Southwest Metro Works Stage 3 Construction Monitoring Report 1

September 2024 – February 2025

SMCSWSW8-JHL-WEC-EM-REP-000001

Document and Revision History

Document Details	
Title	Construction Monitoring Report
Client	Sydney Metro City & Southwest
Client reference no.	SMCSWSW8-JHL-WEC-EM-REP-000001
JHLOR JV contract no.	K44

Revisions

Revision	Date	Description	Prepared by	Reviewed by
Rev A	10/03/2025	Initial Issue	Tom Buratti	Lucas Dobrolot
Rev B	25/03/2025	Response to comments from the ER and SM	Tom Buratti	Lucas Dobrolot

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Management reviews

Review date	Details	Reviewed by

1 Compliance Matrix

Condition	Requirement	Reference
C14	The results of the Construction Monitoring Programs must be submitted to the Planning Secretary, and relevant regulatory agencies, for information in the form of a Construction Monitoring Report at the frequency identified in the relevant Construction Monitoring Program.	Section 1.1

2 Introduction

The Construction Monitoring Program is being implemented to monitor impacts on surrounding surface water quality resources and impacts from noise and vibration on the surrounding areasduring the construction phase. The surface water monitoring program and noise and vibration monitoring program are also both designed to assess the effectiveness of the mitigation measures applied as part of the Southwest Metro Works Stage 3 (SWM3) as well as one (1) month data to close out Southwest Metro Corridor Works (SMC) and Additional Works. This is the 1st construction monitoring report to cover the Stage 3 works, which are a continuation of the SWM works. The reporting periods for each document are as follows:

Construction monitoring report 001 for the period of September 2024 – February 2025

These reports are to be prepared 6 monthly or as required until the completion of the project or when JHLORJV are no longer undertaking works in established monitoring areas.

2.1 Submission Requirements

In accordance with condition C14, the CMR will be submitted to the following agencies for information:

- City of Canterbury Bankstown
- Inner West Council
- New South Wales (NSW) Environment Protection Authority (EPA)
- NSW Department of Planning Infrastructure and Housing (DPHI)

The Independent Environmental Representative and Sydney Metro will review the report prior to submission.

2.2 Surface Water

The project site is located within the rail corridor on the T3 Bankstown line between Sydenhamand Bankstown, NSW.

The Project site forms part of the overall Cooks River, Coxs Creek and Salt Pan Creek catchment areas. The water from the area discharges into these water catchments via local stormwater drainage or overland flow. The surrounding catchment areas are urbanised with a mix of residential, commercial, and industrial properties.

Water quality is measured on an ongoing basis for the wider Cooks River catchment by the *Environment, Energy and Science - NSW DPE* as part of the Beachwatch programme. The

monitoring pointis at Kyeemagh Baths at the mouth of the Cooks River in Port Botany. Water quality within the Cooks River catchment is influenced by stormwater, fertilisers, industrial discharge and sewage contamination.
The EIS, referring to the Salt Pan Creek catchments, states *"A number of beaches in the lower Georges River are monitored as part of Department of Planning Industry and Environment – Environment, Energy and Science's (DPE-EES) Beachwatch program. The most recent State of the Beaches annual report noted that these locations were graded as 'good', meaning that the quality of the water was appropriate for swimming most of the time".* It is noted however that the catchment is impact by development, including construction impacts and litter, as well as other influences such as wastewater overflows and a landfill operation.
Surface water quality monitoring is undertaken in accordance with the Water Quality Monitoring Programme within the Construction Soil and Water Management Plan (refer to Section 7).
Objectives for water quality management during construction are:
Minimise pollution of surface water through appropriate erosion and sediment control
Maintain existing water quality of surrounding surface watercourses

2.3 Noise and Vibration

The area surrounding the SWM3 project contains a variety of land-use types and receivers, including residential receivers, commercial, industrial, sensitive non-residential receivers. Theseland-uses are mixed within the identified noise catchments, though in general there are clusters of industrial and commercial areas surrounding stations, and primarily residential areas between stations. The area surrounding the project is affected by rail noise and vibration.
Majority of the works will occur within the rail corridor between stations, works will mainly occur adjacent to residential properties.

There are a number of sensitive non-residential receivers identified within the vicinity of theproject works. The full list of receivers can be found within the CNVIS (SMCSWSSJ-JHL-WEC-EM-REP-000011-Construction Noise and Vibration Impact Statement-Rev04) A summary of the sensitive receivers are;

- 17 Childcare and Early Learning Centres
- 25 Primary and High Schools
- 24 Hospitals, Medical Centres, clinics and Aged Care Facilities
- 23 Places of Worship

Objectives for noise and vibration management on the project are:

Minimise unreasonable noise and vibration impacts on residents and businesses
Avoid cosmetic damage to buildings or heritages items as a result of constructionvibration
Maintain positive, co-operative relationships with schools, childcare centres, localresidents and building owners, and undertake active community consultation

Construction noise levels for some SWM3 activities are expected to exceed the external noise management level at times, particularly during works outside of standard hours, resulting in noise impacts to outdoor spaces. Internal and external noise levels will be assessed as part of the Out of Hours Works (OOHW) protocol and monitored accordingly.

3 Methodology

3.1 Surface Water

Surface water quality monitoring is undertaken in accordance with the Water Quality Monitoring Programme within the Construction Soil and Water Management Plan (refer to Section 7).
The water quality monitoring methodology as stated within the CSWMP is as follows;

"*Following rain events of greater than 20mm in a 24-hour period, JHLOR will undertake post*

rainfall inspections of monitoring locations to determine if there is any change in water quality post a significant first flush. An 'event' is defined as the first 20mm rainfall event within a 24-hour period. In the case of multiple consecutive events, only the first will be monitored. Monitoring will resume after a seven-day period of no rain. Visual inspections will include the following monitoring parameters:

- *Water clarity and colour*
- *Odour*
- *Description of flow and quantity*
- *Oil and Grease determination*
- *Details of any foreign objects within the water, and*
- *Visible runoff (into the water body)*

JHLOR will maintain a record of the inspections (including photographs) within the SWM3 Project drive.

