

Traffic Control Signals - 555 Rexdale Boulevard (Delegated)

Date: June 1, 2023

To: Etobicoke York Community Council

From: Director, Traffic Management, Transportation Services

Director, Transportation Planning and Capital Program, Transportation Services

Wards: Ward 1 - Etobicoke North

SUMMARY

Transportation Services is requesting approval to install compulsory stop control for northbound traffic on Sunny's Halo Trail at Rexdale Boulevard and to install traffic control signals at the intersection of Rexdale Boulevard and Glorious Song Way plus five (5) future public road intersections within the property at 555 Rexdale Boulevard (Woodbine Lands). Transportation Services is also requesting authorization to prohibit eastbound and southbound left turns and northbound through movements at the existing right-in/right-out private driveway at 500 Rexdale Boulevard, opposite Glorious Song Way at Rexdale Boulevard.

The traffic control signals will provide enhanced safety for all road users and is justified based on the assessment undertaken. Prohibition of eastbound and southbound left turns and northbound through traffic movements will prevent unsafe left turns and through movements at Rexdale Boulevard and Glorious Song Way. The proposed stop sign for northbound traffic on Sunny's Halo Trail at Rexdale Boulevard is required, as this is for a future minor public road terminating at a major public road with free-flow conditions at the intersection.

The future named public roads within the Woodbine Lands, including the extension of Queen's Plate Drive, south of Rexdale Boulevard, are currently dedicated as public highways, but not yet assumed. The recommendations for the installation of traffic control signals in this report should not be construed as the City's assumption of these future public roads.

A companion report, "Traffic Control Signals - 555 Rexdale Boulevard (Non-Delegated)" outlines the required non-delegated proposed traffic control signals and turning restriction amendments for locations with Toronto Transit Commission (TTC) Service.

RECOMMENDATIONS

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

1. Etobicoke York Community Council authorize the installation of traffic control signals at the intersection of Rexdale Boulevard and Glorious Song Way.
2. Etobicoke York Community Council authorize the installation of traffic control signals at the intersection of Queen's Plate Drive and Dance Smartly Boulevard.
3. Etobicoke York Community Council authorize the installation of traffic control signals at the intersection of Glorious Song Way and Dance Smartly Boulevard.
4. Etobicoke York Community Council authorize the installation of traffic control signals at the intersection of Sunny's Halo Trail and Dance Smartly Boulevard.
5. Etobicoke York Community Council authorize the installation of traffic control signals at the intersection of Dance Smartly Boulevard and the private driveway located approximately 143 metres north of New Providence Trail.
6. Etobicoke York Community Council authorize the installation of traffic control signals at the intersection of New Providence Trail and Dance Smartly Boulevard.
7. Etobicoke York Community Council prohibit eastbound left turns at all times at the intersection of Rexdale Boulevard and Glorious Song Way.
8. Etobicoke York Community Council prohibit southbound left turns at all times at the intersection of Rexdale Boulevard and the private driveway at 500 Rexdale Boulevard, located on the north side of Rexdale Boulevard, opposite Glorious Song Way.
9. Etobicoke York Community Council prohibit northbound through movements at all times at the intersection of Glorious Song Way and Rexdale Boulevard.
10. Etobicoke York Community Council authorize a compulsory stop control for northbound traffic on Sunny's Halo Trail at Rexdale Boulevard.

FINANCIAL IMPACT

There are no financial implications associated with adoption of this report as funding has been secured from the proponent of the Woodbine lands development for the new signals and other road improvements along Highway 27, Rexdale Boulevard, and within the Woodbine Racetrack site. These funds were secured through Plan of Subdivision Application No. 17 158705 WET 02 SB (Phase 1).

