

Mirvish Village Readiness Assessment

Date: February 6, 2023

To: Toronto and East York Community Council

From: Director, Planning and Capital Program, Transportation Services

Wards: Ward 11, University-Rosedale

SUMMARY

The purpose of this report is to provide the findings from the Mirvish Village Readiness Assessment, a study led by the Transportation Services division at the request of Toronto and East York Community Council. The study encompassed an assessment of existing conditions in the study area, and a review of forecasted travel demand associated with the new development at Mirvish Village. The study was completed to better understand the neighbourhood's transportation infrastructure and travel behaviours today, and assess the capacity of the local road network to accommodate the travel needs of new neighbours and visitors in the future. This report summarizes the study findings and recommends traffic calming measures that can be installed in the neighbourhood.

The Mirvish Village Readiness Assessment examined the neighbourhood's travel network, existing traffic management measures, planned network improvements and community concerns and requests. Staff participated in several stakeholder and public meetings with the Councillor and community members to discuss neighbourhood transportation concerns.

The City assessed the Mirvish Village transportation network and concluded it will adequately serve current and future area residents when considering three planned improvements: bikeway on Palmerston Boulevard; diversion on Lennox Street; and upgrades to the Lennox Street and Bathurst Street intersection. One additional requested improvement was reviewed and deemed suitable: speed bumps are recommended in the Laneway West of Bathurst Street, between Harbord Street and Lennox Street to encourage compliance with regulatory speed limits. No other network changes are recommended at this time.

RECOMMENDATIONS

The Director, Transportation Services, Planning and Capital Program recommends that:

1. Toronto and East York Community Council authorize the installation of speed bumps in Lane West of Bathurst Street, between Lennox Street and Herrick Street, at the locations shown on File No. TC-127 attached to this report.
2. Toronto and East York Community Council authorize the installation of speed bumps in Lane West of Bathurst Street, between Herrick Street and Harbord Street, at the locations shown on File No. TC-128 attached to this report.
3. Toronto and East York Community Council not authorize the installation of traffic calming (speed humps) on Markham Street between Lennox Street and Harbord Street.

FINANCIAL IMPACT

The estimated cost for the installation of four speed bumps is \$2180.00. Funding is subject to availability and competing priorities within Transportation Services Interim 2023 Capital Budget.

DECISION HISTORY

On July 19, 2022 City Council adopted item MM47.35 which included six recommendations intended to refine the installation plan for the Palmerston-Tecumseth Cycling Connection. Refinements included adjusting the contra-flow bicycle lanes and cycling regulations on Palmerston Boulevard (from Bloor Street West to College Street), and authorizing the installation of contra-flow bicycle lanes on Lennox Street (from Palmerston Boulevard to Markham Street). Item MM47.35 also directed staff to report to Toronto and East York Community Council on the findings of the Mirvish Village Readiness Assessment item. The City Council decision can be found at: <https://secure.toronto.ca/council/agenda-item.do?item=2022.MM47.35>

On December 15, 2021 City Council adopted item IE26.10, the Cycling Network Plan, 2021 Cycling Infrastructure Installation - Fourth Quarter Update and the Future of ActiveTO Cycling Network Projects, including recommendations pertaining to the installation of the [Palmerston-Tecumseth Cycling Connections](#). The City Council decision can be found at: <https://secure.toronto.ca/council/agenda-item.do?item=2021.IE26.10>

On April 4, 2018 Toronto and East York Community Council adopted item TE31.105, requesting that the General Manager, Transportation Services conduct a review of movement, transportation and street use priorities in the local road network in the immediate vicinity of the new Mirvish Village development, with emphasis on circulation patterns, and the possibility of further traffic calming measures, stormwater management, canopy enhancement, and creative solutions that consider repurposing of road space for community uses. The Community Council decision can be found at: <https://secure.toronto.ca/council/agenda-item.do?item=2018.TE31.105>

On April 26, 2017 City Council adopted item TE23.6 which included a requirement for the owner(s) of the Honest Ed's and Mirvish Village development to design and

construct, at no cost to the City, improvements to the Lennox Street and Bathurst Street intersection to facilitate left turn movements. The City Council decision can be found at: <https://secure.toronto.ca/council/agenda-item.do?item=2017.TE23.6>

COMMENTS

The Mirvish Village neighbourhood study area, shown on Attachment 1, is defined as the area bounded roughly by: London Street to the north, Harbord Street to the south, Borden Street to the east, and Manning Avenue to the west. The Mirvish Village Readiness Assessment, hereafter referred to as "the study", encompassed an assessment of existing conditions in the study area, and a review of forecasted travel demand associated with the new development at Mirvish Village. The study was completed to better understand the neighbourhood's current transportation infrastructure and travel behaviours, and assess the capacity of the local road network to accommodate the travel needs of new neighbours and visitors in the future. This report summarizes the study findings and recommends traffic calming measures that can be implemented in the neighbourhood.

The first section of the report provides an overview of existing conditions; the second section summarizes the City's review of community requests; the third section provides a summary of planned Council-approved future improvements; and the fourth section outlines further traffic calming measures that were evaluated including those that are recommended.

Existing Conditions

Study Focus

Three primary concerns have been raised: motor vehicles using local roads for circulation; speeding; and vulnerable road user safety. Current residents believe that the network of local roads is being used by motorists to avoid the adjacent arterials, and bypass the intersection of Bathurst Street and Bloor Street West. They also believe the patterns of local road use by motorists could become more complex or more popular in future.

Street Network Characteristics

The Mirvish Village study area is comprised of a network of local and collector roads and public laneways, bounded by a minor arterial road to the south, and local roads on the west, north and east. Two major arterial roads, Bloor Street West and Bathurst Street pass through the study area. The majority of the area is designated for residential use and there is commercial designation fronting portions of Bloor Street West, Bathurst Street and Markham Street between Bloor Street West and Lennox Avenue. Toronto Transit Commission (TTC) service is available on Bloor Street West, Bathurst Street and Harbord Street. Permit parking is available on most residential roads in the area, pay-and-display parking is available on Harbord Street, Bathurst Street and Bloor Street West, and designated car-share parking is available on Lennox Street.

