

Ref. No. 131-23735

June 3, 2014

Mr. Hugh Morrison, P. Eng., Development Engineer HRM Community Development PO Box 1749 HALIFAX NS B3J 3A5

RE: Addendum - Traffic Impact Statement: Proposed Residential/Commercial Development Wyse Road, Dartmouth, Nova Scotia

Dear Mr. Morrison:

Plans are being prepared for a mixed use residential / commercial development on the parcel (PID: 00045351) bounded by Wyse Road, Pelzant Street, and George Street in Dartmouth, NS (See Figure 1). This is an addendum to the original *Traffic Impact Statement* (WSP Canada, January 2014), and has been prepared to address changes to land use and site access for the proposed development. As currently proposed, the development includes a 10-storey, 82-unit apartment building, eight ground level townhouse units, and approximately 2,634 square feet of ground floor commercial space. Underground parking areas accessed from driveways on George Street and Pelzant Street will provide approximately 67 parking stalls.

**Background-** The original *Traffic Impact Statement* (WSP Canada, January 2014) was completed for a 10-storey mixed use building that included 75 apartment units, four ground level townhouse units, approximately 8,700 square feet of ground floor commercial space, and 42 underground parking spaces. The proposed development has been modified to include a 10-storey, 82-unit apartment building, eight ground level townhouse units, and approximately 2,634 square feet of ground floor commercial space. Though the number of residential units has increased, the amount of commercial space has been reduced considerably. The revised development concept also includes a total of 67 parking spaces, which represents an increase of 25 spaces relative to the original proposal.

**Description of Site Access-** Vehicular access to the proposed development remains as described in the January 2014 *Traffic Impact Statement*, including parking garage driveways on Pelzant Street and George Street. Each driveway will be two-way and serve a separate underground parking area. The number of underground parking spaces has been increased for both underground parking lots - the parking area accessed from Pelzant Street will include 23 spaces (originally 21 spaces), and the parking area accessed from George Street will include 44 parking spaces (previously 21 spaces). Vehicular access between the parking areas within the building will not be possible. While a recent site visit indicates that sight distance to both proposed driveways is adequate, the final design of the parking garage entrances must ensure that drivers exiting the garage will have adequate visibility of pedestrians on the sidewalk.

Pedestrian access to the site has been modified slightly. Accesses to the residential and retail uses, originally proposed from Pelzant Street, have been relocated to Wyse Road.

