

DRAFT: Noise Management and Monitoring Plan (NMP)

Event: Rolling Meadows 2025 (**Rolling Meadows**)

Location: 240 Lower Styx Road

Date(s): 29/12/25 - 1/1/26

Prepared by: Technical Event Solutions; Author: Ben Kamps

Certified by: [To be updated and obtained at time of finalisation in accordance with 'Condition 3']

Version: 6.0 (16 October 2025)

1. Introduction

This Noise Management Plan (NMP) is prepared by Technical Events Solutions in accordance with NZ standards: NZS 6801:2008 Acoustics – Measurement of environmental sound and NZS6802:2008 Acoustics – Environmental noise.

The NMP is created to enable appropriate management of noise created from Rolling Meadows during its 3-year consent at 240 Lower Styx Road. This NMP sets out procedures to ensure that the potential adverse noise effects of its activities are minimised and that its obligations and conditions outlined in its consent RMA/2025/1880 are fulfilled.

This NMP is prepared in accordance with the below conditions of consent RMA/2025/1880:

3. The NMP is created to enable appropriate management of noise created from Rolling Meadows during its 3 year consent at 240 Lower Styx Road. The operation of each event shall be undertaken in accordance with an event specific Noise Management Plan (NMP), and submitted to Council at least four weeks before the 20th of December for certification by the Manager Resource Consents by way of rcmon@ccc.govt.nz. The NMP shall be first certified by a suitably qualified and experienced acoustic engineer before being submitted to Council. A copy of the approved NMP shall be kept on the site at all times. Any amendments to the approach to managing noise in the NMP from year to year, other than those to make it event-specific shall be:
 - for the purposes of improving the measures outlined in the NMP for achieving the NMP purpose;
 - consistent with the conditions of this resource consent; and
 - certified by an appropriately qualified and experienced acoustic engineer.

The consent RMA/2025/1880 imposes the following requirements that must be complied at all times:

2. One amplified musical event per calendar year is consented; to occur on the 29th December -1st January each year, for a duration of three years (2025, 2026 and 2027). Maximum event size for ticketholders as follows: • 10,000 total including up to 5,000 camping
4. The applicant shall arrange for noise to be monitored and recorded during the sound checks, and through the duration of the event in accordance with the Noise Management Plan, with the aim of ensuring a compliant event. All monitoring information shall be provided to the Christchurch City Council Environmental Health Team within ten working days of the completion of each event by way of rcmon@ccc.govt.nz and shall include conclusions as to whether or not the various aspects of the event were compliant with conditions.
5. The event must utilise the stage orientation and speaker position as set out in the Site Plan (Figure 3) of the Earcon Acoustic Assessment (dated 26th September 2025, Revision 12), which forms part of the approved consent documentation, unless an alternative arrangement is approved through a Noise Management Plan in accordance with condition [3] above.
6. The following operation times of the stages shall be adhered to: • 29 December – Stage A (12:00-24:00 hours) • 30 December – Stage A (13:00-01:00 hours), Stage B and C (10:05-22:00 hours) • 31 December – Stage A (14:00-02:00 hours), Stage B and C (10:05-22:00 hours)

2. Noise Limits

Noise limits are based on the Earcon Acoustic Assessment (dated 16th October 2025, Revision 14) and relevant district plan requirements. Noise levels shall comply with the conditions in the resource consent at any residential unit when measured in accordance with NZS 6801:2008 Acoustics – Measurement of environmental sound and assessed in accordance with NZS 6802:2008 Acoustics – Environmental noise:

Noise limits for the festival are outlined in the following condition of consent RMA/2025/1880.

7. All events authorised by this consent shall comply with the noise limits specified in Rule 6.1.5.2.1 of the Christchurch District Plan except where specific 'dB exceedance' are identified in Tables 10–12 of Earcon Acoustic Assessment (dated 16th October 2025, Revision 14).
--

Advice Note: The authorised 'dB exceedance' is contained in the right column of Tables 10-12 of Earcon Acoustic Assessment (dated 16th October 2025, Revision 14). The applicable receiver for the authorised dB exceedance is contained in the far left column of those same tables. The District Plan standards otherwise to be achieved are noted in these same tables under the heading 'Noise Limit, Day / Night'.

Advice note: The monitoring requirements for this condition are set within Noise Management Plan required by Condition 3.

