

TRANSPORTATION IMPACT ASSESSMENT

**1472 DUNDAS STREET EAST
CITY OF LONDON**

**PREPARED FOR:
2288711 ONTARIO INC.**

**PREPARED BY:
C.F. CROZIER & ASSOCIATES INC.
2800 HIGH POINT DRIVE, SUITE 100
MILTON, ON L9T 6P4**

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Revision Number	Date	Comments
Rev.0	December 2023	Issued for Submission
Rev.1	August 2024	Issued for Submission

Executive Summary

C.F. Crozier & Associates (Crozier) was retained by 2288711 Ontario Inc. to complete a Transportation Impact Assessment (TIA) in support of a proposed mixed-use residential development with ground floor retail situated at 1472 Dundas Street East in the City of London.

The analysis undertaken herein was completed using the Draft Site Plan prepared by Weston Consulting, dated December 05, 2023. It is noted that any minor changes to the Site Plan are not expected to materially affect the conclusions set out within this report.

The proposed development envisions the construction of a ten (10) storey mixed-use residential development with an approximate gross floor area of 28,087 square metres with a total of 178 parking spaces. Additionally, a single full-moves site access via Dundas Street is proposed to allow access to the proposed development.

Under 2022 existing conditions, the study intersections operate with a Level of Service "B" or better with the exception of the intersection of Dundas Street and Highbury Avenue operating with a Level of Service "D" for A.M. and P.M. peak hours respectively. Notably the southbound through movements operates near capacity during the A.M. peak hour with the southbound left-turn movement operating above capacity during the P.M. peak hour. A lost time adjustment of -2.0 seconds was incurred for the eastbound left, westbound through and southbound left movements to reflect existing operating conditions in the P.M. peak hour.

For the intersection of Dundas Street and Highbury Avenue, the 95th percentile queue length for eastbound left-turn and southbound left-turn exceed the available storage in both the A.M. and P.M. peak periods and the westbound left-turn exceeding the available storage in P.M. peak hour only.

Further at the intersection of Dundas Street and First Street, the 95th percentile queue length for the eastbound left-turn exceed the available storage in the A.M. peak hour. However, the 50th percentile queue length operates well under available storage.

Under 2024 future background conditions, the study intersections are expected to operate with a Level of Service "B" or better with the exception of the intersection of Dundas Street and Highbury Avenue expected to operate with Level of Service "E" and "F" during the A.M. and P.M. peak hours respectively with an addition of critical capacity movements for the eastbound left, westbound through, northbound through and southbound left movements in the A.M. peak hour and eastbound left/through and westbound left/through movement in the P.M. peak hour. The 95th percentile queue length for southbound left and right-turn lanes are expected to exceed the available storage in the A.M. and P.M. peak hours.

Under the 2029 future background conditions, the study intersections are expected to operate with a Level of Service "B" or better with the exception of the intersection of Dundas Street and Highbury Avenue expected to operate with a Level of Service "E" and "F" during the A.M. and P.M. peak hours respectively. The critical capacity movements are expected to be very similar to the 2024 future background conditions. The 95th percentile queue lengths are expected to operate similar to the 2024 future background conditions with an addition of northbound through lane exceeding the available storage in P.M. peak hour.

The proposed development is expected to generate 147 two-way (40 inbound and 107 outbound) trips during the weekday A.M. peak hour and 145 two-way (85 inbound and 60 outbound) trips during the weekday P.M. peak hour.

Under the 2024 future total conditions, the study intersections are anticipated to be very similar to that of the future background conditions forecasted for the 2024 horizon.

Under the 2029 future total conditions, the study intersections are anticipated to operate similarly to the 2029 future background conditions. The intersection of Dundas Street and Highbury Avenue is forecasted to operate with a Level of Service "F" during both the peak hours with a slight increase in delays. The 95th percentile queue length for the southbound left-turn lane is expected to increase by 5.0 metres in the P.M. peak hour.

The proposed site access of Dundas Street is forecasted to operate with a Level of Service "C" and "D" during the A.M. and P.M. peak hours respectively with no overcapacity movements and minimal delays under the 2029 future total conditions.

The sightlines at the proposed site access on Dundas Street were conducted using the guidance provide by the Transportation Association of Canada (TAC), and sufficient visibility of oncoming vehicles are provided for vehicle. Additionally, corner clearance and access spacing to adjacent driveways were verified at each access and are expected to be sufficient.

Vehicle maneuvering analysis was undertaken for the site and no issues were noted for the fire, waste, loading or passenger vehicle movements on the ground floor.

The proposed parking supply at the site meets the City's Zoning By-Law requirement.