

CONNECTING MORE PEOPLE TO MORE POSSIBILITIES

Key Project Team



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- Project Director for Regional Road 43 (Bridge Street) and Adjacent Municipal Roadways Municipal Class Environmental Assessment



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Presentation Overview

Project Review

- Project Scope & Class EA Process
- Policies and Studies
- Problem & Opportunity Statement
- Supporting Studies:
 - Transportation Needs & Opportunities
 - Streetscape Opportunities
 - Socio-economic Environment
 - Natural Environment
 - Cultural Heritage and Archaeology
- Public Consultation

Assessment of Alternative Solutions

- Planning and Design Time Horizons
- Evaluation of Alternative Designs
- Design Considerations
- Preliminary Preferred Designs
 - Bridge Street
 - City of Niagara Falls Streets
- Stakeholder Impacts
- Invitation to Participate
- Next Steps



Housekeeping Items

- When joining the online meeting, the attendees will be muted. We request you to please turn off your camera.
- There will be an opportunity at the end of the presentation to ask any questions or submit comments.
 Please use the chat function to type in your questions/comments or click on "Raise hand".

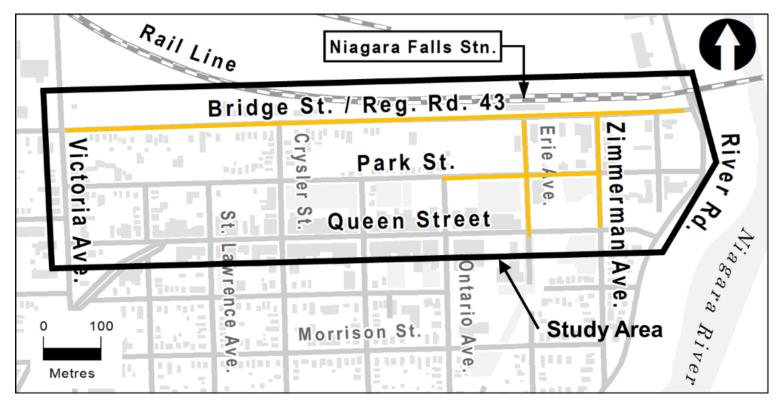


In case if you would like to submit your feedback later, the presentation materials and an online comment form are available on the project webpage: https://www.niagararegion.ca/projects/bridge-street-ea

Project Description

Niagara Region has initiated a Municipal Class Environmental Assessment (MCEA), in consultation with the City of Niagara Falls for improvements to Regional Road 43 (Bridge Street) and adjacent municipal roadways. Subject roads include:

- Regional Road 43 (Bridge Street) from Victoria Avenue to River Road,
- Erie Avenue from Regional Road 43 (Bridge Street) to Queen Street,
- Park Street from Ontario Avenue to Zimmerman Avenue, and
- Zimmerman Avenue from Regional Road 43 (Bridge Street) to Queen Street, in the City of Niagara Falls.



The Objective

The objective is to complete a detailed transportation assessment and active transportation plan to meet future needs in the vicinity of the GO rail station. It will provide all the required deliverables to satisfy a Schedule C MCEA.



Class Environmental Assessment (EA) Process

The Study is being carried out in accordance with the planning and design process for Schedule C projects as outlined in the Municipal Class Environmental Assessment (October 2000, as amended in 2007, 2011 and 2015), which is approved under the **Ontario Environmental Assessment Act**. This study will address Phases 1, 2, 3 and 4.

SUMMER/FALL 2020 WINTER to SUMMER 2021

FALL 2021

WINTER 2022 and Beyond

PHASE I:

PROBLEM OR OPPORTUNITY

- Notice of Study
 Commencement
- Identify problem or opportunity
- PIC #1

PHASE 2:

ALTERNATIVE SOLUTIONS

- Identify alternative solutions to problem or opportunity
- Inventory natural, cultural and economic environment
- Identify impact of alternative solutions on the environment
- Identify evaluation criteria
- Evaluate alternative solutions
- PIC #2
- Select Alternative Solution(s)
- Confirm MCEA Schedule

PHASE 3:

ALTERNATIVE DESIGN CONCEPTS

- Identify alternative design concepts
- Detailed inventory of natural, cultural and economic environment
- Evaluate alternative design concepts
- PIC #3
- Select Preferred
 Design Concept

PHASE 4:

ENVIRONMENTAL STUDY REPORT

- Complete environmental study report
- Notice of Study
 Completion
- Provide a 30-day review period

PHASE 5:

IMPLEMENTATION

- Detailed design and tender documents
- Proceed to construction



WE ARE HERE



Problem and Opportunity Statement

- It has been noted that the improvements represent additional opportunities:
 - To contribute to the creation of a unique and identifiable destination that builds on 'Niagara' - a globally recognized landmark.
 - Attract people and investment to support the revitalization and transformation of the area into a compact and mixed-use transit-oriented community.
 - Create sense of place throughout with an urban design approach that creates rewarding and attractive streetscapes enlivened with people. Streetscapes will be tied together through a consistent treatment of paving street trees, lighting, furniture, and public art.





Studies Undertaken





SOCIO-ECONOMIC ENVIRONMENT

Undertaken Stage 1 archaeological assessment, built heritage and cultural landscape assessment and community profile





NATURAL ENVIRONMENT

Undertaken an assessment of natural environment features and habitat including terrestrial and aquatic environments



STREETSCAPING

Assessed the current streetscape features, streetscape policies and opportunities to implement complete streets elements



SAFETY ASSESSMENT

Reviewed collision history, points of conflict and improvement opportunities



ROAD AND TRAFFIC

Completed forecasts of future traffic, analysed traffic levels of service and assessed warrants for traffic control and turn lanes



ACTIVE TRANSPORTATION

Assessed the cycling and pedestrian routes for connectivity, convenience and opportunities for improvements



TRANSIT OPERATIONS

Assessed transit use forecasts, bus routing and bus bay needs for GO Transit, WEGO and municipal transit routes



Transportation Needs and Opportunities

Active Transportation:

- Pedestrian routes on Bridge Street
- Cycling route on Bridge Street
- Cycling route on Erie Avenue

Road Capacity and Safety:

Future need for left turn lane for Erie
 Avenue and possible future development

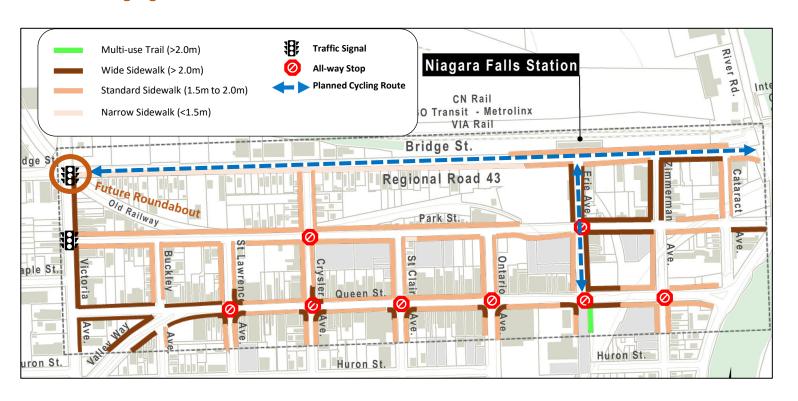
Transit Service:

Bays for City, WEGO and GO buses, private carriers

Streetscape:

Different opportunities for Complete Streets add landscaping, walking and cycling amenities, marketing areas, and gateways and placemaking elements for Bridge Street east and west of Erie Avenue and along Erie Avenue.





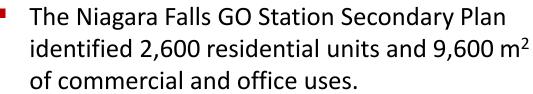
Socio-economic and Planning Considerations

Existing Land Uses:

- Mostly residential uses south side of Bridge Street, Victoria Avenue to 170 m east of Crysler Avenue.
- Employment uses north side of Bridge Street, Victoria Avenue to 130 m east of Crysler Avenue.
- Hotel and office uses south side of Bridge Street (Erie Avenue to River Road), on Erie Avenue and on Zimmerman Avenue.

Planned Future Land Uses:

The Niagara Falls GO Station Secondary Plan of commercial and office uses.













