

June 20, 2017

Averton (Brock) Limited  
161 Pennsylvania Avenue, Suite 5  
Vaughan, Ontario, L4K 1C3

Attention: **Daniela DeGasperis, B.U.R.PI.**  
Assistant Development Coordinator  
Email: [ddegasperis@averton.ca](mailto:ddegasperis@averton.ca)

RE: Main Street Seaton, 2675 – 2725 Brock Road  
Blocks 3 and 4 – Plan 40M-2568  
City of Pickering  
Traffic Impact Study – Addendum

Dear Daniela:

This letter provides an Addendum to the BA Group Traffic Impact Study (TIS) report of July 2013 for the residential condominium development located on Brock Road (Main Street Seaton – Averton) in the City of Pickering.

The subject development is a multi-phase, mixed-use development with a total of 787 dwellings units proposed and neighbourhood retail/commercial land uses with a total gross floor area (GFA) of approximately 808 square metres (m<sup>2</sup>), based upon Site Plans prepared by RN Design issued May 2017.

Development phases are as follows:

- Phase 1 184 townhouse units (nearing completion);
  - Phase 2 102 townhouse units (under construction);
  - Phase 3 201 (44 stacked townhouses and 157 apartment units); and
  - Phase 4 300 (106 stacked townhouses and 194 apartment units).
- Total dwelling units 787 units

Also, development phases 3 and 4 include a total of 808 m<sup>2</sup> of neighbourhood retail/commercial land uses.

Pursuant to Zoning By-law 7444/15, a total of 1,073 parking spaces are required for residents and 157 parking spaces for visitors at a rate of 0.20 parking spaces for each dwelling unit. The Site Plan indicates that 1199, 159 and 24 parking spaces will be provided for residents, visitors retail uses, respectively.

## SITE TRAFFIC GENERATION

As shown in Table 1, the subject development will generate 270 and 335 net new vehicle trips during weekday AM and PM peak hours, respectively. Trip rates for the apartment units were derived based upon a review of trip rates extracted from the Institute of Traffic Engineers (ITE) Trip Generation Manual 9<sup>th</sup> Edition land use codes 230 and 232 for residential uses and ITE land use code 820 for retail / commercial uses.

For residential trips, an 11% reduction in site traffic was applied to account for trips made by non-auto means (walking, cycling and public transit). This reduction is based upon the following:

- Transit service will be a 5-minute walk from any part of the Duffin Heights development
- Consistent with the TIS report of July 2013, a model split of 33% was used in Environmental Service Plan based upon full build out of Duffin Heights Neighbourhood. As such, an 11% reduction would represent one third of the total traffic reduction used in the Environmental Service Plan.

**TABLE 1 SITE TRAFFIC GENERATION**

Land Use	Units/GLA	AM Peak Hour			PM Peak Hour		
		In	Out	2-Way	In	Out	2-Way
Residential Townhouse (LUC 230)	436 units	35	135	170	135	65	200
Residential Apartment (LUC 232)	351 units	25	105	130	85	50	135
<i>11% Residential Modal Split Reduction</i>		5	30	35	25	10	35
<b>Total Net Residential</b>		<b>55</b>	<b>210</b>	<b>265</b>	<b>195</b>	<b>105</b>	<b>300</b>
Retail (LUC 820)	808 sq. m. (8,697 sq. ft.)	20	15	35	55	60	115
<i>25% Retail Linked (Internal) Trips Reduction<sup>1</sup></i>		5	5	10	15	15	30
Net Retail		15	10	25	40	45	85
<i>60% Retail Pass-By Trips Reduction<sup>2</sup></i>		10	5	15	25	25	50
<b>Total Net Retail</b>		<b>5</b>	<b>5</b>	<b>10</b>	<b>15</b>	<b>20</b>	<b>35</b>
<b>Total Traffic<sup>3</sup></b>		<b>55</b>	<b>215</b>	<b>270</b>	<b>210</b>	<b>125</b>	<b>335</b>

Notes:

1. Percentage reduction adopted from Duffin Heights ESP assumptions (Table 10.4)
2. Percentage reduction adopted from ITE Trip Generation Manual (Chapter 5)
3. Rounded to the nearest 5 trips

In the Traffic Impact Study report of July 2013, the subject development was estimated to generate approximately 270 and 335 vehicle trips during the weekday morning and afternoon peak hours, respectively, based upon 800 dwelling units and 1,886.m<sup>2</sup> (20,305 ft<sup>2</sup>) of retail commercial floor area.



Therefore, net new vehicle trips for 787 dwelling units and 808 m<sup>2</sup> of retail uses shown in Table 1 are equal to the net new trips assessed in the Traffic Impact Study report of July 2013.

### **TRAFFIC OPERATIONS ANALYSIS**

As documented in the Traffic Impact Study report of July 2013, future total conditions at Brock / Dersan / William Jackson intersection and Brock / Zents / collector Road reflect acceptable operating conditions with v/c ratios of 0.58 and 0.51 during am and 0.75 and 0.66 during pm peak hours, respectively. The results also show the intersection will operate with no critical movements and significant reserve capacity.

Therefore, the magnitude of the vehicle demand generated by the proposed development can be easily accommodated by the existing and future roadway network and intersection configurations currently being completed by the Region of Durham.

The proposed mixed-use development is supportive of the planned road and transit improvements within the Duffin Heights Neighbourhood and do not necessitate any changes to the planned intersection configurations identified by the authorities.

### **CONCLUSIONS**

In summary, the foregoing analyses reflect comparable conclusions to those set out in the Traffic Impact Study report of July 2013. We continue to believe that the recommended improvements for the Brock Road intersections reflect an appropriate response in support of the subject development.

Sincerely,

**BA Consulting Group Ltd.**



John E. Barrington  
Senior Associate