Welcome to the Public Information Centre No. 1 for

Municipal Class Environmental Assessment, Phase 3 & 4 Barton Street and Fifty Road Improvements (CN Rail Crossing Phase 1 & 2)

Housekeeping Rules

- Please remain muted during presentation and while others are asking questions

- Questions can be asked by:
  1. Q&A Function
  2. Waiting for designated phone user time
  3. “Raise Hand” & Unmute

- Please keep questions brief

Mute/Unmute

Participants

Chat

Raise Hand

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08 Provide feedback via comment forms

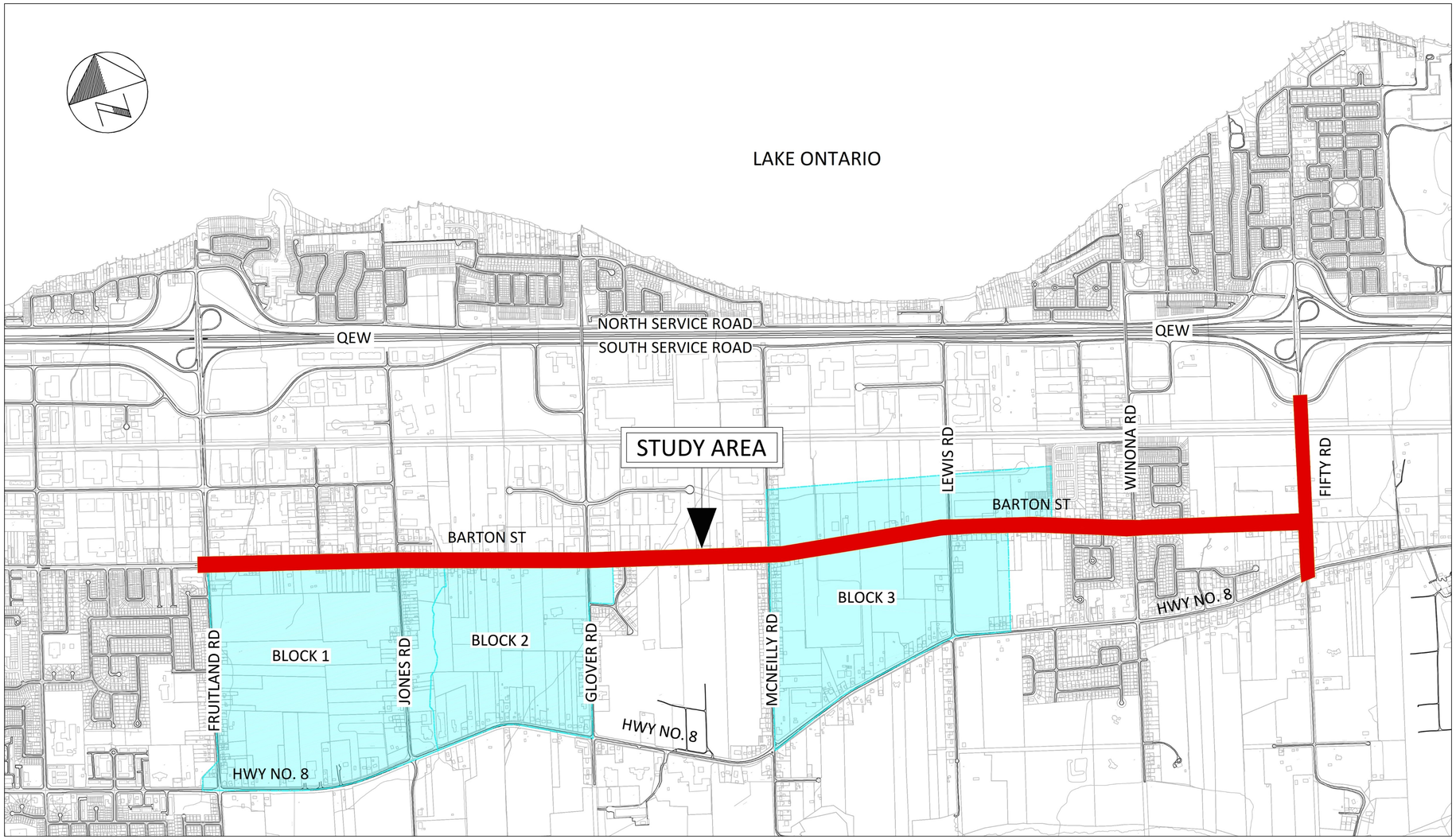
09 Find out where the study is going next…

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

Comment Deadline is July 23, 2021

Study Area and Structure

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



Timeline & Environmental Assessment

Phase 1
Problem or Opportunity

Phase 2
Alternative Solutions

Stoney Creek Urban Boundary Expansion (SCUBE) Transportation Master Plan Completed

September 2017
PIU # 1

Confirm findings of previous studies and develop the preferred roadway designs

Phase 3
Alternative Design Concepts for the Preferred Solution

June 2021
PIC # 1

Included in this EA

Public input is an important and mandated component of the EA process

Your opinions matter

To stay up-to-date with project progress and join the discussion, please sign up to receive future direct mail notices and/or find us on Twitter to receive electronic notifications

For PIU#1 and PIC#1 consultation will include: Indigenous Nations, public and stakeholders, such as CNR, MTO and the Study Focus Group

Will include:
- Existing and future conditions
- Confirmation of needs and opportunities
- Record of public input
- Alternative designs and evaluation
- Environmental impacts and mitigations

Phase 4
Environmental Study Report

Fall 2021
30 Day Review

To be presented to Council for approval prior to 30-day review

Phase 5
Implementation

Problem and Opportunity Statement

The City is taking this opportunity to 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 growing community of lower Stoney Creek, based on recommendations from Fruitland-Winona Secondary Plan – SCUBE Transportation Master Plan. Confirm the need for 36.0 m Road Right-Of-Way and 4.0 m Promenade along southern edge
- Ensure both commuter and recreational transportation needs are met across **all age groups and transportation modes**
- **Improve connectivity** between residential areas, schools, workplaces and other community 'Points of Interest'
- **Improve safety and reduce delays** at intersections, including the CN/ Metrolinx grade crossing 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 **transit** within the study roadways

Rendering from the Fruitland-Winona Urban Design Guidelines showing what the Promenade is proposed to look like.

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

Public Information Update #1

What have we heard from you so far?

The first Public Information Update was held on Thursday September 21, 2017. The event introduced the project to the public and allowed them to voice specific issues and concerns.

Public comments were received at the event and received via mail and e-mail following the event. Key areas of concern are summarized below:

- Past flooding and drainage issues in the study area
- Transport trucks travelling on Barton Street, especially the noise created when transport trucks pass over manholes
- Level of traffic on Barton Street makes it difficult for some residents to back out of their driveways
- Amount of land required for widening of Barton Street right-of-way
- Current intersection design at Fifty Road and South Service Road. Desire to see northbound right turn lane added
- Would like to see hydro lines and phone lines buried
- Safety at CNR Crossing over Fifty Road

Completed Technical Studies

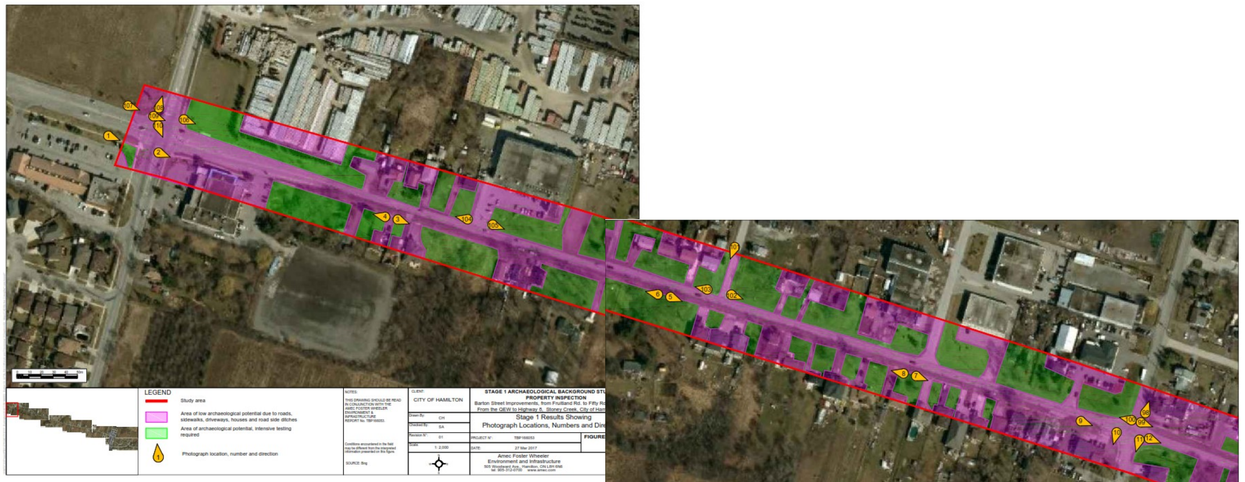
Archaeology

Findings of Stage 1 Report:

- 51% of the study area has been determined to have had archaeological potential removed due to existing roads, driveways, sidewalks, houses and gravel ditches
- Remaining 49% exhibits archaeological potential as identified in the report and seen in the maps below

Recommendations

- Stage 2 Archaeological Assessment recommended in remaining areas of archaeological potential during detailed design process



Built & Cultural Heritage

Findings

- 16 cultural heritage resources identified as having heritage interest or value
  - 15 built heritage resources
  - 1 cultural heritage landscape resource
  - 5 built heritage resources listed with the City, but none designated
- 12 built heritage resources are not listed with the City, but have heritage value or interest

