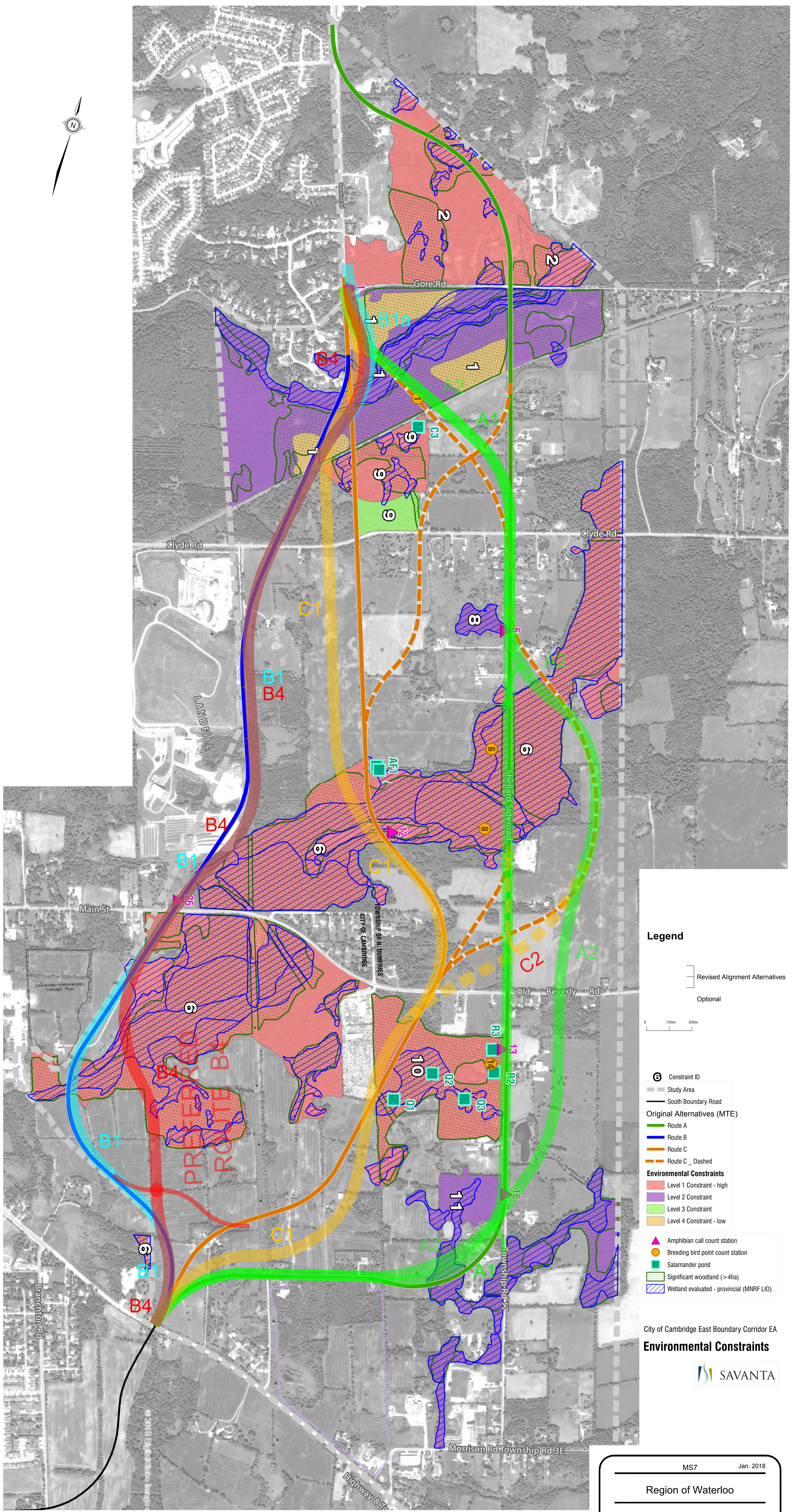
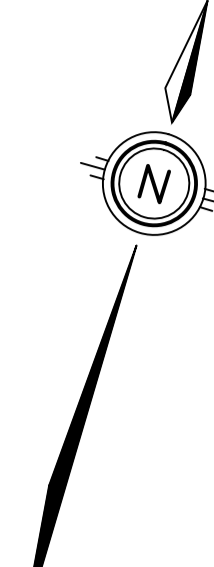
Dundas St. S. & Townline Rd. Cambridge

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Original  
Route Alternatives  
PCC No. 1

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**Legend**

- Revised Alignment Alternatives
- Optional
- 0 100m 200m
- Constraint ID
- Study Area
- South Boundary Road
- Original Alternatives (MTE)
  - Route A
  - Route B
  - Route C
  - Route C - Dashed
- Environmental Constraints
  - Level 1 Constraint - high
  - Level 2 Constraint
  - Level 3 Constraint
  - Level 4 Constraint - low
- Amphibian call count station
- Breeding bird point count station
- Salamander pond
- Significant woodland (> 4ha)
- Wetland evaluated - provincial (MNR/LIO)

City of Cambridge East Boundary Corridor EA  
**Environmental Constraints**  
 SAVANTA

