# **Region of Waterloo**

## **Transportation and Environmental Services**

### **Design and Construction**

То:	Chair Tom Galloway and Members of the Planning and Works Committee
Meeting Date:	October 4, 2022
Report Title:	Project Approval for a Roundabout at Fischer-Hallman Road (Regional Road No. 58) and New Dundee Road. (Regional Road No. 12), City of Kitchener and North Dumfries Township

#### 1. Recommendation:

That the Regional Municipality of Waterloo approve the Recommended Design Alternative for a proposed roundabout at Fischer-Hallman Road (Regional Road No. 58) and New Dundee Road. Regional Road No. 12), City of Kitchener and North Dumfries Township, as described in Report EES-DCS-22-001, dated October 4, 2022.

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, 70 km/h on New Dundee Road (Regional Road 12) from 500 m west of Fischer-Hallman Road (Regional Road 58) to 500 m east of Fischer-Hallman Road (Regional Road 58);

b) Remove from Schedule 17, Rates of Speed, 70 km/h on Fischer-Hallman Road (Regional Road 58) from 500 m north of New Dundee Road (Regional Road 12) to 500 m south of New Dundee Road (Regional Road 12);

c) Add to Schedule 17, Rates of Speed, 60 km/h on New Dundee Road (Regional Road 12) from 500 m west of Fischer-Hallman Road (Regional Road 58) to 500 m east of Fischer-Hallman Road (Regional Road 58);

d) Add to Schedule 17, Rates of Speed, 60 km/h on Fischer-Hallman Road (Regional Road 58) from 500 m north of New Dundee Road (Regional Road 12) to 500 m south of New Dundee Road (Regional Road 12);

e) Add to Schedule 15, Lane Designation, on New Dundee Road (Regional Road 12) westbound at Fischer-Hallman Road (Regional Road 58), Through/Left Turn, Right Turn;

f) Add to Schedule 15, Lane Designation, on Fischer-Hallman Road (Regional Road 58) southbound at New Dundee Road (Regional Road 12), Left Turn, Through/Right Turn;

g) Add to Schedule 10, Level 2 Pedestrian Crossover, on New Dundee Road (Regional Road 12) at Fischer-Hallman Road (Regional Road 58), On All Entry and Exits.

# 2. Purpose / Issue:

1. A roundabout is recommended at Fischer-Hallman Rd. and New Dundee Rd. to improve safety and reduce delays to motorists. The proposed roundabout is a partial two lane roundabout, with a southbound through-right turn lane and a left turn lane, a westbound through-left turn lane and a right turn lane, and single lanes for the remaining entrances and exits.

## 3. Strategic Plan:

Approval of the Recommended Design Alternative meets the 2019-2023 Corporate Strategic Plan objectives under Strategic Focus Area 2, Sustainable Transportation to improve road safety for all users – drivers, cyclists, pedestrians.

# 4. Report Highlights:

- 2. The recommended roundabout would improve safety and reduce delays to motorists by replacing signals that were installed in 1996.
- 3. 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:
  - Concerns for the safe passage of large trucks and agricultural equipment;
  - Concerns about properly educated roundabout users;
  - Concerns for increased vehicle approach speeds and increased speed in the roundabout;
  - Benefit from improved traffic flow and reduced wait times for vehicles approaching and moving through the roundabout;
  - Benefit from reduced speeds and reduced collisions in the intersection; and
  - Concerns for cost and impact from roundabout construction.
- 4. The proposed roundabout, including the approaches and exits to the roundabout would be designed geometrically to adequately accommodate all types of vehicles. The proposed roundabout would have lower maintenance and electricity costs when compared to a traffic signal, and will reduce idling times which results in fuel savings and reduced vehicle emissions.

### 5. Background:

The intersection was historically controlled by stop signs and then converted to a signalized intersection in 1996. The collision history for the 5-year period between 2014 to 2018 was reviewed. During this period, 26 collisions were recorded, 13 of which were classified as non-fatal injury and 13 classified as property-damage-only. Sixteen of the collisions (62%) were classified as rear-end, indicating that high speeds and lack of left-turn lanes may be a factor.

A roundabout at this location would significantly decrease high speed rural collisions, provides better level of service for traffic and provides a gateway for speed reduction entering the future urban environment to the north.

#### 6. Area Municipality Communication and Public/Stakeholder Engagement:

**Area Municipality Communication**: Staff at the Township of North Dumfries and the City of Kitchener were advised of the plans for this roundabout. There were no objections to a proposed roundabout at this location.

#### Public/Stakeholder Engagement:

A survey was developed as the main form of public engagement and the public was directed to the Region of Waterloo's EngageWR website to complete the survey.

- Letters were delivered to property owners within a 2km radius of the intersection as well as all the residents in the Village of Roseville. The letters directed residents to the survey on the EngageWR website;
- Signs within the project limits were installed to direct motorists passing through this intersection to the Region of Waterloo's EngageWR website; and
- In-person meetings or phone conversations were coordinated with the four adjacent property owners, and it was explained that a portion of their land would need to be acquired for construction of the roundabout.

