

IN THE MATTER

of the Resource Management Act 1991

AND

IN THE MATTER

of an application by **THAMES COROMANDEL DISTRICT COUNCIL**
for a comprehensive resource consent for festivals and events at
Williamson Park, Whangamata

JOINT WITNESS STATEMENT – ACOUSTICS

JON STYLES (for the Friends of Williamson Park Society)

NEVIL HEGLEY (for the Applicant)

1 This statement has been prepared by acoustic experts Jon Styles and Nevil Hegley as directed by the hearings commissioner.

2 This statement has been prepared to accompany and explain the differences between the noise-related conditions attached as:

Appendix A – Conditions suggested by Jon Styles; and

Appendix B – Conditions suggested by Nevil Hegley.

3 The experts have narrowed their disagreement considerably by preparing two sets of proposed conditions which are the same aside from the text highlighted in grey. All matters are agreed aside from the matters discussed below.

4 The reasons for the differences are as follows:

Condition 1 – Noise Limits

5 The experts have agreed that the measurement and assessment location should be within the boundary of any residential property. However the experts disagree on the numerical L_{Aeq} noise limits that should apply to the different types of events.

6 Mr Styles prefers the lower set of limits described in his suggested conditions, and considers that they will permit all events that have been described in the proposal except for the 'loud' concerts, like the Shapeshifter event.

(a) The highest noise limit for the 6 night time events at 80dB L_{Aeq} is approximately consistent with one of the limits in the Reserve Management Plan (being 85dB at the mixing desk, equating roughly to 78-79dB at the residential boundary);

(b) The noise limit for 5 day time high noise events at 75dB L_{Aeq} is approximately 3dB higher than the boundary control in the Reserve Management Plan of 70dB L_{A10} . In his view this will easily permit events such as sporting competitions with limited use of a PA system, food and wine festivals with modest live performances, fairs and markets.

- (c) The noise limit for the remaining 15 events is 60dB L_{Aeq} . This limit is relatively low, but in his opinion would easily permit markets, fairs, promotions and community events where the use of a PA system is either limited to announcements to small crowds or playing background music. The noise levels inside the event if the location of the PA system is further removed and oriented away from neighbours compared to the stage location depicted in the application plans.
- 7 Mr Styles considers that this mix of noise limits, event numbers and durations is reasonable, having regard to the matters raised in his primary evidence and supplementary statement presented at the hearing. He notes that consistency with the Reserve Management Plan has not been the focus in developing these controls. When taking into account the mix of noise limits and the number of events, Mr Styles' proposal is considerably more liberal than the Reserve Management Plan.
- 8 Mr Hegley recommends a higher set of noise limits than Mr Styles.
- 9 The levels Mr Hegley has adopted at the residential boundary are 3dB below that originally recommended in the application based on a level at the monitoring desk.
- 10 Mr Hegley understands that that all closer residents have advised they do not mind the normal concerts held at the park but do not accept noisy concerts, such as the Shapeshifters concert. The Shapeshifters concert exceeded the originally proposed noise limits by up to 6dB above the limits proposed for the seven special events. The Concerts referred to by residents as being acceptable, such as Sol≡ Mio and the type of event at the 2018 New Year's Eve concert play at the 85dB L_{Aeq} limit as Mr Hegley has now proposed. In his opinion these groups would not comply with a level as low as 80dB L_{Aeq} .
- 11 Mr Hegley's proposed level of 85dB L_{Aeq} at the residential boundary (3dB lower than initially sought) will allow the concerts that play at a level considered acceptable by the closer neighbours and prohibit concerts such as Shapeshifters.