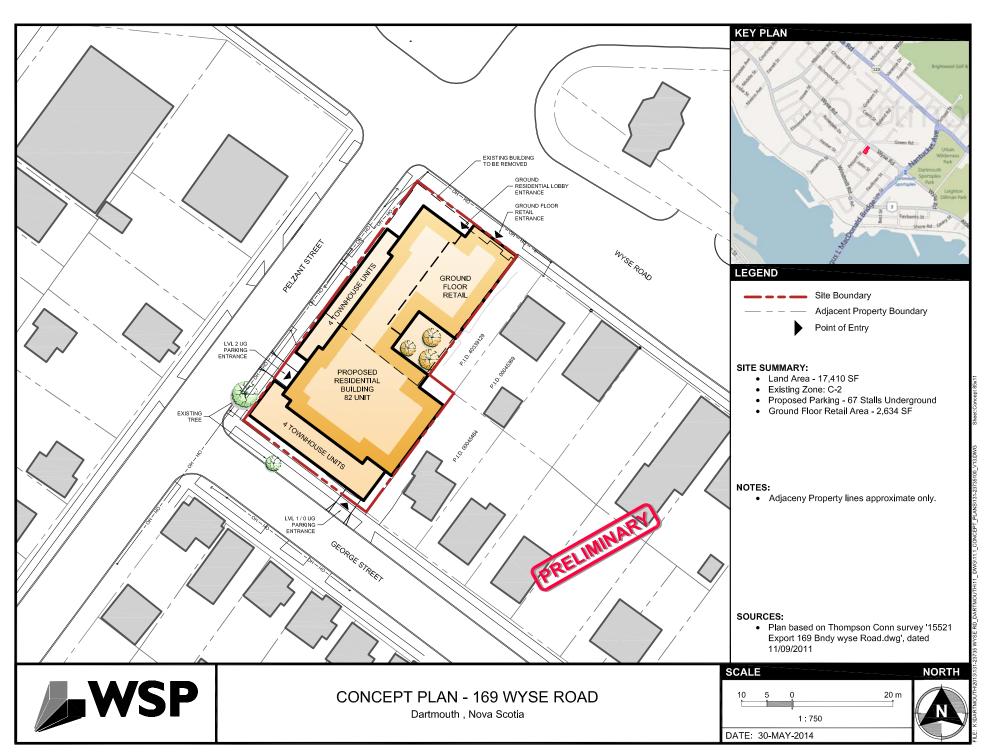


Figure 1 - Site Plan

**Trip Generation** – Trip generation estimates for the revised development concept have been prepared using published trip generation rates from *Trip Generation*, *9th Edition* (Institute of Transportation Engineers, 2012). Table 1 summarizes trip generation estimates for the development as currently proposed as well as those that were included in the original January 2014 *Traffic Impact Statement*. It is estimated that the revised mixed use development will generate about 35 two-way vehicle trips (11 entering and 24 exiting) during the AM peak hour and 43 vehicle trips (25 entering and 18 exiting) during the PM peak hour. Relative to the January 2014 development, this represents a reduction of 3 entering trips during the AM peak hour and 11 total trips (4 entering, 7 exiting) during the PM peak hour.

**Table 1 - Trip Generation Estimates** 

Table 1 The Constant Learning											
	Units <sup>2</sup>	Trip Generation Rates <sup>3</sup>				Trips Generated⁴					
Land Use <sup>1</sup>		AM Peak		PM Peak		AM Peak		PM Peak			
		ln	Out	ln	Out	ln	Out	ln	Out		
Trip Generation Estimates (January 2014)											
High-Rise Apartment (ITE 222)	75	0.08	0.22	0.21	0.14	6	17	16	11		
Single Family Dwelling (ITE 210) <sup>5</sup>	4	0.19	0.56	0.63	0.37	1	2	3	1		
Specialty Retail (ITE 826) <sup>6</sup>	8.7 KGLA	0.76	0.60	1.19	1.52	7	5	10	13		
Total Estimated Trips						14	24	29	25		
Trip Generation Estimates (June 2014)											
High-Rise Apartment (ITE 222)	82	0.08	0.22	0.21	0.14	7	18	17	11		
Single Family Dwelling (ITE 210) <sup>5</sup>	8	0.19	0.56	0.63	0.37	2	4	5	3		
Specialty Retail (ITE 826) <sup>6</sup>	2.7 KGLA	0.76	0.60	1.19	1.52	2	2	3	4		
Total Estimated Trips						11	24	25	18		
Net Reduction in Trip Generation Estimates						3	0	4	7		

Notes: 1. Land use codes are from Trip Generation, 9th Edition, Institute of Transportation Engineers, 2012.

- 2. Residential units are the number of dwelling units. KGLA is '1000 square feet gross leasable area',
- 3. Trip generation rates are 'vehicles per hour per unit.'.
- 4. Trips generated are 'vehicles per hour' for AM and PM peak hours.
- 5. Trip generation rates for Single Family Dwellings have been used for Townhouse Units.
- 6. The Specialty Retail (ITE Land Use 826) rate for 'Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6PM' has been used. Since there is no published rate for the AM peak hour of adjacent street traffic for this land use, and since AM peak hour trips to specialty retail are generally low, AM trip rates have been assumed to be 50% of the PM rate with reversal of the directional split.



## Summary and Conclusions -

- 1. Plans are being prepared for a mixed use residential / commercial development on a parcel bounded by Wyse Road, Pelzant Street, and George Street in Dartmouth, NS.
- 2. In January 2014, WSP Canada submitted a *Traffic Impact Statement* that considered a previous concept for the proposed development. The original concept included a 10-storey, 75-unit apartment building, four ground level townhouse units, and approximately 8,700 square feet of ground floor commercial space.
- 3. A revised concept has since been developed for the proposed development. The revised plan includes a 10-storey, 82-unit apartment building, eight ground level townhouse units, and approximately 2,634 square feet of ground floor commercial space.
- 4. It is estimated that the revised mixed use development will generate about 35 two-way vehicle trips (11 entering and 24 exiting) during the AM peak hour and 43 vehicle trips (25 entering and 18 exiting) during the PM peak hour. Relative to the January 2014 development, this represents a reduction of 3 entering trips during the AM peak hour and 11 total trips (4 entering, 7 exiting) during the PM peak hour.
- 5. Since the proposed changes to the development result in a reduced number of vehicle trips generated during AM and PM peak periods, the revised development will have a marginally reduced impact relative to the January 2014 development concept.
- 6. Based on these findings, the conclusion included in the January 2014 Traffic Impact Statement remains unchanged: "Given the good connectivity to higher order streets and proximity to transit service associated with the proposed development site, site generated trips are not expected to significantly impact levels of performance on the adjacent streets and intersections".

