



Ref. No. 161-10583

August 4, 2016

Ms. Ashley Blissett, P. Eng (Email blissea@halifax.ca)
Senior Development Engineer
Halifax Regional Municipality
PO Box 1749
HALIFAX NS B3J 3A5

**RE: Traffic Impact Statement, Proposed Multi-Unit Residential Building,
246 Waverley Road, Dartmouth**

Dear Ms. Blissett:

Michael Napier Architecture is preparing plans for construction of a multi-unit residential building with approximately 56 apartment units at 246 Waverley Road. The site on the southeast corner of the Montebello Drive intersection (Figure 1) is now occupied by three residential buildings. This is the Traffic Impact Statement (TIS) required to accompany the development application.

Description of Site Location - The proposed development is at the southeast corner of the Waverley Road and Montebello Drive intersection as illustrated on Figure 1 and Photo 1. The site includes existing residential buildings at 246 Waverley Road, and 2 and 4 Montebello Drive.

Pedestrian access will be from Montebello Drive. Vehicle access will be via a parking garage driveway on Waverley Road at or near the existing site driveway for 246 Waverley Road at the south edge of the property (Figure 1). Visibility is good on both Waverley Road approaches to the site driveway as illustrated in Photos 2 and 3.

The parking garage entrance is set back from the sidewalk (Figure 1) which should provide adequate visibility between vehicle drivers exiting the parking garage and pedestrians using the sidewalk.

The driveway centerline is approximately 47 m (154 feet) from the Montebello Drive south street line which is in excess of the 100 feet minimum required in Streets By-Law S-300 (Section 36 (1) (b)). It is not considered reasonable to provide the site driveway on Montebello Drive due to the steep west to east slope on the site.



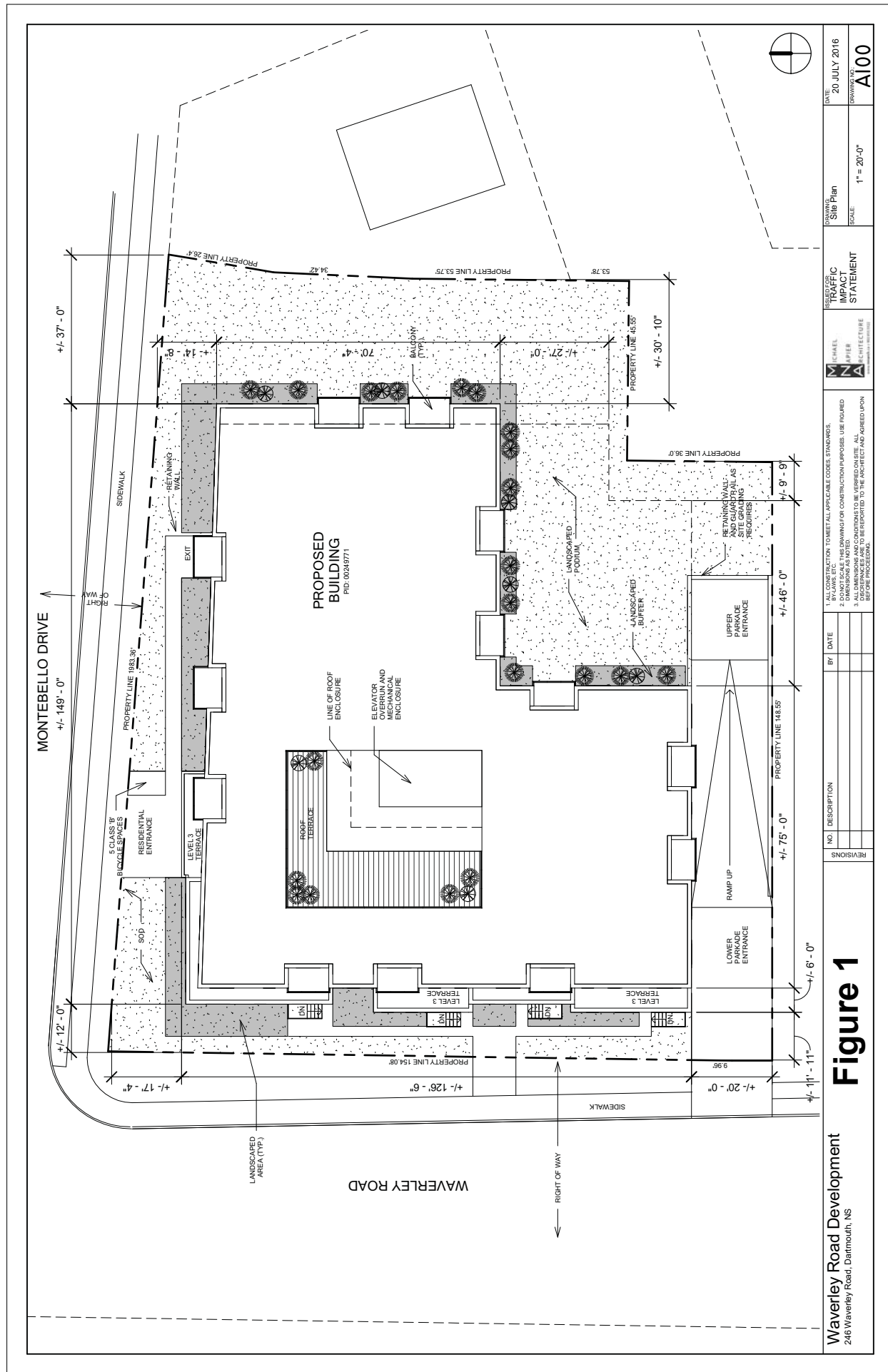
Photo 1 - Looking towards the site from the west side of Waverley Road just north of Montebello Drive. The site includes the first two lots on the south side of Montebello Drive east of Waverley Road.