Recommendations

- Cultural heritage landscape should be maintained as much as possible
- Construction fencing and tree hoarding adjacent to heritage resource
- Standard road construction techniques, excluding all avoidable construction techniques that could cause structural damage to heritage resources
- Trees that cannot be saved should be replaced with large caliper nursery stock appropriate for roadside use. Replacement trees should replicate as closely as possible the heritage appearance, assortment and placement of the current trees
- Roadway engineering should not obscure or unduly impact heritage character

Completed Technical Studies

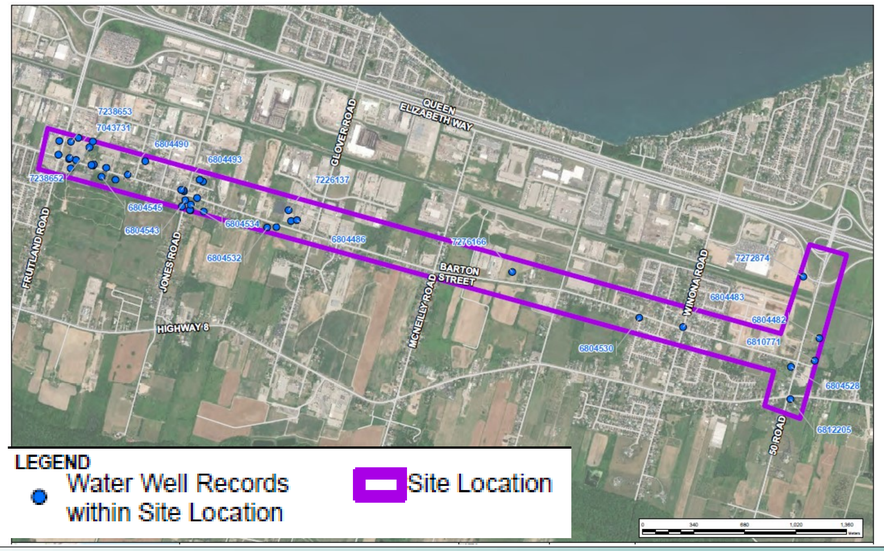
Hydrogeology

Findings

- There are several watercourse crossings in the area, including 5-Barton and Fruitland, 6-Barton and Jones, and 7-Barton and Glover
- Fifty Creek is adjacent to Fifty Road and Hwy 8
- No groundwater was discovered during explorative drilling
- No water sources are expected to be impacted during construction activities

Recommendations

- An Environmental Activity and Sector Registry or Permit To Take Water may be required
- Any water discharged to the sewer system must comply with the City's Sewer Use Bylaw and requires a permit. Any water discharged towards a water body must comply with the Provincial Water Quality Objectives



Geotechnical

Findings

- Existing pavement condition ranged from 'Fair to Poor' condition
- Groundwater was not encountered in any boreholes

Recommendations

- Partial depth re-construction of pavement
- Roadway widening should match existing pavement thickness to promote drainage
- Installation of a subdrain
- Provide adequate drainage laterally and longitudinally along the length of the project
- Installation of anti-seepage collars for pipes installed under groundwater table

Completed Technical Studies

Natural Environment

Findings

Terrestrial

- Fifty Creek Valley Environmentally Significant Area (ESA) and Fifty Mile (non-provincially significant wetland) are adjacent to Fifty Road
- 3 avian species at risk present in study area: Barn Swallow, Bank Swallow, Eastern Meadowlark
- 3 significant woodlands present in study area
- Significant wildlife habitat in the form of reptile hibernaculum and amphibian breeding habitat may be present

Aquatic

- 9 drainage features cross Barton Street
- 5 watercourses have intermittent flow and may provide seasonal habitat to fish
- Fifty Creek is a permanent warm-water habitat and has been identified as an Urban River Valley in the Greenbelt Plan

Recommendations

- Vegetation clearing and grubbing should be kept to a minimum and areas should be restored to equal or better condition using native, non-invasive seed mix
- Vegetation removal should not occur during local bird breeding season
- Implement mitigation measures to avoid adverse environmental effects on fish and fish habitat
- Consider enhancement measures to improve aquatic habitat following construction
- Implement restricted timing to protect warm water fish species

Barton Street Evaluation of Alternative ROW Centre Line Alignments

Category and Criteria	Alternative 1: ROW Widened Along Existing Centreline	Alternative 2: ROW Widened North by 4.0 m	Alternative 3: ROW Widened North but Maintain Property Line
Natural Environment	• **71** trees impacted • ROW alignment potentially impacts approx. **0.892 ha** of SAR habitat • The impact on the Fresh- Moist Green Ash-Hardwood Lowland Deciduous Forest is greatest for Alternative 1 (approx. **0.14 ha;** northeast of Barton Street and Glover Road intersection)	• **43** trees impacted • ROW alignment potentially impacts approx. **0.65 ha** of SAR habitat • Minimal impact (approx. **0.06 ha**) to Fresh-Moist Green Ash-Hardwood Lowland Deciduous Forest (northeast of Barton Street and Glover Road intersection)	• **49** trees impacted • ROW alignment potentially impacts approx. **0.65 ha** of SAR habitat • Minimal impact (approx. **0.06** ha) to Fresh-Moist Green Ash-Hardwood Lowland Deciduous Forest (northeast of Barton Street and Glover Road intersection)
	○	●	●
Social/ Cultural Environment	• **88** residential properties impacted • **9** businesses impacted • No increase or decrease to road noise	• **80** residential properties impacted • **10** businesses impacted • Reduction in road noise as road alignment shifts away from residential properties. Landscaped buffer added on south side	• **60** residential properties impacted • **3** businesses impacted • Reduction in road noise as road alignment shifts away from residential properties. Landscaped buffer added on south side • Consistent ROW/cross section with Barton Street west of Fruitland Road • Consistent property taking on north side
	○	◑	●
Financial	• Property acquisition cost: **$850 K** • Residential buyout cost: **$34.5 M**	• Property acquisition cost: **$1.65 M** • Residential buyout cost: **$32.5 M**	• Property acquisition cost: **$1.56 M** • Residential buyout cost: **$30 M**
	○	○	◑
Engineering - Transportation	• Straight alignment and adequate sight distance throughout corridor • Does not provide continuity west of Fruitland Rd, in terms of ROW	• Straight alignment and adequate sight distance throughout corridor • Does not provide continuity west of Fruitland Rd, in terms of ROW	• Straight alignment and adequate sight distance throughout corridor • Provides continuity west of Fruitland Rd, in terms of ROW
	◑	◑	●
Engineering – Other	• Applicable for all alternatives: • Requirement for updates of 6 existing major culverts. • Roadways and existing culvert replacements will be designed to City standards with respect to flood risk. • Management of stormwater quality and quantity will be addressed, and sustainable techniques recommended for consideration during detailed design process. • Use of solar-powered lights and innovative active transportation facility materials (i.e., permeable pavements) will be recommended for consideration during detailed design process.		

Barton Street Preliminary Preferred Alignment

The alternative ROW alignments for Barton Street was analyzed based on natural and social environment and financial and engineering considerations. **Alternative 3 (ROW Widened North but Maintain Property Line)** was selected as the preliminary preferred alignment due to a number of advantages compared to the other alternatives.

A summary of the key impacts and benefits of Alternative 3 is provided below:

- Meets City of Hamilton safety standards
- Reduces impacts on properties on both sides of the roadway
- Minimal impact to natural environment
- Utilizes previously dedicated properties on the north side and optimizes property taking, by maintaining a straight property line

The roll plan of the preferred alignment is located on the project website – engage.hamilton.ca/bartonfiftyea

Fifty Road Alternative Alignment Options Overview

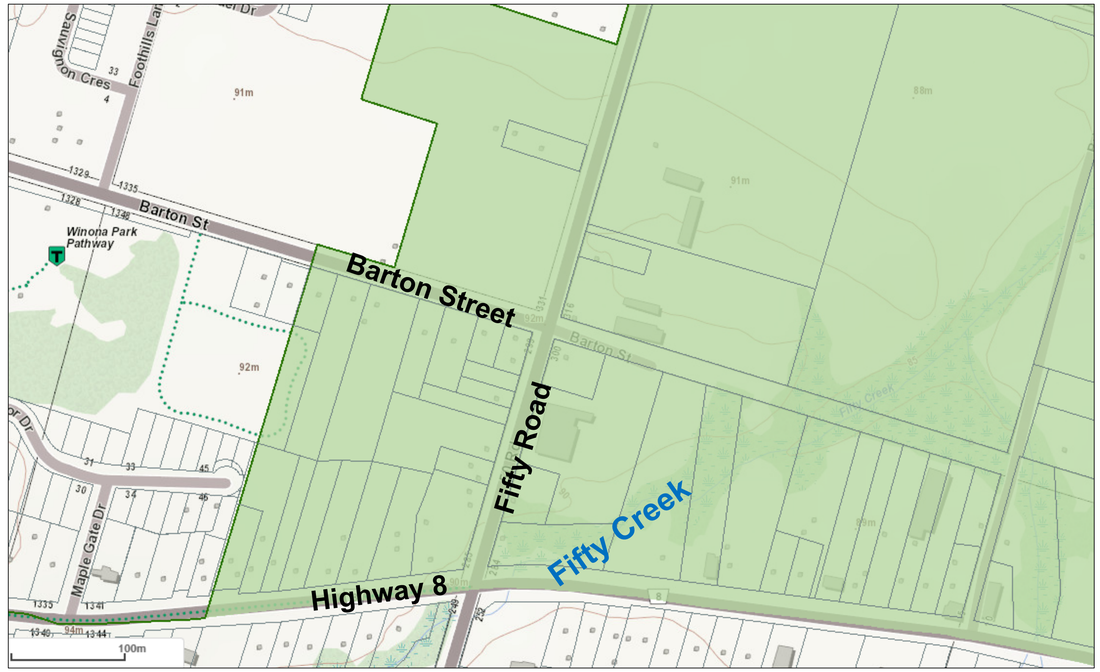
Constraints and considerations for the development of the Alternative Alignment Options for Fifty Road

