Acoustics Advisor Monthly Report

ACOUSTIC STUDIO

SYDNEY METRO WEST

Stage 1 (SSI 10038), *Stage 2* (*SSI 19238057*[1]) and Stage 3 (SSI 22765520[2])

For period:	July 2026	Authorisation:	Dave Anderson, Acoustics Advisor [redacted]
Prepared by:	Larry Clark, David Hanson, Aaron Miller		
Date of issue:	7 August 2026		

Acoustics Advisors		
Dave Anderson, Larry Clark, David Hanson, Aaron Miller and Sav Shimada		
Documents reviewed during the period		
Document	**Reviewed**	**Endorsed / approved**
Stage 1 – Phase F Western Tunnelling Package (WTP), GLC		
Attended noise monitoring results for Westmead cavern infill removal	Y	N/A
Information on noise levels of tunnel vent fans to be installed at Parramatta	Y	N/A
Construction Environment Management Plan Rev H	Y	N/A
Construction Noise and Vibration Management Plan Rev J	Y	Under review
Construction Noise and Vibration Monitoring Plan Rev J	Y	Under review
Stage 2[1] ***– Phase G2 Eastern Tunnelling Package*** *(ETP), JCG*		
Weekly real time unattended noise and vibration monitoring results June 2026	*Y*	*N/A*
DNVIS Hunter Street Station Rev 10	*Y*	*6 July 2026*
Stage 3[2] **– Phase L** (Rosehill Power Enabling Works), Quickway		
OOHW Permit 2 Extension (updated ROLs only)	Y	15 July 2026
Stage 3 – Phase N (Line Wide Works - LWD), JHG		
Attended noise monitoring results for Sydney Olympic Park rail deliveries	Y	N/A
Stage 3 – Phase O (Stations Package West), Gamuda		
DNVIS Early Works Rev. 3	Y	22 July 2026
DNVIS Addendum FDK-E Sewer Jetting	Y	30 July 2026
OOHW Application Permit – NST Crawler Crane Mobilisation	Y	29 July 2026
Stage 3 – Phase P (Hunter Street Station), Lendlease		
Construction Noise and Vibration Management Plan (CNVMP)	Y	Under review
Construction Noise and Vibration Monitoring Program (CNVMoP)	Y	Under review

[1] *Sydney Metro West Stage 2: Bays to Sydney CBD (SSI 19238057) shown in italics*

[2] Sydney Metro West Stage 3: Rail infrastructure, stations, precincts and operations (SSI 22765520) shown underlined

