

## Acoustic Recommendation

17 Fenwick Crescent, Goulburn, NSW

24-09-2024

**DA:** TBA

**Acoustic Report:** Urban Adobe Developments (Report ID: PS106653-ACO-REP-001 Rev0)  
dated 14/12/2017

**Development:** Modification to DA application for approved construction of townhouses

**TO:** *Goulburn Mulwaree Council*

Soundscape have been engaged by Infinite Projects Fenwick Pty Ltd to review and provide recommendations based on the above Acoustic Assessment for the Modification to DA application for approved construction of townhouses at 17 Fenwick Crescent, Goulburn, NSW. Specifically, Soundscape were engaged to assess the noise impact of the neighbouring tennis courts on Townhouses 1-5 (block A). The previous acoustic report provided recommendations to attenuate noise from the tennis courts as follows:

- Installation of a 1.8m high acoustic barrier along the eastern boundary with a minimum mass of 12kg/m<sup>2</sup>
- External doors and windows on the upper floors should have an acoustic rating of  $R_w$  35, which will require acoustically rated glass and full perimeter acoustic seals
- The "Offensive noise test" from the EPA Noise Guide for Local Government for the assessment of sporting facilities was specified as the selected criteria used to assess the tennis courts, however there is no explanation or data to demonstrate its application.

Soundscape completed a review of the report and the specific recommendations above in reference to:

- EPA Noise Policy for Industry 2017
- Noise Guide for Local Government
- Recommended design sound levels and reverberation times for building interiors (AS/NZS 2107:2000)
- Goulburn Mulwaree Council DCP

### Updated noise survey:

Soundscape completed a noise survey on the site from 11/07/2024 to 18/07/2024. The noise logging location was on the boundary fence of the tennis courts as shown in figure 1. The logger noise survey results are provided in Table 1.

Analysis of data from known matches showed an LAeq between 47 and 51dBA. An LAeq15 of 51dBA has been conservatively adopted for this assessment. Noise modelling has been conducted using software following the ISO-9613 (2024) calculation methodology to predict the noise impact of the tennis courts on the townhouses (Figure 1).

## Results and recommendations:

1. The sound pressure level at the façade of townhouses 1, 4 and 5 is predicted to be 44dBA on the lower floors and 44-45dBA at the façade on the upper floors. It is accepted that a façade with an open window attenuates 10dBA resulting in an internal noise level of 34-35dBA.
2. The recommended design sound levels for living areas (lower floors) is 30-40dBA (Table 2). The recommended design sound levels for sleeping areas (upper floors) is 30-35dBA.
3. The noise impact of the tennis courts on townhouses 1-5 is within the recommended range for living and sleeping areas.
4. It is our opinion that in light of the actual noise measurements, the proposed acoustic barrier is not required and that standard glazing for the upper floors will be sufficient.

For further information regarding this recommendation, please don't hesitate to contact the undersigned.

Kind regards,



Kurtis Ferry

B. Eng (Civil) (Hons.) | MAAS – Australian Acoustic Society  
0422 924 297 | kurtis@soundscape.com.au



# Supplementary Data

17 Fenwick Crescent, Goulburn, NSW



**Figure 1:** Noise model results showing logger location and the predicted impact of the tennis courts on the approved townhouses (T1-T5).

**Table 1:** Noise Survey Results (dBA)

Time of Day	LAeq,15min	RBL
Day (7:00–18:00)	51	42
Evening (18:00–22:00)	45	39
Night (22:00–7:00)	44	33

**Table 2:** Recommended design sound levels

Type of occupancy/activity	Design Sound Level (LAeq)
Common Areas	45 - 50
Living Areas	30 - 40
Sleeping Areas	30 - 35
Work Areas	35 - 40