Where water quality issues are visibly observed JHLOR will investigate further to determine if the source of the issue is related to JHLOR construction activities (where possible, noting safe access limitations). The JHLOR Environmental Manager or delegate will discuss changes in water quality associated with Construction with the JHLOR Construction Team to determine if further controls may be implemented, noting that any controls must be feasible and reasonable. Once works in a particular area have been completed and any disturbed ground (from the works) reinstated to a suitable condition the associated monitoring within the particular area will cease. It is noted that post-rainfall inspections within 24 hours of some drainage crossings and outlets may not be possible in some circumstances, including:

Where there are safety concerns, or access is restricted due to rail safe working requirements Where erosion and sediment controls prevent access to an outlet and removing those controls would present a risk to water quality (e.g. removing drain guards).

Weather monitoring will be conducted using data from the Canterbury Racecourse weather station, accessed via the bureau of Meteorology website (http://www.bom.gov.au)."
Water quality monitoring locations are included within Appendix F of the CSWMP. Canterbury Racecourse BOM weather observations were used to determine the amount of rainfall in a 24hr period, forming the basis of when monitoring occurred.

Pre-construction (baseline) monitoring was undertaken prior to the start of Construction in late March 2021, noting that works did not commence across the entire project site in March. The baseline for water quality monitoring was updated with two extra sites (eastern-side Canterbury compound and BEW) during May and September of 2021. Monitoring was undertaken during dry conditions (no rainfall within the last 24hrs). Pre-construction monitoring was undertaken with the same visual and qualitative approach as described above.

The results of the Construction Water Quality Monitoring Programme are included in Section 3. There are currently no active sediment basins on the project, and none have been identified during the construction phase of the project to date.

3.2 Surface Water Baseline Data

One baseline monitoring inspection was conducted in March 2021 (02/03/2021) and updated with 2 additional locations including and Canterbury compound (14/04/2021 – see **Figure 1**) and BEW (10/09/2021 – see **Figure 2**). Refer to **Table 1** for a summary.

Figure 1 - *Canterbury Compound (water quality location 8)*

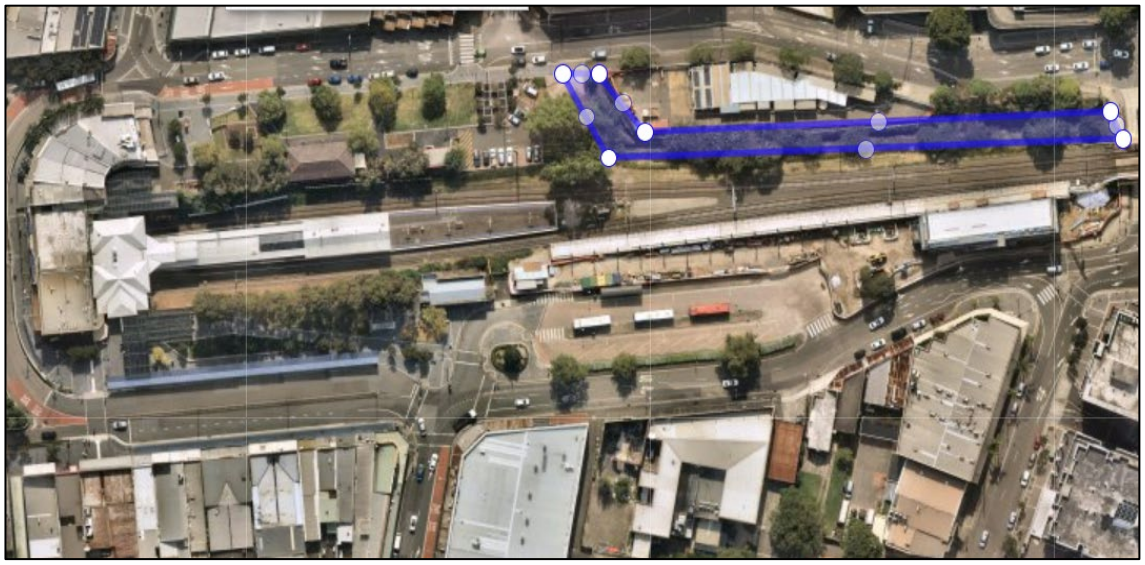


Figure 2 - Bankstown early works (water quality location 9)

Table 1 - *Surface Water Monitoring Baseline*

Date	Total Rainfall (mm)	Rainfall Event (hours)	Adverse Impacts relating to JHLOR works recorded	Monitoring Location Checklist	Notable Observations	Observations relating to JHLOR impacts	Follow up actions with construction team
03/2021	0	0 (dry weather baseline)	No	• Location 1 Dulwich Hill • Location 2 Hurlstone Park • Location 3 West Bank of Cooks River • Location 4 Belmore Triangle • Location 5 Lakemba • Location 6 Wiley Park • Location 7 Punchbowl	Ewart St, Dulwich Hill: Turbid water entering from side tributary into D/S side of rail culvert – no JHLOR works in area. Unknown source. General – low flows and litter.	None	N/A
05/05/2021	86.4	72	No	• Location 1 Dulwich Hill • Location 2 Hurlstone Park • Location 3 West Bank of Cooks River • Location 4 Belmore Triangle • Location 5 Lakemba • Location 6 Wiley Park • Location 7 Punchbowl • **Location 8 Canterbury Compound (First Inspection)**	Ewart St, Dulwich Hill: Turbid water entering from side tributary into D/S side of rail culvert – no JHLOR works in area. Unknown source. Close Street, Canterbury: turbid water observed coming from upstream. No inflow from compound area	None	N/A
14/10/2021	31.8	48	No	• Location 1 Dulwich Hill • Location 2 Hurlstone Park • Location 3 West Bank of Cooks River • Location 4 Belmore Triangle • Location 5 Lakemba • Location 6 Wiley Park • Location 7 Punchbowl • Location 8 Canterbury Compound • **Location 9 Bankstown (First Inspection)**	Ewart St, Dulwich Hill: Small side tributary (LHS) – source of upstream brown cloudiness/dirty water unknown other than Council Contactor works under Ness St bridge. – no JHLOR works in area. Hurlstone Park: JHLOR installing engineered earth ramp upstream from culvert. Controls in place and ramp structure stabilised with “little” sign of scour flowing into heavily vegetated area (upstream of culvert). Wiley Park: Station Contractor works near culverts. Pre-construction baseline inspections and early Construction period inspections indicate turbid water within this drain at times. No indication SM works causing turbidity. Canterbury Compound: turbid/cloudy water observed in creek. No JHLOR works.	None	N/A

