



Ref. No. 161-04044 Task 2

May 10, 2016

Mr. Cesar Saleh, P. Eng.
VP Planning and Design
W.M. Fares Group
3480 Joseph Howe Drive, 5th Floor
HALIFAX NS B3L 4H7

RE: Traffic Impact Statement, Proposed Multi-Tenant Residential Building with Ground Floor Commercial Space, 651 Portland Hills Drive, Dartmouth

Dear Saleh:

This is the Traffic Impact Statement you have requested for the proposed multi-unit residential building with ground floor commercial space on a vacant lot at 651 Portland Hills Drive (Figure 1).

Description of Development Site - The proposed development will include approximately 70 apartment units, 14,000 square feet of commercial space, with approximately 70 underground parking spaces and 77 exterior parking spaces. The development will be accessed by an existing driveway on Portland Hills Drive for Portland Hills Centre at 635 and 639 Portland Hills Drive, a access at an existing curb cut on the Portland Hills Park & Ride driveway, and an additional one-way driveway with sidewalk from the site to the Park & Ride lot.

The driveway on Portland Hills Drive will provide access to the underground parking spaces, and approximately 55 of the exterior parking spaces. The access on the Portland Hills Park & Ride driveway will provide access for approximately 12 exterior parking spaces.

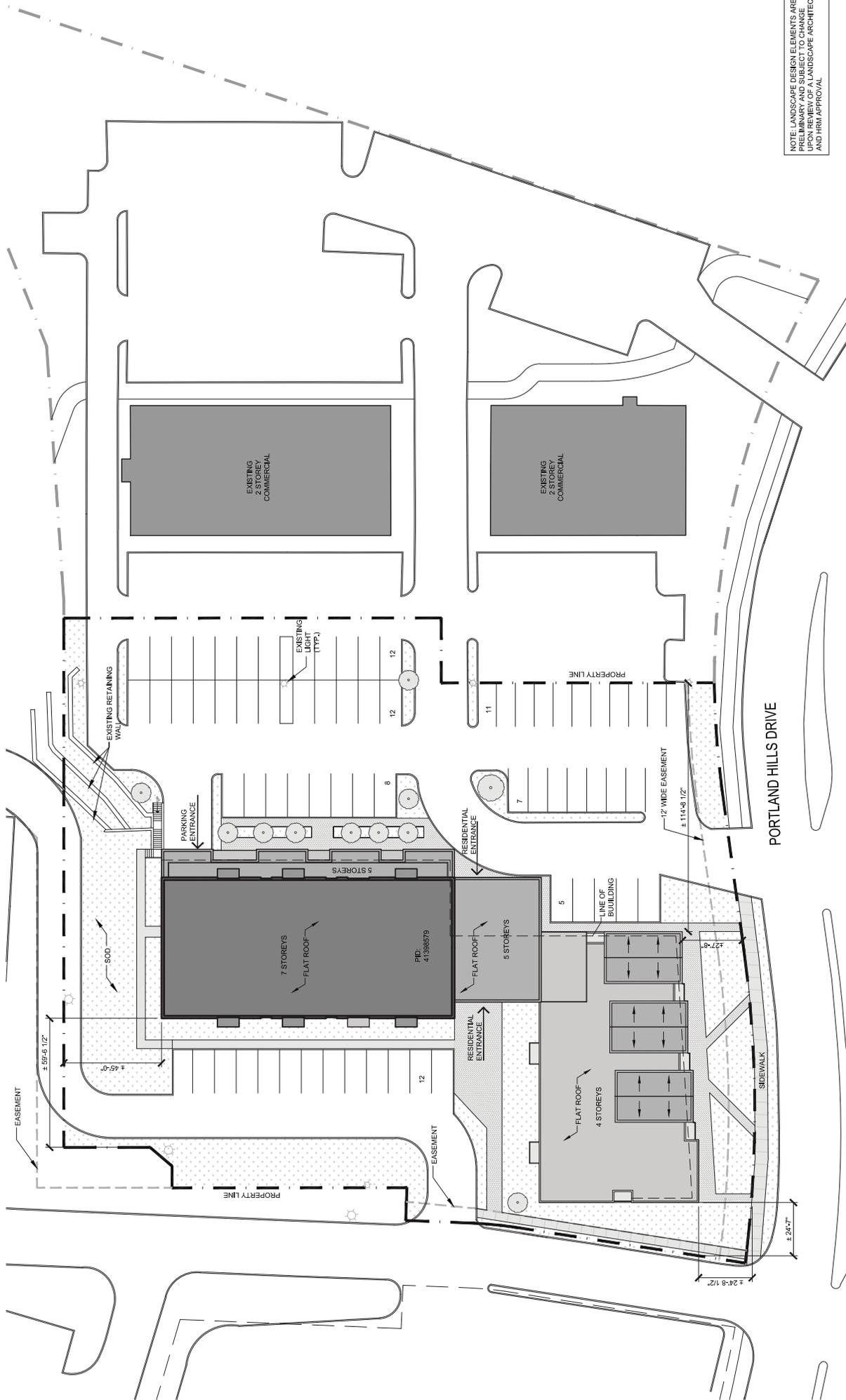
Portland Hills Drive is a two lane collector street with sidewalks on both sides. The street has a grassed center median with a southbound left turn lane at the existing site driveway. Visibility is good on both approaches to the driveway as illustrated on Photos 1 and 2. A manual count obtained by WSP Canada Inc. on Thursday, October 30, 2014, north of the site driveway indicated a two-way Portland Hills Drive volume of 530 vehicles per hour (vph) during the PM peak hour. The AM peak hourly volume is expected to be similar to the PM volume at this location.