DECISION HISTORY

The traffic impacts of the Phase 1 Woodbine Racetrack development (Blocks 9 and 10) were reviewed under Zoning By-law Amendment and Draft Plan of Subdivision Application Nos. 17 1458697 WET 02 OZ, 17 158704 02 OZ and 17 158705 WET 02 SB. Under these applications, the traffic impacts of the Phase 1 development were generally accepted subject to implementation of a number of road improvements. However, given that the overall development proposal consisted of many phases which will potentially be built over an extensive time horizon (approximately 20 years), through the Draft Plan of Subdivision approval process a provision was secured which required the proponent to submit updated Traffic Impact Studies during the site plan approval process for each development block to the satisfaction of Transportation Services. Subsequently, Notice of Approval Conditions for Site Plan Control Applications 18 117779 WET 02 SA (Block 9) and 18 119828 WET 02 SA (Block 10 and Part of Block 9) were issued.

Through Plan of Subdivision Application No. 17 158705 WET 02 SB (Phase 1), the installation of new traffic control signals was secured for the intersection of Highway 27 and New Providence Trail/Nearctic Drive and at the intersection of Rexdale Boulevard and Glorious Song Way. In its April 24, 2018 decision, City Council approved the development by adopting Item No. 2018.EY29.2. A link to the City Council decision is provided below for reference.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2018.EY29.2>

COMMENTS

The Development

The Woodbine Entertainment Group (WEG) is proposing to develop the property at 555 Rexdale Boulevard (the Woodbine Lands) with a multi-phased project that will allow for expanded gaming operations and the introduction of new commercial, institutional and hotel uses.

The development consisting of new gaming and entertainment facilities is part of Phase 1, consisting of Blocks 9 and 10. Block 9 consists of 7,617 square metres of retail gross floor area. Block 10 and a portion of Block 9 of the development consists of a 32,989-square-metre integrated gaming facility with a casino, a 400-room hotel, a 507-room hotel, a 10,337-square-metre performance venue, restaurants, retail, and office uses with a total of 98,557 square metres of gross floor area.

The development site also includes a number of new public roads, including New Providence Trail, Glorious Song Way, Sunny's Halo Trail, and the extension of Queen's Plate Drive, south of Rexdale Boulevard; all four of these future public roads are dedicated public highways that are currently not assumed. Each of these new public

roads connect to Dance Smartly Boulevard, another future public road that has not been assumed. These new public roads will serve the new gaming and entertainment facilities within the Woodbine Racetrack area.

The future named public roads within the Woodbine lands, including the extension of Queen's Plate Drive, south of Rexdale Boulevard, are currently dedicated as public highway, but not yet assumed. The recommendations for the installation of traffic control signals in this report should not be construed as the City's assumption of these future public roads.

Existing Conditions

Highway 27 is characterized by the following conditions:

- It is a four-lane, north/south, major arterial roadway
- It operates two-way traffic on a pavement width of approximately 18 metres
- The daily two-way traffic volume is approximately 33,000 vehicles
- The posted regulatory speed limit is 70 km/h
- Heavy trucks are permitted at all times
- There is TTC service provided by the Highway 27 Express 927 Bus
- There are sidewalks located on the east side of the street from Bethridge Road to Rexdale Boulevard

Rexdale Boulevard is characterized by the following conditions:

- It is a six-lane, east/west, major arterial roadway
- It operates two-way traffic on a pavement width of approximately 24.5 metres
- The daily two-way traffic volume is approximately 37,000 vehicles
- The posted regulatory speed limit is 60 km/h
- Heavy trucks are permitted at all times
- There is TTC service provided by the Islington 37A Bus west of the west intersection with Queen's Plate Drive
- There are sidewalks located on the north side of the street from Highway 27 to Highway 427

Queen's Plate Drive, north of Rexdale Boulevard, is characterized by the following conditions:

- It is a four-lane, north/south, collector roadway in the vicinity of Rexdale Boulevard (west intersection)
- It operates two-way traffic on a pavement width of approximately 18.5 metres
- The daily two-way traffic volume is approximately 9,000 vehicles
- The posted regulatory speed limit is 50 km/h
- Heavy trucks are permitted at all times
- There is TTC service provided by the Islington 37A Bus north of the west intersection with Rexdale Boulevard
- There are sidewalks located on both sides of the street from Rexdale Boulevard (west intersection) to Highway 27