1. The designated ROW listed in UHOP for this roadway is 26.0 m

2. Current ROW width varies from 20.0 m to 26.0 m ROW within the study area

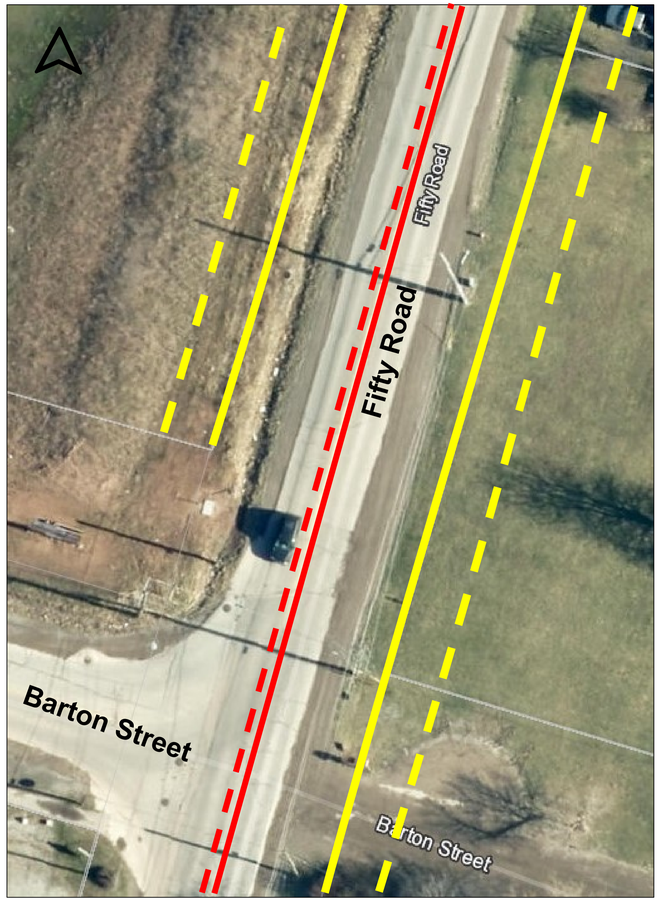
3. Only the northwest portion of the Fifty Road study area falls within the urban boundary (the rest abuts the Greenbelt at the intersection with Barton Street and the eastern portion south of CN Rail line)

4. Fifty Creek flows under the intersection at Highway 8 and along the eastern edge of Fifty Road, posing drainage challenges

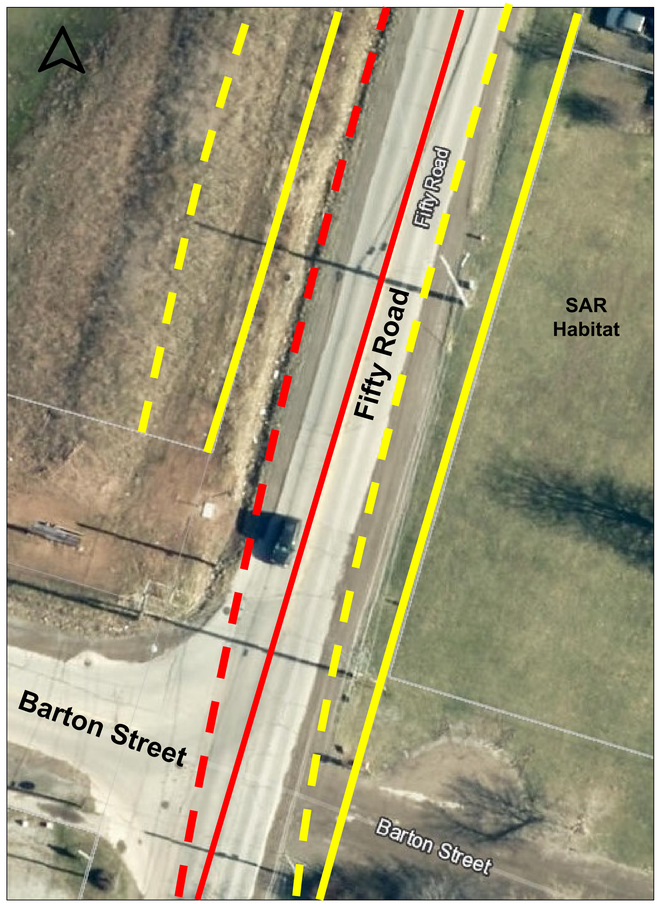


Three alignment alternatives were developed, which include consideration of a Rapid Transit line connection from Barton Street to the future transit hub south-west of the QEW interchange, urban boundary and Greenbelt designation, CN Rail crossing and approved development south-west of the CN Rail crossing. Preliminary analysis determined that 26.0 m ROW can remain south of Barton, but north of Barton Street considerations included 26.0 m, 30.0 m and 36.0 m ROW widths. 30.0 m ROW is confirmed to be the preferred ROW width. All three alternatives incorporate the same ROW widths (26.0 m south of Barton and 30.0 m north of Barton Street).

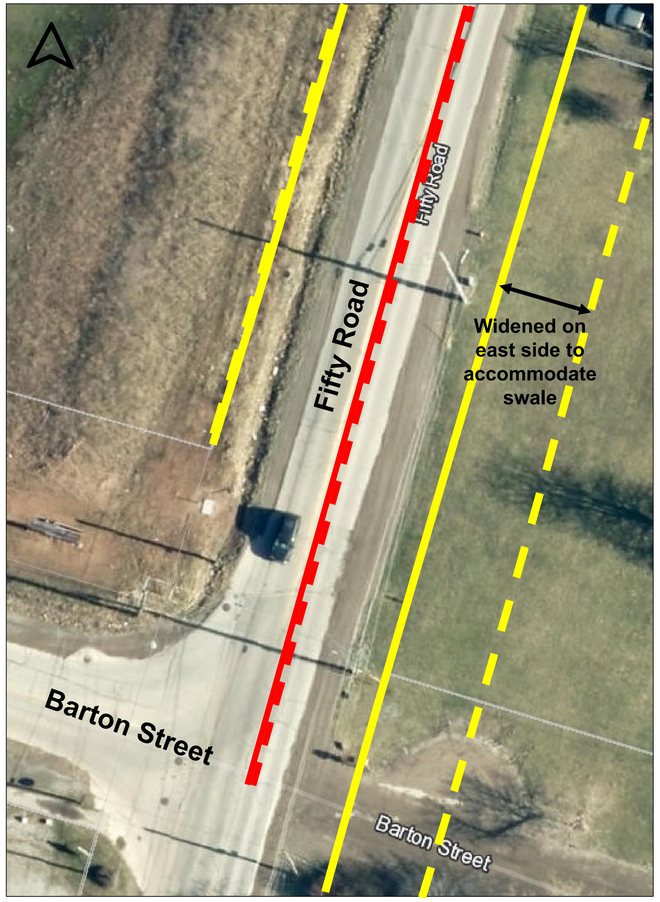
Fifty Road Alternative Alignment Options



Alternative 1 (excerpt) - ROW widened evenly along existing centre line – standard approach



Alternative 2 (excerpt) - ROW widened from existing ROW width to avoid constraints, such as Species at Risk (SAR) habitat – hybrid shape



Alternative 3 (excerpt) - ROW widened to east from centre line of existing ROW – match the western boundary of already dedicated lands from existing ROW centre line and address stormwater management needs relating to Fifty Creek

The full roll plan of the preferred alignment is located on the project website – engage.hamilton.ca/bartonfiftyea

Proposed ROW limits
Existing ROW limits
Proposed road centre line
Existing road centre line

wood.