3.3 Noise and Vibration monitoring

As part of the Noise and Vibration Assessment within the Sydney Metro Sydenham to Bankstown Upgrade Environmental Impact Statement, the area surrounding the entire Project site was divided into 13 Noise Catchment Areas (NCAs). SWM3 works occur across all 13 NCA's depending on where works will reside, there are some locations where works are more consistent than others. Noise monitoring was undertaken in 2016 to determine the Rating Background Level for the 13 noise catchments. The Rating Background Levels for all NCAs are shown in **Table 2**.

Table 2 - *RBLs for SWM3 Noise Catchment Areas*

NCA	Daytime RBL(7am to 6pm)	Evening RBL (6pm to10pm)	Night RBL (10pm to7am)
1	38	38	33
2	38	38	33
3	38	38	34
4	40	40	35
5	36	36	32
6	45	42	35
7	41	41	35
8	47	47	41
9	44	44	36
10	47	47	41
11	47	47	39
12	54	51	42
13	42	42	39
14	41	41	40
15	51	51	43
16	58	52	38

Based on planned work in the construction phase, impacts were largely spread across the noise catchments.

Figure 3 below shows the noise catchment boundaries across the project.

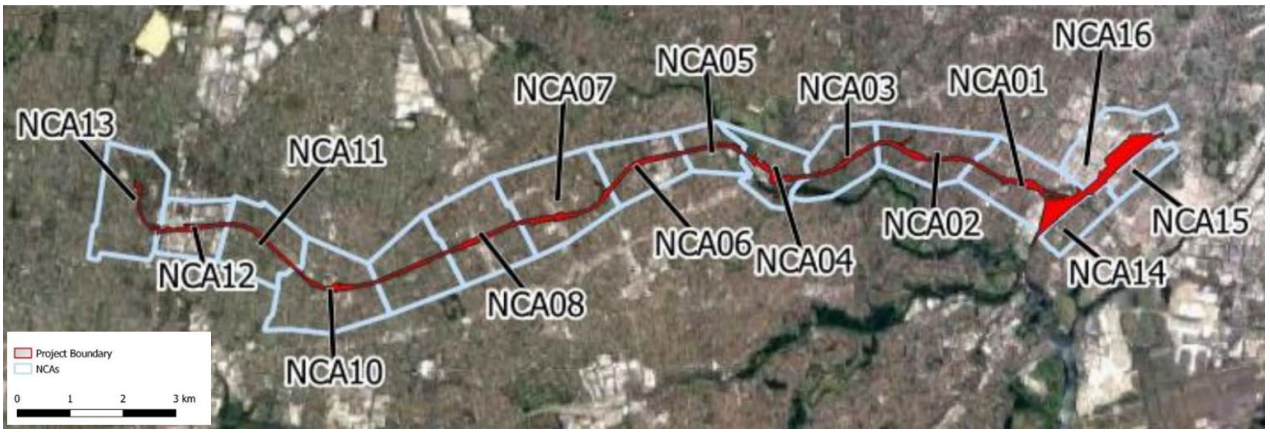


Figure 3 – Sydenham to Bankstown Noise Catchment Areas

Monitoring is undertaken during construction activities (including out of hours works) where required in accordance with Section 8 of the CNVS and for validation purposes. Attended noise monitoring is undertaken in the event of a noise complaint. Where a complaint occurs, monitoring will be undertaken at the complainant's property, nearest to any work.
Vibration monitoring will be undertaken before and during works where buildings or structures exist within the safe work distances of vibratory plant. Monitoring will also be undertaken where vibration generating activities have the potential to impact on heritage items. Monitoring will be undertaken for vibration causing "activities" at a structure and applied as indicative across the project area in similar circumstances (e.g. the methods and plant used for the compaction of

batters is consistent across the site, as such the monitoring at one structure is representative of the impacts at other structures). Representative monitoring should be undertaken at the most sensitive structure for which it is to be applied. In accordance with the requirements of the CNVS, the vibration limits have been set out in the British Standard BS 7385-2:1993.

4 Results

4.1 Surface Water

Water quality monitoring inspections were undertaken six (6) times during this reporting period. These occurred between on the 27th of September 2024 and the 16th of January 2025 and was in response to rain events.

The following monitoring inspections were undertaken during the reporting period (Result surmised in **Table 3**):

- Rain Event on the 27/09/2024, 31.4mm rainfall during inspection, no adverse impacts identified during the period;
- Rain Event on the 15/10/2024, 30.2mm rainfall during inspection, no adverse impacts identified during the period;
- Rain Event on the 30/11/2024, 38.4mm rainfall during inspection, no adverse impacts identified during the period;
- Rain Event on the 8/12/2024, 14.8mm rainfall during inspection, no adverse impacts identified during the period;
- Rain Event on the 9/01/2025, 40.4mm rainfall during inspection, no adverse impacts identified during the period;
- Rain Event on the 16/01/2025, 40mm rainfall during inspection, no adverse impacts identified during the period.

Full monitoring inspections, including commentary and photographs are maintained on the JHLOR Project Drive. These are available upon request. See **Appendix A** for a sample water monitoring report. Where monitoring indicates adverse impacts associated with JHLOR works this Section of the CMR will explore the details and corrective actions in detail.

