

Waimakariri District Council Proposed Waimakariri District Plan

Recommendations of the PDP Hearings Panel

Recommendation Report 13

Hearing Stream 5 Part 2: District-wide matters – NOISE – Noise

This report should be read in conjunction with **Report 1** and **Recommendation Report 2**.

Report 1 contains an explanation of how the recommendations in all subsequent reports have been developed and presented, along with a glossary of terms used throughout the reports, a record of all Panel Minutes, a record of the recommendation reports and a summary of overarching recommendations. It does not contain any recommendations per se.

Recommendation Report 2 contains the PDP Panel's recommendations on the PDP's Part 2: District-wide Matters – Strategic directions - SD Strategic directions objectives and policies.

Appendix 1: Schedule of attendances.

Appendix 2: Recommended amendments to the Proposed Plan - Tracked from notified version (provisions not consequentially renumbered)

The Hearings Panel for the purposes of **Hearing Stream 5** comprised Commissioners Gina Sweetman (Chair), Allan Cubitt, Gary Rae, Megen McKay, Neville Atkinson and Niki Mealings.

1. Introduction

Report outline and approach

1. This is Report 13 of 37 Recommendation Reports prepared by the PDP Hearings Panel appointed to hear and make recommendations on submissions to the Proposed Waimakariri District Plan (PDP).
2. The report addresses the objective, policies and the advice note relating to the NOISE – NOISE Chapter and the submissions received on those provisions. The relevant provisions are:
 - Introduction
 - Objectives NOISE-O1 to NOISE-O3
 - Policies NOISE-P1 to NOISE-P6
 - Rules NOISE-R1 – NOISE-R20
 - Standards NOISE-S1 and NOISE-R23
 - Advice Notes NOISE-AN1
 - Matters of Discretion NOISE-MD1 – NOISE-MD4
3. We have structured our discussion on this topic as follows:
 - (a) **Section 2** summarises key contextual matters, including relevant provisions and key issues/themes in submissions;
 - (b) **Sections 3 - 9** contains our evaluation of key issues and recommended amendments to provisions; and
 - (c) **Section 10** contains our conclusions.
4. This Recommendation Report contains the following appendices:
 - (a) **Appendix 1: Schedule of attendances** at the hearing on this topic. We refer to the parties concerned and the evidence they presented throughout this Recommendation Report, where relevant.
 - (b) **Appendix 2: Recommended amendments to the Proposed Plan – Tracked from notified version.** This sets out the final amendments we recommend be made to the PDP provisions relating to this topic. The amendments show the specific wording of the amendments we have recommended and are shown in a 'tracked change' format showing changes from the notified version of the PDP for ease of reference. Where whole provisions have been deleted or added, we have not shown any consequential renumbering, as this method maintains the integrity of how the submitters and s42A report authors have referred to specific provisions, and our analysis of these in the Recommendation Reports. New whole provisions are prefaced with the term 'new' and deleted provisions are shown as struck out, with no subsequential renumbering in either case.

5. We record that we have taken into account all submissions on the provisions relating to the NOISE – Noise chapter in our deliberations. In general, submissions in support of the PDP have not been discussed but are accepted or accepted in part. More detailed descriptions of the submissions and key issues can be found in the relevant s42A Reports, Responses to Preliminary Questions and written Reply Reports, which are available on the Council’s website.
6. In accordance with the approach set out in Report 1, this Report focuses only on ‘exceptions’, where we do not agree fully or in part with the s42A report author’s recommendations and / or reasons, and / or have additional discussion and reasons in respect to a particular submission point, evidence at the hearing, or another matter. Original submissions have been accepted or rejected as recommended by the s42A report author unless otherwise stated in our Recommendation Reports. Further submissions are either accepted or rejected in conformance with our recommendations on the original submission to which the further submission relates.
7. The requirements in clause 10 of the First Schedule of the Act and s32AA are relevant to our considerations of the PDP provisions and the submissions received on those provisions. These are outlined in full in Report 1. In summary, these provisions require among other things:
 - (a) our evaluation to be focussed on changes to the proposed provisions arising since the notification of the PDP and its s32 reports;
 - (b) the provisions to be examined as to whether they are the most appropriate way to achieve the objectives; and
 - (c) as part of that examination, that:
 - i. reasonable alternatives within the scope afforded by submissions on the provisions and corresponding evidence are considered;
 - ii. the efficiency and effectiveness of the provisions is assessed;
 - iii. the reasons for our recommendations are summarised; and
 - iv. our report contains a level of detail commensurate with the scale and significance of the changes recommended.
8. We have not produced a separate evaluation report under s32AA. Where we have adopted the recommendations of Council’s s42A report authors, we have adopted their reasoning, unless expressly stated otherwise. This includes the s32AA assessments attached to the relevant s42A Reports and/or Reply Reports. Those reports are part of the public record and are available on the Council website. Where our recommendation differs from the s42A report authors’ recommendations, we have incorporated our s32AA evaluation into the body of our report as part of our reasons for recommended amendments, as opposed to including this in a separate table or appendix.
9. A fuller discussion of our approach in this respect is set out in Section 5 of Report 1.

2. Summary of provisions and key issues

Outline of matters addressed in this section

10. In this section, we provide relevant context around which our evaluation of the notified provisions and submissions received on them is based. Our discussion includes:
 - (a) summary of relevant provisions;
 - (b) themes raised in submissions; and
 - (c) identification of key issues for our subsequent evaluation.

Submissions

11. Twenty-nine original submissions and 11 further submissions were received on the NOISE – Noise Chapter and associated Maps. The 29 submissions raised 165 submission points.

Key issues

12. We have grouped the issues in contention addressed in this report in line with the s42A report itself, while also rationalising the issues where these relate to more than one provision (for example in respect to setbacks from road and rail corridors). The exception to following the order of the s42A report is the McAlpines Ltd submission 226.2 which was not addressed in the s42A report, but it was addressed through the hearing and Reply Report.
 - (a) General – Chapter specific
 - i. North Canterbury Clay Target
 - ii. McAlpines Ltd
 - iii. Frost fans
 - (b) Definitions
 - i. Noise sensitive activity
 - (c) NOISE-O2 and NOISE-P1
 - (d) New Policy
 - (e) NOISE-R2
 - (f) NOISE-R7
 - (g) NOISE-R16, new NOISE-S1, NOISE-MD3, and new NOISE-SCHED1 – Construction Schedule
 - (h) Minor Errors
13. In saying that, each of these groupings have a number of sub-categories within them, which we equally respond to.

3. General – Chapter Specific

Overview

14. The Panel's recommended general amendments to the Noise Chapter, over and above the amendments recommended by the s42A report author, is summarised below:

Provision	Panel recommendations
NOISE-R1 NOISE-R21 Planning Maps	Rename the Timber Processing Noise Contour as the Timber Processing Noise Overlay and apply it to the land adjacent to the McAlpine's sawmill. Amend the Planning Maps to include the new Overlay applying to the McAlpine's sawmill.
New Rule	Introduce a new rule to manage new noise sensitive activities near frost fans, which includes reference to lawfully established activities.

Amendments and reasons

15. The submissions we consider here are those seeking amendments which were general to the Chapter. In summary, these were:
 - (a) Introduce a new sports facility overlay and a rule for the North Canterbury Clay Target Association, similar to the rule that provides for activities at Woodford Glen Speedway (Noise-R12).
 - (b) Amending the subdivision standards for Rural Lifestyle Zone (RLZ) to recognise and protect the McAlpines sawmill in Southbrook, Rangiora, from reverse sensitivity effects from rural land subdivision and amend RLZ development standards to recognise and protect the sawmill from reverse sensitivity¹.
 - (c) Introduce a new rule to manage new noise sensitive activities near frost fans.²

16. We have addressed these separately below.

North Canterbury Clay Target Association

17. The North Canterbury Clay Target Association (NCCTA) submission is traversed by Ms Manhire, the Council report author, in section 3.4 of the s42A report, pages 3 to 5 of the preliminary responses to questions and paragraphs 22 to 40 of the Reply Report. We were also presented evidence by the submitter during the course of the hearing.
18. We were made aware that the NCCTA holds a resource consent application, which limits the number of shoot meetings and practices per year. Through a certificate of compliance process, this was increased to 52 meetings and practices per year. The submission sought to increase the number of practices and the hours of operation. The report author's initial view was that the best route to address the submitter's concerns was through a resource consent application. She also expressed that she could only support an overlay being applied if noise monitoring and consultation had occurred with neighbouring properties.
19. We were advised that the Council currently alerts prospective purchasers of land within 1km of the NCTTA of the resource consent. From our viewing of the Proposed District Plan, the Woodford Glen Overlay applies specifically to their site at 39 Doubledays Road, Kaiapoi, and does not extend beyond its boundaries.

¹ McAlpines Ltd [226.2]

² HortNZ [295.115]

20. We noted the report author's advice that the Woodford Glen Speedway does not have a resource consent for its racing activity, beyond the operation of a market on Sundays. The permitted activity rule NOISE-R12 therefore acts to legitimise the Speedway activity, with no specific noise restrictions. So, on the face of it, the relief sought by the submitter in the submission was to create a bespoke rule and overlay for the NCCTA of a similar ilk to the Speedway. We were advised by the report author that the standards the NCCTA is seeking go beyond the resource consent and certificate of compliance and would mean that the activity is not subject to the general noise standards. We were also advised that the submitter did not seek the equivalent of NOISE-R22, which makes new residential and minor-residential units a non-complying activity within the Speedway Noise Contour.
21. However, the submitter included a further increase in the number of practices and their end times during the hearing. The material presented at the hearing included what appeared to be an overlay extending by 1 to 1.5km beyond the site. The submitter provided a detailed presentation setting out the issues that the NCCTA were facing with their operation and an explanation of the relief sought. This did not include any expert evidence.
22. In the report author's view, these changes presented at the hearing were beyond the scope of the submission. However, she acknowledged based on legal advice³ that what was sought through the submission itself would not necessarily give rise to issues of natural justice or fair process. However, she was concerned that the greater level of activity sought than what is consented may give rise to other considerations, such as the assessment of any greater effects of the activity. She was also concerned that an alert layer that extended beyond the site would be beyond the scope of the submission.
23. Mr Camp, acoustic expert for the Council, expressed the view at the hearing that the Plan should restrict new residential development in proximity to the site and considered that this would best be done by way of direct engagement with the NCCTA. In his view, any gun club should aim to have a noise contour around it, given the difficulties in obtaining new resource consents. In their Appendix 4 to the Reply Report, Mr Camp and Mr Farren expressed that a noise contour could be seen as legitimising a level of noise that is unacceptable to existing neighbours, and setting rules should be negotiated by the parties. They were also not satisfied that the NCCTA had adequately investigated noise mitigation measures on the site.
24. The report author's final position was that there is scope to include a NCCTA specific rule that does not go beyond the scope of the submission, along with an overlay specific to the site; however, she was of the view that she did not have the evidence to draft such a rule.
25. We agree with the report author that what was presented at the hearing was beyond the scope of the relief sought through the submission. In particular, the submission did not seek any overlay that would extend beyond the site that would restrict noise

³ This was appended as Appendix 5 to the Reply Report.

sensitive activities from establishing nearby to them. Further, the additional conditions sought in the evidence are beyond the scope of what was sought through the submission, and it would not be natural justice to include them without providing potentially affected persons the opportunity to submit on them. We also agree with the report author that we had no evidence before us about the impact a rule would have compared to the resource consent and certificate of compliance, particularly in terms of the expanded number of practices and hours.