Fifty Road Evaluation of Alternative ROW Alignments

Category and Criteria	Alternative 1: ROW Widened Along Existing Centreline	Alternative 2: ROW Widened to Avoid Constraints (Hybrid)	Alternative 3: ROW Widened to the East
Natural Environment	• ROW alignment potentially impacts approx. **0.892 ha** of SAR habitat • Impact to the Fresh-Moist Willow Lowland Deciduous Forest approx. **0.045 ha** (northeast of Fifty Road and Highway 8)	• ROW alignment potentially impacts approx. **0.039 ha** of SAR habitat • Impact to the Fresh-Moist Willow Lowland Deciduous Forest approx. **0.037 ha** (northeast of Fifty Road and Highway 8)	• ROW alignment potentially impacts approx. **0.963 ha** of SAR habitat, however a wider swale will be implemented in this area • Impact to the Fresh-Moist Willow Lowland Deciduous Forest approx**. 0.031 ha** (northeast of Fifty Road and Highway 8)
	○	◑	◑
Social/ Cultural Environment	• **1** existing property will be impacted • **3** planned residential properties impacted • No business impact	• **1** existing property will be impacted • **20** planned residential properties will be impacted • Multiple businesses will be impacted	• **5 existing** properties will be impacted • **18** planned residential properties will be impacted • **1** business will be impacted
	●	○	◑
Financial	• Residential buyout cost: **$2.75 M**	• Residential buyout cost: **>$2.75 M**	• Residential buyout cost: **$2.5 M**
	◑	○	●
Engineering - Transportation	• All intersections for all alternatives will be designed to provide the same level of safety • All alternatives contemplate implementation of similar cross-sections, allowing for implementation of similar urban design features		
Engineering – Other	• Applicable to all alternatives • None to minimal impacts to major culverts • Roadways and existing culvert replacements will be designed to City standards with respect to flood risk • Management of stormwater quality and quantity will be addressed, and sustainable techniques recommended for consideration during detailed design process • Use of solar-powered lights and innovative active transportation facility materials (i.e., permeable pavements) will be recommended for consideration during detailed design process		

Fifty Road Preliminary Preferred Alignment

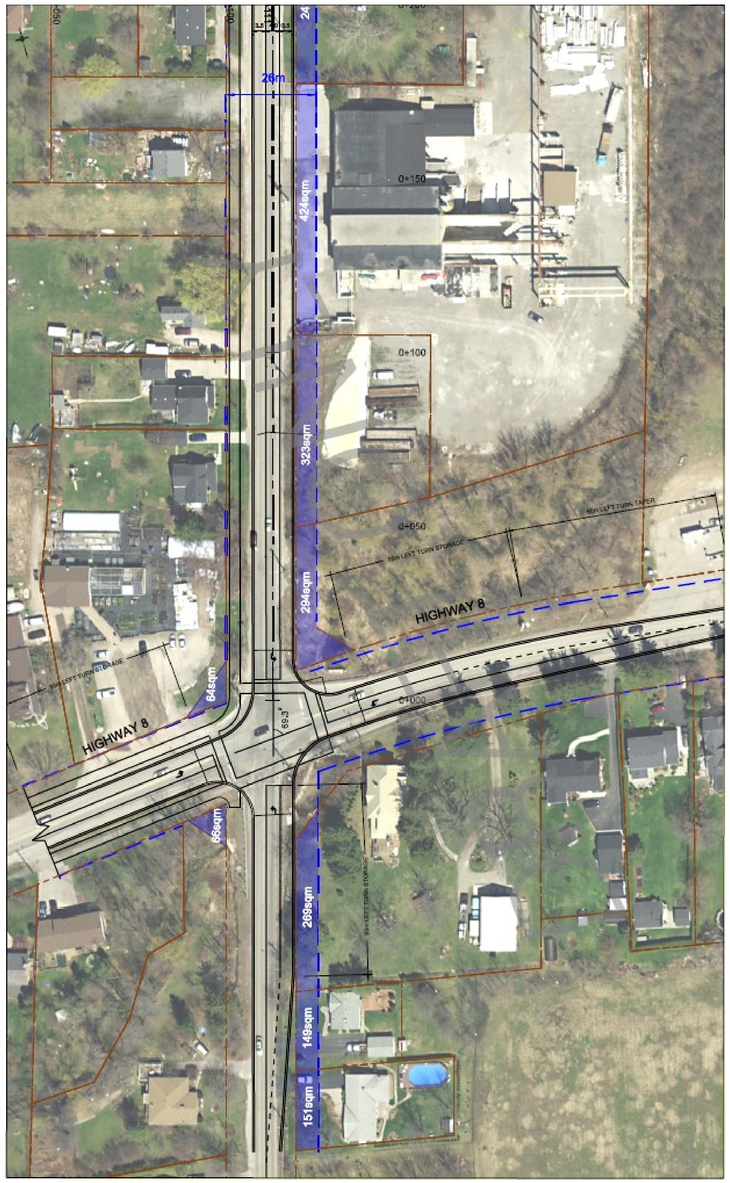
The alternative alignments for Fifty Road was analyzed based on natural and social environment and financial and engineering considerations. **Alternative 3 (ROW Widened to the East)** was selected as the preliminary preferred alignment due to a number of advantages compared to the other alternatives.

A summary of the key impacts and benefits of Alternative 3 is provided below:

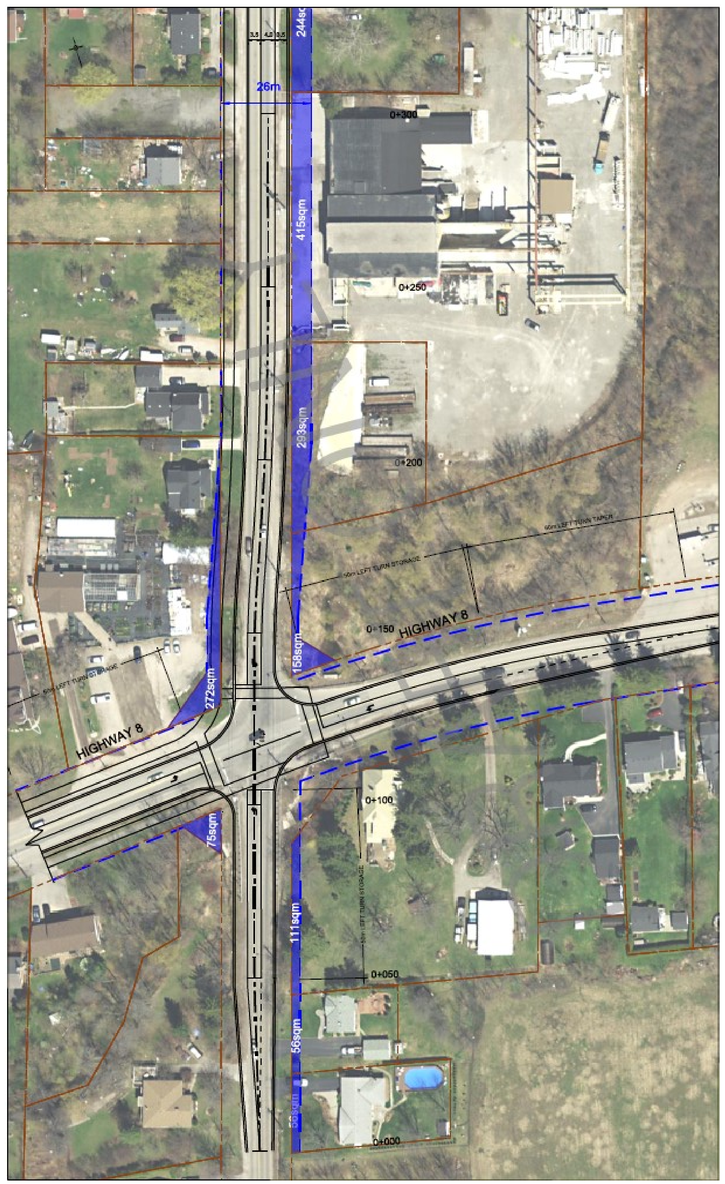
- Avoids impacts to previously approved development applications
- Reduced impacts to residential properties, south of Barton Street
- Optimizes property acquisitions

The roll plan of the preferred alignment is located on the project website - engage.hamilton.ca/bartonfiftyea

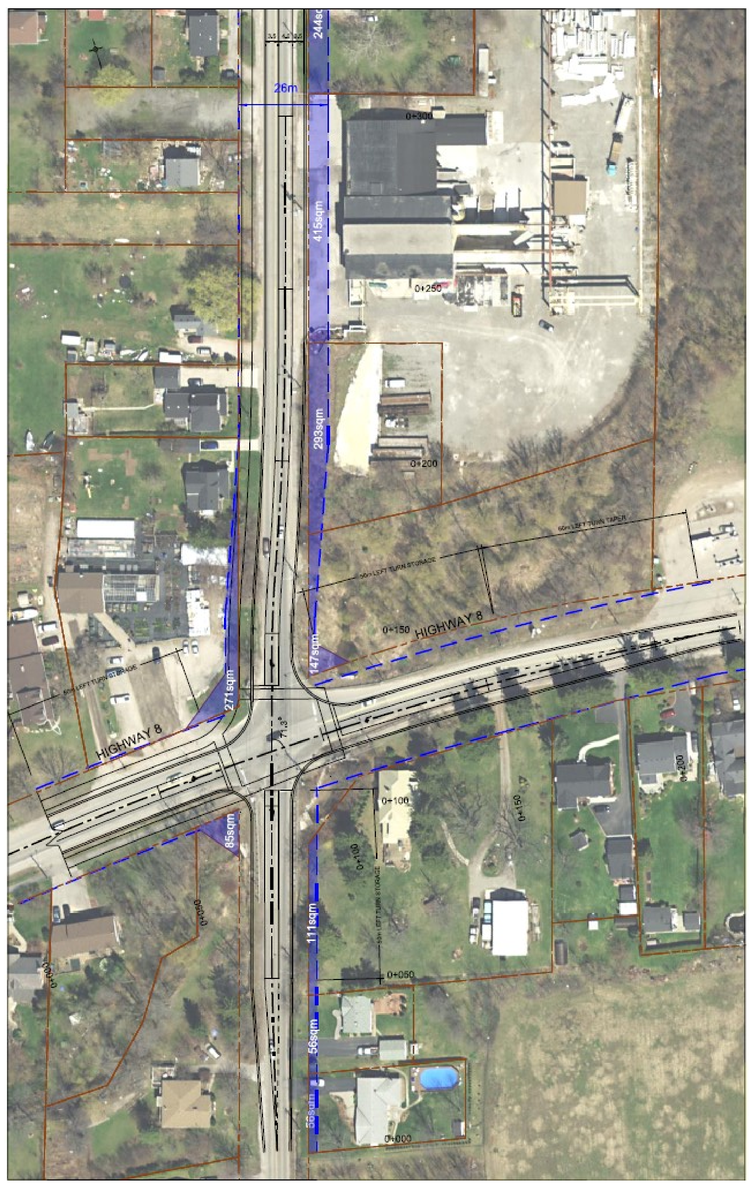
Fifty Road and Highway 8 Intersection Options