The road network within the residential neighbourhood has speed limits of 30 km/h. Sidewalks are available on both sides of all roadways in the neighbourhood and meet or are above the standard minimum width of 1.5 metres. Roads are between 6.4 and 9.8 metres wide. One-way roadways are slightly wider than the current guideline that recommends a maximum of 3.0 metres per travel lane for streets operating at 30 km/h or less. Two-way roadways are slightly narrower than the same guideline. Both the road and sidewalk widths are built to legacy standards.

Bike lanes are available on Bloor Street West and Harbord Street. Bike lanes were installed on Palmerston Avenue, north of Bloor Street West, and Palmerston Boulevard, south of Harbord Street in 2022 as part of the [Palmerston-Tecumseth Cycling Connections](#) project. The segment of Palmerston Boulevard between Bloor Street West and Harbord Street will have bicycle lanes installed in 2023, pending completion of watermain replacement. Bicycle parking is available in the study area along Bloor Street West, Bathurst Street and Harbord Street, and five Bike Share Toronto stations are located within close proximity to the study area (refer to the [Bike Share System Map](#) for latest locations).

There are two schools in the Mirvish Village study area: Harbord Collegiate Institute and Central Technical School. Monsignor Fraser College - Annex Campus is also within close proximity, located north of the London Street study boundary.

Context of Community Concerns

The road network in the Mirvish Village neighbourhood has a grid-like pattern and provides several direct connections to Harbord Street, Bathurst Street and Bloor Street West. Roads near the Bathurst Street and Bloor Street West intersection, such as Lennox Avenue and Markham Street, may be attractive as alternatives for motorists travelling along Bloor Street West and Bathurst Street, respectively. High traffic volumes on Bathurst Street, Harbord Street and Bloor Street West may motivate road users to seek alternate routes.

The Mirvish Village neighbourhood is changing as a result of new, mixed-use developments. The block bound by Bloor Street West to the north, Lennox Street to the south, Markham Street to the west and Bathurst Street to the east is the site of Mirvish Village, a mixed-use development expected to begin occupancy in 2023. The development includes approximately 900 rental units, a market, public park, daycare, and retail. The development is intended to be pedestrian-oriented, as it is within close proximity to the TTC subway and main surface transit routes and nearby streets include active transportation infrastructure, as described above. Parking will be made available on the site, with the entrance to the car and bike parking garage on Lennox Street, between Markham Street and Bathurst Street. Current members of the community have cited concerns with potential travel patterns of new residents and visitors. The streets closest to the garage entrance (namely: the segment of Markham Street between Lennox Street and Herrick Street, and segments of Lennox Street between Bathurst Street and Palmerston Boulevard) have been identified by residents as a particular area of concern with regards to motor vehicle volumes, speeds and overall road user safety. Inquiries have also been made about the capacity of the local street network to

accommodate access routes using Lennox Street east of Bathurst Street and Markham Street north of Bloor Street.

Traffic Speed, Volume and Travel Patterns

Existing local traffic data was compiled and analyzed to assess motor vehicle traffic trends in the neighbourhood. Traffic studies are completed by the City or its service providers to quantify motor vehicle speed and volume. Best available data for the study area ranges from six months to eight years old. In residential neighbourhoods with limited growth and change, such as Mirvish Village until now, existing patterns tend to be longstanding and observable in data gathered as much as 15 years ago. Traffic studies are available for public viewing on the [City's Open Data portal](#).

Traffic studies indicate that the majority of road users comply with regulatory speed limits, and the volume of vehicles is within the guidelines on local and collector roads. Excessive speeding is not observed in the Mirvish Village neighbourhood; the average speeds of motor vehicles on local roads range between 22-31 km/h; locations with average speeds over 30 km/h were measured when speed limits were set at 40 km/h. Speed limit reductions to 30 km/h have now been implemented on all local roads in the study area. Traffic volumes are below the target maximum indicated in the Road Classification guidelines on all neighbourhood roads, except on Palmerston Boulevard, where one-way street segments are being implemented with the new bikeway. The target maximum for local and collector roads is 2,500 and 8,000 vehicles per day, respectively.

By request of the former Ward Councillor, a detailed review of the segment of Markham Street between Herrick and Lennox Street, and the intersection of Lennox Street and Bathurst Street was completed. New traffic counts were performed on Markham Street between Herrick Street and Lennox Street in August 2022. The new data indicated that the volume of traffic using the road segment intersection was significantly below the intended maximum for a local road (2500 vehicles per day); an average of 102 motor vehicles travel along this road segment per day. A turning movement count was performed at the intersection of Herrick Street and Markham Street in September 2021 and reached similar findings; in the AM peak (08:15–09:15), there were 7 vehicles observed traveling onto Markham Street, north of Herrick Street and in PM peak (16:30–17:30), there were 11 vehicles observed. The total daily vehicles observed travelling on Markham Street north of Herrick Street was 47. A turning movement count was performed at the intersection of Lennox Street and Bathurst Street in 2014. The data indicated that the volume of traffic using the intersection was also well below the intended maximum for a collector road (8000 vehicles per day); the total daily vehicles observed travelling on Lennox Street (west of Bathurst Street) was 1777. In the AM peak (8:15-9:15), there were 195 vehicles travelling on Lennox Street, and in the PM peak (17:00-18:00) there were 313 vehicles travelling on Lennox Street.

Road Safety (5 Year Collision History)

Collision history from the last five years was reviewed with a special emphasis on collisions involving vulnerable road users, and those that resulted in a death or serious injury (KSI collisions). Collision history provided by the Toronto Police Service for the five-year period ending in November 2022, disclosed 5 collisions that resulted in a death

or serious injury within the study area. The [Vision Zero Mapping Tool](#) provides publicly accessible information about KSI collisions.

All KSI collisions occurred on arterial roads (Bloor Street West, Bathurst Street or Harbord Street). All five KSI collisions involved a pedestrian, and one collision resulted in a fatality. The fatal collision occurred at the intersection of Bathurst Street and Lennox Street in 2019. Refer to Attachment 2 for a five-year summary of KSI collisions.