Bass Noise Limit

8. The LZeq (10 min) sound pressure level measured in any third octave band is not to exceed 85 dB at any time at any residential unit or at the nearest campground camping sites, except between 10pm and 2am where it shall not exceed 80 dB.

Pack-in and Pack-Out

20. Pack-in and pack-out activity shall only occur between 07:00 and 20:00 hours and shall not exceed a noise level of 60 dB LAeq (1 hour), decreasing to 50 dB LAeq (1 hour) after 18:00, at any residential property when measured and assessed in accordance with NZS 6801:2008 Acoustics – Measurement of Environmental Sound and NZS 6802:2008 Acoustics – Environmental Noise.

The Noise Limit conditions (condition 7 above) refers to tables produced in the Earcon Acoustic Assessment (dated 16th October 2025, Revision 14). These tables identify the applicable District Plan noise limits and authorised 'Db exceedance' for each day of the event.

Rolling Meadows is responsible to ensure that these noise limits are complied with at the identified receivers, utilising the methodology outlined in section 3 of this NMP below.

Noise Limits – 29 December

6.2.2.1 Predicted Noise Levels 29th December

Receiver	Predicted Noise Rating Level dB		Night-time	Noise Limit Day / Night	dB exceedance
	Duration Adjusted Daytime Noise Rating Level	Stage A only After 10pm			
176 Lower Styx Road	36	37	47	50dB / 40dB L _{Aeq} & 65dB L _{Amax} at night	N/A
206 Lower Styx Road	35	36	46		N/A
212 Lower Styx Road	36	37	47		N/A
218 Lower Styx Road	36	37	47		N/A
220 Lower Styx Road	36	37	47		N/A
222 Lower Styx Road	37	38	48		N/A
224 Lower Styx Road	37	38	48		N/A
226 Lower Styx Road	39	40	50		N/A
228 Lower Styx Road	38	39	49		N/A
230 Lower Styx Road	40	41	51		1dB 10pm – 12am
234 Lower Styx Road	41	42	52		2dB 10pm – 12am
Residential Zone (e.g. 286 Lower Styx Road)	38	39	49	55dB / 45dB L _{Aeq} & 70dB L _{Amax} at night	N/A
Spencer Beach Top 10 Holiday Park	41	42	52		N/A
Specific Purpose (Golf Resort) Zone	42	43*	53		N/A

Noise Limits - 30 December

6.2.2.2 Predicted Noise Levels 30th December

Receiver	Predicted Noise Level dB L _{Aeq}		L _{Amax}	Noise Limit Day / Night	dB exceedance
	Duration Adjusted Daytime Noise Rating Level	10pm – 1am Stage A only	Night- time		
176 Lower Styx Road	45	37	47	50dB / 40dB L _{Aeq} & 65dB L _{Amax} at night	N/A
206 Lower Styx Road	42	36	46		N/A
212 Lower Styx Road	46	37	47		N/A
218 Lower Styx Road	44	37	47		N/A
220 Lower Styx Road	44	37	47		N/A
222 Lower Styx Road	45	38	48		N/A
224 Lower Styx Road	45	38	48		N/A
226 Lower Styx Road	48	40	50		N/A
228 Lower Styx Road	46	39	49		N/A
230 Lower Styx Road	52	41	51		2dB 10:05am – 10pm 1dB 10pm – 1am
234 Lower Styx Road	53	42	52		3dB 10:05am – 10pm 2dB 10pm – 1am
Residential Zone (e.g. 286 Lower Styx Road)	46	39	49	55dB / 45dB L _{Aeq} & 70dB L _{Amax} at night	N/A
Spencer Beach Top 10 Holiday Park	48	42	52		N/A
Specific Purpose (Golf Resort) Zone	50	43*	53		N/A