MS7 Jan. 2018

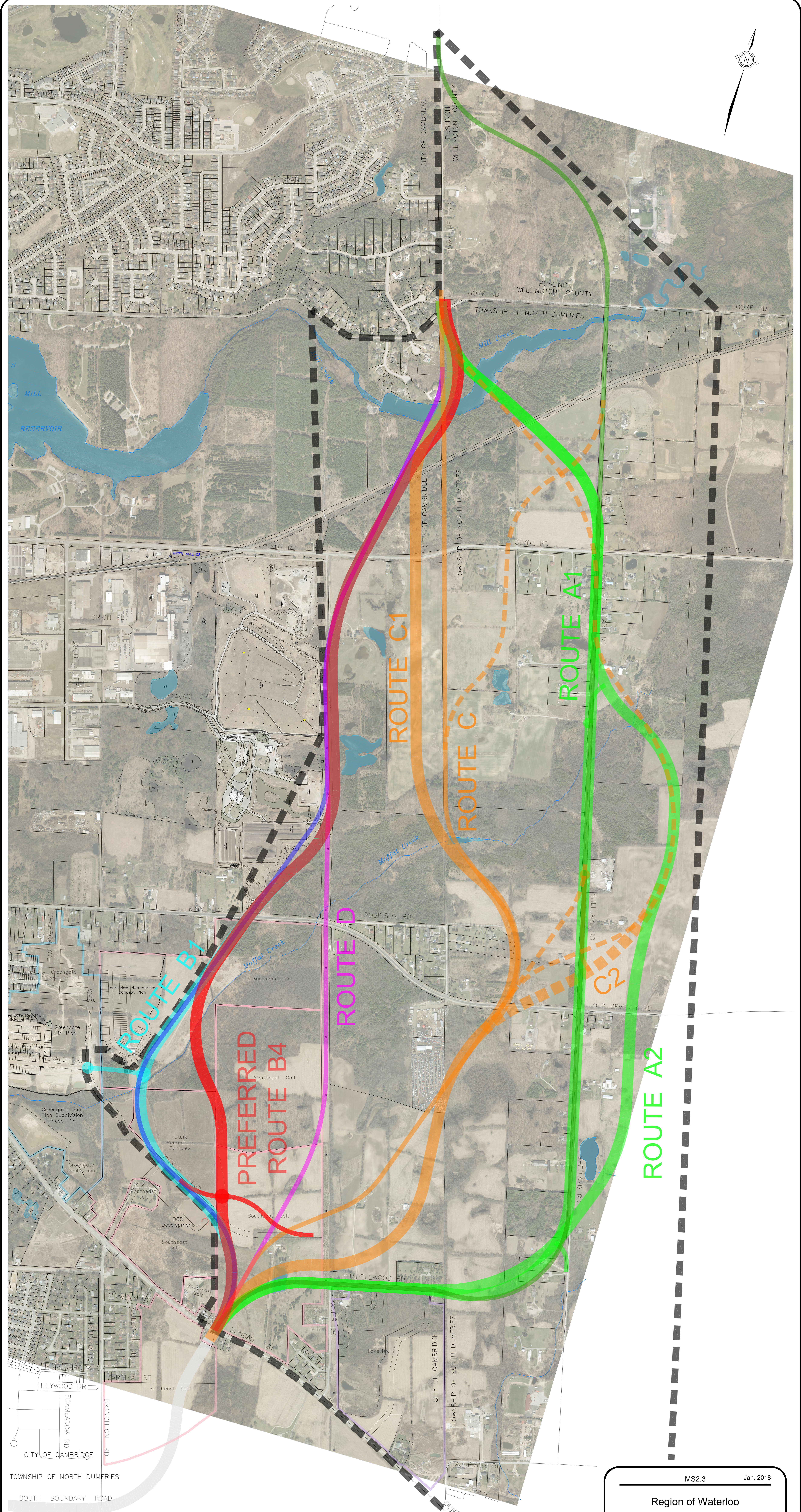
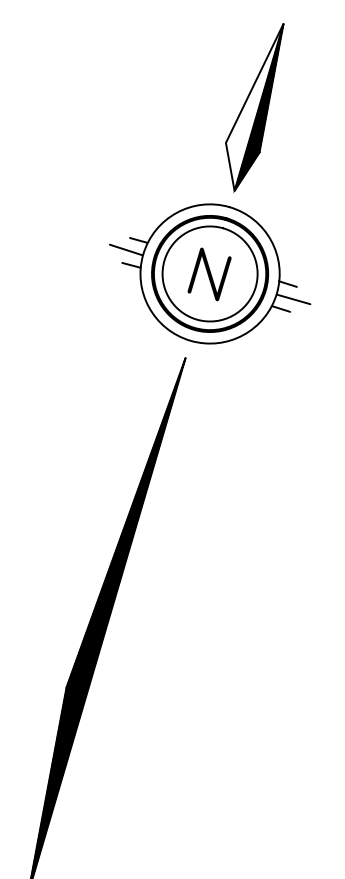
Region of Waterloo

East Boundary Road

Dundas St. S. & Townline Rd. Cambridge

Natural Environment  
 with Alignment Options  
 PCC No. 3





**Legend**

- Original Route Alternatives
  - ROUTE B1
  - ROUTE B2
  - ROUTE B3
  - ROUTE B4
  - ROUTE B5
  - ROUTE B6
  - ROUTE B7
  - ROUTE C1
  - ROUTE C2
  - ROUTE C3
  - ROUTE A1
  - ROUTE A2
- Limit of Proposed Study Area
  - Thick dashed black line
- Revised Alignment Alternatives
  - ROUTE B4
  - ROUTE B5
  - ROUTE C1
  - ROUTE C2
  - ROUTE A1
  - ROUTE A2

0 100m 200m

MS2.3 Jan. 2018

Region of Waterloo

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East Boundary Road

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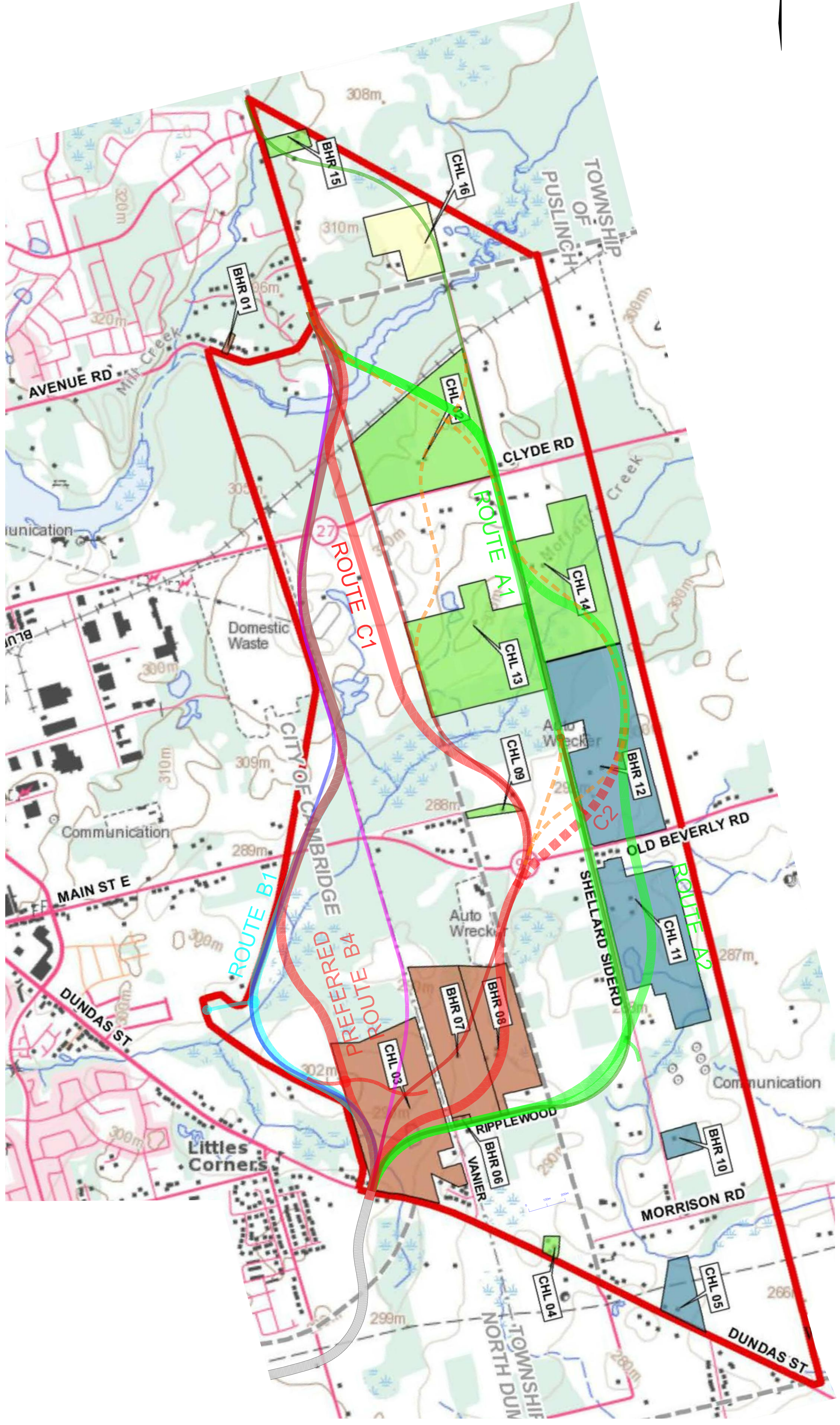
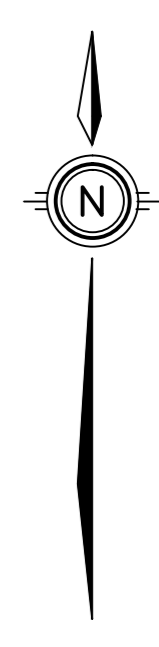
Dundas St. S. & Townline Rd. Cambridge

