



March 27, 2025

David M. Duber |  
District Lodging Capital  
1990 K Street NW, Suite 320  
Washington, D.C. 20006

**RE: HUNT DOG KENNEL - OLNEY, MARYLAND**  
**Noise Study and Analysis**

Dear Mr. Duber:

Miller, Beam & Paganelli, Inc. has performed a site survey and noise analysis for the proposed dog kennel and boarding facility to be constructed at the site of the existing Spring Garden center at 5011 Olney-Laytonsville Road Parcel P600. The purpose of the noise study is to ensure that the proposed facility will meet the County Code Chapter 31B acoustical requirements. A summary of the noise criteria, analysis, and results are presented below.

Criteria

Section 31B-5 of the Montgomery County Code defines the maximum allowable noise levels as shown in the table below, with nighttime defined as the hours from 9 p.m. to 7 a.m. weekdays and 9 p.m. to 9 a.m. weekends and holidays. Many noise codes have modifiers to the general noise code limits based on the character of certain sounds, such as tonality, though these sound qualities are subjective and interpreted by enforcement personnel when applied.

<i>Maximum Allowable Noise Levels (dBA) for Receiving Noise Areas</i>		
	<i>Daytime</i>	<i>Nighttime</i>
Non-residential noise area	67	62
Residential noise area	65	55

Exhibit 13  
OZAH Case No: CU 26-03

### Noise Analysis of Proposed Kennel Building

It is our understanding that the existing one story building near the center of the property will be used for general dog daytime care and boarding use. Thus, an assessment of the existing building shell's noise attenuation was performed by using custom loudspeakers to play loud, continuous, broadband (pink) noise at several locations within the building, and then measuring the noise levels both within and outside the building. The difference in these levels is the transmission loss the building provides. The building's exterior walls are primarily CMU block, which will provides much better sound attenuation then the building's windows and doors, and therefore the performance is controlled by the windows and doors.

We understand the plan is for the kennel facility to be designed to house nominally 80 dogs during the day and nominally 50 overnight. It should be noted that for this or any similar type kennel of veterinarian facility, the dogs do not normally continuously bark. They will typically bark only when excited such as feeding time with the barking typically limited to a modest period of time. Also, though the number of dogs will have some impact on the overall noise, a moderate increase or reduction in the number of dogs will have little effect due to the nature of our perception of sound and the logarithmic scale by which it is measured. For example, doubling the number of dogs barking at a time would produce twice the acoustical energy (+3 dB). But we do not perceive this increase as being twice as loud, instead a doubling of energy is perceived to be a little louder.

In our testing, our speakers produced noise levels in the 97 - 101dBA range inside the building, which is estimated (based on past experience/measurement of other dog kennel facilities) to be at or louder than the noise level expected for a large group (80) of dogs barking. When measured outside with windows and doors closed and at a distance of nominally 50 feet from the building, noise levels were measured to be approximately 55 dBA. Noise levels will diminish with increased distance such that at the property lines (approximately 200 feet from the building to property lines to the northeast and northwest in the direction of the closest residential areas) noise levels will be comfortably less than the allowable nighttime noise code level of 55 dBA (residential zoning).

### Noise Level from Outdoor Use Areas

In assessing potential noise impact, there are many factors involved with only some of these factors objective. Noise disturbance from any source is dependent on noise source level, character, any intervening barriers or structures, background noise levels, and the sensitivity of the receiver. Many of these elements vary over time and thus actual potential for disturbance is complex. Factors such as character and sensitivity are subjective. Objective elements are primarily source levels, reduction from distance, barriers, or structures, and background levels (which vary over time). Also,

as noted above, for this or any similar type kennel of veterinarian facility, the dogs do not normally continuously bark. When outdoors, on a leash, they normally also do not bark unless excited by an event.

Daytime background noise levels near the middle of the property and away from the closest roads were typically averaging in the 45-50 dBA range with occasional peaks caused by both vehicular traffic on the nearby roads and by overhead aircraft.

Based on measurements made of dogs outdoors at other kennels we would expect when barking average noise levels to be less than 60 dBA with maximum levels in the mid 65 dBA range at a distance of 150 feet. Thus, with the closest existing residential property boundaries more than 500 feet from the outdoor kennel area, and with any outdoor dog activity occurring during the daytime only, occasional noise levels from dogs barking outdoors are expected to be much lower than the allowable daytime level of 65 dBA due to the increased distance alone. Locating the outdoor dog areas behind any structures or incorporating barriers would provide additional noise mitigation.

### Conclusion

A site survey and acoustical analysis was performed for the proposed conversion of the existing one story building at the development site into a kennel facility. Measurements indicated that the existing structure will provide sufficient noise mitigation that the expected typical "worst case" dog noise condition would result in noise levels that meet the nighttime noise code level at approximately 50 feet from the building and be noticeably less at the more distant residential property boundaries. Occasional noise from dogs in the outdoor area are expected to be less than the daytime allowable level of 65 dBA at the closest existing residential properties. Thus, the project is expected to comply with the Montgomery County code requirements of Section 31B.

Please contact us if there are any questions regarding the above noise assessment.

Sincerely,



Douglas P. Koehn, M.S.  
Senior Consultant