If you have any questions or comments, please contact me by email at mike.connors@wspgroup.com or by telephone at 835-9955.

Sincerely: Originally Signed

> Mike Connors, P. Eng. Traffic Engineer WSP Canada Inc.







Ref. No. 131-23735

January 6, 2014

Mr. Hugh Morrison, P. Eng., Development Engineer HRM Community Development PO Box 1749 HALIFAX NS B3J 3A5

RE: Traffic Impact Statement, Proposed Residential / Commercial Development, Wyse Road, Dartmouth, Nova Scotia

Dear Mr. Morrison:

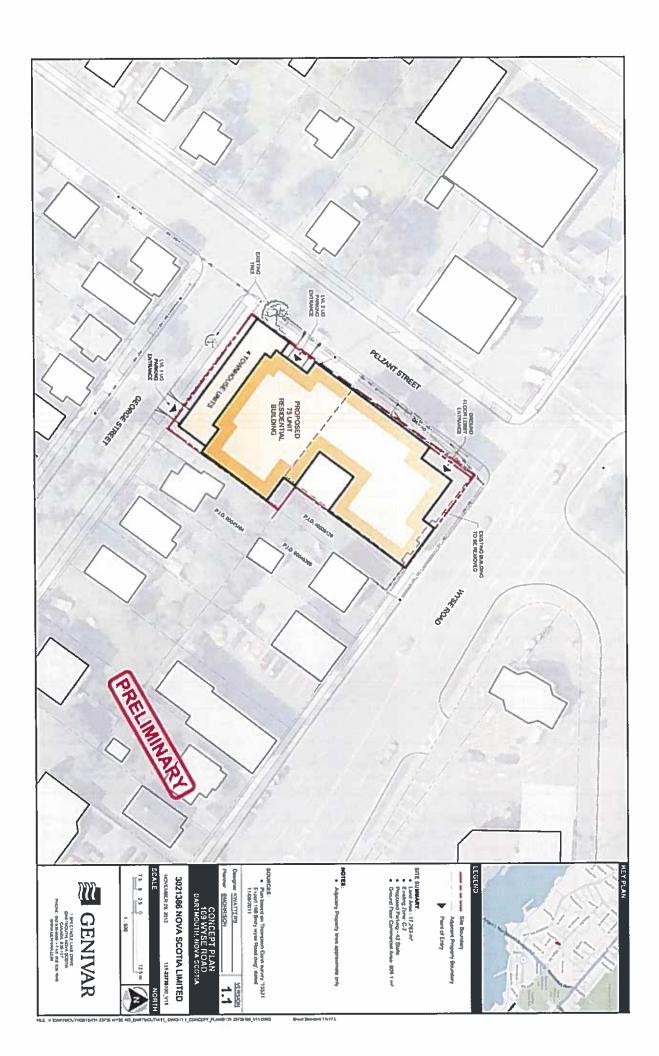
Plans are being prepared for a mixed use residential / commercial development on the parcel (PID: 00045351) bounded by Wyse Road, Pelzant Street, and George Street in Dartmouth, NS (See Figure 1). The proposed development includes a 10-storey, 75-unit apartment building, four ground level townhouse units, and approximately 8,700 square feet of ground floor commercial space. Underground parking areas accessed from driveways on George Street and Pelzant Street will provide approximately 42 parking stalls. This is the Traffic Impact Statement (TIS) required to accompany the development application.

Site Description- At present, the site includes a vacant two-storey building with frontage on Wyse Road, as well as a parking area accessed by Pelzant Street (See Photo 1). The existing structure will be demolished as part of the redevelopment of the site.



Photo 1 – Looking at the rear of the existing building and parking area on the proposed development site from George Street.

Description of Site Access- Vehicular access to the proposed development will be via parking garage driveways on Pelzant Street (See Photo 2 and Photo 3) and George Street (Photo 4 and Photo 5). Sight distance to both driveways is adequate. Each driveway will be two-way and serve a separate underground parking area - the Pelzant Street driveway will access the upper parking level (21 spaces), and the George Street driveway will access the lower parking level (21 spaces). Vehicular access between the parking areas within the building will not be possible.



Street Descriptions— Pelzant Street and George Street are local streets with sidewalks on both sides, and a speed limit of 50km/h. Time restricted onstreet parking is permitted on both sides of Pelzant Street and on the west side only on George Street.