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Alignment Options  
PCC No. 3

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**Legend**

- Study Area
- Listed Cambridge
- Listed North Dumfries
- Listed Puslinch
- Potential
- CHL 12 Site label - points to approximate building location on property

Source base mapping: © Department of Natural Resources Canada. All rights reserved.

**Legend**

- Original Route Alternatives
- Original Route Alternatives
- Original Route Alternatives
- Limit of Proposed Study Area
- Revised Alignment Alternatives
- Revised Alignment Alternatives
- Optional

0 100m 200m

MS3.1 Jan. 2018

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Region of Waterloo

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East Boundary Road

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Dundas St. S. & Townline Rd. Cambridge

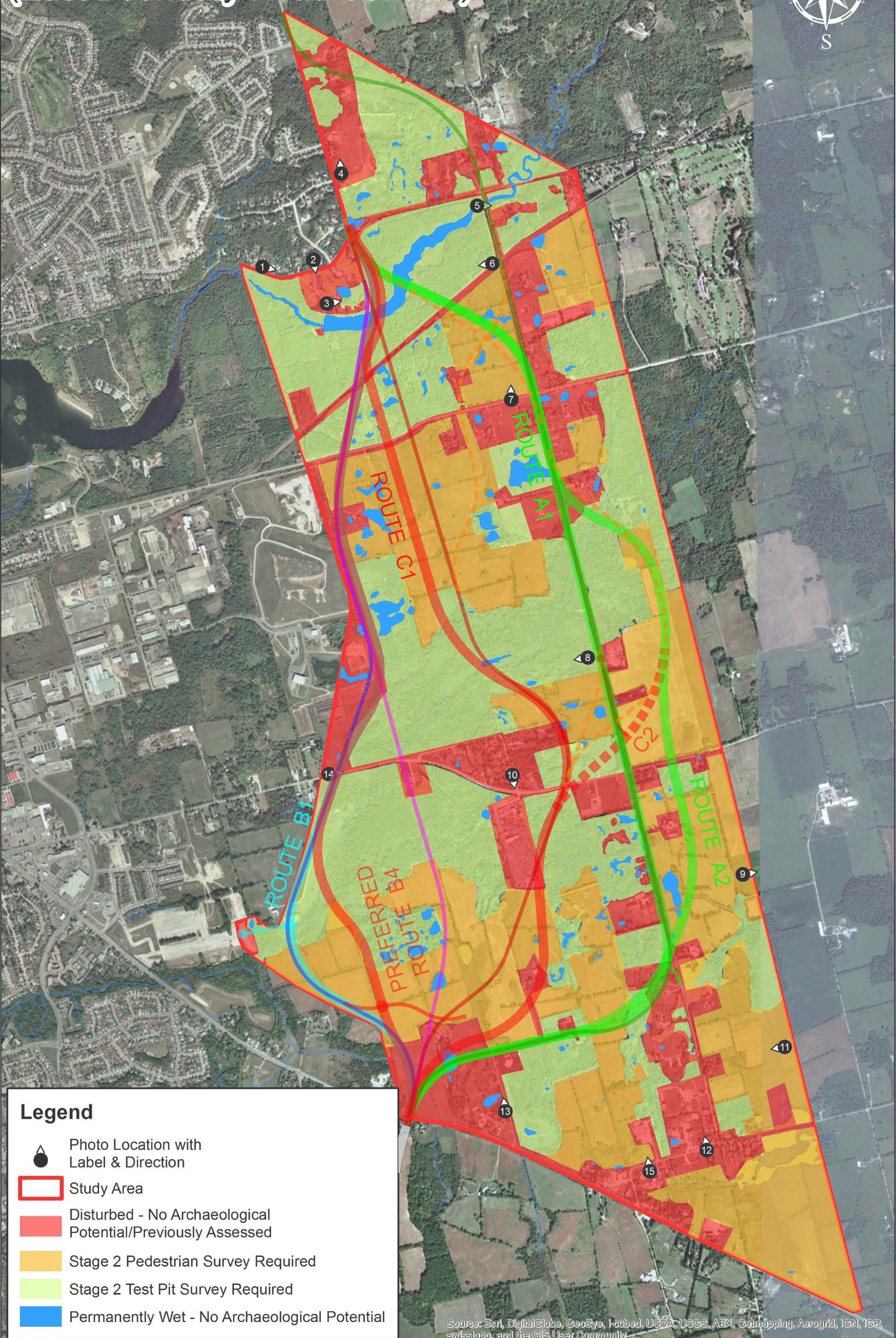
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Cultural Heritage  
PCC No. 3

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# Archaeological Potential (East Boundary Road Corridor)



**Legend**

- Photo Location with Label & Direction
- Study Area
- Disturbed - No Archaeological Potential/Previously Assessed
- Stage 2 Pedestrian Survey Required
- Stage 2 Test Pit Survey Required
- Permanently Wet - No Archaeological Potential

Source: Esri, DigitalGlobe, GeoEye, I-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



**Legend**

- Original Route Alternatives
- Original Route Alternatives
- Original Route Alternatives
- Original Route Alternatives
- Limit of Proposed Study Area
- Revised Alignment Alternatives
- Revised Alignment Alternatives
- Optional

