

# ACOUSTICS ADVISOR MONTHLY REPORT

## SYDNEY METRO WEST (SSI 10038 and SSI 19238057<sup>1</sup>)

For period:	November 2024	Authorisation:	Dave Anderson, Acoustics Advisor
Prepared by:	Dave Anderson		
Date of issue:	7 December 2024		

Acoustics Advisor	Alternate Acoustics Advisor(s)		
Dave Anderson	Larry Clark, David Hanson and Sav Shimada		
<b>Document review</b>			
Document	Reviewed	Endorsed / approved	
<b>Central Tunnelling Package (CTP), AFJV</b>			
Weekly Noise Reports 25/10/24, 1/11/24, 15/11/24, 22/11/24	Y	N/A	
Noise and Vibration Management Plan Rev 15	Y	12 November 2024	
DNVIS Five Dock Rev 15	Y	19 November 2024	
<b>Western Tunnelling Package (WTP), GLC</b>			
Unwin Street Vibration Assessment Memo	Y	Under review	
DNVIS Phase 2 Local Area Works Priddle St and Hawkesbury Rd intersection	Y	22 November 2024	
DNVIS Westmead to Sydney Olympic Park Rev 6.7	Y	Under review	
<b>Eastern Tunnelling Package (ETP), JCG<sup>2</sup></b>			
<i>Detailed Noise and Vibration Impact Statement - Pyrmont Station: Rev 5</i>	Y	<i>Under review</i>	
<i>Weekly realtime monitoring data for periods ending: 3, 10, 17 and 24 November</i>	Y	<i>N/A</i>	
<i>Attended noise monitoring field sheets</i>	Y	<i>N/A</i>	
<b>Westmead Utility Relocation (WUR), Quickway</b>			
	<i>Nil</i>		

Inspections / site visits		
Date	Location(s)	Details
13 November	WTP Parramatta, Westmead, Sydney Olympic Park	Larry Clark attended ER inspection.
	Discussed responses to 2 recent vibration complaints from businesses across George St Parramatta, including monitoring, switching roller to static (not vibrating) mode, and respite periods. Discussed early (4.30am) prestart for OOH delivery of OSOM crane at Westmead – drive in only OOH with counterweights delivery, crane setup and operation standard hours only.	
14 November	CTP Sydney Olympic Park, Five Dock and The Bays	Larry Clark attended ER inspection.
	Discussion on loud noises during demolition at The Bays resulting from spoil shed steel components impacting on the concrete hard stand, skip bins and truck trailers, and potential impact of such noises at other locations such as Five Dock and Burwood North. At these other locations the demolition method will be more controlled, with less drops, which should reduce or eliminate such loud impact noises. AFJV subsequently provided a presentation on the proposed demolition methods at Five Dock and Burwood North.	
19 November	<i>Hunter Street</i>	<i>David Hanson joined ER inspection</i>
	<i>Included inspection of interior and exterior of Skinners Hotel building to see the structural framing and bracing work in progress. DPHI representatives also in attendance.</i>	

<sup>1</sup> Sydney Metro West Concept and Stage 1 (SSI 10038), Sydney Metro West Stage 2: Bays to Sydney CBD (SSI 19238057) shown in italics

20 November	WTP Clyde Dive and MSF West.	Larry Clark joined ER inspection
	Discussion on tower crane at Clyde Dive to stop operating at night, with tunnel segments to be loaded by forklift onto MSV for delivery into the tunnel, and whether this activity has been modelled as NML compliant. Viewing of RTA heritage façade, ATC premises, works nearby and vibration monitors and discussion on dilapidation surveys done before works, after the Endeavour Energy works and to be done after GLC's works.	
21 November	CTP Sydney Olympic Park, North Strathfield and Burwood North.	Larry Clark joined ER inspection.
	Discussion at Sydney Olympic Park on OOH OSOM movements, mostly 9.30 to 11pm and mostly involve just hitching up and removal of pre-loaded truck trailers. Observations on SOP crawler crane exhaust outlet mounted beneath crane body and directed down, compared with tower crane exhaust outlet mounted high. Discussion at Burwood North on noise benefits of sequencing demolition of spoil wall and slab from inside to outside, which is to be considered, given engineering and safety factors. Observation of in tunnel noise level of around 95dBA; station box edge around 75dBA; real-time noise monitor around 55dBA, up to 65dBA when hydraulic hammering.	
21 November	CTP North Strathfield and The Bays	Larry Clark OOH AA inspection.
	Concrete drop pipe not in use at NST. Verification monitoring of The Bays diesel tower crane at 1 Batty Street. Background noise level of 50dBA without the crane operating, possibly influenced by 2 bulk carrier ships berthed at White Bay. Crane audible at times when seen to be operating – estimated noise level 49dBL <sub>Aeq,15minutes</sub> . AFJV evaluating feasible and reasonable noise mitigation options.	
25 November	Pymont East	Dave Anderson witnessed noise monitoring by JCG and Renzo
	Attended by JCG water treatment plant (WTP) operator and enviro team, plus 2 engineers from Renzo Tonin Associates. Noise tests of certain WTP processes that occur daytime only. Agreed OOH follow-up required to determine WTP OOH noise footprint. Witnessed installation of noise logger within shed, near gantry crane. Aim is to provide insight into noise from loading spoil into trucks, levels near the source.	
28 November	CTP Five Dock and The Bays	Larry Clark joined ER inspection
	Discussion at Five Dock on loud gantry crane overhead load alarm. AFJV advised that the alarm volume could not be reduced but it does not sound at night, and the gantry crane is scheduled to be removed soon. Measurements and observations of diesel tower crane noise at The Bays.	

### Meeting

Date	With	Purpose
4, 11, 18, 25 November	AFJV, Sydney Metro, ER	Environment meeting, CTP
4, , 18 November	Sydney Metro, GLC, ATC	Fortnightly works status
5, 12, 19, 26 November	Sydney Metro, JCGJV, ER	Weekly environment meeting, ETP
11 November	DPHI, ER	Monthly meeting with DPHI compliance
13, 27 November	Sydney Metro, GLC, ER	Environment meeting, WTP
28 November	DPHI, Sydney Metro, ER	Monthly meeting with DPHI post-approvals

### Noise and vibration issues, incidents, recommendations

Date	Contract / Location and details

### Examples of good practice in noise and vibration management

Date	Contract / Location and details

## Ongoing and upcoming noise and vibration risks

### ETP:

- *Pyrmont: Cavern excavation continuing 24/7*
- *Hunter Street: transitioning from demolition to shaft excavation*

### CTP:

- Cross passage ground borne noise and vibration. Being managed by door knocking by comms.
- Demob and demolition at Five Dock. Managed by comms notifications and consultation.

### WTP:

- Unwin Street works adjacent to RTA heritage façade. Management measures discussed.

## Noise and vibration complaints

26 noise and vibration complaints attributed to Sydney Metro during November, 8 of which were from *Pyrmont*:

Location / activity	Standard hours	Out of hours	Standard and out of hours
Westmead			
Parramatta	2		
Clyde / Rosehill			
Sydney Olympic Park			
North Strathfield		1	
Burwood North		2	2
Five Dock	1	1	
The Bays	2	2	
<i>Pyrmont</i>		1	7
<i>Hunter Street</i>			2
Tunnelling			
ETP			
CTP	3		
WTP			
<b>Total</b>	<b>8</b>	<b>7</b>	<b>11</b>

Note: The chart shows noise and vibration (NV) complaints in standard hours and out of hours (OOH) periods. Some complaints relate to both time periods so the total number of NV complaints shown here may be less than the sum of standard and OOH complaints.

