

**Before an Independent Hearing
Commissioner Appointed by
Christchurch City Council**

In the Matter

of the Resource Management Act
1991

And

In the Matter

of a resource consent application to
establish an agricultural equipment
sales, servicing and training facility at
33 and 69 School Road, Yaldhurst

**Statement of Evidence of
Rewa Jane Satory
for Landpower Group**

Dated: 16 May 2022

Amanda Dewar | Barrister

PO Box 7
Christchurch 8140
Email: amanda@amandadewar.com
Phone: 0212429175

TABLE OF CONTENTS

TABLE OF CONTENTS	2
INTRODUCTION	3
Qualifications and Experience	3
SCOPE OF EVIDENCE	3
BACKGROUND	4
ACOUSTIC CRITERIA	4
EXPECTED NOISE LEVELS	5
RESPONSE TO COUNCIL OFFICER REPORT	7
CONCLUSION	8
ANNEXURE A	9

INTRODUCTION

Qualifications and Experience

1. My name is Rewa Satory. I am a Senior Acoustic Engineer with Acoustic Engineering Services Limited (AES), an acoustic engineering consultancy with head office based in Christchurch. I hold a Bachelor of Engineering from the University of Canterbury. I am a Member of the Acoustical Society of New Zealand.
2. I have over six years' experience in the field of acoustic engineering consultancy and have been involved with a large number of environmental noise assessment projects throughout New Zealand on behalf of applicants, submitters and as a peer reviewer for Councils.
3. My experience includes assessing noise levels from many activities including the operation of workshops and heavy vehicle movements on sites in Christchurch, Selwyn, Queenstown Lakes, Southland and Central Otago Districts.
4. While this matter is not before the Environment Court, I have read the Code of Conduct for Expert Witnesses (Part 7 of the Environment Court Code of Practice), and I agree to comply with it. I confirm this evidence is within my area of expertise, except where I state I am relying on facts or information provided by another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

SCOPE OF EVIDENCE

5. My evidence discusses the following:
 - (a) Background and proposal
 - (b) Acceptable noise levels
 - (c) Expected noise emissions
 - (d) Response to S42A report and submissions

BACKGROUND

6. In November 2019 AES was engaged by Richard Wilson of Whyte Group Investments Ltd on behalf of Landpower Group (the Applicant) to provide acoustic engineering advice in relation to a proposal to establish and operate a new purpose-built rural machinery sales and service facility at Yaldhurst.
7. I prepared an Assessment of Environmental Noise Effects report (AES reference: AC19336 – 05 – R2, dated 10 March 2021).

ACOUSTIC CRITERIA

8. In that report I considered guidance from the District Plan, NZS 6802:2008, the WHO, and ambient noise measurements. The relevant District Plan noise limits are as follows:

For noise emissions when received within the notional boundary of dwellings:

Daytime (0700 to 2200 hours) 50 dB L_{Aeq}

Night-time (2200 to 0700 hours) 40 dB L_{Aeq} and 65 dB L_{Amax}

For noise emissions received at the boundary of another site:

Daytime (0700 to 2200 hours) 55 dB L_{Aeq}

Night-time (2200 to 0700 hours) 45 dB L_{Aeq} and 70 dB L_{Amax}

9. I concluded that where noise levels associated with the proposal comply with the District Plan noise limits the noise effects would be minimal.
10. In addition, occasional night-time periods where noise levels would exceed the District Plan limits but remain less than 45 dB L_{Aeq} are expected to have a minimal effect when received at the notional boundary of dwellings. This is because this level of noise is not expected to cause sleep disturbance, even when people are sleeping with their windows open and there is already occasional heavy vehicle noise in the area. I provide more details about this below.

EXPECTED NOISE LEVELS

11. My report stated that noise sources associated with the facility are expected to be:
 - (a) Noise from staff and customer vehicles travelling about on the site (engine noise, road/tyre noise, door slams, engine starts and the like).
 - (b) Noise generated by delivery and farm vehicles moving about on the site (engine noise, exhaust noise, road/tyre noise, reversing beepers, and the like).
 - (c) Noise generated by the vehicle workshop (pneumatic tools, vehicle hoists, compressed air lines, grinding and the like).
 - (d) Noise generated by water blasters cleaning the vehicles as part of the normal operation of the dealership and for repairs.
 - (e) Mechanical plant noise associated with the various activities including outdoor condensers, and extract systems.
12. I noted that the proposed activity will operate largely within daytime hours, with occasional night time activity as discussed below.
13. I undertook modelling using SoundPLAN computational noise modelling to calculate the propagation of noise from these activities, taking into account the topography of the area, and sound power levels for each of the noise sources.
14. The proposal includes 1.0 metre bund and 1.5 metre acoustic fence along the site's northern boundary with School Road parallel with the main workshop and service yard area, and a 2.5 metre acoustic fence located between the yard and the grassed staff area as shown in the site layout in Appendix A.

