

Ref. No. 152-11929 Phase 003

March 27, 2018

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

## RE: Addendum Traffic Impact Statement, Parking Garage Driveway Changes for The BOSS Development (Former Halifax West Site), Dutch Village Road, Halifax

Dear Ms. Blissett:

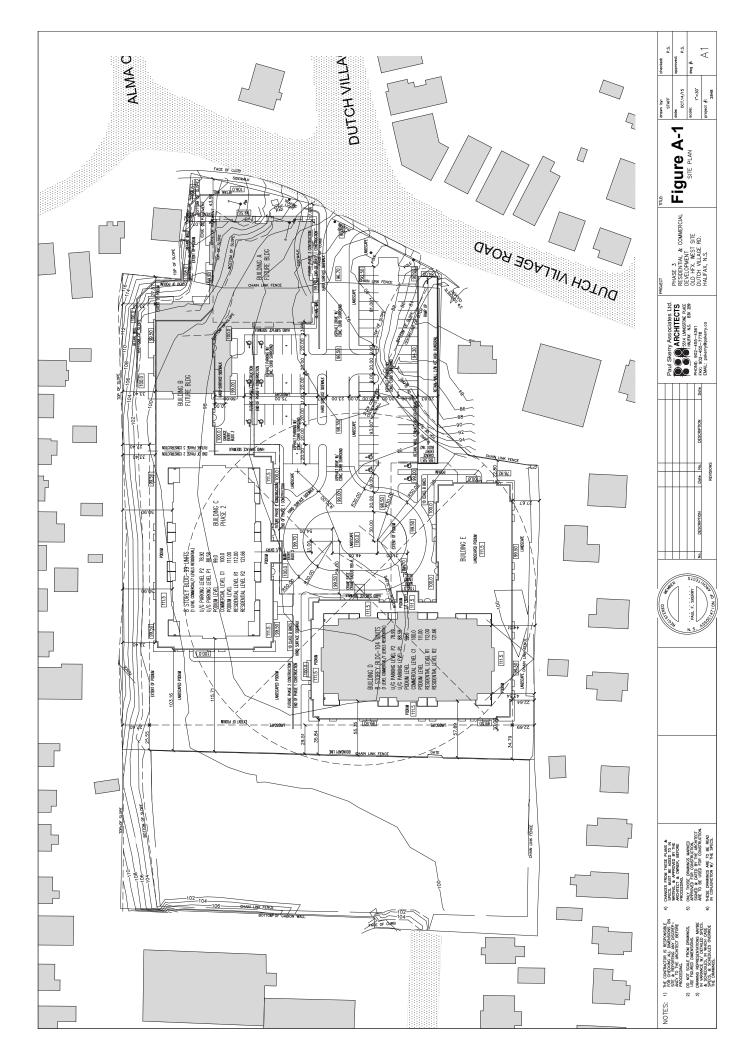
Further to our recent telephone conversation, this Addendum has been prepared to address HRM concerns relative to possible traffic impacts of parking garage driveway changes for The BOSS development on Dutch Village Road.

**Description of Development Site** - The BOSS development (Figure A-1) includes four buildings with two site accesses - one at the signalized Dutch Village Road / Alma Crescent intersection, and a right-in / right-out driveway on Dutch Village Road at the south site boundary. When the site was originally studied in *Traffic Impact Study - Proposed Mixed Use Development, Former Halifax West High School Site* (WSP Canada Inc., December 2010) the driveway at the signalized intersection provided access and egress for surface parking lots as well as egress for the underground parking garage, and the right-in / right-out provided access and egress for the parking garage.

The current site plan (Figure A-1) includes the following changes to underground parking garage access / egress:

- The parking garage served by the right-in / right-out driveway will provide spaces for approximately 200 apartments in Buildings C and D with access and egress only possible at the right-in / right-out driveway.
- A second parking garage, which is not interconnected to the other parking garage and which will have an on-site driveway between Buildings C and B, will serve approximately 90 apartment units and 58,100 SF of commercial space. All trips to and from this garage will use the signalized intersection.