Photo 2 - Looking south on Waverley Road from the existing driveway for 246 Waverley Road.



Photo 3 - Looking north on Waverley Road towards Montebello Drive from the existing driveway for 246 Waverley Road.



Waverley Road is a two-lane major collector street with sidewalks and bicycle lanes on both sides (Photos 2 and 3). A turning movement count obtained by HRM at the signalized Montebello Drive intersection north of the site driveway indicated two-way volumes of 1195 vehicle per hour (vph) during the AM peak hour and 1515 vph during the PM peak hour.

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. The three existing residential buildings on the site are considered as three single family dwellings and two apartments. Since the existing buildings 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.

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)	56 units	0.09	0.21	0.23	0.16	5	12	13	9
Trip Generation Estimate for the Existing Land Uses ⁴									
Single Family (Land Use 210)	3	0.19	0.56	0.63	0.37	1	2	2	1
Apartment (Land Use 220)	2 units	0.10	0.41	0.40	0.22	0	1	1	0
Trip Generation Estimate for the Existing Land Uses ⁴						1	3	3	1
Estimated Additional Trips Generated by the Redeveloped Site									
Additional Vehicle Trip Estimates for the Redeveloped Site ⁵						4	9	10	8
NOTES: 1. Rates are for the indicated Land Use Codes, <i>Trip Generation, 9th Edition</i> , Institute of Transportation Engineers, 2012. 2. Proposed apartment units; existing single family dwellings and existing apartments. 3. Rates are 'vehicles per hour per unit'; trips generated are 'vehicles per hour for peak hours'. 4. These are the trips generated by existing residential buildings on the site which can be considered as a 'credit' for site trip generation estimates for the redeveloped site. 5. 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.									

It is estimated that the proposed mid-rise apartment building will generate 17 two-way vehicle trips (5 entering and 12 exiting) during the AM peak hour and 22 two-way vehicle trips (13 entering and 9 exiting) during the PM peak hour. However, when trips generated by the existing site land uses are considered as a credit, it is estimated that the redeveloped site will generate 13 additional two-way vehicle trips (4 entering and 9 exiting) during the AM peak hour and 18 additional two-way vehicle trips (10 entering and 8 exiting) during the PM peak hour.

Description of Transit Service - The site is served by Halifax Transit Route 55 with bus stops on Waverley Road adjacent to the site for northbound buses and just north of Montebello Drive for southbound buses.

Summary -

1. The proposed project at the southeast corner of Waverley Road and Montebello Drive will include removal of three residential buildings and construction of a multi-unit residential building with approximately 56 apartment units and 58 underground parking spaces.
2. Pedestrian access will be from Montebello Drive and vehicle access will be via a parking garage driveway on Waverley Road at or near the existing driveway for 246 Waverley Road at the south edge of the property. The parking garage entrance is set back from the sidewalk which should provide adequate visibility between vehicle drivers exiting the parking garage and pedestrians using the sidewalk.
3. It is estimated that the proposed mid-rise apartment building will generate 17 two-way vehicle trips (5 entering and 12 exiting) during the AM peak hour and 22 two-way vehicle trips (13 entering and 9 exiting) during the PM peak hour.
4. The site has good pedestrian facilities and transit services. Halifax Transit Route 55 serves Waverley Road with a bus stop adjacent to the site for northbound buses and just north of Montebello Drive for southbound buses.
5. Traffic volumes are high on Waverley Road adjacent to the site with two-way volumes of 1195 vehicle per hour (vph) during the AM peak hour and 1515 vph during the PM peak hour.

Conclusion -

6. While traffic volumes are high on Waverley Road, the low numbers of vehicle trips estimated to be generated by this site are not expected to have any significant impact to the level of performance of Waverley Road, the adjacent Montebello Drive intersection, or the regional street network.

Recommendation -

7. While the building set-back is expected to provide good visibility between drivers exiting the site driveway and pedestrians on the sidewalk, ensure that landscaping features do not obscure visibility.

If you have any questions or comments, please contact me by Email to ken.obrien@wspgroup.com or telephone 902-835-9955.

Sincerely:

**ORIGINAL
SIGNED**

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

