TORONTO

REPORT FOR ACTION

Bathurst Manor Neighbourhood Mobility Plan

Date: October 30, 2023

To: North York Community Council

From: Director, Project Design and Management, Transportation Services

Wards: Ward 6, York Centre

SUMMARY

The purpose of this report is to share the findings from the Bathurst Manor Neighbourhood Mobility Plan (BMNMP), a study led by Transportation Services at the request of North York Community Council. The study encompassed an assessment of existing conditions in the study area, analyses to determine appropriate changes to the streets, and a multi-staged engagement process with area residents and stakeholders.

This report summarizes the study findings and recommends road safety and traffic management changes that can be implemented in the neighbourhood. Recommended changes include installation of traffic calming measures, one-way travel restrictions, all-way stop controls, traffic control signals, a pedestrian crossover, and sidewalks.

RECOMMENDATIONS

The Director, Project Design and Management, Transportation Services recommends that:

- 1. North York Community Council amend City of Toronto Municipal Code Chapter 950, Traffic and Parking, generally as outlined in Attachment 1, permitting one-way, westbound travel for motor vehicles on Kennard Avenue between Wilson Heights Boulevard and Honiton Street.
- 2. North York Community Council authorize an all-way compulsory stop control at the intersection of Combe Avenue and Elder Street.
- 3. North York Community Council authorize an all-way compulsory stop control at the intersection of Clifton Avenue and Elder Street.
- 4. North York Community Council authorize an all-way compulsory stop control at the intersection of Kennard Avenue and Elder Street.

Bathurst Manor NMP Page 1 of 57

- 5. North York Community Council authorize an all-way compulsory stop control at the intersection of Pannahill Road and Elder Street.
- 6. North York Community Council authorize an all-way compulsory stop control at the intersection of Tillplain Road and Cocksfield Avenue.
- 7. North York Community Council authorize the installation of traffic calming (speed humps) and direct the City Solicitor to prepare a by-law to alter sections of the roadway to install:
- i. Sixteen speed humps on Maxwell Street, between Sheppard Avenue West and Wilmington Avenue for traffic calming purposes, generally as shown on Attachment 12, Attachment 13, Attachment 14, Attachment 25, Attachment 26, Attachment 27, Attachment 28, and Attachment 29, dated October 2023;
- ii. Eight speed humps on Hove Street, between Sheppard Avenue West and Maxwell Street for traffic calming purposes, generally as shown on Attachment 19, Attachment 20, and Attachment 21, dated October 2023;
- iii. Six speed humps on Purdon Drive between Wilmington Avenue and Evanston Drive for traffic calming purposes, generally as shown on Attachment 32, Attachment 33, Attachment 34, and Attachment 35, dated October 2023;
- iv. Four speed humps on Cedar Springs Grove between Wilmington Avenue (south intersection) and Wilmington Avenue (north intersection) for traffic calming purposes, generally as shown on Attachment 22, Attachment 23, and Attachment 24, dated October 2023;
- v. Thirteen speed humps on Codsell Avenue between Bathurst Street and Tillplain Road for traffic calming purposes, generally as shown on Attachment 15, Attachment 16, Attachment 17, Attachment 18, and Attachment 36, dated October 2023;
- vi. Fourteen speed humps on Cocksfield Avenue between Bathurst Street and Tillplain Road for traffic calming purposes, generally as shown on Attachment 7, Attachment 8, Attachment 9, Attachment 10, and Attachment 11, dated October 2023; and vii. Four speed humps on Overbrook Place between Wilmington Avenue and Maxwell Street for traffic calming purposes, generally as shown on Attachment 30 and Attachment 31, dated October 2023.

FINANCIAL IMPACT

The estimated cost for the installation of one speed hump is \$4,000; up to 65 speed humps are recommended. The estimated cost of installing an all-way stop control is \$2000; five all-way stop controls are recommended. Funding for all measures is subject to availability and competing priorities within the Transportation Services Capital Budget.

DECISION HISTORY

In February 2023, North York Community Council adopted item 2023.NY3.7 (Tillplain Road and Codsell Avenue - All-Way Stop Control and Parking Amendments)

Bathurst Manor NMP Page 2 of 57

authorizing the installation of an all-way compulsory stop control at the intersection of Tillplain Road and Codsell Avenue and associated parking amendments. https://secure.toronto.ca/council/agenda-item.do?item=2023.NY3.7

In December 2021, City Council amended item 2021.IE26.10 (Cycling Network Plan - 2021 Cycling Infrastructure Installation - Fourth Quarter Update and the Future of the 2020 ActiveTO Cycling Network Projects) and approved the permanent installation of 2020 ActiveTO Cycling Network Expansion projects, including designated bicycle lanes on Wilmington Avenue from Finch Avenue West to Sheppard Avenue West. https://secure.toronto.ca/council/agenda-item.do?item=2021.IE26.10

In February 2019, North York Community Council adopted item 2019.NY3.19 (Bathurst Manor Traffic Management Plan) directing Transportation Services to work with the community and evaluate their traffic concerns and develop a Traffic Management Plan. https://secure.toronto.ca/council/agenda-item.do?item=2019.NY3.19

COMMENTS

In response to a Community Council request (2019.NY3.19) staff initiated a transportation study of Bathurst Manor. The study area is bounded by Dufferin Street to the west, West Don Parkland and Bathurst Street to the east, Finch Street West to the north and Sheppard Street West to the south. Refer to Attachment 2 for a map of the study area. Study area boundaries for the Bathurst Manor Neighbourhood Mobility Plan (BMNMP) were defined in the request for study. This report summarizes the neighbourhood mobility plan that resulted from an assessment of existing conditions in the study area, analyses to determine appropriate changes to the streets, and a multistaged engagement process with area residents and stakeholders.

Existing Conditions

Study Focus

Three primary concerns have been raised by the Bathurst Manor community: high motor vehicle speeds; vulnerable road user safety; and through traffic on local roads.

Street Network Characteristics

The Bathurst Manor neighbourhood is characterized by a grid-like road network consisting of five arterial roads (Dufferin Street, Finch Avenue West, Bathurst Street, Sheppard Avenue West, and Wilmington Avenue), two collector roads (Overbrook Place and Wilson Heights Boulevard), and local roads (all remaining road segments). The neighbourhood is situated next to the West Don Parkland which limits access points on the north and east sides by all modes. The majority of the area is designated for residential use, however there are commercial uses fronting on Sheppard Street West, Bathurst Street and Dufferin Street. There are many community destinations within the neighbourhood: four schools; seven synagogues; a mosque; a church; a community centre; parks and ravine access; three senior centres; a shopping plaza; and health care services.

Bathurst Manor NMP Page 3 of 57

TTC bus and subway service is available in the neighbourhood. Bus routes 84 Sheppard West, 36 Finch West and 7 Bathurst operate on the arterial roads that bound the neighbourhood. Bus route 104 Faywood operates within the neighbourhood, travelling on Wilmington Avenue and Wilson Heights Boulevard, connecting to subway service. The Sheppard West Subway Station is located in the south/west corner of the neighbourhood and provides accessible access to Line 1 (Yonge-University). York Region Transit also operates out of Sheppard West Subway station and connects to the broader transit service in York Region.

Local roads within the residential neighbourhood have speed limits of 30 km/h. Two-way travel movements are permitted on all roadways. Local roads are generally 8.5m wide and collector roads range from 8.5-16m wide; all roads meet the current guideline that recommends a maximum of 3.0 metres per travel lane for streets operating at 30 km/h or less, when space for curbside parking is considered. The majority of roadways permit daytime parking on one or both sides of the road. Low usage rates of street parking space make travel lanes feel wide. All arterial and collector roads in the study area align with the Road Classification Criteria and have sidewalks on both sides of the street, except Overbrook Place between Wilmington Avenue and Maxwell Street where sidewalks are only available on one side. Sidewalk widths on arterial and collector roads meet or exceed the legacy standard of 1.5 metres. The majority of local roadways do not have sidewalks on either side of the street; the sidewalk network is incomplete and results in gaps in sidewalk connections to local destinations.

Designated bicycle lanes are available on Wilmington Avenue; they were installed on a temporary basis in 2020 as part of the ActiveTO program, which supported Cycling Network Expansion. City Council approved the Wilmington Avenue bicycle lanes as permanent in 2021, and safety upgrades were implemented in summer 2023, as part of road resurfacing work. The Finch Hydro Corridor is located immediately north of the study area and has a network of four Bike Share Toronto stations (refer to the Bike Share System Map for latest locations).

Refer to attachment 2 for a map of the study area.

Context of Community Concern

There is a history of community-led advocacy to improve safety and mobility conditions in the area. Over the years, members of the Bathurst Manor community have expressed concerns about transportation conditions and road user behaviour to their local Councillor and City staff. Through-traffic patterns, speeding by motor vehicles, volume of motor vehicles on local roads, non-compliance with traffic regulations, road user safety, atypical geometric design of intersections and road curves are among the most frequently cited concerns. Residents have submitted a series of petitions related to speed management and requests for traffic calming and intersection controls.

The road network in the Bathurst Manor neighbourhood has a grid-like pattern, but limited access into the neighbourhood, especially from the north and east sides. Roads near the major arterial intersections may be attractive as alternative routes for motorists. High traffic volumes on Sheppard Avenue East, Dufferin Street and Bathurst Street may motivate people driving to seek alternate routes within the Bathurst Manor neighbourhood. Residents in the community have cited concerns about road user

Bathurst Manor NMP Page 4 of 57

safety, and the opportunity to encourage more pedestrian and cyclist activity if sidewalk and bikeway connectivity is improved.

Traffic Volume, Speed and Travel Patterns

Traffic data was collected and analyzed to assess multi-modal traffic trends in the neighbourhood. Traffic studies were completed by City staff or its service providers to quantify motor vehicle speed and volume. Traffic data used to inform the development of the near-term plan was collected between October 2021 and December 2022. Data collected in 2017, 2018 and 2019 was also considered and reflect pre-pandemic travel patterns. Traffic studies are available for public viewing on the City's Open Data portal.