26. We are also unclear of what the benefits the Overlay would bring over and above the existing resource consent and the current practice of the Council to alert prospective property owners of the resource consent when seeking a LIM. The submission did not seek an equivalent rule to NOISE-R22 which applies to new residential units within the Speedway Noise Contour.
27. We are sympathetic, however, to the submitter's situation, in that they are a lawfully established activity that is being increasingly surrounded by noise sensitive activities which would affect the NCCTA's viability. It seems an anomaly that the Council did not give consideration through the PDP process whether it was appropriate to provide any particular overlay to this established and consented activity while it did so for the unconsented Speedway, and other activities such as Daikens and the Rangiora Airfield. The same applies to the McAlpine site which we address below.
28. Therefore, we recommend that the NCCTA's submission be rejected, for the reasons given by the report author. However, we strongly recommend that the Council and the submitter liaise following the PDP being made operative with a view to consider the merits of applying an overlay to the site and adjacent properties, along with a rule that manages the establishment of new noise sensitive activities in its proximity.

McAlpines Ltd

29. This submission on the face of it sought to amend subdivision standards and impose new standards to protect the sawmill from reverse sensitivity effects. These submission points had largely been allocated to be reported on through the Rural Zone chapter, and as such, these were not addressed in the s42A report. However, the submitter sought to present their case through the NOISE chapter hearing, seeking that the Timber Processing Noise Contour be applied to the site and adjoining area, along with a rule managing the establishment of noise sensitive activities. Along with the specific relief sought, the submission also included general relief that the PDP provisions be amended to reflect the issues raised in this submission, being such other relief as may be required to give effect to this submission, including alternative, consequential or necessary amendments to the PDP that address the matters raised by McAlpines.
30. We directed the submitter's and Council's acoustic and planning experts to provide further advice on the McAlpine's submission and relief sought through expert conferencing⁴. We requested the Council report author to address scope through their Reply Report, which they did with the benefit of legal advice. The submitter's legal

⁴ See the two Joint Witness Statements.

counsel provided submissions in response to the Reply Report. We have considered the submitter's evidence and submissions, the joint witness statements, and Council's Reply Report carefully. The final iteration of what we are considering is the Timber Processing Noise Contour being amended to be an Overlay, and NOISE-R21 applying to that Overlay in respect to the McAlpine site and adjacent land.

31. We note that the two acoustic experts agreed on all matters that they conferenced on, concluding that it was appropriate to control potential noise sensitive activities encroaching on the sawmill site and the contour proposed by the submitter was a reasonable location for a control boundary. They agreed it was appropriate to restrict the construction of new noise sensitive activities within the proposed noise contour, with no specific rule controlling noise emissions from the site. The two planners agreed on draft provisions, being the Overlay and NOISE-R21 with minor amendments.
32. However, there was disagreement between the planners as to whether there was scope for the amendments that were the subject to the expert conferencing and joint witness statements. Mr Walsh relied on Mr Fowler's advice and Ms Manhire on the Council's advice.
33. In our view, the relief sought provides for the nuanced approach sought through the evidence. On reading the McAlpine's submission, it is clear that the submitter seeks to impose provisions that would protect the sawmill from reverse sensitivity effects. We consider the provisions sought through the evidence achieve this, albeit in a modified form. As we understand it, there are four residential dwellings in the nearby vicinity (northwest and southwest) and no dwellings in the remainder surrounding rural zones. McAlpine's own two of the four dwellings. The other two are located further away from the site – across a field with a racetrack, with a tree line. We were advised that McAlpine's had not received any noise complaints about their operation. We also noted the planners' agreed statement that any potential consequences of the proposed new provisions would not be significant for affected persons. We note that the proposed overlay would cover a relatively confined area of the Rural Lifestyle Zone, and that that zoning only provides for subdivision to a minimum site area of 4ha, and one dwelling per site.
34. We see no issues of natural justice and fair process. We consider that any persons reading the summary of submissions could have anticipated that there may be restrictions placed on new development so as to manage reverse sensitivity effects on the McAlpine's site. We accept and prefer Mr Fowler's legal submissions in this regard. We also recommend that the new overlay be added, based on the modelled noise contour attached as Appendix A to the JWS of Acoustic Experts, and NOISE-R21 amended as set out in the planners' joint witness statement. We find that these amendments are the most appropriate means of achieving the relevant objectives and policies of the PDP and the RPS, by ensuring that activities within Industrial Zones are not adversely affected by reverse sensitivity effects from noise sensitive activities.

Frost Fans

35. HortNZ⁵ sought the introduction of a new rule to manage the effects of new noise sensitive activities near frost fans. There were no further submissions received. Frost fans themselves are proposed to be a controlled activity under NOISE-R20. The report author recommended that the new rule be accepted, and there was no evidence to the contrary. We agree with the officer's reasons and recommendation that this submission be accepted, and a new rule introduced.
36. In response to Panel questions, we were advised that there are no existing frost fans in the District, and any new ones would be subject to NOISE-R20. To ensure that this rule would not be applied to unconsented frost fans, we recommend adding "lawfully established" into recommended clause 1 to provide that clarity.

4. Definitions – noise sensitive activity

Overview

37. The Panel has no recommended amendments in response to the submissions, beyond those recommended by the s42A report author.

Reasons

38. The submissions we consider here are those seeking amendments in relation to the noise sensitive activity definition⁶, where amendments were sought to refer to educational facilities and add marae and places of worship. This definition was subject to expert conferencing under the topic of "NOISE-R16 and associated matters", with the planners agreeing to include marae and places of worship within the definition. The report author also agreed with changing the reference to educational facilities. We accept these recommendations.
39. What we would like to note is the discussion regarding clause (a) "residential activities other than those in conjunction with rural activities that comply with the rules in the relevant district plan as at 23 August 2008". The only submission on this clause was from Federated Farmers⁷ who sought that it applies to residential activities nearby to rural activities. This clause was raised in evidence by Ms Heppelthwaite for KiwiRail and Waka Kotahi and Mr Lindenberg for Kāinga Ora and Mr Pearson in expert conferencing as being inappropriate in its exemption. From our review of the evidence, we agree with Ms Heppelthwaite, Mr Lindenberg and Mr Pearson as being poor planning practice to exclude dwellings simply because they are associated with a rural activity. However, as agreed in the joint witness statement, there was no scope in their clients' submissions for its deletion. We agree with Ms Manhire that there is no scope from the Federated Farmers submission for its deletion. We recommend that this is a matter that the Council considers amending through a subsequent plan change process.

⁵ 295.115

⁶ Ministry of Education [277.60], KiwiRail [373.6], Federated Farmers [414.11]

⁷ 414.11

5. NOISE-O2, NOISE-P1 and NOISE-P2

Overview

40. The Panel's recommended amendments to NOISE-O2, NOISE-P1 and NOISE-P2, over and above the amendments recommended by the report author, is summarised below:

Provision	Panel recommendations
NOISE-O2	That the objective be amended to refer to "existing noise generating activities subject to any noise control overlay or contour."
NOISE-P1	Replace "minimise" in the title and chapeau of the policy with "manage" That clauses 1 and 2 be amended to refer to "anticipated" function, character and amenity values. That clause 3 be amended to refer to requiring sound insulation for noise sensitive activities and changing existing activities to refer to existing noise generating activities subject to any noise control overlay or contour.
NOISE-P2	That clause 2 be amended to refer to "anticipated" character and amenity values.

Amendments and reasons

41. The submissions we consider here are those from the NCCTA, Daiken, New Zealand Pork, HortNZ, Federated Farmers and Kāinga Ora⁸ to NOISE-O2. We also consider the following submissions on NOISE-P1 from:
- (a) Kāinga Ora⁹, which sought to insert "anticipated" before "amenity values of each zone" in clause 1 and insert "maintain the" before amenity values in clause 2 of NOISE-P1 and insert "anticipated" before character in clause of NOISE-P2; and
 - (b) Fulton Hogan¹⁰ which sought to replace the term "minimise" with "manage" in NOISE-P1 and amend clause 3 to avoid noise sensitive activities in respect to noise from existing activities.
42. NCCTA and Daiken considered that there was a lack of clarity/certainty about what identified existing activities are. New Zealand Pork, HortNZ and Federated Farmers sought that Rural Zones be included. Kāinga Ora sought that the reference to reverse sensitivity be replaced with effects from the incompatible use or development of noise sensitive activities. We record here that we accept the report author's recommendations in respect to the inclusion of Rural Zones and reverse sensitivity and do not address these further.

⁸ 61.3, 145.24, 169.31, 294.111, 414.176, [325.149 – Kāinga Ora had a broad submission across the whole Noise Chapter]

⁹ 325.149

¹⁰ 41.39

43. We agreed with NCCTA and Daiken that the wording was not certain and clear enough and spent some time with the report author questioning how that could be obtained. We were generally satisfied with the final wording set out in the Reply Report; however, for greater clarity and certainty, we have recommended that “and/or” be included between Industrial Zones and existing noise generating activities. As a consequential amendment, we have recommended that clause 3 of Policy NOISE-P1 which also refers to existing activities be amended to “existing noise generating activities subject to a noise control overlay or contour” and that the reference to requiring sound insulation be in respect of noise sensitive activities. We consider these amendments to be within the scope of these submissions.
44. In respect to NOISE-P1, we preferred Mr Ensor’s evidence in respect to Fulton Hogan’s requested relief to replace the term ‘minimise’ with ‘manage’. In his evidence and through questioning, Mr Ensor explained that the use of manage would allow the application of the full effects management hierarchy and allows the clauses in the policy to express how management would occur. We agree with his opinion that this is a more appropriate approach when a policy sets out how effects are to be managed, rather than using minimise.
45. We note that there was no dispute about introducing “maintain” into clause 2. However, Ms Manhire disagreed with Mr Lindenberg for Kāinga Ora’s view that ‘anticipated’ should be introduced before amenity values. Ms Manhire drew on s7(c) of the RMA requirement to have regard to the maintenance and enhancement of amenity values, noting that an activity may already be exceeding the current District Plan noise levels and already adversely affecting amenity values before any anticipated changes.
46. Mr Lindenberg’s view was the inclusion would better align with the language used in the NPS-UD, which recognises that amenity values change over time and change isn’t necessarily an adverse effect.
47. We have discussed the matter of ‘anticipated’ elsewhere in our recommendation reports. A district plan needs to be forward looking, with at least a 10-year outlook. As we have set out, we consider ‘anticipated’ is an appropriate term to use, as it sets out what a zone is anticipated to “look” like in the future.