Table 3 – *Summary of result - Surface Water Monitoring undertaken during the CMR6 reporting period*

Date	Total Rainfall	Adverse Impacts	Monitoring Location Checklist	Notable Observations	Observations	Follow up actions
27/09/2024	31.4 mm	No adverse impacts relating to JHLOR works recorded	**Location 1** Dulwich Hill	No JHLOR works, ERSED Controls in place, Turbid water from side inlet on LHS, Unknown source. Station Contractor's black pipe from on RHS – not able to see.	None relating to JHLOR impacts	N/A
			Location 2 Hurlstone Park	**NO PO AVAILABLE – AREA NOT INSPECTED**, No JHLOR works, ERSED Controls in place		
			Location 3 West Bank of Cooks River	No JHLOR works, ERSED Controls in place, No sign of dirty water from corridor		
			Location 4 Belmore Triangle	JHLOR Stockpiling area, **NO PO AVAILABLE – AREA NOT INSPECTED**, ERSED Controls in place		
			Location 5 Lakemba	No JHLOR works. Not checked on Downstream due to the drainage network is below ground. Upstream AREA NOT INSPECTED, ERSED Controls in place.		
			Location 6 Wiley Park	No JHLOR works, ERSED Controls in place, No sign of dirty water from corridor. Small inlet from the RHS of the Western most culverts – turbid water flowing into culver. Unknown upstream source but seeping from concrete GLT/ toe of vegetated batter. No oil & grease. No odour		
			Location 7 Punchbowl	This flow line is below ground and runs across the corridor from North to South and can be seen through pits located within corridor only. **NO PO AVAILABLE – AREA NOT INSPECTED** – No JHLOR works in catchment		
			Location 8 Canterbury Compound	JHLOR compound, ERSED Controls in place, No sign of dirty water from corridor		
			Location 9 Bankstown	No construction work on culvert side. JHLORJV works occurring here. ERSED controls in place, effective and maintained. No sign of dirty water from corridor. Council works are being carried out in roadway alongside.		
15/10/2024	30.2 mm	No adverse impacts relating to JHLOR works recorded	**Location 1** Dulwich Hill	No JHLOR works, ERSED Controls in place, Slightly turbid water from side inlet on LHS, Unknown source. Station Contractor's black pipe from on RHS – not able to see.	None relating to JHLOR impacts	N/A
			Location 2 Hurlstone Park	**NO PO AVAILABLE – AREA NOT INSPECTED**, No JHLOR works, ERSED Controls in place		
			Location 3 West Bank of Cooks River	No JHLOR works in the area or up at Campsie Station. ERSED Controls in place. Slightly turbid water from side inlet on LHS. Unknown source. Cooks River water already quite turbid due to rain event.		
			Location 4 Belmore Triangle	JHLOR Stockpiling area, ERSED Controls in place, No sign of dirty water from corridor.		
			Location 5 Lakemba	No JHLOR works. Not checked on Downstream due to the drainage network is below ground. Upstream observed to have a slightly turbid flow and Total Suspension Solid (TSS)		
			Location 6 Wiley Park	No JHLOR works, ERSED Controls in place, No sign of dirty water from corridor. Small inlet from the RHS of the Western most culverts – clean water flowing into culver. Unknown upstream source but seeping from concrete GLT/ toe of vegetated batter. No oil & grease. No odour		
			Location 7 Punchbowl	This flow line is below ground and runs across the corridor from North to South and can be seen through pits located within corridor only. **NO PO AVAILABLE – AREA NOT INSPECTED** – No JHLOR works in catchment		
			Location 8 Canterbury Compound	JHLOR compound, ERSED Controls in place. Clean ponded water on asphalt surface and no flow of water off asphalt parking surface at time of inspection. Downstream water observed to be turbid (looks same as upstream). No excavation activities along the corridor near this location. NOTE: signs of batter slip on LHS.		
			Location 9 Bankstown	No excavation activities work on culvert side. JHLORJV works occurring here. ERSED controls in place, effective and maintained. No sign of dirty water from corridor. Council works are being carried out in roadway alongside.		
30/11/2024	38.4 mm	No adverse impacts relating to JHLOR works recorded	**Location 1** Dulwich Hill	No JHLOR works, ERSED Controls in place, Water in main culvert is slightly turbid. Turbid water from side inlet on LHS. No JHLOR works in the area or up at Ewart St. Unknown source. Station Contractor's black pipe from on RHS – not able to see. Medium flow of water (during the inspection), but damage to vegetation indicates previously high flow	None relating to JHLOR impacts	N/A
			Location 2 Hurlstone Park	**NO PO AVAILABLE – AREA NOT INSPECTED**, No JHLOR works, ERSED Controls in place		
			Location 3 West Bank of Cooks River	No JHLOR works, ERSED Controls in place, No sign of dirty water from corridor		
			Location 4 Belmore Triangle	JHLOR Stockpiling area, ERSED Controls in place, Slightly turbid water alongside road and over DGB hardstand. No turbid water from corridor		
			Location 5 Lakemba	No JHLOR works. Not checked on Downstream due to the drainage network is below ground. Upstream observed to have clean water flowing through both culverts. No sign of residual sediment in floor.		
			Location 6 Wiley Park	No JHLOR works, ERSED Controls in place, No sign of dirty water from corridor. Small inlet from the RHS of the Western most culverts – turbid water flowing into culver. Unknown upstream source but seeping from concrete GLT/ toe of vegetated batter. No oil & grease. No odour		
			Location 7 Punchbowl	This flow line is below ground and runs across the corridor from North to South and can be seen through pits located within corridor only. **NO PO AVAILABLE – AREA NOT INSPECTED** – No JHLOR works in catchment		
			Location 8 Canterbury Compound	JHLOR compound, ERSED Controls in place. High flow of water. Clean ponded water on asphalt surface and no flow of water off asphalt parking surface at time of inspection. Downstream water observed to be turbid (looks same as upstream). No excavation activities along the corridor near this location. NOTE: signs of batter slip on LHS.		
			Location 9 Bankstown	**Piling work on culvert side**. ERSED controls in place, effective and maintained. No sign of dirty water from corridor. Council works are being carried out in roadway alongside.		
8/12/2024	14.8 mm	No adverse impacts relating to JHLOR works recorded	**Location 1** Dulwich Hill	No JHLOR works, ERSED Controls in place, Water in main culvert is slightly turbid. Turbid water from side inlet on LHS. No JHLOR works in the area or up at Ewart St. Unknown source. Station Contractor's black pipe from on RHS – not able to see. Medium flow of water, but damage to vegetation indicates previously high flow.	None relating to JHLOR impacts	N/A
			Location 2 Hurlstone Park	**NO PO AVAILABLE – AREA NOT INSPECTED**, No JHLOR works, ERSED Controls in place		
			Location 3 West Bank of Cooks River	JHLOR Security fence piling works occurs west side of Warioa Bridge, ERSED Controls in place, No sign of dirty water from corridor. Medium flow of water.		
			Location 4 Belmore Triangle	JHLOR Stockpiling area, ERSED Controls in place, No sign of dirty water from corridor. Clean water through SW pipe.		
			Location 5 Lakemba	JHLOR construction activities on the SWN side of corridor along top of batter. ERSED controls in place. Clean water discharge into drop pit.		
			Location 6 Wiley Park	JHLOR construction works on the UP (North side) of tracks – security fence installation, ERSED Controls in place, No sign of dirty water from corridor. Small inlet from the RHS of the Western most culverts – slightly turbid water flowing into culver. Dirty water in the wester culver ponding due to blockage in outlet at eastern culvert. Unknown upstream source but seeping from concrete GLT/ toe of vegetated batter. No oil & grease. No odour		

