Item No.10.1.4

August 20, 2019

Vince Van Den Brink
1096 Marginal Road, Suite 120
Halifax, NS
B3H 4N4

[Via Email: vincent@breakhouse.ca]

RE: Traffic Impact Statement
Corner of Gottingen Street with Bilby Street and Macara Street, Halifax, NS

Dear Mr. Van Den Brink:

In 2012, Genivar (acquired by WSP Canada Inc.) was retained to conduct a Traffic Impact Statement for a proposed residential and commercial development on the corner of Gottingen and Bilby Street, which was comprised of 39 mid-rise apartments and 3,200 square feet of commercial space. In 2017, an addendum was completed that reviewed a development including a 64-unit mid-rise apartment building and 4,360 square feet of commercial space.

In 2015, WSP Canada Inc. was retained to conduct a Traffic Impact Statement for a proposed residential and commercial development on the corner of Gottingen and Macara Street, which was comprised of 68 mid-rise apartments, three single family townhouses and 3,510 square feet of commercial space.

Figure 1 - Location of Site within Road Network

Since completing these Traffic Impact Statements, the two identified sites have been amalgamated to one and the proposed development will include 130 mid-rise apartments and 8,000 square feet of commercial space fronting Gottingen Street. This Traffic Impact Statement estimates the potential impacts on traffic due to the changes in intended land use and quantifies the trips generated by the proposed redeveloped site.

SITE DESCRIPTION

The existing site is located on the corner of Gottingen Street, Bilby Street and Macara Street (See Photo 1). The current site is occupied by single family homes, small businesses and a parking lot (PID 00127498, PID 00127506, PID 00127514, PID 00127522, PID 00127530, PID 00127548 and PID 00127555). Vehicle access for residents will be provided on Bilby Street, where there will be approximately 100 parking spaces spread over two levels of underground parking.


Photo 1 - Corner of Bilby and Gottingen Street

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Photo 2 – Looking Left (to the North-east) on Bilby Street at the Site Driveway

Photo 3 – Looking Right (to the South-west) on Bilby Street at the Site Driveway

DESCRIPTION OF EXISTING STREETS AND INTERSECTIONS

Gottingen Street is a two-lane collector street with sidewalk on both sides. Gottingen Street was identified in the *Moving Forward Together Plan* (Halifax Transit, 2016) and *Integrated Mobility Plan* (HRM, 2017) for Transit Priority Measures (TPM). Halifax Regional Council approved the plan for installation of a northbound transit priority lane on Gottingen Street Cogswell Street and Charles Street during peak periods. Implementation began during the 2018 construction season and included full time stopping restrictions on the west side of Gottingen Street as well as peak periods (7-9AM and 3-6PM) restrictions on the east side.

Bilby Street is a two-lane local street with sidewalk on both sides. On weekdays from 8AM to 6PM, 30-minute parking is permitted on the south side of the street and 60-minute parking is permitted on the north side of the street.

Macara Street is a two-lane local street with sidewalk on both sides. While parking is not permitted on the south side of the street adjacent to the site, '1 HOUR 8AM – 6PM' parking is permitted west of the site. Unrestricted parking is permitted on the north side of the street, expect for street cleaning early Friday morning.

Gottingen Street at Bilby Street Intersection is controlled by a STOP sign on the Bilby Street approach.

Gottingen Street at Macara Street Intersection is controlled by a STOP sign on the Macara Street approach.

TRIP GENERATION

When using the published trip generation rates in *Trip Generation Manual, 10th Edition* (Institute of Transportation Engineers, Washington, 2017) the transportation engineer's objective should be to provide a realistic estimate of the number of trips that will be generated. Generated trips for Speciality Retail (Land Use 826) are estimated for the AM and PM peak hours of traffic by the gross leasable floor area of the establishment. Generated trips for Mid-Rise Apartments (Land Use 223) are estimated for the AM and PM peak hours of traffic by the number of units. The proposed redeveloped site is expected to have 8,000 square feet of commercial property and 130 apartment units.

The previously approved Traffic Impact Statements estimated that the combined developments (corner of Bilby and corner of Macara) would generate:

- 40 two-way trips (14 entering and 26 exiting) during the AM peak hour; and,
- 57 two-way trips (31 entering and 26 exiting) during the PM peak hour.

Trip generation estimates, prepared using published rates from *Trip Generation Manual, 10th Edition* (Institute of Transportation Engineers, Washington, 2017) for the new development are included in Table 1. It is estimated that the redeveloped site will generate:

- 37 two-way trips (13 entering and 24 exiting) during the AM peak hour; and,
- 52 two-way trips (28 entering and 24 exiting) during the PM peak hour.