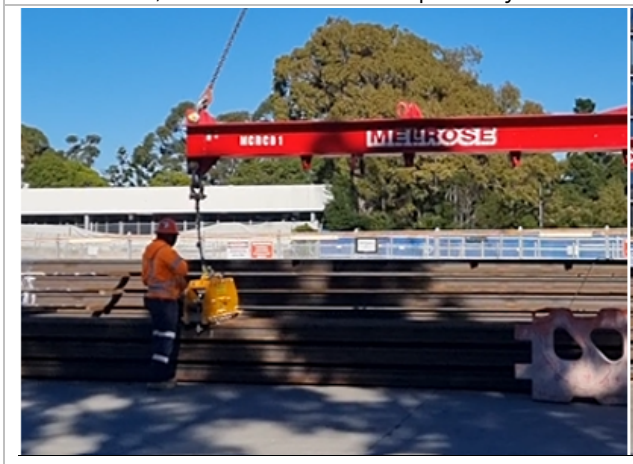
Inspections / site visits

Date	Location(s)	Details
1 July	*ETP Hunter Street*	*Larry Clark OOHW AA inspection*
	Witnessed and observed activities and behaviours for OOHWs within Hunter Street East site, and no works taking place at Hunter Street west.	
7 July	*ETP Hunter Street*	*Larry Clark joined ER inspection*
	Discussions on: equipment moved on HSE site to accommodate [redacted]; battery to be replaced in the vibration monitor at the base of Pangas House, HSW; relative loudness of the formwork vibrators for the daytime only concrete pour at HSW.	
20 July	LWD Sydney Olympic Park	Larry Clark witnessed flash butt welding noise monitoring at Sydney Olympic Park.
	Observed competent noise monitoring: noise levels below predicted at good intermediate monitoring locations NM2 and NM3 on the SOP site.	
21 July	*ETP Hunter Street*	*Larry Clark joined ER inspection*
	Observed real time noise levels [redacted] via mobile phone app during rock hammering in Stage 2 at Hunter St East.	
22 July	WTP Rosehill, Westmead and Parramatta	Larry Clark joined ER inspection
	Discussions on: relatively noisy power pack for hydro demo blockouts at Parramatta located down in station box to reduce off-site noise; location of vibration monitor for restoration work on George St heritage shops.	
23 July	LWD Sydney Olympic Park	Larry Clark joined ER inspection
	Discussions on good setup of site noise-wise: exclusions zones in use for crawler crane to replace audible slew and overhead load alarms; bespoke rail lifting attachment using compressed air to minimise metal on metal impact and chain clash noise; quiet rubber tyred excavator for rail handling, eliminating potential for noisy track slap, squeal and screech; squawker on excavator set to an appropriate volume to provide adequate warning on site but low noise off-site; voice alert on excavator proximity alarm instead of annoying tonal alarm.	
27 July	WTP Parramatta	Larry Clark witnessed noise measurements during tunnel vent fans commissioning
	Observations and measurements of tunnel vent fan noise at approximately 40, 50, 60, 70 and 80 percent of maximum output.	
28 July	*ETP Hunter Street*	*Larry Clark OOHW AA inspection*
	Discussions on: 3 hour respite [redacted] Observed real time noise levels in [redacted] and vibration levels in [redacted] via mobile phone app during rock hammering in Stage 2 at Hunter St East.	
30 July	LWD Sydney Olympic Park	Larry Clark joined ER inspection
	DPHI compliance in attendance. Discussed good setup of site noise-wise, as described above. Observation of scissor lift at nearby Aquatic Centre the possible source of a tonal alarm faintly heard previously and unable to be related to any plant item on site.	

Meetings

Date	With	Purpose
13 July	DPHI, ER	Monthly Compliance Meeting
7, 21 July	*Sydney Metro, JCGJV, ER*	*Fortnightly environment meeting, ETP*
22 July	Sydney Metro, GLC, ER	Environment meeting, WTP
7, 14, 21, 28 July	Sydney Metro, ER, JHG	Phase N Line Wide Works (LWD) Enviro and Approvals meeting
30 July	DPHI, Metro, ER	Monthly Post Approvals Meeting
6, 13, 20, 27 July	Sydney Metro, ER, Gamuda	Weekly environment meeting, SPW
2 July	Sydney Metro, ER, Gamuda	OOH Protocol discussion, SPW
7 July	Sydney Metro, ER, Gamuda	OOHW Workshop, SPW
7 July	Sydney Metro, ER, Gamuda	Early Works DNVIS Comment Closure, SPW
6, 20 July	SM, ER, Lendlease	Fortnightly environment meeting, Hunter Street Station
2, 15, 29 July	Sydney Metro, Quickway, ER	Phase L Rosehill PEW Enviro and Approvals meeting
23 July	*Sydney Metro, JCGJV, ER*	*JCGJV internal noise and vibration audit*

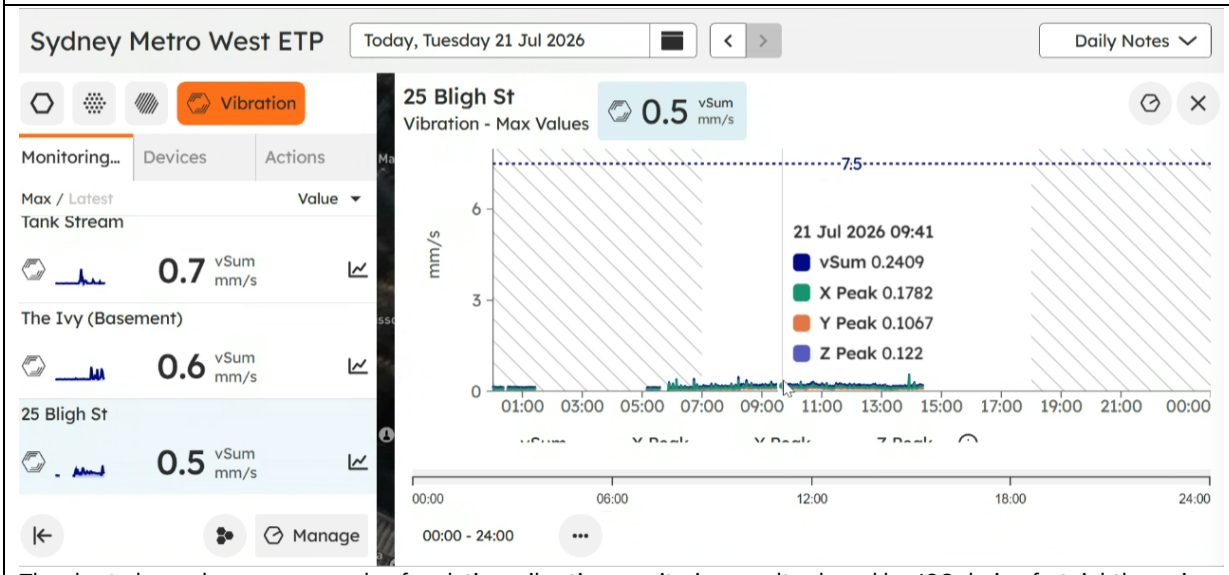
Noise and vibration issues, incidents, recommendations	
Date	**Contract / Location and details**