Traffic studies indicate that the volume of vehicles on all neighbourhood roads is generally below the target maximum for local and collector roads, 2,500 and 8,000 vehicles per day, respectively, as indicated in the Road Classification guidelines. There are two notable exceptions: the south/east corner of the neighbourhood where a commercial plaza is located, and a one block segment in the north/west quadrant, the first entry point into the neighbourhood north of Sheppard Avenue West. Data suggests that motor vehicles may be using local roads to bypass arterial intersections.

Speed studies collect precise travel speed data from motor vehicles. Studies indicated that there are local roads in the neighbourhood where motor vehicles travel over 38 km/h (8 km/h above the posted limit). Many roads where speeds exceed 38km/h were observed are in School Safety Zones and Community Safety Zones. The City's Traffic Calming Policy was under review at the time of study to address the fact that prescribed assessments are in reference to the previous minimum speed limit of 40 km/h. Industry best practices (i.e., 8 km/h above the posted speed limit) is being used as a threshold for concern in the absence of an updated Traffic Calming Policy. The updated Traffic Calming Policy will be considered at the November meeting of City Council (see item 2023.IE7.4).

Refer to Attachment 3 for a table of motor vehicle volumes and speeds in Bathurst Manor.

The <u>Transportation Tomorrow Survey</u> is a regional study conducted by the University of Toronto Data Management Group that aims to collect information about urban travel patterns in southern Ontario. According to the Transportation Tomorrow Survey, Bathurst Manor residents typically choose motor vehicle travel over walking, cycling and taking public transit. Table 1 displays average mode share in Bathurst Manor, compared to the city averages.

Table 1: Average mode share in Bathurst Manor versus the City of Toronto

Mode	Bathurst Manor	City-wide Average
Motor vehicle	68%	46%
Passenger in motor vehicle	11%	11%
Walking	4%	13%

Bathurst Manor NMP Page 5 of 57

Mode	Bathurst Manor	City-wide Average
Cycling	<1%	13%
Transit	17%	28%

Approximately 60% of trips that start and end in Bathurst Manor are less than 5 kilometres in length. The City's <u>TransformTO Climate Change Action Plan</u> has committed to converting 75% of trips under 5 kilometres to walking, cycling or transit by 2030.

Road Safety (10 Year Collision History)

Collision history from the last ten years was reviewed with a special emphasis on collisions that resulted in a death or serious injury. Collision history provided by the Toronto Police Service for the ten-year period ending in September 2023, indicated that there have been 32 collisions that resulted in a death or serious injury within the study area.

Of the 32 collisions that resulted in a death or serious injury, three took place on the local, collector and minor arterial roads within Bathurst Manor and 29 took place on the arterial roads that bound the neighbourhood (Dufferin Street, Sheppard Avenue East, Finch Street West and Bathurst Street). In total, 53 percent of all collisions involved a vulnerable road user such as a pedestrian or person cycling, and the remaining 47 percent involved one or more motor vehicles.

Refer to Attachment 4 for a ten-year summary of collisions that resulted in a death or serious injury.

Neighbourhood Mobility Plan Components

Road Safety Improvements

Intersection Controls

Introducing intersection controls can provide clarity on expected road user behaviour and consequently improve safety for all road users. Traffic control signals are recommended at the Wilmington Avenue and Codsell Avenue intersection, and a pedestrian crossover is recommended at the intersection of Wilson Heights Avenue and Codsell Avenue to facilitate the movement of pedestrians, students traveling to school, transit users and people cycling across Codsell Avenue.

Throughout the BMNMP study public engagement process, Codsell Avenue was identified as a key route in the neighbourhood, especially for vulnerable road users such as pedestrians, people cycling and school-aged children. Codsell Avenue is one of the only roads that provides an east/west connection through the neighbourhood to and from Bathurst Street. Codsell Avenue has continuous sidewalks on the south side of the roadway, and terminates at Tillplain Road, where William Lyon Mackenzie Collegiate Institute is located. Area residents and stakeholders identified Codsell Avenue as a common route for vulnerable road users, especially high school students. Requests

Bathurst Manor NMP Page 6 of 57

were received to implement intersection controls at the minor arterial and collector roads where Codsell Avenue intersects to facilitate safe crossing opportunities.

Staff analyzed the request to install a traffic control signal at Wilmington Avenue and Codsell Avenue, and a pedestrian crossover at Wilson Heights Boulevard and Codsell Avenue. City Council approval of the traffic control signals and pedestrian crossover is required since the TTC operates transit service on Wilmington Avenue and Wilson Heights Boulevard. A companion report titled "Traffic Control Signals and Pedestrian Crossover - Wilmington Avenue and Codsell Avenue and Wilson Heights Boulevard and Codsell Avenue" has been submitted to the November 2023 meeting of North York Community Council.

All-Way Stop Controls

Introducing traffic controls can provide clarity on expected road user behaviour and improve safety for all road users. Through community consultation activities facilitated through the BMNMP study process, concerns were raised about safe crossing opportunities at minor intersections, near community destinations.

Through the BMNMP public consultation process, suggestions were received to implement all-way stop controls at intersections in Bathurst Manor. Staff analyzed the request for all-way stop controls at seven (7) minor intersections in the neighbourhood. The warrant analysis of all-way stop controls can be found in Table 2.

Table 2: All-way stop control warrant analysis

Intersection	A: Collision History	B-1A: Total Volume	B-1B: Crossing Volume	B-2: Volume Split	Warrant Met?
Warrant requirement for local road	More than 2 collisions per year	More than 250 vehicles	More than 100 units	Less than 70/30 percent split	A or B-1A or B-1B and B-2 met
Combe Avenue and Elder Street	0	96	4	69/32	Not met
Clifton Avenue and Elder Street	0	70	10	77/23	Not met
Kennard Avenue and Elder Street	0	70	54	49/51	Not met
Pannahill Road and Elder Street	0	65	13	81/19	Not met
Evanston Drive and Purdon Drive	0	107	7	73/27	Not met

Bathurst Manor NMP Page 7 of 57

Intersection	A: Collision History	B-1A: Total Volume	B-1B: Crossing Volume	B-2: Volume Split	Warrant Met?
Tillplain Road and Cocksfield Avenue	0	115	362	12/88	Met
Maxwell Street and Waterloo Avenue	0	123	29	77/23	Not met

To summarize, the all-way stop controls are warranted at one of the seven intersections investigated. The all-way stop control warrant criteria considers several technical indicators: collision history (A), total vehicle volume (B-1A), crossing volume (B1-1), and volume split (B-2). To meet the technical warrant for an all-way stop control, an intersection must meet the volume split requirement and any one of the following: collision history, total vehicle volume, or crossing volume. Table 2 shows that some intersections met both or one of the requirements.

All-way stop controls are technically warranted and recommended at the intersection of Tillplain Road and Cocksfield Avenue.

All-way stop controls along Elder Street, the frontage of the Irving W. Chapley Community Centre, would serve their intended function as traffic control or access management tools that assign the right-of-way among the various road users. They would provide more convenient and comfortable east/west crossing opportunities for vulnerable road users traveling to and from the park and to the sidewalk on Elder Street, located on the west side only. Despite not being technically warranted, all-way-stop controls are recommended at intersections along Elder Street based on evaluation of risks to vulnerable road users accessing the community centre and sidewalk on the west side of Elder Street. These intersections are: Clifton Avenue and Elder Street, Kennard Avenue and Elder Street, and Pannahill Road and Elder Street.

Traffic Calming

Speed Humps

Area residents expressed concerns about motor vehicle speeds throughout Bathurst Manor, highlighting that aggressive driving and speeds above the posted speed limit were common behaviours.

Speed studies performed in the neighbourhood capture the operating speeds of motor vehicles; the speed at which 85 percent of traffic is travelling at or below. Studies conducted confirmed that some local and collector roads in the neighbourhood experience operating speeds at 8km/h or more over the posted speed limit, 30 km/h and 40km/hr respectively. Local and collector roads where operating speeds exceeded the posted speed limit by at least 8 km/h are identified in Table 3.

Bathurst Manor NMP Page 8 of 57

Table 3: Local and collector roads with operating speeds 8km/h or more above the

posted speed limit

pootoa opooa iirriit	ı	T.	1
Roadway	From	То	85% Speed
Maxwell Street	Sheppard Avenue West	Wilmington Avenue	44-49km/hr
Hove Street	Sheppard Avenue West	Maxwell Street	43-48km/hr
Purdon Drive	Wilmington Avenue	Evanston Drive	44km/hr
Cedar Springs Grove	Wilmington Avenue (near Purdon Dr)	Wilmington Ave (south of Finch Avenue West)	40km/hr
Codsell Avenue	Bathurst Street	Tillplain Road	41-51km/hr
Cocksfield Avenue	Bathurst Street	Tillplain Road	46-53km/hr
Overbrook Place	Wilmington Avenue	Maxwell Street	50km/hr

Staff investigated all traffic calming options that are outlined in the Traffic Calming Guide for Toronto. Speed humps were determined to be the most appropriate strategy to improve compliance with the regulatory speed limits. Speed humps are the most common traffic calming measure used in the City because of their effectiveness and low cost. Speed humps are raised sections of the roadway designed to discourage motor vehicle drivers from travelling at excessive speeds. They are installed mid-block and used on local and collector roads only. Benefits of speed humps include: speed and volume reduction; improved safety conditions; minimal impact on people cycling, snow clearing and emergency services; and are self-enforcing in nature, yielding high compliance.

The investigation on the streets identified in Table 3 concluded that speed humps are an appropriate measure for the following reasons:

- Minimum Speed: The operating speeds range from 9-23 km/h above the 30 km/h posted speed limit (refer to Attachment 3 for details).
- Area Conditions: All roadways are located within, or within close proximity to, a School Safety Zone or Community Safety Zone, or near community destinations.

