Ref. No. 161-04044 Task 1

March 31, 2016

Ms. Ashley Blissett, P. Eng
Senior Development Engineer
Halifax Regional Municipality
PO Box 1749
HALIFAX NS B3J 3A5

RE: Traffic Impact Statement, Proposed Multi-Tenant Residential Building with Ground Floor Commercial Space, Robie Street between Cunard Street and Compton Avenue, Halifax, NS

Dear Ms. Blissett:

W M Fares Group is preparing plans to construct a multi-unit residential building with ground floor commercial space on a site that occupies the Robie Street block face between Cunard Street and Compton Avenue (Figure 1). The site now includes seven buildings with a total of 22 apartment units and 1000 square feet (SF) of commercial space. The proposed development will include approximately 100 apartment units, 9,040 square feet of neighbourhood oriented commercial space, and approximately 93 underground parking spaces. The development will be served by a driveway on Compton Avenue at the west site boundary. This is the Traffic Impact Statement (TIS) required to accompany the development application.

Description of Development Site - The site on Robie Street between Cunard Street and Compton Avenue now includes the following seven buildings which will be removed to provide space for the proposed new building:

- 6025 Compton Avenue (4 units);
- 2162 Robie Street (2 units);
- 2166 Robie Street (4 units);
- 2176 Robie Street (3 units);
- 2178 Robie Street (3 units)
- 2180 Robie Street (3 units and 1000 SF commercial (Tony's Variety); and
- 6018 / 6020 Cunard Street 3 units).

Photo 1 - Looking across Robie Street towards Cunard Street and the development site which includes 2166, 2176, and 2178 Robie Street at the left of the photo, Tony's Variety (#2180) at the corner, and the next building (# 6018 /# 6020) on the south side of Cunard Street.

Robie Street is a north-south arterial street with three lanes in each direction adjacent to the site. Parking is not permitted on either side of the street. The street is served by many Halifax Transit routes with a bus shelter on the west side in front of 2162 Robie Street (Photo 2). A traffic count obtained by HRM at the end of October 2014 indicates two-way volumes of 1,450 vehicles per hour (vph) during the AM peak hour and 1,730 vph during the PM peak hour.

Photo 2 - Looking across Robie Street towards Compton Avenue and the development site which includes 2166 and 2176 Robie Street at the right of the photo, 2162 Robie Street at the corner, and the first building (# 6025) on the north side of Compton Avenue.