Nearctic Drive, east of Highway 27, is characterized by the following conditions:

- It is a two-lane, east/west, local roadway
- It operates two-way traffic on a pavement width of approximately 10.5 metres
- It has an unposted regulatory speed limit of 50 km/h
- Heavy trucks are permitted at all times
- There is no TTC service provided along this street
- There are sidewalks located on both sides of the street from Queen's Plate Drive to Highway 27

The closest adjacent traffic controls to the proposed traffic control signals at the intersection of Rexdale Boulevard and Glorious Song Way are located approximately 214 metres to the west at Rexdale Boulevard/Queen's Plate Drive (west intersection) in the form of a traffic control signal and approximately 454 metres to the east at Highway 27/Rexdale Boulevard in the form of a traffic control signal. Glorious Song Way, at its intersection with Rexdale Boulevard, is located opposite the existing right-in/right-out access at the Woodbine Mall shopping centre, which will be maintained. As noted earlier, eastbound and southbound left turns and northbound through movements are to be prohibited at this intersection.

A map of the area is included in Attachment 1.

Conditions of Approval

As part of conditions of approval at the development review stage, new traffic control signals are to be installed at the intersection of Rexdale Boulevard and Glorious Song Way and eastbound and southbound left turns and northbound through movements are to be prohibited at the existing right-in/right-out driveway opposite Glorious Song Way at Rexdale Boulevard. In addition, a compulsory stop control shall be established for northbound traffic on Sunny's Halo Trail at Rexdale Boulevard.

In addition, five new traffic control signals are to be constructed at the future public road intersections within the Woodbine Lands as follows:

- 1) Queen's Plate Drive and Dance Smartly Boulevard;
- 2) Glorious Song Way and Dance Smartly Boulevard;
- 3) Sunny's Halo Trail and Dance Smartly Boulevard;
- 4) Dance Smartly Boulevard and a private roadway located approximately 143 metres north of New Providence Trail and Dance Smartly Boulevard; and
- 5) New Providence Trail and Dance Smartly Boulevard.

These future named public roads within the Woodbine lands, including the extension of Queen's Plate Drive, south of Rexdale Boulevard, are currently dedicated as public highway, but not yet assumed. The recommendations for the installation of traffic control signals in this report should not be construed as the City's assumption of these future public roads.

Traffic Control Signals

The proponent's transportation consultant conducted traffic signal warrant analyses for each new traffic control signal, which included projected traffic generated by the development, vehicular volume counts, delay to cross traffic and an analysis of combination warrants (minimum vehicle volume and cross traffic delay combination).

To meet the justification criteria for the installation of traffic control signals, as stated in Book 12 of the Ontario Traffic Manual, one of the first two justifications indicated in the tables below, namely 'minimum vehicle volume' (Justification 1) and 'delay to cross traffic' (Justification 2), must be 100 percent satisfied or, to satisfy the combination warrant (Justification 3), both of the first two justifications indicated in the tables below must be at least 80 percent satisfied.

Table 1: Warrant Compliance - Rexdale Boulevard and Glorious Song Way.

Justification	Compliance level
Minimum vehicular volume	61%
Delay to cross traffic	100%
Combination Warrant	61%

According to the information provided by the proponent and based on the results in Table 1, traffic signals are warranted under Justification 2 of the Ontario Traffic Manual Book 12 for the intersection of Rexdale Boulevard and Glorious Song Way.

Table 2: Warrant Compliance - Queen's Plate Drive and Dance Smartly Boulevard.

Justification	Compliance level
Minimum vehicular volume	100%
Delay to cross traffic	88%
Combination Warrant	88%

According to the information provided by the proponent and based on the results in Table 2, traffic signals are warranted under Justifications 1 and 3 of the Ontario Traffic Manual Book 12 for the intersection of Queen's Plate Drive and Dance Smartly Boulevard.