Staff recommend the installation of speed humps on the roadways identified in Table 2. Feedback collected throughout the consultation process indicated mixed support for speed humps; approximately 51 percent of survey participants support or feel neutral about them. The locations of the proposed speed humps are shown in Attachment 7-36.

Staff are proposing updates to the Traffic Calming Policy to account for the city-wide speed limit reduction on local roads since the last policy update in 2002. More information on updated policy is available in item 2023.IE7.4 Updates on Vision Zero

Bathurst Manor NMP Page 9 of 57

Road Safety Initiatives. The proposed Traffic Calming Policy is consistent with the speed thresholds applied in the BMNMP.

In-Road Flexible Speed Signs

In-road flexible speed signs are vertical posts installed in the centre of the road that act as a traffic calming tool to encourage compliance with speed limits. They serve as both a visual reminder of the posted speed limit and physical device to slow motor vehicle speeds. The signs are eligible to be installed on two-way roads with one travel lane in each direction, designed parking areas or parking prohibitions to maintain a clear through lane, and with a posted speed limit not exceeding 40 km/h. Unlike speed humps, they can be installed on TTC bus routes, if approved by TTC. In-road flexible speed signs are being pursued on Wilmington Avenue near Acton Avenue and Waterloo Avenue. Wilmington Avenue is a minor arterial road that supports two-way traffic, TTC bus service and has bicycle lanes. The posted speed limit is 40 km/hr. Operating speeds range from 8-13 km/hr above the posted speed limit and volumes along the corridor range from 25 to 50 percent of the expected capacity of 20,000 on a minor arterial road.

Vehicle Volume Management

Area residents expressed concerns about motor vehicle volumes throughout Bathurst Manor, highlighting that motorists do not comply with turn restrictions and use local roads to by-pass major arterials, especially during peak hours.

Vehicle counts performed in the neighbourhood are used to determine the average number of daily vehicles on a roadway. These volume studies indicate that the volume of vehicles on all neighbourhood roads is generally below the target maximum for local and collector roads, 2,500 and 8,000 vehicles per day, respectively, as indicated in the Road Classification guidelines. Notable exceptions exist on five block segments that intersect with, or are within proximity to arterial roadways. Data suggests that motorists may be using local roads to by-pass major intersections, especially during peak periods. Local roads where vehicle volumes are near or exceeding the 2,500 average vehicles per day are identified in Table 4.

Table 4: Local roads with average daily vehicle volumes above near or exceeding 2,500

Roadway	From	То	Average Daily Volume
Hove Street	Codsell Avenue	Sheppard Avenue West	2,432
Codsell Avenue	Hove Street	Bathurst Street	2,684
Cocksfield Avenue	Hove Street	Bathurst Street	2,058
Kennard Avenue	Wilson Heights Boulevard	Honiton Street	2,358

Bathurst Manor NMP Page 10 of 57

Area residents have expressed concern about the lack of compliance with turn restrictions into the neighbourhood. Careful attention was paid to the intersection of Sheppard Avenue West and Hove Street where the Sheppard Plaza is located; the location was highlighted by community members as a specific concern due to non-compliance with posted turn restriction signs. Two rounds of data collection at both intersections indicate that there is non-compliance with the turn restrictions which may correlate with the higher motor vehicle volumes.

At Hove Street and Sheppard Avenue West there is an eastbound, left-turn restriction between 4p.m and 6p.m. on Monday-Friday, to maintain traffic on arterial roadways during rush hour. Turning movement counts were performed in 2019 and 2021. Data from both years indicated there is non-compliance with the turn restriction; 102 and 132 vehicles were observed making a prohibited eastbound left-turn in 2019 and 2021, respectively. This reflects more than 20 percent of the daily eastbound left-turn movements at Sheppard Avenue West and Hove Street during the highest peak-hour volumes.

Turn restrictions are one measure that can be used to reduce vehicle volumes, however they can experience low levels of compliance in some locations. Another option available for managing motor vehicle volumes is introducing one-way travel restrictions. One-way travel restrictions limit the direction that motor vehicles can travel, discourage routing onto neighbourhood streets, help maintain traffic on arterials, and improve predictability of vehicle movements for all road users. As with turn restrictions to and from arterials, creating a "one-way maze" would impact residents, visitors, and deliveries as well as through-traffic. Unlike turn restrictions, one-way travel restrictions can be reinforced with physical diverters that promote compliance, while allowing through-traffic by active modes (walking, cycling, etc.). One-way travel restrictions were proposed on local roadways identified in Table 4 and presented to the community through the BMNMP process. Refer to map in Attachment 6.

Through the public consultation process the community expressed low levels of support for one-way travel restrictions. Results from the Fall 2023 survey showed the lowest level of support on segments of Hove Street, Codsell Avenue and Cocksfield Avenue, with 67 percent, 66 percent and 61 percent of respondents unsupportive or very unsupportive, respectively. Based on lack of support for one-way travel restrictions in the survey, at the public drop-in event, and through public emails, one-way changes are not being recommended on these streets in the Sheppard Plaza area. Speed humps are being proposed on Hove Street, Codsell Avenue and Cocksfield Avenue and will provide traffic calming benefits without affecting traffic volumes or travel route options in this area.

One-way travel restrictions on Kennard Avenue between Honiton Avenue and Wilson Heights Boulevard received mixed feedback; 57 percent of respondents were very unsupportive or unsupportive, and 43 percent were very supportive, supportive, neutral or not sure. This report recommends the one-way changes on Kennard Avenue, to restrict vehicle movements to westbound only. Kennard Avenue is a local road and does not have sidewalks on either side of the street. Lowering vehicle volumes and creating more predictable motor vehicle movements will improve safety conditions for all road users, especially vulnerable road users such as pedestrians, seniors, school-aged

Bathurst Manor NMP Page 11 of 57

children and people cycling. One-way travel restrictions on the one-block segment of Kennard Avenue will provide the community with an opportunity to experience one-way restrictions in Bathurst Manor at the smallest possible scale.

The possibility of additional one-way travel restrictions may be revisited, should community support for them change, or should recommendations for one-way travel restrictions emerge from future road design projects.

Mode Choice

Bicycle Lanes

The Cycling Network Plan serves as a comprehensive roadmap and work plan, outlining the City's planned network of cycling infrastructure. Designated bicycle lanes are available on Wilmington Avenue; they were installed on a temporary basis in 2020 as part of the ActiveTO program, which supported Cycling Network Expansion. City Council approved the Wilmington Avenue bicycle lanes as permanent in 2021, and safety upgrades were implemented in summer 2023, as part of road resurfacing work. The Finch Hydro Corridor is located immediately north of the study area and has a network of four Bike Share Toronto stations (refer to the Bike Share System Map for latest locations).

The 2022-2024 Near-term Implementation Plan identifies segments of Overbrook Place and Maxwell Street as planned routes for bikeways. The community will be consulted on the design of bikeways on these routes.

Sidewalks

Providing safe, comfortable and accessible sidewalks on all public streets is among the City's fundamental objectives for the street network. The Missing Links Sidewalk program was created in 2002 to develop a city-wide system to deliver sidewalks on roadways where they are not currently present. Sidewalks were recently installed on segments of Honiton Avenue and Shaftsbury Street through this program. The City reviews opportunities to install sidewalks on all roadways where they are missing, primarily through including sidewalk construction along with state-of-good-repair road work.

Local roads remain the largest gap in the walking network and generate the highest number of requests for new sidewalk installations. Nearly one quarter of all local roads in Toronto, or 800 kilometres, are without a sidewalk. In Bathurst Manor, the majority of local roads do not have sidewalks on either side of the road. Where sidewalks are missing, pedestrians have no alternative but to walk on the roadway or on unpaved road shoulders. In winter months when roads are icy, pavement width is narrowed by snow, and with daylight hours reduced, the walking conditions are less safe than roadways with sidewalks.

The installation of new sidewalks will be pursued on all roads in Bathurst Manor. The following priority streets to be considered for accelerated sidewalk construction were identified based on connectivity to the existing sidewalk network and neighbourhood destinations like schools, community centres and faith centres:

Maxwell Street

Bathurst Manor NMP Page 12 of 57

- Kennard Avenue
- Shaftesbury Street
- Evanston Drive
- Purdon Drive
- Cedar Springs Grove
- Elder Street

Residents in Bathurst Manor support the installation of new sidewalks on roadways where they are missing; the online survey found that 68 percent of respondents support the installation of new sidewalks in the neighbourhood.

Public Consultation

Public consultation was a key element of the project approach and engagement with area residents and stakeholders was facilitated continuously throughout the development of the near-term plan. The two objectives of public consultation were: to enrich the study team's understanding of traffic issues in the neighbourhood with local knowledge, and to understand the extent to which proposed changes were supported by the community.

A variety of methods were used to notify members of the public and stakeholders of the project and opportunities to participate in consultation activities, including:

- Project web page (<u>www.toronto.ca/BathurstManor</u>)
- Mailed notices to neighbourhood addresses via Canada Post Neighbourhood Mail system (7,520 addresses)
- Emails to project emailing list, including residents' groups, community groups, organizations, local businesses, institutions and elected officials (46 contacts)

A series of activities informed the development of the BMNMP, organized in two phases of consultation:

Phase 1

- July 2021: A local advisory committee (LAC) was formed. The LAC is a non-political advisory body with a mandate to provide feedback, guidance, and advice to the City Project Team at key points during the BMNMP. A meeting was hosted by the project team to introduce the project objectives, potential neighbourhood improvements, and provide an opportunity for the LAC members to provide feedback.
- November 2021: A virtual public meeting was held on November 17, 2021 to introduce the project objectives, share opportunities for near-term changes and collect feedback from area residents and stakeholders. It was attended by 55 participants. The <u>presentation</u> is available on the project website.
- November 2021-January 2022: A digital mapping tool and online survey allowed members of the public to provide site specific feedback on their transportation experiences in Bathurst Manor and identify areas of concern and ideas for improvements. A total of 138 comments were submitted. Comments could also be submitted by phone, email or mail. A <u>summary</u> of the LAC meeting, public meeting and digital mapping tool and survey is available on the project website.
- Fall 2021-Spring 2022: Meetings with school administrators at Charles H. Best Junior Middle School, Wilmington Elementary School, Tanenbaum Community

Bathurst Manor NMP Page 13 of 57

Hebrew Academy of Toronto, and William Lyon Mackenzie Collegiate Institute to collect feedback on traffic and travel behaviours, opportunities to improve access and safety around schools, and design of Wilmington bicycle lanes.

