

The Regional Municipality of York

Committee of the Whole
Transportation Services
June 10, 2021

Report of the Acting Commissioner of Transportation Services

Request for Traffic Signals Major Mackenzie Drive East and Elm Green Lane City of Markham

1. Recommendations

1. Traffic signals not be installed at the future intersection of Major Mackenzie Drive East and Elm Green Lane in the City of Markham.
2. The Regional Clerk forward this report to the Clerk of the City of Markham.

2. Summary

This report responds to a resolution received from City of Markham, requesting the Region approve installation of traffic signals that currently do not meet the required criteria at the future intersection of Major Mackenzie Drive East and Elm Green Lane as part of the Angus Glen development at the property owner's expense.

Key Points:

- City of Markham is requesting installation of traffic signals at the future intersection of Major Mackenzie Drive East and Elm Green Lane that currently do not meet the Region's Traffic and Pedestrian Signal Policy criteria
- Traffic signals may be justified in the future once the proposed collector road on the north side of Major Mackenzie Drive East and Elm Green Lane is constructed as part of Markham's Future Urban Area
- The Region would install traffic signals when the Region's Traffic and Pedestrian Signal Policy criteria is satisfied

3. Background

City of Markham is requesting installation of traffic signals at the future intersection of Major Mackenzie Drive East and Elm Green Lane

On October 19, 2020, the Regional Clerk received a council resolution from the City of Markham (Attachment 1) requesting the Region approve installation of traffic signals at the future intersection of Major Mackenzie Drive and Elm Green Lane, to serve as the principal access to a private 173-townhouse condominium development off of Major Mackenzie Drive East. The resolution states that installation of traffic signals will be at the expense of the property owner. The intersection is tentatively scheduled to be constructed by spring 2022 and includes provision for future traffic signals at the intersection. A location map showing the proposed development and intersection is included as Attachment 2.

In [June 2015](#), Council adopted the updated Traffic and Pedestrian Signal Policy

The Region's Traffic and Pedestrian Signal Policy (Policy) is consistent with Ministry of Transportation of Ontario traffic signal warrant criteria and directly references Ontario Traffic Manual Book 12 entitled Traffic Signals. This publication provides for a consistent approach to be used across the province to determine when installation of signals would be required. The signal criteria are based on traffic volume and delay, pedestrian volume and collision history. The Policy acknowledges Council has authority to approve traffic signals that do not satisfy Policy criteria.

Past installations of traffic signals not satisfying Policy criteria have been fully funded by the requesting party

The Policy stipulates funding of traffic or pedestrian signals at private entrances are at the expense of the property owner. Where requested signals on Regional roads have not satisfied Policy criteria, Council's practice has been to approve installation conditional on costs being fully recovered from the requesting party, in this case the property owner.

4. Analysis

The intersection of Major Mackenzie Drive and Elm Green Lane does not satisfy the Region's Traffic and Pedestrian Signal Policy criteria

Results of the traffic impact assessment provided by the developer show projected traffic volume counts for vehicles entering/exiting the subdivision account for only 11% of the required minimum to satisfy the Policy criteria. While installation of traffic signals that do not meet Policy criteria would likely benefit residents entering/exiting the townhouse development during rush hours, commuter traffic on Major Mackenzie Drive East would experience approximately 80 seconds of delay per vehicle.

Traffic signals may be justified once the proposed collector road on the north side of Major Mackenzie Drive East and Elm Green Lane is constructed

The lands to the north of Major Mackenzie Drive East and Elm Green Lane have been identified as part of the Markham Future Urban Area to include residential development and a proposed collector road on the north side of Major Mackenzie Drive East and Elm Green Lane. The traffic impact assessment provided by the developer suggests the intersection would justify Policy criteria in five to 10 years once the collector road is built. An Official Plan Amendment for these lands has not yet been approved and the subdivision application identifying the fourth leg has not been submitted to the Region for review.

Traffic signals would be installed in the future should annual studies reveal the Region's Traffic and Pedestrian Signal Policy criteria has been satisfied

Once the intersection of Major Mackenzie Drive East and Elm Green Lane is constructed with provisions for future traffic signals and residential occupancy begins, staff will begin conducting annual intersection studies applying Policy criteria. Should the Policy criteria be satisfied in the future, the Region would begin the traffic signal installation process. In the interim, staff will request the developer submit an electrical design for the future installation of traffic signals.

5. Financial

The cost to install traffic signals at a typical four-approach intersection is approximately \$250,000, subject to final design. Annual operating and maintenance costs are approximately \$7,800. Installation of traffic signals that do not satisfy the policy criteria are to be paid for by the property owner, including operating and maintenance costs. All costs are non-refundable.

6. Local Impact

Traffic and pedestrian signals are required to balance alternating right-of-way between all road users and to facilitate access to local communities. Installation of traffic signals that do not meet the Policy criteria result in increases in overall delay on the major street, negatively impacting the flow of traffic. In this case, traffic on Major Mackenzie Drive would experience approximately 80 seconds of delay per vehicle during rush hours.

7. Conclusion

City of Markham is requesting installation of traffic signals at the future intersection of Major Mackenzie Drive East and Elm Green Lane at the property owner's expense. This intersection does not currently satisfy the criteria under the Region's Traffic and Pedestrian Signal Policy.

Staff do not currently recommend traffic signals be installed at the future intersection of Major Mackenzie Drive East and Elm Green Lane.

Traffic signals may be justified once the proposed collector road on the north side of Major Mackenzie Drive East and Elm Green Lane is constructed as part of Markham's Future Urban Area. Staff will undertake annual studies and, should the Policy criteria be satisfied in the future, begin the process of having traffic signals installed. In the interim, staff will request the developer submit an electrical design for the future installation of traffic signals.

For more information on this report, please contact Joseph Petrunaro, Director Roads and Traffic Operations, at 1-877-464-9675 ext. 75220. Accessible formats or communication supports are available upon request.

Recommended by:



Ann-Marie Carroll
Acting Commissioner of Transportation Services

Approved for Submission:



Bruce Macgregor
Chief Administrative Officer

May 21, 2021
Attachments (2)
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