0 100m 200m

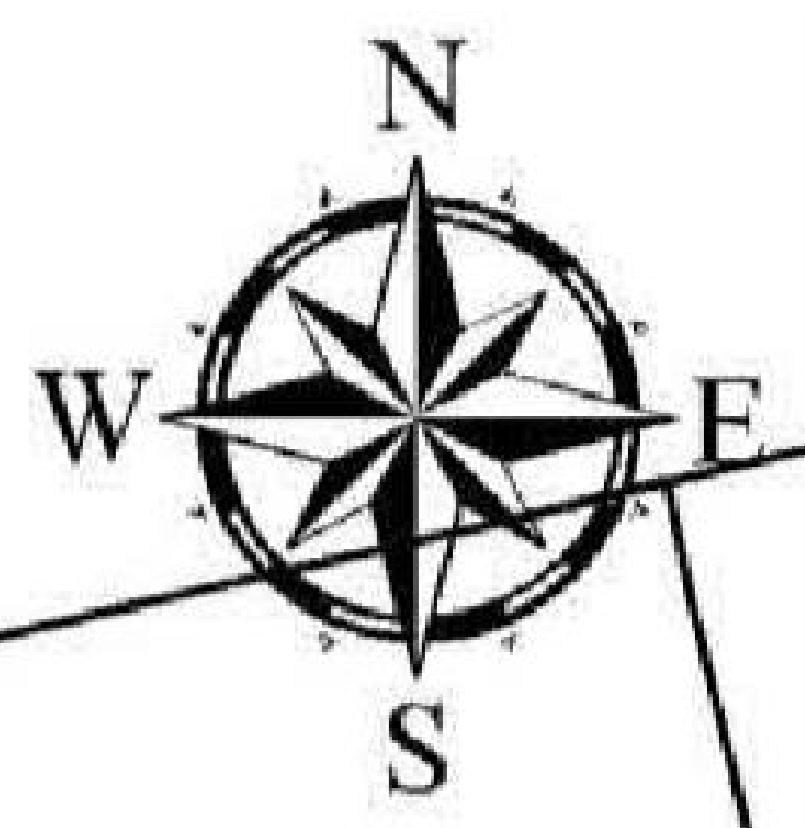
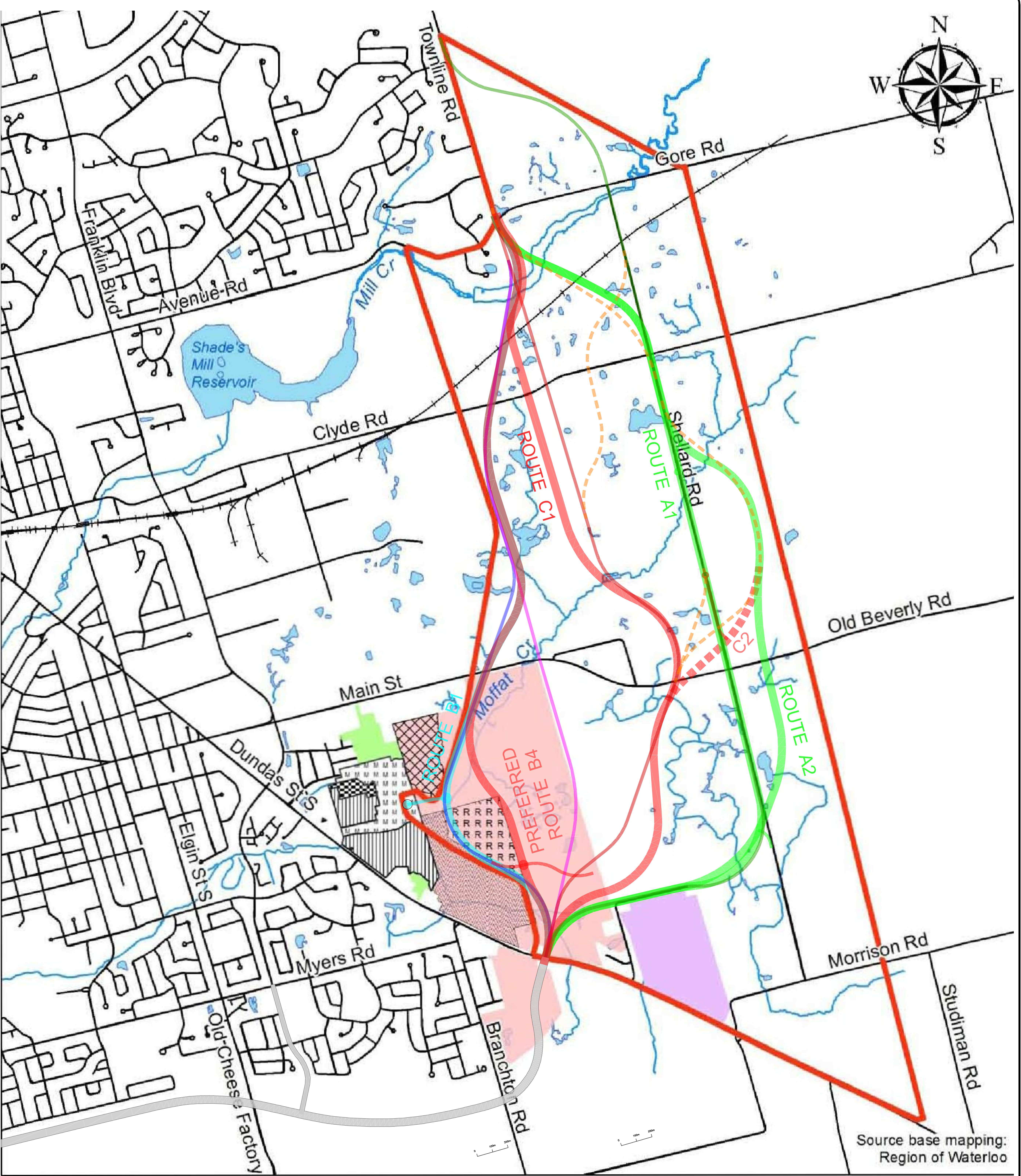
MS4.1 Jan. 2018

