



Alternative formats and communication supports available upon request. Please contact accessibility@brantford.ca or 519-759-4150 for assistance.

Date June 22, 2022 **Report No.** 2022-176

To Chair and Members
Committee of the Whole-Vision Zero Road Safety Committee

From Inderjit Hans, P.Eng., PMP
General Manager, Public Works Commission

1.0 Type of Report

Consent Item ☐
Item For Consideration ☒

2.0 Topic Henry Street Bicycle Facilities [Financial Impact-None]

3.0 Recommendation

- A. THAT report 2022-176, titled "Henry Street Bicycle Facilities" BE RECEIVED; and
- B. THAT Schedule "5" of Traffic By-law 37-83 which pertains to "Lane Designation" BE AMENDED as outlined in Appendix "A" of Report No 2022-176; and
- C. THAT Schedule "14" of By-law 37-83 which pertains to "Designated Lanes for Bicycles" BE AMENDED as outlined in Appendix "A" of Report No. 2022-176; and
- D. THAT Schedule "15" of Traffic By-law 37-83 which pertains to "Combined Use Pathway" BE AMENDED as outlined in Appendix "A" of Report No. 2022-176; and
- E. THAT the necessary by-laws BE PRESENTED to City Council for adoption.

4.0 Executive Summary

Henry Street is identified in the 2020 Transportation Master Plan (TMP) as one of the many cycling corridors approved for implementation across the City.

A review of the roadway, taking into account the operational characteristics, existing infrastructure and surrounding land use, determined that the most appropriate and safest option for cycling infrastructure was a combination of physically-separated bicycle lanes and a Multi-Use Path (MUP).

Staff recommends the installation of bicycle lanes on both sides of Henry Street from Brock Street to Bosworth Court/Stanley Street and the installation of a MUP on the north side of Henry Street from Bosworth Court to Wayne Gretzky Parkway.

5.0 Purpose and Overview

To install bike lanes and MUP on Henry Street from Brock Street to Wayne Gretzky Parkway.

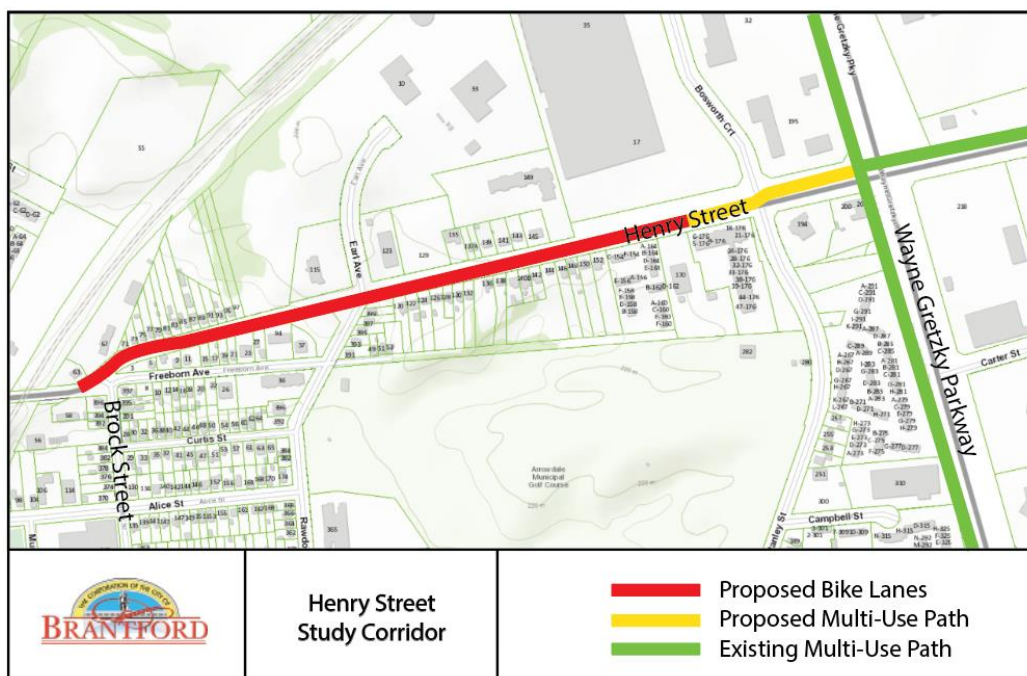


Figure 1- Study Corridor

6.0 Background

In October 2020, Council approved the 2020 Transportation Master Plan (TMP) Update (Report 2020-427). The TMP includes detailed information to enhance

forms of transportation in the City such as cycling, walking, and upgrades to existing transportation routes.