Date	Total Rainfall	Adverse Impacts	Monitoring Location Checklist	Notable Observations	Observations	Follow up actions
			Location 7 Punchbowl	This flow line is below ground and runs across the corridor from North to South and can be seen through pits located within corridor only. **NO PO AVAILABLE – AREA NOT INSPECTED** – No JHLOR works in catchment		
			Location 8 Canterbury Compound	No JHLOR works. ERSED Controls in place, Medium flow of water, slightly turbid water across the rail track. Water flow from compound hard stand / asphalt into ballast drain.		
			Location 9 Bankstown	No excavation work on culvert side. JHLORJV works occurring here. ERSED controls in place, effective and maintained. No sign of dirty water from corridor. Council works are being carried out in roadway alongside.		
			Location 2 Hurlstone Park	**NO PO AVAILABLE – AREA NOT INSPECTED**, No JHLOR works, ERSED Controls in place		
			Location 3 West Bank of Cooks River	JHLOR Security fence piling works occurs west side of Warioa Bridge, ERSED Controls in place, No sign of dirty water from corridor		
			Location 4 Belmore Triangle	JHLOR Stockpiling area, ERSED Controls in place, No sign of dirty water from corridor		
			Location 5 Lakemba	No JHLOR works. ERSED Controls in place, **AREA NOT INSPECTED**		
			Location 6 Wiley Park	No JHLOR works, ERSED Controls in place, No sign of dirty water from corridor. Small inlet from the RHS of the Western most culverts – turbid water flowing into culver. Unknown upstream source but seeping from concrete GLT/ toe of vegetated batter. No oil & grease. No odour		
			Location 7 Punchbowl	This flow line is below ground and runs across the corridor from North to South and can be seen through pits located within corridor only. **NO PO AVAILABLE – AREA NOT INSPECTED** – No JHLOR works in catchment		
			Location 8 Canterbury Compound	JHLOR compound, ERSED Controls in place, No sign of dirty water from corridor		
			Location 9 Bankstown	No construction work on culvert side. JHLORJV works occurring here. ERSED controls in place, effective and maintained. No sign of dirty water from corridor		
9/01/2025	40.4 mm	No adverse impacts relating to JHLOR works recorded	**Location 1** Dulwich Hill	No JHLOR works, ERSED Controls in place, Water in main culvert is slightly turbid. Turbid water from side inlet on LHS. No JHLOR works in the area or up at Ewart St. Unknown source. Station Contractor's black pipe from on RHS – not able to see. Medium flow of water, but damage to vegetation indicates previously high flow.	None relating to JHLOR impacts	N/A
			Location 2 Hurlstone Park	**NO PO AVAILABLE – AREA NOT INSPECTED**, No JHLOR works, ERSED Controls in place		
			Location 3 West Bank of Cooks River	JHLOR Security fence piling works occurs west side of Warioa Bridge, ERSED Controls in place, No sign of dirty water from corridor. Medium flow of water.		
			Location 4 Belmore Triangle	JHLOR Stockpiling area, ERSED Controls in place, No sign of dirty water from corridor. Clean water through SW pipe.		
			Location 5 Lakemba	JHLOR construction activities on the SWN side of corridor along top of batter. ERSED controls in place. Clean water discharge into drop pit.		
			Location 6 Wiley Park	JHLOR construction works on the UP (North side) of tracks – security fence installation, ERSED Controls in place, No sign of dirty water from corridor. Small inlet from the RHS of the Western most culverts – slightly turbid water flowing into culver. Dirty water in the wester culver ponding due to blockage in outlet at eastern culvert. Unknown upstream source but seeping from concrete GLT/ toe of vegetated batter. No oil & grease. No odour		
			Location 7 Punchbowl	This flow line is below ground and runs across the corridor from North to South and can be seen through pits located within corridor only. **NO PO AVAILABLE – AREA NOT INSPECTED** – No JHLOR works in catchment		
			Location 8 Canterbury Compound	No JHLOR works. ERSED Controls in place, Medium flow of water, slightly turbid water across the rail track. Water flow from compound hard stand / asphalt into ballast drain.		
			Location 9 Bankstown	No excavation work on culvert side. JHLORJV works occurring here. ERSED controls in place, effective and maintained. No sign of dirty water from corridor. Council works are being carried out in roadway alongside.		
			Location 2 Hurlstone Park	**NO PO AVAILABLE – AREA NOT INSPECTED**, No JHLOR works, ERSED Controls in place		
			Location 3 West Bank of Cooks River	JHLOR Security fence piling works occurs west side of Warioa Bridge, ERSED Controls in place, No sign of dirty water from corridor		
			Location 4 Belmore Triangle	JHLOR Stockpiling area, ERSED Controls in place, No sign of dirty water from corridor		
			Location 5 Lakemba	No JHLOR works. ERSED Controls in place, **AREA NOT INSPECTED**		
			Location 6 Wiley Park	No JHLOR works, ERSED Controls in place, No sign of dirty water from corridor. Small inlet from the RHS of the Western most culverts – turbid water flowing into culver. Unknown upstream source but seeping from concrete GLT/ toe of vegetated batter. No oil & grease. No odour		
			Location 7 Punchbowl	This flow line is below ground and runs across the corridor from North to South and can be seen through pits located within corridor only. **NO PO AVAILABLE – AREA NOT INSPECTED** – No JHLOR works in catchment		
			Location 8 Canterbury Compound	JHLOR compound, ERSED Controls in place, No sign of dirty water from corridor		
			Location 9 Bankstown	No construction work on culvert side. JHLORJV works occurring here. ERSED controls in place, effective and maintained. No sign of dirty water from corridor		
16/01/2025	40 mm	No adverse impacts relating to JHLOR works recorded	**Location 1** Dulwich Hill	No JHLOR works, ERSED Controls in place, Water in main culvert is slightly turbid. Turbid water from side inlet on LHS. No JHLOR works in the area or up at Ewart St. Unknown source. Station Contractor's black pipe from on RHS – not able to see. Medium flow of water, but damage to vegetation indicates previously high flow.	None relating to JHLOR impacts	N/A
			Location 2 Hurlstone Park	**NO PO AVAILABLE – AREA NOT INSPECTED**, No JHLOR works, ERSED Controls in place		
			Location 3 West Bank of Cooks River	JHLOR Security fence piling works occurs west side of Warioa Bridge, ERSED Controls in place, No sign of dirty water from corridor. Medium flow of water.		
			Location 4 Belmore Triangle	JHLOR Stockpiling area, ERSED Controls in place, No sign of dirty water from corridor. Clean water through SW pipe.		
			Location 5 Lakemba	JHLOR construction activities on the SWN side of corridor along top of batter. ERSED controls in place. Clean water discharge into drop pit.		
			Location 6 Wiley Park	JHLOR construction works on the UP (North side) of tracks – security fence installation, ERSED Controls in place, No sign of dirty water from corridor. Small inlet from the RHS of the Western most culverts – slightly turbid water flowing into culver. Dirty water in the wester culver ponding due to blockage in outlet at eastern culvert. Unknown upstream source but seeping from concrete GLT/ toe of vegetated batter. No oil & grease. No odour		