Phase 2

- September 2023: A meeting with the LAC to present the BMNMP and collect feedback in advance of the public event.
- September 2023: An in-person drop-in event was held on September 27, 2023. The BMNMP was presented to community members in attendance and staff made a presentation and facilitated a question and answer period. Attendees had an opportunity to speak with staff and provide feedback. Over 130 people attended the event. Materials were posted online for those who could not attend.
- September-October 2023: An online survey was posted to collect feedback about the BMNMP and level of support for the proposed changes. In total, 358 complete responses were received.
- September-October 2023: Comments and questions were accepted via email and phone during the consultation period. 43 comments were received from 32 residents.

358 complete responses to the community survey were received. Overall, public feedback collected through the survey indicated mixed support of the proposed changes. Public feedback received at the drop-in event and over the phone and email was consistent with the results of the survey.

Mixed feedback about proposed one-way roads:

- 38 percent of survey respondents support or feel neutral about one-way travel restrictions on Kennard Avenue,
- 35 percent of survey respondents support or feel neutral about one-way travel restrictions on Cocksfield Avenue,
- 29 percent of survey respondents support or feel neutral about one-way travel restrictions on Codsell Avenue, and
- 29 percent of survey respondents support or feel neutral about one-way travel restrictions on Hove Street.

Respondents are generally unsupportive of one-way travel restrictions because of concerns that one-ways will increase congestion within Bathurst Manor and inconvenience residents by requiring them to take alternate routes.

Mixed feedback about speed humps and in-road flexible speed signs:

- 51 percent of survey respondents support or feel neutral about speed humps overall;
 and
- 51 percent of respondents support or feel neutral about in-road flexible speed signs on Wilmington Avenue.

Some respondents feel that speed humps will effectively address issues of speeding and improve neighbourhood safety. Respondents who are unsupportive are concerned that speed humps could cause damage to vehicles, increase emergency vehicle response times, inconvenience residents, and increase congestion on other streets. With regards to in-road flexible speed signs, some respondents feel that they are an effective and affordable method to discourage speeding, but others suggest the signs

Bathurst Manor NMP Page 14 of 57

will have limited effectiveness, create a hazard to drivers and may interfere with snow plowing.

Support for all-way stop signs and pedestrian crosswalks:

- 61 percent of respondents support or feel neutral about the installation of a traffic signal at Codsell Avenue and Wilmington Avenue;
- 79 percent of respondents support or feel neutral about the installation of a pedestrian crosswalk at Codsell Avenue and Wilson Heights Boulevard; and
- 74 percent of respondents support or feel neutral about the implementation of new stop signs in four locations in the neighbourhood.

Respondents feel the new signs, traffic control signals and crosswalk will improve safety and provide safer ways for pedestrians to cross the street to key destinations. Those opposed feel that the traffic control signals at Codsell Avenue and Wilmington Avenue and some of the stop signs might contribute to increased congestion and are unnecessary given the area's other existing traffic lights. Some respondents suggest that greater enforcement of existing stop signs is required. Many respondents proposed additional locations where the City might consider stop signs.

Support for new sidewalks and mixed feedback about bikeways throughout the neighbourhood:

- 71 percent of respondents support or feel neutral about installing sidewalks on roadways that have no sidewalks.
- A few respondents feel that quieter roads in the neighbourhood do not require sidewalk installation to improve safety.
- Many respondents are supportive of additional bike routes through Bathurst Manor and expressed desire for separated bike lanes that connect to area destinations such as Downsview, Finch Hydro Corridor and Earl Bales Park. Some respondents are concerned about impacts to traffic, parking and snow clearing. Some respondents are also critical of the installation of raised platforms along the Wilmington bikeway.

The full public consultation report is available on the BMNMP project website.

Implementation Timeline

The traffic management elements outlined in this report are proposed to be implemented in phases; the timing of installation will be dependent on the complexity of delivery, availability of materials, funding and competing priorities. Elements that can be delivered in the short-term include changes that do not require Community Council approval such as in-road flexible speed signs. Community Council authority is being sought for changes requiring by-law amendments: all-way stop controls, speed humps and one-way roads. Pending Community Council approval, these changes can also be implemented in the short-term.

Elements of the plan that would be delivered in up to two years include changes that require capital infrastructure and further consultation. The installation of speed humps is targeted for the 2024 construction season, pending Community Council approval. Implementation of the cycling network plan on neighbourhood routes would be delivered following community engagement, targeted for 2024. Installation of the traffic control

Bathurst Manor NMP Page 15 of 57

signals, and pedestrian crosswalks (PXO) is targeted for completion by the end of 2024, pending City Council approval.

Conclusion

The development of the BMNMP was informed by traffic data and community feedback. Residents and stakeholders in Bathurst Manor expressed concerns with road user safety, motor vehicle speeds, volumes on neighbourhood roads, and availability of pedestrian and cycling infrastructure. Recommendations respond to neighbourhood travel patterns to mitigate traffic and safety concerns. Traffic data indicates that there is low compliance with speed limits on local roads and traffic calming elements are recommended to encourage slower speeds.

Public consultation was a key element of the project approach; engagement with area residents and stakeholders was facilitated continuously throughout the development of the plan. Area residents and stakeholders were given opportunities to share their concerns and ideas for improvements to address traffic issues and opportunities in the neighbourhood. Community members were also surveyed to understand the extent to which recommendations are supported. Surveying results indicated general support for the proposed changes. Support for one-way streets was lower than other for other proposed changes; recommendations for one-way streets were scaled back to one of two possible locations as a result of community feedback. A one-way conversion is being pursued on Kennard Avenue between Wilson Heights Boulevard and Honiton Street. Pending Community Council approval, motor vehicles will only be permitted to drive in the westbound direction on the roadway. This change will be reinforced with signage and .

Safety improvements that provide better crossing opportunities for vulnerable road users and improve motorist behaviours around intersections are being pursued. To support modal shift to walking, cycling and transit, new sidewalks and bikeways are planned to make it more safe and convenient to engage in active transportation in the Bathurst Manor Community.

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

Bathurst Manor NMP Page 16 of 57

Jacquelyn Hayward
Director, Project Design and Management, Transportation Services

ATTACHMENTS

```
Attachment 1 - Amendments to Chapter 950
Attachment 2 - Study Area Map
Attachment 3 - Motor Vehicle Speeds and Volumes
Attachment 4 - 10-Year Killed and Seriously Injured (KSI) Collision History for Bathurst
Manor Study Area
Attachment 5 - Traffic Management Inventory for Bathurst Manor Study Area
Attachment 6 - One-Way Travel Restriction Proposal
Attachment 7 - TC 193- Speed Hump Location Plan
Attachment 8 - TC 194- Speed Hump Location Plan
Attachment 9 - TC 195- Speed Hump Location Plan
Attachment 10 - TC 196- Speed Hump Location Plan
Attachment 11 - TC 197- Speed Hump Location Plan
Attachment 12 - TC 198- Speed Hump Location Plan
Attachment 13 - TC 199- Speed Hump Location Plan
Attachment 14 - TC 200- Speed Hump Location Plan
Attachment 15 - TC 201- Speed Hump Location Plan
Attachment 16 - TC 202- Speed Hump Location Plan
Attachment 17 - TC 203- Speed Hump Location Plan
Attachment 18 - TC 204- Speed Hump Location Plan
Attachment 19 - TC 205- Speed Hump Location Plan
Attachment 20 - TC 206- Speed Hump Location Plan
Attachment 21 - TC 207- Speed Hump Location Plan
Attachment 22 - TC 208- Speed Hump Location Plan
Attachment 23 - TC 209- Speed Hump Location Plan
Attachment 24 - TC 210- Speed Hump Location Plan
Attachment 25 - TC 211- Speed Hump Location Plan
Attachment 26 - TC 212- Speed Hump Location Plan
Attachment 27 - TC 213- Speed Hump Location Plan
Attachment 28 - TC 214- Speed Hump Location Plan
Attachment 29 - TC 215- Speed Hump Location Plan
Attachment 30 - TC 216- Speed Hump Location Plan
Attachment 31 - TC 217- Speed Hump Location Plan
Attachment 32 - TC 218- Speed Hump Location Plan
Attachment 33 - TC 219- Speed Hump Location Plan
Attachment 34 - TC 220- Speed Hump Location Plan
Attachment 35 - TC 221- Speed Hump Location Plan
Attachment 36 - TC 222- Speed Hump Location Plan
```

Bathurst Manor NMP Page 17 of 57

Attachment 1 - Amendments to Chapter 950

TO BE ENACTED

CHAPTER 950 - SCHEDULE XIX: ONE-WAY TRAFFIC LANES

Highway	Between	Times and/or Days	Direction
Kennard Avenue	Wilson Heights Boulevard and Honiton Street	Anytime (cyclists excepted)	Westbound