Region of Waterloo

East Boundary Road

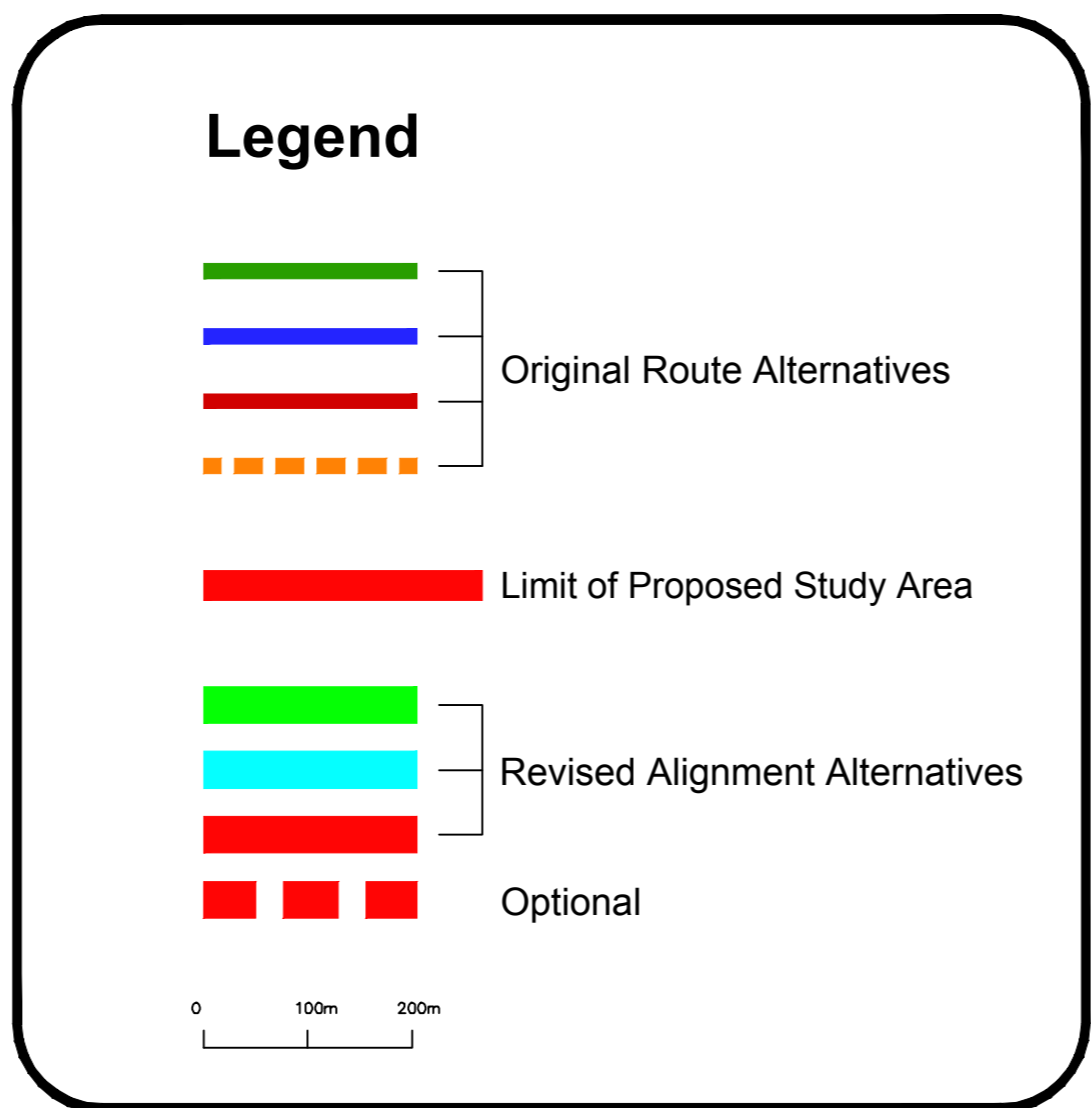
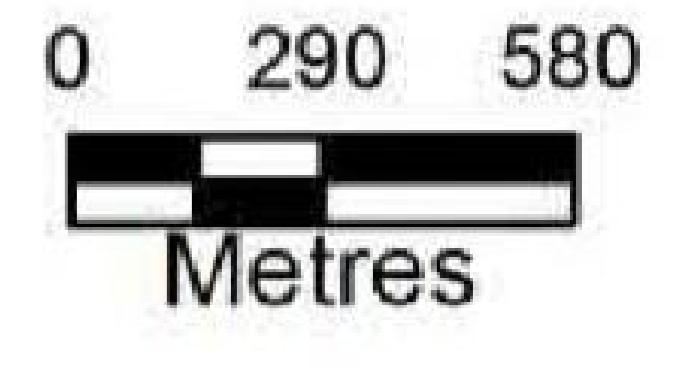
Dundas St. S. & Townline Rd. Cambridge

Archaeological Sites  
PCC No. 3



**Legend**

- Study Area
- Laurelview-Hammersley Draft Plan of Subdivision
- Greengate Village registered plan of subdivision Phase 1a
- Greengate Village registered plan of subdivision Phase 1b
- Greengate Village registered plan of subdivision Phase 1c
- Future Recreation Complex
- Greengate Village Draft Approved Plan of Subdivision
- Lakeview Homes Concept Plan
- Bosdale Farms Draft Plan of Subdivision
- Southeast Galt Community Plan



MS5.1 Jan. 2018

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Region of Waterloo

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East Boundary Road

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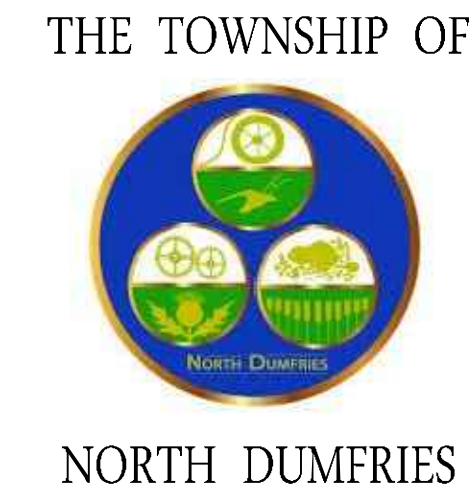
Dundas St. S. & Townline Rd. Cambridge

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Land Use  
PCC No. 3

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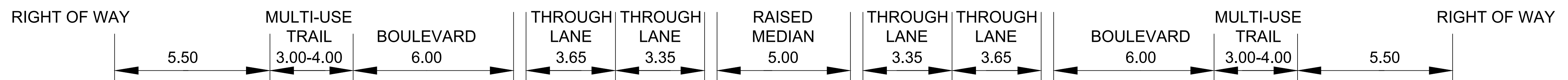


# EAST BOUNDARY ROAD CLASS EA

## PUBLIC CONSULTATION CENTRE (PCC) No. 3

### East Boundary Road Preliminary Cross-Section






Ultimate 4 Lanes and Multi-Use Trail  
40m-50m Right-of-Way Width (To be Determined)






January 22, 2018 11:43 a.m. - Plotted By: prembault






# EAST BOUNDARY ROAD - PCC #3 ALTERNATIVE EVALUATION MATRIX

CRITERIA	DESCRIPTION	DO NOTHING	PROPOSED ROUTE A1 / A2	PROPOSED ROUTE B1 / B4	PROPOSED ROUTE C1
<b>OVERALL EVALUATION RANKING</b>	General Description of Route	No new road constructed within study area, but may require improvements to other existing roads, intersections etc., to accommodate future traffic.	Follows route illustrated in Region of Waterloo and Wellington County Official Plan, but doesn't continue through Puslinch/Wellington County, and diverts east of Shellard Road.	Western route originally utilizing Wesley Blvd (B1), adjacent to East of Wesley Blvd, eastern edge of landfill, and just East of Hydro One Corridor.  <b>Route B4 PREFERRED</b>	Route through "centre" of Study Area, crossing Moffat Creek at narrowest point then ties into Townline Rd west of Cambridge/North Dumfries Boundary.

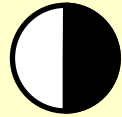

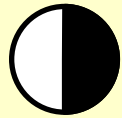
<b>LEGEND</b>	 Poor		 Fair		 Good
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




