MEMORANDUM

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To: Mr. Marcel Denommé
Vice President of Land Development
Lioness Developments Inc.

From: Lee Jablonski, P.Eng.

RE: 2723 Lancaster Road
Lioness Developments Inc.
Zoning By-Law Amendment
Noise Assessment Letter

Date: November 13, 2018

Job No.: 28440

CC: Ms. Christa Jones
Land Development Coordinator
Urbandale

INTRODUCTION

Lioness Developments Inc. (Lioness) has retained the services of J.L. Richards & Associates Limited (JLR) to prepare a noise assessment letter in support of a Zoning By-law Amendment Application for the rezoning of the 0.68 ha property located at 2723 Lancaster Road in the City of Ottawa. This letter has been prepared in accordance with the Ministry of the Environment and Climate Change (MOECC) Environmental Noise Guidelines NPC-300 and the City of Ottawa Environmental Noise Control Guidelines (approved by City Council January 2016).

SITE DESCRIPTION AND BACKGROUND

The subject property is located at 2723 Lancaster Road within the urban limits of the City of Ottawa. The subject site consists of one building centred within the property limits with parking available on all four sides of the building. Existing Light Industrial and Heavy Industrial developments surround the subject site. Lancaster Road is located southwest of the building entrance and a CN railway track is located northeast of the building and rear parking area.

Lioness desires to modify the existing use of the property to add a place of worship within the existing building footprint. The current zoning of the subject property is Light Industrial.

TRANSPORTATION NOISE

The proposed zoning amendment at 2723 Lancaster Road is adding a noise-sensitive land use in the form of a 'Place of Worship' into the existing building. The following table outlines indoor noise level limits per The City of Ottawa Environmental Noise Control Guidelines (ENCG) and the MOECC NPC-300.

Table 1: Indoor Noise Limit for Surface Transportation

Type of Space	Time Period	Leq (dBA)	
		Road	Rail
Theatres, Places of Worship, Libraries, Conference Rooms, etc.	07:00-23:00	45	40

When the sound levels are equal to or less than the specified criteria, per the City of Ottawa ENCG and/or MOECC NPC-300, no noise attenuation (control) measures are required.

Figure 1 – Location Plan

ROAD NOISE

Lancaster Road is the only transportation (road) noise source within 100 m of 2723 Lancaster Road. Using Schedule 'E' and Annex 1 of the City of Ottawa Official Plan, Lancaster Road is classified as a Collector. Comparing this classification to Table 'B1' (Part 4, Appendix 'B') of the ENCG, a value of 8,000 vehicles per day was determined to be an appropriate Average Annual Daily Total (AADT). The existing 2-Storey building is approximately 41.9 m away from the centreline of Lancaster Road, with exposure angles of -71 degrees and 56 degrees. A predicted noise level at the plane of window (front) was calculated using STAMSON to be 54.9 dBA.

RAIL NOISE

At the rear of 2723 Lancaster Road, there is an existing Railway spur that is classified as active but with very few to no trains on a daily basis. For the purposes of this noise assessment, JLR is assuming 1 train (engine) with 1 car per day at a speed of 20 km/hr and a distance of 35.5 m away from the plane of window (rear). Using STAMSON,

the predicted noise level was calculated to be 40.8 dBA. It should be noted that the proposed 'Place of Worship' is expected be located at the front of the existing building with no direct exposure to the railway spur.

CONCLUSION

Standard window and wall construction will reduce the plane of window noise levels by 10 dBA. With this reduction, indoor noise levels for both road and rail sources will meet the noise limits as shown in Table 1.

Predicted noise levels will not exceed indoor noise limits of the City's ENCG or the MOECC's NPC-300. No noise attenuation measures are required to protect the proposed 'Place of Worship' noise sensitive land use.

J.L. RICHARDS & ASSOCIATES LIMITED

Prepared by:

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Reviewed by:

LICENSED PROFESSIONAL ENGINEER
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13 Nov 2018
PROVINCE OF ONTARIO

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