



Staff Report for Committee of the Whole Meeting

Date of Meeting: May 22, 2018

Report Number: SRPRS.18.015

Department: Planning and Regulatory Services
Division: Development Engineering & Transportation

Subject: **SRPRS.18.015 – Misty Moor Drive and Hunter's Point Drive Traffic Calming Review**

Purpose:

To respond to resident petitions requesting traffic calming measures on Misty Moor Drive and Hunter's Point Drive, and seek Council approval to implement enhancements to intersections along Hunter's Point Drive at Old Surrey Lane and Tiffany Gate.

Recommendation(s):

- a) That staff be authorized to implement the pavement marking, signage, and crossing improvements recommended in SRPRS.18.015 for the intersections of Hunter's Point Drive at Old Surrey Lane and Hunter's Point Drive at Tiffany Gate;
- b) That the amount of \$25,000 be approved to implement the works identified in Recommendation a);
- c) That a project be established for the Hunter's Point Drive enhancements with the \$25,000 funded from the Cash to Capital Reserve Fund; and
- d) That York Regional Police be notified of the improvements on Hunter's Point Drive and be requested to provide the necessary enforcement.

Contact Person:

Ahsun Lee, Transportation Engineer, 905-771-2515,
Richard Hui, Manager, Transportation, 905-771-5478, and/or
Dan Terzievski, Director, Development Engineering and Transportation, 905-747-6358

Page 2

Report Approval:

Submitted by: Kelvin Kwan, Commissioner of Planning and Regulatory Services

Approved by: Neil Garbe, Chief Administrative Officer

All reports are electronically reviewed and/or approved by the Division Director, Treasurer (as required), Town Solicitor (as required), Commissioner, and Chief Administrative Officer. Details of the reports approval are attached.

Page 3

Background:

Town staff received a petition from residents of Misty Moor Drive on April 25, 2017 requesting traffic calming measures for Misty Moor Drive and Hunter's Point Drive as they were concerned with speeding and safety on these particular streets (**Appendix 1**). The received petition represented 24% of the affected households on Misty Moor Drive and did not meet the required 75% threshold established by the Town's traffic calming policy and process (**Appendix 2**).

While the April 2017 petition did not meet the traffic calming process threshold, staff continued to investigate the concerns raised with respect to traffic operational issues in the area to validate these concerns and determine whether any other actions or improvements would be warranted. This investigation involved data collection, analysis, and communications with residents.

Operational Assessment:

Misty Moore Drive Volume and Speed Assessment

Misty Moor Drive is a local street with a 20m right-of-way and a default (un-posted) speed limit of 50 km/h based on the Highway Traffic Act. It is controlled under a stop sign at the approach to the intersection with Hunter's Point Drive. Misty Moor Drive has a sidewalk on the south side of the street with 50 residential driveways abutting the street. Misty Moor Drive provides a connection to Chapman's Park, Hunter's Point Wildlife Park, and the baseball field at the southern end. It also connects to Old Langstaff Road at the southerly terminus leading to the Richmond Hill Golf Club maintenance entrance.

Traffic volume and speed data collected on Misty Moor Drive in August 2017 and October 2017 indicate that approximately 200-300 vehicles per day use the street with the 85th percentile speed of about 44 km/h and an average speed of about 30 km/h. This is shown in **Figure 1**. These observed speeds are within the default speed limit of 50 km/h. Coordinated enforcement and observations with York Regional Police along Misty Moor Drive also confirm these results.

Misty Moor Drive has vertical (slopes) and horizontal (curvatures) geometric challenges which may limit visibility of drivers if they drive at higher speeds than the default speed of 50 km/h. The geometric design of Misty Moor Drive presents drivers with a lower speed environment. The observed speeds on Misty Moor Drive, which have an average speed of about 30 km/h, reflect the geometric design constraints that drivers encounter.

Given that the geometry and setting of Misty Moor Drive is conducive with lower speeds and appears to help generally control speeds to less than the default speed limit of 50 km/h, no additional traffic calming measures are required or recommended for Misty Moor Drive.

