December 20, 2024

177 Colonnade Road
Suite 101
Ottawa, Ontario
Canada
K2E 7J4
Telephone
613.745.2213
Fax
613.745.3491

Urbandale Corporation
2193 Arch Street
Ottawa, Ontario
K1G 2H5

Attention: Vincent Denomme, Manager – Planning and Development

Traffic Impact Assessment Addendum Letter, 2145 Walkley Road

Dillon Consulting Limited (Dillon) completed a Traffic Impact Assessment (TIA) for the proposed Walkley Road Apartments at 2190 Halifax Drive in July 2019 for LS GP Inc. The developer has recently updated the site plan, which has increased the number of residential dwelling units and the number of parking spaces. The site address has also been updated and is now known as 2145 Walkley Road. This addendum letter is intended to address the impacts of the proposed site plan modifications and respond to the following:

- Impact on trip generation due to the increase in the number of dwelling units from 202 units to 260 units;
- Impact on parking supply;
- Driveway grading; and
- Service vehicle site circulation.

Trip Generation Update

The 2019 TIA based the trip generation rates on the TRANS Trip Generation Study Report (2009). The previous TIA considered a development with 202 residential high-rise units. The Table 1 below summarizes the number of trips by mode as identified by the 2019 TIA.

Table 1: Trip Generation by Mode - from 2019 TIA

Travel Mode	Mode Share for Apartment in Urban Area (TRANS Table 3.13)		AM Peak Hour			PM Peak Hour		
	AM	PM	Total	In	Out	Total	In	Out
Auto Driver	37%	40%	48	11	37	54	33	21
Auto Passenger	8%	9%	10	2	8	12	7	5
Transit	41%	37%	53	12	41	50	30	20
Non-Motorized	14%	14%	18	4	14	19	12	7
Total Person Trips	100%	100%	129	29	100	135	82	53

Source: Table 7 from the 2019 TIA for 2190 Halifax Drive

The TRANS Trip Generation Manual was updated in 2020 and included revised trip rates. A high-rise residential building with 260 dwelling units in the Alta Vista area is forecast to generate weekday AM and PM peak hour trips as summarized in Table 2.

Table 2: Revised Trip Generation by Mode (260 Dwelling Units)

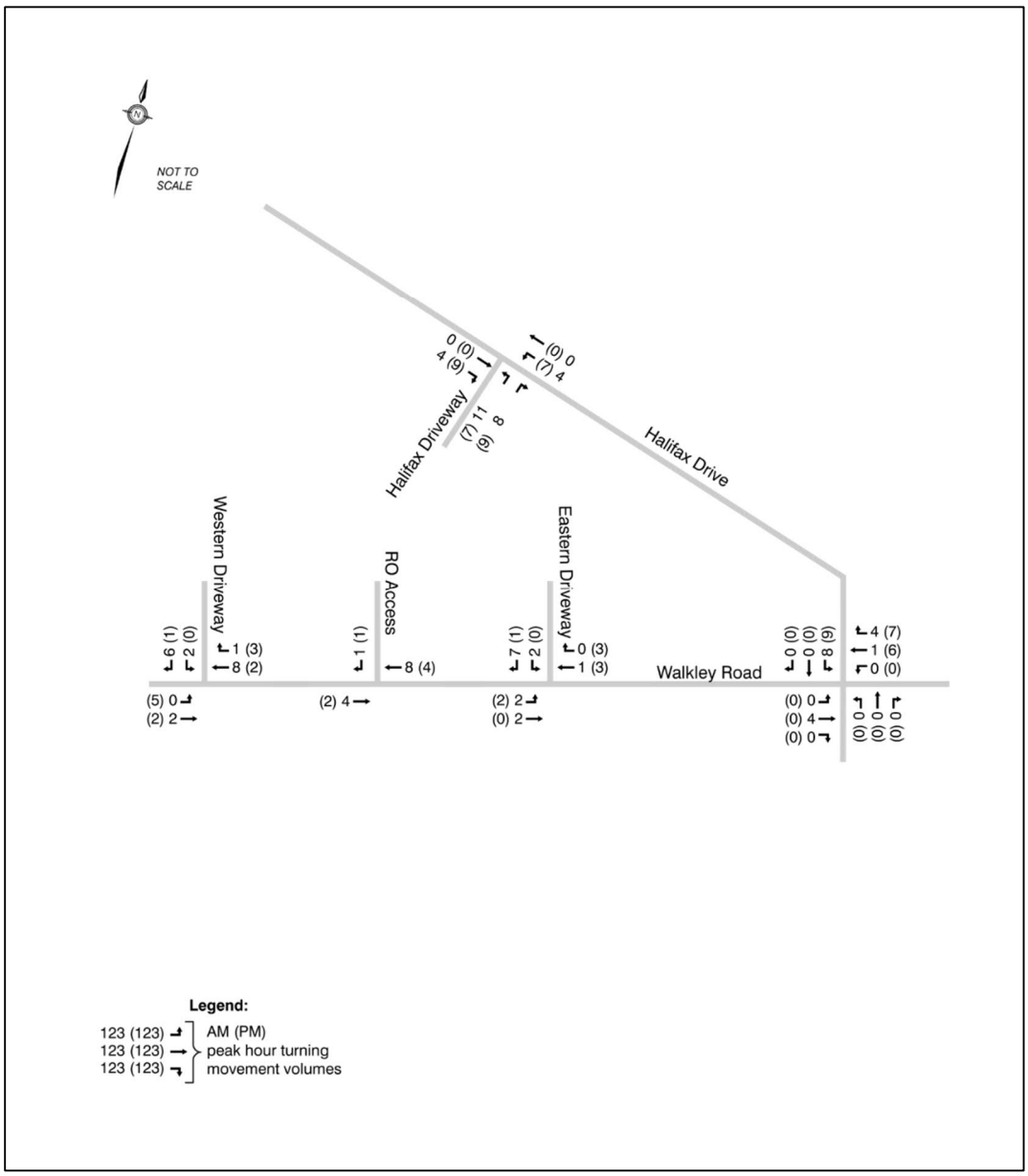
RESIDENTIAL								
Travel Mode	Mode Share		AM Peak Hour			PM Peak Hour		
	AM	PM	Total	In	Out	Total	In	Out
Auto Driver	38%	45%	38	12	26	46	27	19
Auto Passenger	12%	16%	12	4	8	16	9	7
Transit	42%	28%	48	15	33	31	18	13
Cycling	2%	2%	2	1	1	2	1	1
Walking	7%	9%	9	3	6	11	6	5
Total Person Trips	100%	100%	109	35	74	106	61	45