Date	Total Rainfall	Adverse Impacts	Monitoring Location Checklist	Notable Observations	Observations	Follow up actions
			Location 7 Punchbowl	This flow line is below ground and runs across the corridor from North to South and can be seen through pits located within corridor only. **NO PO AVAILABLE – AREA NOT INSPECTED** – No JHLOR works in catchment		
			Location 8 Canterbury Compound	No JHLOR works. ERSED Controls in place, Medium flow of water, slightly turbid water across the rail track. Water flow from compound hard stand / asphalt into ballast drain.		
			Location 9 Bankstown	No excavation work on culvert side. JHLORJV works occurring here. ERSED controls in place, effective and maintained. No sign of dirty water from corridor. Council works are being carried out in roadway alongside.		
			Location 2 Hurlstone Park	**NO PO AVAILABLE – AREA NOT INSPECTED**, No JHLOR works, ERSED Controls in place		
			Location 3 West Bank of Cooks River	JHLOR Security fence piling works occurs west side of Warioa Bridge, ERSED Controls in place, No sign of dirty water from corridor		
			Location 4 Belmore Triangle	JHLOR Stockpiling area, ERSED Controls in place, No sign of dirty water from corridor		
			Location 5 Lakemba	No JHLOR works. ERSED Controls in place, **AREA NOT INSPECTED**		
			Location 6 Wiley Park	No JHLOR works, ERSED Controls in place, No sign of dirty water from corridor. Small inlet from the RHS of the Western most culverts – turbid water flowing into culver. Unknown upstream source but seeping from concrete GLT/ toe of vegetated batter. No oil & grease. No odour		
			Location 7 Punchbowl	This flow line is below ground and runs across the corridor from North to South and can be seen through pits located within corridor only. **NO PO AVAILABLE – AREA NOT INSPECTED** – No JHLOR works in catchment		
			Location 8 Canterbury Compound	JHLOR compound, ERSED Controls in place, No sign of dirty water from corridor		
			Location 9 Bankstown	No construction work on culvert side. JHLORJV works occurring here. ERSED controls in place, effective and maintained. No sign of dirty water from corridor		

4.2 Noise and Vibration Monitoring

4.3.1 Noise Monitoring

Attended noise monitoring was undertaken as required for OOHW and possessions, where noise modelling predicted significant exceedance of Rating Background Levels (RBL) or otherwise required validation using this method.

Continuous noise monitoring was undertaken for OOHW and possessions. They were located at the locations with the highest risk of noise exceedance of RBL as established by the JHLOR noise models, detailed monitoring locations can be found in **Appendix B – Noise Monitoring Report**. These noise monitoring methods have been conducted for activities with significant predicted exceedances of noise management levels, mostly occurring where works are conducted in the evening or night-time periods. SWM3 have committed to review impacts and mitigation of construction activity and document outcomes where an exceedance is recorded, or a complaint is made related to project construction activities.

