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# Memorandum

To/Attention

Sakto Corporation

Date

January 10, 2019

**From** 

**IBI** Group

**Project No** 

100795

CC

**Subject** 

Adelaide Expansion (17 Aberdeen Street) - Transportation Overview

Addendum #1

#### 1. Overview

This document serves as an Addendum to a Transportation Overview prepared by IBI Group in August 2016 in support of a Site Plan Application for a proposed residential expansion to the 158-unit *Adelaide* apartment building at 17 Aberdeen Street, located within the Preston Square mixeduse complex. Following the approval of the Site Plan Application, subsequent changes have been made to the development plan triggering the need for a re-submission.

The proposed changes to the site plan are as follows:

- The proposed residential building has been increased in height from 23 storeys to 30 storeys.
- The number of new apartment units has been increased from 197 units to 252 units an increase of 55 units.

The purpose of this Addendum is to identify the net change in peak hour site-generated traffic associated with the updated site plan and determine if there are any additional impacts as a result.

## 2. Updated Development-Generated Traffic

For consistency with the previous analysis undertaken for this site, the assumptions used in the Transportation Overview have been carried forward in the estimation of revised site-generated traffic volumes. In recognition of the proximity to rapid transit (Trillium Line), the trip generation values shall be considered conservative.

The 2016 Transportation Overview referenced Institute of Transportation Engineers (ITE) trip generation rates for Land Use Code 220: Apartment. To express the trip generation in terms of person-trips, it was assumed that the data included an inherent 95% driver mode share with an auto-occupancy of 1.2 persons per vehicle resulting in a vehicle to person trip conversion factor of 1.28.

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Despite the proximity to an existing rapid transit station (Carling) and within the area of influence of the future Gladstone station, the mode share considered for the development was based on the mode share distribution for the Ottawa Inner Area Traffic Assessment Zone (TAZ), as indicated in the 2011 NCR Household Origin-Destination Survey. The mode share distribution for this TAZ is summarized below:

Auto Driver: 33%

Auto Passenger: 10%

Transit: 19%Non-Auto: 39%

Based on the above assumptions, the resulting net increase in site-generated traffic during the weekday morning and afternoon peak hours is in the order of 15 and 17 two-way trips, respectively. As indicated in the 2016 study, site-generated traffic is distributed amongst 4 access points to the site on all three of the site's boundary streets and will therefore have a negligible impact on the adjacent road network.

## 3. On-Site Circulation, Parking & Loading

#### 3.1. On-Site Circulation

The proposed changes to the Adelaide Expansion will require modification to the turning circle at the interior of the site. As indicated on the attached site plan, the building is now proposed to extend over the drive aisle with a punch-through for vehicle circulation. As the turning circle forms part of the site's Fire Route, it has been designed to include a clear 6m drive aisle. Through the design process, vehicle swept-path analyses were undertaken to confirm that the minimum turning radius requirements were exceeded. Pedestrian accessibility will be improved between Tower 1 and Tower 2 with the incorporation of a raised pedestrian pathway.

#### 3.2. Loading

The Loading Zone for the existing Tower 1 (Block 'A') has been reconfigured to permit only LSU (light, single-unit) trucks. This vehicle type represents a typical mail-courier vehicle and is the most common heavy vehicle servicing Tower 1. The loading space has been designed in conformance with minimum by-law requirements (Part 4 of By-Law 2008-250) and will permit this vehicle type to park while not obstructing the fire route. Larger delivery vehicles will be directed to the existing primary loading dock located at Tower 2 (Block 'C).

## 3.3. Parking

The reconfiguration of the turning circle has resulted in the loss of 4 short-term surface parking spaces as compared with the previous submission. In addition to this, the extended building footprint will impact the below-grade parking facilities due to the requirement for additional support columns, resulting in a further loss of parking spaces. The original transportation study indicated that the proposed development would result in an overall net loss of 26 parking spaces. The total parking supply of the Preston Square Complex will be reduced from the existing 1,068 spaces to 1,015 spaces under the revised design, equating to a net loss of 53 parking spaces.

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As confirmed by the Parking Study undertaken in support of the 2016 Site Plan Application, the below-grade parking facilities were found to be under-utilized with a peak demand of 77%. The reduction in parking supply would increase this figure to approximately 81%, which remains below the practical capacity of a parking facility. As the site is within proximity of a major LRT station, as indicated by Area Z in By-law 2008-250, the proposed residential development will not require any additional residential parking and may only provide up to 30 visitor parking spaces, many of which already exist.

#### 4. Conclusion

Based on a review of the updated site plan, the proposed increase of 55 units may generate up to 20 additional two-way vehicular trips during the weekday morning and afternoon peak hours, respectively. With consideration that site-generated traffic will be distributed amongst 4 access driveways onto the three boundary streets, the impact of this additional site-generated traffic on the adjacent road network can be considered negligible.

It is the overall opinion of IBI Group that the increase in density proposed for the Adelaide apartment building will have no significant transportation impact. The original study conclusions remain valid and therefore the proposed development can be safely accommodated by the adjacent transportation network.



David Hook, P.Eng.