The revised site plan, which contains 260 dwelling units, is forecast to generate fewer auto trips than the previous TIA, which contained 202 dwelling units. The AM peak hour is forecast to generate 38 auto trips vs. 48 trips in the 2019 TIA. During the PM peak hour, the site is forecast to generate 46 auto trips vs. 54 trips in the 2019 TIA. The overall person trips are also forecast to be lower, with 109 and 106 in the AM and PM peak hours, respectively, vs. the previous TIA, which forecasted 129 and 135 during the AM and PM peak hours, respectively.

The small number of trips assigned across the site driveways will have a negligible, yet slightly positive, effect on the overall level of service (LOS) compared to the 2019 TIA.

The site-generated trips are assigned throughout the network as illustrated in Figure 1.

Figure 1: Site Trip Assignment



Parking Supply

The following subsections address the proposed apartment building's auto and bicycle parking requirements.

Auto Parking

The proposed development includes modifications to the existing on-site parking. The new development will result in a net increase of 258 parking spaces, achieved by:

- Removing 63 existing surface parking spaces to accommodate the new construction;
- Adding 269 new underground parking spaces;
- Adding 52 above-grade visitor spaces; and
- Total net new parking = 258 spaces.

Table 3 provides a summary of the site's parking spaces. The existing site includes:

- Two towers with 360 units, with 375 surface parking spaces and 169 underground spaces.
- 50 garden homes, which have separate dedicated underground parking totalling 65 spaces and have been excluded from the parking supply calculation of the residential tower buildings.

Table 3: Parking Space Summary

Parking Type	**Existing Parking** Spaces (Excluding Garden Homes)	Proposed Change in Parking Spaces	Future Parking Supply (Excluding Garden Homes)
Surface	375	-63 + 52 = -11	364
Underground	169	+269	438
Total	544	+258	802

Table 4 indicates the parking requirements for the existing and proposed apartment towers based on Part 4 of the City of Ottawa Zoning by-law 2008-250. Given that the row houses have separate designated parking, only the apartment towers were considered for this analysis. In total, the towers will provide 620 residential high-rise dwelling units. Section 101 of the By-Law addresses the minimum parking requirement, while Section 102 identifies the minimum visitor parking requirement.

