


## MONTHLY NOISE AND VIBRATION REPORT CITY & SOUTHWEST ACOUSTICS ADVISOR

<b>Project:</b>	<b>Chatswood to Sydenham SSI-7400</b>		
<b>For period:</b>	<b>October 2022</b>	<b>Authorisation:</b>	
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### **Introduction**

EMM Consulting Pty Limited (EMM) presents the October 2022 AA Noise and Vibration Report for the Sydney Metro City and Southwest project as required by SSI 15\_7400 A27 (g) vi.

A reference table for the acronyms used in this report is provided on the last page.

### **Acoustic Advisor Activity**

- Review and/or endorsement of:
  - Barangaroo Construction Noise and Vibration Management Plan Rev 10;
  - Barangaroo Construction Noise and Vibration Impact Statement – Civil Works Rev 5;
  - CSM Construction Noise and Vibration Management Plan Rev 13;
  - CNISD Construction Monitoring Report Oct 21 to Mar 22 Rev C;
  - CNISD Construction Noise and Vibration Impact Statement Rev L (review only);
  - CNISD Construction Noise and Vibration Management Plan Rev 2 (review only);
  - PSISD Construction Environmental Monitoring Report Rev 2 (review only);
  - PSISD Construction Noise and Vibration Management Plan Rev 16 (review only); and
  - Sydney Metro City and Southwest Out of Hours Work Strategy Protocol Rev 5.3.
- Review and endorsement of out of hours work applications (OOHWA) and extensions for:
  - CNISD OOHWA Sydney Water Bypass Rev 1;
  - CNISD OOHWA Tower Crane Disassembly Rev 1;
  - CNISD OOHWA10 Extended Work Hours Rev 1;
  - LWW OOHWA239 Waterloo Cable Pulling Rev 5;
  - LWW OOHWA261 Surry Hills BPS Randle Lane HV Cabling Sunday Work;
  - MPISD OOHWA52 Extension and Community Agreement Rev 4 (review only);
  - MPISD OOHWA97 Hoarding changeover, south site (review only);
  - PSISD OOHWA43 Permanent Utilities Installation Rev 8 (extension);
  - PSISD OOHWA45 Podium Façade Installation Rev 2;
  - PSISD OOHWA49 Footpath Reinstatement Rev 2;
  - PSISD OOHWA50 Jan to March 2023 Rev 0 (review only);
  - PSISD OOHWA51 Tower Crane Delivery and Installation Rev 0 (review only);
  - PSISD OOHWA52 Crane Dismantle Rev 0 (review only);
  - WISD OOHWA38 Level 1 & 2 Concrete Pours Rev 1;
  - WISD OOHWA45 Nov 22 to Jan 23 OOH Work Rev B; and

- WISD OOHWA46 Botany Road Hydrant Works Rev B (review only).
- Attendance at Sydney Metro and DPE monthly meeting, and ongoing meetings with CNISD, VCISD, Barangaroo Station, PSISD, MPISD, CSM and WISD contractors.

### ***Inspections, audits and site visits***

The following was complete:

- Barangaroo inspection with ER on 13 and 20 October 2022;
- WISD inspection with ER on 13 October 2022;
- VCISD inspection with ER on 18 October 2022;
- CNISD inspection with ER on 19 October 2022;
- CSM inspection with ER on 19 October 2022;
- PSISD inspection with ER on 25 October 2022; and
- MPSID inspection with ER on 28 October 2022.

### ***Monitoring status***

- Real-time noise and vibration monitoring (with real-time access) is ongoing at CNISD, VCISD (noise only), Barangaroo, PSISD (noise only), MPISD and CSM.

Due to the progressing works at CSM Eastern Entrance, the real-time noise monitor (RTNM) was relocated in consultation with the AA, with simultaneous verification measurements requested to establish the correlation between the RTNM's new position and ground level compliance measurement location.

Ongoing vibration intensive works at VCISD North and South are complete and vibration monitoring results have been well below criteria as presented the Jan to June 2022 Noise and Vibration Monitoring Report. The permanent real-time vibration monitors have therefore been removed in consultation with the AA. Consistent with practice to date, the contractor will continue with operator attended vibration measurement where discrete vibration intensive works occur (eg Denison St stormwater works).

The WISD Contractor is operating real-time noise monitors to assist with site noise management. This is not a requirement of their CNVMP and is optional only. We have access to this data on an as-needs basis only (eg when complaints are received).

