

Noise & Vibration Monthly Report Barangaroo Cutaway Cultural Facility

3847.17

NoiseNet Operations Pty Ltd

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Customer Name: FDC Construction

Report Number: 3847.17

Reporting Period 29/8/2025 to 28/9/2025

Issue Date: 29/9/2025

Compiled By: Jonathan South Jake Donovan-Parker Reviewed By

1 Executive Summary

Noise and vibration associated with construction activities were monitored between 29th of August and 28th of September 2025 (inclusive).

During this reporting period, a new noise monitor (5038) and vibration sensor (1001V) were installed at 3pm on the 19th of September 2025, using a solar battery solution for powering sensors. Capacity of the solar solution is currently being optimised to ensure noise and vibration sensors are active during the site operating hours. FDC has continued to send a technician to the skylight twice a day (during the noisy periods) to take manual dB measurements.

Over the monitoring period, there was one instances where noise exceeded established alerting or alarm levels and zero instances where vibration exceeded established alerting or alarm levels. Impacts to sensitive receivers from site activities are expected to be minimal.

2 Monitoring Program Update

The noise and vibration monitoring program has been altered in response to the changed site conditions as works enter final stages. With skylight installation the mains power outlets in the skylights were removed and so FDC sourced and installed a solar solution to be paired with a NoiseNet noise monitor (5038) and vibration sensor (1001V). See Figure 1 for in situ photo of noise monitor 5038 and vibration sensor 1001V.

Monitor locations have been chosen in line with "Option B" proposed in Figure 2 of the Acoustic Studios Letter *Re: The Cutaway – Construction Noise and Vibration Management Plan (CNVMP) – Monitoring Program Update*, dated 27th May 2025. Specific details are provided below.



Figure 1 - Noise and vibration monitor installation, in situ.





Figure 2 – Noise and vibration monitor installation.

Noise and vibration monitors were installed by FDC at 3:00 pm on 19th of September 2025. Sensor connectivity and data coverage remains inconsistent while the capacity of the solar battery solution is optimised.

To aid in power consumption optimisation, active noise monitoring times have been reduced to cover the site operational times, with an additional 1-hour window before/after, as below.

Day/s	Monitoring Start Time	Monitoring End Time		
Monday to Friday	6:00	18:00		
Saturday	7:00	14:00		
Sunday	No Noise Monitoring	No Noise Monitoring		

Vibration data will remain at 24/7 coverage, however all device connectivity, data upload and real-time alerting is subject to power availability from the solar system.

Receiver noise level adjustments and alerting and alarming schedule remain consistent with those described in NoiseNet report 3847_11_NVMR_Barangaroo_Cutaway_FDC_Construction.



3 Noise

Over the reporting period, when noise data was available, there was one instance where noise exceeded the established levels for high emission. Details of noise heard during this period are in Table 1. Overall noise impacts are assumed to be low risk at this stage in the project.

Noise impacts analysed are exclusively to the sensitive receiver along Merriman Street. In all cases, noise levels returned to acceptable levels within a reasonable time and required respite periods were observed.

Filename	Date	Time	Description	Merriman Street Receiver Levels	
				LA _{eq} (dB)	LA _{max} (dB)
2025-09-21T09_59_46.wav	22/9/2025	10:01- 10:20	Angle grinder, circular saw or similar power tool.	76	94

Table 1: Most notable noise events during the reporting period.

See Table 2 for manual noise measurements taken by FDC technicians and supplied to NoiseNet.

Date	Time	Manual reading (dB)	Time	Manual reading (dB)
Saturday, 30 August 2025	10:00	42.7	15:00	53.1
Sunday, 31 August 2025	10:00	worksite closed	15:00	worksite closed
Monday, 1 September 2025	10:00	40.4	15:00	50.6
Tuesday, 2 September 2025	10:00	45.2	15:00	54.3
Wednesday, 3 September 2025	10:00	47.9	15:00	44.1
Thursday, 4 September 2025	10:00	51.7	15:00	39.8
Friday, 5 September 2025	10:00	43.5	15:00	52.2
Saturday, 6 September 2025	10:00	46.3	15:00	49
Sunday, 7 September 2025	10:00	worksite closed	15:00	worksite closed
Monday, 8 September 2025	10:00	41.6	15:00	55
Tuesday, 9 September 2025	10:00	48.8	15:00	39.9
Wednesday, 10 September 2025	10:00	53.7	15:00	42.1
Thursday, 11 September 2025	10:00	50.2	15:00	45.8
Friday, 12 September 2025	10:00	47.3	15:00	51
Saturday, 13 September 2025	10:00	43.9	15:00	54.6
Sunday, 14 September 2025	10:00	worksite closed	15:00	worksite closed
Monday, 15 September 2025	10:00	40.7	15:00	44.9
Tuesday, 16 September 2025	10:00	52.5	15:00	46.6
Wednesday, 17 September 2025	10:00	41.2	15:00	49.7
Thursday, 18 September 2025	10:00	53.4	15:00	42.9
Friday, 19 September 2025	10:00	50.8	15:00	39.5
Saturday, 20 September 2025	10:00	48.1	15:00	45
Sunday, 21 September 2025	10:00	worksite closed	15:00	worksite closed
Monday, 22 September 2025	10:00	51.9	15:00	43.2
Tuesday, 23 September 2025	10:00	54	15:00	47.6
Wednesday, 24 September 2025	10:00	40.1	15:00	44.6
Thursday, 25 September 2025	10:00	41.8	15:00	49.3
Friday, 26 September 2025	10:00	53.9	15:00	52.1
Saturday, 27 September 2025	10:00	46.4	15:00	51.7
Sunday, 28 September 2025	10:00	worksite closed	15:00	worksite closed