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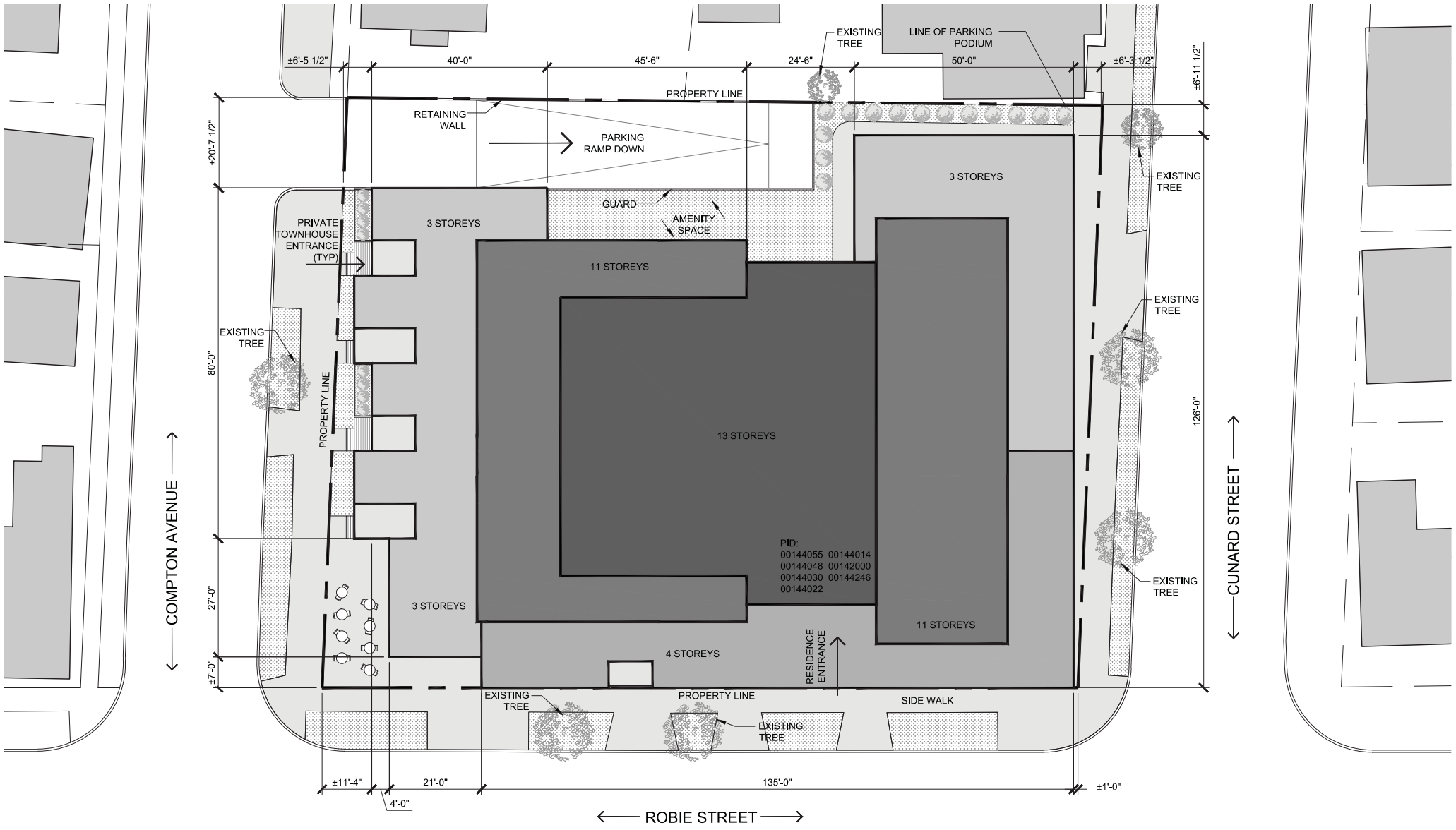

ROBIE + CUNARD ROBIE STREET, HALIFAX, NS	**SITE PLAN** **Figure 1**	Project No.: 2015.01 Scale: 1" = 20'-0" Date: 31 Mar 2016	WM FARES ARCHITECTS **SDP**

Cunard Street is an east-west arterial street with two eastbound lanes and one west bound lane adjacent to the north side of the site. While parking is not permitted on the south side adjacent to the site, parking is permitted (8 AM to 6 PM Monday to Friday) on the north side of the street. A traffic count obtained by HRM at the end of October 2014 indicates two-way volumes of 505 vph during the AM peak hour and 650 vph during the PM peak hour.

Compton Avenue is a one block long east-west local street between Robie Street and Windsor Street. Parking is prohibited on the north side adjacent to the site (8 AM to 6 PM Monday to Friday), however, two hour parking is permitted on the south side of the street during the same time periods. While traffic volume data were not available, it is expected that volumes are reasonably low on this local street.

The parking garage driveway for the building is proposed at the west edge of the site approximately 35 meters from Robie Street. Visibility is good on both Compton Avenue approaches to the driveway as illustrated in Photos 3 and 4.

Photo 3 - Looking east on Compton Avenue towards Robie Street from the proposed site driveway at the west edge of the site.

Photo 4 - Looking west on Compton Avenue towards Windsor Street from the proposed site driveway at the west edge of the site.

Trip Generation - Trip generation estimates for the proposed and existing land uses, prepared using published trip generation rates from *Trip Generation,9th Edition,* are included in Table 1.

Since the seven existing buildings on the site (which include 22 apartment units and 1000 SF of commercial space) will be removed, trips now generated by the existing land uses have been considered as a 'credit' when determining additional vehicle trips that will be generated by the redeveloped site.

It is estimated that the proposed mid-rise apartment building with ground level commercial space will generate about 42 two-way vehicle trips (16 entering and 26 exiting) during the AM peak hour and 64 two-way vehicle trips (34 entering and 30 exiting) during the PM peak hour. However, when trips generated by the existing 22 apartment units and 1000 SF of commercial space in the seven existing buildings on the site are considered as a credit, it is estimated that the redeveloped site will generate 33 additional two-way vehicle trips (13 entering and 20 exiting) during the AM peak hour and 52 additional two-way vehicle trips (28 entering and 24 exiting) during the PM peak hour.