Henry Street is a four-lane, minor arterial road, with a speed limit of 50 km/h and is identified as part of the proposed Bikeways and Trails network to receive dedicated cycling facilities.

Wayne Gretzky Parkway currently has a MUP that extends from Powerline Road to Grey Street. Henry Street currently has an MUP and bike lane combination that extends from Wayne Gretzky Parkway to Garden Avenue.

7.0 Policy Context

2020 Transportation Master Plan Update (Report 2020-427), section 3.6.2.1:

GOALS: Provide safe and convenient bicycle routes for all user types: utilitarian (commuting), recreational (personal or family discretionary), or sport (advanced, high level recreation).

OBJECTIVES:

1. There is a continuous network of safe and direct bicycle routes.
2. There is an ability to navigate the bicycle network with ease.
3. End-of-trip facilities support cycling as a preferred mode of transportation.
4. The bicycling environment is safe.
5. Provide unique and specific design environments appropriate for the different types of users.

City of Brantford Official Plan, section 11.7:

- Council shall encourage development of a comprehensive network of bikeways and trails throughout the City to connect residential, institutional, commercial, and industrial areas in accordance with the facilities shown on **Schedule 5.3-Transportation: Bikeways and Trails Network Plan**.

Council Priorities 2019-2022:

- Desired Outcome #3: A safe, efficient transportation system connects the community across neighbourhoods, with neighbouring communities and provincial transportation networks.

- Tier 2 (e) Priority: Develop a comprehensive plan to integrate active transportation network measure for improved connectivity and enhanced maintenance.

Vision Zero - Road Safety Plan - Engineering and Evaluation;

- Action C: Continue expansion of the cycling network in identified areas through multi-use trails and segregated bike lanes to improve safety.

8.0 Input From Other Sources

The City hosted a public engagement strategy to present the concept, and solicited feedback from property and business owners along the road, as well as the general public. Due to the Covid-19 pandemic, public assembly was prohibited and a virtual public engagement process was held. Property owners and business owners who were directly affected received in the mail, the proposed concept plan, a pamphlet describing the proposed changes, and a letter to invite them to fill out a public engagement survey on the Let's Talk Brantford platform. Additionally, staff hosted a Ward 4 Active Transportation virtual public meeting on Thursday, February 10, 2022 from 6:00 p.m. to 7:30 p.m. where residents were invited to speak with City staff about the project. The project notice was also posted on social media accounts such as Twitter and Facebook, where the general public was invited to visit the project webpage. The online survey was open from January 30 to February 16, 2022. The mail out boundary can be found in Appendix "C" attached to this report. Finally, two project signs were installed on site to inform residents using Henry Street about the project and public engagement opportunities.

There were 508 households and businesses that received this package and a total of 56 responses were received through the online survey or email. Detailed analysis of feedback will be discussed in Section 9.0.

Prince Charles Neighbourhood Association-no concerns.

Operational Services – Increased operational costs include line and symbol repainting, winter snow clearing, and path sweeping.

Brantford Transit Services – The proposed project will have minimal impacts on transit services.

Waste collection was consulted during the design process and they have advised that they understand the importance of active transportation infrastructure, but

due to the nature of curbside collection, cyclists may be impeded during collection times.

Brantford Fire Department – no concerns.

Active Transportation Sub Committee – The proposed plan was presented to committee members and attendees fully supported the plan.

9.0 Analysis

A successful municipal bicycle network is one that is utilized for commuting, tourism activities, and increasing physical activity by users of all ages and abilities.

The existing lane configuration of Henry Street consists of two vehicle travel lanes in each direction (Figure 2) with a mixed use of both commercial and passenger vehicles.

