

Region of Waterloo

Engineering and Environmental Services

Design and Construction

To: Planning and Works Committee

Meeting Date: May 7, 2024

Report Title: Project Approval Report for a Roundabout at Strasburg Road and New Dundee Road (Regional Road No. 12), City of Kitchener

1. Recommendation

That the Regional Municipality of Waterloo approve the recommended design for a proposed multi-lane roundabout at New Dundee Road (Regional Road 12) and Strasburg Road in the City of Kitchener, as described in Report EES-DCS-24-004, dated May 7, 2024. Upon completion of construction, that The Regional Municipality of Waterloo amend Traffic and Parking By-law 16-023, as amended to:

- a) Remove from Schedule 17, Rates of Speed, 80 km/h on New Dundee Road (Regional Road 12) from 500 meters east of Fischer-Hallman Road (Regional Road 12) to 550 meters west of Homer Watson Boulevard (Regional Road 28);
- b) Add to Schedule 17, Rates of Speed, 80 km/h on New Dundee Road (Regional Road 12) from 500 meters east of Fischer-Hallman Road (Regional Road 12) to 400 meters west of Strasburg Road;
- c) Add to Schedule 17, Rates of Speed, 60 km/h on New Dundee Road (Regional Road 12) from 400 meters west of Strasburg Road to 400 meters east of Strasburg Road;
- d) Add to Schedule 17, Rates of Speed, 80 km/h on New Dundee Road (Regional Road 12) from 400 meters east of Strasburg Road to 550 meters west of Homer Watson Boulevard (Regional Road 28);
- e) Add to Schedule 15, Lane Designation, on New Dundee Road (Regional Road 12) eastbound at Strasburg Road; Left, Through;
- f) Add to Schedule 15, Lane Designation, on New Dundee Road (Regional Road 12) southbound at Strasburg Road; Left, Right;
- g) Add to Schedule 15, Lane Designation, on New Dundee Road (Regional Road 12) westbound at Strasburg Road; Right, Through; and
- h) Add to Schedule 10, Level 2 Pedestrian Crossover, New Dundee Road (Regional Road 12) at Strasburg Road, On All Entry and Exits

2. Purpose / Issue:

A roundabout is recommended on New Dundee Road at the proposed new intersection with Strasburg Road to move anticipated traffic efficiently and provide a solution with known safety benefits for all users of the road corridor.

3. Strategic Plan:

Approval of the Recommended Design Alternative supports the Homes For All initiative under the 2023-2027 Corporate Strategic Plan as the connection of Strasburg Road will link communities and bolster residential growth in the south end of Kitchener. The proposed roundabout will keep idling times to a minimum and, combined with the proposed active transportation facilities that foster car alternative options, will support the Climate Aligned Growth and Equitable Services initiatives of the Strategic Plan.

4. Report Highlights:

A roundabout is recommended based on completed studies to determine the best solution to provide a safe and effective intersection.

Feedback from the public included concerns as well as support for the roundabout. The main themes raised by the public and adjacent property owners are below:

- Benefit from reduced speeds approaching, entering and exiting the roundabout;
- Benefit from efficient traffic flow through the intersection;
- Concerns for pedestrian safety;
- Concerns for cost and impact from roundabout construction; and
- Concerns for the safe passage of large commercial trucks and agricultural equipment.

The roundabout, including the entrance and exit to the roundabout, will be designed geometrically to accommodate all users. Less serious injuries occur at roundabout compared to traffic signals. A study of 30 roundabout in Ontario found that pedestrian collision rates are approximately 40 to 60 per cent less than pedestrian collision rates at comparable traffic signals with similar traffic and pedestrian volumes. The proposed roundabout will have lower life-cycle costs and reduce idling times, which will result in fuel savings and reduced vehicle emissions and will support the Region's climate goals.

5. Background:

New Dundee Road (Regional Road 12) is under the jurisdiction of the Region of Waterloo. It is an east-west road extending between Homer Watson Boulevard (Regional Road 28) to the east and Walker Road (Regional Road 3) to the west,

becoming Bridge Street at the City of Kitchener limit at Trussler Road. In the study area it currently has a two-lane rural section with gravel shoulders and a statutory speed limit of 80 km/h.

Strasburg Road is under the jurisdiction of the City of Kitchener. The City of Kitchener is undergoing a detailed design assignment for Strasburg Road Extension from Rockcliffe Drive to New Dundee Rd. The extension of Strasburg Road will include a four-lane urban section, with multi-use paths on both sides. Construction is expected to start in 2025. The City of Kitchener is completing the roundabout project on the behalf of the Region of Waterloo in combination with the Strasburg Road Extension project.

The area along the Strasburg Road extension is planned for predominantly low-density residential development. Areas bordering New Dundee Road are currently agricultural. The planned new intersection at New Dundee Road and Strasburg Road South will be about 280 m west of Reidel Drive/Cameron Road, and 380 m south of a new east-west collector road to be called Blair Creek Drive.

A roundabout at the new intersection is expected to reduce injury collisions and delays for all users when compared to a signalized intersection.

6. Communication and Engagement with Area Municipalities and the Public

Area Municipalities: Ongoing meetings are being held with City of Kitchener staff, and the Region of Waterloo to review the details, scope and timing of the project. These meeting are held monthly on the first Tuesday of the month. City of Kitchener staff are in favour of the proposed roundabout and the project is being managed by City of Kitchener.

Public: Letters were delivered to property owners within the immediate vicinity of the proposed intersection. Phone discussions and email correspondence took place with all property owners who responded to the letters. Signs within the project limits were installed to direct the public to the Region of Waterloo's Engage WR website. The Engage website recorded 150 responses to the survey of which 95 responses were in favour of implementing a roundabout at this location.

Analysis of the Engage Survey and public consultation responses are provided in Appendix C. The full Engage Survey results can be made available upon request.

7. Financial Implications:

The Region's approved 2024-2033 Transportation Capital Program includes a budget of \$3,225,000 in 2024-2026 for the Strasburg Road / New Dundee Road Roundabout (project #07315) to be funded from the Regional Roads Development Charges Reserve Fund.

8. Conclusion / Next Steps:

Subject to Council approval, Regional staff will work with City of Kitchener staff and initiate the property acquisition process, finalize detailed design and coordinate required utility relocations. The roundabout will be constructed by the City of Kitchener as part of the multi-year Strasburg Road Extension project which may commence as early as 2025.

Attachments:

Appendix A Key Plan

Appendix B Preliminary Design Drawing

Appendix C Public Consultation and Responses

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