RE: The Alcove sound study

On August 7, 2019 at approximately 1:30pm I conducted a sound study at The Alcove (35W655 Tollgate Rd, Dundee, IL). Results of my study are as follows.

All results are with a calibrated meter C, weighted.

Ambient noise levels around the house in the non wooded areas of the property averaged around 68db. Ambient levels at property driveway entrance was 64db. This level is constant to the northeast corner of the property. At the driveway entrance to the property at 35W590 Tollgate Rd a measurement of 67db was recorded. Directly east of the building on The Alcove’s property, at the eastern property line, ambient noise levels where 68db. The main contribution to the noise levels at all stated locations is the neighboring tollway to the south of The Alcove property.

To conduct the remainder of the study I assembled a typical wedding DJ style sound system set up to simulate actual wedding levels. This system included full range speakers as well as a subwoofer. I used top 40 style music that is popular wedding dance music for my readings. Music was played back through system at 101db at 1 meter. With music playing at this level I measured 68db at The Alcove properties driveway entrance. At the north east corner of the property sound levels measured 66db.
At the driveway entrance to 35W590 Tollgate, I registered 67db. At the eastern property line adjacent to The Alcove building, I registered 68db.

Conclusion: At the property lines of The Alcove there is a 2-3db increase in noise level with music playing at party volume. This is nearly an undetectable level to the human ear. It is worth noting, that the contributing factor to this rise was solely the very low bass of the program material and subwoofer and the slight increase could be mitigated easily by a slight decrease in subwoofer output.

About me. I am an audio engineer with over 20 years experience in live and recorded sound. I have been involved in thousands of concerts and sound system set ups, installations, and designs. If there are any further questions regarding my findings, you can contact me at (773) 865-2823 or mr.eric.block@gmail.com.