# EAST BOUNDARY ROAD - PCC # 3 ALTERNATIVE EVALUATION MATRIX

CRITERIA	DESCRIPTION	DO NOTHING	PROPOSED ROUTE A1 / A2	PROPOSED ROUTE B1 / B4	PROPOSED ROUTE C1
<b>Natural Environment</b>	General Description of Route	No new road constructed within study area, but may require improvements to other existing roads, intersections etc., to accommodate future traffic.	Follows route illustrated in Region of Waterloo and Wellington County Official Plan, but no longer continues through Puslinch/Wellington County, and diverts east of Shellard Road 	Western route originally utilizing Wesley Blvd (B1), adjacent to eastern edge of landfill, and just East of Hydro One Corridor 	Route through "centre" of Study Area, crossing Moffat Creek at narrowest point then ties into Townline Rd west of Cambridge/North Dumfries Boundary 
	How does the alternative affect existing vegetation, water quality, wildlife and aquatic habitat, wetlands, ANSI's, terrestrial resources, woodlands, species at risk, groundwater resources, surface drainage and the floodplain?	<ul style="list-style-type: none"> <li>No roads (or bridges) constructed so no new impacts to vegetation, wildlife or wildlife habitat within study area;</li> <li>Potential improvements to other roads may impact the natural environment in localized areas outside the study area.</li> </ul>	<ul style="list-style-type: none"> <li>New crossing of Moffat Creek required but in narrowest portion of Wetland Complex;</li> <li>Potential to close Shellard Rd through Moffat Creek Wetland Complex and convert to trail as compensation for new Moffat Creek crossing;</li> <li>New bridge required over Mill Creek Dam/Pond;</li> <li>Longest Route – most air emissions;</li> <li>Approx. 700m of road runs through woodlands;</li> <li>Avoids Salamander ponds;</li> <li>Some Bobolink and Eastern Meadowlark habitat affected, as well as Eastern Wood Peewee and Wood Thrush;</li> <li>Greatest amount of evaluated, unevaluated and GRCA wetlands directly impacted by alignment. (38,850 s.m)</li> </ul>	<ul style="list-style-type: none"> <li>Route B4 no longer utilizes Wesley Boulevard and crosses Moffat Creek in an area acceptable to approving agencies, and provides greater separation from approved Wesley Boulevard Moffat Creek crossing;</li> <li>New bridge required over Mill Creek Dam/Pond;</li> <li>Shortest Route – least air emissions;</li> <li>"Skirts" east edge of existing Landfill;</li> <li>Approx. 900m of road runs through woodlands;</li> <li>No nearby salamander ponds;</li> <li>Route skirts Bobolink and Eastern Wood thrush habitat;</li> <li>Smallest amount of evaluated, unevaluated and GRCA wetlands directly impacted by alignment (26,250 s.m.);</li> <li>MNRF have indicated that impacts to peripheral/fringe of habitat and wetlands etc. are significantly less than bisecting wetlands/habitat.</li> </ul>	<ul style="list-style-type: none"> <li>New crossing of Moffat Creek required in area not favored by approving agencies due to impacts on wetland and habitat;</li> <li>As compensation for new Moffat Creek Crossing, potential to close Shellard Road through Moffat Creek Wetland Complex and convert to trail;</li> <li>New bridge required over Mill Creek Dam/Pond;</li> <li>Second shortest route – second least air emissions;</li> <li>Approx. 1350m of road runs through woodlands;</li> <li>Route has been moved away from salamander ponds;</li> <li>Some Bobolink, and Eastern Meadowlark habitat affected, as well as Eastern Wood Peewee and Wood Thrush;</li> <li>Second most amount of evaluated, unevaluated and GRCA wetlands directly impacted by alignment (35,350 s.m.);</li> <li>Significant additional monitoring will be required as a result of bisecting Moffat Creek Wetland and surrounding areas. This adds additional time, costs and uncertainty associated with agency approvals;</li> <li>Due to anticipated significant impacts to wetland and surrounding habitat, MNRF will likely require an Overall Benefit Permit which adds significant time, cost and uncertainty due to requirements of permit;</li> </ul>




<b>LEGEND</b>	 Poor		 Fair		 Good
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# EAST BOUNDARY ROAD - PCC # 3 ALTERNATIVE EVALUATION MATRIX

CRITERIA	DESCRIPTION	DO NOTHING	PROPOSED ROUTE A1 / A2	PROPOSED ROUTE B1 / B4	PROPOSED ROUTE C1
<b>Social Environment</b>	General Description of Route	No new road constructed within study area, but may require improvements to other existing roads, intersections etc., to accommodate future traffic.	Follows route illustrated in Region of Waterloo and Wellington County Official Plan, but no longer continues through Puslinch/Wellington County, and diverts east of Shellard Road  	Western route originally utilizing Wesley Blvd (B1), adjacent to eastern edge of landfill, and just East of Hydro One Corridor  	Route through “centre” of Study Area, crossing Moffat Creek at narrowest point then ties into Townline Rd west of Cambridge/North Dumfries Boundary  
	<p>What Impacts will the alternative have on the local community (e.g. noise, property requirements, etc.)?</p> <p>How does the alternative impact access to existing residences, businesses and industries?</p> <p>Will the alternative fragment land and/or limit development?</p>	<ul style="list-style-type: none"> <li>No roads constructed resulting in no new impacts on noise, property requirements, access to existing residences and businesses, nor will there be any land fragmentation or limit development within the study area;</li> <li>Potential improvements to other roads may result in additional noise, property requirements, and revised accesses to existing residences and businesses;</li> <li>No new roads in study area will limit development potential within the study area.</li> </ul>	<ul style="list-style-type: none"> <li>Bisects two residential properties near connection to Shellard Rd in south;</li> <li>Utilizes existing Ripplewood Rd. and Shellard Road;</li> <li>Potential Closure of Shellard Road will result in less direct access for residents, but reduce traffic on Shellard Road;</li> <li>New right of way required on approx. 29 properties, including at least two buyouts;</li> <li>Constructing new road on existing Shellard Rd. alignment may require temporary closures during construction;</li> <li>Noise Studies required for Scottfarm Walk;</li> <li>Preferred by School Boards as planning for existing and future school locations have been based on an “eastern” alignment per Official Plan.</li> </ul>	<ul style="list-style-type: none"> <li>Adjacent to existing and proposed subdivisions with direct access.</li> <li>Not utilizing Wesley Boulevard (B1) eliminates impacts on proposed servicing. Alignment B4 skirting the eastern side of the community complex / school site eliminates need to consider relocation of schools, etc;</li> <li>Requires property from RMOW landfill potentially affecting operation;</li> <li>New right of way required on approx. 12 properties;</li> <li>Noise Studies required for properties in Laurelview/Hammersley, Main St., Scottfarm Walk, Grandy Ln, Deer Path, Stone Brook and Cedarpath;</li> <li>Acceptable to School Boards.</li> </ul>	<ul style="list-style-type: none"> <li>New right of way required on approx. 14 properties, including one potential buyout;</li> <li>Noise Studies required for properties off of Main St., Scottfarm Walk, Grandy Lane, Deer Path Ct., Stone Brook Rd., and Cedarpath Ct;</li> <li>Splits up at least 10 farm fields;</li> <li>Some adjustments will have to be made to School Boards current planning for school locations and territories as it is further west than “eastern” Official Plan Alignment for which they based their planning.</li> </ul>




<b>LEGEND</b>	 Poor	 Fair	 Fair	 Fair	 Good
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# EAST BOUNDARY ROAD - PCC # 3 ALTERNATIVE EVALUATION MATRIX