Natural Environment Considerations

Investigations:

- Vegetation communities
- Incidental wildlife and migratory birds
- Endangered and threatened species
- Areas of Natural Scientific Interest (ANSI)

Implications:

 Impacts to natural heritage features and functions are expected to be minimal

Recommendations:

- Tree inventory / protection during detail design
- A landscape plan to improve tree canopy cover
- Use native or non-invasive urban tolerant species





Public Consultation

Format and Content of PIC #1

- Virtual PIC posted on niagararegion.ca/projects from August 18, 2020 to September 15, 2020 to introduce the study
- PIC Content: Problem & Opportunity, Class EA Process, Transportation System, Key Issues, Technical and Next Steps

Format and Content of PIC #2

- Virtual Live PIC hosted by Niagara Region July 21, 2021 and posted on the study site
- PIC Content: Transportation needs, natural and social environmental constraints, alternatives and preferred solution, interim and ultimate cross sections and Next Steps

Stakeholder Consultation

- Circulation to government agencies and indigenous communities
- Consultation meetings with property owners and residents of affected properties (December 2021, January 2022)



Planning and Design Time Horizons

Interim Horizon (prior to redevelopment)

- Short and Medium-term operating conditions
- Existing residences and businesses anticipated to remain
- Little to no additional property required
- Vehicle traffic levels anticipated to remain low
- Increased walking and cycling activity with GO rail station operations

Existing Corridor Environment The state of the state of

Ultimate Horizon (as redevelopment proceeds)

- Longer term operating conditions
- Significant amount of redevelopment underway along Bridge Street
- Will require additional property along Bridge Street frontages
- Higher traffic from redevelopment



Source: Niagara GO Hub and Transit Stations Study (BrookMcIlroy)



Bridge Street Roadway Sections



West Section

- Existing employment land uses on the north side
- Existing residential land uses on the south side
- Existing 18.3 m right of way
- Opportunity to widen right of way with redevelopment

East Section

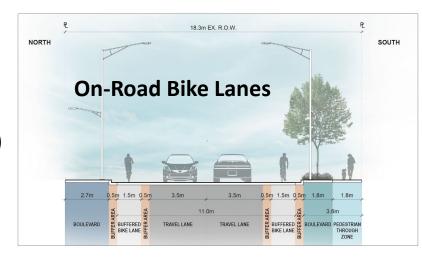
- Existing rail station on north side
- Existing office, hotel bus station uses on south side
- Existing right of way ranges from 18.3 m to 20.2 m
- Constraints to widen right of way with current land uses



Preferred Solution: Bridge Street

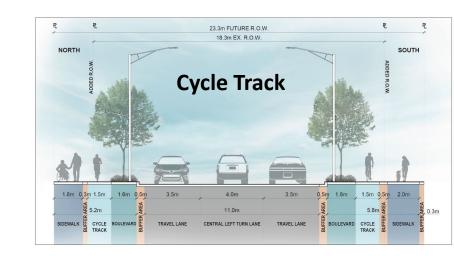
West Section of Corridor Interim Solution: Bike Lanes

- 1 EB and 1 WB through lane 3.5 m each
- Bicycle facility (i.e., bike lanes) adjacent to vehicle lanes
- South side boulevard adjacent to roadway (planting area, utilities, sidewalk)
- North side boulevard adjacent to roadway (hard surface treatment)



West Section of Corridor Ultimate Solution: Cycle Track

- Remove bike lanes and replace with centre left-turn lane
- 2.5 m ROW widening to allow boulevard cycle track
- Add north side and south side boulevard planting and utilities
- Curb location can remain the same

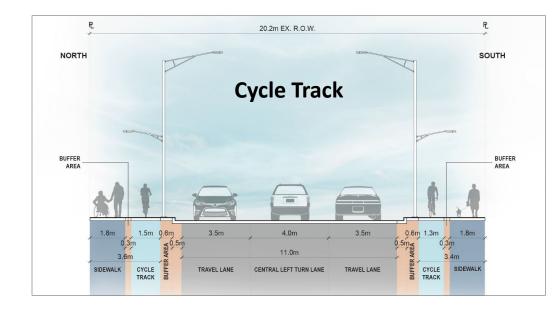




Preferred Solution: Bridge Street

East Section of Corridor Solution: Cycle Track

- 1 EB and 1 WB through lane 3.5 m each
- Centre left-turn lane
- Bicycle facility (i.e., cycle tracks) adjacent to sidewalk
- Bus loops for bays on north side
- Improvements for pedestrian crossing at Erie Avenue