6. New Policy

Overview

48. The Panel’s recommended new policy, over and above the new policy recommended by the report author, is summarised below:

Provision	Panel recommendations
NOISE-PXX	Add a new policy relating to the “Existing HIZ Processing Activity”

Amendments and reasons

49. Daiken¹¹ sought a new policy to recognise potential for reverse sensitivity effects on the Daiken site. After initially recommending the submission be rejected, the report author then recommended it be accepted in her Reply Report. We accept the report author's recommendation that the policy be included. However, we felt that it could benefit from greater clarity of wording as to where it applies. We have therefore recommended it be amended to read "protect the existing processing plant located between Upper and Lower Sefton Roads from noise sensitive activities located in the adjacent Rural Lifestyle Zone within the HIZ Processing noise contour".
50. We note our agreement with the report author's recommendation in respect to HortNZ¹², noting no evidence was provided during the hearing. In addition to the reasons given by the report author, we also comment that the Rural Chapter contains specific objectives, policies, rules and standard relating to the separation of sensitive activities from certain primary production activities, as well as general boundary setbacks.

7. NOISE-R2

Overview

51. The Panel's recommended amendments to NOISE-R2, over and above the amendments recommended by the report author, is summarised below:

Provision	Panel recommendations
NOISE-R2	Amend the recommended rule to become two separate rules

Amendments and reasons

52. The submission we are considering here is that of NZDF¹³. The Panel noted that the acoustic experts for the Council and NZDF discussed the proposed provisions and evidence following the hearing and came to a general agreement which was set out in the report author's reply report. The Reply Report included an updated recommended rule. The Panel accept the acoustic experts' advice and the report author's recommendation; however, we had concerns of how the rule was structured. We have recommended restructuring the rule into two rules, one permitted and one controlled distinguishing between whether a TMTA involves weapons firing and/or the use of explosives, to provide greater clarity and certainty of its application.

¹¹ 145.25

¹² 295.113

¹³ 166.18

8. NOISE-R7

Overview

53. The Panel's recommended amendments to NOISE-R7, over and above the amendments recommended by the report author, is summarised below:

Provision	Panel recommendations
NOISE-R7	Insert "including aircraft" after "use of agricultural vehicles or equipment"

Amendments and reasons

54. The submissions we consider here are the requests by the NZAAA to:
- (a) Exclude intermittent helicopter movements for agricultural aviation activities¹⁴
 - (b) insert reference to aircraft, or agricultural aircraft, into the rule¹⁵.
55. We accept the report author's advice in respect of NOISE-R4 and the consequential introduction of a new definition for agricultural aviation activities. We preferred the evidence of Mr Michelle for the NZAA that NOISE-R7 should include specific reference to aircraft to ensure that it is clear and certain that agricultural vehicles include aircraft.
56. We note that further submitter the NZ Helicopter Association¹⁶ sought that "including commercial and agricultural aircraft" be inserted into rule NOISE-R7. We accept Ms Manhire's advice that the amendment sought by the NZ Helicopter Association is out of scope, as it sought to amend the relief sought by the NZAAA which is beyond what can be achieved through a further submission.

9. NOISE-R16, new NOISE-S1, NOISE-MD3 and new NOISE-SCHED 1 – Construction Schedule

Overview

57. The Panel's recommended amendments to NOISE-R16 and NOISE-MD3 and new NOISE-S1 and NOISE-SCHED1, over and above the amendments recommended by the report author, is summarised below:

Provision	Panel recommendations
NOISE-R16 and NOISE-MD3	<p>In addition to the amendments recommended through the planning joint witness statement and the Reply Report:</p> <ul style="list-style-type: none">• Apply the rule to additions or alterations to existing buildings that create a new habitable room or room that will be occupied by a noise sensitive activity.

¹⁴ NZAAA [310.1]

¹⁵ NZAAA [310.2]

¹⁶ FS66

	<ul style="list-style-type: none"> • Amend NOISE-MD3 to include a new clause 6 the outcome of consultation with Waka Kotahi or KiwiRail. • Minor amendments to the rule to ensure it applies to all buildings containing noise sensitive activities and not just residential units.
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Amendments and reasons

58. The submissions we consider here are those from Waka Kotahi, KiwiRail, Kāinga Ora and Bellgrove Rangiora Ltd¹⁷. These submissions were the subject of considerable evidence, debate and discussion through the hearing, culminating in joint expert statements from the acoustic experts and planners for Waka Kotahi, KiwiRail, Kāinga Ora and the Council¹⁸, which we have carefully considered.
59. We generally accept the recommended amendments and new standard for ventilation, and the associated reasons set out in Ms Manhire’s Reply Report. These included expanding the rule to apply to all noise sensitive activities and the introduction of road and rail noise overlays and associated definitions. We consider that these amendments make the rule more certain and easier to administer and appropriately implement the associated objectives and policies in the PDP and give effect to the relevant objectives and policies in the RPS. We also agree with the acoustic experts that a Rail Vibration Alert Overlay is the most appropriate response for addressing vibration in the absence of specific vibration criteria. We note that there was disagreement between the acoustic experts about the width of this overlay; however, as it is advisory only, we consider this of no particular consequence and accept the 100m distance recommended by Mr Camp and Dr Chiles.
60. However, we preferred Ms Heppelthwaite and Mr Lindenberg’s position that the rule should also apply to additions and alterations to existing buildings where new habitable rooms or rooms that would be occupied by noise sensitive activities were created, for the reasons set out by Ms Heppelthwaite. Unfortunately, Ms Manhire did not provide her view or reasoning for her alternative view on this in her Reply Report for us to consider. We also preferred Mr Lindenberg’s evidence that NOISE-MD3 should be amended to apply to ventilation as well as acoustic insulation, which is consistent with the recommended amendments to NOISE-R16 and the introduction of new NOISE-S1. As a consequential amendment, we have also recommended that NOISE-MD3 be amended to include a new clause “the outcome of any consultation with Waka Kotahi NZ Transport Agency (for state highways) or KiwiRail (for rail)”.
61. We note that we considered Bellgrove’s submission which sought an alternative pathway for managing road noise effects on noise sensitive activities. We were not provided any evidence by the submitter to consider. We anticipate that the recommended amendments will go some way in addressing Bellgrove’s concerns, but without the

¹⁷ 275.55, 373.74, 325.149, 408.27

¹⁸ Bellgrove did not appear at the hearing, provide evidence or participate in expert conferencing

knowledge of any other suggested alternatives, we agree with the report author that the submission should be rejected.

10. Conclusion

62. For the reasons summarised above, we recommend the adoption of a set of changes to the PDP provisions relating to Part 2: District-Wide Matters – NOISE – Noise. Our recommended amendments are shown in Appendix 2.
63. Overall, we find that these changes will ensure the PDP better achieves the statutory requirements, national and regional direction, and our recommended Strategic Directions, and will improve its useability.

Appendix 1: Submitter attendance and tabled evidence for Noise - Hearing Stream 5

Attendee	Speaker	Submitter No.
Council Reporting Officer	<ul style="list-style-type: none"> Jessica Manhire Stuart Camp (Acoustics) 	N/A
Kainga Ora	<ul style="list-style-type: none"> Brendon Liggett Jon Styles Lance Jimmieson Matt Lindenberg Clare Dale Lisa Williams 	325, FS 88
NZ Helicopter Association	<ul style="list-style-type: none"> Richard Milner 	66
North Canterbury Clay Target Association	<ul style="list-style-type: none"> Haydn Porritt 	61
Christchurch International Airport Limited	<ul style="list-style-type: none"> Darryl Millar 	254, FS 80
KiwiRail	<ul style="list-style-type: none"> Jacob Burton Mike Brown Catherine Heppelthwaite Stephen Chiles 	373, FS 99
Waka Kotahi	<ul style="list-style-type: none"> Stuart Pearson Catherine Heppelthwaite Dr Stephen Chiles Robert Swears 	275, FS 110
McAlpines	<ul style="list-style-type: none"> William Reeve Tim Walsh John Duncan John Gardner Chris Fowler 	226, 102
NZ Agricultural Aviation Association	<ul style="list-style-type: none"> Tony Michelle Richard Milner 	310
NZ Defence Force	<ul style="list-style-type: none"> Darran Humpheson Rebecca Davies 	166
Canterbury Regional Council	<ul style="list-style-type: none"> Joanne Mitten 	41
Federated Farmers of New Zealand Inc.	<ul style="list-style-type: none"> Lionel Hume Karl Dean 	414, FS 83
Tabled Evidence		
KiwiRail	<ul style="list-style-type: none"> Sheena McGuire 	373 FS 99
Fuel Companies	<ul style="list-style-type: none"> Miles Rowe 	276
Oxford Ohoka Community Board	<ul style="list-style-type: none"> T Robson 	172
Daiken	<ul style="list-style-type: none"> Stephanie Styles 	145

Appendix 2: Recommended amendments to the Proposed Plan - Tracked from notified version
(provisions not consequentially renumbered)

NOISE - Te orooro - Noise

Introduction

Noise effects require management because they can affect the health of people, natural values, and amenity values. The character, level and duration of sound, and the time at which it occurs are all factors affecting the perception of noise and how tolerable it is. This chapter contains objectives, policies and rules to manage the effects of noise for different receiving environments and activities.

This chapter does not control noise from aircraft in flight, however aircraft noise contours are used to control land uses where they may be subject to noise from aircraft using Christchurch International Airport and Rangiora Airfield. Noise from main transport routes can adversely affect residential amenity for people living nearby. Acoustic design for residential development near identified main roads and rail corridors is required to ensure noise levels within residential units do not adversely affect the health and wellbeing of occupants.