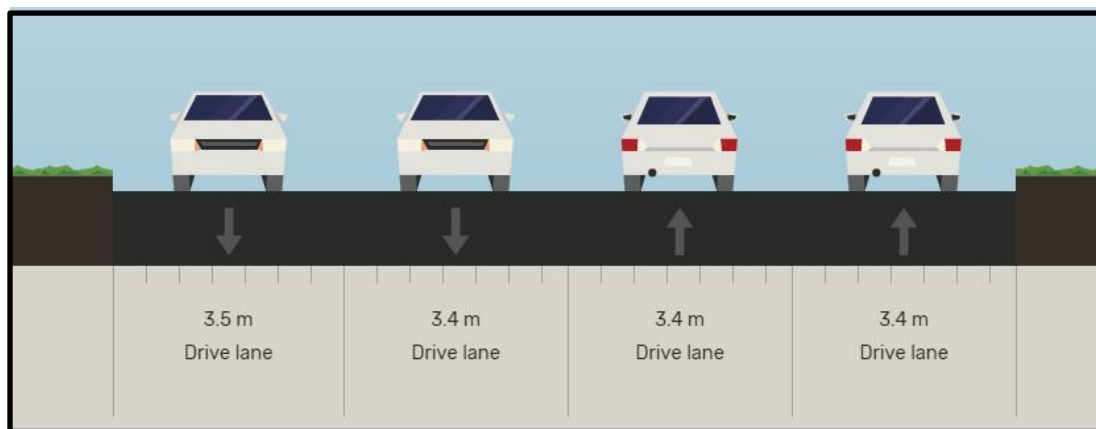


Figure 2-Existing Cross-Section for Henry Street

The TMP identified on-street bicycle facilities for Henry Street. Taking into account the operating characteristics, it was determined the most appropriate type of facility for this roadway would be a combination of on-road physically-separated bicycle lanes and an in-boulevard MUP design that would align with the existing MUP east of Wayne Gretzky Parkway.

The Henry Street MUP will be installed within the north side boulevard (Figure 3) and provides opportunities for connections to the existing MUPs on both Henry Street and Wayne Gretzky Parkway (Figure 4). The addition of the MUP between Wayne Gretzky Parkway and Bosworth Court will cause redundancy of the existing sidewalk, thus it is proposed that the sidewalk be removed between

those two roadways. This will help sustain existing operational services costs for snow clearance and trail maintenance.

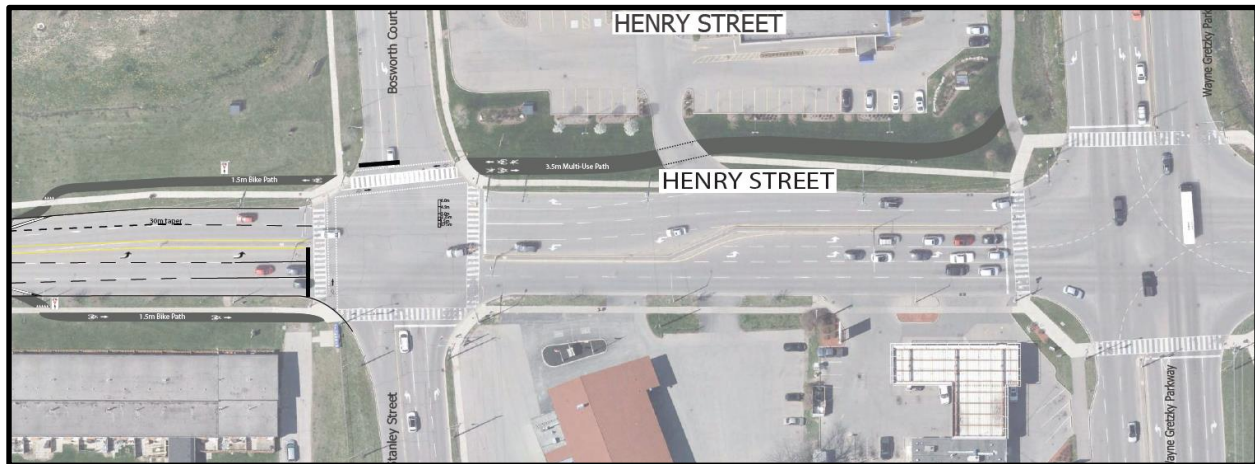


Figure 3-Proposed In-boulevard Bicycle Facilities from 75 metres west of Bosworth Court/Stanley Street to Wayne Gretzky Parkway