Alternative 1 (excerpt) - Shifting to the East



Alternative 2 (excerpt) - Shifted 4 m to the West



Alternative 3 (excerpt) - Shifting 4 m to the West and Shifting to the South

Fifty Road and Highway 8 Intersection Evaluation

Category and Criteria	Alternative 1: Shifting to the East	Alternative 2: Shifted 4 m to the West	Alternative 3: Shifting 4 m to the West and Shifting to the South
Natural Environment	• Minor impact on wetlands on the northeast quadrant • Minor impact on wetlands on the southwest quadrant	• Lower impact on wetlands than Alternative 1	• Lower impact on wetlands than Alternative 1 and 2
	○	◑	●
Social/ Cultural Environment	• Impacts to properties in all three quadrants: northeast, southeast, southwest • Total property impact: 6443 sqm	• Impacts to properties in all four quadrants • Total property impact: 6244 sqm	• Impacts to properties in all four quadrants • Total property impact: 6242 sqm
	○	●	●
Financial	• High cost due to potential culvert extension	• Mid-high cost due to property impacts	• Mid-high cost due to property impacts
	○	◑	◑
Engineering - Transportation	• Intersection skew angle: 69.3 degrees	• Intersection skew angle: 69.3 degrees	• Improved intersection skew angle: 71.3 degrees
	◑	◑	●
Engineering – Other	• An extension of existing culvert couth of Highway 8 may be required	• Culvert extension may not be required	• Culvert extension may not be required
	○	◑	◑

Fifty Road and Highway 8 Preferred Intersection

The alternative alignments for the Fifty Road and Highway 8 intersection was analyzed based on natural and social environment and financial and engineering considerations. **Alternative 3 (Shifting 4 m to the West and Shifting to the South)** was selected as the preliminary preferred alignment due to a number of advantages compared to the other alternatives.

A summary of the key impacts and benefits of Alternative 3 is provided below:

- Improved Intersection Skew Angle
- Extension of the existing culvert (south of Highway 8, along Fifty Road) may not be required

The roll plan of the preferred alignment is located on the project website - engage.hamilton.ca/bartonfiftyea

Alternative Cross-Sections Options Overview

The following alternatives were short-listed based on consultation with the City. They represent possible viable options for the future cross-section of both Barton Street and Fifty Road. For a full set of drawings please see:
engage.hamilton.ca/bartonfiftyea

Barton Street

Alternative 1		Alternative 2		Alternative 3	
Interim • Sidewalk (north side) • Two travel lanes • Centre turn lane • Parking lane (south side) • Cycle track (south side) • Promenade (south side)	**Ultimate** • Sidewalk (north side) • Four travel lanes • Cycle track (south side) • Promenade (south side)	**Interim** • Sidewalk (north side) • Two travel lanes • Centre turn lane • Bike lanes (on-street both sides) • Promenade (south side)	**Ultimate** • Sidewalk (north side) • Four travel lanes • Bike lanes (on-street both sides) • Promenade (south side)	**Interim** • Sidewalk (north side) • Four travel lanes • Centre turn lane • Multi-use pathway (south side)	**Ultimate** • Sidewalk (north side) • Four travel lanes • Centre turn lane • Cycle track (south side) • Promenade (south side)

Fifty Road

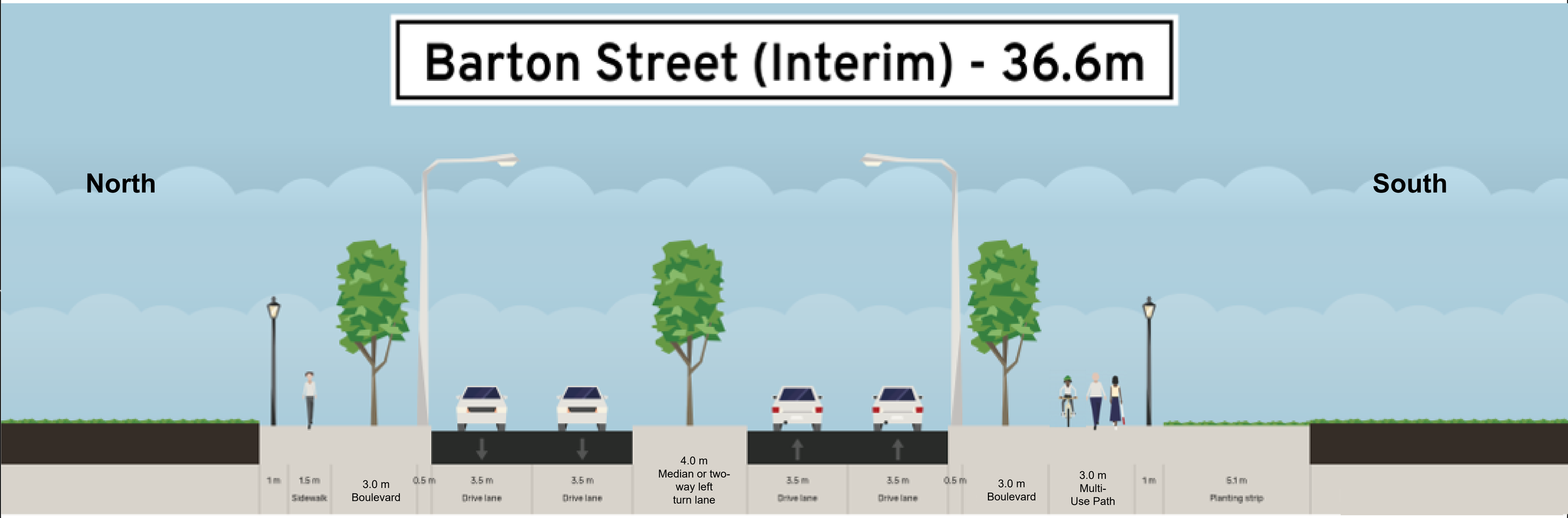
Alternative 1	Alternative 2	Alternative 3	
• Sidewalk (both sides) • Cycle track (both sides) • Four through lanes	• Sidewalk (both sides) • Bike lane (on-street both sides) • Four through lanes • Median	**North of Barton Street** • Multi-use pathway (west side) • Four travel lanes • LID* (east side)	**South of Barton Street** • Multi-use pathway (west side) • Two travel lanes • Centre turn lane • LID* (east side)

*LID – Low Impact Development

Evaluation of Alternative Cross Sections – Barton Street

Design Objectives	Alternative 1 (Ultimate)	Alternative 2 (Ultimate)	Alternative 3 (Ultimate)
Meets or Exceeds City Standards	• The parking lane may be used for passing (interim)	• Centre turn lane is wider than standard; may encourage excessive speeds	• Meets City standards
	○	○	●
Operations considerations for left and right turning vehicles	• No special consideration for left turning vehicles in ultimate design	• No special consideration for left turning vehicles in ultimate design	• Centre turn lane provided in interim and ultimate scenario
	○	○	●
Meets Pedestrian Needs	No difference between alternatives. Similar higher-order pedestrian facilities provided in all alternatives		
Meets Cyclists Needs	• Does not provide cycling connectivity on north side of the roadway where employment and one of the elementary schools are located (localized improvements could be considered) • Multi-use path provided on south side in interim and ultimate scenario. Buffered cycle track provided in the ultimate scenario	• Provides cycling facilities on both sides of Barton Street, however on-road facilities are not favoured for younger riders	• Does not provide cycling connectivity on north side of the roadway where employment and one of the elementary schools are located (localized improvements to be considered) • Multi-use path provided on south side in interim and ultimate scenario. Buffered cycle track provided in the ultimate scenario
	◑	○	◑
Compatibility with Cultural/ Archaeological/ Socio-ec/ Natural Environment/ Adjacent Land Uses and Transit. Provides adequate width for utilities outside of clear zone No significant difference between alternatives			
Provision for linear greenspace on south side	• Provides the greatest width for the south side linear greenspace	• Provides significant width for the south side linear greenspace	• Provides significant width for the south side linear greenspace
	●	◑	◑
Construction Impacts	• Significant construction impacts at the interim stage • Minor restriping at the ultimate stage	• Significant construction impacts at the interim stage • Further impacts at the ultimate stage (addition of median)	• Significant construction impacts at the interim stage • Minor construction impacts at the ultimate stage (addition of cycle track on south side)
	◑	○	◑
High level implementation cost for ultimate condition	• **$3600/m x 5,100m length** • **$18,400,000 total** for corridor	• **$4000/m x 5,100m length** • **$20,400,000 total** for corridor	• **$3800/m x 5,200m length** • **$19,400,000** for corridor
	●	◑	◑

Barton Street Preferred Cross-Section (Alternative 3)