### ***Noise and vibration complaints***

- Complaints from Chatswood (x2), CNISD (x5), PSISD (x5) and WISD (x5) were received. Most complaints were classified as unavoidable (12 of 17). The avoidable complaints were in relation to:
  - grinder noise break-out from the Chatswood Dive site at around 1am. It is understood the grinder was operated at the dive access area allowing noise to travel out and towards residential properties. There is an OOHWA for this activity within the tunnels however not at the dive access area. A toolbox talk was delivered by the site environmental team re-enforcing the requirements of the approved OOHWA;
  - potholing occurring as part of the CNISD public domain works during standard construction hours. This triggered three complaints from separate business owners; and
  - tools and worker conversation prior to 7am on Saturday morning triggered a complaint at PSISD. The contractor has instigated further toolbox talks to inform workers and contractors on appropriate worker behaviour on and around the site. The contractor is completing further investigation to confirm if works were actually occurring and if covered under an OOHWA.

### ***Initiatives, continual improvement and feedback***

- We continue to advocate the use of alternative work practices to rock hammering for the removal of temporary structures. Capping beam removal using a wire saw continued at WISD and commenced at CNISD. VCISD is currently exploring this as an option for the capping beam demolition for the north site. The WISD site inspection also identified a noticeable improvement in the installation and overlapping of the noise blankets on the Cope Street area of the site.
- WISD contractors are being highly proactive with the community in terms of information sharing and engagement with several events and initiatives being undertaken through November and December 2022.

### ***Non-compliances, incidents and events***

- A non-compliance (NCR-016) was raised in relation to the grinder that was used near the Chatswood dive access area without an active OOHWA (as described above).

### ***Ongoing and upcoming environmental risks***

- The diesel tower crane at CNISD Site B has been replaced by a smaller diesel alternative. A conditional approval to operate the replacement diesel tower crane has been provided for two weeks to allow AWE to verify the operating noise levels in-situ and to support their proposed use of the crane during OOH periods.
- OOH works, particularly long running concrete pours and/or oversize deliveries at ISD sites at WISD, PSISD, VCISD and CNISD will continue.
- A significant phase of utilities works will continue at PSISD and WISD. OOHW is required due to ROL requirements and footpath permits from Council.
- Public domain works have started at CNISD and will continue for several months. This will require a substantial scope of utilities works of which some will be required OOH to facilitate utility service provider requirements.
- Capping beam removal will continue at WISD and CNISD during standard construction hours. The alternative lower noise method of wire saw and core drilling (consistent with successful removal of capping beam at PSISD) is being used where feasible and has proved to provide additional benefits in terms of dust suppression and smaller exclusion zones on site. The WISD contractor has also demonstrated that capping beam removal with wire saw can occur at discrete locations of the site during the evening hours (NML compliant) with the activities subject to verification measurements.

### ***Recommendations (incl auditing):***

Nothing to report.

## Acronyms

<i>CNISD</i>	<i>Crows Nest Integrated Station Development</i>
<i>CNVIS</i>	<i>Construction Noise and Vibration Impact Statement</i>
<i>CNVMP</i>	<i>Construction Noise and Vibration Management Plan</i>
<i>CSM</i>	<i>Central Station Metro</i>
<i>DPE</i>	<i>NSW Department of Planning and Environment</i>
<i>ER</i>	<i>Environmental Representative</i>
<i>ISD</i>	<i>Integrated Station Development</i>
<i>LWW</i>	<i>Line Wide Works</i>
<i>MPISD</i>	<i>Martin Place Integrated Station Development</i>
<i>NVA</i>	<i>Noise and Vibration Assessment</i>
<i>NVMP</i>	<i>Noise and Vibration Monitoring Plan</i>
<i>OOH</i>	<i>Out of hours</i>
<i>OOHW</i>	<i>Out of hours work</i>
<i>OOHWA</i>	<i>Out of Hours Work Application</i>
<i>OSOM</i>	<i>Oversize, overmass</i>
<i>PSISD</i>	<i>Pitt Street Integrated Station Development</i>
<i>ROL</i>	<i>Road Occupancy License</i>
<i>SSJ</i>	<i>Sydenham Station Junction</i>
<i>TSS</i>	<i>Traction Substation</i>
<i>VCISD</i>	<i>Victoria Cross Integrated Station Development</i>
<i>WISD</i>	<i>Waterloo Integrated Station Development</i>