

Ref. No. 171-04432 Phase 2

September 20, 2017

Mr. Doug Dean
Project Manager
Kent Building Supplies

Sent Via Email to sd@shelleydickey.com

RE: Addendum Traffic Impact Statement, Kent Mic Mac Mall Office Building, 35 Micmac Boulevard, Dartmouth, NS (WSP Canada Inc., May 31, 2017)

Dear Mr. Dean:

This is an Addendum to *Traffic Impact Statement, Kent Mic Mac Mall Office Building, 35 Micmac Boulevard, Dartmouth, NS (WSP May 31, 2017)* to consider traffic impacts of development Option 2 which includes converting the existing *Kent Building Supplies* store to an office building.

**Background** - The Traffic Impact Statement (TIS) prepared in May, 2017, considered impacts of converting the existing 127,280 SF building supply store with 3,791 SF of office space to combined office space and associated warehouse space. This Addendum has been prepared to consider impacts of Option 2 for the redevelopment of the site which includes converting the existing building to a two story office building with approximately 165,200 SF of office space.

**Description of Proposed Development** - The proposed re-construction of the existing Kent building will retain the existing 127,280 SF footprint of the building. The existing ground floor will be reconfigured (Figure A-1A, Appendix A) to provide 75,600 SF of leasable office space. A second floor will be constructed with 89,600 SF of leasable office space (Figure A-2A, Appendix A). The completed redevelopment is expected to provide 165,200 SF of leasable office space.

**Trip Generation** - AM, PM, and Saturday peak hour trip generation estimates for the existing building supplies store and the proposed office land use, prepared using published trip generation rates and equations from *Trip Generation*, 9<sup>th</sup> Edition, are included in Table 1A. The following trip generation estimates are included:

- **Existing Building** It is estimated that the existing building supply store generates the following vehicle trips:
  - AM peak hour 195 two-way trips (113 entering and 82 exiting);
  - PM peak hour 302 two-way trips (146 entering and 156 exiting):
  - Saturday peak hour 576 two-way trips (294 entering and 282 exiting).
- **Proposed Office Building** It is estimated that the proposed 165,200 SF of leasable office space will generate the following vehicle trips:
  - AM peak hour 286 two-way trips (252 entering and 34 exiting);
  - PM peak hour 264 two-way trips (45 entering and 219 exiting);
  - Saturday peak hour 71 two-way trips (38 entering and 33 exiting).
- Trip Generation Changes It is estimated that the proposed change from building supply store to office land use will result in the following two-way vehicle trip changes at the site:
  - AM peak hour 91 more trips (139 more entering and 48 fewer exiting);
  - PM peak hour 38 fewer trips (101 fewer entering and 63 more exiting);
  - Saturday peak hour 505 fewer trips (256 fewer entering and 249 fewer exiting).

Table 1A - Trip Generation Estimates for Existing Land Use and Proposed Reconstructed Land Use														
Land Use <sup>1</sup>	Units <sup>2</sup>	Trip Generation Rates <sup>3</sup>						Trips Generated <sup>3</sup>						
		AM Peak		PM Peak		Saturday		AM Peak		PM Peak		Saturday		
		In	Out	In	Out	In	Out	ln	Out	In	Out	In	Out	
Trip Generation Estimate for the Existing Building Supply Store Land Use <sup>4</sup>														
General Office <sup>6</sup> (Use Code 710)	3.791 KGLA	1.37	0.19	0.20	1.31	0.23	0.20	5	1	1	5	1	1	
Home Improvement Superstore (Land Use 862)	127.28 KGFA	0.85	0.64	1.14	1.19	2.30	2.21	108	81	145	151	293	281	
Estimated Trip Generation for the Existing Building <sup>5</sup>								113	82	146	156	294	282	
Trip Generation Estimate for the Proposed Office Land Use <sup>5</sup>														
General Office (Land Use 710)	165.2 KGLA	Equations from Pages 1260 and 1261			0.23	0.20	252	34	45	219	38	33		
Estimated Change in	Estimated Change in Trips Generated by the Redeveloped Site													
Change in Vehicle Trip Estimates for the Redeveloped Site $^7$									(48)	(101)	63	(256)	(249)	

- NOTES: 1. Rates are for indicated Land Use Codes, Trip Generation, 9th Edition, Institute of Transportation Engineers, 2012.
  - KGFA is 'Gross Floor Area x 1000 square feet'; KGLA is 'Gross Leasable Area x 1000 square feet'.
  - Rates are 'vehicles per hour per unit'; trips generated are 'vehicles per hour for peak hours'.
     These are the trip generation estimates for the existing Kent Building Supplies Store.
     These are the trip generation estimates for the proposed office building.

  - 6. Since the existing office space is significantly less than the average sized facility published in Trip Generation, 9th Edition (215,000 SF and 222,000 SF) and the regression curves would produce illogical trip-end estimates, average published AM, PM, and Saturday peak hour rates have been used.
  - 7. These are the estimated changes in AM, PM, and Saturday peak hour vehicle trips as a result of re-constructing the existing home improvement store as an office building.

## Summary -

- Kent Building Supplies is preparing plans to convert the existing Kent warehouse store at 35 Micmac Boulevard from a building supply store to a general office building. It is proposed (Option 2) that the existing 127,280 SF building supply store with 3,791 SF of office space be re-constructed to provide approximately 165,200 SF of office space.
- 2. It is estimated that the proposed change from building supply store to office land use will result in the following two-way vehicle trip changes at the site:
  - AM peak hour 91 more trips (139 more entering and 48 fewer exiting);
  - PM peak hour 38 fewer trips (101 fewer entering and 63 more exiting;
  - Saturday peak hour 505 fewer trips (256 fewer entering and 249 fewer exiting).

## Conclusions -

- While the proposed conversion to office configuration is estimated to generate more trips than the existing building supplies store during the AM peak hour, the increase is not expected to have any significant impacts on adjacent intersections and roadways.
- 4. Since the proposed conversion to office configuration is estimated to generate fewer trips than the existing building supplies store during the PM peak hour, and significantly fewer trips during Saturday peak hours, there will be reduced traffic impacts on adjacent intersections and roadways.

WSP Canada Inc. September 20, 2017 5. Since the site has good pedestrian connections to adjacent residential areas, good transit service on Micmac Boulevard, and significant potential for on-site synergies with the adjacent MicMac Mall, it is possible that the numbers of site generated vehicle trips for the proposed office building could be less than estimated numbers.

If you have any questions, please contact me by Email to <a href="mailto-ken.obrien@wso.com">ken.obrien@wso.com</a> or telephone 902-452-7747.

Sincerely: original signed

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