Table 11 – High Intensity Activity – Cumulative Predicted Noise Rating Levels

Noise Limits - 31 December

6.2.2.3 Predicted Noise Levels 31st December

Receiver	Predicted Noise Level dB L _{Aeq}			L _{Amax}	Noise Limit Day / Night	dB exceedance
	Duration Adjusted Daytime Noise Rating Level	10pm – 12am Stage A only	12am – 2am Stage A only	Night- time		
176 Lower Styx Road	45	39	37	52	50dB / 40dB L _{Aeq} & 65dB L _{Amax} at night	N/A
206 Lower Styx Road	42	39	36	52		N/A
212 Lower Styx Road	46	40	37	53		N/A
218 Lower Styx Road	44	39	37	52		N/A
220 Lower Styx Road	44	39	37	52		N/A
222 Lower Styx Road	45	40	38	53		N/A
224 Lower Styx Road	45	40	38	53		N/A
226 Lower Styx Road	48	42	40	55		2dB 10pm – 12am
228 Lower Styx Road	46	41	39	54		1dB 10pm – 12am
230 Lower Styx Road	52	44	41	57		2dB 10:05am – 10pm 4dB 10pm – 12am 1dB 12am – 2am
234 Lower Styx Road	53	44	42	57	55dB / 45dB L _{Aeq} & 70dB L _{Amax} at night	3dB 10:05am – 10pm 4dB 10pm – 12am 2dB 12am – 2am
Residential Zone (e.g. 286 Lower Styx Road)	46	41	39	54		1dB 10pm – 12am
Spencer Beach Top 10 Holiday Park	48	44	42	57		N/A
Specific Purpose (Golf Resort) Zone	50	44*	43*	57		N/A

Table 12 – High Intensity Activity – Cumulative Predicted Noise Rating Levels

Pack-in and Pack-out

During pack-in and pack-out activities, Rolling Meadows shall ensure that noise-generating and mechanical plant utilised during setup and pack-down works is operated only during restricted hours (between 07:00 and 20:00 hours). This is to ensure compliance with the noise requirements established in Condition 20. All activities shall be managed to minimise disturbance to surrounding receivers.

3. Monitoring Procedure and Requirements

This NMP sets out procedures to ensure that the potential adverse noise effects of its activities are minimised and that its obligations and conditions outlined in its consent RMA/2025/1880 are fulfilled.

1.	Noise limits must be measured in accordance with NZS 6801:2008 Acoustics – Measurement of Environmental Sound and assessed in accordance with NZS 6802:2008 Acoustics – Environmental Noise. An adjustment must not be applied to amplified music or amplified voice sounds containing special audible characteristics (with respect to section 6.3 of NZS6802:2008).
2.	Noise monitoring shall be undertaken at approximately five representative locations, chosen to represent the closest and most affected neighbouring receivers, referenced in Figure 1 below. To be measured at or in close proximity to the boundary of: 1. 230 Lower Styx Road 2. 234 Lower Styx Road 3. 286 Lower Styx Road 4. 26 Styx River Place 5. Spencer Beach Top 10 Holiday Park (in proximity to the closet campsites) Note: preferred monitoring locations have been identified, however, subject to suitability or excess background noise levels, alternative monitoring locations closer to the festival may be required and extrapolated from to provide an estimated noise levels at the relevant receiver(s). Alternative monitoring location must be approved by the Council's Environmental Officer in charge of monitoring during the event. Additional noise monitoring locations may also be required through the Complaints Response & Corrective Actions procedure outlined within this NMP.