The following noise monitoring event were undertaken for the below Out-of-hour works (OOHW):

- OOHW carried out from the 30th of September 2024 to the 8th of October 2024. Works carried out under condition L5.6 – Local Possessions.
- OOHW carried out from the 8th to the 19th of October 2024. Works carried out under condition L5.6 – Local Possessions.
- OOHW carried out on the 19th of October 2024 to the 4th of November 2024. Works carried out under condition L5.6- Local Possessions.
- OOHW carried out from the 7th to the 8th of November 2024 during weekday (night) out-of-hour-works. Works carried out under condition L5.6- Local Possessions.
- OOHW carried out on the 4th to the 15th of November 2024. Works carried out under condition L5.6- Local Possessions.
- OOHW carried out on the 16th of November to the 1st of December 2024. Works carried out under condition L5.6- Local Possessions.
- OOHW carried out on the 2nd of December to the 15th of December 2024. Works carried out under condition L5.6- Local Possessions.
- OOHW carried out on the 16th to the 22nd of December 2024. Works carried out under condition L5.6- Local Possessions.
- OOHW carried out the 12th of January 2025 during Weekend 28 Rail Possession (WE28) over one (1) day shift. Works carried out under condition L5.6- Local Possessions
- OOHW carried out from the 13th to the 14th of January 2025 during weekday (WK28) over one (1) night shift. Works carried out under condition L5.6- Local Possessions.
- OOHW carried out on the 21st of January 2025 during weekday (WK29) and from the 25th to the 27th of January 2025 during Weekend 30 Possession (WE30). Works carried out under condition L5.6- Local Possessions.
- OOHW carried out from the 17th to the 18th of February 2025 and from the 21st to the 24th

February 2025. Works carried out under condition L5.6- Local Possessions.

Detailed noise monitoring results are attached in **Appendix B**. Throughout the works carried out over the reporting period (September 2024 to February 2025). Actual noise (LAeq 15min) data was collected at the monitoring location and assessed for exceedances.
There were no exceedances of the original noise predictions for the current reporting period.
As part of the noise monitoring, a respite offer was the correct level of additional mitigation.
Construction impacts as well as extraneous noise has been recorded as impacting receivers and monitoring results. Frequent extraneous noise sources throughout the night included:

- Noise from passing freight trains on the ARTC line
- Road traffic, particularly rail replacement buses during rail possessions

4.3.2 Vibration

As per the Construction Noise and Vibration Impact Statement, real time vibration monitoring is conducted when the works are predicted to exceed the building cosmetic damage vibration goals and/or human comfort vibration goals. No works throughout this reporting period indicated the need for vibration monitoring
To date, there has been no exceedances of vibration from construction activities, and recorded vibration (PPV in mm/s) has been well below cosmetic vibration limits for affected structures. As above, attended noise and vibration monitoring has identified that external non-construction noise and vibration sources are frequent in the areas, which is also expected to reflect in the results of any real-time continuous monitoring.
Vibration monitoring was carried out one (1) time during the current reporting period.

- Thursday the 7th of November 2024 during the partial demolition of the Dulwich Hill Ticket Office. No exceedances of vibration recorded.

4.4 Complaints

There were twenty-four (24) complaints throughout this reporting period. All complaints were noise complaints which were found to be attributed to JHLORJV works.

Date received	Complaint Identification	Complaint Method	Suburb complaint relates to	Construction site/work complaint relates to	Complaint description	Response provided to stakeholder by community team	Action taken by project team/team on site	Status
6/09/2024	ECO102	E-mail	Canterbury	Noise	Complainant emailed in complaint about workers playing loud radio/music on site.	JHLORJV CRM called back to apologise for the disturbance and let the complainant know that the workers have been instructed to turn the music off and keep their voices low.	JHLORJV supervisor phoned the foreman on site and instructed them to turn music off and keep voices down. One worker had a portable speaker. The worker apologised and put the speaker away. No noise monitoring was conducted. All workers will be reminded at pre-start to avoid the use of radios and portable speakers. The Enviro Coordinator was driving through the same location at +-10:35 and can confirm there was additional road work/line marking activities (not JHLOR) being conducted (under traffic control) along Charles St.	Closed
26/09/2024	ECO103	E-mail	Dulwich Hill	OOH Noise	Dulwich Hill resident complaining of location of generator at station	JHLORJV CRM checked with team if the generators' location could be changed however it cannot as it needs to be connected to the Pad mount in this location. Reviewed the noise modelling for the activity and the resident was eligible for additional mitigation measure of respite.	JHLORJV CRM email resident to advise that the generators location could not be shifted however they were eligible for AMM for the operation of the generator, resident is yet to accept the offer. Note: the non-compliance regarding this complaint has been rescinded as the works were associated with Sydney Trains work, not JHLORJV despite the interface element. It is not part of our scheduled activity, contract or planning approval. NO complaint has been received since.	Closed
28/09/2024	ECO104	Email	Bankstown	Noise	Bankstown resident complaining of noisy works close to residence during standard construction hours	Stakeholder and Community Relations Manager emailed resident explaining the works being conducted near their property are only considered moderately intrusive and the correct additional mitigation measure of a respite voucher has been offered for these works OOH, not standard construction hours.	Stakeholder and Community Relations Manager reviewed the daily work program and noise modelling for tonight, the works being conducted near the residents property are only considered moderately intrusive (<30dB). resident is not eligible for alternative accommodation, a respite voucher will be issued.	Closed
1/10/2024	ECO105	Email	Hurlstone Park	OOH Noise	Hurlstone Park resident complaining of Nosie from generator powering Hurlstone Park station	JHLORJV CRM identified that generator was in operation for Sydney Trains works prior to JHLORJV works can commence. JHLORJV responded to resident providing a response that monitoring showed experienced noise level at the property is lower than predicted for the generators operation and does not trigger an additional mitigation measure of a respite voucher or alternative accommodation. Explained to resident that station would be transferred to Sydney Metro power today and the generator decommissioned there after.	JHLORJV environment team conducted noise monitoring (regardless) during the night period and provided info to CRM. This data showed experienced noise level at the property is lower than predicted for the generators operation and does not trigger an additional mitigation measure of a respite voucher or alternative accommodation that JHLORJV would provide on behalf of Sydney Trains.	Closed
30/09/2024	ECO106	Email	Dulwich Hill	OOH Noise	Dulwich Hill resident complaining works occurring early Monday morning	JHLORJV CRM spoke to Stations supervisor to see what works may have been occurring. Supervisor informed that it was likely the team erecting hoarding following the final Sydney Trains service on the T3 line to prevent public access to stations during the final conversion period. JHLORJV CRM emailed resident to advise of this and apologised that this was missed in our planning and unfortunately was not correctly notified or offered the appropriate additional mitigation measure for the works. CRM apologised for this and offered respite retrospectively for this date	Works missed in our planning and unfortunately was not correctly notified or offered the appropriate additional mitigation measure for the works. A Non-compliance has been raised and will be documented in the Annual Return against Condition L5.12	Closed
1/10/2024	ECO107	Received directly by Sydney Metro or contractor	Dulwich Hill	Construction noise	Dulwich Hill enquiring about when the metro services building will be completed, raised the issue of her daughter having a severe mental episode from the noise	Stakeholder and Community Relations Manager reviewed the daily work program and liaised with the team to see what works were being conducted in the area. Stakeholder and Community Relations Manager	Offered resident alternative accommodation from this afternoon/ tomorrow until Saturday to seek respite from the works.	Closed