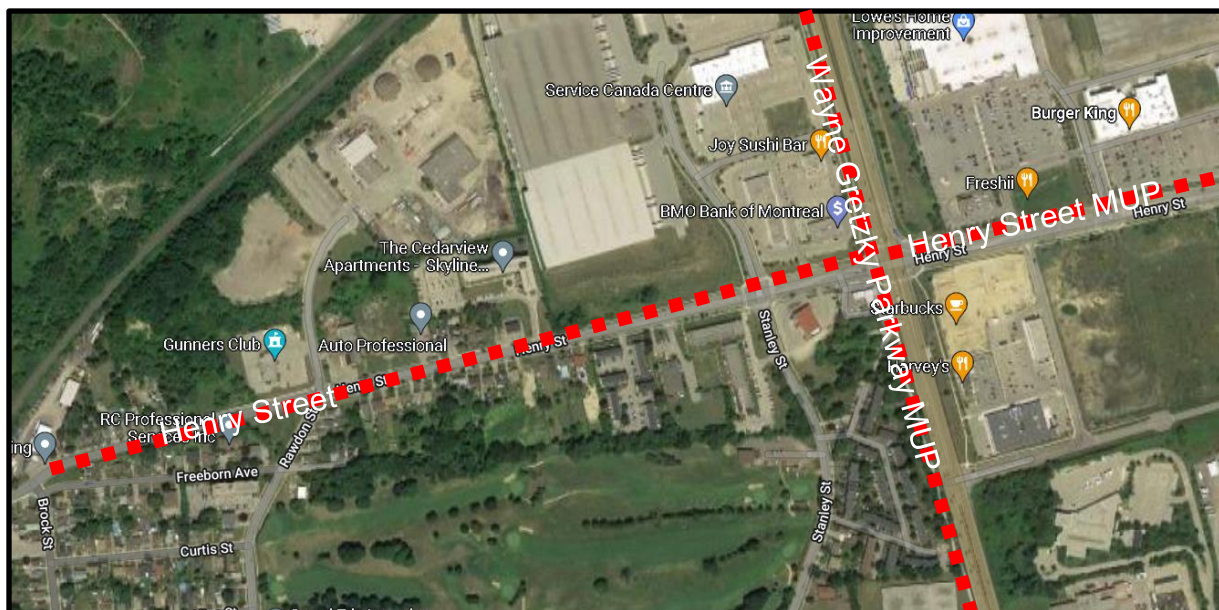


Figure 4-Streetview connection Henry Street MUP and Wayne Gretzky Parkway MUP

The Henry Street bike lanes will be installed on both sides of the roadway (Figure 5). The proposed road diet reduces the vehicle travel lanes from 4 to 3, with two through lanes and one two-way centre left turn lane. This reduction in vehicle lanes allows road space for bicycle lanes, as well as physically-separated buffer lanes that consist of flexible bollards and pre-cast concrete curbs. There are many benefits to implementing a road diet including reduced vehicle speeds, improved multi-modal transportation system, and a potential reduction in collisions as a result of providing designated center turn lane to access side

streets and properties. Additionally, the physically-separated bicycle lanes offer a higher level of security than painted bike lanes and are more attractive to a wider spectrum of the public.

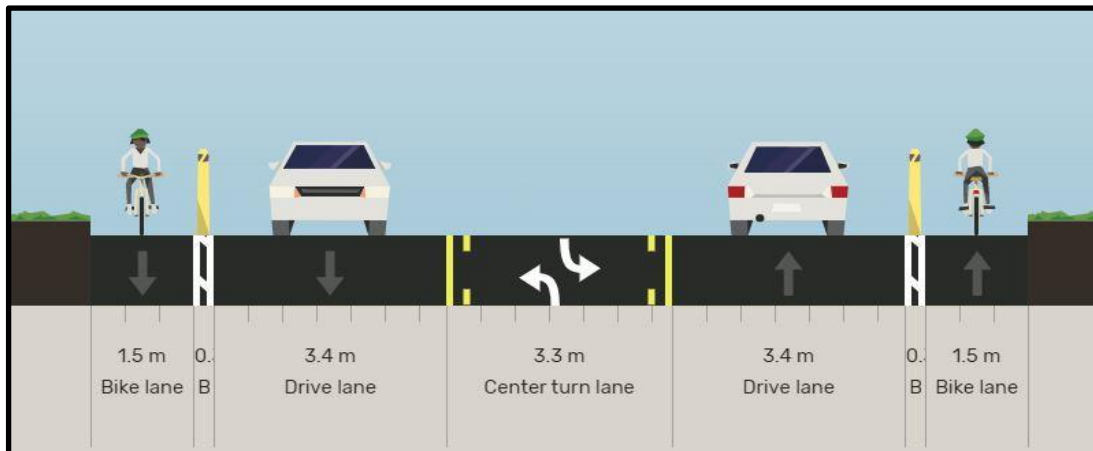


Figure 5-Proposed Typical Cross-Section for Henry Street

The following is a summary of the responses received from area residents.