Identification of Alternative Bridge Street Designs:

Bridge Street Bicycle Facility Configuration Alternatives

Buffered Bike Lane (City of Toronto)



Source: OTM Book 18 Figure 4.21

One-way Cycle Track (City of Toronto) Two-way Cycle Track (City of Toronto)



Source: OTM Book 18 Figure 4.30



Source: https://www.toronto.ca/services-payments/streets-parkingtransportation/cycling-in-toronto/cycle-track-projects/lake-shore-cycle-track/



Evaluation of Alternative Bridge Street Designs:

Bridge Street Bicycle Facility Configuration – West Section

- Natural Heritage implications are comparable for all design options
- Socio-economic and cultural heritage implications are comparable for all design options

Design Options	Key Transportation and Cost Considerations	Findings
Bike Lanes	Low implementation cost; very low operational maintenance cost Low cost to add future left-turn lane and no short-term impact to properties Moderate / High level of cyclist safety	Recommended Interim
One-Way Cycle Track	Moderate implementation cost; low operational maintenance cost High cost to add future left-turn lane OR short-term impact to properties High level of cyclist safety	Recommended Ultimate
Two-way Cycle Track	Moderate / High implementation cost; low operational maintenance cost High cost to add future left-turn lane OR short-term impact to properties High level of cyclist safety	-



Evaluation of Alternative Bridge Street Designs:

Bridge Street Bicycle Facility Configuration – East Section

- Natural Heritage implications are comparable for all design options
- Socio-economic and cultural heritage implications are comparable for all design options

Design Options	Key Transportation and Cost Considerations	Findings
Bike Lanes	Low implementation cost; very low operational maintenance cost No cost to add future left-turn lane Moderate level of cyclist safety and convenience – interaction with bus traffic	-
One-Way Cycle Track	Moderate implementation cost; low operational maintenance cost No cost to add future left-turn lane High level of cyclist safety and convenience	Recommended
Two-way Cycle Track	Moderate implementation cost; low operational maintenance cost No cost to add future left-turn lane Low level of cyclist safety and convenience – transition area at Erie Avenue	-



Evaluation of Alternative Bridge Street Designs:

Bridge Street / Erie Avenue Intersection

Traffic Control

Design Options	Key Transportation and Cost Considerations	Findings
Traffic Signals	Provides a high level of conspicuity and driver recognition Allows pedestrian and vehicle actuation Provides higher level of pedestrian safety	Recommended
Pedestrian Crossover Allows pedestrian actuation; not responsive to vehicle demand		-
Stop Control More vehicle stops, delays and related emissions		-

Lane Configuration

Design Options	Key Considerations	Findings
2 Lane Cross-section	Narrower pedestrian crossing	-
3 Lane Cross-section	Region policy for left turn lanes at signalized intersections	Recommended



Design Considerations:

Stakeholder Impacts and Implementation

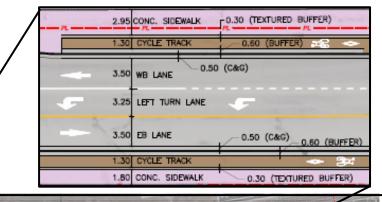
- Interim Solution
 - No significant impacts to property (minor impacts for utilities and grading)
 - Current parking within the Bridge Street existing right-of-way and on-street will no longer be permitted
 - Landscape features within the right of way will be replaced with a streetscape area and relocated sidewalk
 - Some building features (steps, ramps, porches) within or adjacent to the road right of way may be reconfigured
- Ultimate Solution
 - 2.5 metres is required across the frontage of 30 properties on the south side and 6 properties on the north side
 - 7 buildings and/or entranceways are directly affected by the additional 2.5 metres required on the south side
 - Parking and business operations are affected by the additional 2.5 metres required on the north side
 - The timing of property acquisition and implementation will be coordinated with property owners