Page 4

Hunter's Point Drive Traffic Calming History

Hunter's Point Drive and Misty Moor Drive were constructed through the subdivision process which began in 1979. When the subdivision was built, all streets including Hunter's Point Drive had speed limits of 50 km/h and the intersection of Hunter's Point Drive and Garden Avenue was the only intersection with all-way stop signs.

However, several traffic calming measures have been requested by area residents and implemented by the Town over the years.

In 1985, residents requested all-way stop signs at the Hunter's Point Drive and Old Surrey Lane intersection and a speed limit reduction on Hunter's Point Drive to 40 km/h. These measures were implemented.

In 1990, another all-way stop intersection was introduced at the intersection of Hunter's Point Drive and Tiffany Gate. The current intersections on Hunter's Point Drive under all-way stop and signal controls are shown in **Figure 2**.

Then in 1995, as part of Highway 407 construction, the intersections of Highway 7 at Bathurst Street and Yonge Street were re-configured. This resulted in the installation of a ramp to Highway 7 and the installation of a new traffic control signal at the intersection of Yonge Street and Garden Avenue. This change raised concerns from residents about the potential increase in traffic volumes due to traffic re-routing through the community. As such, the Town undertook a Traffic Calming Study in 1996 to address the residents' concerns.

As a result of this 1996 Study, and in an attempt to address the speeds on Garden Avenue, a travel lane width reduction was implemented as a pilot project using planter boxes. Although the Hunter's Point Drive data at the time did not show a significant speeding issue, for consistency, these planter boxes were to be introduced on both Garden Avenue and Hunter's Point Drive for a one year period. After one year, residents on Garden Avenue requested that the planter boxes be removed, however, the planter boxes on Hunter's Point Drive were not removed and still remain as of today, north of Langstaff Road (see **Figure 3**).

In addition, other traffic operational control measures have also been implemented in the area over the years such as the No-Right-Turn-on-Red restriction at the southbound Hunter's Point Drive approach to Highway 7 intersection and the playground area signage to assist in reducing travel speeds on the street, and discourage traffic infiltration through the community. These measures have been coupled with regular York Regional Police enforcement in an attempt to stabilize traffic levels and speeds on Hunter's Point Drive.

Today, Hunter's Point Drive is a collector street with a 23m right-of-way north of Old Surrey Lane and 26m right-of-way south of Old Surrey Lane. The posted maximum speed limit on Hunter's Point Drive is 40 km/h. It connects to Highway 7 with a traffic control signal system at the southern end and connects to Garden Avenue with an all-

Page 5

way stop at the northern end. In between, the intersections at Tiffany Gate and Old Surrey Lane are controlled with all-way stop signs. Hunter's Point Drive also provides sidewalks on both sides of the street for pedestrians.

Hunter's Point Volume and Speed Assessment

Traffic volumes and speeds on Hunter's Point Drive have remained relatively the same since 1995. The historical traffic volume and speed data of Hunter's Point Drive between Tiffany Gate and Langstaff Road are shown in **Figure 4**. This figure shows that traffic volumes on Hunter's Point Drive remain within the range of 3,000 to 4,000 vehicles per day. This is considered within acceptable volume levels for a collector street classification. Over the years, the 85th percentile speed is relatively consistent at about 50-55 km/h while the average speed is at about 45 km/h.

Based on the historical traffic volumes and speeds, combined with more recent observations and coordinated enforcement efforts with York Regional Police, no additional traffic calming measures are required or recommended along Hunter's Point Drive.

Further request for Speed Reduction on Misty Moor Drive

On October 24, 2017, Town staff attended a Community meeting hosted by the Ward Councillor to present the findings and options resulting from the investigation of the traffic concerns on Misty Moor Drive and Hunter's Point Drive.