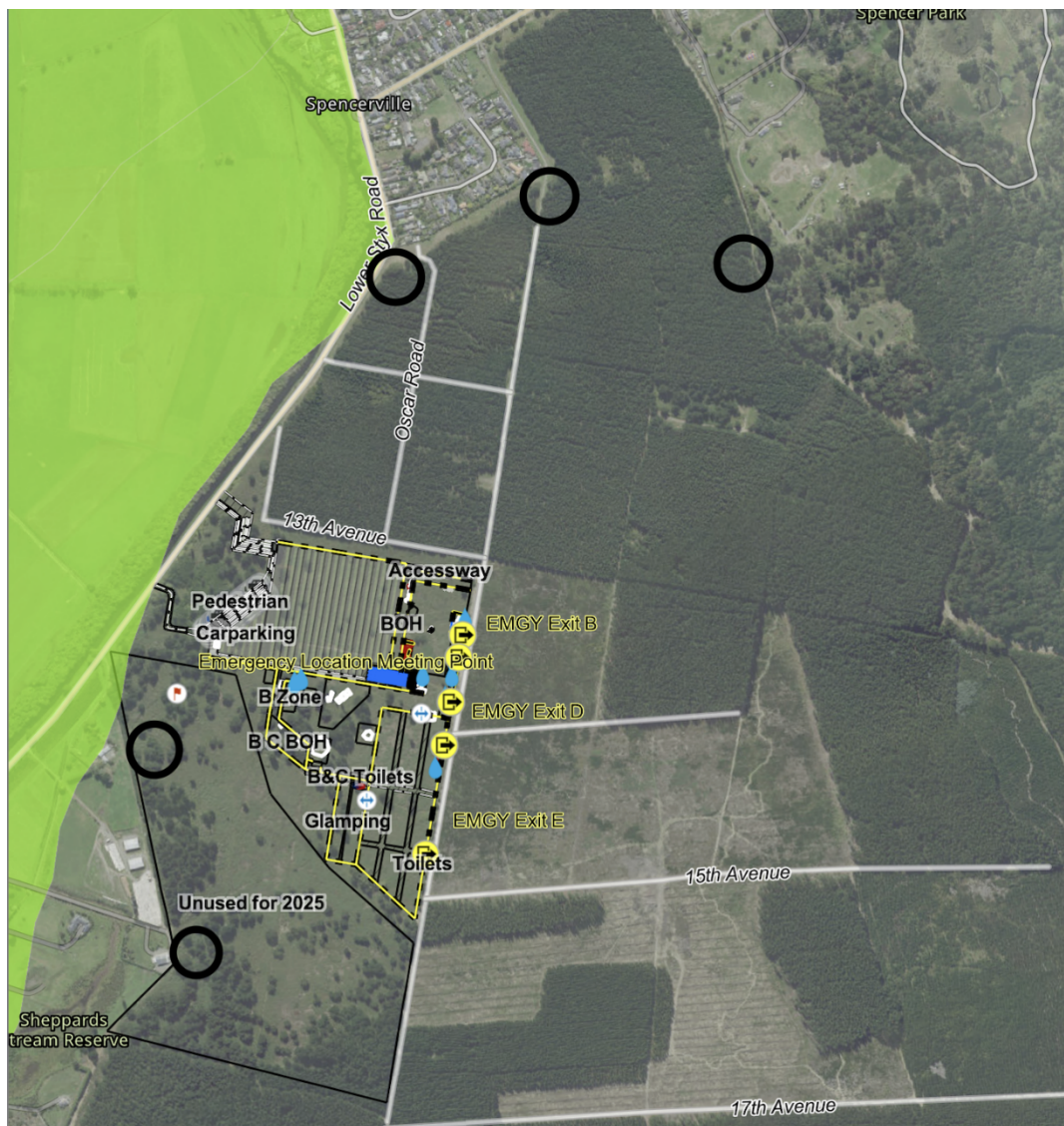


Figure 1 - Proposed Monitoring Locations (black circle)

- | | |
|------------------|--|
| <p>3.</p> | <p>At a minimum, noise monitoring shall be carried out at each of the locations identified in figure 1:</p> <ol style="list-style-type: none"> 1. Within 1 hour of amplified music beginning 2. When Stage A begins amplified music at: 12:00 (29th), 13:00 (30th) and 14:00 (31st) 3. At 18:00 when Stage A volume changes 4. Shortly after each headline act changeover on Stage A up until 22:00 hours 5. Hourly after 22:00 until all stages close 6. Hourly for 3 hours after a complaint is received from the closest location to the complainants address, in accordance with the 'Complaints Response & Corrective Actions' outlined in section 5 of this NMP below. |
|------------------|--|

4.	Monitoring at the identified locations shall include monitoring in accordance with the 'Bass Noise Limits' as required by condition 8 of the resource consent.
5.	Continuous noise level monitoring will be carried out at the front of house to ensure noise levels specified in condition [#] of RMA/2025/1880 are being met at all times. 1. Where the results of boundary monitoring indicate that the consented noise limits are being approached or exceeded, the FOH noise limits shall be adjusted accordingly to ensure ongoing compliance with the requirements of this consent.
6.	Noise monitoring shall be undertaken throughout the event, with results recorded in real time. These records shall be maintained in a shared spreadsheet that Council's Environmental Officer in charge of monitoring during the event has full access to. The spreadsheet shall include time-stamped sound level readings, monitoring locations, and any corrective actions taken.
7.	Within 10 working days of the completion of the first concert, the Consent Holder shall provide the noise monitoring results, confirming whether the noise levels complied with the requirements of Condition # of RMA/2025/1880, and shall submit these results to the Council's Team Leader – Compliance Monitoring.
8.	Equipment Monitoring will be conducted using a Class 1 sound level meter with a valid calibration certificate, in accordance with NZS 6801:2008. Measurements will be undertaken using the LAeq, LAmax and LZeq descriptors, with windshields fitted to microphones.
9.	Meteorological conditions Wind speed, wind direction, and temperature inversions will be recorded hourly. If weather conditions indicate potential for sound to travel further than expected, mobile monitoring will be deployed to affected areas.
10.	Noise monitoring will be undertaken by suitably experienced and qualified personnel. Rolling Meadows have engaged the following consultant(s) for the 2025 event: Sound Company Engaged: Technical Event Solutions (TES), Christchurch Main Contact: Ben Kamps, 021 262 7520, ben@tes.nz Acoustic Engineer Engaged: Earcon Acoustics, Christchurch Main Contact: Daniel Marten, 027 513 5890, daniel.martens@earecon.co.nz