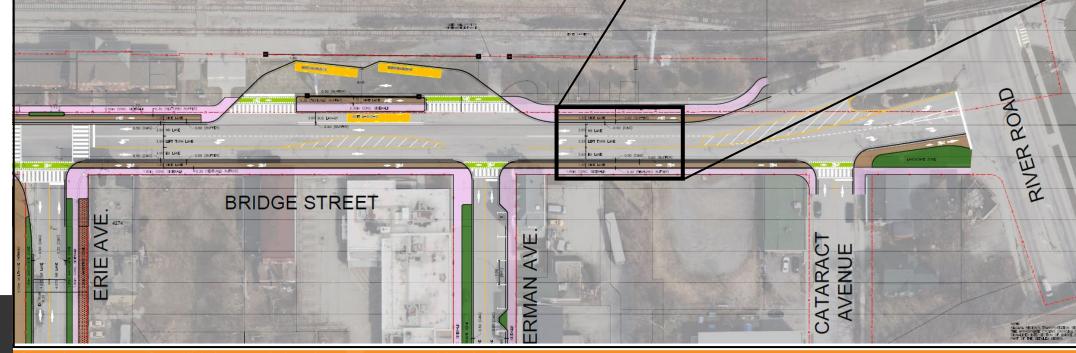


Preliminary Preferred Design: Interim & Ultimate

Alternative 3 (Cycle Tracks) – East Section

- Cycle track adjacent to sidewalk with buffer separation
- East Bus loop and one on-street bay accommodates 3 WEGO buses
- Maintain maintenance access to rail line and site parking
- Accommodates cyclists meeting OTM Book 18 guidelines



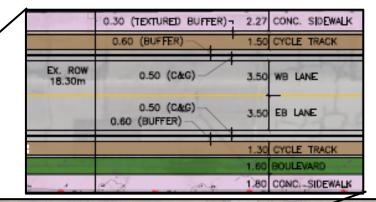


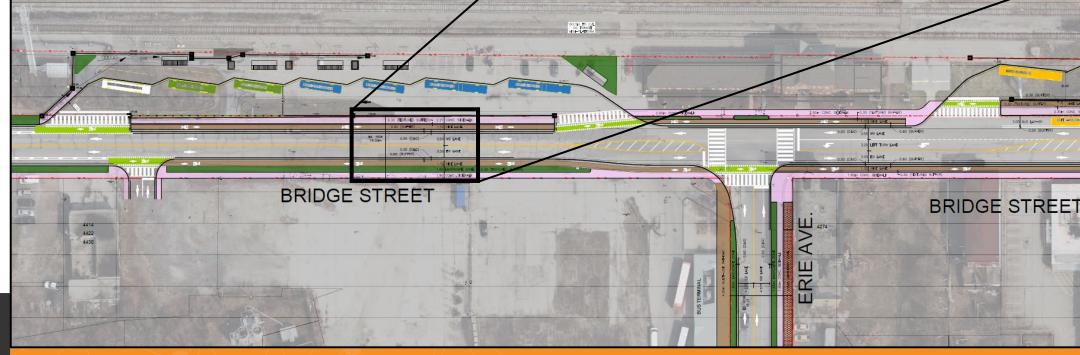


Preliminary Preferred Design: Interim & Ultimate

Alternative 3 (Cycle Tracks) – GO Precinct Section

- Cycle track adjacent to sidewalk with buffer separation
- West Bus loop accommodates 7 buses (GO, City Transit and Private).
- No changes to curb and drainage for ultimate configuration
- Accommodates cyclists meeting OTM Book 18 guidelines





