Region of Waterloo

Engineering and Environmental Services

Design and Construction

То:	Planning and Works Committee
Meeting Date:	August 15, 2023
Report Title:	Lancaster Street Reconstruction (Regional Road #29), Wellington Street to Bridgeport Road, City of Kitchener – Project Design Concept Approval

1. Recommendation

That the Regional Municipality of Waterloo approve the Recommended Design Concept for the proposed reconstruction of Lancaster Street between Wellington Street and Bridgeport Road in the City of Kitchener as outlined in Report EES-DCS-23-004 dated August 15, 2023.

Upon completion of construction, that The Regional Municipality of Waterloo amend Traffic and Parking By-law 16-023, as amended to:

- a) Amend Traffic and Parking By-law 16-023 to add to Schedule 22, Reserved Bike Lanes on both sides of Lancaster Street (Regional Road 29) from Wellington Street to Bridgeport Road, in the City of Kitchener as outlined in Report EES-DCS-23-004.
- b) Amend Traffic and Parking By-law 16-023 to delete from Schedule 2, Limited Parking on west side of Lancaster Street (regional Road 29) from Elizabeth Street to 45m north of Guelph Street, in the City of Kitchener as outlined in Report EES-DCS-23-004.
- c) Amend Traffic and Parking By-law 16-023 to delete from Schedule 4, No Stopping on east side of Lancaster Street (Regional Road 29) from Union Street to Ash Street, in the City of Kitchener as outlined in Report EES-DCS-23-004.
- d) Amend Traffic and Parking By-law 16-023 to add to Schedule 1, No Parking on west side of Lancaster Street (Regional Road 29) from Elizabeth Street to 45m north of Guelph Street and on east side of Lancaster Street (Regional Road 29) from Union Street to Ash Street and Arnold Street to 45m north of Guelph Street, in the City of Kitchener as outlined in Report EES-DCS-23-004.

2. Purpose / Issue:

To obtain Council approval for the Recommended Design Concept for the

reconstruction of Lancaster Street between Wellington Street and Bridgeport Road and proceed to detailed design, property acquisition and construction, pending budget approval.

3. Strategic Plan:

This project supports Strategic Focus Area 2 - Sustainable Transportation. It will offer residents more choice in active transportation and improve road safety with new boulevard cycle tracks and continuous sidewalks on both sides of the road.

4. Report Highlights:

The recommended Design Concept for Lancaster Street between Wellington Street and Bridgeport Road meets the following Regional strategic priorities:

- Supports active transportation with boulevard cycle tracks and continuous sidewalks on both sides of the road;
- Improves pedestrian safety and access to public transit with the installation of a
 pedestrian refuge island at the Hamel Avenue intersection and updated bus
 stops throughout the project; and
- Effectively manages the Regions assets by improving the condition of the road structure, storm drainage system and trunk watermain.

This project has approved budget for design in 2023 with forecasted funds in 2024 to 2027 to be refined through future budget processes in the Transportation Capital Program.

Please see Appendix A, B, C and D for more information.

5. Background:

The limits of this project include the Wellington Street intersection and extend to the south side of the Bridgeport Road intersection. The pavement structure of Lancaster Street within the study area is in poor condition. In addition, a trunk watermain between Louisa Street and Bridgeport Road that supplies the Bridgeport area of Kitchener is in poor condition and must be replaced. There are currently discontinuous sidewalks and no cycling facilities on Lancaster Street. The 2018 Transportation Master Plan identifies the need for such facilities within the corridor. Although there is no need to widen the road to accommodate future traffic volumes, the inclusion of cycling facilities in the proposed roadworks will require the acquisition of private property to accommodate a widened right-of-way.

The Project Team developed three alternative Design Concepts for the reconstruction of Lancaster Street within the study area. Each alternative included different configurations of pedestrian and cycling facilities;

- <u>Alternative 1</u> includes 1.25m wide on-road cycling lanes separated from the motor vehicle lanes by painted lines.
- <u>Alternative 2</u> includes 1.25m wide on-road cycle tracks separated from the motor vehicle lanes by flush concrete curbs.
- <u>Alternative 3</u> includes 1.5m wide cycle tracks built within the boulevard on both sides of the road abutting the new and reconstructed concrete sidewalks

Each alternative included a reduction in the number of motor vehicle through lanes on Lancaster Street between Union Street and Bridgeport Road from the existing four lanes to two lanes. Each alternative also included a reduction to two lanes across the Highway 85 bridge in order to create sufficient space for cycling facilities on the bridge.

Property acquisition from 55 properties would be required to widen the municipal rightof-way sufficiently to accommodate Alternative 3. Implementation of Alternative 1 and 2 would require narrower acquisitions from 46 properties. No full buy-outs are required.

The Regions Traffic By-law 16-023 allows on-street parking on Lancaster Street for up to two hours at specific locations between Union Street and Guelph Street. The three alternative design concepts that were considered for the proposed reconstruction incorporated a reduction in the width of the asphalt road surface to the minimum required to accommodate projected traffic volumes and emergency vehicles, buses and snow clearing equipment. This would require that on-street parking be eliminated in order to avoid additional property acquisition. In order to determine the utilization of existing on-street parking, a study was done in March 2023 to document the frequency and duration of on-street parking. It was found that on 24 occasions during the study vehicles were parked on-street for durations of less than 15 minutes.