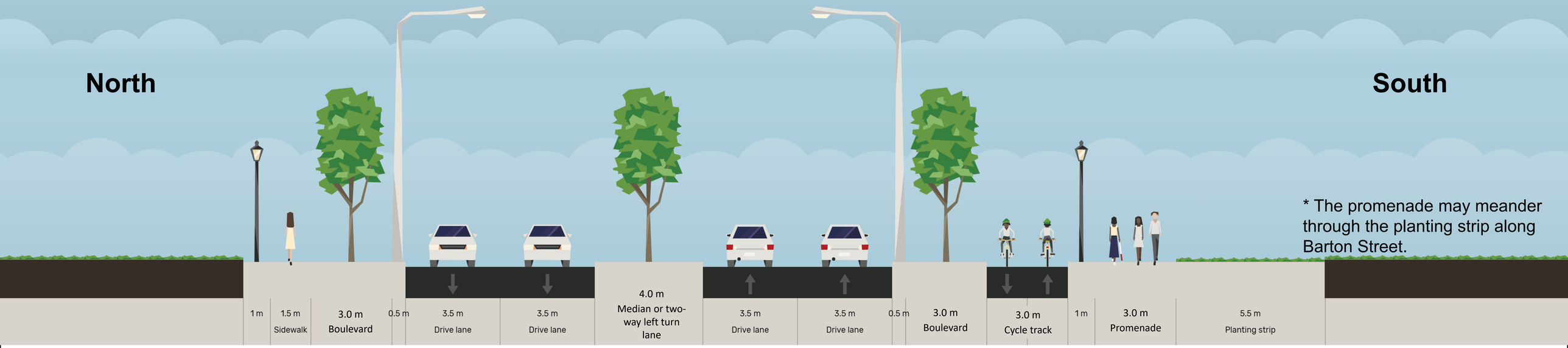


Widening to 4 lanes is preferred as Barton Street will be designated as a major east-west throughfare roadway and preferred route over Highway 8 for traffic and future transit

The property taking will be a gradual process and will happen slowly over time. Consideration will be given to negotiating property takings during the development application process

Barton Street Preferred Cross-Section (Alternative 3)

Barton Street (Ultimate) - 40.0m



The ultimate condition will dedicate space for a potential transit lane

Location of future pedestrian promenade is approximate and subject to streetscaping and landscaping during the detailed design process. There is a need for separate space for pedestrians and cyclists, which confirms the need for the ultimate ROW width

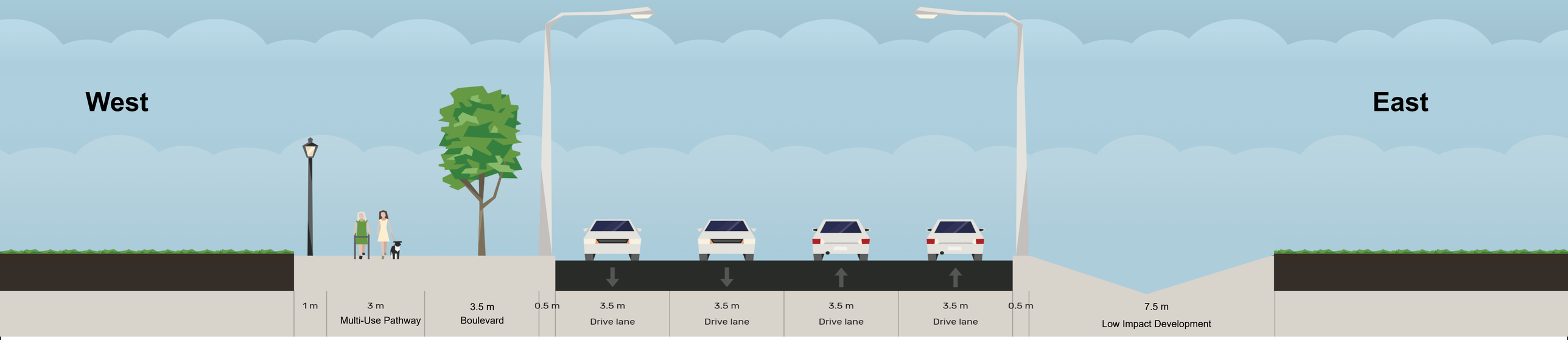
The ultimate condition will include a large landscaped buffer on the south side of Barton Street. This will separate the residential land use on the south side and the commercial/industrial land use on the north side. The buffer will reduce potential traffic noise impacts on the residential properties and will likely vary in length (meander)

Fifty Road - Evaluation of Alternative Cross Sections

Design Objectives	Alternative 1	Alternative 2	Alternative 3	
Key Features	• Sidewalk (both sides) • Cycle track (both sides) • Four through lanes	• Sidewalk (both sides) • Cycle lane (both sides) • Four through lanes • Median	**<u>North of Barton Street</u>** • Multi-use pathway (west side) • Four travel lanes	**<u>South of Barton Street</u>** • Multi-use pathway (west side) • Two travel lanes • Centre turn lane
Meets or Exceeds City Standards	• Meets City standards			
Operations considerations for left and right turning vehicles in the ultimate condition	• No special consideration for left turning vehicles ○	No special consideration for left turning vehicles. ○	• Centre turn lane provided south of Barton Street into residential/commercial properties ●	
Meets Pedestrian Needs	• Sidewalks on both sides of roadway (minimal benefit on east side) ●	• Sidewalks on both sides of roadway (minimal benefit on east side) ●	• Multi-use path provided on the west side (servicing adjacent residential development and commercial area off South Service Road) ●	
Meets Cyclists Needs	• Cycle track on both sides of roadway ●	• Cycle lanes (adjacent to travel lanes) less desirable ○	• Multi-use path provided on the west side (servicing adjacent residential development and commercial area off South Service Road) ●	
Natural Environment	• No special provisions for natural environment ○	• No special provisions for natural environment ○	• Low impact development (swale) proposed for east side of roadway ●	
Cultural/Archaeological/Socio-economic Environment	No significant difference between alternatives			
Compatible with Adjacent Land Uses (Current and Future)	No significant difference between alternatives			
Provides adequate width for utilities outside of clear zone	No significant differences between alternatives			
High level implementation cost	**$4,300/m x 820m length** **$3,500,000** for corridor total ○	**$4,500/m x 820m length** **$3,700,000** for corridor total ○	**$3,800/m x 820m length** **$3,100,000** for corridor total ●	

Fifty Road Preferred Cross-Section (Alternative 3)

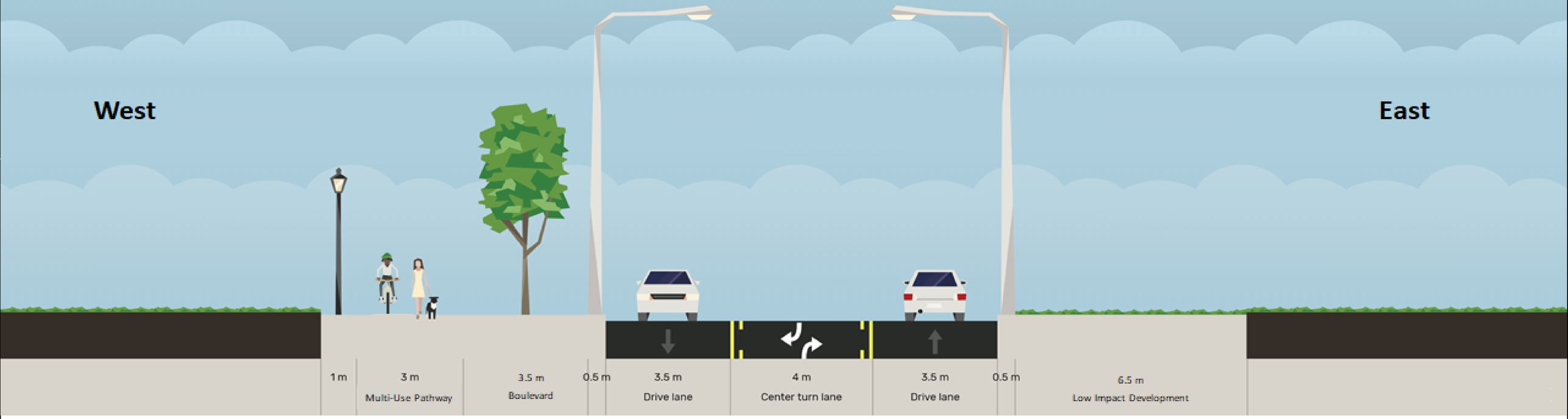
Fifty Road North of Barton Street - 30.0m



- Incorporates active transportation facilities (multi-use path)
- The Traffic Impact Study confirmed the lanes required
- Considers the existing truck route
- Protects Greenbelt land
- Considers Fifty Creek, which runs in parallel to Fifty Road and crosses at the intersection with Highway 8
- The number of lanes/ROW higher north of Barton to support future Rapid Transit from Barton Street to future Transit Hub
- Incorporates stormwater management features (Low impact development (swale)) accommodating road run-off from both sides of the road, as well as providing a more rural look

Fifty Road Preferred Cross-Section (Alternative 3)