The survey on the EngageWR website recorded 261 contributions to the four questions in the survey.

Further information regarding the public consultation, discussions and responses is provided in Attachment C.

## 7. Financial Implications:

The Region's approved 2022-2031 Transportation Capital Program includes a budget of \$2,315,000 in 2022-2025 for the Fischer Hallman/New Dundee Rd. roundabout (Project

#05284) to be funded from the Regional Roads Development Charges Reserve Fund.

#### 8. Conclusion / Next Steps:

Subject to Council approval, Regional staff would initiate the property acquisition process, finalize detailed design and coordinate required utility relocations, with construction planned for 2024-2025.

#### Attachments/Links:

Attachment A - Key Plan

Attachment B - Preliminary Design Drawing

Attachment C - Responses to Public Consultation Comments (4177530)

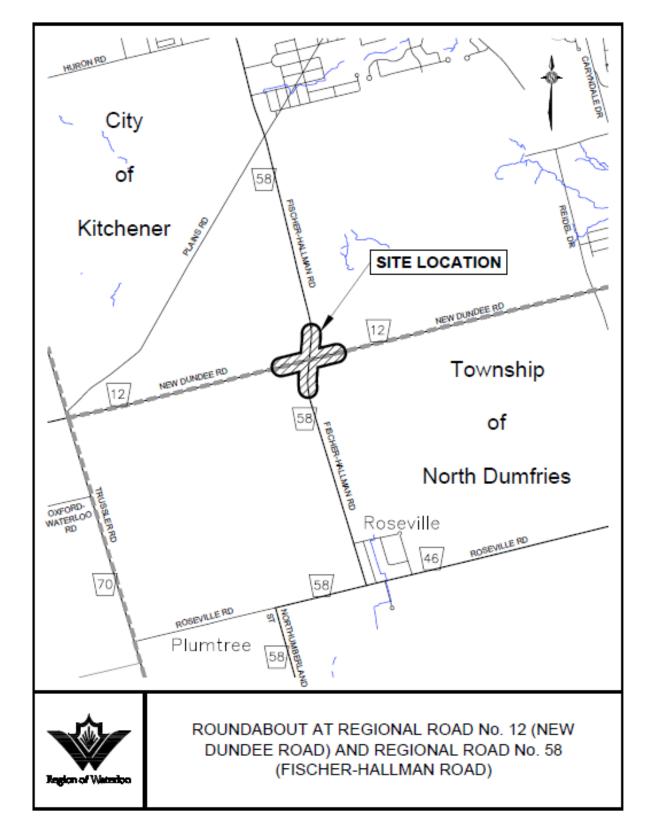
Prepared By: Steve Yonemitsu, Engineer, Design and Construction

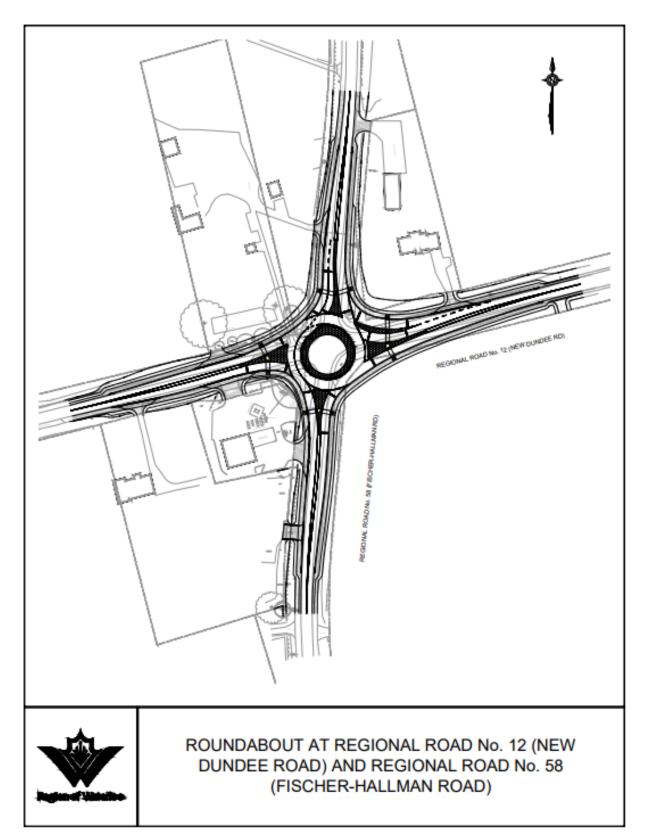
Skylar Van Kruistum, Head, Design and Construction

Reviewed By: Phil Bauer, Director, Design and Construction

Approved By: Jennifer Rose, Commissioner, Engineering and Environmental Services

Attachment A - Key Plan





Attachment B - Preliminary Design Drawing