Bathurst Manor NMP Page 18 of 57

Attachment 2: Study Area Map



Bathurst Manor NMP Page 19 of 57

Attachment 3: Motor Vehicle Speeds and Volumes

iotor veriloie ope	seus and volum				
From	То	Road Classification	Speed Limit (km/h)	85% Speed (km/h)	Average Daily Vehicle Volume
Combe Avenue	Goldthread Terrace	Local	30	48.5	1,366
Artreeva Drive	Wilmington Avenue	Local	30	44.5	1,091
Cockfield Avenue	Codsell Avenue	Local	30	43.7	2,432
Acton Avenue	Bitteroot Road	Local	30	48.3	1,343
Bryant Street	Liberato Court	Local	30	41.1	2,085
Wilmington Avenue	Shaftesbury Street	Local	30	51.1	1,509
Tillplain Road	Wilson Heights Boulevard	Local	30	43.1	1,846
Hove Street	Heaton Street	Local	30	Not available	2,311 (8-hour count)
Bathurst Street	Heaton Street	Local	30	Not available	2,684 (8-hour count)
Maxwell Street	Goddard Street	Local	30	46.4	470
Wilmington Avenue	Wilson Heights Boulevard	Local	30	53.1	1,303
Hove Street	Heaton Street	Local	30	Not available	1,867 (8-hour count)
	From Combe Avenue Artreeva Drive Cockfield Avenue Acton Avenue Bryant Street Wilmington Avenue Tillplain Road Hove Street Bathurst Street Maxwell Street Wilmington Avenue	From To Combe Avenue Goldthread Terrace Artreeva Wilmington Avenue Cockfield Avenue Bitteroot Road Bryant Street Liberato Court Wilmington Shaftesbury Street Tillplain Road Wilson Heights Boulevard Hove Street Heaton Street Bathurst Street Goddard Street Wilmington Avenue Heights Boulevard Wilson Heights Boulevard Hove Street Heaton Street Wilson Heights Street Wilson Heights Boulevard Maxwell Goddard Street Wilmington Heights Boulevard	From 10 Classification Combe Avenue Goldthread Terrace Local Artreeva Wilmington Avenue Local Cockfield Avenue Bitteroot Road Local Bryant Street Liberato Court Local Wilmington Shaftesbury Street Local Tillplain Road Wilson Heights Boulevard Hove Street Heaton Street Local Maxwell Goddard Street Local Wilmington Avenue Heights Boulevard Mincolor Bathurst Street Local Mincolor Bathurst Street Local Wilmington Avenue Local Maxwell Street Local Wilson Local Maxwell Street Local Wilson Local Local Local	FromToRoad ClassificationSpeed Limit (km/h)Combe AvenueGoldthread TerraceLocal30Artreeva DriveWilmington AvenueLocal30Cockfield AvenueCodsell AvenueLocal30Acton AvenueBitteroot RoadLocal30Bryant StreetLiberato CourtLocal30Wilmington AvenueShaftesbury StreetLocal30Tillplain RoadWilson Heights BoulevardLocal30Hove StreetHeaton StreetLocal30Bathurst StreetHeaton StreetLocal30Maxwell StreetGoddard StreetLocal30Wilson Heights BoulevardLocal30Wilson Heights BoulevardLocal30Wilson Heights BoulevardLocal30	From To Road Classification Speed Limit (km/h) Speed (km/

Bathurst Manor NMP Page 20 of 57

Roadway	From	То	Road Classification	Speed Limit (km/h)	85% Speed (km/h)	Average Daily Vehicle Volume
Cocksfield Avenue	Bathurst Street	Heaton Street	Local	30	Not available	2,058 (8-hour count)
Cedar Springs Crescent	Wilmington Avenue (north of Purdon)	Wilmington Avenue (south of Finch Avenue West)	Local	30	39.8	233
Overbrook Place	Maxwell Street	Goddard Street	Collector	40	49.8	2,308
Purdon Drive	Garthdale Crescent	Hyfan Crescent	Local	30	44.3	398
Kennard Avenue	Honiton Street	Wilson Heights Blvd	Local	30	34.4	2,358

Bathurst Manor NMP Page 21 of 57

Attachment 4 - 10-Year Killed and Seriously Injured (KSI) Collision History for Bathurst

Manor Study Area

Manor Study Area	ı	T
Location	Date	Collision Type
Bathurst St and Sheppard Ave W	04/06/2013	Vehicle-Pedestrian
Finch Ave W and Wilmington Ave	06/05/2013	Vehicle-Vehicle
Dufferin St and Overbrook PI and Steeprock Dr	12/16/2013	Vehicle-Vehicle
William R Allen Rd and Sheppard Ave W	02/10/2014	Vehicle-Vehicle
Bathurst St and Sheppard Ave W	08/27/2014	Slow Vehicle
Dufferin St and Overbrook PI and Steeprock Dr	01/05/2015	Vehicle-Vehicle
Finch Ave W and Wilmington Ave	05/15/2015	Vehicle-Vehicle
Bathurst St and Sheppard Ave W	12/21/2015	Pedestrian-Vehicle
Combe Ave and Wilmington Ave	01/19/2016	Vehicle-Vehicle
Wilson Heights Blvd and Codsell Ave	07/26/2016	Vehicle-Vehicle
Bathurst St and Cocksfield Ave	09/09/2016	Pedestrian (2)-Vehicle
Wilson Heights Blvd and Cocksfield Ave	04/17/2017	Vehicle-Pedestrian
Bathurst St and Sheppard Ave W	04/18/2017	Cyclist-Vehicle
Codsell Ave and Maxwell St	09/05/2017	Vehicle-Pedestrian
Sheppard Ave W and Dufferin St	09/09/2018	Pedestrian-Vehicle
Dufferin St between Overbrook PI and Stanstead Dr	11/20/2018	Pedestrian-Vehicle
Sheppard Ave W and Goddard St	06/06/2019	Vehicle-Vehicle
Finch Ave W (between Wilmington Ave and Dufferin St)	06/25/2019	Vehicle-Vehicle
Dufferin St and Finch Ave W	10/15/2019	Vehicle-Vehicle
Sheppard Ave W between Ln E Wilson Heights S Sheppard and Wilson Heights Blvd	07/26/2020	Pedestrian-Vehicle

Bathurst Manor NMP Page 22 of 57

Location	Date	Collision Type
Bathurst St between Sheppard Ave W and Cocksfield Ave	10/05/2020	Pedestrian-Vehicle
William R Allen Rd and Sheppard Ave W	01/31/2020	Pedestrian-Vehicle
Sheppard Ave W between Wilson Heights Blvd and Ln E Wilson Heights S Sheppard	07/26/2020	Vehicle-Pedestrian
Dufferin St between Finch Ave W and Stanstead Dr	09/20/2020	Pedestrian-Vehicle
Dufferin St and Finch Ave W	10/04/2020	Pedestrian-Vehicle
William R Allen Rd and Sheppard Ave W	05/30/2021	Vehicle Lost Control
William R Allen Rd and Sheppard Ave W	06/22/2022	Vehicle Lost Control
Dufferin St and Finch Ave W	10/20/2022	Pedestrian-Vehicle
Sheppard Ave W between Wilson Heights Blvd and Banting Ave	09/09/2022	Cyclist-Vehicle
Wilson Heights Blvd near Kennard Ave	12/07/2022	Vehicle Lost Control
William R Allen Rd and Sheppard Ave W	07/09/2023	Vehicle-Vehicle
Bathurst St and Sheppard Ave W	08/12/2023	Pedestrian-Vehicle

Bathurst Manor NMP Page 23 of 57

Attachment 5 - Traffic Management Inventory for Bathurst Manor Study area

Strategy	Intersection	Location Detail	Quantity	Installation Date
Accessible Pedestrian Signal	Bathurst St 65m North of Cocksfield Ave	Pushbutton Actuated	NA	Record not found
Accessible Pedestrian Signal	Sheppard Ave W and Bryant St	Pushbutton Actuated	NA	Record not found
Accessible Pedestrian Signal	Sheppard Ave W and Wilmington Ave	Pushbutton Actuated	NA	Record not found
Accessible Pedestrian Signal	William R Allen Rd and De Boers Dr	Pushbutton Actuated	NA	Record not found
Accessible Pedestrian Signal	William R Allen Rd and Kennard Ave	Pushbutton Actuated	NA	Record not found
Accessible Pedestrian Signal	Finch Ave W and Wilmington Ave	Pushbutton Actuated	NA	Record not found
Red Light Camera	Bathurst St and Sheppard Ave W	NA	1	Record not found
Red Light Camera	Sheppard Ave W and Wilson Heights Blvd	NA	1	Record not found
Red Light Camera	Sheppard Ave W and William R Allen Rd	NA	1	Record not found
Red Light Camera	Dufferin St and Finch Ave W	NA	1	Record not found

Bathurst Manor NMP Page 24 of 57

Strategy	Intersection	Location Detail	Quantity	Installation Date
School Crossing Guard	Sheppard Ave W and Goddard St	Signalized Intersection	1	Record not found
School Crossing Guard	Sheppard Ave W and Wilmington Ave	Signalized Intersection	1	Record not found
School Crossing Guard	Wilmington Ave and Purdon Dr	Stop Control Intersection - All-Way	1	Record not found
Pedestrian Crossover	Wilmington Ave and Searle Ave	South Crosswalk on Wilmington Ave	1	Record not found
Speed Hump	Overbrook PI	Between Dufferin and Wilmington	1	Record not found
Left Turn Restriction	Sheppard Ave W and Hove St	Mon-Fri 4- 6pm, eastbound left turn	NA	Record not found
Turn Restriction	Wilmington Ave and Codsell Ave	Mon-Fri 7-9am and 4-6pm, northbound right turn and southbound left turn	NA	2021
School Safety Zone	Wilmington Elementary School	NA	NA	11/19/2020
School Safety Zone	Charles H Best Middle School	NA	NA	11/19/2020
Community Safety Zone	Wilmington Ave	Finch Ave W to Overbrook PI	NA	03/22/2019