1. Of the 56 responses, 31 residents commented that they like that the MUP “encourages alternative forms of transportation”.
2. Of the 56 responses, 28 residents commented that they like “continued development and connection of the cycling network”.
3. Of the 56 responses, 24 residents commented that they like the “improved visibility/safety for people on bikes”.

Additionally, the concern of speeding on Henry Street was voiced by multiple residents. Road diets have been proven to have traffic calming benefits, and encourage lower vehicle speeds. The plan does not affect the existing roadway level of service and will allow capacity to continue as normal. Additionally, the concept plan has been designed to minimize conflicts with Brantford Transit bus boarding/alighting at designated Brantford Transit stops.

10.0 Financial Implications

There are no financial implications from the recommendations in this report. The implementation of these cycling facilities will cost approximately \$125,000 for trail installation, pavement markings, bike bollards, pre-cast curbs, and signage.

Funded for this project will come from the On-Road Active Transportation Initiatives capital project account.

11.0 Climate and Environmental Implications

There are no negative climate and environmental implications with the approval of this report. Cycling as a form of regular transportation actually provides an improvement to the environment compared to the alternative of driving a vehicle or taking transit. Cycling 10km each way to work would save 1,500kg of greenhouse gas emissions each year.

12.0 Conclusion

The proposed bicycle facilities on Henry Street enhances the cycling network by connecting north/south/ and east/west corridors. This design and project uses a complete and safe street concept that is sustainable and advantageous for all roadway users.



Inderjit Hans, P.Eng., PMP
General Manager, Public Works Commission

Prepared By:

Kathryn Broadbelt, Transportation Planning Project Coordinator

Attachments:

Appendix A-Henry Street-Traffic By-law Amendments

Appendix B-Brantford TMP Proposed 2041 Active Mode Network

Appendix C-Henry Street Public Engagement Mail Out Boundary

Appendix D-Henry Street Proposed Concept Plan

Copy to:

In adopting this report, is a by-law or agreement required? If so, it should be referenced in the recommendation section.

By-law required ☒ yes ☐ no

Agreement(s) or other documents to be signed by Mayor and/or City Clerk ☐ yes ☒ no

Is the necessary by-law or agreement being sent concurrently to Council? ☒ yes ☐ no

APPENDIX 'A'**A. HENRY STREET-TRAFFIC BY-LAW AMENDMENTS**

- a) RECOMMEND that Schedule "5" of Traffic By-law 37-83 which pertains to "Lane Designation" BE AMENDED to provide the following:

<u>STREET</u>	<u>LOCATION</u>	<u>LANE</u>	<u>DIRECTION</u>
Henry Street	From Brock Street to a point 68 metres west of the centre line to Earl Avenue	Centre	Both: Left turn only
Henry Street	From Earl Avenue to a point 68 metres westerly thereof	Centre	Easterly: Left turn only
Henry Street	From Earl Avenue to a point 45 metres easterly thereof	Centre	Westerly: Left turn only
Henry Street	From a point 45 metres east of the centre line of Earl Avenue to a point 145 metres west of the centre line of Stanley Street	Centre	Both: Left turn only
Henry Street	From Stanley Street/Bosworth Court to a point 126 metres west thereof	Centre	Easterly: Left turn only

- b) RECOMMEND that Schedule "14" of Traffic By-law 37-83 which pertains to "Designated Lanes for Bicycles" BE AMENDED to provide the following:

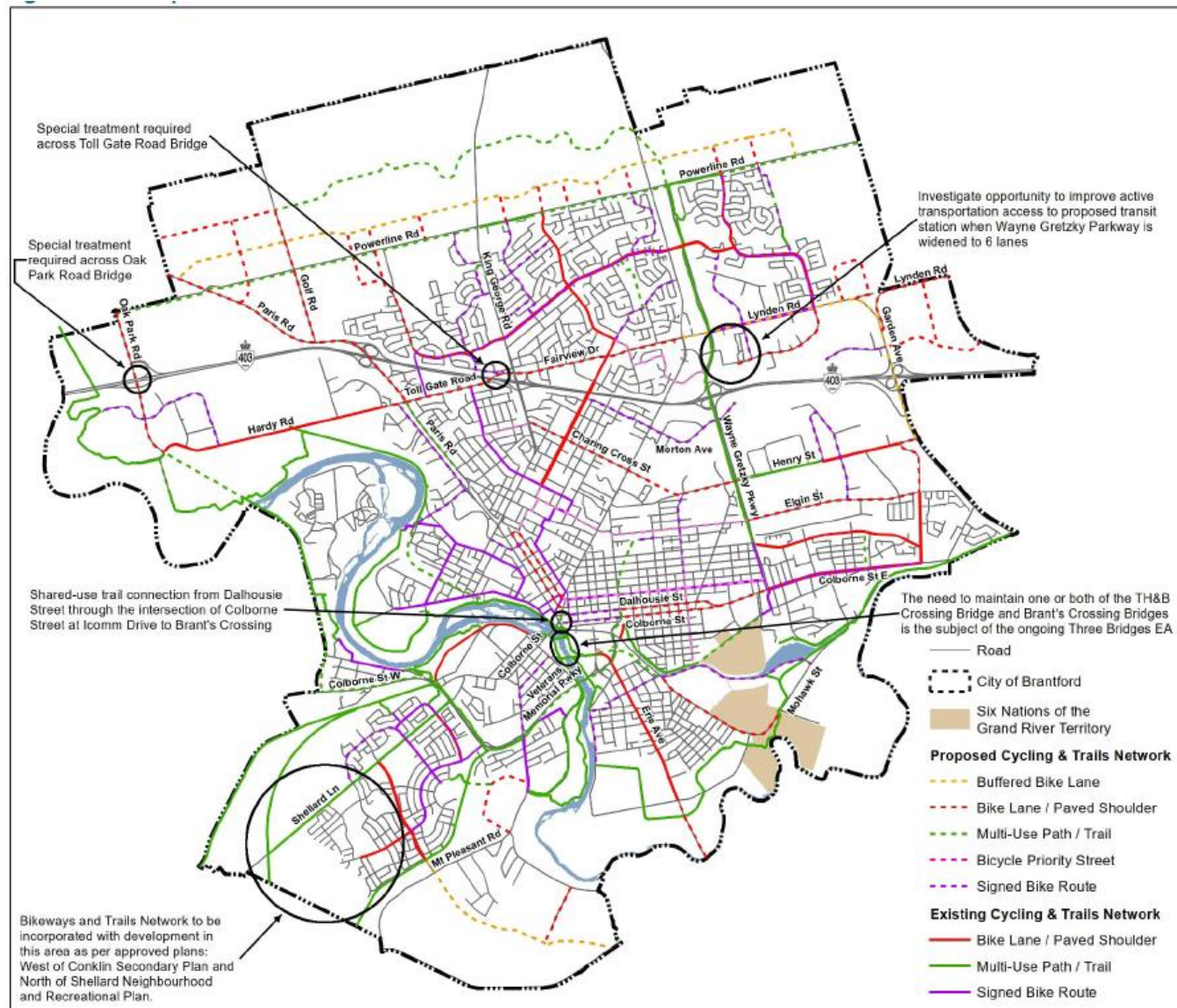
<u>STREET</u>	<u>LIMITS</u>	<u>LANES</u>	<u>TIMES OR DAYS</u>
Henry Street	From Brock Street to 50 metres west of Bosworth Court	North, westbound adjacent to curb	Anytime
Henry Street	From Brock Street to 50 metres west of	South, eastbound	Anytime