Examples of good practice in noise and vibration management	
Date	**Contract / Location and details**
23 July	LWD Sydney Olympic Park: good setup of site noise-wise: exclusions zones in use for crawler crane to replace audible slew and overhead load alarms; bespoke rail lifting attachment using compressed air to minimise metal on metal impact and chain clash noise; quiet rubber tyred excavator for rail handling, eliminating potential for noisy track slap, squeal and screech; squawker on excavator set to an appropriate volume to provide adequate warning on site but low noise off-site; voice alert on excavator proximity alarm instead of annoying tonal alarm.
	  Specialised, quiet attachment (no loud metal on metal impact noise or loud chain clashes) for rail lifting by crawler crane on surface. No audible overhead load or slewing alarms required for crane operation due to exclusion zones in place.
July	*ETP Hunter Street: Works across East site adjusted thoughtfully in response to a request from* [redacted]
1 August	*WTP Parramatta: Leigh Memorial Congregation Church advised of a funeral service being held on 1/08, GLC committed to no high impact noise during the service time. Stakeholder was very appreciative.*

Current Works
ETP: • *Hunter Street: shaft excavation by day and ongoing OOH tunnelling support works at Hunter Street East; bulk excavation completed at Hunter Street West.*
WTP: • Parramatta: Station box and tunnel finishing works, including blockouts hydro blasting. • Tunnel defects. • Works finished at all other sites.
Utilities packages: • Rosehill: construction continuing, managing cumulative impacts with GLC and Ferricarrig works in same area.
Stations Package West: • Low impact works (care & maintenance, including Water Treatment Plant at The Bays) ongoing. • NDD works and boreholing occurring at Five Dock and The Bays.
Linewide Works • Rail deliveries, grinding and flash butt welding at SOP. Low Impact Geotech surveys at MSF. Amenities install at RSH

Upcoming works and discussion of risks
ETP: • *Hunter Street: Potential construction noise fatigue with works seven days per week (including Sunday) under CoA D39 respite agreement. Noise and vibration levels decreasing as excavation progresses deeper. Potential cumulative impact from Milligans development.*
WTP: • Low risk
Utilities packages: • Rosehill: works mainly through industrial area. Almost all works will be below NML at ATC and nearest residential receivers.
Stations Package West: OOHW: • NST Crawler Crane mobilisation to occur on 22/23 August. Low risk. • OSOM Piling rig delivery to occur at The Bays 24 August. Predicted NML compliant. Standard hours: • NST, BWT and FDK: NDD investigation works, tower crane footing excavation (within station box) site mobilisation, geotechnical investigations. All low risk. • The Bays: Shotcreting and site shed installation, tower crane footing construction in late August. Low risk.
Linewide Works • Low Impact Work rail delivery, grinding and flash butt welding at SOP; OOH rail handling in tunnel to commenced soon.

Monitoring data



The chart above shows an example of real-time vibration monitoring results shared by JCG during fortnightly environment and approvals meetings, showing measured vibration levels during that morning's ER inspection and up until the time of the meeting. Rock hammering of Stage 2 at Hunter Street East has been observed, and spot noise levels measured, during ER inspections and JCG has been providing Sydney Metro, the ER and AA with corresponding noise and vibration results from the real time monitors, both during the inspections and at the regular environment and approvals meetings, for context. This has been very useful for gaining an appreciation of the relative on-site and off-site noise and vibration levels experienced, particularly as excavation progresses deeper.