4. Noise Mitigation Measures

To minimise sound propagation from the event the following Mitigation shall be applied as required by of condition [#] of RMA/2025/1880:

8. The noise levels and configuration for each stage and speaker positioning shall be as specified below, unless otherwise authorised by a Noise Management Plan in accordance with condition [3] above:

Stage A (at 30m from the stage)

29 December

- 12:00-00:00 hours – 90 dB $L_{Aeq15\ min}$

30 December

- 13:00-18:00 hours - 90 dB $L_{Aeq15\ min}$
- 18:00-22:00 hours - 95 dB $L_{Aeq15\ min}$
- 22:00-01:00 hours - 90 dB $L_{Aeq15\ min}$

31 December

- 14:00-18:00 hours - 90 dB $L_{Aeq15\ min}$
- 18:00-22:00 hours - 95 dB $L_{Aeq15\ min}$
- 22:00-00:00 hours - 92 dB $L_{Aeq15\ min}$
- 00:00-02:00 hours - 90 dB $L_{Aeq15\ min}$

Stage B

30 & 31 December

- 10:05-22:00 hours – 84 dB $L_{Aeq15\ min}$ @ 30m (90 dB $L_{Aeq15\ min}$ @ 15m – Front of House)

Stage C

30 & 31 December

- 10:05-22:00 hours – 84 dB $L_{Aeq15\ min}$ @ 30m (93 dB $L_{Aeq15\ min}$ @ 10m – Front of House)

Speaker Trim Heights (as modelled by Earcon, and measured above ground level (not stage height):

- Stage A - 8m
- Stage B - 7m
- Stage C - 4m

Speaker/Stage Orientation – Compass Bearings:

- Stage A – 130 degrees
- Stage B – 115 degrees
- Stage C – 105 degrees

In addition, Rolling Meadows shall implement the following noise mitigations measures to minimise sound propagation during the course of the event:

1.	An appropriately qualified acoustic engineer shall be present on site to ensure that the sound and mixing system is configured in accordance with the approved layout and complies with the noise limits identified in this NMP. The engineer shall verify that all equipment settings and speaker placements are optimised to minimise noise impacts on surrounding properties.
2.	Loudspeaker orientation: 1. All speakers angled inward and downward to reduce propagation toward all residential units no matter the zoning, and campers. 2. Delay towers to be limited and aligned to reduce overspill beyond site. 3. All speakers will be orientated towards the east, with the stage orientated slightly to the south- east, as displayed on Site Plan (Figure 3) of the Earcon Acoustic Assessment (dated 26th September 2025, Revision 12). The compass directions to be implemented are: <u>Speaker/Stage Orientation – Compass Bearings:</u> • Stage A – 130 degrees • Stage B – 115 degrees • Stage C – 105 degrees
3.	Cardioid Subwoofer Deployment All stages will use a ‘cardioid’ deployment to reduce noise spill.
4.	Cumulative Effects & Multi-Stage Control Cumulative sound from multiple stages will be managed through: 1. Live coordination between FoH engineers and monitoring staff. 2. Real-time level adjustments to avoid exceedance at any boundaries in accordance with conditions of consent.
5.	Sound checks Audible soundchecks will be conducted on A stage only during the hours of 10am - 2pm on the 30th and 31st and only for the headline artists performing on each respective day. These sound checks will be conducted far below the 90db LAeq (15min) outlined above.
6.	Site Layout The event must utilise the stage orientation and speaker position as set out in the Site Plan (Figure 3) of the Earcon Acoustic Assessment (dated 16th October 2025, Revision 14).