One topic of discussion that was raised by the residents for Misty Moor Drive was the reduction of the maximum speed limit from 50 km/h to 40 km/h. The residents were again advised that in order for staff to be able to consider such a reduction in posted speed limit, the Town would need to receive a petition signed by 75 percent of the residents of the streets in accordance with Council approved traffic calming policies. However, as noted previously, the petition received only represented 24 percent of the residents.

Based on this requirement, the Ward Councillor initiated a follow-up petition to all residents on Misty Moor Drive to confirm the desire for the traffic calming measures.

On November 24, 2017, the Ward Councillor initiated petition closed but staff were informed by the Ward Councillor that only 44% of the 50 households on Misty Moor Drive responded positively to the petition. The 75% threshold was not met.

As a result, staff cannot recommend a reduction of the posted maximum speed limit on Misty Moor Drive as a traffic calming measure. However, based on Town staff's recent review of speed and volume data as well as the geometry, context, and setting of Misty Moor Drive, which includes residential driveways, nearby parks, geometric constraints, and sidewalks, such a speed limit reduction could be implemented if the warrant is satisfied in the future or if Council directs it.

Page 6

Stop Compliance Issue at Hunter's Point Drive and Old Surrey Lane

Another key issue raised by residents in the area is the effectiveness of the all-way stop intersection at Hunter's Point Drive and Old Surrey Lane. During peak hours, three school buses pick up or drop off children at this intersection. With a sidewalk on the south side of Old Surrey Lane, pedestrians primarily crossed the south leg of the intersection.

Staff conducted observations of the intersection and found that a number of vehicles came to a rolling stop in the southbound direction during the morning period, whereas rolling stops occurred in both north and southbound directions during the afternoon period. The drivers making rolling stops appear to be aware of the all-way stop control, but proceeded through the intersection without coming to a full stop as there was no opposing side traffic.

Staff undertook a warrant analysis for the all-way stop control at the intersection of Hunter's Point Drive and Old Surrey Lane. The analysis found that this intersection did not meet the warrants for the all-way stop control since traffic volumes on Old Surrey Lane were too low. The review also revealed that the distances from adjacent all-way stop controlled intersections at Garden Avenue and at Tiffany Gate were too short and did not meet the Ontario Traffic Manual's recommended spacing. The recommended spacing between all-way stop intersections is at least 250m, while, the spacing between these two intersections is only 115m and 165m, respectively.

While unmet warrants and short intersection spacing are likely the biggest contributors to the non-compliance at Hunter's Point Drive and Old Surrey Lane, and removal of the all-way stop control would be the most effective solution from a traffic operations perspective, staff recognize and acknowledge that there is need to maintain this all-way stop control at this time to accommodate current pedestrian and student activities in the area. As such, staff recommend that enhancements to the intersection be considered to improve compliance, particularly at the south leg of the intersection where pedestrians typically cross.

Based on staff review of the intersection geometry and surroundings, the following enhancements are recommended:

- Add zebra crossing markings on the south, west and east legs of the intersection;
- Add larger Stop signs to the north/south approaches; and
- Restripe with larger stop bars on the pavement at all approaches.

These recommended improvements are focused on bringing attention to the all-way stop control, and in particular to the pedestrian activity at the south leg and other legs where sidewalks bring pedestrians to the intersection. The current intersection does not have any pavement markings to delineate a designated pedestrian crossing space on the roadway. To increase awareness of the pedestrian crossing activity at this

Page 7

intersection for drivers, zebra crossing markings are recommended for the crossing on the south, west and east legs where sidewalks currently exist. In addition, larger stop signs at the Hunter's Point Drive north/south approaches to the intersection plus larger pavement stop bars at all approaches are recommended to bring further attention to this all-way stop controlled intersection.

Hunter's Point Drive and Tiffany Gate

As part of the crossing enhancement review, staff also examined the all-way stop intersection of Hunter's Point Drive and Tiffany Gate. Tiffany Gate, which forms the east leg of the T-intersection, provides a sidewalk on the north side. On the west side, a trail to Hunter's Point Wildlife Park is provided. However, no pedestrian connection from the sidewalk on the west side of Hunter's Point Drive exists. Therefore, construction of a pedestrian connection including a barrier-free ramp on the west side of Hunter's Point Drive at the intersection with Tiffany Gate is recommended. Also, zebra crossing markings are recommended as part of the crossing design on the north leg and east leg where sidewalks currently exist.

