

**BEFORE THE ASHBURTON DISTRICT COUNCIL**

**IN THE MATTER** of the Resource Management Act 1991

**AND**

**IN THE MATTER** of applications by **Ashburton District Council**  
for:

- Land use consent at 329 West Street to address the non-compliances associated with the replacement and relocation of the air conditioning equipment (LUC25/0028)
- Section 127 Change of conditions 1, 14, 31 and 33 of LUC09/0025 at 329 West Street (LCA25/0007)

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**BRIEF OF EVIDENCE OF WILLIAM PETER REEVE  
ON BEHALF OF JOINT SUBMITTERS**

**ACOUSTICS**

**Dated 29 October 2025**

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**Counsel Acting: Alanya Limmer KC**  
Bridgeside Chambers  
P O Box 3180  
Christchurch 8140

Email: [alanya@bridgeside.co.nz](mailto:alanya@bridgeside.co.nz)  
Telephone: 64 21 812 811

## **Introduction**

1. My name is William Peter Reeve. I am employed as a Senior Associate Acoustic Engineer with Acoustic Engineering Services.
2. I hold a Bachelor of Engineering with Honours from the University of Auckland. I am a member of the Acoustical Society of New Zealand.
3. I have over 13 years' experience in the field of acoustic engineering consultancy and have been involved with many environmental noise assessments on behalf of applicants, submitters and as a peer reviewer for Councils. My experience includes noise to boundary assessments for mechanical plant across a range of building types and uses.
4. I have some historic involvement with this site, having supported the contractor with their construction noise monitoring and reporting obligations.
5. I have been asked to provide independent expert evidence on behalf of the following submitters, who filed a joint (and, I understand, the only) submission on these consent applications:
  - (a) A D & E J Shearer (124 Wills Street)
  - (b) Haworth House Limited (128 Wills Street)
  - (c) D & D Sauer (130 Wills Street)
  - (d) K Smith (121 Camerson Street)
  - (e) D & N Chilton (123 Cameron Street)
  - (f) C & M Ross (127 Cameron Street)

**(Joint Submitters).**

## **Code of Conduct**

6. I have read of the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023, Section 9. I have complied with it when preparing this brief of evidence. I confirm this evidence is within my area of expertise, other than where I state that I am relying on another person, and that I have not omitted to consider any material facts known to me that might alter or detract from the opinions I express.

## **Scope of my Evidence**

7. My evidence addresses:
  - (a) What areas of uncertainty there are, that might affect predicted noise effects;
  - (b) How the proposed conditions of consent might be changed to ensure the noise outcome predicted, is the noise outcome achieved.
8. I have reviewed the following documents to prepare my evidence:
  - (a) The Application and Appendix 4 Marshall Day Acoustics (MDA) Assessment of Noise Effects dated the 24<sup>th</sup> of July 2024.
  - (b) The acoustic questions contained in the section 92(1) request email from Nick Boyes on the 4<sup>th</sup> of August 2025, and subsequent letter with MDA response dated the 27<sup>th</sup> of August 2025.
  - (c) The Section 42A Report and Appendix One – Acoustic Review Report prepared by Darran Humpheson of Tonkin and Taylor.
  - (d) The evidence of Stewart Fletcher, Sam Seatter, Jon Farren and Renee Julius on behalf of the Applicant.

## **Areas of uncertainty that could affect final noise levels**

9. Achievement of the noise levels predicted by the application relies primarily on whether the noise characteristics of the final equipment, and how it will operate, are consistent with what has been modelled to date. Exactly where the equipment is sited in the outdoor compound, relative to the barrier, and on the rooftop may also result in small changes to predicted noise levels.
10. As Mr Farren notes in paragraph 46 of his evidence, there have been some changes to the proposal since the modelling presented in the original MDA Noise Assessment and reproduced in his evidence. This includes an additional heat pump, which Mr Seatter describes as providing redundancy in the event maintenance is required.
11. I also understand from the evidence of Mr Seatter (for example in paragraph 16.3), that final equipment selections are still to be made. There may therefore be further changes as the design is finalised.
12. At this stage, the key areas of uncertainty that are apparent from my review are:

- (a) Whether the initial heat pump selections for the new heat pumps will be carried through into the final design, and their noise emission characteristics.
  - (b) Whether the manufacturer data for the Carrier 30RQS090 model heat pump is reliable (HP1). MDA measured noise levels on site from the Carrier 30RQS78 model heat pump (HP2) that were 4 dB louder than the manufacturer data indicated – as recorded in section 5.1 of the Assessment of Noise Effects. While MDA used the higher measured values in their assessment for this model, it appears that no such adjustment was made for the other Carrier heat pump – and manufacturer data has been relied upon. If the other Carrier unit exhibits a similar trend, this could lead to higher predicted noise levels.
  - (c) How loud the replacement VRF units on the roof will be and when they will operate. In his evidence, Mr Seatter notes that there are *“three existing VRF units to be upgraded with similar plant in same location”* (paragraph 15.3). I note that areas of the dwelling at 127 Cameron Street that are closest to the rooftop plant area, may also receive lower levels of traffic noise because of shielding from the road.
  - (d) To what extent the outdoor condenser unit on the rooftop for the dehumidifiers has been reviewed in combination with other rooftop plant. Mr Seatter indicates that *“the noise level of the preliminary design condenser unit selections will be significantly lower than existing plant noise levels on the rooftop plant deck”*. I do not have sufficient information to comment on how likely this is.
  - (e) Whether any of the equipment will have tonal characteristics which would attract a +5 dB penalty in accordance with NZS 6802:2008. I note that tonality has previously been reviewed by Mr Humpheson based on now superseded plant selections.
13. Given that predicted noise levels at 130 Wills Street are within 2 dB of the proposed noise limit, and the remaining uncertainty I have described above, I consider that there should be a relatively robust process to ensure that noise levels remain consistent with the proposal, as the design is finalised.
14. I note that Paragraph 12 of Renee Julius’ evidence suggests the ability of the Ashburton Art Gallery and Heritage Centre to host events is currently limited by the existing HVAC plant. If there is likely to be a change in demand on the HVAC units once installed, this will need to be accounted for in any revised assessment.

## How to ensure the noise levels predicted, are achieved

15. I have reviewed the proposed changes to the Conditions of Consent as recorded on pages 20 and 21 of the s42A report. I have the following comments.
16. I agree with paragraph 51 of the evidence of Mr Farren, that the measurement location should be “*when measured at any point within the adjacent residentially zoned sites*” as, when accompanied with a requirement for noise to be measured and assessed in accordance with NZS6801:2008 and NZS6802:2008, this will provide appropriate certainty as to where and how noise would be measured and assessed moving forward.
17. As outlined above, the design has already moved on, compared to the latest specific situation modelled by Mr Farren, and final equipment selections have not yet been made. While the Applicant has indicated that they will continue to review the design to ensure compliance is achieved – there is currently no condition which requires that to occur.
18. There is then the matter of possible measurements to verify that installed equipment is operating with the noise emissions as expected, upon installation and commissioning (given, for example the MDA measurements of the existing HP1 indicated it was always generating more noise than manufacturer data indicated).
19. Finally, there is the question of what checks should be in place, to ensure that noise emissions do not increase in the future. For example, it appears that equipment was modified / replaced previously, without revisiting the issue of noise emissions.
20. Accordingly, I consider that Conditions which cover the following issues may be appropriate in this instance:
  - (a) A Condition which requires the final design and equipment selections to be reviewed prior to installation, and a report to be provided confirming there will be compliance with the permitted activity noise limits. This should cover likely worst-case operation of equipment (including for events).
  - (b) A Condition which requires a noise measurement exercise to be conducted and a report submitted within one month of the installation and commissioning of the equipment, confirming that compliance has been achieved.
  - (c) A Condition which requires further assessment or monitoring, with various triggers – such as the modification or replacement of any aspect of the equipment, or if the Council receives a credible enquiry as to whether noise emissions have increased. Alternatively, a requirement for regular reoccurring monitoring could be used instead of specific triggers.

21. I have some residual concerns about the wording proposed in the section 42A report, which presumes that “additional mitigation” is all that will be required. As has occurred previously, compliance may not be practicable, or mitigation may take many months to design and install. While there may be some operational controls / setbacks that could be employed, this would require the input of a mechanical engineer. The meaning of mitigation and compliance “to the satisfaction of the Council” is also unclear.
22. I also consider there would be benefit in expanding the relevant condition so it sets out what immediate action will be taken to achieve compliance while longer-term options are investigated. Regular updates (such as fortnightly) would likely be appropriate too, to give all parties comfort about what is being worked towards.

**William Reeve**

29 October 2025