- 12 Adopting a level 5dB and 10dB respectively below the noisiest events will in Mr Hegley's view be well within a reasonable level for neighbours and still allow the quieter groups to play.
- 13 Based on field measurements that reflect the types of events being proposed (including food and wine festivals and festivals with modest noise levels) there would not be compliance with the lower limits being suggested by Mr Styles. Mr Hegley is of the opinion that a level of 65dB LAeq will not allow any noise beyond low background music. Should such a level be adopted those events should simply be prohibited as it is the same thing but at least it would be clear what is meant. Mixing Desk Measurements
- 14 This matter relates to the note beneath the table of noise limits, highlighted grey in Mr Hegley's suggested conditions, and absent in Mr Styles' suggested conditions.
- 15 Mr Styles has not included provision for measurements to be completed at the mixing desk. He considers that the conditions required to describe how determine and rely on a robust correlation between the noise levels at the mixing desk and residential boundary would be too detailed and cumbersome to apply. Given that measurements at the residential boundary are easy, best-related to the effects, and can be easily monitored and enforced by the Council, he considers that measurements within the residential boundary are all that is required.
- 16 Mr Hegley accepts the design limit at the residential boundary but with a note to say measurements at the mixing desk is appropriate if a correlation of the noise played at is made to the level at the desk. In his view, determining the difference for any given concert is a simple matter to field checks when setting up the sound system used on the day.
- 17 If the aim is to ensure compliance at all times and where it is a loud concert communication between some outside point and the desk is considered impractical by Mr Hegley and promoters he has spoken with. Monitoring at the desk enables instant checking that in Mr Hegley's view is not practical with any form

of remote monitoring. He considers that for small events monitoring at the residential boundary will work well.

Advice to Council and Neighbours

- 18 This matter relates to the requirement to give notice of the higher noise events on the neighbourhood.
- 19 Mr Styles considers that the threshold for notification should be all events exceeding the limit of 60dB, being the 5 day time events up to 70dB L_{Aeq} and the 6 night time events up to 80dB L_{Aeq} . He considers that noise up to these levels is sufficiently annoying to warrant a letter drop to set expectations around event timing, duration and the nature and character of the event. He also considers that the Council should be advised of these events so it may invoke the requirement to monitor the noise as set out in condition.
- 20 Mr Hegley considers notification for the quieter events unnecessary as permitted events at louder levels do not require notification, but if considered to be appropriate then the radius for notification should be dropped to 250m for the five special events (assuming Mr Hegley's noise limits are adopted).
- 21 Mr Hegley does not see the need to include Council in the notification as any event must be approved by Council before it may take place so they know about the event.

Monitoring Location

- 22 This matter relates to the monitoring location as specified in the monitoring condition.
- 23 Mr Styles considers that specifying that monitoring must be undertaken at the residential property most exposed to noise is clear and will avoid any arguments or misunderstandings where the consent holder carries out the monitoring elsewhere.
- 24 Mr Hegley considers that the ability to monitor at the mixing desk, once correlated with the boundary level for any given event, provides for a positive outcome by enabling instant control of the levels and provided the same level of certainty.

Signed:



Nevil Hegley (for the Applicant)



Jon Robert Styles (for FOWPS)

30 October 2018

Appendix A - Conditions Suggested By Jon Styles

1. The noise level from any special noise event must not exceed the following limits when measured within any residential boundary:

Time, day and frequency	Noise limit
Up to 6 special noise events between 4:00pm and 11:00pm in any 12 month period; and On New Year's Eve between 4:00pm – 12:30am the next day	80dB $L_{Aeq(5min)}$
Up to 5 special noise events between 7:00am and 7:00pm in any 12 month period.	75dB $L_{Aeq(5min)}$
Up to 15 special noise events between 7:00am and 7:00pm in any 12 month period.	60dB $L_{Aeq(5min)}$

2. Noise Measurement and Assessment requirements:
 - i) Subject to the following, noise levels must be measured in accordance with the requirements of NZS 6801:2008 Acoustics – Measurement of Environmental Sound and assessed in accordance with the requirements of NZS 6802:2008 Acoustics – Environmental Noise;
 - ii) No duration correction or adjustment for special audible characteristics will be applied;
 - iii) Crowd noise is to be excluded from any assessment of compliance with these limits;
 - iv) The noise from the sound checks shall not exceed 30 minutes between 12 midday and 4:00pm on the day of the event;
 - v) Noise from sound checks shall not exceed a level of 80dB L_{Aeq} when measured at 35m from the stage;
3. For all special noise events where the noise level will be over 65dB L_{Aeq} when measured within any residential boundary, The neighbours within a radius of 250m from the stage, and the Council shall be advised of the event via a letter box drop between seven and twenty one days before the event. As a minimum, this letter shall include the date and times of the proposed event, the nature of the event and a contact number in case there are any concerns;
4. There must be no more than 4 special noise events within any 2 week period.
5. A special noise event must be limited to a total duration of 6 hours. Any special noise event lasting longer than 6 hours must be counted as 2 special noise events. The duration of a special noise event must