Residential Zones anticipate quiet night time conditions, as noise can disturb relaxation and sleep. Commercial and Mixed Use Zones and Industrial Zones normally have a greater tolerance for noise that reflects the working environment. The working nature of the rural environment may result in seasonal, short term or intermittent noise effects but the rural environment generally comprises low levels of noise.¹

Noise limits for the Open Space and Recreation Zones recognise the use of these areas for relaxation, and enjoyment of nature, as well as activities, such as sports, that can generate noise.

The provisions in this chapter are consistent with the matters in Part 2 - District Wide Matters - Strategic Directions and give effect to matters in Part 2 - District Wide Matters - Urban Form and Development.

Other potentially relevant District Plan provisions

As well as the provisions in this chapter, other District Plan chapters that contain provisions that may also be relevant to noise include:

- Temporary Activities: this chapter contains provisions for activities that may generate noise on a short term basis.
- Special Purpose Zone (Kāinga Nohoanga): how the Noise provisions apply in the Special Purpose Zone (Kāinga Nohoanga) is set out in SPZ(KN)-APP1 to SPZ(KN)-APP5 of that chapter.
- Any other District wide matter that may affect or relate to the site.
- Zones: the zone chapters contain provisions about what activities are anticipated to occur in the zones.

Objectives	
NOISE-O1	Adverse noise effects Noise does not adversely affect human health, communities, natural values and the anticipated amenity values of the receiving environment.
NOISE-O2	Reverse sensitivity

¹ NZPork [169.29], HortNZ [295.109]

	The operation of regionally significant infrastructure and strategic infrastructure, activities within Commercial and Mixed Use Zones and Industrial Zones and/or identified existing <u>noise generating</u> activities <u>subject to any noise control overlay or contour</u> ² are not adversely affected by reverse sensitivity effects from noise sensitive activities.
NOISE-O3	Rangiora Airfield The avoidance of noise sensitive activities within the 65dBA and 55dBA Ldn Noise Contours for Rangiora Airfield.
Policies	
NOISE-P1	<u>Minimising Managing</u> adverse noise effects <u>Minimise Manage</u> adverse noise effects by: <ol style="list-style-type: none"> 1. limiting the noise level, location, duration, time, intensity and any special characteristics of noise generating activities, to reflect the <u>anticipated</u>³ function, character and amenity values of each zone; 2. requiring lower noise levels during night hours compared to day time noise levels to protect human health, natural values and <u>maintain the</u>⁴ <u>anticipated</u>⁵ amenity values of sensitive environments; and 3. requiring sound insulation <u>for noise sensitive activities</u>, or limiting the location of noise sensitive activities where they may be exposed to noise from existing <u>noise generating</u> activities <u>subject to a noise control overlay or contour</u>.⁶
NOISE-P2	Limited duration noise generating activities Enable specific noise generating activities of limited duration that are: <ol style="list-style-type: none"> 1. required for anticipated activities within zones or the District, including construction noise, audible bird scaring devices, frost control fans, temporary activities, <u>temporary military training activities</u>.⁷ and emergency services, and 2. where noise levels and characteristics are consistent with the <u>anticipated</u>⁸ character and amenity values of the receiving environment.
NOISE-P3	Rail and roads Protect the operation of rail and road infrastructure by identifying locations where acoustic mitigation measures for any new noise sensitive activities are required.
NOISE-P4	Airport Noise Contour Protect Christchurch International Airport from reverse sensitivity effects by: <ol style="list-style-type: none"> 1. avoiding noise sensitive activities within the 50 dBA Ldn Noise Contour by limiting the density of any residential unit or minor residential unit to a maximum of 1 residential unit or minor residential unit per 4ha, except within existing Kaiapoi Residential Zones, greenfield priority areas identified in Chapter 6 - Map A of the RPS (gazetted 6 December 2013) or any residential Development Area; and 2. requiring noise insulation within the 50 dBA Ldn and 55 dBA Ldn Noise Contour for Christchurch International Airport.
NOISE-P5	Rangiora Airfield Avoid the development of noise sensitive activities in the Rural Lifestyle Zone within the 55dBA Ldn Noise Contour for Rangiora Airfield and prohibit noise sensitive activities within the 65 dBA Ldn Noise Contour for Rangiora Airfield.

² North Canterbury Clay Target Association [61.3], Daiken [145.24]

³ Kainga Ora [325.149]

⁴ Kainga Ora [325.149]

⁵ Kainga Ora [325.149]

⁶ North Canterbury Clay Target Association [61.3], Daiken [145.24] - consequential amendment

⁷ New Zealand Defence Force [166.17]

⁸ Kainga Ora [325.149]

NOISE-P6	Existing HIZ processing activity Protect the existing processing plant located between Upper and Lower Sefton Roads from noise sensitive activities located in the adjacent Rural Lifestyle Zone within the HIZ Processing noise contour. ⁹
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Activity Rules

How to interpret and apply the rules

1. Noise standards apply to the zone or zones where noise is received. Noise from the use of public roads or railways is exempt from the provisions of the Noise Chapter.
2. Unless otherwise specified:

a. sound levels shall be measured in accordance with NZS 6801:2008 Acoustics - Measurement of Environmental Sound and assessed in accordance with NZS 6802:2008 Acoustics - Environmental Noise where the source of noise is within the scope of these standards; and

b. for the purposes of compliance with these noise standards, public roads shall not be considered as a site receiving noise.
3. A Rail Vibration Alert Overlay has been applied which identifies the vibration-sensitive area within 60 metres each side of the railway designation boundary as properties within this area may experience rail vibration effects. No specific district plan provisions apply in relation to vibration controls as a result of this Rail Vibration Alert Area. The Rail Vibration Alert Overlay is to advise property owners of the potential vibration effects but leaves the site owner to determine an appropriate response.¹⁰

NOISE-R1	TimberHIZ processing and ancillary activities	
Heavy Industrial Zone <u>located between Upper and Lower Sefton Roads</u>	Activity status: PER Where: <div>1. noise generated within the TimberHIZ Processing Noise Contour, as shown on the planning map, <u>shall not exceed the following standards at or beyond the noise control boundary:</u><div><div>a. not exceed 45 dB LAeq outside the Timber Processing Noise Contour and shall otherwise comply with Table NOISE-2; and</div><div>b. not exceed the following standards at or within the notional boundary of the residential unit located at 126 Beatties Road:<div><div>i. <u>a. 7:00am-7:00pm</u> Monday to Saturday 55 dB LAeq.</div></div></div></div></div> <div>Activity status when compliance not achieved: RDIS Matters of discretion are restricted to:<div>NOISE-MC¹²D1 - Noise</div><div>NOISE-MD2 - Management of noise effects</div><div>NOISE-MD3 - Acoustic insulation</div></div>	

⁹ Daiken [145.25]

¹⁰ KiwiRail [373.74]

¹² RMA Schedule 1 clause 16(2).

	<p>ii. b. 9:00am-7:00pm Sundays and Public Holidays 55 dB LAeq.</p> <p>iii. c. All other times 45 dB LAeq.</p> <p>iv. d. ¹¹10:00pm- 7:00am on any day 75 dB LAF(max).</p>	
NOISE-R2	Temporary military training activity	
	<p><i>This rule does not apply to:</i></p> <p><u>1. temporary military training activities that involve weapons firing and/or the use of explosives provided for under NOISE-RXX</u></p> <p><u>2. helicopter movements provided for under NOISE-R4.</u></p>	
All Zones	<p>Activity status: PER Where:</p> <p><u>1. Any temporary military training activity that does not exceed the noise limits in Table NOISE-2 by more than 5 dB¹³</u> written notice shall be provided to the District Council's Manager, Planning and Regulation at least 10 working days prior to the commencement of the activity;</p> <p><u>2. firing of weapons and explosive events shall be undertaken no closer than 1500m to the notional boundary of any noise sensitive activity during the hours of 7:00am-7:00pm, nor within 4500m during the hours of 7:00pm-7:00am;</u></p> <p><u>3. firing of weapons and explosive events shall not exceed a noise level of 65 dB LAF(max) during the hours of 7:00am-7:00pm;</u></p>	<p>Activity status when compliance with NOISE-R2 (1) not achieved: CON Matters of control are restricted to: NOISE-M¹⁴C¹⁴D1 - Noise</p> <p>Activity status when compliance with NOISE-R2 (2) not achieved: RDIS Matters of discretion are restricted to: NOISE-MD1—Noise</p> <p>Activity status when compliance with NOISE-R2 (4) not achieved: (Refer to NOISE-R4) Activity status when compliance with NOISE-R2 (5) not achieved: (Refer to NOISE-R19)</p>

¹¹ Daiken [145.26]

¹³ New Zealand Defence Force [166.18]

¹⁴ RMA Schedule 1 clause 16(2).

	<p>nor a level of 50 dB LAF(max) during the hours of 7:00pm-7:00am;</p> <p>4. helicopter movements shall comply with NOISE-R4;</p> <p>5. noise from all other sources other than those specified in activity standards (3) to (5) shall comply with the noise limits in NOISE-R19.</p>	
	<p><u>Advisory Note</u></p> <ul style="list-style-type: none"> • <u>See also TEMP-R5 Temporary military training activity.¹⁵</u> 	
<u>NOISE-RXX</u>	<u>Temporary Military Training Activity involving weapons firing and/or use of explosives¹⁶</u>	
	<p><u>Activity status: CON</u></p> <p><u>Where:</u></p> <ol style="list-style-type: none"> 1. <u>Any temporary military training activity where there is weapons firing and/or use of explosives:</u> <ol style="list-style-type: none"> a. <u>where written notice is provided to the District Council's Manager, Planning and Regulation at least 10 working days prior to the commencement of the activity including any details of separation distances and predicted sound levels; and</u> b. <u>where firing of weapons and explosive events are undertaken no closer than 500m to the notional boundary of any noise sensitive activity during the hours of 7:00am-7:00pm, nor within 1250m during the hours of 7:00pm-7:00am; or</u> c. <u>where the minimum separation distances specified in b. above are not met, then the activity shall comply with the following peak sound pressure level when measured at the notional boundary of any</u> 	<p><u>Activity status when compliance with NOISE-RXX not achieved: RDIS</u></p> <p><u>Matters of discretion are restricted to: NOISE-MCD1 - Noise</u></p>

¹⁵ New Zealand Defence Force [166.17]

¹⁶ New Zealand Defence Force [166.18]