CRITERIA	DESCRIPTION	DO NOTHING	PROPOSED ROUTE A1 / A2	PROPOSED ROUTE B1 / B4	PROPOSED ROUTE C1
<b>Traffic Capacity, Operations and Safety</b>	General Description of Route	No new road constructed within study area, but may require improvements to other existing roads, intersections etc., to accommodate future traffic.	Follows route illustrated in Region of Waterloo and Wellington County Official Plan, but no longer continues through Puslinch/Wellington County, and diverts east of Shellard Road  	Western route originally utilizing Wesley Blvd (B1), or adjacent to eastern edge of landfill, and just East of Hydro One Corridor  	Route through "centre" of Study Area, crossing Moffat Creek at narrowest point then ties into Townline Rd west of Cambridge/North Dumfries Boundary  
	How does the alternative serve the expected vehicular, transit, pedestrian and cycling traffic needs?  Does the alternative efficiently and safely handle the forecasted traffic from existing/future developments and properties?	<ul style="list-style-type: none"> <li>Significant improvements to existing roads will be required (widening, intersection improvements etc.) to meet the expected vehicular, transit, pedestrian and cycling traffic needs;</li> <li>May result in congestion on existing roads with limited room for widening;</li> <li>Does not provide the best opportunities for future development within the study area.</li> </ul>	<ul style="list-style-type: none"> <li>Will address required capacity, and include sidewalks, cycling and transit facilities as required;</li> <li>Forecasted (2031) traffic is 5,712 – lowest of all alternatives;</li> <li>Longest total length (6300m) which is least conducive to attracting Active Transportation and Public Transit users;</li> <li>Furthest away from existing and planned developments with little access to existing and proposed developable areas;</li> <li>Some existing private driveways on Shellard Road will impact traffic flow and safety;</li> <li>Crosses all major intersections at 90 degrees, but connects to Shellard Rd on a skew (2 locations) requiring revised intersections;</li> <li>Can be designed to meet Engineering Standards.</li> </ul>	<ul style="list-style-type: none"> <li>Will address required capacity, and include sidewalks, cycling and transit facilities as required;</li> <li>Forecasted (2031) traffic is 8,520 – Highest of all considered alternatives;</li> <li>Shortest total length (5120m) which is most conducive to attracting Active Transportation and Public Transit users;</li> <li>Closest to existing and planned developments with best access to existing and proposed developable areas;</li> <li>Approximately 700m length of road adjacent to the Hydro One Corridor;</li> <li>Crosses Main Street and Clyde Rd. on a skew;</li> <li>Can be designed to meet Engineering Standards.</li> </ul>	<ul style="list-style-type: none"> <li>Will address required capacity, and include sidewalks, cycling and transit facilities as required;</li> <li>Forecasted (2031) traffic is 7,131 – Second highest of all considered alternatives;</li> <li>Second shortest route length (5300m) which is second most attractive for Active Transportation and Public Transit;</li> <li>Somewhat further away from existing and planned developments than Route B1/B4;</li> <li>Crosses Main Street at right angles, and Clyde Rd. on a skew;</li> <li>Can be designed to meet Engineering Standards;</li> </ul>

LEGEND	 Poor	 Fair	 Fair	 Fair	 Good
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# EAST BOUNDARY ROAD - PCC # 3 ALTERNATIVE EVALUATION MATRIX






CRITERIA	DESCRIPTION	DO NOTHING	PROPOSED ROUTE A1 / A2	PROPOSED ROUTE B1 / B4	PROPOSED ROUTE C1
<b>Heritage/ Archaeological/ Cultural Impacts</b>	General Description of Route	No new road constructed within study area, but may require improvements to other existing roads, intersections etc., to accommodate future traffic.	Follows route illustrated in Region of Waterloo and Wellington County Official Plan, but no longer continues through Puslinch/Wellington County, and diverts east of Shellard Road  	Western route originally utilizing Wesley Blvd (B1), adjacent to eastern edge of landfill, and just East of Hydro One Corridor  	Route through “centre” of Study Area, crossing Moffat Creek at narrowest point then ties into Townline Rd west of Cambridge/North Dumfries Boundary  
	What are the potential impacts upon the heritage significance of the heritage structures or landscapes and the potential disturbance of archaeological resources?	<ul style="list-style-type: none"> <li>No new roads constructed so no new impacts to the heritage significance of heritage structures or landscapes, or disturbance of archaeological resources within the study area;</li> <li>Potential improvements to existing roads may have potential to disturb heritage structures or landscapes archaeological resources outside the study area.</li> </ul>	<ul style="list-style-type: none"> <li>Approx. 3900m of proposed road where Stage 2 Archaeological Pedestrian Survey recommended;</li> <li>Approx. 1500m of proposed road where Stage 2 Archaeological Test Pit Survey recommended;</li> <li>5 Listed or “Identified” properties potentially impacted.</li> </ul>	<ul style="list-style-type: none"> <li>Approx. 1700m of proposed road where Stage 2 Archaeological Pedestrian Survey recommended;</li> <li>Approx. 1800m of proposed road where Stage 2 Archaeological Test Pit Survey recommended;</li> <li>1 Listed or “Identified” property potentially impacted.</li> </ul>	<ul style="list-style-type: none"> <li>Approx. 1950m of proposed road where Stage 2 Archaeological Pedestrian Survey recommended;</li> <li>Approx. 3300m of proposed road where Stage 2 Archaeological Test Pit Survey recommended;</li> <li>3 Listed or “Identified buildings potentially impacted.</li> </ul>

LEGEND	 Poor	 Fair	 Fair	 Good	 Good
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# EAST BOUNDARY ROAD - PCC # 3

