



July 5, 2019

Patrick Neal
Chairman Executive Committee
Neal Communities
5800 Lakewood Ranch Blvd N, Sarasota, FL 34240

Dear Mr. Neal,

The following is a summary of Keane Acoustics' exterior noise impact analysis for the proposed residential development in Venice, FL.

Introduction

It is understood that a noise study has been requested by the City of Venice but there are no city specific numerical requirements for the study. Given the nature of the project

"The Noise Guidebook", a reference document for implementing the Department of Housing and Urban Development's Noise Policy", prepared by The Environmental Planning Division, Office of Environment and Energy has been used as a guideline for the analysis.

Analysis Methodology

The analysis will focus on roadway noise, with an emphasis the contribution of the Northbound Lane of I-75. The southwestern corner of the proposed development appears to be the most susceptible location for noise impact based on the close proximity of proposed residences to I-75. Noise contributions from Laurel Road and Border Road will be significantly lower based on truck traffic counts (which are the prime contributor to traffic noise levels).

Sound levels measured on site (focusing on the SW corner of the property) will be compared to the guidelines found in "The Noise Guidebook" to identify any noise impacts. The results will then be used to determine if additional noise mitigation is required.

Project Noise Criteria

The metric used for this analysis is the Day-Night Average Sound Level (DNL) per "The Noise Guidebook". The recommended maximum DNL for residential buildings is 65.

The following narrative in italics is taken from the U.S. Department of Housing and Urban Development - Chapter 5 Noise Assessment Guidelines. Each of the three noise impact categories will be applied to the proposed residential community.

The degree of acceptability of the noise environment at a site is determined by the outdoor day-night average sound level (DNL) in decibels (dB).

The noise environment at a site will come under one of three categories:

Acceptable (DNL not exceeding 65 dBA) *The noise exposure may be of some concern but common building constructions will make the indoor environment acceptable and the outdoor environment will be reasonably pleasant for recreation and play.*

The results of the sound level measurements show that most of the proposed residential locations are in this category. A review of the measured sound levels indicates that the quantity of trees between the I-75 northbound roadway appears to be sufficient in reducing sound levels at the properties closest to the roadway.

Typically a maximum equivalent indoor sound level of 40 dBA Leq is recommended for sleeping areas. Based on prior experience, impact rated windows should be sufficient to meet the 40 dBA Leq guideline for this noise impact category.

Normally Unacceptable (DNL above 65 but not exceeding 75 decibels) *The noise exposure is significantly more severe; barriers may be necessary between the site and prominent noise sources to make the outdoor environment acceptable; special building constructions may be necessary to ensure that people Indoors are sufficiently protected from outdoor noise.*

An area at the very SW corner of the proposed development falls into this category (See shaded area in Exhibit B). The 2 or 3 single family dwellings proposed for this location should be given special attention to the quantity, orientation of, and glazing configuration of windows specifically facing the Interstate roadway.

Unacceptable (DNL above 75 decibels) *The noise exposure at the site is so severe that the construction cost to make the Indoor noise environment acceptable may be prohibitive and the outdoor environment would still be Unacceptable.*

Sound measurements indicate that none of the proposed properties fall into this category.

Conclusion

Based on this evaluation, less than 1% of the proposed residential community will exceed the anticipated DNL of 65. Careful selection of windows for these properties will ensure noise impact is minimized.

Best regards,



Michael Keane, P.E.
President, Keane Acoustics, Inc.

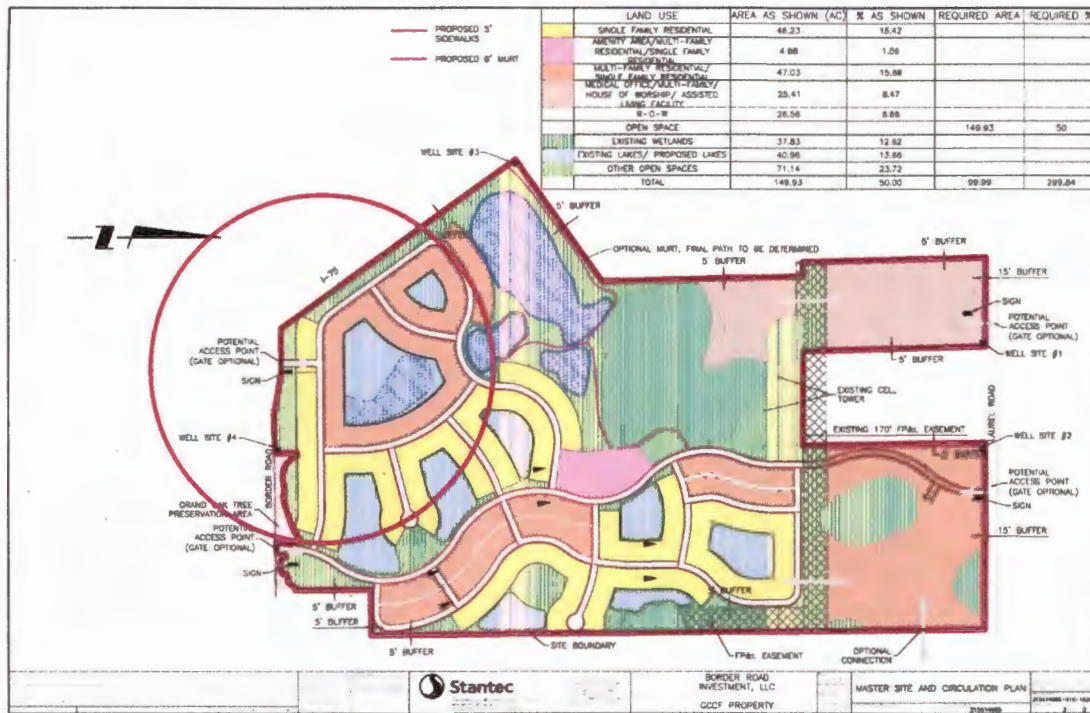
**Exhibit A – Proposed Community Map****Area of interest circled in red.**



Exhibit B – Sound Levels and Impacts on Proposed Community Map

Note small red hatched area showing anticipated noise impacted properties above DNL of 65.

Measured sound levels in dBA shown.