Table 4: City of Ottawa By-law Vehicle Parking Requirements

Type	Parking space requirement per dwelling unit	Number of dwelling units	Number of parking spaces required	Notes
Tenants (overall)	0.5	620	310	The first 12 dwelling units are exempt
Visitors (overall)	0.2	620	Max = 60	First 12 dwelling units exempt, maximum 60 parking spaces required
Tenants (2145 Walkley)	0.5	260	130	The first 12 dwelling units are exempt,
Visitors (2145 Walkley Road)	0.2	260	52	First 12 dwelling units exempt, maximum 60 parking spaces required
Total No. of Parking Spaces Required by Zoning By-Law (Overall Development)			370	802 parking spaces provided
Total No. of Parking Spaces Required by Zoning By-Law (2145 Walkley Road)			182	258 parking spaces provided

The overall site provides sufficient parking and exceeds the zoning by-law requirement. The proposed high-rise at 2145 Walkley Road will offer more than the minimum number of parking spaces and meets the number of visitor parking spaces.

Bicycle Parking

The City of Ottawa By-law, Section 111, indicates that residential developments are to provide 0.5 bicycle parking spaces per dwelling unit, which equates to 130 bicycle parking spaces. Of these, at least 25% must be located in the building or another secure structure. The new tower will provide 130 indoor bicycle parking spots, which meets the by-law requirement. Five additional bicycle visitor spaces are to be provided on the west side of the building.

Driveway Grading

The City of Ottawa Private Approach By-Law, Section 25 1.u) indicates: No person shall construct a private approach serving a parking area with more than 50 parking spaces, with a grade exceeding 2% within the private property for a distance of 9 metres from the highway line or future highway line.

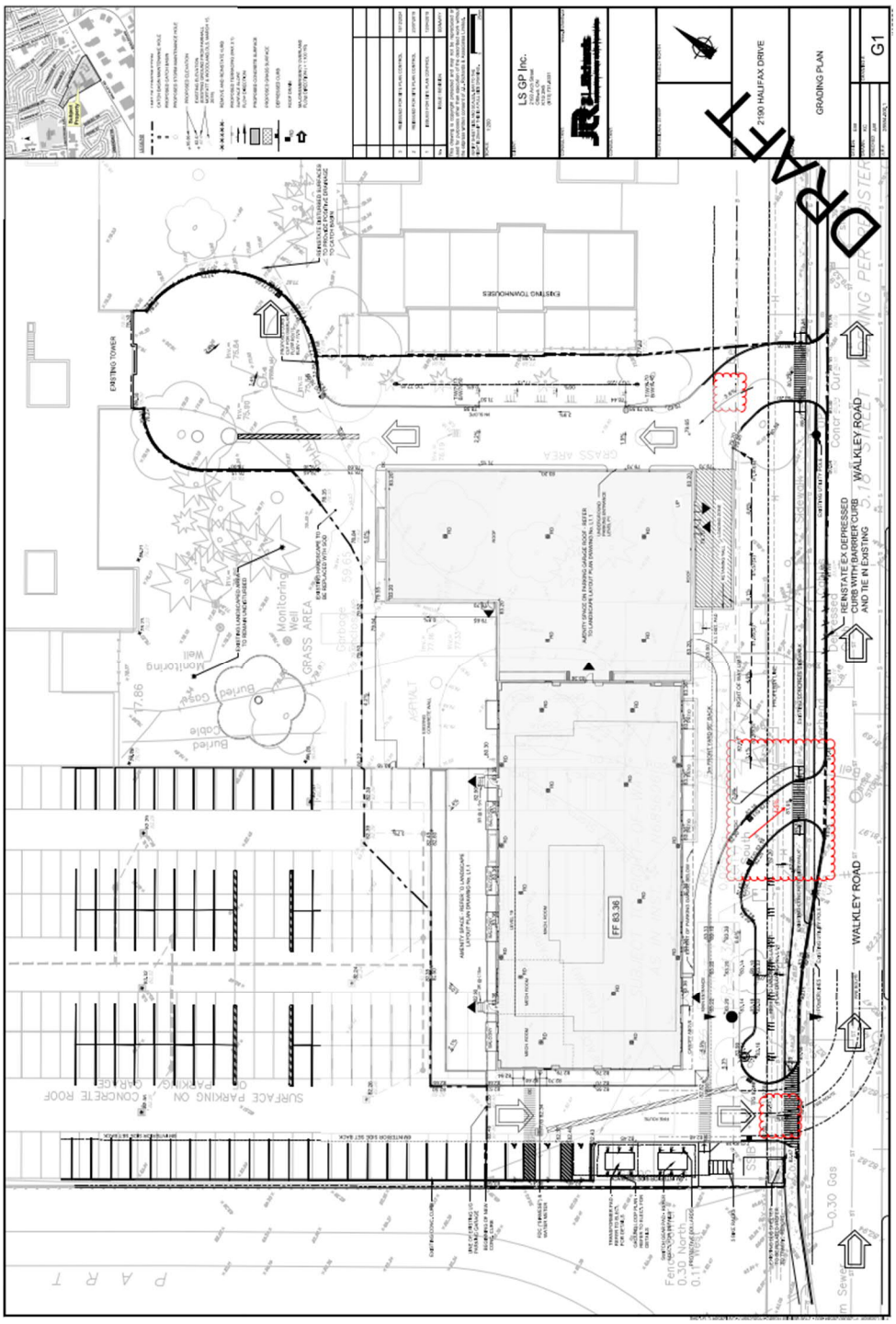
The draft Grading Plan is illustrated in Figure 2.