	<u>building for a noise sensitive activity:</u> <u>7:00am to 7:00pm: 95 dBC</u> <u>7:00pm to 7:00am: 85 dBC.</u> ¹⁷	
	Advisory Note <u>See also TEMP-R5 Temporary military training activity</u> ¹⁸	
NOISE-R3	Construction work	
All Zones	Activity status: PER Where: 1. noise from construction shall comply with the following maximum noise limits when assessed in accordance with NZS 6803:1999 Acoustics - Construction Noise: a. when received in any Residential Zones, or within the notional boundary of any Rural <u>zz</u> ¹⁹ ones: i. 7:30am - 6:00pm Monday to Saturday: 70 dB LAeq; ii. all other times: 45 dB LAeq; b. when received in any Commercial and Mixed Use Zones and Industrial Zones: a. at all times: 70 dB LAeq; 2. vibration from construction shall be assessed in accordance with DIN 4150-3:2016, Vibration in Buildings – Part 3: Effects on Structures, and shall comply with the relevant limits in Tables 1 and 4 of that standard.	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: NOISE-M <u>C</u> ²⁰ D1 - Noise
NOISE-R4	Helicopter movements	
	<i>This rule does not apply to helicopter movements at Rangiora Airfield or for emergency purposes provided for under NOISE-R5, <u>or to intermittent helicopter movements for agricultural aviation activities provided for under NOISE-R7</u>²¹.</i>	
All Zones	Activity status: PER Where: 1. helicopter movements shall only occur between 8:00am and 6:00pm, unless further than 450m from any residential unit or minor residential unit;	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: NOISE-M <u>C</u> ²² D1 - Noise NOISE-MD4 - Helicopter noise

¹⁷ New Zealand Defence Force [166.18]

¹⁸ New Zealand Defence Force [166.17]

¹⁹ RMA Schedule 1 clause 16(2).

²⁰ RMA Schedule 1 clause 16(2).

²¹ NZ Agricultural Aviation Association [310.1]

²² RMA Schedule 1 clause 16(2).

	<p>2. within 25m of any residential unit or minor residential unit, no helicopter movement shall take place, unless that residential unit or minor residential unit is on the site on which the landing or take-off occurs;</p> <p>3. between 25m and 450m from a residential unit or minor residential unit not located on the same site as the activity, the number of helicopter movements on a site shall not exceed 24 in any 12 month period within which there may be a maximum of 10 in any month, or six in any week, unless that residential unit or minor residential unit is on the site on which the landing or take-off occurs.</p>	
NOISE-R5	Helicopter movements for emergency purposes	
All Zones	Activity status: PER	Activity status when compliance not achieved: N/A
NOISE-R6	Audible bird scaring devices	
All Zones	<p>Activity status: PER</p> <p>Where:</p> <ol style="list-style-type: none"> 1. audible bird scaring devices shall: <ol style="list-style-type: none"> a. only operate between 30 minutes before sunrise to 30 minutes after sunset; b. not exceed a maximum of six events per device per hour, where each event has a maximum of three clustered shots; c. not be used within 200m of a notional boundary of any residential 	<p>Activity status when compliance not achieved: RDIS</p> <p>Matters of discretion are restricted to:</p> <p>NOISE-M²⁴C²⁴D1 - Noise</p>

²⁴ RMA Schedule 1 clause 16(2).

	<p>unit or minor residential unit on any other site of different ownership; and</p> <p>d. not exceed 65 dB LAE from any one noise emission event, when assessed at any point within the notional boundary of any residential unit or minor residential unit on any site of different ownership; and</p> <p>e. <u>not exceed one device per 1ha of land in any single land holding.</u>²³</p>	
	<p>Advisory Note</p> <ul style="list-style-type: none"> Audible bird scaring devices should have a legible notice securely fixed to the road frontage of the site in which the device is to operate stating the name, address and phone number of the person(s) responsible for the operation of the device and identify the site on which the device will operate.²⁵ 	
NOISE-R7	Temporary, mobile or intermittent agriculture activities emitting noise for cultivation, application of fertiliser, planting, harvesting, use of agricultural vehicles or equipment <u>including aircraft</u> ²⁶ , and movement, handling and transport of livestock	
Rural Zones Special Purpose Zone (Kāinga Nohoanga) Special Purpose Zone (Pines Beach and Kairaki Regeneration)	Activity status: PER	Activity status when compliance not achieved: N/A
NOISE-R8	Operation of an emergency service facility warning device	
All Zones	Activity status: PER	Activity status when compliance not achieved: N/A
NOISE-R9	Temporary activities	

²³ Michael John Baynes [357.1]

²⁵ HortNZ [295.114]

²⁶ NZ Agricultural Aviation Association [310.2]

	<p><u><i>This rule does not apply to:</i></u></p> <p><u><i>(a) recreational jet boating activity.</i></u>²⁷</p> <p><u><i>(b) Temporary Military Training Activities</i></u>²⁸</p>	
All Zones	<p>Activity status: PER</p> <p>Where:</p> <ol style="list-style-type: none"> 1. between 10:00pm and 8:00am the noise limits in NOISE-R19 are met; 2. sound amplified activities shall be restricted to a total duration not exceeding four hours per day on any site on which the temporary activity is located, including all sound checks; 3. sound amplified activities shall have a maximum total amplified power of 500 Watts RMS; 4. noise from any temporary activity shall not exceed 65 dB LAeq at the notional boundary of any residential unit or minor residential unit, except fireworks displays that are limited to the hours between: <ol style="list-style-type: none"> a. 9:00am to 10:00pm on any day; b. 9:00am to 11:00pm on Guy Fawkes Night or Matariki; or c. 9:00am to 01:00am on New Year's Eve/Day. 	<p>Activity status when compliance with NOISE-R9 (1 to 3) not achieved: CON</p> <p>Matters of control are restricted to:</p> <p>NOISE-MC²⁹D1 - Noise</p> <p>Activity status when compliance with NOISE-R9 (4) not achieved: RDIS</p> <p>Matters of discretion are restricted to:</p> <p>NOISE-MC³⁰D1 - Noise</p>
	<p>Advisory Note</p> <ul style="list-style-type: none"> • It is recommended that residents adjacent to an event involving amplified sound or fireworks, are notified at least 48 hours before the temporary activity commences, including: <ul style="list-style-type: none"> ○ the nature of the activity; ○ proposed dates, start and finish time and the expected times of any sound testing or practice; ○ any alternative dates in the event of postponement and; contact details of the event organiser. 	
NOISE-R10	Wind turbine operation	
All Zones	<p>Activity status: PER</p> <p>Where:</p>	<p>Activity status when compliance not achieved: DIS</p>

²⁷ Jet Boating New Zealand [358.6]

²⁸ New Zealand Defence Force [166.22 and 166.7]

²⁹ RMA Schedule 1 clause 16(2).

³⁰ RMA Schedule 1 clause 16(2).

	<ol style="list-style-type: none"> 1. the turbine has a rated generation capacity of no greater than 15kW; 2. the turbine is located no closer than 500m to the notional boundary of any residential unit or minor residential unit on any other site of different ownership; 3. where there is more than one wind turbine, noise shall be assessed in accordance with NZS 6808:2010 Acoustics - Wind Farm Noise and comply with the limits given in that standard. 	
NOISE-R11	Use of generators for emergency purposes	
All Zones	Activity status: PER Where: <ol style="list-style-type: none"> 1. routine testing is only undertaken between the hours of 9:00am and 5:00pm; 2. noise from the generator does not exceed the NOISE-R19 daytime (7:00am-10:00pm) noise limit at any site receiving noise. 	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: NOISE-MC ³¹ D1 - Noise
NOISE-R12	Speedway Activities - 39 Doubledays Road, Kaiapoi	
Speedway Overlay	Activity status: PER Where: <ol style="list-style-type: none"> 1. a maximum of 25 events may be held in the period from 1 October to 30 April in any year; 2. a maximum of three practices may occur on the site each calendar year (that will not be assessed as an event under (1)); 3. events, except for Speedway New Zealand Allocated Championships, shall conclude by 10:30pm and have a maximum duration of 4.5 hours, not including event preparation and clean-up; 4. where a medical emergency or similar circumstance causes delay to an event, the hours of operation may be extended by up to one hour; 5. activities other than the use of the track by motor racing vehicles shall comply with NOISE-R19. 	Activity status when compliance with NOISE-R12 (1) to (4) not achieved: RDIS Matters of discretion are restricted to: NOISE-MC ³² D1 - Noise Activity status when compliance with NOISE-R12 (5) not achieved: as set out in NOISE-R19
NOISE-R13	Aircraft operations at Rangiora Airfield	

³¹ RMA Schedule 1 clause 16(2).

³² RMA Schedule 1 clause 16(2).

Rural Lifestyle Zone	<p>Activity status: PER</p> <p>Where:</p> <ol style="list-style-type: none"> 1. the aircraft operation is for one of the following purposes: <ol style="list-style-type: none"> a. emergency medical or for national/civil defence reasons, air shows, military operations; b. aircraft using the airfield as a necessary alternative to an airfield elsewhere; c. aircraft taxiing; d. engine run-ups for each 50 hour checkor³³ 2. for all other aircraft operations: <ol style="list-style-type: none"> a. noise from the aircraft operations shall not exceed 65 dBA Ldn outside the 65 dBA Ldn Airport Noise Contour, shown on the planning map; b. measurement and assessment of noise from aircraft operations at Rangiora Airfield shall be carried out in accordance with NZS 6805:1992 Airport Noise Management and Land Use Planning; c. when recorded aircraft movements at Rangiora Airfield exceed 70,000 movements per year, compliance with (1) shall be determined by calculations of noise from airfield operations and shall be based on noise data from the Rangiora Airfield Noise Model. Records of actual aircraft operations at Rangiora Airfield and the results shall be reported to the District Council's Manager, Planning and Regulation; d. measurement of the noise levels at the site shall commence once aircraft operations at Rangiora Airfield reach 88,000 movements per year and 	<p>Activity status when compliance not achieved: NC</p>
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³³ RMA Schedule 1 clause 16(2).