Table 2: Manual noise measurements taken by FDC technicians.



4 Vibration

Over the reporting period, there were no instances where vibrations exceeded the established warning or alarm levels where data was available and vibration impacts are considered to be low risk



5 Report Issue Log

Document Title	Reference	Reporting Period	Issue Date
3847_Installation_Report_Barangaroo_Cutaway_F DC_Construction_R01 (Superseded)	3847	13/06/2024	24/06/2024
3847_01_NVMR_Barangaroo_Cutaway_FDC_Co nstruction_R01	3847_01	13/06/2024 to 24/06/2024	24/06/2024
3847_Installation_Report_Barangaroo_Cutaway_F DC_Construction_R02	3847	11/07/2024	25/07/2024
3847_02_NVMR_Barangaroo_Cutaway_FDC_Co nstruction_R01	3847_02	25/06/2024 to 24/07/2024	25/07/2024
3847_03_NVMR_Barangaroo_Cutaway_FDC_Co nstruction_R01 (Superseded)	3847_03	25/07/2024 to 26/08/2024	26/08/2024
3847_03_NVMR_Barangaroo_Cutaway_FDC_Co nstruction_R02	3847_03	25/07/2024 to 26/08/2024	26/08/2024
3847_04_NVMR_Barangaroo_Cutaway_FDC_Construction	3847_04	26/08/2024 to 25/09/2024	25/09/2024
3847_05_NVMR_Barangaroo_Cutaway_FDC_Co nstruction (Superseded)	3847_05	26/09/2024 to 25/10/2024	25/10/2024
3847_05_NVMR_Barangaroo_Cutaway_FDC_Co nstruction_R02	3847_05	26/09/2024 to 25/10/2024	31/10/2024
3847_06_NVMR_Barangaroo_Cutaway_FDC_Construction	3847_06	25/10/2024 to 11/11/2024	12/11/2024
3847_07_NVMR_Barangaroo_Cutaway_FDC_Construction (Superseded)	3847_07	12/11/2024 to 26/11/2024	26/11/2024
3847_07_NVMR_Barangaroo_Cutaway_FDC_Co nstruction_R02	3847_07	12/11/2024 to 26/11/2024	27/11/2024
3847_08_NVMR_Barangaroo_Cutaway_FDC_Co nstruction	3847_08	27/11/2024 to 18/12/2024	18/12/2024
3847_09_NVMR_Barangaroo_Cutaway_FDC_Co nstruction-(Superseded)	3847_09	19/12/2024 to 26/1/2025	27/1/2025
3847_09_NVMR_Barangaroo_Cutaway_FDC_Co nstruction_R02	3847_09	19/12/2024 to 26/1/2025	28/1/2025
3847_10_NVMR_Barangaroo_Cutaway_FDC_Co nstruction_R02	3847_10	27/1/2024 to 26/2/2025	27/2/2025
3847_11_NVMR_Barangaroo_Cutaway_FDC_Construction	3847_11	27/2/2024 to 26/3/2025	27/3/2025
3847_12_NVMR_Barangaroo_Cutaway_FDC_Co nstruction	3847_12	27/3/2024 to 26/4/2025	27/4/2025
3847_13_NVMR_Barangaroo_Cutaway_FDC_Construction	3847_13	27/4/2024 to 26/5/2025	27/5/2025
3847_14_NVMR_Barangaroo_Cutaway_FDC_Construction	3847_14	27/5/2024 to 26/6/2025	27/6/2025
3847_14_NVMR_Barangaroo_Cutaway_FDC_Co nstruction_R02	3847_14	27/5/2024 to 26/6/2025	10/7/2025
3847_15_NVMR_Barangaroo_Cutaway_FDC_Construction (Superseded)	3847_15	27/6/2024 to 6/8/2025	7/8/2025
3847_15_NVMR_Barangaroo_Cutaway_FDC_Construction_R02	3847_15	27/6/2024 to 6/8/2025	13/8/2025
3847_16_NVMR_Barangaroo_Cutaway_FDC_Construction	3847_16	7/8/2024 to 29/8/2025	1/9/2025
3847_17_NVMR_Barangaroo_Cutaway_FDC_Construction	3847_17	29/8/2024 to 28/9/2025	29/9/2025

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6 Noise and Vibration Data

6.1 19/9/2025 - 28/9/2025