Bathurst Manor NMP Page 25 of 57

Strategy	Intersection	Location Detail	Quantity	Installation Date
Community Safety Zone	Dufferin St	Kennard Avenue To 300 M South of Finch Ave W	NA	03/10/2020
Community Safety Zone	Tillplain Rd	Waterloo Ave to Cocksfield Ave	NA	09/03/2020
Community Safety Zone	Sheppard Ave W	Wilson Heights Blvd to Gorman Park Rd	NA	03/09/2020
Senior Safety Zones	4455 Bathurst St	Sheppard Place	NA	09/01/2018
Pedestrian Head Start Signal	Sheppard Ave W and Bryant St	NA	NA	01/14/2021
Pedestrian Head Start Signal	Sheppard Ave W and Goddard St	NA	NA	01/14/2021
Pedestrian Head Start Signal	Sheppard Ave W and Wilmington Ave	NA	NA	01/13/2021
Pedestrian Head Start Signal	William R Allen Rd and Rimrock Rd	NA	NA	12/21/2021
Pedestrian Head Start Signal	William R Allen Rd and Dufferin St / Kennard Ave	NA	NA	12/21/2021

Bathurst Manor NMP Page 26 of 57

Attachment 6 - One-Way Travel Restriction Proposal



Bathurst Manor | Neighbourhood Mobility Plan

Location of Proposed Volume Management Measures





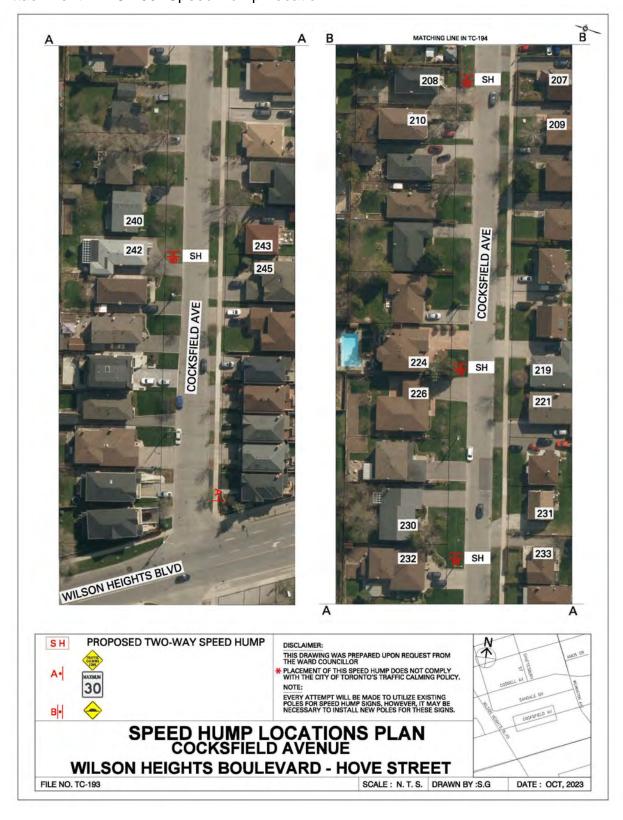
Local roads with volumes above 2,500 vehicles per day