Wyse Road is a collector street with three westbound lanes and one eastbound lane in the vicinity of the proposed development (See Photo 6 and Photo 7). The street widens iust east of the site to accommodate grassed median and turn lanes at the Wyse Road \_ Nantucket Avenue intersection, which provides direct access to the Angus L. Macdonald Bridge. There are sidewalks on both sides of the street. On-street parking is not permitted on Wyse Road adjacent to the proposed development site. The speed limit is 50km/h.

The intersection of Wyse Road and Pelzant Street is unsignalized, with stop control on the Pelzant Street approach. The intersection is located approximately 30m south of the signalized Wyse Road – Boland Road intersection, and is offset slightly from Green Road.

The Pelzant Street – George Street intersection is unsignalized, with stop control on the George Street approach.



Photo 2 - Looking west on Pelzant Street from the proposed Pelzant Street drivaway.



Photo 3 - Looking east on Pelzant Street toward Wyse Road from the proposed Pelzant Street driveway.



Photo 4 - Looking south on George Street from the proposed George Street driveway.



Photo 5 - Looking north on George Street toward Pelzant Street from the proposed George Street driveway.





Photo 6 - Looking north on Wyse Road from Peizant Street



Photo 7 - Looking south on Wyse Road from Pelzant Street

*Transit* – Metro Transit operates six routes on Wyse road adjacent to the site (Routes 10, 16, 52, 53, 64, 87), with bus stops located just north of Pelzant Street. Also, the site is approximately 500m from the Metro Transit's Bridge Terminal, which serves 19 bus routes and provides access to all routes in HRM.

**Trip Generation** – Trip generation estimates, prepared using published trip generation rates from *Trip Generation*, 9th Edition, are included in Table 1. It is estimated that the proposed mixed use development will generate about 38 vehicle trips (14 entering and 24 exiting) during the AM peak hour and 54 vehicle trips (29 entering and 25 exiting) during the PM peak hour. It is expected that the underground parking areas will be designated for residential tenants, therefore, patrons of the commercial uses will be restricted to on-street parking.

Table 1 - Trip Generation Estimates Table 2 - Trip Generation Estimates

Land Use 1	Units <sup>2</sup>	Trip Generation Rates <sup>3</sup>				Trips Generated			
		AM Peak		PM Peak		AM Peak		PM Peak	
		In	Out	ln	Out	In	Out	In	Out
High-Rise Apartment (ITE 222)	75	0.08	0.22	0.21	0.14	6	17	16	11
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Total Estimated Trips					14	24	29	25	

Notes: 1. Land use codes are from Trip Generation, 9th Edition, Institute of Transportation Engineers, 2012.

- 2. Residential units are the number of dwelling units. KGLA is '1000 square feet gross leasable area',
- 3. Trip generation rates are 'vehicles per hour per unit.'.
- 4. Trips generated are 'vehicles per hour' for AM and PM peak hours.
- 5. Trip generation rates for Single Family Dwellings have been used for Townhouse Units.
- 6. The Specialty Retail (ITE Land Use 826) rate for 'Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6PM has been used. Since there is no published rate for the AM peak hour of adjacent street traffic for this land use, and since AM peak hour trips to specialty retail are generally low, AM trip rates have been assumed to be 50% of the PM rate with reversal of the directional split.



## Summary and Conclusions -

- Plans are being prepared for a mixed use residential / commercial development on a parcel bounded by Wyse Road, Pelzant Street, and George Street in Dartmouth, NS. The proposed development includes a 10-storey, 75-unit apartment building, four ground level townhouse units, and approximately 8,700 square feet of ground floor commercial space. Two underground parking areas will be accessed from driveways on George Street and Pelzant Street.
- 2. It is estimated that the proposed development will generate about 38 vehicle trips (14 entering and 24 exiting) during the AM peak hour and 54 vehicle trips (29 entering and 25 exiting) during the PM peak hour.
- 3. Site traffic will be dispersed to Wyse Road, which provides access to several key regional routes.
- 4. It is expected that site generated trips will have a relatively high transit and pedestrian mode share due to the urban environment and close proximity to transit routes and the Metro Transit Bridge Terminal.
- 5. Given the good connectivity to higher order streets and proximity to transit service associated with the proposed development site, site generated trips are not expected to significantly impact levels of performance on the adjacent streets and intersections.

If you have any questions or comments, please contact me by email at mike.connors@wspgroup.com or by telephone at 835-9955.

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