Table 1 - Trip Generation Estimates for Proposed Development and Existing Land Uses

Land Use [1]	Units [2]	Trip Generation Rates [3]				Trips Generated [3]			
		AM Peak		PM Peak		AM Peak		PM Peak	
		In	Out	In	Out	In	Out	In	Out
Trip Generation Estimate for the Proposed Development									
Mid-Rise Apartment (Land Use 223)	100 units	0.09	0.21	0.23	0.16	9	21	23	16
Specialty Retail (Use Code 826) [4]	9.040 KGLA	0.76	0.60	1.19	1.52	7	5	11	14
Trip Generation Estimates for Proposed Development						16	26	34	30
Trip Generation Estimate for the Existing Land Uses									
Mid-Rise Apartment (Land Use 223	22 units	0.09	0.21	0.23	0.16	2	5	5	4
Specialty Retail (Use Code 826) [4]	1.000 KGLA	0.76	0.60	1.19	1.52	1	1	1	2
Trip Generation Estimates for Existing Site Buildings [5]						3	6	6	6
Estimated Additional Trips Generated by the Redeveloped Site									
Additional Vehicle Trip Estimates for the Redeveloped Site [6]						13	20	28	24

NOTES:
1. Rates are for the indicated Land Use Codes, *Trip Generation*, *9th Edition*, Institute of Transportation Engineers, 2012.
2. KGLA is 'Gross Leasable Area x 1000 square feet'.
3. Rates are 'vehicles per hour per unit'; trips generated are 'vehicles per hour for peak hours'.
4. The Speciality Retail (Land Use 826) rate for 'Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 PM' has been used. While the unit is considerably smaller than the average 69.0 KGLA in the published data (Page 1580), the published trip generation rate has been used since this is expected to be pedestrian oriented commercial space. Also, since there is no published rate for the AM peak hour of adjacent street for this Land Use, and since AM peak hour trips to Speciality Retail are generally low, AM trip rates have been assumed to be 50% of the PM rate with reversal of the directional split.
5. These are the trips generated by existing residential apartment units and commercial space on the site which can be considered as a 'credit' for site trip generation estimates for the redeveloped site.
6. These are the estimated additional trips that will be generated by the redeveloped site after consideration of the 'credit' for trips generated by the existing land uses on the site.

Summary -

1. The proposed development on the Robie Street block face between Cunard Street and Compton Avenue will include approximately 100 apartment units, 9,040 square feet of neighbourhood oriented commercial space, and approximately 93 underground parking spaces.

2. The parking garage driveway is proposed on Compton Avenue approximately 35 meters from Robie Street at the west site boundary. Visibility is good on both Compton Avenue approaches to the driveway.

3. Site generated trips for the development include approximately 42 two-way vehicle trips (16 entering and 26 exiting) during the AM peak hour and 64 two-way vehicle trips (34 entering and 30 exiting) during the PM peak hour. However, when trips generated by the seven existing buildings on the site are considered as a credit, it is estimated that the redeveloped site will generate 33 additional two-way vehicle trips (13 entering and 20 exiting) during the AM peak hour and 52 additional two-way vehicle trips (28 entering and 24 exiting) during the PM peak hour.

4. The site is well served by pedestrian facilities and transit services. There are sidewalks on all streets adjacent to the site and Metro Transit provides service for several routes along Robie Street with a bus stop in front of the site.

5. While traffic volumes are high on Robie Street (two-way volumes of 1,450 vehicles per hour (vph) during the AM peak hour and 1,730 vph during the PM peak hour), Compton Avenue peak hour volumes are expected to be low.

Conclusions -

6. Since vehicle trips estimated to be generated by this site can be distributed west on Compton Avenue to Windsor Street and east to Robie Street, the low to moderate numbers of additional trips are not expected to have any significant impact to the level of performance of adjacent streets and intersections, or the regional street network.

7. Since the site has good pedestrian connections, as well as good transit service on Robie Street, it is possible that the numbers of site generated vehicle trips could be less than the estimated numbers.

If you have any questions or comments, please contact me by Email to ken.obrien@wspgroup.com or telephone 902-443-7747.

Sincerely:
Originally Signed

Ken O'Brien, P. Eng.
Senior Traffic Engineer
WSP Canada Inc.