be determined by the cumulative length of time that the Standard Noise Limits are exceeded; and

6. The Standard Noise Limits (from 54.4(9) of the Proposed District Plan) are:

Time and Day	L _{Aeq} Noise Limit	L _{Amax} Noise Limit
Monday to Saturday 7 am to 10 pm	50 dB	N/A
Sunday 7 am to 6 pm	50 dB	N/A
At all other times	40 dB	65 dB

7. The Council may at its reasonable discretion, require the Consent Holder to carry out noise measurements of any special noise event to ensure that compliance with these conditions is met. If noise monitoring is requested, it shall be undertaken for the duration specified by the Council at the residential property most exposed to noise. The results of all monitoring shall be provided to the satisfaction of the Council within 5 working days of the event concluding.

Appendix B - Conditions Suggested By Nevil Hegley

1. The noise level from any special noise event must not exceed the following limits when measured within any residential boundary:

Time, day and frequency	Noise limit
Up to 6 special noise events between 4:00pm and 11:00pm in any 12 month period; and On New Year's Eve between 4:00pm – 12:30am the next day	85dB $L_{Aeq(5min)}$
Up to 5 special noise events between 7:00am and 7:00pm in any 12 month period.	80dB $L_{Aeq(5min)}$
Up to 15 special noise events between 7:00am and 7:00pm in any 12 month period.	75dB $L_{Aeq(5min)}$

Note: If a correlation of the noise at the residential boundary to the mixing desk is demonstrated for any event then the monitoring may be undertaken at the mixing desk to check compliance.

2. Subject to the following, noise levels must be measured in accordance with the requirements of NZS 6801:2008 Acoustics – Measurement of Environmental Sound and assessed in accordance with the requirements of NZS 6802:2008 Acoustics – Environmental Noise;
 - i) No duration correction or adjustment for special audible characteristics will be applied;
 - ii) Crowd noise is to be excluded from any assessment of compliance with these limits;
 - iii) The noise from the sound checks shall not exceed 30 minutes between 12 midday and 4:00pm on the day of the event;
 - iv) Noise from sound checks shall not exceed a level of 80dB L_{Aeq} when measured at 35m from the stage;
 - v) For all special noise events where the noise level will be over 75dB L_{Aeq} when measured within any residential boundary, The neighbours within a radius of 350m from the stage shall be advised of the event via a letter box drop between seven and twenty one days before the event. As a minimum, this letter shall include the date and times of the proposed event, the nature of the event and a contact number in case there are any concerns;
 - vi) There must be no more than 4 special noise events within any 2 week period;
 - vii) A special noise event must be limited to a total duration of 6 hours. Any special noise event lasting longer than 6 hours must

be counted as 2 special noise events. The duration of a special noise event must be determined by the cumulative length of time that the Standard Noise Limits are exceeded;

- viii) The Standard Noise Limits (from 54.4(9) of the Proposed District Plan) are:

Time and Day	L _{Aeq} Noise Limit	L _{Amax} Noise Limit
Monday to Saturday 7 am to 10 pm	50 dB	N/A
Sunday 7 am to 6 pm	50 dB	N/A
At all other times	40 dB	65 dB

- ix) The Council may at its reasonable discretion, require the Consent Holder to carry out noise measurements of any special noise event to ensure that compliance with these conditions is met. If noise monitoring is requested, it shall be undertaken for the duration specified by the Council at the location required by condition 1. The results of all monitoring shall be provided to the satisfaction of the Council within 5 working days of the event concluding.