	shall be calculated over the busiest three-month period of the year. The measurements shall be undertaken annually while aircraft operations are at 88,000 movements or higher and the results shall be reported to the District Council's Manager, Planning and Regulation.	
NOISE-R14	Buildings in the 55 dBA Ldn Noise Contour for Christchurch International Airport	
55 dBA Ldn Noise Contour for Christchurch International Airport	<p>Activity status: PER Where:</p> <ol style="list-style-type: none"> 1. any new building or any addition to an existing building for an activity listed in Table NOISE-1 within the 55 dBA Ldn Noise Contour for Christchurch International Airport, shown on the planning map, shall be insulated from aircraft noise to ensure indoor sound levels stated in Table NOISE-1 are not exceeded, when windows and doors are closed, and: <ol style="list-style-type: none"> a. noise insulation calculations and verification shall be as follows: <ol style="list-style-type: none"> i. building consent applications shall be accompanied by a report detailing calculations that show how the required sound insulation and construction methods have been determined; b. for the purpose of sound insulation calculations, the external noise levels for a site shall be determined by application of the air noise contours Ldn and LAE. Where a site falls within the contours the calculations shall be determined by linear interpolation between the contours; c. if required by the District Council, in conjunction with the final building inspection the sound transmission of the façade shall be tested in 	Activity status when compliance not achieved: NC

	accordance with ISO 16283-3:2016 to demonstrate that the required façade sound insulation performance has been achieved, and a test report is to be submitted to the District Council's Manager, Planning and Regulation. Should the façade fail to achieve the required standard then it shall be improved to the required standard and re-tested prior to occupation.	
NOISE-R15	Buildings in the 55 dBA Ldn Noise Contour for Rangiora Airfield	
	<i>This rule applies to any new residential unit, or minor residential unit addition to an existing residential unit, minor residential unit or building, or part of a building, for a noise sensitive activity.</i>	
55 dBA Ldn Noise Contour for Rangiora Airfield	Activity status: PER Where: 1. the building shall be insulated from aircraft noise to achieve the indoor sound levels in Table NOISE-1.	Activity status when compliance not achieved: NC

Table NOISE-1: Noise Contour Indoor Design Levels

	Indoor Design and Sound Level	
Building Type and Activity	dB LAE	dB Ldn
Residential Units or Minor Residential units		
Bedrooms	65	40
Other habitable room	75	50
Visitor Accommodation		
Bedrooms, living rooms	65	40
Conference meeting rooms	65	40
Service activities	75	60
Education Facilities		
Libraries, study areas, teaching areas, assembly areas	65	40
Workshops, gymnasiums	85	60
Retail Activities, Retail Services and Offices		
Conference rooms	65	40
Private offices	70	45

Open plan offices, exhibition spaces	75	50
Data processing	80	55
Shops, supermarkets, showrooms	85	60
NOISE-R16	<u>Residential units and minor residential units Noise sensitive activities within 80m of an arterial road, strategic road or rail designation the road and rail noise overlays</u> ³⁴	
<u>All Zones Road and rail noise overlays</u>	<p>Activity status: PER Where:</p> <ol style="list-style-type: none"> any new residential unit or minor residential unit building, intended for a noise sensitive activity, and/or any addition or alteration to an existing building which creates a new habitable room or room that will be occupied by a noise sensitive activity.³⁵ shall <ol style="list-style-type: none"> be designed, and constructed and maintained to achieve a minimum external and internal noise reduction of 30 dB Dtr,2m,nT,w + Ctr to any habitable room; or not exceed the maximum values for be designed and constructed to meet the following maximum³⁶ indoor design sound levels: <ol style="list-style-type: none"> road traffic noise within any habitable room – 40 dB LAeq(24hr); rail noise inside bedrooms between 10:00pm and 7:00am – 35 dB LAeq(1h); and rail noise inside any habitable room excluding bedrooms – 40 dB LAeq(1h); be constructed in accordance with the 	<p>Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: NOISE-MC⁴⁰D1 - Noise NOISE-MD2 -Management of noise effects NOISE-MD3 - Acoustic insulation</p>

³⁴ KiwiRail [373.74], Waka Kotahi [275.55]

³⁵ KiwiRail [373.74]

³⁶ KiwiRail [373.74]

⁴⁰ RMA Schedule 1 clause 16(2).

	<p><u>Construction Schedule</u> <u>NOISE-SCHED1:</u>³⁷</p> <p>2. <u>Design report</u> <u>Where 1(a) applies, a report shall be submitted to the council demonstrating compliance with clauses (1)(a) above prior to the construction or addition or alteration of any building containing a noise sensitive activity. In the design:</u>³⁸</p> <p>a. the design for road traffic noise shall take into account future permitted use of the road, either by the addition of <u>23</u>³⁹ dB to predicted sound levels or based on forecast traffic in 20 years' time;</p> <p>b. rail noise shall be deemed to be 70 dB LAeq(1h) at 12m from the edge of the track, and shall be deemed to reduce at a rate of <u>either:</u></p> <p><u>i. 3 dB per doubling of distance up to 40m and 6 dB per doubling of distance beyond 40m;</u></p> <p><u>or</u></p> <p><u>ii. As modelled by a Suitably Qualified and Experienced Acoustic Consultant using a recognised computer modelling method for freight trains</u></p>	
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³⁷ Bellgrove Rangiora Ltd [408.27]

³⁸ KiwiRail [373.74]

³⁹ KiwiRail [373.74]

	<p><u>with diesel locomotives, having regard to factors such as barrier attenuation, the location of the building or room containing the noise sensitive activity relative to the orientation of the track, topographical features and any intervening structures;</u></p> <p><u>3. If windows must be closed to achieve the maximum indoor design sound levels in clause 1a, or if a building is constructed in accordance with NOISE-SCHED1, the building must be designed, constructed and maintained with a mechanical ventilation system that meets the requirements in NOISE-S1.</u></p> <p>5. the indoor design sound level shall be achieved at the same time as the ventilation requirements of the New Zealand Building Code. If windows are required to be closed to achieve the indoor design sound levels then an alternative means of ventilation shall be required within bedrooms;</p> <p>4. the external to internal noise reduction shall be assessed in accordance with ISO 16283-3:2016 Acoustics — Field measurement of sound insulation in buildings and of building elements — Part 3:</p>	
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	Façade sound insulation and ISO 717-1:2020 Acoustics — Rating of sound insulation in buildings and of building elements — Part 1: Airborne sound insulation.	
	Advisory Note <ul style="list-style-type: none"> D_{tr,2m,nT,w}+C_{tr} means the weighted standardised level difference of the external building envelope (including windows, walls, roof/ceilings and floors where relevant) and is a measure of the reduction in sound level from outside to inside a building. D_{tr,2m,nT,w}+C_{tr} is also known as the external sound insulation level.⁴¹ 	
NOISE-R17	Noise sensitive activities	
50dBA Ldn Noise Contour for Christchurch International Airport Limited	Activity status: PER Where: <ol style="list-style-type: none"> the activity is located within Residential Zones; or any activity meets the indoor sound levels stated in Table NOISE 1, when windows and doors are closed. 	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: NOISE-MD2 - Management of noise effects NOISE-MD3 - Acoustic insulation Notification An application for a restricted discretionary activity under this rule where compliance is not achieved with NOISE-R17 (1), shall be limited notified only to Christchurch International Airport Limited.
	Advisory Note <ul style="list-style-type: none"> Noise insulation calculations and verification shall be as follows: <ul style="list-style-type: none"> Building consent applications shall be accompanied with a report detailing the calculations showing how the required sound insulation and construction methods have been determined. For the purpose of sound insulation calculations, the external noise levels for a site shall be determined by application of the air noise contours Ldn and LAE. Where a site falls within the contours the calculations shall be determined by linear interpolation between the contours. <ul style="list-style-type: none"> If required by the District Council, in conjunction with the final building inspection the sound transmission of the façade shall be tested in accordance with ISO 16283-3:2016 to demonstrate that the required façade sound insulation performance has been achieved, and a test report is to be submitted to the District Council's Manager, Planning and Regulation. Should the façade fail to achieve the required standard then it shall be improved to the required standard and re-tested prior to occupation. 	
NOISE-R18	Bedrooms in Town Centre Zone, Local Centre Zone, Neighbourhood Centre Zone or Mixed Use Zone	
Town Centre Zone Local Centre Zone	Activity status: PER Where: <ol style="list-style-type: none"> any bedroom that forms part of residential activity or visitor accommodation 	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: NOISE-MC ⁴² D1 - Noise NOISE-MD2 - Management of noise effects

⁴¹ KiwiRail [373.74].⁴² RMA Schedule 1 clause 16(2).

Neighbourhood Centre Zone Mixed Use Zone	<p>must achieve an external to internal noise reduction of not less than 35 dB D_{tr,2m,nT,w+Ctr};</p> <p>2. the external to internal noise reduction shall be assessed in accordance with ISO 16283-3:2016 Acoustics — Field measurement of sound insulation in buildings and of building elements — Part 3: Façade sound insulation and ISO 717-1:2020 Acoustics — Rating of sound insulation in buildings and of building elements — Part 1: Airborne sound insulation;</p> <p>3. the indoor design sound level should be achieved at the same time as the ventilation requirements of the New Zealand Building Code. If windows are required to be closed to achieve the indoor design sound levels then an alternative means of ventilation shall be required within bedrooms that meets the ventilation requirements of the New Zealand Building Code.</p>	<p>NOISE-MD3 - Acoustic insulation</p> <p>Notification</p> <p>An application for a restricted discretionary activity under this rule where compliance is not achieved with NOISE-R18 (1) to NOISE-R18 (3) is precluded from being publicly or limited notified.</p>
	<p>Advisory Note</p> <ul style="list-style-type: none"> D_{tr,2m,nT,w+Ctr} means the Weighted Standardised Level Difference of the external building envelope (including windows, walls, roof/ceilings and floors where relevant) and is a measure of the reduction in sound level from outside to inside a building. D_{tr,2m,nT,w+Ctr} is also known as the external sound insulation level. 	
NOISE-R19	Activities emitting noise not otherwise covered in NOISE-R1 to NOISE-R13	
	<i><u>This rule does not apply to recreational jet boating activity.</u></i> ⁴³	
All Zones	<p>Activity status: PER</p> <p>Where:</p> <p>1. the noise limits in Table NOISE-2 are met.</p>	<p>Activity status when compliance not achieved (where the activity exceeds the noise standards given in Table NOISE-2: Noise limits by less than 10 dB LAeq):</p> <p>RDIS</p>

⁴³ Jet Boating New Zealand [358.6].

