



**Peer Review of Sound Study for
230 1st Street-81 Washington Avenue
PB 23-0577**

Prepared for:

**Miami Beach Planning Department
1700 Convention Center Drive
Miami Beach, Florida 33139**

Prepared by:

A handwritten signature in black ink, appearing to read "Jesse J. Ehnert", written over a horizontal line.

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April 11, 2023

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1 Introduction

This report documents a peer review of an acoustic study conducted for the City of Miami Beach related to an application for a Conditional Use Permit for a Neighborhood Impact Establishment at 81 Washington Avenue. The reviewed report, prepared by Criterion Acoustics (CA) and dated March 27, 2023, describes the project, acoustic measurements made on site, and analyses based on SoundPLAN modeling of potential impact of the outdoor dining area on the environs.

2 Project Description

The proposed French restaurant, Le Jardin Boucherie, would be located in an existing three-story building at the southeast corner of the intersection of Washington Avenue and 1st Street, in the South of Fifth neighborhood. It is planned to consist of three areas:

- (1) Exterior garden seating with approximately 172 seats
- (2) Ground level interior dining room with approximately 92 seats
- (3) Second level interior dining room with approximately 122 seats

The hours of operation are planned to be 11 am to 5 pm for lunch and 5 pm to midnight for dinner. According to the Letter of Intent (LOI), “[o]nly pre-recorded background music played at ambient background levels will be utilized.” The LOI also indicates that patrons will be asked to wait for their vehicles inside the restaurant when they are ready to leave in order to minimize noise from patrons queuing for the valet.

The nearest residential neighbors are identified in the report as being at 75 Washington Avenue immediately to the south of the restaurant. There also appears to be a multi-story condominium or apartment building at 100 Washington Avenue at the northwest corner of the intersection of Washington Avenue and 1st Street. These two developments appear to be the most likely to be impacted by the proposed restaurant.

3 Discussion

The CA sound study presents results utilizing the commercial SoundPLAN acoustic modeling program using an exterior sound system design developed by SUPPORT 360 which includes full-range loudspeakers with 8” bass drivers and subwoofers with 10” bass drivers. The model appears to have been built well and we have no reason to question its accuracy or results.

We do, however, question claims about the existing ambient sound level at the site, which is reported as 64 to 65 dBA and 74 to 76 dBC at street level near the restaurant property. These measurements were taken between 9:00 pm and 9:30 pm, purportedly on December 8, 2023. Assuming this was actually 2022, then this was a Thursday evening. These levels are reported as equivalent sound levels, presumably measured over up to 15 minutes. Equivalent sound levels are essentially average sound levels over a defined period and, as such, are particularly influenced by loud sounds (e.g., passing cars). A more appropriate sound level metric to assess the background sound level would have been the 90th-percentile exceeded level, L₉₀. We believe this level would have likely been a few

decibels lower and provided a better assessment of the sound level without the influence of transient sounds. Additionally, it is very likely that the ambient sound level is different at different times of day and, in fact, may be lower nearer midnight in this area given the lack of nightclubs in the area.

Given the potential for existing ambient sound levels at the site being lower than reported, particularly later in the evening, the sound levels produced by the SoundPLAN model would be more obtrusive. For example, sound levels at the north façade at 75 Washington Avenue are modeled as being 71 to 72 dBA, which would certainly be above the existing ambient. Additionally, sound levels along the residential façade at 100 Washington Avenue are modeled as being approximately 59 dBA, which may be near the existing ambient, particularly later at night.

In light of the SoundPLAN modeling results, CA makes several recommendations to mitigate noise issues in the area. These recommendations include reducing levels predicted by the model by seven decibels, limits on loudspeaker sizes as well as elimination of subwoofers from the exterior dining area, tight controls or elimination of loudspeakers closest to the south property line, and installation of a sound level limiter.

4 Conclusions

In conclusion, we proffer that the sound study report may overestimate the existing ambient sound level at the site, particularly later at night (i.e., near midnight versus 9 pm, when the survey was conducted) but do agree with several recommendations made.

Specifically, we encourage adherence to the following recommendations made in the report concerning the outdoor audio system:

- Distributed loudspeakers should have 6" or smaller bass drivers and be mounted low and downward facing.
- Cardioid loudspeakers should be used if possible.
- Subwoofers should be eliminated from the design.
- Loudspeakers near the south property line should be moved, eliminated, or significantly lowered in level.
- A digital tamper-resistant sound level limiter, which is only accessible by offsite corporate management, should be installed.

Additionally, sound level calibration should be performed after the system is installed. This calibration should incorporate the following features:

- Calibration should maintain an ambient sound level during system operation of no greater than 65 dBA in the dining area to allow for normal patron conversation. This would be consistent with the statement in the LOI that "[o]nly pre-recorded background music played at ambient background levels will be utilized."
- Calibration should address and establish C-weighted (dBC) as well as A-weighted (dBA) sound levels so that low-frequency bass is controlled.
- Calibration should consider residences at 100 Washington Avenue as well as at 75 Washington Avenue.