5. Complaints Response & Corrective Actions

The following condition of RMA/2025/1880 outlines the complaint notification process to Council.

10. Compliance recording and daily reporting, shall be documented and sent to Council by 11am the day after each event day via EnvironmentalHealth@ccc.govt.nz and rcmon@ccc.govt.nz.

Any complaints received over the course of the event should be forwarded to the Council on 03 941 8999 (which will divert to Council's after-hours noise control service (Allied) when offices are closed), who will liaise with the Council's Environmental Officer in charge of monitoring at CCC during any event.

In addition, a complaints hotline will be active from sound check through to close of the event. All complaints will be registered and are the responsibility of the Event Manager and Production Manager to ensure they are addressed, and corrective actions are taken immediately.

The following procedure shall be followed upon receipt of a complaint:

1.	Event Manager is notified immediately and ensures noise at the mixing desk does not exceed the levels committed to by Rolling Meadows as set out in the Earcon Acoustic Assessment dated 16th October 2025 (Revision 14) and that operations remain within consented timeframes.
2.	At the earliest opportunity, monitoring will be undertaken at the complainant's location if requested and access is available. Monitoring will be conducted each hour for 3 hours at a complainant's address, or the nearest location to where the complaint originated.
3.	Upon completion of monitoring, results are reported back to the mixing desk and Event Manager , with adjustments made immediately if required to ensure compliance.
4.	These measurements will be added to a shared spreadsheet that council has access to with the following information including both Lmax, LAeq and LZeq (15min) readings: 1. Date, time and location of the complaint 2. Nature of the complaint 3. How the complaint was made 4. Monitoring taken place at the complainant address 5. Resolution to the complaint 6. Any further communication with the complainant
5.	All complaints will be reviewed post event with production and event teams, with any learnings noted for future events.

6. Communication Strategy

Neighbour notification: All properties within the predicted >40 dB contour of the Acoustic Assessment prepared by Earcon Acoustic Assessment (dated 16th October 2025, Revision 14) will be notified in writing at least 10 days before the event, as per

the following condition of RMA/2025/1880. The applicable properties are captured by the below conditions of consent.

17. At least ten days before each event, a letterbox drop to residents along Lower Styx Road (from 166 Lower Styx Road to Heyders Road) as well as the residents along Nautilus Place, Seabrooke Drive, Hemingway Place, Calypso Place, and Styx River Place, advising of the proposed event date including timings and sound check times shall be completed. The letter shall include the contact details of the Event Manager should there be any questions or concerns. At the same time, a copy of the letter shall be sent to the Council's monitoring team, by way of rcmon@ccc.govt.nz.

The Communication Strategy shall also meet the following requirements:

1.	The Letter drop shall contain the following information: 1. Key event information 2. Stage timings 3. Information on the fireworks display if applicable 4. Complaint process for noise issues 5. Contact details for an event manager who will record inquiries 6. Summary of noise mitigation and monitoring measures.
2.	Further communication will be posted in community groups 1 week prior to the event reiterating this information.
3.	The NMP will be sent to all staff in their staff handbook pack. TES will brief all stage managers and audio teams including running through the NMP prior to the event.
4.	Monitoring and Audio teams will be required to sign off that they have read and understood the NMP.

7. Management & Contact Details

Contact details for **Stage Managers** in control of audio are as follows:

All Stages (oversite)	Ben Kamps (ben@tes.co.nz and 021 262 7520)
Stage A	Jamie Thomsson (jamie@tes.co.nz and 027 445 0593)
Stage B	Will Graham (will@tes.co.nz and 022 135 9875)
Stage C	Jack Lanham (jack@tes.co.nz and 027 612 8535)

Contact details for **Event Manager** who will be responsible for ensuring the Noise Management Plan and Resource Consent is follows:

29 December	12:00-24:00	Jamie Moir - 0278671810
30 December	00:00 -10:00	Aaron Smith - 0279193604
	10:00-24:00	Jamie Moir - 0278671810

31 December	24:00-10:00	Aaron Smith - 0279193604
	10:00-24:00	Jamie Moir - 0278671810
1 January	24:00-10:00	Aaron Smith - 0279193604

**Note event personnel may change closer to the event.