Table 3: Warrant Compliance - Glorious Song Way and Dance Smartly Boulevard.

Justification	Compliance level
Minimum vehicular volume	100%
Delay to cross traffic	92%
Combination Warrant	92%

According to the information provided by the proponent and based on the results in Table 3, traffic signals are warranted under Justifications 1 and 3 of the Ontario Traffic Manual Book 12 for the intersection of Glorious Song Way and Dance Smartly Boulevard.

Table 4: Warrant Compliance - Sunny's Halo Trail and Dance Smartly Boulevard.

Justification	Compliance level
Minimum vehicular volume	100%
Delay to cross traffic	98%
Combination Warrant	98%

According to the information provided by the proponent and based on the results in Table 4, traffic signals are warranted under Justifications 1 and 3 of the Ontario Traffic Manual Book 12 for the intersection of Sunny's Halo Trail and Dance Smartly Boulevard.

Table 5: Warrant Compliance - Dance Smartly Boulevard and the private driveway located approximately 143 metres north of New Providence Trail.

Justification	Compliance level
Minimum vehicular volume	61%
Delay to cross traffic	7%
Combination Warrant	7%

According to the information provided by the proponent and based on the results in Table 5, traffic signals are not warranted for the intersection of Dance Smartly Boulevard and the private driveway located approximately 143 metres north of New Providence Trail. However, the proponent's transportation consultant recommends the installation of traffic control signals at this location in order to minimize queues, achieve acceptable levels of service and to provide a controlled crossing for pedestrians and cyclists. Transportation Services staff concur with these recommendations.

Table 6: Warrant Compliance - New Providence Trail and Dance Smartly Boulevard.

Justification	Compliance level
Minimum vehicular volume	100%
Delay to cross traffic	77%
Combination Warrant	77%

According to the information provided by the proponent and based on the results in Table 6, traffic signals are warranted under Justification 1 of the Ontario Traffic Manual Book 12 for the intersection of New Providence Trail and Dance Smartly Boulevard.

In conjunction with the installation of traffic control signals, eastbound and southbound left turns and northbound through movements are to be prohibited at the existing right-in/right-out driveway opposite Glorious Song Way, at Rexdale Boulevard.

In addition, a compulsory stop control shall be established for northbound traffic on Sunny's Halo Trail at Rexdale Boulevard. Sunny's Halo Trail is stop-sign controlled at its intersection with Rexdale Boulevard and is restricted to eastbound-to-southbound (right-in) and northbound-to-eastbound (right-out) movements only while Rexdale Boulevard is uncontrolled free-flow. Sunny's Halo Trail/Rexdale Boulevard is located approximately 290 metres west of Highway 27.

The TTC has been consulted throughout the development review process and concurs with these findings.

Based on the aforementioned, Transportation Services is recommending the installation of traffic control signals at the following intersection:

- Rexdale Boulevard and Glorious Song Way.

Transportation Services also recommends the installation of traffic control signals at the intersections within the Woodbine lands:

- Queens Plate Drive and Dance Smartly Boulevard;
- Glorious Song Way and Dance Smartly Boulevard;
- Sunny's Halo Trail and Dance Smartly Boulevard;
- Block 10 East Access and Dance Smartly Boulevard, located approximately 143 metres north of New Providence Trail and Dance Smartly Boulevard; and
- New Providence Trail and Dance Smartly Boulevard.

In addition, Transportation Services recommends the establishment of eastbound and southbound left turn and northbound through traffic prohibitions at the existing right-in/right-out driveway opposite Glorious Song Way at Rexdale Boulevard and the establishment of a compulsory stop control for northbound traffic on Sunny's Halo Trail at Rexdale Boulevard.

CONTACT

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SIGNATURE

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ATTACHMENTS

Attachment 1: Map - Traffic Control Signals - 555 Rexdale Boulevard

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