Each alternative design concept includes the provision of pedestrian and cycling facilities on the Highway 85 overpass between Union Street and Bridgeport Road. The existing access ramps create a need for pedestrians and cyclists to cross these ramps in order to continue north and south of the overpass. At the Regional Council meeting held April 19, 2023, the decision was made to maintain the current configuration of the ramps.

The Highway 85 overpass structure is under the jurisdiction of the Ministry of Transportation (MTO). Region staff have discussed the transition from the existing four lane cross-section on the bridge to the proposed two lane configuration on Lancaster Street north and south of the bridge. MTO staff have agreed to a reduction to a two lane cross-section on the bridge which will provide sufficient room for separated cycling facilities on the bridge. The installation of a physical barrier between the vehicular lanes and cycling facility may require structural modifications to the bridge. This will be investigated further during detailed design and coordination with the MTO.

The section of Lancaster Street between Bridgeport Road and Bridge Street is outside the limits of the current study area. A separate study is currently underway by Regional staff to determine the feasibility of installing cycling facilities on Lancaster Street from Bridgeport Road to Shirk Place. Such a facility would connect to cycling facilities currently being considered on Shirk Place by the City of Kitchener.

Other studies are currently underway adjacent to the study area and include:

- A study was initiated in 2022 to consider the feasibility of constructing a grade separation to replace the Lancaster Street/Metrolinx railway level crossing between Wellington Street and Victoria Street. The construction of such a structure would include pedestrian and cycling facilities. This study is expected to be completed in 2024.
- The Region is currently undertaking a study to determine the need for cycling facilities on Bridgeport Road between Erb Street and Lancaster Street. This study will address the configuration of the Bridgeport Road at Lancaster Street intersection and the connection of proposed cycling facilities on Bridgeport Road with those proposed on Lancaster Street.

6. Communication and Engagement with Area Municipalities and the Public

Area Municipalities: City of Kitchener staff are included on the Project Team for this project and have provided input regarding municipally owned infrastructure within and abutting the project limits.

Public: Region staff have met and consulted with the City of Kitchener Cycling and Trails Advisory Committee and the Region of Waterloo's Active Transportation Advisory Committee. Both committees expressed a preference for the boulevard cycling facilities included in Alternative 3 due to the increased separation distance between motor vehicles and cyclists.

Public consultation regarding the three alternative design concepts was undertaken through EngageWR and through direct mailing to property owners and tenants within the study area. A total of 26 responses were submitted to the online survey. In addition, 6 written submissions were submitted. The results of the public feedback were;

- 60% supported Alternative 3
- 14% supported Alternative 2
- 14% supported Alternative 1
- 12% supported not including any cycling facilities on Lancaster Street

A summary of public comments and project team responses is included in Appendix C

The most common comments received were that the increased separation between motor vehicles and pedestrians/cyclists as provided in Recommended Alternative 3 was the safest solution. Concerns were expressed regarding the need to acquire property in order to implement Alternative 3. In general, comments were focussed on three issues; the need for on-street parking on Lancaster Street, potential conflicts between cyclists and motor vehicles at the Highway 85 access ramps and the need for cycling facilities on Lancaster Street between Bridgeport Road and Bridge Street. Region staff investigated these issues and provided further information to the public through EngageWR.

7. Financial Implications:

The approved 2023-2032 Transportation Capital Plan includes a total budget of \$10,039,500 for the reconstruction of Lancaster Street as set out below.

Project Expenditure	2023	2024-2027	Total
05497 Lancaster St, Wellington St N to Bridgeport Rd	\$1,813,500	\$6,922,500	\$8,736,000
06269 Bridgeport Rd at Lancaster St	325,000	834,300	1,159,300
07283 Lancaster St at Louisa St	<u>133,900</u>	<u>10,300</u>	<u>144,200</u>
Subtotal Project Expenditure	<u>\$2,272,400</u>	<u>\$7,767,100</u>	<u>\$10,039,500</u>
Funding Sources			
Transportation Capital Reserve	\$1,813,500	\$4,866,300	\$6,679,800
Canada Community-Building Reserve Fund		1,500,000	1,500,000
RDC RF Transportation	<u>458,900</u>	<u>1,400,800</u>	<u>1,859,700</u>
Subtotal Funding Sources	<u>\$2,272,400</u>	<u>\$7,767,100</u>	<u>\$10,039,500</u>

The timing of construction is subject to the receipt of all technical and financial approvals, relocation of utilities and property acquisition. The cost and timing will be reviewed and revised as necessary during the preparation of future Transportation Capital Programs.

8. Conclusion / Next Steps:

Subject to approval of the recommended Design Concept, staff will proceed to prepare detailed design drawings for the proposed reconstruction of Lancaster Street and will initiate the property acquisition process. Construction of the proposed improvements is currently scheduled through 2025 to 2026.

9. Attachments:

Appendix A: Key Plan

- Appendix B: Project Team recommended Design Concept
- Appendix C: Public Comments and Project Team Responses
- Appendix D: Property Requirements

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