## ALTERNATIVE EVALUATION MATRIX

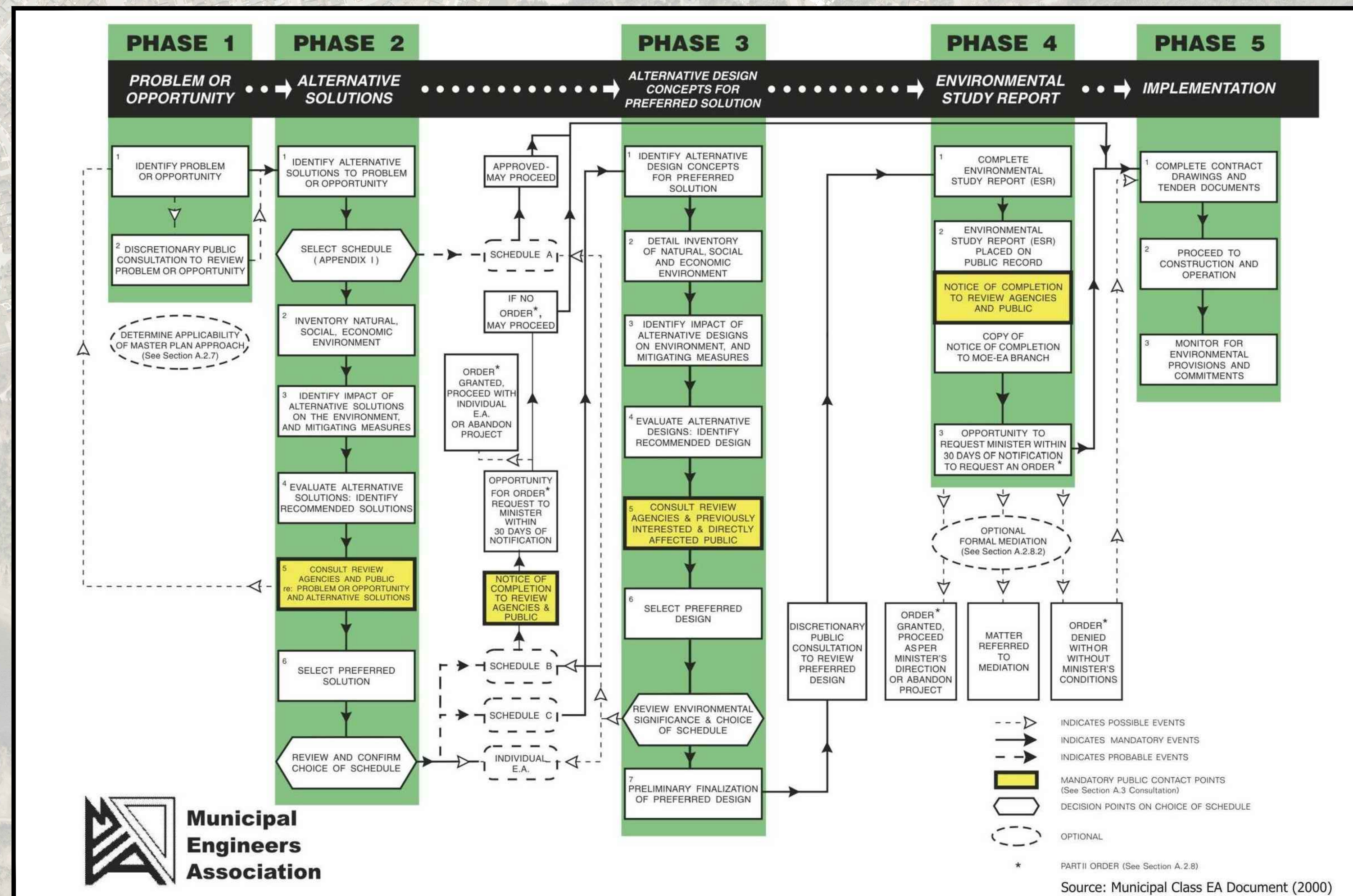
CRITERIA	DESCRIPTION	DO NOTHING	PROPOSED ROUTE A1 / A2	PROPOSED ROUTE B1 / B4	PROPOSED ROUTE C1
<b>Cost</b>	General Description of Route	No new road constructed within study area, but may require improvements to other existing roads, intersections etc., to accommodate future traffic.	Follows route illustrated in Region of Waterloo and Wellington County Official Plan, but no longer continues through Puslinch/Wellington County, and diverts east of Shellard Road  	Western route originally utilizing Wesley Blvd (B1), adjacent to eastern edge of landfill, and just East of Hydro One Corridor  	Route through "centre" of Study Area, crossing Moffat Creek at narrowest point then ties into Townline Rd west of Cambridge/North Dumfries Boundary  
	How do the alternatives compare with respect to anticipated costs: <ul style="list-style-type: none"> <li>○ Capital Costs</li> <li>○ Property Costs</li> <li>○ Utility Relocation Costs</li> </ul>	<ul style="list-style-type: none"> <li>• Less new road capital costs than building a new road, but will be significant capital costs for widening or increasing the capacity of existing roads;</li> <li>• No property required for a new road within the study area, but widening of existing roads will impact the use and area of existing properties along existing roads;</li> <li>• No utility costs for a new road, but there will be significant utility relocation costs for widening of existing roads or intersection improvements.</li> </ul>	<ul style="list-style-type: none"> <li>• Estimated Construction/Capital Cost \$65,200,000 (Highest Cost);</li> <li>• Habitat compensation/mitigation costs unknown due to Agency comments focusing on Preferred Alignment;</li> <li>• Approx. 6300 m of new road including rebuilding approx. 500m of Ripplewood Rd and 700m of Shellard Rd;</li> <li>• Requires new crossing of Moffat Creek (culvert/bridge);</li> <li>• Requires new crossing of Mill Creek (bridge) at wide section of creek;</li> <li>• Utilities on approx. 3900m of existing roads to be relocated;</li> <li>• Crosses/intersects with existing roads at 7 locations;</li> <li>• New at-grade or grade separated (bridge) crossing of CPR tracks required;</li> <li>• Crosses existing CPR tracks on an approx. 70 degree skew;</li> <li>• 550m of road crosses existing wetland areas that may require peat removal and/or strengthened granular road base.</li> </ul>	<ul style="list-style-type: none"> <li>• Estimated Construction/Capital Cost \$58,800,000 (Lowest Cost) ;</li> <li>• Less Habitat compensation/mitigation costs than C1 due to peripheral impacts;</li> <li>• Approx. 5120 m of new road;</li> <li>• Requires new crossing of Moffat Creek (culvert/bridge) ;</li> <li>• Requires new crossing of Mill Creek (bridge) at slightly narrower section of creek;</li> <li>• Crosses/intersects with existing roads at 5 locations including new intersection with Wesley Boulevard;</li> <li>• New at-grade or grade separated (bridge) crossing of CPR tracks required;</li> <li>• Crosses existing CPR tracks on an approx. 40 degree skew;</li> <li>• 400m of road crosses existing wetland areas that may require peat removal and/or strengthened granular road base.</li> </ul>	<ul style="list-style-type: none"> <li>• Estimated Construction/Capital Cost \$62,800,000 (not including environmental mitigation measures)</li> <li>• Significant Habitat compensation/mitigation estimated costs of \$1,000,000 to \$2,000,000 to address Agency Approvals (Total Costs of \$63,800,000 - \$64,800,000);</li> <li>• Approx. 5300 m of new road;</li> <li>• Requires new crossing of Moffat Creek (culvert/bridge) at new location;</li> <li>• Requires new crossing of Mill Creek (bridge) at slightly narrower section of creek;</li> <li>• Crosses/intersects with existing roads at 5 locations;</li> <li>• New at-grade or grade separated (bridge) crossing of CPR tracks required;</li> <li>• Crosses existing CPR tracks on an approx. 60 degree skew;</li> <li>• 300m of road crosses existing wetland areas that may require peat removal and/or strengthened granular road base.</li> </ul>

<b>LEGEND</b>	 Poor	 Fair	 Fair	 Fair	 Good
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# EAST BOUNDARY ROAD CLASS EA

## PUBLIC CONSULTATION CENTRE (PCC) No. 3

# Municipal Class EA Planning and Design Process



Note: This flow chart is to be read in conjunction with Part A of the Municipal Class EA



Region of Waterloo



THE TOWNSHIP OF



NORTH DUMFRIES



# EAST BOUNDARY ROAD CLASS EA

## PUBLIC CONSULTATION CENTRE (PCC) No. 3

# Next Steps

- ✓ Please *fill out a comment sheet, and place in the comment box*, or send them to Justin Armstrong at the Region of Waterloo prior to February 15, 2018.
- ✓ Project Team will review and address comments from PCC No. 3 as they refine the study and routes alternatives.
- ✓ After consideration of all comments received from the public and agencies, and in conjunction with all other relevant information and design standards, the Project Team will review the Evaluation and confirm a Recommended Alignment to be presented to Regional Council in Spring/Summer 2018.
- ✓ After project approval by the Regional Municipality of Waterloo, the project will be "filed" for public review for 30 days under the Municipal Class EA process. (Please see additional details regarding the Class EA Process in the information package.)