Stanley Street adjacent to curb

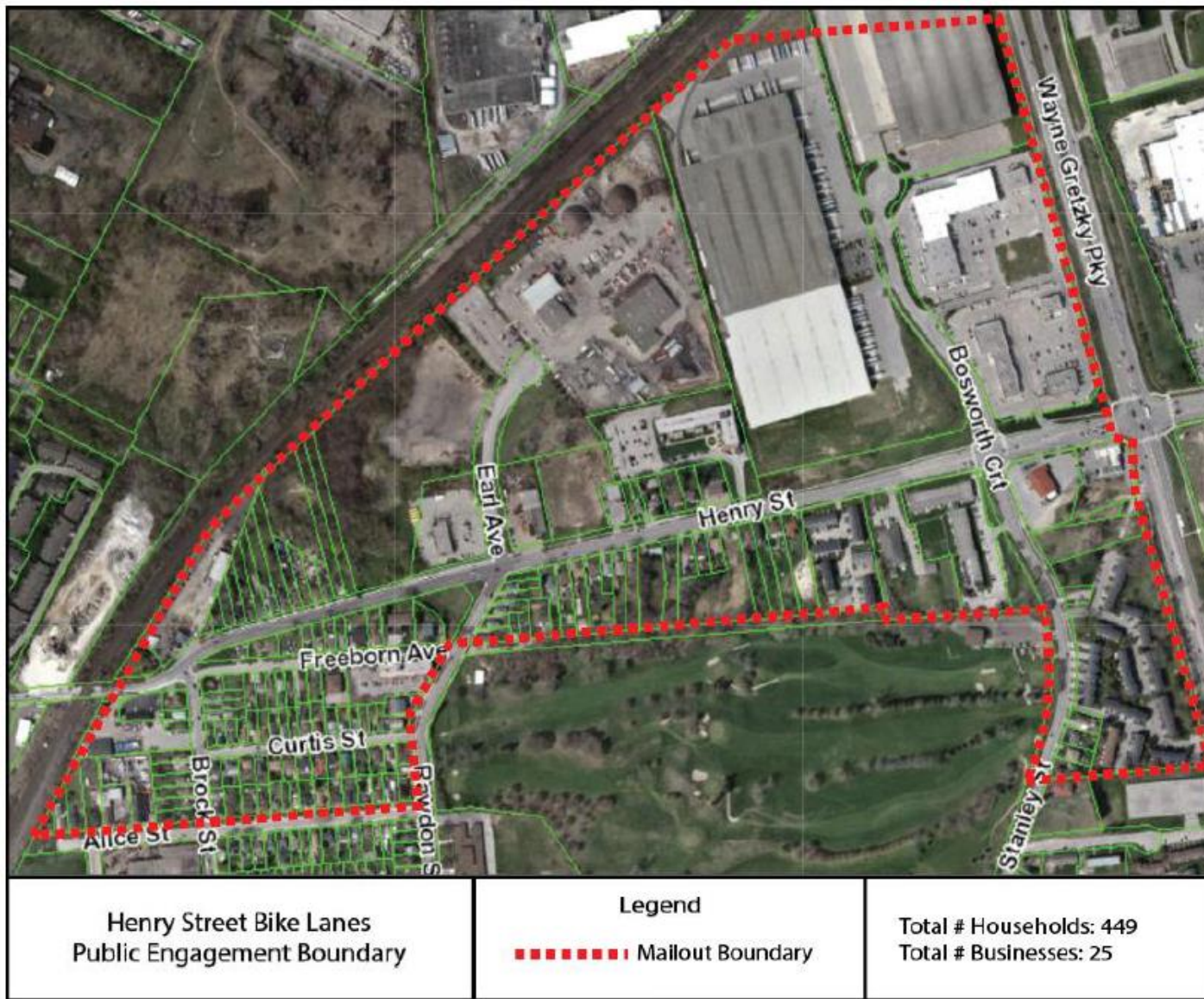
- c) RECOMMEND that Schedule “15” of Traffic By-law 37-83 which pertains to
“Combine Use Pathway” BE AMENDED to provide the following:

<u>STREET</u>	<u>LIMITS</u>	<u>SIDE OF RIGHT OF WAY</u>	<u>DIRECTION OF TRAVEL</u>
Henry Street	Bosworth Court to 75 metres west of the centerline of Bosworth Court	North	One-Way
Henry Street	Stanley Street to 75 metres west of the centerline of Stanley Street	South	One-Way
Henry Street	Bosworth Court to Wayne Gretzky Parkway	North	Two-Way

APPENDIX 'B' – BRANTFORD TMP PROPOSED 2041 ACTIVE MODE NETWORK



APPENDIX 'C' – HENRY STREET PUBLIC ENGAGEMENT MAIL OUT BOUNDARY



APPENDIX 'D' – HENRY STREET PROPOSED CONCEPT PLAN