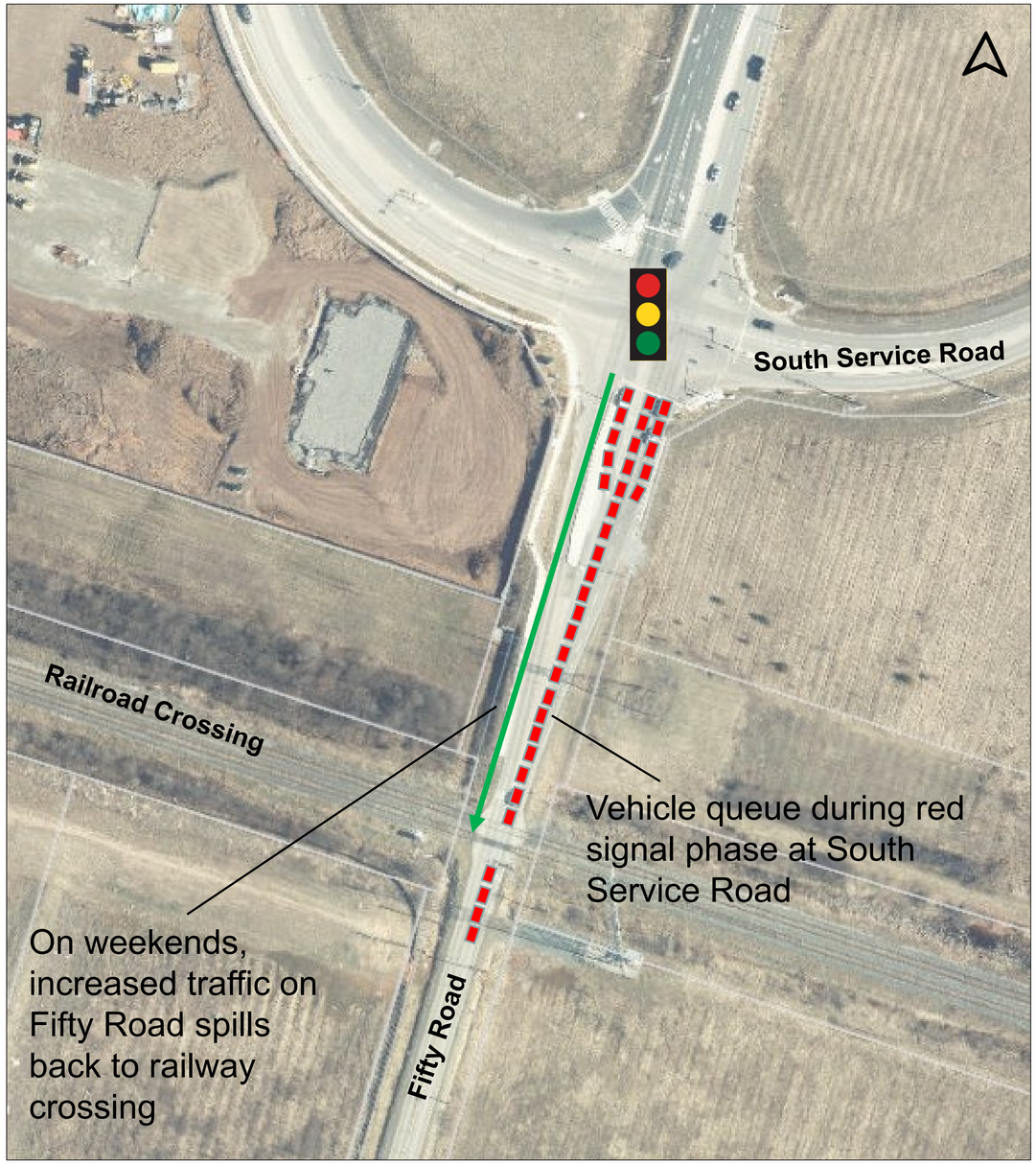
Fifty Road South of Barton Street - 26.0m



- Centre turn lane provided for ease of turning into residential/commercial properties
- Incorporates active transportation facilities (multi-use path)
- Incorporates stormwater management features on east side of Fifty Road (Low impact development (swale))

Fifty Road Grade Crossing

- Recommendations from the *Safety Assessment for CN Grade Level Railway Crossings* (Oct 2020) were used to support inform the Barton Street/Fifty Road MCEA
- In the short term:
  - Installed additional warning signs at crossing
  - Apply the stop bar marking and “X” symbol on both north and south approach (Spring/Summer 2021)
  - Staff investigating the underlying causal factors that are contributing to the queue at the crossing (2021)
- To fulfill Phase 2 requirements of the MCEA process, three alternatives were explored (Do Nothing, Underpass and Overpass)



Fifty Road Grade Crossing Phase 2 Evaluation

Category and Criteria	Alternative 1: Do Nothing	Alternative 2: Grade Separation – Underpass	Alternative 3: Grade Separation – Overpass
Natural Environment	• No impacts	• Potential impacts to SAR habitat	• Potential impacts to SAR habitat
	●	◑	◑
Social Environment	• No impacts	• No visual impacts to nearby residences	• Potential visual impacts to nearby residences
	●	●	◑
Transportation	• Traffic safety would remain a concern • Impact associated with increased traffic not addressed	• Improved traffic conditions	• Improved traffic conditions
	○	●	●
Cost	• Zero capital cost	• Significant capital cost • Comparatively higher cost for stormwater management	• Significant capital cost • Gravity-fed solutions for stormwater management
	●	○	◑
Technical	• No construction • No upgrading of existing infrastructure	• Lower clearance requirement • Improved air quality and lower noise nuisance due to reduction of idling at rail crossing	• Higher clearance requirement • Improved air quality and lower noise nuisance due to reduction of idling at rail crossing
	○	●	◑
Transportation Plans and Policies	• Recommended improvements for future growth would not be implemented	• Improvements would address transportation plans and policies	• Improvements would address transportation plans and policies
	○	●	●

Fifty Road Grade Crossing Phase 2 Evaluation
Preliminary Preferred Solution

The alternative planning solutions for the Fifty Road Grade Crossing was analyzed based on natural environment, social environment, transportation, cost, technical and policy considerations. **Alternative 2 (Underpass)** was selected as the preliminary preferred solution due to a number of advantages compared to the other alternatives.

A summary of the key impacts and benefits of Alternative 2 is provided below:

- No visual impacts to nearby residences
- Lower clearance requirement

Fifty Road at CN Rail crossing will fulfill Phases 1 & 2 of the MCEA process. This EA will allow for the future ROW to accommodate a bridge or a tunnel, if it is warranted in the future. Subsequent Phases 3 & 4 will address this fully in a separate MCEA process

Next Steps

Your input is important! Over the coming months, the Study Team will:

1. **Finalize** the conceptual preferred designs based on feedback from this PIC and related consultation. Anticipated impacts and mitigation methods will be fully documented.

2. **Prepare the Environmental Study Report (ESR)** and present to City council for approval.

3. **Provide a copy of the ESR to the Provincial Agencies,** for their 30-day review.

4. **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 opposed to the report based on impacts to Indigenous and Treaty Rights, an appeal may be made to the Minister of Environment, Conservation and Parks under the EA Act.

5. **Detailed Design** for Barton Street is currently scheduled to begin in 2025. Detailed Design schedule for Fifty Road is pending. Property acquisition will be finalized at this stage of implementation, with construction to follow.

Comment Deadline for consideration in next steps
July 23, 2021

Thank you for Participating!

We Want to Hear From You!

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

Please fill out and send us comment forms to one of the mailing or email addresses listed on the comment sheet and project website.

www.hamilton.ca/barton-fifty-ea/ engage.hamilton.ca/bartonfiftyea

Comment Deadline: July 23, 2021

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

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Housekeeping Rules

- Please remain muted during presentation and while others are asking questions

- Questions can be asked by:
  1. Q&A Function
  2. Waiting for designated phone user time
  3. “Raise Hand” & Unmute