*Site Generated Trip Distribution (2015)* - The site plan considered in the 2015 analysis included 296 apartments and 58,100 SF of commercial space. After adjustment for 10% non-vehicle trips, it was estimated that the proposed 2015 land uses considered in *Addendum Traffic Impact Analysis for the Revised 2015 Land Uses, Former Halifax West Site Development, Dutch Village Road, Halifax* (WSP November 2015) would generate 153 two-way vehicle trips (71 entering and 82 exiting) during the AM peak hour and 232 two-way vehicle trips (113 entering and 119 exiting) during the PM peak hour.



*Site Generated Trip Distribution (2018)* - The proposed land use includes approximately 290 apartment units and 58,100 SF of commercial space. Estimated site generated trips have been split between two site entrances (Table A-1) with trips for 200 apartment units assigned to the right-in / right-out driveway, and trips for 90 apartments plus the commercial part of the development assigned to the signalized intersection.

Table A-1 - Site Generated Trips Assigned to Two Site Entrances - 2018							
Site Entrance	AM Peak Hour Trips			PM Peak Hour Trips			
	Enter	Exit	Two-Way	Enter	Exit	Two-Way	
Right-in / Right-out <sup>1</sup>	17	39	56	42	29	71	
Traffic Signals <sup>2</sup>	54	43	97	71	90	161	
Totals - Two Entrances <sup>3</sup>	71	82	153	113	119	232	

NOTES: 1. Trips generated by 200 apartment units in Buildings C and D.

2. Trips generated by 90 apartment units and 58,100 SF commercial space in Buildings A and B.

3. Total trips considered are the same as those in Addendum Traffic Impact Analysis for the Revised 2015 Land Uses, Former Halifax West Site Development, Dutch Village Road, Halifax (WSP November 2015)

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The following trip distribution that was used in the 2015 Addendum has been used to assign trips entering and exiting at the two site entrances:

- South on Dutch Village Road 40%
- East on Dutch Village Road / Alma Crescent 30%
- North / West on Alma Crescent / Titus Street 30%.

Assigned trips to the two site entrances for the 2018 Addendum are compared to those for the 2015 Addendum in Table A-2.

Site Entrance	Comparison of Trips Assigned to Two Si AM Peak Hour Trips			PM Peak Hour Trips			
	Enter	Exit	Two-Way	Enter	Exit	Two-Way	
Right-in / Right-out 2018 <sup>1</sup>	17	39	56	42	29	71	
Right-in / Right-out 2015 <sup>2</sup>	20	15	35	30	21	51	
Change from 2015 <sup>3</sup>	(3)	24	21	12	8	20	
Traffic Signals 2018 <sup>1</sup>	54	43	97	71	90	161	
Traffic Signals 2015 <sup>2</sup>	51	67	118	83	98	181	
Change from 2015 <sup>3</sup>	3	(24)	(21)	(12)	(8)	(20)	

NOTES: 1. Table A-1, above

2. Figure A-2, Boxes A and B, Addendum Traffic Impact Analysis for the Revised 2015 Land Uses, Former Halifax West Site Development, Dutch Village Road, Halifax (WSP November 2015).

3. The change in parking garage entrances will divert some trips from the signalized intersection to the right-in / rightout driveway.

 Assigned trips for both the2015 and 2018 Addenda include 153 two-way vehicle trips (71 entering and 82 exiting) during the AM peak hour and 232 two-way vehicle trips (113 entering and 119 exiting) during the PM peak hour.

- 1. The change in parking garage entrance and exit plans will result in fewer trips using the signalized intersection driveway with a corresponding increase in trips using the right-in / right-out driveway.
- 2. While the right-in / right out driveway will require vehicles that wish to travel in directions that would require a left turn movement either to enter or exit the site to make changes in travel routes, the numbers are not significant compared to existing traffic volumes in the area.
- 3. The re-distribution of some site generated trips from the signalized intersection driveway to the right-in / right-out driveway is not expected to have a significant impact on the performance of the signalized intersection from that included in the 2015 Addendum: *"With relatively minor signal timing changes for the 2020 PM peak hour used in the performance evaluation, all intersection approaches are expected to operate well within HRM critical limits."*

If you have any questions, please contact me by Email to <u>ken.obrien@wsp.com</u> or telephone 902-452-7747.



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

