

December 23, 2020

Colin MacDonald
 Micco Companies Ltd.
 741 Bedford Highway
 Halifax, Nova Scotia, B3M 2M1

[via email: cmacdonald@micco.ca]

RE: Traffic Impact Statement - 3195 Highway 2, Fall River, Nova Scotia

Dear Mr. MacDonald:

Plans are being prepared for residential and office space development on a 1.37-acre site located at 3195 Highway 2 in Fall River, Nova Scotia. This development will consist of a four-unit townhouse block, as well as a separate building for office space. This is the Traffic Impact Statement for the proposed residential and office space development, as shown in Figure 1. In addition, WSP has completed a sightline review at the proposed site access driveway with respect to stopping sight distance requirements on Highway 2.



Figure 1 – Study Area

SITE DESCRIPTION

The proposed residential and office space buildings are expected to be developed on a property which is currently occupied by a single residence building at 3195 Highway 2 (PID 00504076), as seen in Photo 1. The proposed residential building will include a four-unit townhouse block and a separate 8,000 ft² building to accommodate office space. Access to the proposed site is anticipated to be on Highway 2 via a full access driveway, which is expected to be in the same location as the current existing driveway, as shown in Photo 2.



Photo 1 – Existing Residence



Photo 2 - Existing Driveway



Lake Thomas



LEGEND

- Site Boundary
- - - Adjacent Property Boundary

SITE SUMMARY:

- PID: 00504076
- Land Area - 5,572 m²
- Lot Coverage - 14.7%
- Impervious Surface Area Coverage - 34.5%
- Existing Zone - VMS (Village Main Street Zone)

NOTES:

- Property lines approximate only. Site subject to survey.

SOURCES:

- Property lines and topographic features from Provincial mapping

Designer: JHARPER	VERSION
Planner: AWINTERS	101

**CONCEPT PLAN
HIGHWAY 2
FALL RIVER, NOVA SCOTIA**

MICCO COMPANIES LIMITED
DECEMBER 15, 2020 191-12517-101

SCALE



1 SPECTACLE LAKE DRIVE, DARTMOUTH, NS, CANADA B3B 1X7
PHONE: 902 635-9955 WSP.COM

PRELIMINARY

Figure 2 - Site Plan



DESCRIPTION OF EXISTING ROADWAY

NS Highway 2 is a 2-lane arterial that runs north-south through Fall River, NS. In the study area, there is concrete sidewalk on the east side of Highway 2 and has a posted speed limit of 60 km/h in the vicinity of the proposed development site. Based on the latest available NSTIR traffic count in the area collected in 2017, Highway 2 has an estimated volume of approximately 15,700 two-way vehicles per day (vpd) the near Highway 102 interchange, Exit 5, just south of the site.

TRIP GENERATION

When using the published rates in *Trip Generation Manual* (Institute of Transportation Engineers), the transportation engineer's objective should be to provide a realistic estimate of the number of trips that will be generated. Trip generation estimates were prepared using the manual for the proposed development consisting of Low-Rise Multifamily Housing (Land Use 220) for residential development, and General Office (Land Use 710) for office development. Trips generated by Low-Rise Multifamily Housing are estimated for the AM and PM peak hours of traffic by the number of dwellings (see Table 1). Trips generated by General Office are estimated for the AM and PM peak hours of traffic by the leasable square footage available (see Table 1). A reduction for the existing single family home was not considered for trip generation, to be conservative.

Trip generation estimates for Low-Rise Multifamily Housing and General Office were prepared using published rates from *Trip Generation Manual, 10th Edition* (Institute of Transportation Engineers, Washington, 2017).

It was estimated that the proposed development will generate:

- 8 two-way trips (7 entering and 1 exiting) during the AM peak hour; and,
- 9 two-way trips (1 entering and 8 exiting) during the PM peak hour.

Table 1– Proposed Site Trip Generation

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
Multifamily Housing (Low-Rise) (Land Use 220)	4 Units	0.11	0.35	0.35	0.21	0	1	1	1
General Office (Land Use 710)	8.0 KGLA	1.00	0.16	0.18	0.97	8	1	1	8
Trip Generation Estimate for Existing Site						8	2	2	9
10% Reduction in Trip Estimate for Non-Auto Modes ⁵						1	1	1	1
Total Primary Trips Generated by the Proposed Redeveloped Site						7	1	1	8
Notes: 1. Land Use Code 220 and 710 rates and equations are from <i>Trip Generation, 10th Edition, (Institute of Transportation Engineers, Washington, 2017)</i> . 2. "Number of Dwelling Units" for Multifamily Housing. "Gross Leasable Area x 1000 SF" for General Office. 3. Trip generation rates are 'vehicles per hour unit'. 4. Trips generated are 'vehicles per hour' for AM and PM peak hours. 5. In 2011, approximately 11% of trips were made by transit or using active transportation in the Outer Suburban Area of Halifax. The Halifax Integrated Mobility Plan has a 14% target for non-auto trips within the Outer Suburban Area of Halifax by 2031 (Page 40, IMP, 2017). A conservative reduction of 10% was used to account for non-auto trips (transit, bicycle and walking trips) generated to the site.									

ACCESS REVIEW

The proposed site is expected to have the same access configuration as the existing residential driveway. Currently, the site has a driveway access that is perpendicular to Highway 2 and is on a consistent grade. The proposed driveway was reviewed for stopping site distance and appear to be adequate. The approximate sightlines from the proposed driveway are shown in Photo 3 and 4.



Photo 3 – Looking South (to the right) on Highway 2 from the approximate Site Access



Photo 4 – Looking North (to the left) on Highway 2 from the approximate Site Access

SUMMARY

1. Plans are being prepared for a four-unit townhouse and a separate 8,000 ft² office space building on a 1.37-acre site located at 3195 Highway 2 in Fall River, Nova Scotia.
2. Vehicular access to the site is expected to be from a full access driveway on Highway 2. The available sightlines appear adequate for both directions on Highway 2.
3. Trip generation estimates were prepared using rates published in *Trip Generation Manual, 10th Edition* (Institute of Transportation Engineers, Washington, 2017) and it was estimated that the proposed site will generate:
 - 8 two-way trips (7 entering and 1 exiting) during the AM peak hour; and,
 - 9 two-way trips (1 entering and 8 exiting) during the PM peak hour.

CONCLUSION

4. The proposed development is not expected to have any significant impact to levels of performance of the regional street system or on adjacent streets and intersections, including Fall River Road at Trunk 2, Highway 102 / Highway 118 interchanges and Lockview Road at McPherson Road.

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.