Traffic Management Measures

Speed management tools like speed humps, speed bumps curb extensions and automated speed enforcement cameras (ASEs) encourage compliance with the regulatory speed limit. The Vision Zero Road Safety Plan, and Vision Zero Speed Management Strategy included the reduction of speed limits from 40 km/h to 30 km/h on all local roads and public lanes. Speed limit reductions were implemented on all local and collector roads in the study area in 2016-17 and 2020, respectively.

Speed humps have been installed on several streets in the Mirvish Village neighbourhood to encourage slower travel speeds: Euclid Avenue from Harbord Street to Bloor Street West and Palmerston Boulevard from Harbord Street to Bloor Street West. Speed bumps were installed in: the Lane system bounded by Bathurst Street, Bloor Street West, Lippincott Street and Lennox Street; the Lane first north of Bloor Street West, between Markham Street and Palmerston Avenue; and Lane east of Palmerston Avenue South of London Street.

Curb extensions were installed in 2020 at the Markham Street and London Street intersection to reduce speeds and improve safety. Prior to 2020, curb extensions were installed at the intersections of Borden Street and Lennox Street and Lippincott Street and Lennox Street. An ASE was installed on Manning Avenue south of Lennox Street (in the vicinity of Harbord Collegiate School) in April 2022. ASE cameras rotate between several locations within a given ward; [ASE data](#) is available on the City's Open Data Portal.

Volume management tools like one-way roads have been implemented to reduce the number of vehicles on local roads and encourage through traffic on nearby arterials. One-way travel has been implemented on roads within the neighbourhood, including Manning Avenue, Euclid Avenue, Markham Street, Lennox Street, Palmerston Avenue and Borden Street. New, one-way travel restrictions are planned for Palmerston Boulevard, in coordination with the bikeway implementation in 2023.

Traffic at local intersections is controlled by a network of all-way stop controls. Traffic at intersections of two arterial roadways is controlled by Traffic Control Signals. Daytime left turns are prohibited at the intersection of Bathurst Street at Bloor Street West in all directions between 7:00 a.m. to 10:00 p.m., and LED blank-out signs were installed to reinforce existing signage. There is also a right-turn-on-red prohibition on Harbord Street at Manning Avenue near Harbord Collegiate Institute.

Safety management tools such as community safety zones, school safety zones, flashing beacons, leading pedestrian intervals and pedestrian crossing facilities improve

safety and visibility for vulnerable road users at intersections. The area surrounding Harbord Collegiate Institute was designated as School Safety Zone in September 2020; Lennox Street, from Palmerston Boulevard to Borden Street, was designated as a Community Safety Zone in October 2022; Markham Street, north of Bloor Street West, was designated a Community Safety Zone in October 2022. Flashing beacons were installed near the intersections of Markham Street and London Street, as well as London Street and Cosimo Tucci Lane in 2019. School Safety Zone improvements are estimated to be completed by 2024.

A pedestrian crossing facility was installed on Harbord Street at Borden Street to enhance pedestrian protection near Central Technical School. Since 2021, leading pedestrian intervals have been implemented at four signalized intersections to provide an advanced walk signal to pedestrians. Accessible pedestrian signals have been installed at two signalized intersections in the study area since 2019.

Refer to Attachment 3 for a complete inventory of traffic management interventions implemented in the Mirvish Village neighbourhood to date.

Community Requests for Transportation Network Changes

Since February 2021, four stakeholder meetings were held to discuss community concerns and the findings from the existing conditions assessment. Public meetings were held in October 2021 and July 2022 to provide residents with an opportunity to learn more about the planned changes and implementation timeline for the Palmerston-Tecumseth Cycling Connection project, and the proposal for a diversion on Lennox Street between Palmerston Boulevard and Markham Street, and provide comments.

Area residents expressed concerns about travel behaviours and made requests for additional volume management tools. The Mirvish Village Readiness Assessment reviewed probable paths of travel to and from the development site by all modes, and considered a list of traffic management interventions which could discourage people driving from selecting routes through the neighbourhood. Transportation Services reviewed and assessed the feasibility of all traffic management requests.

The following community requests for traffic management changes were generated from public and stakeholder meetings and assessed by staff:

- Prohibit all east-west through traffic at the Lennox Street and Bathurst Street intersection and improve signal timing
- Convert Lennox Street, between Lippincott Street and Bathurst Street, to one-way, permitting westbound vehicle movements
- Introduce a dead end on Markham Street where it currently meets Lennox Street
- Install speed humps on Markham Street between Herrick Street and Lennox Street
- Introduce a right turn restriction at the Borden Street and Harbord Street intersection in the PM peak
- Restrict 'new Markham Street', between Lennox Street and Bloor Street West, to one-way in a direction to compliment changes made to Palmerston Boulevard as part of the Cycling Connections project

- Introduce a controlled crossing at the Markham Street and Bloor Street West intersection
- Discourage the use of laneways as through routes

An itemized summary of the review and conclusions for each of these requests can be found in Attachment 4. Generally, the assessment found that most roads in the Mirvish Village neighbourhood are carrying less than half the target maximum motor vehicle traffic volume for a local road. The City's assessment of the development application concluded that the additional traffic generated is not estimated to exceed the available capacity. Staff's review through this study found no reason to doubt this conclusion. Most notably, on Markham Street, between Harbord Street and Lennox Street, a baseline traffic volume measurement was taken in June 2022 and confirmed that the street currently carries a volume of vehicles equivalent to approximately 6% of the target maximum. The community suggestion of fully closing Markham Street at a point south of Lennox Street was not supportable by City staff due to the disruption it would pose to safe operations of Markham Street, including but not limited to the operation of service vehicles such as waste removal, postal delivery, and emergency response.

In some cases, the study found that planned future network improves are expected to mitigate the issues raised or directly conflict with the requested change. The City is pursuing three network improvements that are expected to adequately serve current and new residents.

