

Committee of the Whole (2) Report

DATE: Tuesday, June 8, 2021

WARD: 1

TITLE: KING VAUGHAN ROAD FROM PINE VALLEY DRIVE TO MILL ROAD SPEED REVIEW

FROM:

Zoran Postic, Deputy City Manager, Public Works

ACTION: DECISION

Purpose

To seek approval to implement a speed limit reduction on King Vaughan Road between Pine Valley Drive to Mill Road to support speed limit consistency and improve traffic operations.

Report Highlights

- York Region has assumed ownership of King Vaughan Road east of Pine Valley Drive, and has reduced the speed limit to 60 km/h.
- A section of King Vaughan Road between Pine Valley Drive and Mill Road is rural in nature and has a statutory speed limit of 80km/h.
- King Vaughan Road, west of Mill Road is posted at 60 km/h.
- A speed limit of 60 km/h on King Vaughan Road between Pine Valley Drive to Mill Road is recommended for consistency in speed limits to improve traffic operations.

Recommendations

1. That Council approve the implementation of a speed limit reduction on King Vaughan Road from Pine Valley Drive to Mill Road, from 80km/h to 60 km/h;
2. That a By-law be enacted to amend Schedule "E" Part 3 of the Traffic By-law 284-94, as amended, to add a speed limit reduction from 80 km/h to 60 km/h on King Vaughan Road from Pine Valley Drive to Mill Road; and
3. That the City Clerk forward a copy of this report to the York Regional Police, Township of King and Region of York.

Background

York Region has assumed ownership of King Vaughan Road east of Pine Valley Drive and has reduced the speed limit to 60 km/h

King Vaughan Road is identified as a minor arterial road in the City's transportation network. The section of King Vaughan Road between Pine Valley Drive to Mill Road has a two-lane rural cross-section with no sidewalks, and a statutory 80 km/h speed limit (a location map presented in Attachment 1).

The Region has assumed ownership of King Vaughan Road east of Pine Valley Drive and has reduced the speed limit from Pine Valley Drive to 400 metres east of Weston Road to 60km/h in the 2021 Speed Limit Revisions report.

(<https://yorkpublishing.escribemeetings.com/filestream.ashx?DocumentId=22024>).

King Vaughan Road, west of Mill Road to Concession Road 10 is posted at 60 km/h. The section of King Vaughan Road between Mill Road to Pine Valley Drive at 80 km/h is approximately 800m long.

Previous Reports/Authority

Traffic By-law 284-94:

[Consolidated Traffic By-Law 284-94](#)

Analysis and Options

A traffic study was conducted on King Vaughan Road to collect both the speed and volume data.

A traffic study was conducted in March 2021. Speed and volume data was collected over a three-day period on King Vaughan Road between Pine Valley Drive and Mill Road.

The following table summarizes average daily traffic volume, the average speed and the 85th percentile speed (the speed at or below which 85% of all vehicles are travelling) in both the eastbound and westbound directions.

Table 1: Traffic Volume and Speeds on King Vaughan Road Avenue (Pine Valley Drive to Mill Road)

King Vaughan Road (Pine Valley Drive to Mill Road)	Average Daily Traffic Volume	Average Speed (85th Percentile Speed) in km/h
Eastbound	462	74 (86)
Westbound	622	79 (91)
Total Volume and Weighted Average	1084	77 (89)

King Vaughan Road, between Pine Valley Drive and Mill Road is classified as a minor arterial roadway. Its function is to facilitate the movement of local and commuter traffic to and from the arterial road network. According to the Geometric Design Guide for Canadian Roads, this type of road can accommodate around 12,000 vehicles per day. The recorded traffic volume was well within this capacity.

The average speeds are in the range of 74 km/h to 79 km/h. The 85th percentile speeds range from 86 km/h to 91 km/h. The statutory speed limit on the subject road is currently 80 km/h. As a result, the 85th percentile speed range is at or over the existing limits.

An inventory of speed limits on similar roads was taken for comparison.

Similarly sized rural roads in the city include Kirby Road and King-Vaughan Road, west of Mill Road. Table 2 summarizes these roads and speed limits.

Table 2: Speeds on rural roads in the area

Road	Classification	Speed Limit (km/h)
King-Vaughan Road (west limit to Mill Road, City of Vaughan section)	Minor Arterial	60
Kirby Road (Highway 27 to Dufferin Street)	Minor Arterial	60

The comparator roads are all largely rural cross-sections with similar or greater traffic volume and are posted at 60 km/h.

The Region has reduced the speed limit on King Vaughan Road from Pine Valley Drive to 400 metres east of Weston Road to 60km/h in the 2021 Speed Limit Revisions report.

A speed limit of 60 km/h on King Vaughan Road between Pine Valley Drive to Mill Road is recommended for consistency in speed limits to improve traffic operations.

The promotion of consistency in speed limits is a very important factor for safer and efficient traffic operations. Speed limits on the same road that change frequently within short distances can result in driver confusion and low compliance with speed limits. Limiting the number of speed zone changes supports driver compliance.

A 60 km/h speed limit for both City and Region sections effectively promotes consistency for the entire length of King Vaughan Road and is consistent with similar sized minor arterial roads.

Financial Impact

There are no financial impacts to this report. York Region will manufacture the signs on King Vaughan Road as part of the Region's King Vaughan Road section of speed limit revision. The City will install the signs. The on-going estimated cost to maintain the signs is about \$100 per annum and will be incorporated in future year operating budgets through the budget process.

Broader Regional Impacts/Considerations

The proposed speed limit revision on King Vaughan Road will promote speed consistency on King Vaughan Road to improve traffic operations.

Upon approval of the recommended speed limit reduction, a copy of this report will be forwarded to York Regional Police for their consideration to develop a communication and enforcement plan.

Conclusion

To promote speed consistency on King Vaughan Road to improve traffic operations, staff recommends implementing a speed limit of 60km/h on King Vaughan Road between Pine Valley Drive and Mill Road. Pending Council approval, a bylaw amendment will be prepared for the speed revision.

For more information, please contact Peter Pilateris, P.Eng., Director of Transportation and Fleet Management Services ext. 6141 and/or Margie Chung, Manager of Traffic Services, ext. 6173.

Attachment

1. Location Map

Prepared by

Mark Ranstoller, Senior Traffic Technologist, ext. 6117

Approved by

A handwritten signature in blue ink, appearing to be 'Zoran Postic', with a stylized, looped design.

Zoran Postic,
Deputy City Manager, Public Works

Reviewed by

A handwritten signature in black ink, appearing to be 'Jim Harnum', with a cursive, flowing style.

Jim Harnum, City Manager