One-way recommended

One-way considered but not recommended due to low community support

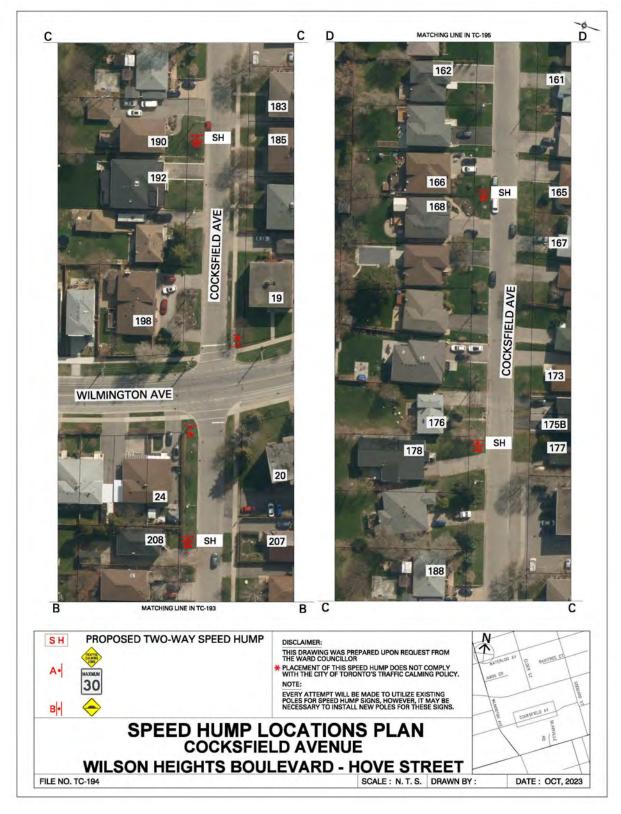
Bathurst Manor NMP Page 27 of 57

Attachment 7- TC 193- Speed Hump Location



Bathurst Manor NMP Page 28 of 57

Attachment 8 - TC 194- Speed Hump Location Plan



Bathurst Manor NMP Page 29 of 57

Attachment 9 - TC 195- Speed Hump Location Plan



Bathurst Manor NMP Page 30 of 57

Attachment 10 - TC 196- Speed Hump Location Plan

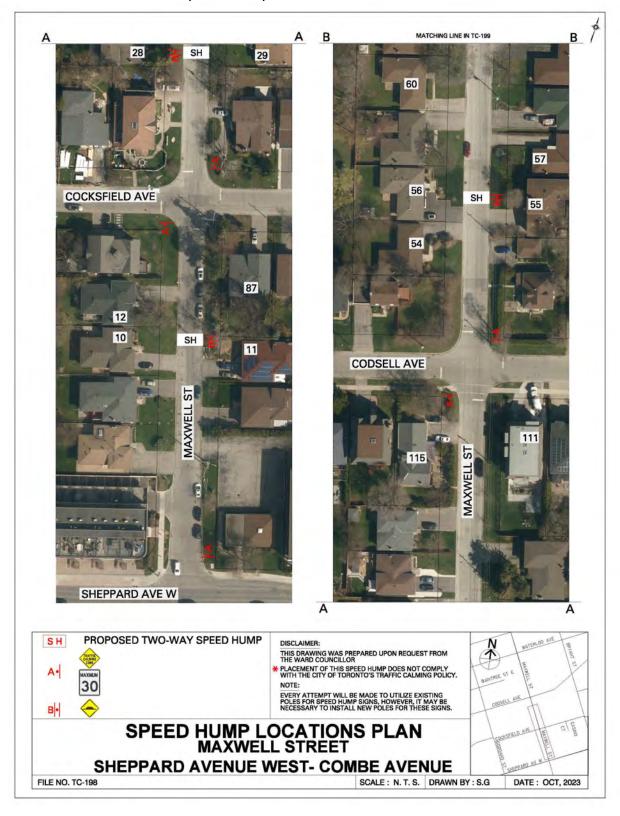


Bathurst Manor NMP Page 31 of 57



Bathurst Manor NMP Page 32 of 57

Attachment 12 - TC 198- Speed Hump Location Plan



Bathurst Manor NMP Page 33 of 57

Attachment 13 - TC 199- Speed Hump Location Plan



Bathurst Manor NMP Page 34 of 57



Bathurst Manor NMP Page 35 of 57



Bathurst Manor NMP Page 36 of 57

Attachment 16 - TC 202- Speed Hump Location Plan



Bathurst Manor NMP Page 37 of 57

Attachment 17 - TC 203- Speed Hump Location Plan



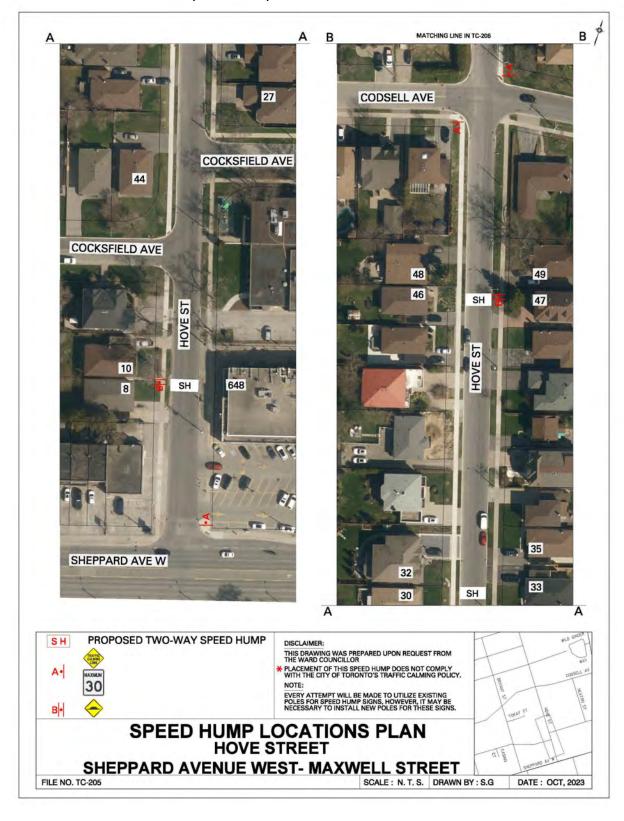
Bathurst Manor NMP Page 38 of 57

Attachment 18 - TC 204- Speed Hump Location Plan



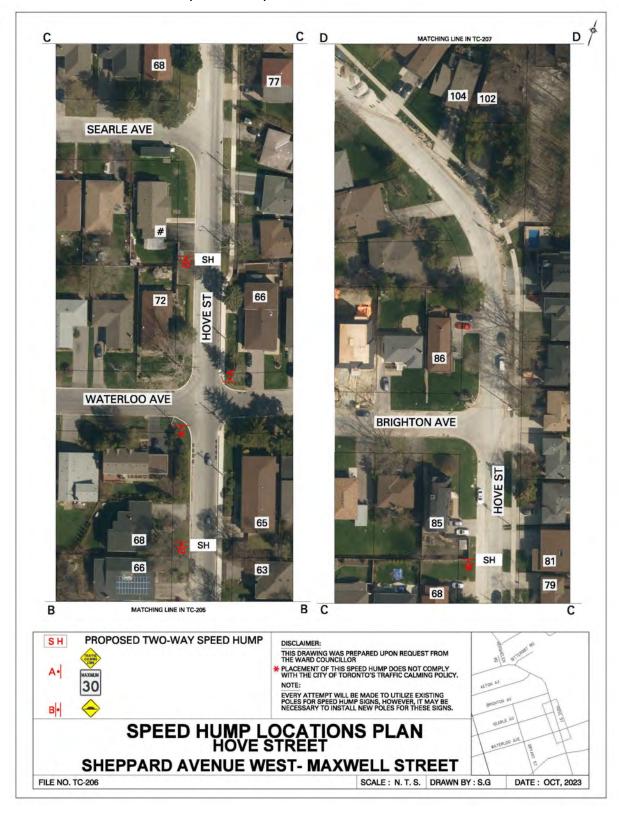
Bathurst Manor NMP Page 39 of 57

Attachment 19 - TC 205- Speed Hump Location Plan



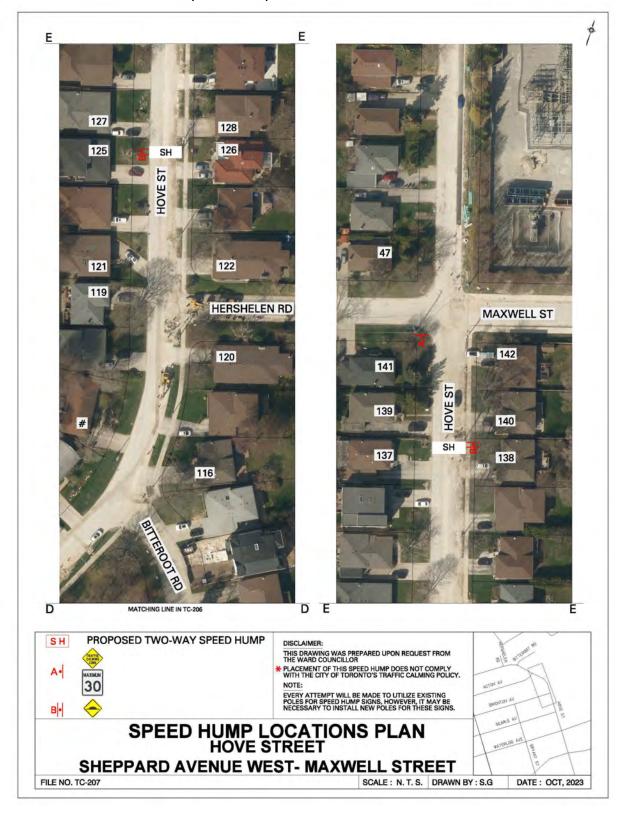
Bathurst Manor NMP Page 40 of 57

Attachment 20 - TC 206- Speed Hump Location Plan



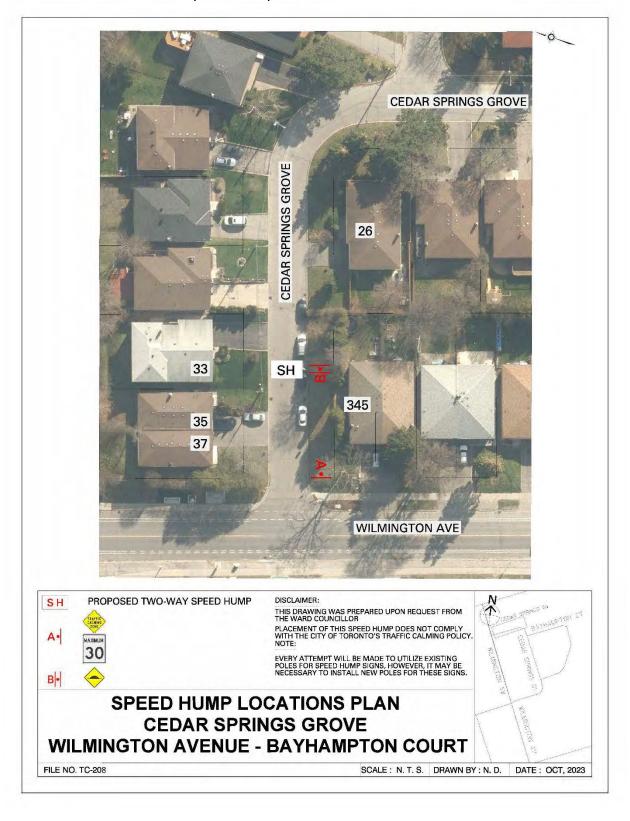
Bathurst Manor NMP Page 41 of 57

Attachment 21 - TC 207- Speed Hump Location Plan



Bathurst Manor NMP Page 42 of 57

Attachment 22 - TC 208- Speed Hump Location Plan