Future Network Improvements

Three Council-approved network improvements are planned for the Mirvish Village neighbourhood:

- Bikeway on Palmerston Boulevard Avenue, between Bloor Street West and Harbord Street, part of the Palmerston-Tecumseth Cycling Connection. The bikeway on Palmerston Avenue/Square/Boulevard, between Dupont Street and Queen Street West, and Tecumseth Street were installed in 2022.
- One-way, eastbound, conversion of Lennox Street between Palmerston Boulevard and Markham Street and a contra-flow bike lane
- Addition of dedicated left-turn lane from eastbound Lennox Street to northbound Bathurst Street and westbound Lennox Street to southbound Bathurst Street

The changes on Palmerston Boulevard and Lennox Street were determined to best achieve the goal of mitigating motor vehicle through-traffic associated with new development, while maintaining safety, mobility and access for residents of neighbourhood streets. The bikeway installation and associated motor vehicle traffic diversions will favour through traffic of active transportation over motor vehicles. The Lennox Street diversion will discourage motorists from travelling westbound across Bathurst Street, as they will be required to exit on the segment of Markham Street, north of Lennox Street. The movement of outbound parking garage trips from the Mirvish Village development is limited, as motorists will not be permitted to travel westbound past Markham Street. This change encourages both ingress and egress parking garage trips to enter and exit using major arterials.

The planned reconfiguration of Palmerston Boulevard to prevent north-south through traffic, coupled with the planned reconfiguration of Lennox Street to prevent westbound traffic beyond Markham Street, will most successfully disrupt several potential paths of travel through the neighbourhood without disrupting services such as waste removal, postal delivery, and emergency response. These planned changes achieve some of the desired community requests.

In October 2022 the City commenced watermain replacement work on Palmerston Boulevard from Bloor Street West to College Street. The work is tentatively scheduled to be completed by the end of June 2023. After its completion, planned contra-flow bike lanes on Palmerston Boulevard and Lennox Street will be installed. Project updates can be found on the Palmerston-Tecumseth Cycling Connections [website](#).

A dedicated left-turn lane is being installed on the west leg of the intersection of Lennox Street and Bathurst Street. This intersection change is being delivered by the developer, and was approved by City Council in the Honest Ed's and Mirvish Village Final report, Council [Item 2017.TE23.6](#). This change will improve the motor vehicle capacity of the Lennox Street and Bathurst Street intersection, and help reduce queuing caused by left turning vehicles. Staff will also implement a new traffic signal timing plan and look for options to optimize timing and intersection performance. The intersection improvements combined with the one-way conversion on Lennox Street referenced above will guide motor vehicles exiting the Mirvish Village parking garage to exit the neighbourhood at the signalized intersection of Lennox Street and Bathurst Street.

Traffic Calming Analyses

In response to Council Item [2022.MM47.35](#), staff investigated the feasibility of installing physical traffic calming on Markham Street and the Laneway West of Bathurst Street (between Harbord Street and Lennox Street) to address speeding concerns. Area residents voiced concerns that these routes are being used by motorists as a detour route to avoid congestion along Bathurst Street.

In order for speed bumps and speed humps to be recommended on a lane and street, respectively, the criteria as set out in the City of Toronto's Traffic Calming Policy must be satisfied. The warrant criteria include factors such as vehicle speed and volume, road widths, pedestrian facilities and gradient.

The investigation on the Laneway West of Bathurst Street concluded that the warrant criteria as outlined in the Traffic Calming Policy for laneways is satisfied as one criteria is met:

- The operating speed is 28.9 km/h, greater than the 20 km/h threshold

Staff recommend the installation of speed bumps on the Laneway West of Bathurst Street between Harbord Street and Lennox Street. The full warrant analysis can be found in Attachment 5 and the locations of the proposed speed bumps are shown in Attachment 6 and Attachment 7.

The investigation on Markham Street concluded that the warrant criteria as outlined in the Traffic Calming Policy is not satisfied for the following reasons:

- Minimum Volume: The average daily traffic volume is 102 and 165, less than the required minimum of 1,000 vehicles per day needed to satisfy the traffic calming installation criteria on both road segments.
- Minimum speed: The operating speed, which is the speed at which 85 percent of traffic is travelling at or below must be a minimum of 10 km/h over the warranted speed limit. The operating speeds of 31.4 km/h and 33.9 km/h are 8.6 km/h and 6.1 km/h less than the warranted speed of 40 km/h.

As required by the Traffic Calming Policy, staff evaluated the speeds of vehicles against the warranted speed limit of 40 km/h and not the posted speed limit of 30 km/h. This Policy is currently under review.

Staff do not recommend the installation of speed humps on Markham Street between Lennox Street and Harbord Street. The full warrant analysis can be found in Attachment 8. If, despite the findings above, Toronto and East York Community Council wish to proceed with installing speed humps on Markham Street, between Harbord Street and Lennox Street, it may introduce and approve the recommendation outlined in Attachment 9. A map of the potential speed humps are shown in Attachment 10 and Attachment 11.

Conclusion

Traffic data suggests that motor vehicle volumes are below expectations on the majority of the local roads, compliance with regulatory speed limits is common, there is no pattern of collisions on local streets, and there is not a significant volume of vehicles infiltrating off arterial roads into the neighbourhood. The City assessed the Mirvish Village transportation network and concluded it will adequately serve current and future area residents, when considering the planned upgrades to Palmerston Boulevard, Lennox Street and the Lennox Street and Bathurst Street intersection. As a result of this review, speed bumps are recommended in the Laneway West of Bathurst Street, between Harbord Street and Lennox Street to encourage compliance with regulatory speed limits. No other network changes are recommended at this time. Neighbourhood conditions can be reassessed after the planned network improvements are implemented to check how traffic volume on Markham Street, and other local, neighbourhood roadways have responded to these initiatives.

The Ward Councillor has been advised of the recommendations in this report.