Noise and vibration complaints

There were 3 registered noise and vibration complaints attributed to Sydney Metro in July, from stakeholders near Hunter Street.

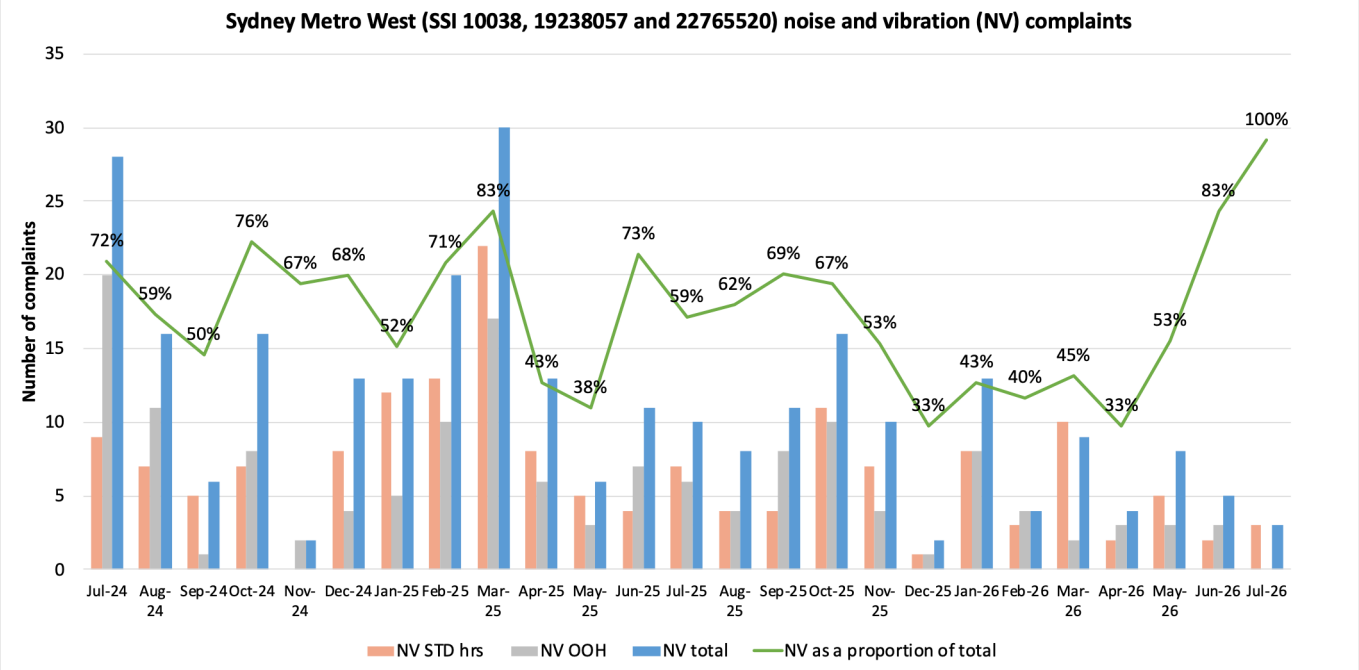
[redacted]

There were 11 complaints in total, but 8 of these were unrelated to Sydney Metro. The remaining 3 were noise and vibration complaints, which means noise and vibration accounted for 100% of the complaints attributed to Sydney Metro in July.

The overall number of complaints remains relatively low by historical standards. This was also the first month since 2022 when there were no complaints about OOH noise and vibration.

Location / activity	Standard hours	Out of hours	Both standard and out of hours	Total
Westmead				
Parramatta				
Clyde / Rosehill				
Sydney Olympic Park				
North Strathfield				
Burwood North				
Five Dock				
The Bays				
Pyrmont				
Hunter Street	*3*			*3*
Tunnelling ETP CTP WTP				
Total	**3**			**3**

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.



Declaration

I certify that:

- this report has been prepared for the NSW Department of Planning, Housing and Infrastructure, in accordance with the Acoustics Advisor Protocol and is accurate at the date of issue
- the proponent has provided me with all the information I requested to allow me to prepare this report
- there are no matters that have impaired the objectivity of this report.

Dave Anderson, Acoustics Advisor