The west Walkley Road entrance provides a 2.5% grade from the existing property line to the Walkley Road curb line. From the existing property line, the grade is relatively level into the parking area along the west side of the building towards the rear parking area. The one-way drop-off loop at the main entrance in front of the building is approximately 0.70 metres above the west access property line elevation, with an upward slope of 5.3% to the drop-off loop. The east side of the drop-off loop provides a downward slope of 4.5% towards the sidewalk, then continues to slope at approximately 6.1% from the north of the sidewalk to the Walkley Road curb line.

At the east Walkley Road access, the access slopes from just north of the sidewalk to the existing Walkley Road curb line at approximately 2.5% and from just north of the sidewalk down into the site at 3.6% over a distance of approximately 15 metres.

The driveway slopes exceed the Private Approach By-Law requirement and the driveway does not consider the Right of Way limit as identified within the Zoning By-Law. We are seeking a deviation from the Private Approach By-Law and the Zoning By-Law to accept the proposed grades and accesses. Vehicles exiting the driveways to Walkley Road have adequate sightlines as the roadway grades are relatively level and there are no horizonal or vertical curves on Walkley Road. Ultimately, the design of the site must ensure that there are no vertical berms or vegetation that could block vehicle sightlines.

Figure 2: Draft Grading Plan



Service Vehicle Site Circulation

A fire truck, garbage truck, and a standard automobile were modelled using AutoTURN software to show how each vehicle accesses the site. The fire truck will enter the Walkley Road west access and pull up beside the building towards the Siamese connections. The fire truck will reverse out of the driveway to travel westbound on Walkley Road as shown in Figure 3. The fire truck has sufficient space to maneuver within the site.

The garbage truck will access the site from the Walkley Road east access and pull up to the loading zone in front of the building to collect the refuse. The truck will back out of the loading zone toward Walkley Road, travel into the site and turn around at the cul-de-sac, then travel south to exit the site at Walkley Road. Figure 4 illustrates the garbage truck turning movement.

There are no site circulation issues with cars accessing the drop-off area, as shown in Figure 5.