CONTACT

Michelle Berquist
Manager, Area Transportation Planning, Transportation Services
416-338-7139, michelle.berquist@toronto.ca

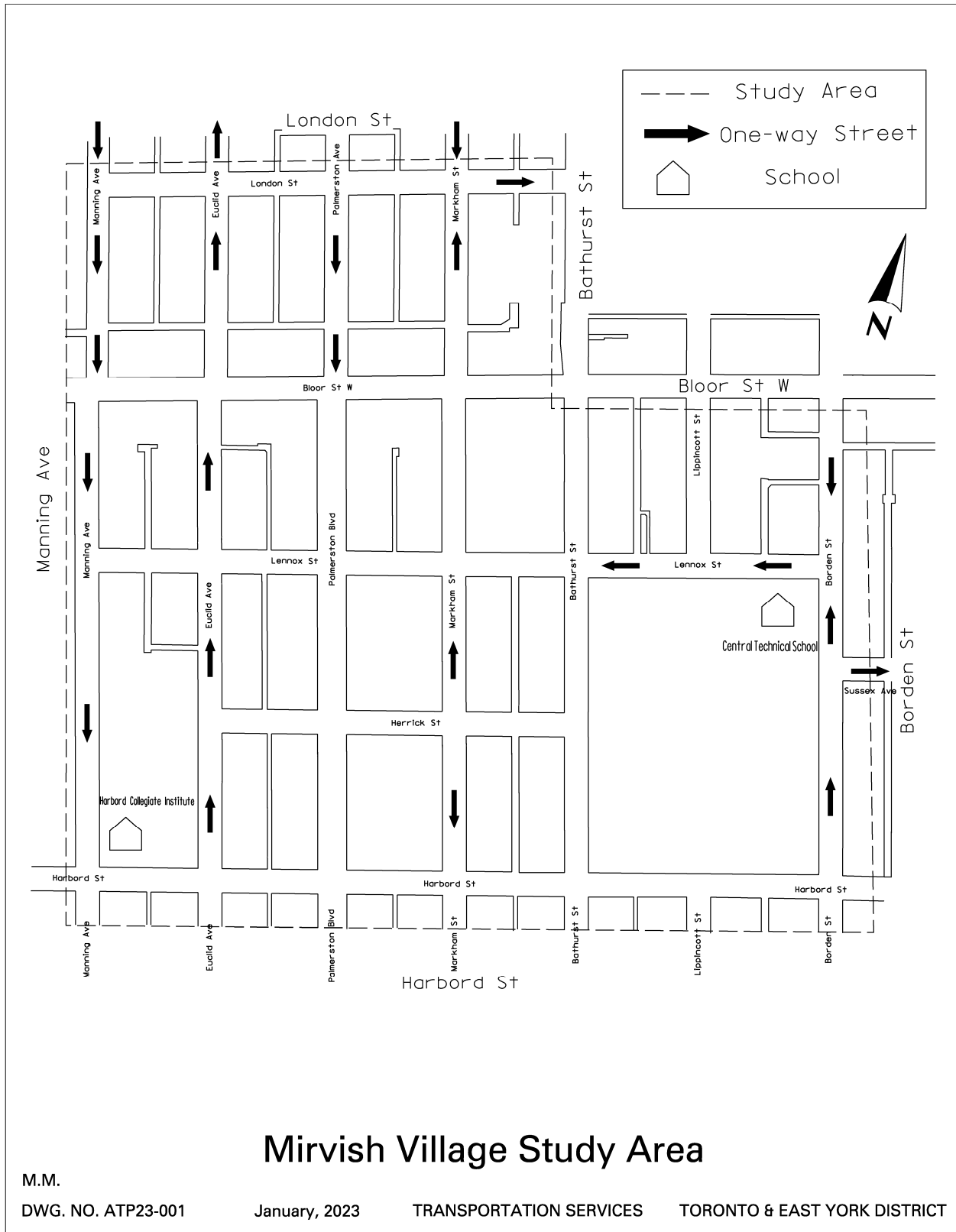
SIGNATURE

Ashley Curtis
Director, Planning & Capital Program, Transportation Services

ATTACHMENTS

- Attachment 1 - Map of Mirvish Village Study Area
- Attachment 2 - KSI Collision Data Review for Mirvish Village Study Area
- Attachment 3 - Traffic Management Inventory for Mirvish Village Study Area
- Attachment 4 - Review of Community Requested Changes
- Attachment 5 - Speed Bump Warrant Analysis on Laneway West of Bathurst between Harbord Street and Lennox Street
- Attachment 6 - TC-127 Speed Bump Locations Plan Lane West Bathurst South Lennox, Lennox Street-Herrick Street
- Attachment 7 - TC-128 Speed Bump Locations Plan - Lane West Bathurst North Harbord, Herrick Street - Harbord Street
- Attachment 8 - Speed Hump Warrant Analysis on Markham Street between Harbord Street and Lennox Street
- Attachment 9 - Alternate Recommendations for Traffic Calming on Markham Street - with community poll
- Attachment 10 - TC-125 Speed Hump Locations Plan - Markham St: Lennox St - Herrick St
- Attachment 11 - TC-126 Speed Hump Locations Plan - Markham St: Herrick St- Harbord St

Attachment 1 - Map of Mirvish Village Study Area



Attachment 2 - KSI Collision Data Review for Mirvish Village Study Area

KSI Collision History (2017-2022) in the study area

Location	Date	Collision type
Bathurst Street at Harbord Street	November 5, 2022	Pedestrian - Vehicle
800 Bathurst Street near Bloor Street West	August 13, 2021	Pedestrian - Vehicle
Bathurst Street at Herrick Street	August 4, 2019	Pedestrian - Vehicle
Bathurst Street West at Lennox Street	January 17, 2019	Pedestrian - Vehicle (Fatal)
Bathurst Street at Harbord Street	December 13, 2018	Pedestrian - Vehicle

Attachment 3 - Traffic Management Inventory for Mirvish Village Study Area

Inventory of existing traffic management strategies which have been implemented in the Mirvish Village study area.

