



Project 171-00927 Task 4

June 13, 2017

Mr. Cesar Saleh, P. Eng.
VP Planning and Design
W.M. Fares Architects
3480 Joseph Howe Drive, 5th Floor
HALIFAX NS B3L 4H7

RE: Traffic Impact Statement for the Proposed Multi-Tenant Residential Building, Site of Our Lady of Lebanon Church and 3834, 3838, and 3844 Joseph Howe Drive, Halifax

Dear Mr. Saleh:

W M Fares Architects is preparing plans to redevelop the Our Lady of Lebanon Church site just south of the Fairview Overpass on Joseph Howe Drive, as well as three lots south of the church site now occupied by single family residential buildings (3834, 3838, and 3844 Joseph Howe Drive). The existing buildings will be demolished and replaced by a 105 unit multi-tenant building with a site driveway on Joseph Howe Drive and a four unit residential building with a site driveway on McFatridge Road (Figure 1). This is the Traffic Impact Statement (TIS) required to accompany the development application.

Development Site Description - The proposed development site (Figure 1) is on the west side of Joseph Howe Drive with the south part of the site frontage on a two-way section of street; the north part of the site is adjacent to one-way sections of street consisting of exit ramps from the Fairview Overpass. There are now three driveways on the Joseph Howe Drive frontage, one for civic number 3834, a shared driveway for 3838 and 3844, and the existing church driveway. The site also has frontage on McFatridge Road at the west side of the site (Figure 1) where an existing driveway provides access to about 15 parking spaces at the west side of the church building.

Joseph Howe Drive Site Access - The three existing driveways on Joseph Howe Drive will be removed, with appropriate reinstatement of curbing and grass boulevard, and a new site driveway to provide access and egress for approximately 119 parking spaces will be provided at the south end of the site (Figure 1, and Photos 1 and 2). The street has curb, gutter, and sidewalks with four travel lanes at this location. Visibility is very good on the northbound approach to the driveway (Photo 2), and the sight distance on the inside of the curve on the southbound approach (Photo 1), which is expected to be approximately 80 meters after construction, is adequate for this location.



Photo 1 - Looking left (north) towards the Fairview Overpass from the proposed site driveway at the south site boundary.



Photo 2 - Looking right (south) towards the Dutch Village Road intersection from the proposed site driveway at the south site boundary.

McFatridge Road Site Access - The existing parking lot driveway on McFatridge Road west of the church building will be retained as the site driveway for the proposed four unit apartment building (Figure 1). There is good visibility on both McFatridge Road approaches to the existing driveway as illustrated in Photos 3 and 4.



Photo 3 - Looking left on McFatridge Road from the existing driveway at the west end of the development site.



Photo 4 - Looking right on McFatridge Road towards Main Avenue from the existing driveway at the west end of the site.

Traffic Volumes - A turning movement count obtained by HRM at the Joseph Howe Drive / Dutch Village Road intersection south of the site during mid-September 2014 indicates the following two-way volumes on Joseph Howe Drive near the proposed site driveway:

- AM peak hour - 2535 vph (1475 NB and 1060 SB)
- PM peak hour - 2520 vph (1040 NB and 1480 SB).

Transit Services - Many Halifax Transit routes provide service on Joseph Howe Drive adjacent to the site, as well as on Main Avenue northwest of the site.

Trip Generation - Trip generation estimates for the proposed 105 multi-unit residential building with frontage on Joseph Howe Drive, and the four unit building with frontage on McFatridge Road, prepared using published trip generation rates and equations from *Trip Generation, 9th Edition*, are included in Table 1.

Table 1 - Trip Generation Estimates for Proposed Development									
Land Use ¹	Units	Trip Generation Rates ²				Trips Generated ²			
		AM Peak		PM Peak		AM Peak		PM Peak	
		In	Out	In	Out	In	Out	In	Out
Trip Generation Estimates for the Proposed 105 Unit Building with Driveway on Joseph Howe Drive									
Mid-Rise Apartment (Land Use 223)	105 Apts	Equations from Pages 387 and 388				9	21	23	17
Trip Generation Estimates for the Proposed 4 Unit Building with Driveway on McFatridge Road									
Apartment (Land Use 220)	4 Apts	0.10	0.41	0.40	0.22	0	2	2	1
NOTES: 1. Rates and equations are for the indicated Land Use Codes, <i>Trip Generation, 9th Edition</i> , Institute of Transportation Engineers, 2012. 2. Rates are 'vehicles per hour per unit'; trips generated are 'vehicles per hour for peak hours'..									

It is estimated that the proposed 105 unit apartment building on Joseph Howe Drive will generate 30 two-way vehicle trips (9 entering and 21 exiting) during the AM peak hour and 40 two-way vehicle trips (23 entering and 17 exiting) during the PM peak hour.

It is estimated that the proposed four unit apartment building on McFatridge Road will generate two two-way vehicle trips (zero entering and two exiting) during the AM peak hour and three two-way vehicle trips (two entering and one exiting) during the PM peak hour.

While the existing Our Lady of Lebanon Church site generates trips at both the Joseph Howe Drive and McFatridge Road driveways for church and social functions at various time throughout the week, the church site does not normally generate any significant vehicle trips during weekday AM and PM peak periods.

Summary -

1. The proposed development includes demolition of the Our Lady of Lebanon Church building and single family residential buildings (3834, 3838, and 3844 Joseph Howe Drive) to provide space for construction of a 105 unit multi-tenant building with a site driveway on Joseph Howe Drive and a four unit residential building with a site driveway on McFatridge Road.
2. Three existing site driveways on Joseph Howe Drive will be removed, with appropriate reinstatement of curbing and grass boulevard, and a new site driveway is proposed at the south end of the site to serve the 105 unit building. The existing parking lot driveway on McFatridge Road west of the church building will be retained as the site driveway for the proposed four unit apartment building.
3. It is estimated that the proposed 105 unit apartment building on Joseph Howe Drive will generate 30 two-way vehicle trips (9 entering and 21 exiting) during the AM peak hour and 40 two-way vehicle trips (23 entering and 17 exiting) during the PM peak hour.
4. It is estimated that the proposed four unit apartment building on McFatridge Road will generate two two-way vehicle trips (zero entering and two exiting) during the AM peak hour and three two-way vehicle trips (two entering and one exiting) during the PM peak hour.
5. Two-way volumes on Joseph Howe Drive near the proposed site driveway include:
 - AM peak hour - 2535 vph (1475 NB and 1060 SB)
 - PM peak hour - 2520 vph (1040 NB and 1480 SB).

Conclusions -

6. While peak hourly volumes are high on Joseph Howe Drive, the low to moderate numbers of site generated trips are not expected to have a significant impact on the operation of adjacent streets or intersections.
7. The very low number of site generated trips for the proposed four unit building will not affect the operation of McFatridge Road.

Recommendation -

8. Since visibility on the inside of the curve on the Joseph Howe Drive southbound approach to the driveway (Figure 1) could be restricted by landscaping features, ensure that design of landscaping along the curved front of the proposed building does not obstruct visibility.

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

Sincerely:



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

