



19 August 2026

Reference: 2026055 L01A 210 Learoyd Road, Willawong ENV - Council RFI Response

Brisbane City Council
PO Box 1434
Brisbane, QLD 4001

RE: 210 Learoyd Road, Willawong
Acoustic Response to outstanding issue (ID: 7147061)

This letter is in response to the Brisbane City Council email regarding the acoustic report assessment and outstanding issue (id: 7147061), sent on 15 July 2026 for the proposed Badminton Centre at 210 Learoyd Road, Willawong. The acoustic issues raised by Council, and the response from Acoustic Works are detailed as follows:

Acoustic Reports prepared by Acoustic Works dated 21 May 2026, 30 June 2026 and 1 July 2026 have been reviewed. The revised reports include additional assessment of internal badminton centre activities, including badminton gameplay, player conversations and coaching voice noise, with the 1 July 2026 report superseding the 30 June 2026 report and removing whistle noise from the assessment.

While the revised reports address some issues raised through the assessment process, a number of assumptions remain insufficiently justified, particularly the adopted building attenuation assumptions and whether a reasonable worst-case operational scenario has been assessed. Accordingly, several issues identified during EMO's review of the Acoustic Report dated 21 May 2026 remain outstanding, and further information is required.

Provide a further revised Noise Impact Assessment report (or addendum) addressing the following:

Issue

i) Further justify and demonstrate that a reasonable worst-case operational scenario has been assessed for the proposed 14-court badminton facility. This should include justification of the operational assumptions adopted, including simultaneous use of all courts, patron numbers, tournaments or larger events (where applicable), patron dispersal and car park activity at closing time.

Response

The proposed development has been confirmed by the client that it is not intended for competitive tournaments, spectator events, concerts or similar activities that would have large gatherings of people. However, in order to assess worst-case use scenario, Acoustic Works have updated the environmental impact assessment taking into account the noise from a spectator crowd of 80 people and combined badminton activities across 14 courts simultaneously. The results are contained in Section 7 of the revised acoustic report.

To predict the noise impacts, the noise level for badminton activities was based on previous measurements of 2 double matches over 2 courts and proportionally increased to 14 double matches over 14 courts. Other noises related to badminton activities such as racquet drops or

player voice were assumed to occurred over short periods of time, based on previous observations at other badminton facilities. All carparking areas have been assessed based on corresponding car movements, door closures, voice conversation and car starts for each time period.

Issue

ii) Clarify and justify the adopted building attenuation assumption of approximately 22 dB. Provide supporting details of the facade construction and demonstrate how glazing, windows, doors, louvres, vents and other potential noise breakout paths have been considered within the assessment. Confirm any facade performance requirements necessary to achieve the assumed attenuation.

Response

All entry doors and windows are confirmed to be closed at all times by the client, except for ingress and egress of people to and from the building. Based on the provided information and architectural drawings, a calculation of single octave composite transmission loss is included in Section 7 of the updated acoustic report (2026055 R01G). The calculation takes into account any room correction, directivity, distance attenuation, composite transmission loss of the proposed material for building construction and other factors as per the calculation method in Bies & Hanson 3rd Engineering Noise Control 3rd Edition.

The updated assessment indicates that compliance is predicted on the condition that the wall located adjacent to the western boundary is constructed using a wall system with a minimum acoustic rating of Rw41.

Issue

iii) Further justify the adopted internal activity noise source levels and assumptions used within the assessment. While the revised reports include additional indoor activity noise sources, insufficient justification has been provided that the adopted source levels and occupancy assumptions are representative of the intended operation of the facility and the operational scenario assessed.

Response

A maximum number of 14 badminton courts is proposed to be included for the development. At maximum capacity, a conservative approach would be to assume that each court is occupied by 4 players to form a doubles match. The noise level measured from previous measurements of 2 double matches over 2 courts was increased proportionally for 14 double matches over 14 courts.

In addition, additional noise sources such as player voices and racquet drops were observed at other previous badminton facilities and were included in the noise assessment.

Issue

iv) Clarify the design and operation of the mezzanine observation deck, including whether the area is enclosed or open to the main playing area, and justify that the adopted noise source and occupancy assumptions are representative of the intended use.

Response

The mezzanine observation deck is not intended for spectators, however based on the area of approximate 200m², a spectator crowd of 80 people were considered to in order to determine hypothetical noise impacts as requested by Council.

Based on this, the noise impacts were calculated to the sensitive receiver locations and presented in Section 7 of the acoustic report. Recommendations for building construction to reduce noise impacts are included in Section 8 of the revised report.

Issue

v) Clarify whether amplification systems, PA systems, announcement speakers or similar equipment are proposed. Where such equipment is proposed, include these sources within the assessment and provide any associated acoustic recommendations required to achieve compliance.

Response

It was confirmed by the client that no amplification systems, PA systems, announcement speakers or similar equipment are proposed and considered for the development. As a result, noise associated with these equipment were not included in the noise impact assessment.

We trust this information meets your current requirements. If you should have any further queries, please do not hesitate to contact us.

Yours faithfully,



Khoi Phan
Acoustic Consultant

acousticworks)))