Strategy	Intersection/ Street	Location detail	Quantity	Installation Date
Intersection Narrowing	Markham Street	London Street	1	31-Dec-20
Flashing Beacon	London Street	Markham Street (Palmerston Avenue Junior Public School)	1	09-May-19
Flashing Beacon	London Street	Euclid Avenue (Palmerston Avenue Junior Public School)	1	09-May-19
Speed Humps	Euclid Avenue	Harbord Street and Bloor Street West	3	Record not found
Speed Humps	Palmerston Boulevard	Harbord Street and Bloor Street West	6	Record not found
Speed Bumps	Loretto Lane	bounded by Bathurst Street, Bloor Street West, Lippincott Street and Lennox Street	2	Record not found
Speed Bumps	Lane System	first north of Bloor Street West, between Markham Street and Palmerston Avenue	2	Record not found
Speed Bumps	Police War Horse Ln	bounded by London Street, Markham Street, Bloor Street West and Palmerston Avenue	2	Record not found
Curb Extension	Markham Street	Lennox Street (southwest corner)	1	2020
Curb Extension	Markham Street	London Street (southwest corner)	1	2020

Strategy	Intersection/ Street	Location detail	Quantity	Installation Date
Curb Extension	Markham Street	London Street (northeast corner)	1	2020
Curb Extension	Borden Street at Lennox Street	Borden Street, east side	1	2019
Curb Extension	Lippincott Street at Lennox Street	Lennox Street (southeast corner)	1	Record not found
Left turn restriction Anytime	Manning Avenue at Bloor Street West	Northbound	1	Record not found
Right Turn on Red restriction	Harbord Street at Palmerston Blvd	Westbound	1	13-May-14
Left turn restriction (7:00 a.m. to 10:00 p.m.)	Bathurst Street at Bloor Street	Northbound (LED sign installed)	1	LED installed in 2017
Left turn restriction (7:00 a.m. to 10:00 p.m.)	Bathurst Street at Bloor Street	Southbound (LED sign installed)	1	LED installed in 2017
Left turn restriction (7:00 a.m. to 10:00 p.m.)	Bathurst Street at Bloor Street	Westbound (LED sign installed)	1	LED installed in 2017
Left turn restriction (7:00 a.m. to 10:00 p.m.)	Bathurst Street at Bloor Street	Eastbound (LED sign installed)	1	LED installed in 2017
One-Way - Southbound	Manning Avenue	London Street to Harbord Street	n/a	Record not found
One-Way - Northbound	Euclid Avenue	Harbord Street to London Street	n/a	Record not found
One-Way - Southbound	Palmerston Avenue	London Street to Bloor Street West	n/a	Record not found

Strategy	Intersection/ Street	Location detail	Quantity	Installation Date
One-Way - Northbound	Markham Street	Herrick Street to Lennox Street	n/a	Record not found
One-Way - Southbound	Markham Street	Herrick Street to Harbord Street	n/a	Record not found
One-Way - Northbound	Markham Street	Poulter's Place to London Street	n/a	Record not found
One-Way - Westbound	Lennox Street	Borden Street to Lippincott Street	n/a	Record not found
One-Way - Southbound	Borden Street	Bloor Street West to Lennox Street	n/a	Record not found
One-Way - Northbound	Borden Street	Harbord Street to Lennox Street	n/a	Record not found
Pedestrian Crossover	Harbord Street	Borden Street	1	Record not found
Automated Speed Enforcement Camera	Manning Avenue	south of Lennox Street (in vicinity of Harbord Collegiate Institute)	1	April 14 – October 31, 2022

Attachment 4 - Review of Community Requested Changes

Community Concern	Community Requested Change	City Review and Conclusion
<p>Lennox St /Bathurst St intersection will be overcapacity and will cause congestion in the neighbourhood</p>	<p>Prohibit all east-west through traffic at the Lennox Street and Bathurst Street intersection and improve signal timing</p>	<p>Upgrades planned for intersection and will be implemented by developer. The intersection is being redesigned to facilitate and incentivize preferred behaviour. New intersection will be reviewed and optimized as needed through settling-in period. Timing plan modifications and prohibitions are best considered at that time.</p>
	<p>Signal timing plan should maximize capacity of the intersection</p>	
	<p>Convert Lennox St, between Lippincott St and Bathurst St, to one-way westbound</p>	<p>Not recommended. This measure limits access to Central Tech School, as well as residences/businesses. This change would likely result in increased southbound traffic on Borden St and Lippincott St, between Bloor St and Lennox St.</p>
<p>Infiltration and cut-through traffic is a common concern on local roads</p>	<p>Introduce a dead-end on Markham St where it currently meets Lennox Ave (southern leg of the intersection)</p>	<p>Not feasible. Dead end would require conversion to two-way operation and a place for service vehicles (e.g. waste removal and emergency services) to turn. Average pavement width is 7.3 m, and cannot accommodate safe turns. Proposed changes are expected to partially meet the goals of this requested change.</p>
	<p>Right turn restriction from Harbord St onto Borden St (e.g. in PM peak)</p>	<p>Not feasible. Borden St is the only motor vehicle access to Central Technical School, which runs programs throughout the day and on weekends. Access must be maintained to building entrance.</p>

Community Concern	Community Requested Change	City Review and Conclusion
<p>Potential for use of 'new Markham St' as a north-south through-route</p>	<p>Restrict Markham St, between Lennox Ave and Bloor St, to one-way in a direction that compliments new configuration of Palmerston Blvd</p>	<p>Not recommended. Markham St between Bloor St and Lennox St will enable ingress and egress routes from the parking garage to use arterial roads instead of local roads.</p> <p>Not feasible with Council-approved change. One-way block on Lennox St between Palmerston and Markham St requires Markham St between Bloor St W and Lennox St to accept northbound motor vehicles. Otherwise, there will be a "trap" at Lennox St/Markham St that would incentivize non-compliant movements or misuse of laneways.</p>
<p>Pedestrian crossing protection at Markham St/Bloor St to access secondary entrance to Bathurst Station</p>	<p>Investigate controlled crossing opportunities</p>	<p>Pending adoption of new crossing protection type. A new traffic signal cannot be installed at this location; it is expected that the resulting spacing between adjacent signals would cause operational issues during peak periods (e.g. queues extending longer than the space available between signals).</p> <p>The Province of Ontario has authorized a new pedestrian crossing design, "Pedestrian Crossover (PXO) Level 2", that may be a suitable alternative for this location. PXO Level 2 has not yet been authorized for widespread use throughout Toronto. Upon the City's full adoption of this crossing protection type, the possibility of using it at this location can be revisited.</p>

Attachment 5 - Speed Bump Warrant Analysis on Laneway West of Bathurst between Harbord Street and Lennox Street

The subject laneway is located between Lennox St and Harbord St, 42 m west of Bathurst St. The lane characteristics are:

- Operates two-way north-south
- Statutory speed limit of 50km/hr; expected operating speed of 20 km/hr as established in the warrant criteria
- Average segment width is 5.8 m
- Parking is prohibited at all times, on both east and west sides
- Used primarily for access to residential parking (driveways and garages)
- Paved and has centre surface draining

In order for speed bumps to be recommended on a street, the criteria as set out in the City of Toronto's Speed Bump Criteria must be satisfied. As part of the assessment of the warrant criteria, mid-block vehicle speed and volume studies were conducted on the Lanes West of Bathurst Street, between Lennox Street and Herrick Street and between Herrick Street and Harbord Streets on June 14th, 15th and 16th, 2022.