Daytime activity 0700 – 2200 hours

15. Noise from heavy vehicles in the daytime and operation of the workshop will produce the highest noise levels with up to 52 dB L_{Aeq} at the boundary of the properties at 52 – 62 School Road and up to 50 dB L_{Aeq} at the notional boundary of the dwelling at 56 School Road. Noise levels at other neighbouring properties will be lower and noise from light vehicles is expected to be lower again.

16. Therefore, noise from daytime operation of the activity is expected to comply with the District Plan limits at all times.
17. Noise from other sources including the wash bay and staff in the outdoor areas is also expected to comply with the District Plan limits

Night-time activity 2200 – 0700 hours

18. Light staff vehicles may travel on site during the night-time period to be ready for work at 0700 hours when the facility opens or if there is a callout during the night-time as Landpower operates a 24-hour service. Noise from up to 10 light vehicles accessing the carpark and 2 light vehicles accessing the service yard via the Hasketts Road entrance is expected to be less than 40 dB L_{Aeq} at all site boundaries and notional boundaries and will therefore comply with the District Plan night-time limits.
19. The workshop will also occasionally operate during the night-time and when this occurs the workshop doors will be closed. Noise levels are expected to comply with the District Plan limits at all nearby properties when this occurs.
20. The majority of night-time large machinery repair works will occur off site, however very occasionally the machinery may need to be brought into the workshop for urgent repairs – and so a heavy vehicle may be driven into the workshop. If this occurs the noise levels may exceed the District Plan boundary limit of 45 dB L_{Aeq} at Yaldhurst Domain, 52 and 56 School Road and at 363 Hasketts Road and the District Plan notional boundary limit of 40 dB L_{Aeq} at 45 and 56 School Road and at 363 Hasketts Road where the noise levels are expected to be 41 – 44 dB L_{Aeq} .
21. Based on information provided by the applicant I understand this would occur less than once a month.
22. As the resulting noise levels remain below 45 dB L_{Aeq} at the notional boundary of all dwellings (as above, this is below the level where sleep disturbance is expected), these events are only expected to occur infrequently, and there is already occasional night time heavy vehicle noise in the area, I expect the effects will be minimal.
23. It is reasonable to expect noise from mechanical plant including HVAC and compressors will be able to be selected, installed and designed to comply with the District Plan day and night-time limits.

RESPONSE TO COUNCIL OFFICER REPORT

24. The S42A report summarises comments from Ms Paula Kloosterman and Agnes van der Erf, Environmental Health Officers.
25. Ms Kloosterman provided initial comment on our Assessment of Environmental Noise Effects report (AC19336 – 05 – R2, dated 10 March 2021). She stated that *“Overall the methodology and reasoning of the report are sound and no concerns are noted as to the conclusion drawn of minimal impact of neighbouring properties.”*
26. Ms van der Erf provided a memo on 15 November 2021 where she concludes noise is not an adverse environmental effect of the proposal. There therefore appears to be a high level of agreement as to the expected noise effects of the proposal.

RESPONSE TO SUBMITTERS

27. 15 submissions were received regarding the proposal 6 in support, 6 opposing and 3 neutral. 4 of these mentioned noise or acoustic matters, and I have commented on each of these below.
28. An anonymous submitter states *“...I am concerned that too much noise will be generated from the workshop which will travel across our rural residential property.”* and *“...there is no bund around the residential property on the corner of Hasketts Road and School Road.”* The Council have confirmed that the boundary and notional boundary of that submitter are some 100 and 200 metres from the facility respectively. Therefore noise at that property is expected to comply with the District Plan limits at all times without a bund to the residential property on the corner of Hasketts Road and School Road, and I do not consider that any further mitigation is required.
29. A submitter on School Road supports the proposal and mentions that the development would help reduce noise from traffic on West Coast Road received at his property. I agree that screening associated with the development will be a beneficial effect for a number of receivers.
30. Yaldhurst Residents Association are neutral to the proposal and state that noise levels should be the same as the Rural Zone. My report confirms noise

will generally comply with the Rural Zone limits, and occasional night time heavy vehicle noise is already experienced in the area.