		Matters of discretion are restricted to: NOISE-M ⁴⁴ C ⁴⁴ D1 - Noise Activity status when compliance not achieved (where the activity exceeds the noise standards given in Table NOISE-2: Noise limits by 10 dB LAeq or more): NC
NOISE-R20	Operation of frost control fans	
Rural Zones	Activity status: CON Where: <ol style="list-style-type: none"> noise from frost control fans measured at or within the notional boundary of any residential unit or minor residential unit, on a site of different ownership, shall not exceed 55 dB LAeq (10min), where: <ol style="list-style-type: none"> the noise level applies both to individual and cumulative noise from all frost control fans within 1km of the residential unit, and noise compliance shall be demonstrated by an acoustic report from a suitably qualified and experienced acoustic consultant; frost control fans shall not be located within: <ol style="list-style-type: none"> 300m of a residential unit or minor residential unit on a site of different ownership; or 1km of any Residential Zones; frost control fan use is limited to the period between bud burst and harvest; frost control fans shall only be operated in wind speeds up to 8km/hr and when the local air temperature is 2°C or less; operation for testing shall only take place between 	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: NOISE-M ⁴⁶ C ⁴⁶ D1 - Noise

⁴⁴ RMA Schedule 1 clause 16(2).

⁴⁶ RMA Schedule 1 clause 16(2).

	7:30am and 6:00pm, Monday-Friday. Matters of control are restricted to: NOISE-MC ⁴⁵ D1 – Noise	
NOISE-RX	Noise sensitive activities near frost fans	
General Rural Zone Rural Lifestyle Zone	Activity status: CON <u>Where:</u> <u>1.Any new noise sensitive activity located on a separate site of different ownership within 1000m of any lawfully-established frost control fan must be designed and constructed to ensure that the noise level inside any bedroom of the dwelling will not exceed 30 dB LAeq with all fans operating at normal duty.</u> <u>2.Compliance with this standard must be demonstrated by the production of a design certificate from an appropriately qualified and experienced acoustic engineer. The design certificate must be based either on actual noise measurements with all fans operating at normal duty, or on an assumed noise level from any one frost fan, corrected for the number of fans present at the time.</u> Matters of control are restricted to: <u>NOISE-MC⁴⁷D1 - Noise</u> <u>NOISE-MD3 - Acoustic insulation</u>	Activity status when not achieved: RDIS Matters of discretion are restricted to: <u>NOISE-MC⁴⁸⁴⁹D1 - Noise</u> <u>NOISE-MD3 - Acoustic insulation⁵⁰</u>
NOISE-R21	Noise sensitive activities	
Timber Processing	Activity status: RDIS <u>Where:</u>	Activity status when compliance not achieved: N/A

⁴⁵ RMA Schedule 1 clause 16(2).

⁴⁷ RMA Schedule 1 clause 16(2).

⁴⁸ HortNZ [295.115].

⁴⁹ RMA Schedule 1 clause 16(2).

⁵⁰ HortNZ [295.115].

Noise Overlay⁵¹ HIZ⁵² Processing Noise Contour	1. <u>The activity is located within the Timber Processing Noise Overlay or the HIZ Processing Noise Contour⁵³</u> Matters of discretion are restricted to: NOISE-M ⁵⁴ D1 - Noise NOISE-MD3 - Acoustic insulation	
NOISE-R22	Residential unit or minor residential unit	
Speedway Noise Contour	Activity status: NC Where: 1. the activity is located in the Speedway Noise Contour.	Activity status when compliance not achieved: N/A
NOISE-R23	Residential units, minor residential units or noise sensitive activities	
65 dBA Ldn Noise Contour for Rangiora Airfield	Activity status: PR Where: 1. the activity is located in the 65 dBA Ldn Noise Contour for Rangiora Airfield.	Activity status when compliance not achieved: N/A

Table NOISE-2 Noise limits

	Maximum noise level at or within the boundary¹ of any site receiving noise from the activity, where the site receiving noise is zoned		
	Daytime 7:00am-10:00pm	Night-time 10:00pm-7:00am	
Residential Zones	50 dB LAeq	40 dB LAeq	70 dB LAF(max)
Special Purpose Zone (Hospital), Special Purpose Zone (Pines Beach and Kairaki Regeneration), Special Purpose Zone (Kāinga Nohoanga)	50 dB LAeq	40 dB LAeq	70 dB LAF(max)
Local Centre Zone, Neighbourhood Centre Zone	60 dB LAeq	40 dB LAeq	70 dB LAF(max)
Open Space Zone, Sport and Active Recreation Zone, Special Purpose Zone (Kaiapoi Regeneration), Special Purpose Zone (Pegasus Resort)	55 dB LAeq	45 dB LAeq	75 dB LAF(max)
Town Centre Zone, Mixed Use Zone	60 dB LAeq	50 dB LAeq	80 dB LAF(max)

⁵¹ McAlpines [226.2]⁵² Daiken [145.66]⁵³ McAlpines [226.2]⁵⁴ RMA Schedule 1 clause 16(2).

Light Industrial Zone	65 dB LAeq	55 dB LAeq	
Large Format Retail Zone, General Industrial Zone	60 5 dB LAeq	50 5 ⁵⁵ dB LAeq	
Heavy Industrial Zone, <u>except as provided for in NOISE-R1</u> ⁵⁶	65 dB LAeq	55 dB LAeq	
Special Purpose Zone (Museum and Conference Centre)	65 dB LAeq	55 dB LAeq	
Rural Zones, Natural Open Space Zone ¹ For sites in Rural Zones the boundary is the notional boundary	50 dB LAeq	40 dB LAeq	65 dB LAF(max)

Noise standards

NOISE-S1	Ventilation
<ol style="list-style-type: none"> 1. <u>Habitable rooms for a residential activity, achieves the following requirements:</u> <ol style="list-style-type: none"> a. <u>provides mechanical ventilation which can operate continuously to satisfy clause G4 of the New Zealand Building Code; and</u> b. <u>provides at least 1 air change per hour, but no less than 7.5L/s per occupant; and</u> c. <u>provides cooling and heating that is controllable by the occupant and can maintain the inside temperature between 18°C and 25°C; and</u> d. <u>must not generate more than 35 dB LAeq(30s) when measured 1 metre away from any grille or diffuser. The noise level must be measured after the system has cooled the rooms to the temperatures in (c.), or after a period of 30 minutes from the commencement of cooling (whichever is the lesser).</u> 2. <u>Alternatively, in lieu of NOISE-S1(1) above, a design verified by a suitably qualified and experienced person stating the design proposed will provide ventilation and internal space temperature controls to meet or exceed the outcomes described in NOISES1(1) a-d.</u>⁵⁷ 	<p><u>Activity status when compliance not achieved: N/A</u></p>

Advice Notes

⁵⁵ Woolworths [282.142].

⁵⁶ Daiken [145.27].

⁵⁷ KiwiRail [373.74]

NOISE-AN1	<ol style="list-style-type: none"> 1. Activities and structures may also be subject to controls outside the District Plan. Reference should also be made to any other applicable rules or constraints within other legislation or ownership requirements including excessive noise provisions of the RMA. 2. National Environmental Standards operate in parallel to or in conjunction with the District Plan, including the NESPF. Section 98 of the NESPF regulates noise and vibration for forests greater than 1ha that has been planted specifically for commercial purposes and will be harvested.
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Matters of Control/Discretion

NOISE-MC⁵⁸D1	<p>Noise</p> <ol style="list-style-type: none"> 1. Noise duration, timing, noise level and characteristics, and potential adverse effects in the receiving environment. 2. Any effects on the health or well-being of persons living or working in the receiving environment, including effects on sleep, and the use and enjoyment of outdoor living areas. 3. The location of the noise generating activity and the degree to which the amenity values of any residential activity may be adversely affected. 4. The extent to which noise effects are received at upper levels of multi-level buildings. 5. Any proposals to reduce or modify the characteristics of noise generation, including: <ol style="list-style-type: none"> a. reduction of noise at source; b. alternative techniques or machinery which may be available; c. insulation or enclosure of machinery; d. mounding, screen fencing/walls or landscape characteristics; and e. hours of operation. 6. The adequacy of measures to address the adverse effects of noise on the natural character values of the coastal environment. 7. Any adverse effects of noise on ecological values. 8. The characteristics of the existing noise environment, and the character the objectives and policies of the zone are seeking to achieve. 9. Any relevant standards, codes of practice or assessment methods based on recognised acoustic principles, including those which address the reasonableness of the noise in terms of community health and amenity values and/or sleep protection. 10. For temporary military training activities, the extent to which compliance with noise standards has been demonstrated by a report prepared by a suitably qualified and experienced acoustic consultant.⁵⁹
NOISE-MD2	<p>Management of noise effects</p> <ol style="list-style-type: none"> 1. The extent to which effects, as a result of the sensitivity of activities to current and future noise generation from aircraft, are proposed to be managed, including avoidance of any effect that may limit the operation, maintenance or upgrade of Christchurch International Airport. 2. The extent and effectiveness of any indoor noise insulation. 3. The extent to which a reduced level of acoustic insulation may be acceptable due to mitigation of adverse noise effects through other means, e.g. screening by other structures, or distance from noise sources.

⁵⁸ RMA Schedule 1 clause 16(2).

⁵⁹ New Zealand Defence Force [166.21].

	<ol style="list-style-type: none"> The ability to meet acoustic insulation requirements through alternative technologies or materials. The extent to which the provision of a report from an acoustic specialist provides evidence that the level of acoustic insulation ensures the amenity values, health and safety of present and future residents or occupiers. The reasonableness and effectiveness of any legal instrument to be registered against the title that is binding on the owner and the owner's successors in title, containing a 'no complaint' clause relating to the noise of aircraft using Christchurch International Airport.⁶⁰
NOISE-MD3	<p>Acoustic insulation <u>and ventilation</u></p> <ol style="list-style-type: none"> The extent to which a reduced level of acoustic insulation <u>and ventilation</u> may be acceptable due to mitigation of adverse noise effects through other means. The ability to provide effective acoustic insulation <u>and ventilation</u> through alternative technologies or materials. The extent to which the provision of a report from an acoustic <u>or ventilation</u> specialist which⁶¹ provides evidence that the level of acoustic <u>or ventilation</u> insulation ensures the amenity values, health and safety of present and future occupants or residents of the site. Any potential reverse sensitivity effects on other activities that may arise from residential accommodation or other noise sensitive activities that do not meet acoustic <u>or ventilation</u>⁶² insulation requirements necessary to mitigate any adverse effects of noise. The location of any nearby business or infrastructure activities and the degree to which any sensitive activities may be adversely affected. <u>The outcome of any consultation with Waka Kotahi NZ Transport Agency (for state highways) or KiwiRail (for rail).</u>⁶³
NOISE-MD4	<p>Helicopter noise</p> <ol style="list-style-type: none"> Assessment of noise in accordance with NZS 6807:1994 Noise Management and Land Use Planning for Helicopter Landing Areas and the findings of that assessment.