In order for installation of speed bumps in a laneway to be justified, guidelines approved by City Council established that one or more of the following criteria must be met:

- The operating speed is greater than 20 km/h;
- The traffic volume is more than 100 vehicles per day; or
- The lane is used as a frequent pedestrian passageway (not numerically quantified).




Table 2 - Evaluated Speed Control Zones in Public Laneways (Speed Bumps)
Locations:

Location	Traffic Volume (vehicles per day)	Operating (85%) Speed (km/hour)
Lane West of Bathurst Street, between Lennox Street and Herrick Street	74	28.9
Lane West of Bathurst Street, between Herrick Street and Harbord Street	78	28.8

Staff recommend the installation of speed bumps on the Laneway West of Bathurst Street between Lennox Street and Harbord Street.

Attachment 6 - TC-127 Speed Bump Locations Plan Lane West Bathurst South Lennox, Lennox Street-Herrick Street



 PROPOSED TWO-WAY SPEED BUMP			
<p>SPEED BUMP LOCATIONS PLAN LANE WEST BATHURST SOUTH LENNOX LENNOX STREET - HERRICK STREET</p>			
FILE NO. TC-127	SCALE : N. T. S.	DRAWN BY : T.M.	DATE : FEB, 2023

Attachment 7 - TC-128 Speed Bump Locations Plan - Lane West Bathurst North Harbord, Herrick Street - Harbord Street



<p> PROPOSED TWO-WAY SPEED BUMP</p>			
<p>SPEED BUMP LOCATIONS PLAN LANE WEST BATHURST NORTH HARBORD HERRICK STREET - HARBORD STREET</p>			
FILE NO. TC-128	SCALE : N. T. S.	DRAWN BY : T.M.	DATE : FEB, 2023



Attachment 8 - Speed Hump Warrant Analysis on Markham Street between Harbord Street and Lennox Street

Markham Street between Lennox Street and Herrick Street is characterized by the following conditions:

- It is a one-lane, north/south local roadway that permits one-way, northbound vehicle movements
- The speed limit is 30 km/h
- Average segment width is 7.3 m
- The average daily vehicle volume is 102 vehicles
- Heavy trucks are not permitted at any time
- There is no TTC service
- There are sidewalks on both sides of the street
- The street is primarily used for access to residential units
- Permit parking is available on the west side of the street from December 1 to March 31 and alternates side between April 1 and November 30.
- Parking for restricted periods is permitted for one-hour, maximum
- There is no parking anytime from a point 35 metres north of Herrick Street to a point 5.5 metres further north between 12:01 a.m. to 7:00 p.m.

Markham Street, between Herrick Street and Harbord Street is characterized by:

- It is a one-lane, north/south local roadway that permits one-way, southbound vehicle movements
- The speed limit is 30 km/h
- Average segment width is 7.3 m
- The average daily vehicle volume is 165 vehicles
- Heavy trucks are not permitted at any time
- There is no TTC service
- There are sidewalks on both sides of the street
- The street is primarily used for access to residential units
- Permit parking is available on the west side of the street from December 1 to March 31 and alternates side between April 1 and November 30.
- Parking for restricted periods is permitted for one-hour, maximum

In order for speed humps to be recommended on a street, the criteria as set out in the City of Toronto's Traffic Calming Policy must be satisfied. The warrant criteria includes factors such as vehicle speed and volume, road widths, pedestrian facilities and gradient. As part of the assessment of the warrant criteria, mid-block vehicle speed and volume studies were conducted on the Markham Street, between Lennox Street and Herrick Street on August 9th, 10th and 11th, 2022 and between Herrick Street and Harbord Street on September 14th, 15th and 16th, 2021.

Table 1 - Evaluated Traffic Calming (Speed Humps) Locations:

Location	Traffic Volume (vehicles per day)	Operating (85%) Speed (km/hour)
Markham Street –	102	31.4

Lennox Street to Herrick Street		
Markham St – Herrick Street to Harbord Street	165	33.9

The overall investigation concluded that the warrant criteria as outlined in the Traffic Calming Policy is not satisfied for the following reasons:

- Minimum Volume: The average daily traffic volume is 102 and 165, less than the required minimum of 1,000 vehicles per day needed to satisfy the traffic calming installation criteria on both road segments.
- Minimum speed: The operating speed, which is the speed at which 85 percent of traffic is travelling at or below must be a minimum of 10 km/h over the regulatory speed limit. The operating speeds of 31.4 km/h and 33.9 km/h are 8.6 km/h and 6.1 km/h less than the warranted speed of 40 km/h and less than the required 10 km/h minimum.

As required by the Traffic Calming Policy, staff evaluated the speeds of vehicles against the warranted speed of 40 km/h and not the posted speed of 30 km/h. Staff do not recommend the installation of speed humps on Markham Street between Lennox Street and Harbord Street.

Attachment 9 - Alternate Recommendations for Traffic Calming on Markham Street - with community poll

If, despite the findings in Attachment 8, Toronto and East York Community Council decides to proceed with installing speed humps on Markham Street, between Harbord Street and Lennox Street, it may approve the following:

"That the Toronto and East York Community Council:

1. Direct the Director of Traffic Management, Transportation Services, to request the City Clerk to poll eligible householders on Markham Street, between Harbord Street and Lennox Street, to determine whether residents support the installation of traffic calming, in accordance with the City of Toronto Traffic Calming Policy.
2. Subject to favourable results of the poll:
 - a. authorize the installation of traffic calming (speed humps) on Markham Street, between Harbord Street and Lennox Street.
 - b. direct the City Solicitor to prepare a by-law to alter sections of the roadway to install four speed humps on Markham Street, between Harbord Street and Herrick Street and Markham Street between Herrick Street and Lennox Street, for traffic calming purposes, generally as shown on Attachment 10, dated February 2023, and Attachment 11, dated February 2023.