Figure 3: Fire Truck Turning Movements

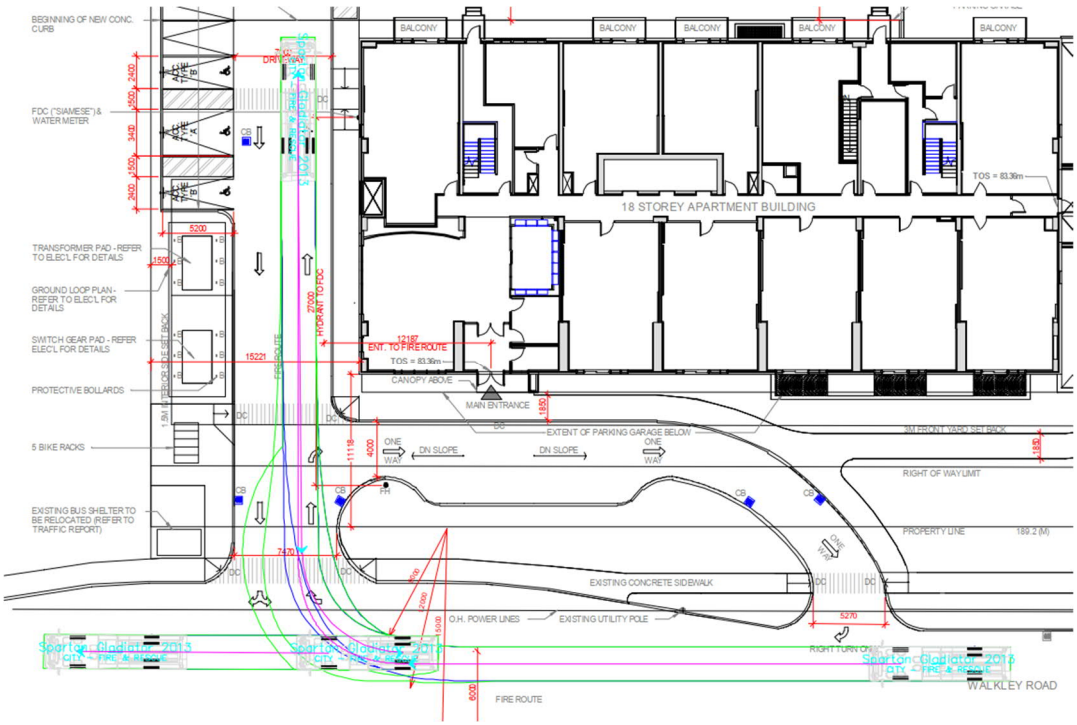


Figure 4: Garbage Truck Turning Movements

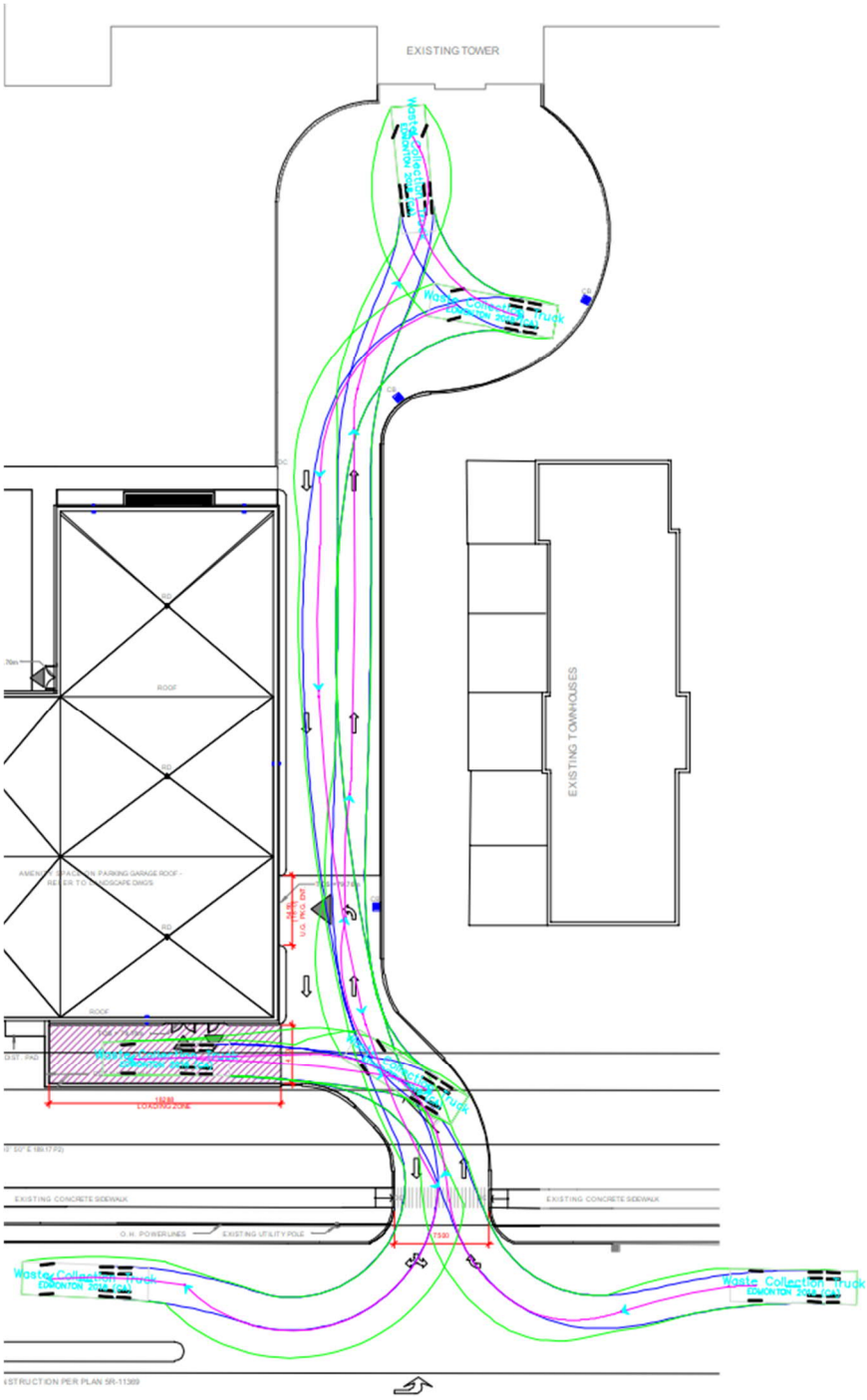


Figure 5: Automobile Access to the One-Way Drop-Off Loop