Photo 1 - Looking south on Portland Hills Drive from the site driveway. Portland Hills Centre, 635 Portland Hills Drive, is at the left of the photo.



Photo 2 - Looking north on Portland Hills Drive towards the Portland Hills Park & Ride driveway and Portland Street from the site driveway.



NOTE: LANDSCAPE DESIGN ELEMENTS ARE PRELIMINARY AND SUBJECT TO CHANGE UPON REVIEW OF A LANDSCAPE ARCHITECT AND PRM APPROVAL

PORTLAND HILLS
DARTMOUTH, NS

Figure 1
SITE PLAN

Project No.: 2015.01
Scale: 1" = 40'-0"
Date: 15 Apr 2016



WM FARES
ARCHITECTS

SDP

Portland Hills Park & Ride Access - The Park & Ride driveway extends easterly from its intersection with Portland Hills Drive just south of Portland Street to the Portland Hills Transit Terminal. The Park & Ride driveway is similar to a local two-lane street with curbs on both sides. A site access is proposed at an existing curb cut opposite the driveway to Petworks Veterinary Hospital. Visibility is good on both approaches to the proposed site access location as illustrated in Photos 3 and 4.



Photo 3 - Looking towards Portland Hills Drive from the proposed site access on the Portland Hills Park & Ride driveway.

A manual count obtained by WSP Canada Inc. on Thursday, October 30, 2014, at the intersection of Portland Hills Drive and the Park & Ride driveway indicated a two-way driveway volume of 180 vehicles per hour (vph) during the PM peak hour. The AM peak hourly volume is expected to be similar to the PM volume at this location.



Photo 4 - Looking towards the parking lot from the proposed site access on the Portland Hills Park & Ride driveway.

Additional Site Exit - A one-way driveway exit with sidewalk is proposed from the parking area at the north side of the building to the Park & Ride lot (Figure 1). The exit driveway meets the Park & Ride lot in an area that does not have parking spaces. There is good visibility for both approaches where the site exit meets the parking lot as illustrated in Photos 5 and 6.



Photo 5 - Looking north across the Park & Ride lot from the location the one-way driveway exiting the proposed development intersects with the existing curb line.



Photo 6 - Looking south across the Park & Ride lot from the location the one-way exit from the proposed development intersects with the existing curb line.

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 trip estimates for the site have been reduced by 10% to account for on-site synergies between the existing and proposed land uses, and pedestrian trips to and from the adjacent Portland Hills Transit Terminal. It is estimated that the proposed mid-rise apartment building with ground level commercial space will generate about 36 two-way vehicle trips (16 entering and 20 exiting) during the AM peak hour and 59 two-way vehicle trips (30 entering and 29 exiting) during the PM peak hour.

Table 1 - Trip Generation Estimates for Proposed Development									
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
Mid-Rise Apartment (Land Use 223)	70 units	0.09	0.21	0.23	0.16	7	14	16	11
Specialty Retail (Use Code 826) ⁴	14.000 KGLA	0.76	0.60	1.19	1.52	11	8	17	21
Total Trip Generation Estimates for Proposed Development						18	22	33	32
10% Reduction for On-Site Synergy and Non-Vehicle Trips						2	2	3	3
Adjusted Trip Estimates for Site Generated Trips						16	20	30	29
NOTES: 1. Rates are for the indicated Land Use Codes, <i>Trip Generation, 9th Edition</i> , 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. 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.									

Additional Proposed Development Near the Site - A mixed use commercial site with approximately 81 apartment units and 27,159 square feet of commercial space is proposed on a lot on the west side of Portland Hills Drive opposite the 651 Portland Hills Drive site and extending northerly to Portland Street. That development will be served by a right-in only driveway from Portland Street and two driveways on Portland Hills Drive, one opposite the existing 651 Portland Hills Drive driveway and the other opposite the Park & Ride driveway. A Traffic Impact Study (WSP Canada Inc., June 2014) concluded that with a small adjustment to timing at the Portland Street @ Portland Hills Drive / Regal Road intersection signal installation, site generated trips from that development would not have any significant impact on level of performance of intersections or adjacent streets.

Summary -

1. The proposed development at 651 Portland Hills Drive will include approximately 70 apartment units, 14,000 square feet of commercial space, with approximately 70 underground parking spaces and 77 exterior parking spaces.
2. The development will be served by an existing driveway on Portland Hills Drive for Portland Hills Centre at 635 and 639 Portland Hills Drive, an access at an existing curb cut on the Portland Hills Park & Ride driveway, and a one-way exit driveway with a sidewalk from the site to the Park & Ride lot. Visibility is good on the approaches to the three driveways.

3. After a 10% reduction to account for on-site synergies and expected pedestrian trips using the adjacent Portland Hills Transit Terminal, it is estimated that the proposed mid-rise apartment building with ground level commercial space will generate about 36 two-way vehicle trips (16 entering and 20 exiting) during the AM peak hour and 59 two-way vehicle trips (30 entering and 29 exiting) during the PM peak hour.
4. The site is well served by pedestrian facilities and transit services. There are sidewalks on both sides of Portland Hills Drive, a sidewalk is proposed between the site and the adjacent Portland Hills Transit Terminal, and Halifax Transit provides service for several routes at the Terminal.
5. A manual count obtained by WSP Canada Inc. during October 2014 indicated a two-way Portland Hills Drive volume of 530 vehicles per hour (vph) during the PM peak hour adjacent to the site. The AM peak hourly volume is expected to be similar to the PM volume at this location.

Conclusions -

6. Since the volumes on Portland Hills Drive are moderate, the low numbers of site generated 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. The cumulative numbers of trips between this development and the proposed development on the opposite side of Portland Hills Drive are not expected to have any significant impact to performance of intersections or streets near the proposed developments.

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

Sincerely:



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