It was then determined that that the proposed redeveloped site would generate:

- **3 fewer** two-way trips (1 fewer entering and 2 fewer exiting) during the AM peak hour; and,
- **5 fewer** two-way trips (3 fewer entering and 2 fewer exiting) during the PM peak hour.

Table 1 – Trip Generation Estimates

Land Use[1]	Units[2]	Trip Generation Rates[3]				Trips Generated[4]			
		AM Peak		PM Peak		AM Peak		PM Peak	
		In	Out	In	Out	In	Out	In	Out
Property 1 (Gottingen and Bilby Street) 2017									
Mid-Rise Apartment (Land Use 223)	64 units	0.09	0.21	0.23	0.16	6	13	14	10
Specialty Retail[5] (Land Use 826)	4.36 KGLA	0.76	0.60	1.19	1.52	3	3	5	7
Trip Generation Estimate for Property 1						9	16	19	17
30% Reduction for Non-Vehicle Trips						3	5	6	5
Total Site Generated Trips for Property 1						**6**	**11**	**13**	**12**
Property 2 (Gottingen and Macara Street) 2015									
Mid-Rise Apartment (Land Use 223)	71 units	0.09	0.21	0.23	0.16	7	15	16	12
Specialty Retail[5] (Land Use 826)	3.51 KGLA	0.76	0.60	1.19	1.52	3	2	4	5
Trip Generation Estimate for Property 2						10	17	20	17
Trip Reduction for Existing (2015) Development[6]						2	2	2	3
Total Site Generated Trips for Property 2						**8**	**15**	**18**	**14**
Proposed Development 2019									
Mid-Rise Apartment (Land Use 223)	130 units	0.09	0.21	0.23	0.16	12	27	30	21
Specialty Retail[5] (Land Use 826)	8.00 KGLA	0.76	0.60	1.19	1.52	6	5	10	12
Trip Generation Estimate for Proposed Development						18	33	40	33
30% Reduction for Non-Vehicle Trips[7]						5	9	12	9
Trip Reduction for Property 1 and Property 2						14	26	31	26
Estimated Additional Trips Generated by the Proposed Redeveloped Site						-1	-2	-3	-2
Total New Trips generated by the Proposed Redeveloped Site						**13**	**24**	**28**	**24**

Notes:
1. Land Use Code 223 is from *Trip Generation, 10th Edition,* (Institute of Transportation Engineers, Washington, 2017) and Land Use Code 826 is from Trip Generation, 9th Edition, (Institute of Transportation Engineers, Washington, 2012).
2. Gross Leasable Area x 1,000 square feet for Specialty Retail.
3. Trip generation rates are 'vehicles per hour unit'.
4. Trips generated are 'vehicles per hour' for AM and PM peak hours.
5. The Specialty Retail (ITE 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 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.
6. The trip reduction was based from the existing land uses in 2015. The existing development was comprised of 1.775 KGFA Light Industrial and 3 Single Family Residences.
7. Since Gottingen Street has good transit services, a 30% reduction in site generated vehicle trips was assumed, which accounts for all non-auto trips including transit, cycling, walking and on-site synergies.

SUMMARY

1. Plans are being prepared for a residential and commercial development on the corner of Gottingen Street, Bilby Street and Macara Street. The proposed redevelopment is comprised of 130 mid-rise apartments and 8,000 square feet of leasable commercial floor space.
2. Vehicular access to the underground parking will be from Bilby Street.
3. It is estimated that the proposed redeveloped site will generate a total of 37 new two-way trips (13 entering and 24 exiting) during the AM peak hour and 52 new two-way trips (28 entering and 24 exiting) during the PM peak hour.

CONCLUSION

The proposed redeveloped site is expected to generate a total of 3 fewer two-way trips (1 fewer entering and 2 fewer exiting) during the AM peak hour and 5 fewer two-way trips (3 fewer entering and 2 fewer exiting) during the PM peak hour than trips generated by the separate proposed developments.

If you have any questions or comments, please contact me by email at courtney.mccarthy@wsp.com or by telephone at 902-536-0982.

Sincerely,

Original Signed

Courtney McCarthy, P.Eng.
Transportation Engineer
WSP Canada Inc.

REGISTERED PROFESSIONAL ENGINEER
DATE Aug. 20/19
Original Signed
C. K. K. McCARTHY
11853
PROVINCE OF NOVA SCOTIA