

MEMORANDUM



230286-Crows Nest OSD Site B-Acoustic Responce-R0

TO: Anna Limnios **DATE:** 26 March 2025
COMPANY: Third.i
FROM: Ben White
SUBJECT: **Crowns Nest Over Station Development, Site B**
Acoustic Response to State Desing Review Panel – 12th March – Review 5

CONFIDENTIALITY

This document is confidential and may contain legally privileged information. If you are not a named or authorised recipient you must not read, copy, distribute or act in reliance on it. If you have received this document in error, please telephone our operator immediately and return the document by mail

This report details the acoustic review of the items included in the *State Desing Review Panel – 12th March – Review 5* and dated 21st March 2025.

This review has included the acoustic items included in Items 2. b. and 4 as well as the PWNA *Crows Nest Over Station Development – Site B, Noise and Vibration Impact Assessment (Acoustic Report)* with reference 230286-Crows Nest OSD Site B-Noise Impact Assessment-R4 and dated 30 October 2024.

Items within the *State Desing Review Panel – 12th March – Review 5* includes the following:

1. Item 2. b. –
 - b. Test alternative approaches such as protected balconies, which employ fixed glazing with permanent openings to provide natural ventilation, wind protection, and passive acoustic attenuation
2. Item 4 –
 4. Clarify how the natural ventilation and acoustic strategies meet the requirements of BASIX, the NCC and the ADG through coordinated technical reports to support the proposal.

Acoustic comments in response to the items above are provided in the following:

1. The acoustic design strategy for the building includes façade elements which includes glass and solid elements which will ensure internal noise levels compliant with relevant project requirements (including those included in the Acoustic Report).

Based on the noise levels measured at the site the requirement for an alternative outside air source have been triggered and detailed in Section 5.2.5 of the Acoustic Report.

2. The assessment included in the Acoustic Report includes the assessment which has been completed in accordance with the relevant standards, including the following:
 - a. Stage Environmental Planning Policy (Transport Infrastructure) SEPP 2007 as well as the subsequent SEPP 2021.
 - b. NSW Department of Planning and Environments - Development near Rail Corridors and Busy Roads – Interim Guideline 2008
 - c. North Sydney Council DCP.
 - d. The 2022 BCA.
 - e. Apartment Desing Guide
3. There is no reference or requirements in any of the standards detailed above for the requirement of *passive acoustic attenuation* to be included in the project, as suggested in point 2 of the State Desing Review Panel letter.
4. The proposed façade design and methodology includes that which is consistent with the project SSD Masterplan acoustic report, including the *Noise and Vibration Impact Report*, included in the documentation which includes the following section:

7.1.1.1 Ventilation

It is commonly accepted that a window that is open to provide ventilation to a room provides 10 dB(A) noise reduction from outside to inside.

The external road traffic noise levels would not allow for the internal noise design targets to be achieved with windows open. Consequently, windows must be closed to ensure internal noise criteria can be satisfied. This is likely to be required on all levels of all facades of each building however a detailed study of acoustic façade and fresh air ventilation performance will be required as part of the detailed design. Optimisation of the building façade performance would occur as part of this process.

It is therefore recommended that an alternative means of ventilation be provided for residential spaces on road traffic noise affected facades. An alternative means of ventilation may take the form of:

- Air conditioning with an outside/fresh air component (not a conventional 'split' system).
- Mechanical ventilation drawn from a 'quiet' side of the building and/or with an acoustically attenuated intake path.

The design of fresh air ventilation for the proposal should consider and incorporate the requirements of the BCA and the State Environmental Planning Policy No 65 - Design Quality of Residential Apartment Development (SEPP 65).

Based on the details included in the sites Acoustic Report the assessment includes the requirements for the project which is compliant with all relevant standards as well as the acoustic items raised within the *State Design Review Panel – 12th March – Review 5* correspondence.

If you have any additional questions, please contact the author below.

Regards

A handwritten signature in blue ink that reads "BG White". The letters are cursive and connected.

Ben White
Director

Pulse White Noise Acoustics