31. Ministry of Education (MOE), neutral submission, supports the construction of the bund/acoustic fence on the northern boundary.

CONCLUSION

32. Noise levels due to light and heavy vehicles including farm machinery moving on site, use of the workshop and ancillary activities during the daytime is expected to comply with the District Plan daytime limits at all nearby boundaries and notional boundaries.
33. Noise from light vehicles including staff vehicles entering the site before 0700 hours or if called into the workshop during the night-time period, and workshop use with the doors closed is expected to comply with the District Plan night-time limits at all nearby boundaries and notional boundaries.
34. Heavy vehicles are expected to enter the site rarely during the night-time period. If this does occur, the noise levels may exceed the District Plan limits at some site and notional boundaries. However, as the resulting noise levels remain below 45 dB L_{Aeq} at the notional boundary of all dwellings, these events are expected to occur infrequently, and there is already occasional night time heavy vehicle noise in the area, I expect the effects will be minimal.

Rewa Jane Satory
16 May 2022

ANNEXURE A

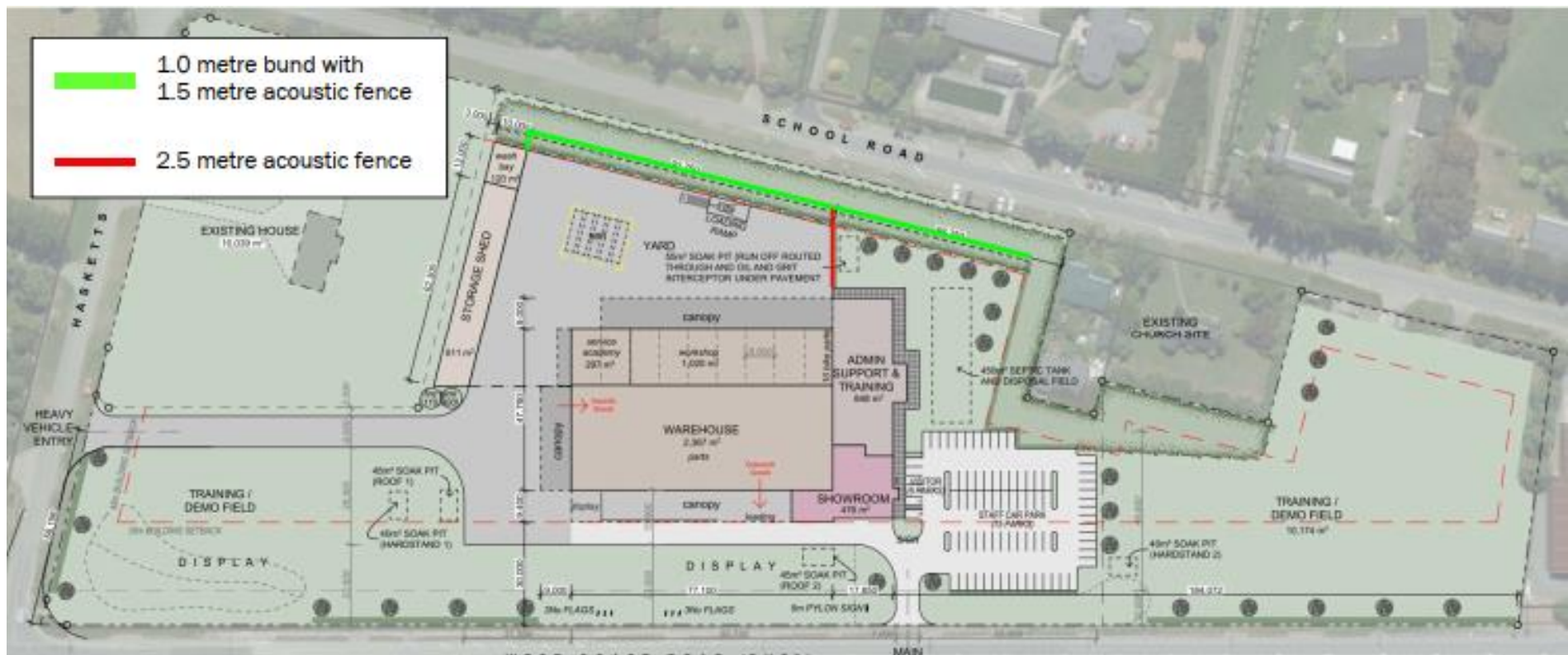


Figure A – Site layout with acoustic barriers