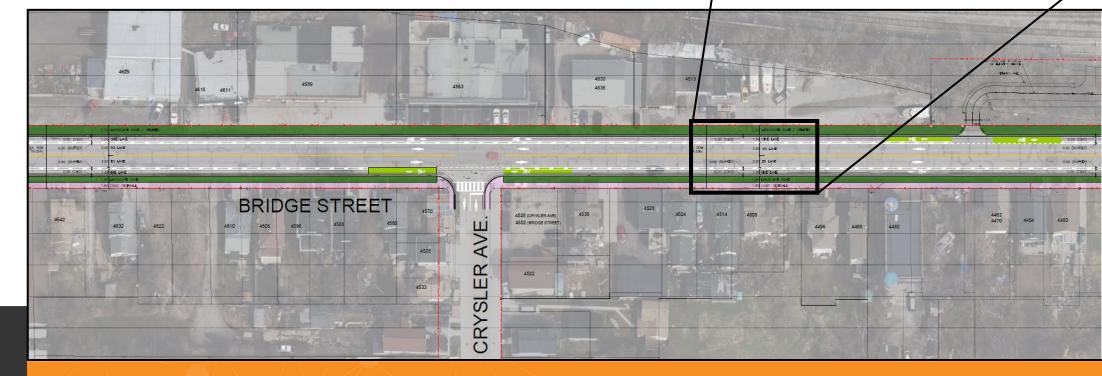


Preliminary Preferred Design: Interim

Alternative 1 (On-street Bike Lanes) – West Section

- Allows for continuous buffered bike lanes
- Lower property and cost implications
- No changes to curb and drainage for ultimate configuration
- Accommodates cyclists meeting OTM Book 18 guidelines

			2.70 BOULEVARD / UTILITIES
		0.50 (C&G)	1,50 BIKE LANE
/	EX. ROW 18.30m	1	3.50 WB LANE
	1	0.50 (BUFFER)	3.50 EB LANE
		0.50 (C&G)	1.50 BIKE LANE
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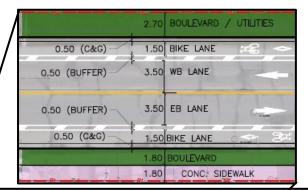