The estimated cost for installing four speed humps on Markham Street is \$16,000. The installation of speed humps on Markham Street would be subject to availability in Transportation Services 2023 Capital Budget and competing priorities.

Polling Requirement

The City of Toronto Traffic Calming Policy requires that the City Clerk (Polling Registry Services) formally poll property owners/occupants who are directly affected by the installation of traffic calming measures. Under the policy, the poll will be considered in favour of traffic calming if it satisfies the following requirements:

- A response rate of 50 percent plus one
- A response rate of 25 percent if the subject street is within a Community Safety Zone or a School Speed Zone
- A support rate of at least 60 percent of the valid responses

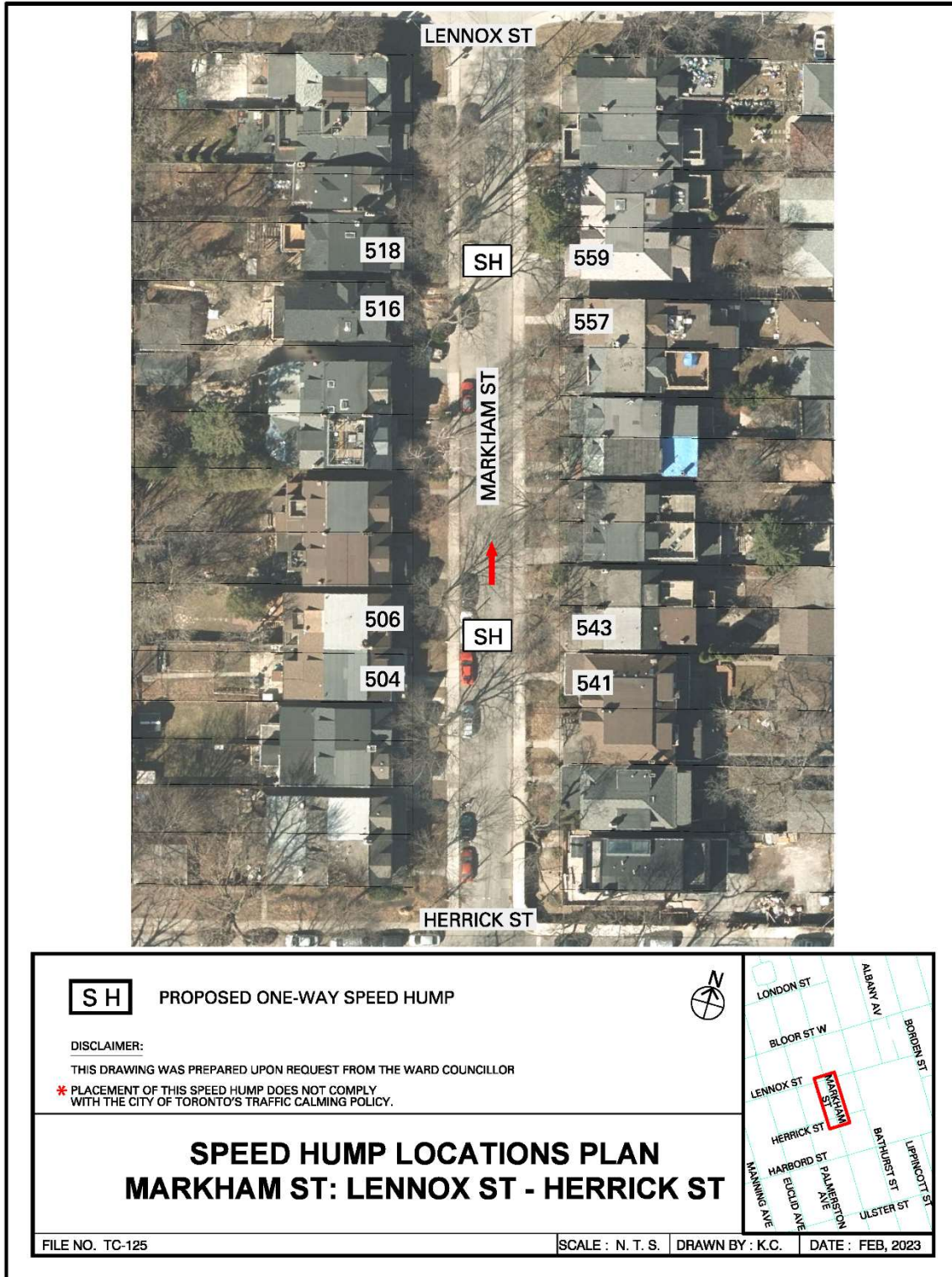
Subject to approval by Community Council of the alternate recommendations in this report, the City Clerk will poll property owners/occupants. Should the results support installing traffic calming measures on Markham Street, between Harbord Street and Lennox Street, Transportation Services staff will schedule installation based on relative need and competing priorities.

Relative Priority and Other Impacts

No alterations to parking regulations would be required, nor would the number of parking spaces be affected by the installation of speed humps. Installation of speed humps would have minimal effect on winter services, street cleaning and garbage collection.

Consultation with emergency services (Toronto Police Services, Toronto Fire Services and Toronto Paramedic Services) is required to ensure that the design and layout of a traffic calming proposal does not unduly affect their operations. Comments have not been received back at the time of writing this report from Toronto Police Service, Toronto Paramedic Services or Toronto Fire Services. Installing speed humps will result in slower operating speeds for all vehicles, including emergency service vehicles.

Attachment 10 - TC-125 Speed Hump Locations Plan - Markham St: Lennox St - Herrick St



Attachment 11 - TC-126 Speed Hump Locations Plan - Markham St: Herrick St- Harbord St

