Sydney Football Stadium Redevelopment Stage 2

Low Impact Out of Hours Works Monitoring Report – September to October 2020

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Table of contents

1 Background....4
2 Out of Hours Concreting Works....4
3 Mitigation Measures....4
4 Noise Predictions....5
5 Monitoring Results....5
6 Discussion....6
7 Complaints....6

1 Background

Condition C5(c) of SSD 9835 facilitates the carrying out of activities outside of the approved construction hours where the works and activities do not cause, when measured at the boundary of the most affected noise sensitive receiver:

(i) Laeq (15 minute) dB(A) noise levels greater than 5dB above the day, evening and night rating background level (RBL) as applicable; and

(ii) L1(1 minute) dB(A) or LFmax dB(A) noise levels greater than 15dB above the night RBL for night works;

(iii) continuous or impulsive vibration values greater than those for human exposure to vibration, set out for residences in Table 2.2 in "Environmental noise management - Assessing Vibration: a technical guideline" (Department of Environment and Conservation, February 2006); and

(iv) intermittent vibration values greater than those for human exposure to vibration, set out for residences in Table 2.4 in "Environmental noise management - Assessing Vibration: a technical guideline" (Department of Environment and Conservation, February 2006);

In September 2020, an application was made to the Department of Planning, Industry and Environment (DPIE) seeking the carrying out low impact concreting works outside of construction hours, pursuant to Condition C6 of SSD 9835. The Planning Secretary's delegate approved the application on the 8 September, 2020 for Out of Hours (OOH) works for low impact concreting works in accordance with Condition C6 of SSD 9835 for an initial trial period of one (1) month from the commencement of the first deliveries, subject to conditions. Verification noise monitoring is required to be undertaken to confirm predicted noise levels for the first two weeks of the commencement of OOH works. Noise monitoring must be completed at locations identified within the approved Construction Noise and Vibration Management Plan (CNVMP) and must be undertaken while the works are being carried out. Should the noise verification determine that the noise impacts exceed the predicted noise levels, noise mitigation measures must be implemented. The results of noise verification monitoring must be submitted to the DPIE in the form of a short report within one week of the completion of the two-week monitoring period

This document responds to the requirements of the above conditions for the initial period of the 15th September to 29th September 2020. This trial period was completed with no complaints or noise exceedances.

2 Out of Hours Concreting Works

Low impact concreting works occurred during the two-week period as set out below:

- Tuesday 15 September: Low impact works of concrete finishing until 8pm.
- Thursday 17 September: Low impact works of concrete finishing until 8pm.
- Wednesday 23 September: Low impact works of concrete finishing until 8pm.
- Tuesday 29 September: Low impact works of concrete pump set up at 6am – 7am, and concrete finishing until 8pm.

3 Mitigation Measures

The following mitigation measures were implemented prior to, during and post each event:

- Community notification by way of letterbox drops.
- Site Meeting held with all relevant staff to ensure the requirements are understood.
- Works limited to those only in the application and approval letter.

- Lighting directed away from residential properties.
- No high impact works.
- Noise monitoring.

4 Noise Predictions

In support of the initial application to the DPIE, JHG completed noise predictions using the ARUP Snapshot Noise Prediction Software. The modelling showed that in all scenarios the activities would be compliant with Condition C5(c) and would be inaudible to the nearest residential receiver. There was also no expectation for any perceptible vibration or LFmax events greater than 15dBA over the night RBLs.

5 Monitoring Results

The approved CNVMP specifies four locations for attended monitoring, however three of these are non-residential receivers. As these works were being completed outside of normal hours, the nearest residential receiver (R6) on Moore Park Road was chosen as the most appropriate monitoring point. The results are displayed below in Table 1.

Table 1 - Monitoring Results

Date	Time	Location	Predicted Laeq(15)	NML Laeq(15)	Result Laeq(15)	Comment
15/9/2020	18:30	R6	52	57	63.4	Heavy traffic was the dominant source. SFS works were inaudible, behind hoardings and not visible.
17/9/2020	19:00	R6	52	57	65.6	Heavy traffic was the dominant source. SFS works were inaudible, behind hoardings and not visible.
23/9/2020	19:15	R6	52	57	63.1	Heavy traffic was the dominant source. SFS works were inaudible, behind hoardings and not visible.
29/9/2020	06:30	R6	52	52	63.6	Heavy traffic was the dominant source. SFS works were inaudible, behind hoardings and not visible.

6 Discussion

A review of the recorded data on in situ monitors displayed a general downward trend in the Laeq (15) readings from 6pm-8pm, consistent with previously recorded data prior to the Low Impact OOHW trial period. The nights associated with the Low Impact OOHW did not display any spikes or result in any trigger level event.

During the works, attended monitoring Laeq(15) readings were above predicted levels as a result of significant traffic on Moore Park Road and surrounding roads, consistent with previously recorded data on in situ monitors. Field observations note that all works were inaudible at the monitoring location during all monitoring events.

The recorded results do not indicate a breach in the predicted noise levels on any occasion during the trial period and were generally consistent with previously monitored background levels. The works resulted in a negligible noise impact to surrounding sensitive receivers.

7 Complaints

No complaints were received during this period as a result of the low impact concreting works being undertaken, further demonstrating that the OOH works completed during the period did not disrupt surrounding sensitive receivers.