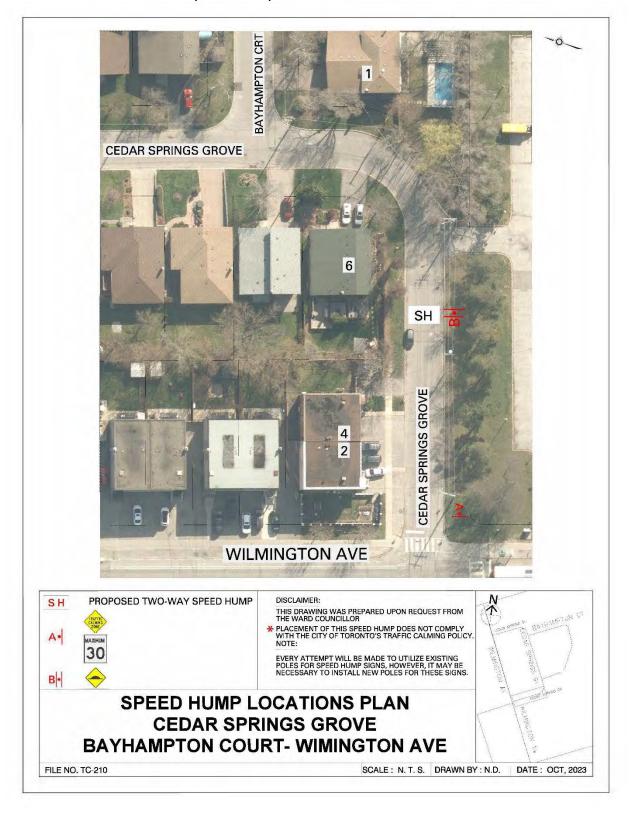
Bathurst Manor NMP Page 43 of 57

Attachment 23 - TC 209- Speed Hump Location Plan



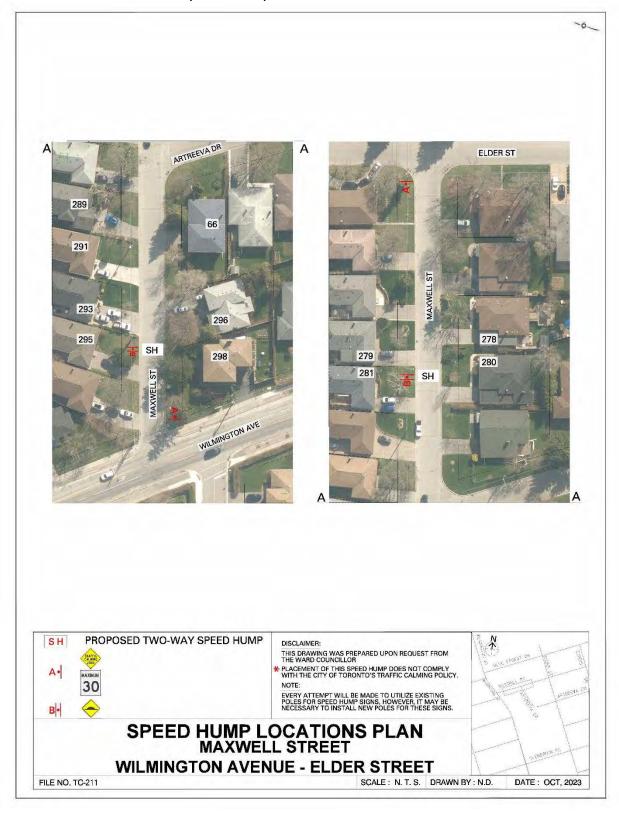
Bathurst Manor NMP Page 44 of 57

Attachment 24 - TC 210- Speed Hump Location Plan



Bathurst Manor NMP Page 45 of 57

Attachment 25 - TC 211- Speed Hump Location Plan



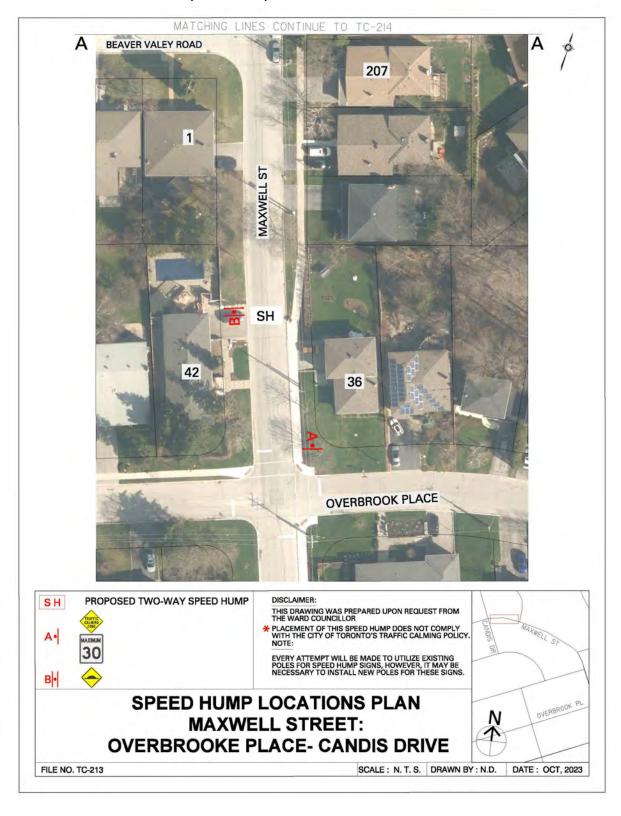
Bathurst Manor NMP Page 46 of 57

Attachment 26 - TC 212- Speed Hump Location Plan



Bathurst Manor NMP Page 47 of 57

Attachment 27 - TC 213- Speed Hump Location Plan



Bathurst Manor NMP Page 48 of 57

Attachment 28 - TC 214- Speed Hump Location Plan



Bathurst Manor NMP Page 49 of 57

Attachment 29 - TC 215- Speed Hump Location Plan

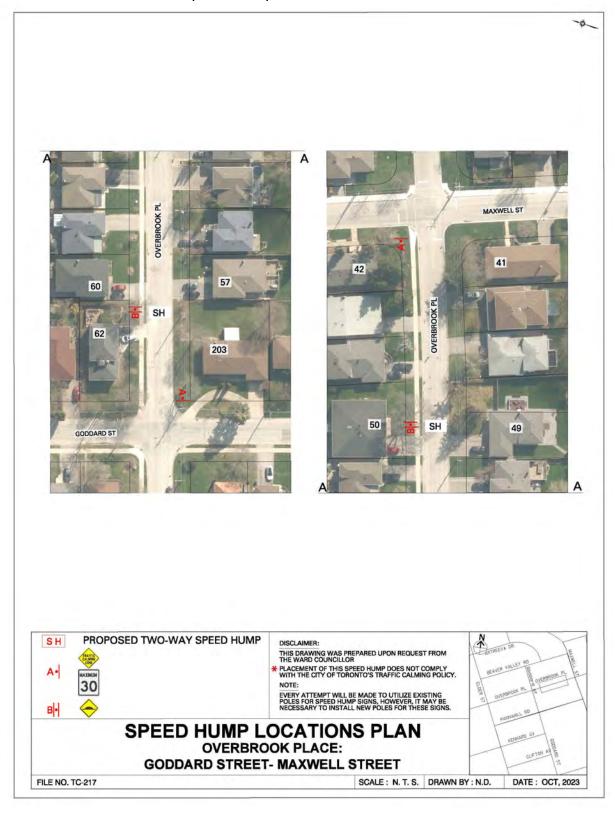


Bathurst Manor NMP Page 50 of 57

Attachment 30 - TC 216- Speed Hump Location Plan



Bathurst Manor NMP Page 51 of 57



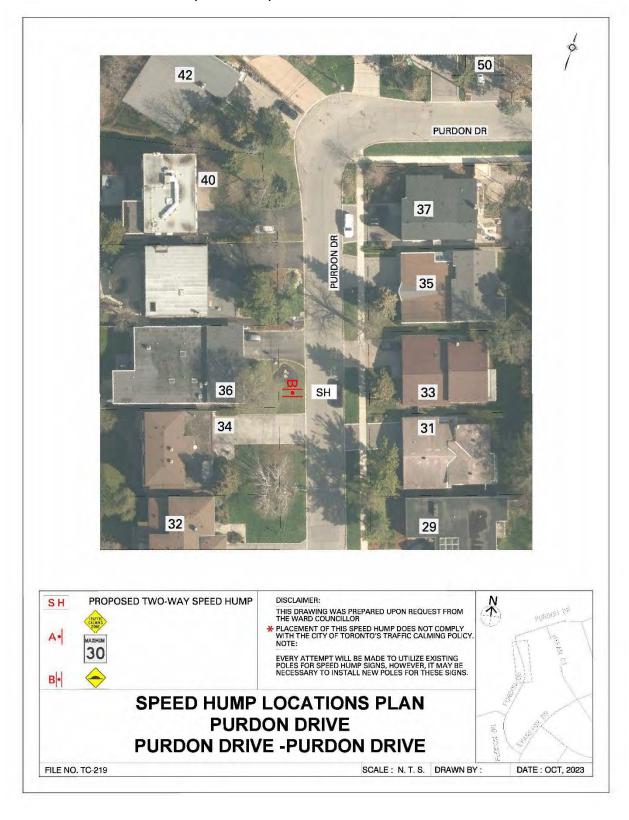
Bathurst Manor NMP Page 52 of 57

Attachment 32 - TC 218- Speed Hump Location Plan



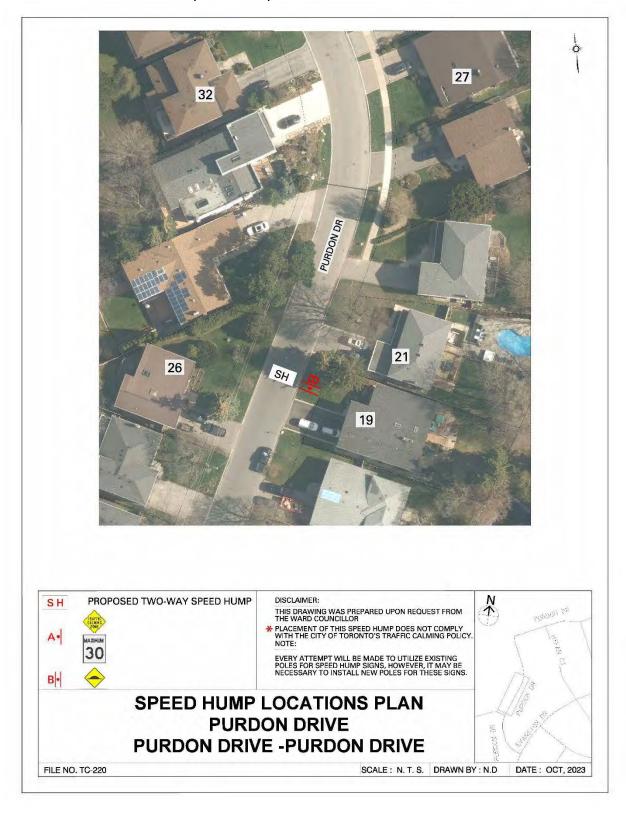
Bathurst Manor NMP Page 53 of 57

Attachment 33 - TC 219- Speed Hump Location Plan



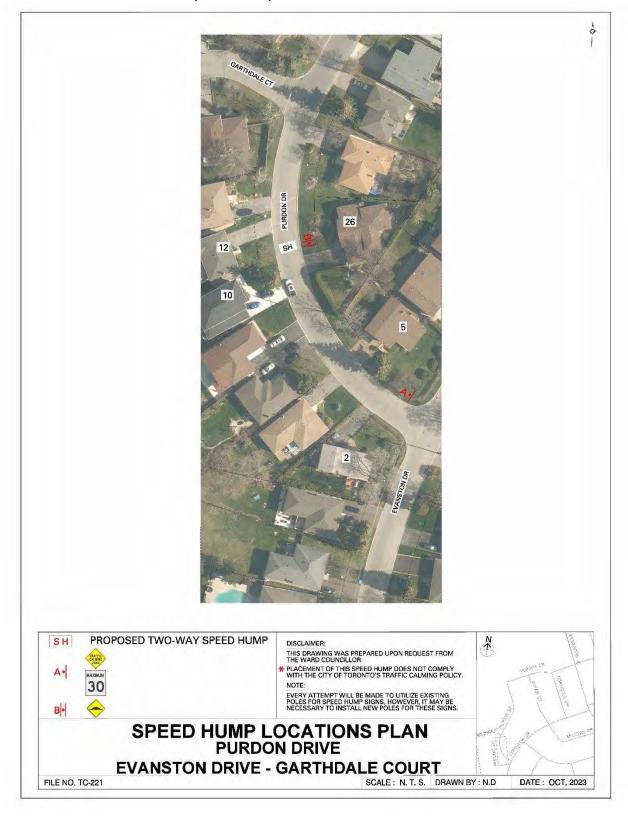
Bathurst Manor NMP Page 54 of 57

Attachment 34 - TC 220- Speed Hump Location Plan



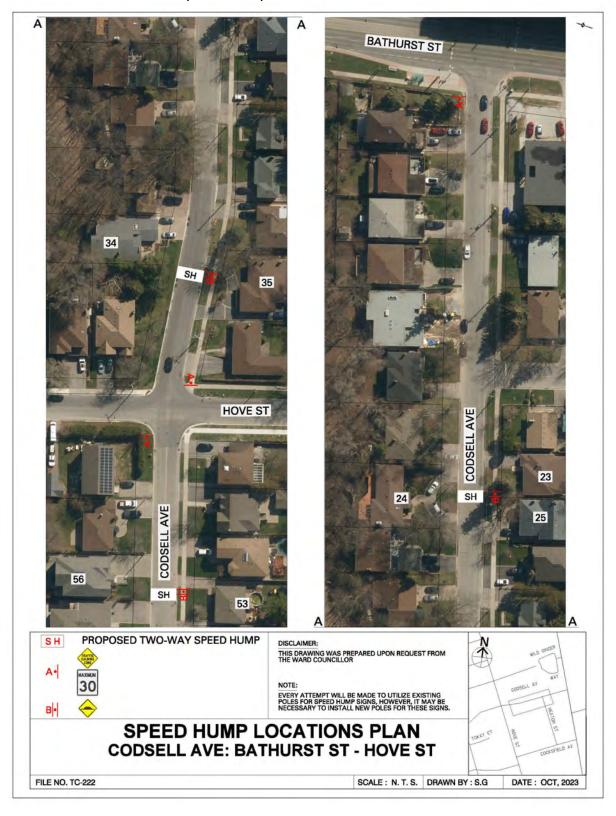
Bathurst Manor NMP Page 55 of 57

Attachment 35 - TC 221- Speed Hump Location Plan



Bathurst Manor NMP Page 56 of 57

Attachment 36 - TC 222- Speed Hump Location Plan



Bathurst Manor NMP Page 57 of 57