Financial/Staffing/Other Implications:

The cost of implementing the recommended enhancements to the Hunter's Point Drive intersections at Old Surrey Lane and Tiffany Gate is estimated to be in the order of \$25,000. As the recommendations enhance the walking environment and address the deficiency in the sidewalk connections at the intersections, staff recommend that the \$25,000 be funded from the Cash to Capital Reserve Fund.

Relationship to the Strategic Plan:

The recommendations of this report are consistent with the Town's Strategic Plan to "enhance community safety" and "provide better connections" for residents. Making design enhancements to the Hunter's Point Drive intersections allow better visibility and improved safety with pedestrian crossing facilities. It also demonstrates responsible municipal management of the Town's infrastructure in response to the needs of the community.

Conclusion:

Petitions for traffic calming measures on Misty Moor Drive and Hunter's Point Drive were received in April and November 2017 but the petitions did not meet the 75 percent threshold in the Town's Traffic Calming policy.

As such, staff cannot recommend the reduction of the default maximum speed limit on Misty Moor Drive from 50 km/h to 40 km/h, as a traffic calming measure.

Staff reviewed and analyzed the historical and recent traffic volume and speed data for the subject streets. This further confirmed that additional traffic calming measures were not required at this time. However, the current speed and volume data, as well as the

Page 8

geometry, context, and setting of Misty Moor Drive could support a reduced speed limit should a petition threshold be satisfied or Council directs it.

With respect to stop sign compliance along Hunter's Point Drive and Old Surrey Lane, in order to enhance the visibility of the all-way stop controls and pedestrian crossing facilities at this intersection, staff recommend enhanced pavement markings and signage at the intersection including zebra crossing markings on the south, east and west legs, larger stop signs, and larger stop bars on the pavement.

Staff have also identified the need for enhancements to the pedestrian crossing at the Hunter's Point Drive and Tiffany Gate intersection including a sidewalk connection on the west side of the north leg. Zebra crossing markings for a pedestrian facility on the north and east legs of Hunter's Point Drive and Tiffany Gate is also recommended.

These intersection design enhancements on Hunter's Point Drive along with continuing monitoring and coordination of enforcement with York Regional Police will help respond to the needs of the neighborhood residents.

Attachments:

The following attached documents may include scanned images of appendixes, maps and photographs. If you require an alternative format please call contact person listed in this document.

- Appendix 1: Residents' Petition Received on April 25, 2017
- Appendix 2: Town of Richmond Hill Traffic Calming Process
- Figure 1: Misty Moor Drive Traffic Volume and Speed Observations
- Figure 2: Current All-Way Stop and Signalized Intersections on Hunter's Point Drive
- Figure 3: Planter Box Traffic Calming Measure on Hunter's Point Drive
- Figure 4: Historical Traffic Volume and Speed Observations on Hunter's Point Drive

Page 9

Report Approval Details

Document Title:	SRPRS.18.015 Misty Moor and Hunters Point Review.docx
Attachments:	<ul style="list-style-type: none">- Appendix I - SRPRS.18.015.pdf- SRPRS.18.015 Appendix 2.pdf- Figure 1-SRPRS 18 015-Misty Moor volume speed.pdf- SRPRS.18.015 - Figure 2.pdf- SRPRS.18.015 - Figure 3.pdf- SRPRS.18.015 - Figure 4.pdf
Final Approval Date:	May 9, 2018

This report and all of its attachments were approved and signed as outlined below:

Dan Terzievski - May 8, 2018 - 3:47 PM

Kelvin Kwan - May 8, 2018 - 3:53 PM

David Dexter - May 8, 2018 - 5:16 PM

Neil Garbe - May 9, 2018 - 10:43 AM