Schedules

NOISE-SCHED1 – Construction Schedule⁶⁴

<u>Applicability</u>	
	<p><u>Construction requirements detailed in this appendix are only applicable where:</u></p> <ol style="list-style-type: none"> <u>The road(s) passing the building containing the noise sensitive activity has/have a posted speed limit of less than or equal to 60 km/hr,</u> <u>The building is a single level construction,</u> <u>The floor of the building is a reinforced concrete slab,</u> <u>No habitable room of the building is located less than 4.5 metres from the road boundary,</u>

⁶⁰ Christchurch International Airport Ltd [254.63].

⁶¹ Christchurch International Airport Ltd [254.64]

⁶² Kāinga Ora [325.149]

⁶³ Waka Kotahi [274.55], KiwiRail [373.74]

⁶⁴ Bellgrove Rangiora Ltd [408.27]

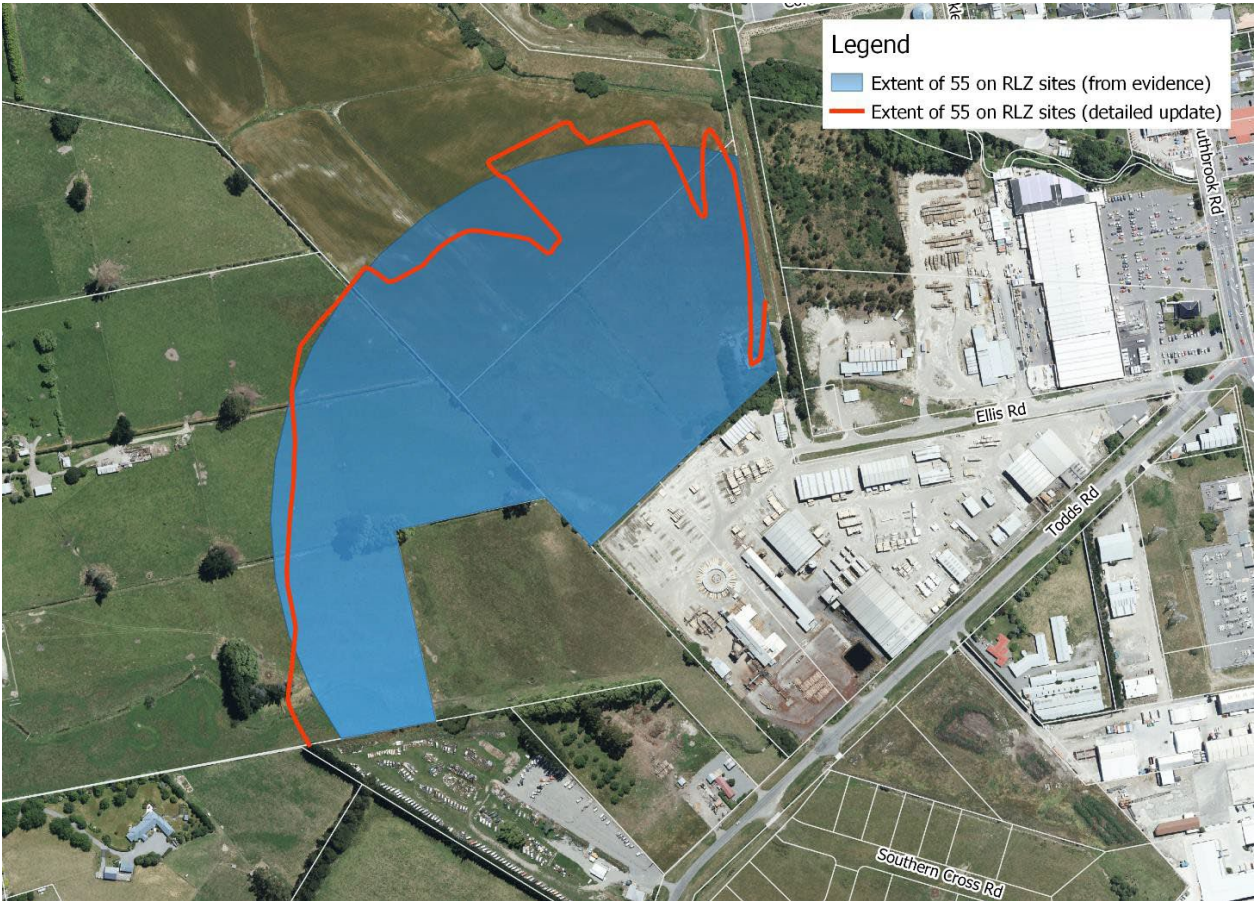
	<p>5. <u>The total area of glazing in any habitable room is no greater than 20% of the total area of external walls of that room.</u></p> <p>6. <u>The roof of the building is a standard timber truss design, with a pitch of not less than 15 degrees and horizontal ceiling. Ventilation of the roof space must only be via casual ventilation typical of the jointing, capping and guttering detail used in normal construction.</u></p> <p><u>In all other situations, a design report from a suitably qualified acoustics specialist is required.</u></p>
<u>Construction Options</u>	
<u>Exterior Walls Option 1</u>	<p><u>Exterior cladding of brick, Aerated Concrete or similar, with a surface mass not less than 27 kg/m².</u></p> <ul style="list-style-type: none"> • <u>Timber or steel framing of not less than 90 mm, with studs at 600 mm centres. A ventilated cavity is not required for noise control purposes under this option but is permissible, with or without a rigid air barrier,</u> • <u>Fibrous insulation of minimum R2.6. This includes fibreglass, polyester and wool, but does not include polystyrene or other foam sheet insulation products,</u> • <u>1 layer of 10 mm thick Standard Gib board or alternative gypsum board having a surface mass not less than 6 kg/m².</u>
<u>Exterior Walls Option 2</u>	<p><u>Exterior cladding of Profiled sheet steel not less than 0.4 mm thick, or profiled aluminium not less than 1.3 mm thick, or treated pine weatherboards not less than 19mm thick.</u></p> <ul style="list-style-type: none"> • <u>Battens forming a ventilated cavity not less than 18mm deep,</u> • <u>Rigid air barrier consisting of Plywood not less than 9 mm thick or Fibre Cement not less than 4 mm thick, or alternative sheet product having a surface mass not less than 5 kg/m².</u> • <u>Timber or steel framing of not less than 90 mm, with studs at 600 mm centres,</u> • <u>Fibrous insulation of minimum R2.6. This includes fibreglass, polyester and wool, but does not include polystyrene or other foam sheet insulation products,</u> • <u>2 layers of 10 mm thick Standard Gib board or alternative gypsum board, each layer having a surface mass not less than 6 kg/m².</u>
<u>Exterior Walls Option 3</u>	<p><u>Exterior cladding of Fibre Cement weatherboards, with a surface mass not less than 18 kg/m².</u></p> <ul style="list-style-type: none"> • <u>Battens forming a ventilated cavity not less than 18 mm deep,</u> • <u>Rigid air barrier consisting of Plywood not less than 7 mm thick or Fibre Cement not less than 4 mm thick, or alternative sheet product having a surface mass not less than 3.8 kg/m².</u> • <u>Timber or steel framing of not less than 90 mm, with studs at 600 mm centres,</u> • <u>Fibrous insulation of minimum R2.6. This includes fibreglass, polyester and wool, but does not include polystyrene or other foam sheet insulation products,</u> • <u>2 layers of 10 mm thick Standard Gib board or alternative gypsum board, each layer having a surface mass not less than 6 kg/m².</u>

Glazing and Exterior doors - All options	<ul style="list-style-type: none">• <u>Windows to consist of double glazing consisting of 2 layers of glass not less than 4 mm thick, separated by an airgap of not less than 12 mm, with full perimeter seals.</u>• <u>External doors to be either double glazed to the same standard as windows, or be a solid panel construction with a surface mass not less than 24 kg/m² and incorporating full perimeter seals.</u>
Roof – All Options	<ul style="list-style-type: none">• <u>Profiled metal roofing not less than 0.4 mm thick, in either sheet or tile form.</u>• <u>Fibrous insulation of minimum R6 within the ceiling cavity. This includes fibreglass, polyester and wool, but does not include polystyrene or other foam sheet insulation products.</u>• <u>2 layers of 13 mm Standard Gib board or alternative gypsum board, with each layer having a surface mass not less than 8 kg/m².</u>

Relevant planning map amendments

Rename the Timber Processing Noise Contour as the 'HIZ Processing Noise Contour' ⁶⁵

Insert the Timber Processing Noise Overlay, and apply to the McAlpine's sawmill, to the red line extent of 55 on RLZ sites (detailed updated) in the following map



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⁶⁵ Daiken [145.66]

⁶⁶ McAlpines Ltd [226.2]

Add a Road and Rail Noise Overlay to include:

- GIS data supplied by Waka Kotahi NZ Transport Agency
- For all other strategic and arterial roads:
 - a. 100-metre distance from “edge of seal” for roads with speed limits of greater than or equal to 70km/hr; and
 - b. 50 metres distance from “edge of seal” for roads with a posted speed limit of less than 70km/hr.⁶⁷
- 100m from the centre of any rail line.

Add a rail vibration alert layer as follows:

- Insert mapping overlay which identifies a 60m buffer on each side of the railway designation boundary.⁶⁸

Relevant definition amendments

- Amend the definition of 'construction work' to add:

“ ...

for the avoidance of doubt, installation of a building includes the relocation and resitting of a building.”

- The definition of noise sensitive activity be amended to read:

Noise sensitive activity

- a. *residential activities other than those in conjunction with rural activities that comply with the rules in the relevant district plan as at 23 August 2008;*
- *educational ~~activities~~ facilities including ~~pre-school places~~*⁶⁹ *or premises excluding training, trade training or other industry related training facilities;*
- *visitor accommodation except that which is designed, constructed and operated to a standard that mitigates the effects of noise on occupants;*
- *hospitals, healthcare facilities and any elderly persons housing or complex.*
- *marae and places of worship.*⁷⁰
- Add a definition of: Agricultural aviation activities:

“means the intermittent operation of an aircraft from a rural airstrip or helicopter landing area for primary production activities, and; conservation activities for biosecurity, or biodiversity purposes; including stock management, and the application of fertiliser, agrichemicals, or vertebrate toxic agents (VTA’s). For clarity, aircraft includes fixed-wing aeroplanes, helicopters, and unmanned aerial vehicles (UAV’s).”⁷¹

⁶⁷ Kainga Ora [325.149], KiwiRail [373.74], Waka Kotahi [275.55]

⁶⁸ KiwiRail [373.74]

⁶⁹ Ministry of Education [277.60]

⁷⁰ KiwiRail [373.6]

⁷¹ NZ Agricultural Aviation Association [310.1] consequential amendment