- Please keep questions brief

Mute/Unmute

Participants

Chat

Raise Hand

Ongoing Technical Studies

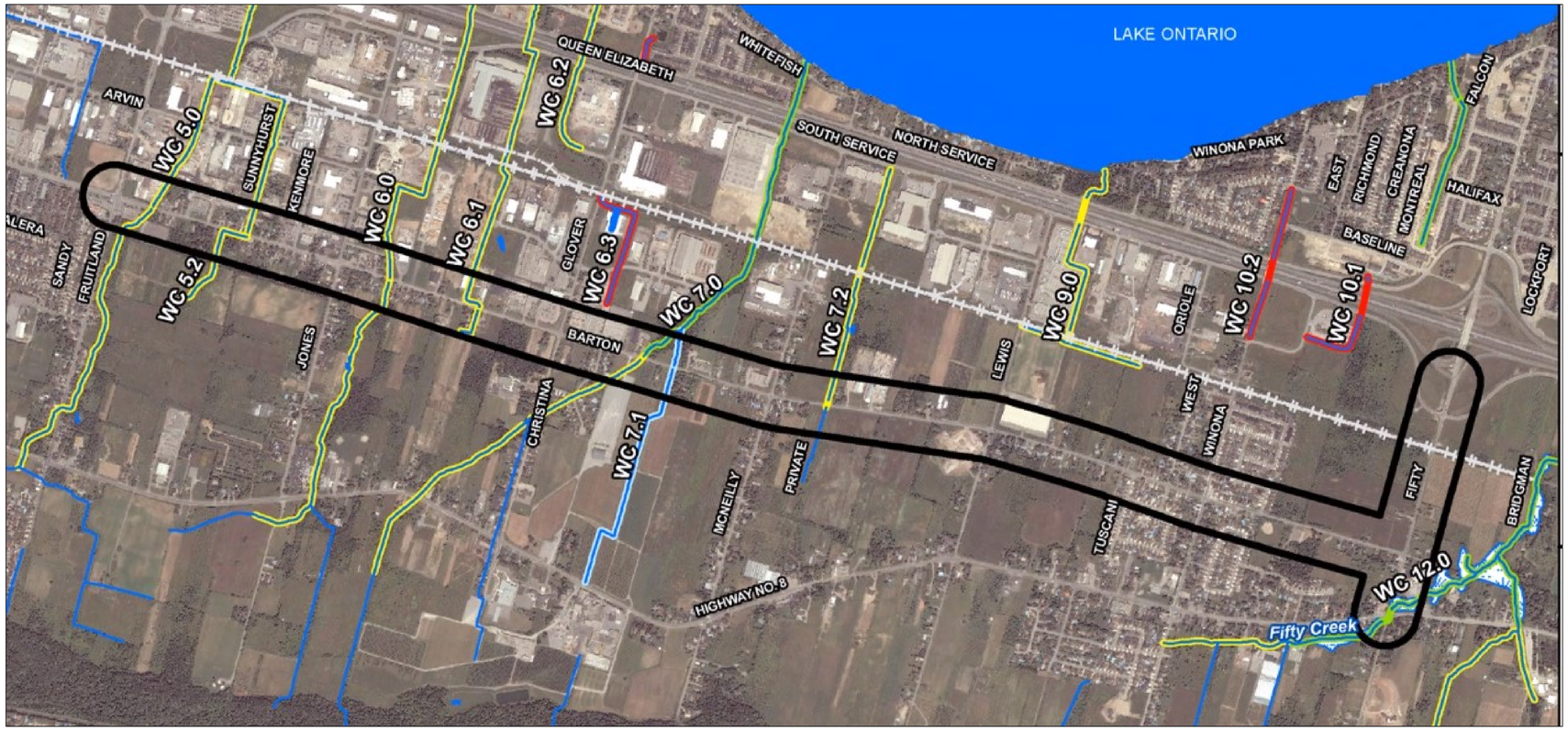
Stormwater and Drainage

Stormwater

- Stormwater management alternatives for Barton Street and Fifty Road being assessed to prevent increases in flows to downstream creek reaches on Watercourse 5.0, 5.2, 6.0, 6.1, 7.0, 9.0 and Fifty Creek
- Alternatives to be located within the road limits
- Consider various forms of low impact development best management measures including:
  - Oil/grit separators
  - Enhanced swales
  - Bioretention
  - Infiltration trenches

Creek Crossings

- Creek crossings have been assessed through various former studies
- Crossings currently have 100-year capacity



Watercourses within the study area

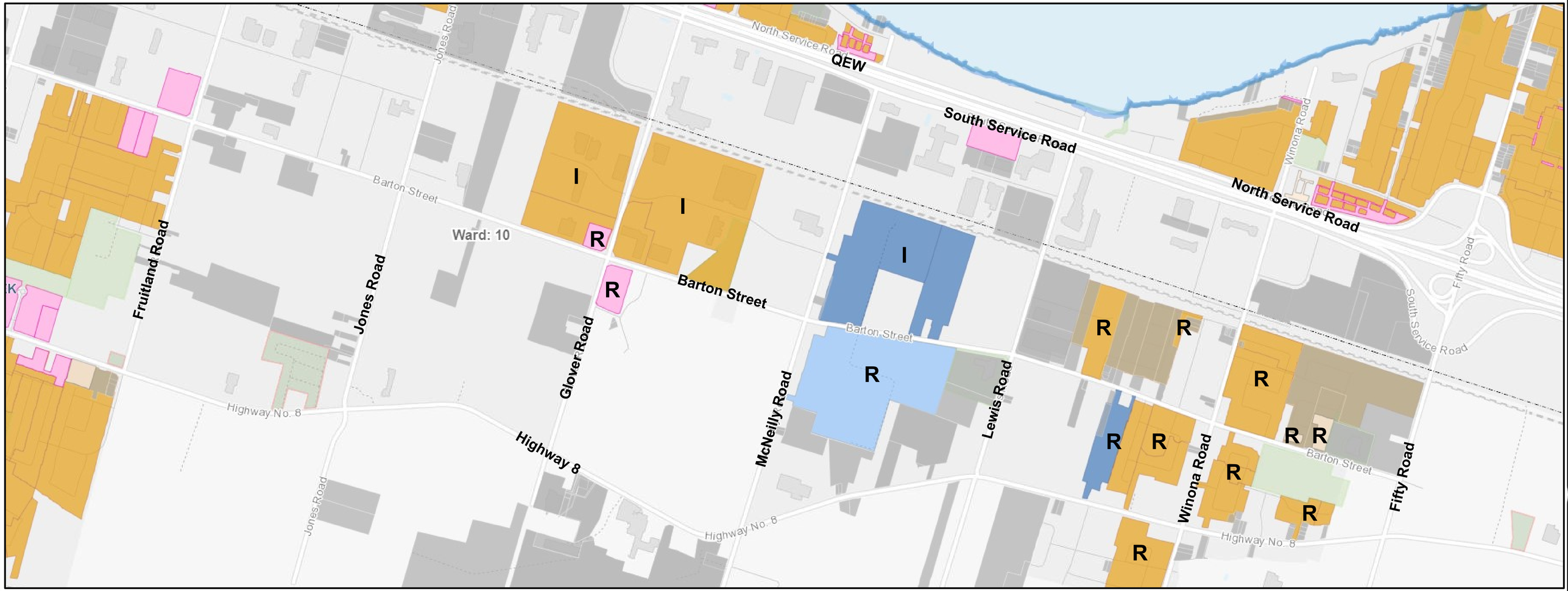
Ongoing Technical Studies

Fluvial Geomorphology – End of June

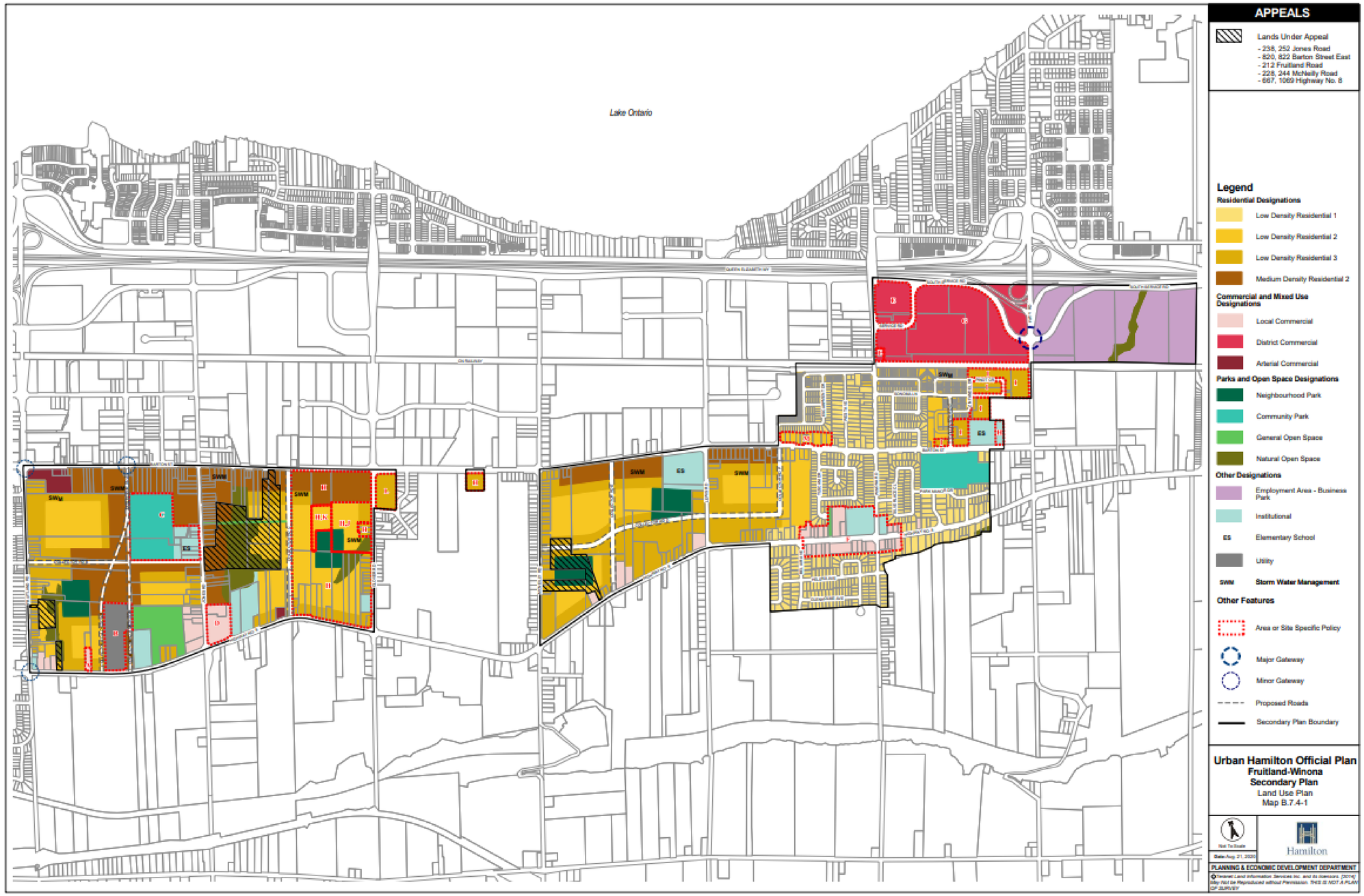
- Watershed and watercourse characterization will be summarized in terms of drainage area, physiographic details, historic land use, physical channel form, and channel evolution processes
- Rapid assessment will be analyzed from upstream to downstream of the proposed crossing locations
- 100-year erosion limits will be determined, and meander belt and meander amplitude considerations will be determined
- Final recommendations will be made for proposed opening sizing from a geomorphic perspective

Future Development

Yellow and blue shaded properties show active development applications in the vicinity of Barton Street and Fifty Road



LEGEND

R – Residential
I – Industrial

Secondary Plan