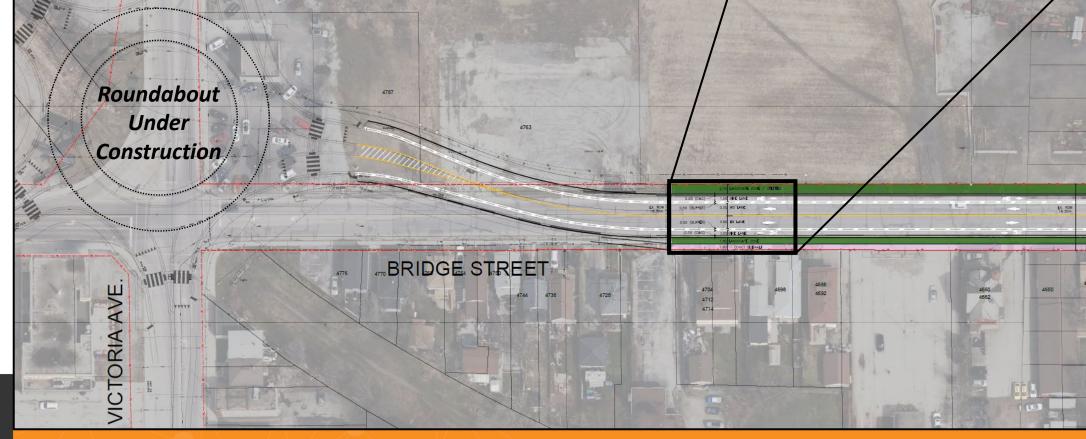
Preliminary Preferred Design: Interim

Alternative 1 (On-street Bike Lanes) – West Section

Allows for continuous buffered bike lanes

Integration with the Victoria Avenue / Thorold Stone Road Extension Roundabout

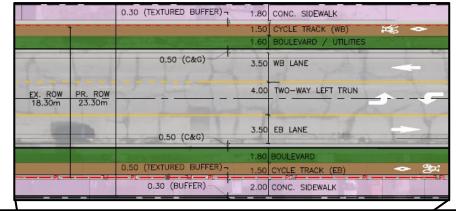


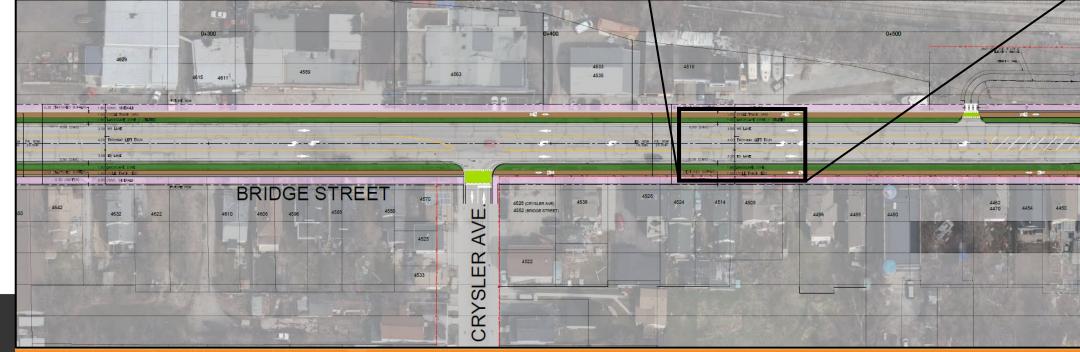


Preliminary Preferred Design (And Property): Ultimate

Alternative 3 (Cycle Tracks) – West Section

- Allows for continuous cycle tracks in the long term
- Coordinated with redevelopment of adjacent properties
- No changes to curb and drainage for ultimate configuration
- Requires 2.5 metres of additional property on each side of the road







Preliminary Preferred Design: City of Niagara Falls Streets

Erie Avenue

- Narrow the pavement width to 9.15m
- West side multi-use path 3.0m to 4.0m
- East side market zone (Bridge to Park)
- Planting zone east and west sides

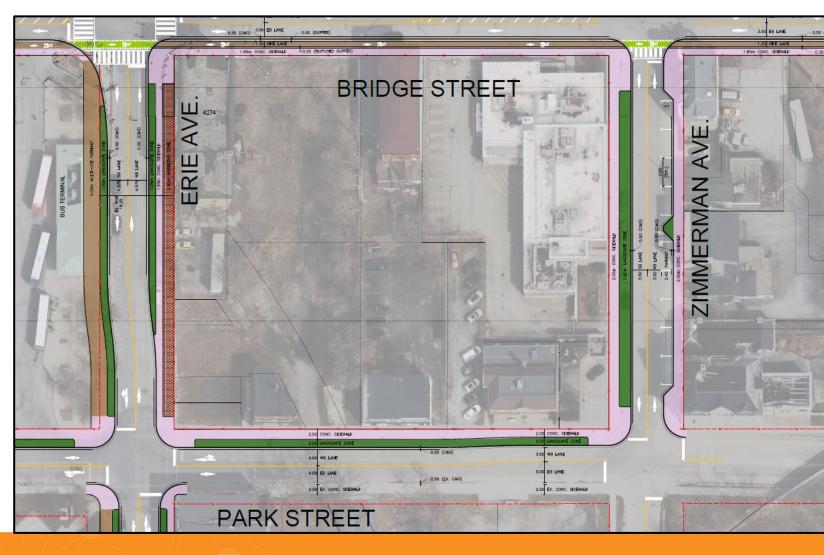
Park Street

- Planting zone north side 2.0m
- Road width narrowed 8.0m

Zimmerman Avenue

- Planting zone west side 2.9m
- Parking east side 2.4m
- Sidewalk 2.5m both sides





Next Steps







- 3-Week PIC #3 Comment Period Ending on February 18, 2022.
- Review PIC #3 Comments
- Develop a PIC Summary to document results of this PIC. The Summary Report will be posted on the project webpage
- Complete consultation with stakeholders
- Finalize the Preferred Design Concept
- Document the findings in an Environmental Study Report



How to Get Involved



Ask questions or discuss issues with the Project Team today at the PIC.



Fill out a PIC comment form and return by February 18, 2022.



Provide email comments or ask to be added to the Project contact list to receive updates and future public notices about the Project.



Visit the Project website for more information.

(https://www.niagararegion.ca/projects/bridge-street-ea/default.aspx)

Questions

Your comments are important. They will be reviewed as part of the study process and incorporated into the Environmental Study Report as part of the consultation record.

To submit a comment, please complete a comment sheet and mail or email it to one of the individuals listed below. Alternatively, you can email or call one of the individuals listed below to discuss your concerns and/or comments.

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