Date received	Complaint Identification	Complaint Method	Suburb complaint relates to	Construction site/work complaint relates to	Complaint description	Response provided to stakeholder by community team	Action taken by project team/team on site	Status
						emailed resident reviewed the daily work plan and explained our team are installing security fence on the top of the batter behind the services building as well as installing mechanical gap fillers and platform screen doors on the station platform.		
2/10/2024	ECO108	Email	Dulwich Hill	OOH Noise	Dulwich Hill resident complaining of OOH delivery	JHLORJV CRM spoke with team to confirm delivery was not related to their project, upon investigation the delivery was related to an interface contractor UGL for PSD/MGF works.	This complaint was passed on to Sydney Metro/ UGL.	Closed
12/10/2024	ECO109	Email	Bankstown	OOH Noise	Bankstown resident complaining of noise overnight during approved OOHW	JHLORJV CRM email resident to advise that the noise level as in line with the prediction and that the resident had received the correct Additional Mitigation Measure.	Attended monitoring on the 10/10/24 and continuous real time monitoring for 12/10/24 validated predictions. Appropriate mitigation in the form of RO has been offered. No exceedance of predictions. Max LAeq15min was 64dB before 05:00. Predicted was 69dB. CRM offered customised molded ear plugs in addition to the RO already issued as well as provided recommendations on masking construction noise impact using pink noise inside the the apartment. The next step was also discussed for internal noise monitoring but not taken up. The resident was as to call back if the recommendations did not work.	Closed
14/10/2024	ECO110	Phone call	Marrickville	OOH Noise	Marrickville resident complained of noisy works overnight	JHLORJV CRM phoned resident to advise works were related to the project and they had been offered respite for the works. Resident advised they had missed the notice and didn't accept the retrospective respite offer.	JHLORJV CRM reviewed work program and trigger list. Works were occurring nearby during the night and the resident was eligible for respite for these works. Retrospectively respite was offered but not accepted by resident. Works were approved to occur OOH and the correct additional mitigation measure was offered to resident	Closed
16/10/2024	ECO111	Email	Bankstown	OOH Noise	Bankstown Resident complained of noisy works overnight. Specifically in relation to the value of additional mitigation measures offered	JHLORJV CMR responded: We want to apologise for any inconvenience caused by the construction noise. We understand that our work can be disruptive, and we appreciate your patience as we continue to upgrade the rail line to metro standards. Sydney Metro respite offers are designed to provide some relief to residents impacted by construction noise. These offers are based on an assessment of construction activities and noise levels, and the number of nights a household might be affected. The vouchers are not intended as compensation but rather to support residents in taking a break from construction noise and enjoy activities outside their homes or to be used to buy a Bluetooth speaker to play white/pink noise to help mask construction noise.	No additional monitoring was undertaken as the predictions were validated through real time continuous noise monitoring.	Closed
16/10/2024	ECO112	Email	Marrickville	OOH Noise	Marrickville resident complained of noisy works overnight. Thanked the Project for respite offer, however cannot take up AA due to pet. The resident also enquired if the works can be undertaken in standard construction hours	JHLORJV CMR responded: We want to apologise for any inconvenience caused by the construction noise last weekend. We understand that our work can be disruptive, and we appreciate your patience as we continue to upgrade the rail line to metro standards. Some of our construction activities must be carried out around the clock during scheduled rail shutdowns to ensure the successful completion of the project. Unfortunately, the specific work being performed this weekend could not be rescheduled due to the sequential nature of the overhead wiring upgrade being undertaken in the area. In accordance with our construction noise and vibration management plan, predictive noise modelling indicated that the work might produce	The realtime monitoring result from the continuous noise monitor has validated our offer of alternative accommodation as the correct additional mitigation measure for the work.	Closed

Date received	Complaint Identification	Complaint Method	Suburb complaint relates to	Construction site/work complaint relates to	Complaint description	Response provided to stakeholder by community team	Action taken by project team/team on site	Status
						intrusive noise levels during the evening period. As a result, we offered alternative accommodation to the building to help resident receive uninterrupted sleep caused by our construction works. We have reviewed our continuous noise monitor located at Marrickville Station over the weekend during the period you mention below, and we were unable to hear any hammering noises however did notice multiple fright trains passing through the area on the live ARTC freight network. Some of these freight train movements produce a clicking noise as they pass through points and crossover located behind blocks C and D of 359 Illawarra Road, Marrickville. The real monitoring result from the continuous noise monitor has validated our offer of alternative accommodation as the correct additional mitigation measure for the work. Pet friendly accommodation can be considered when applying for the AA. Sydney Metro recognises that noisy work is inconvenient for residents. We would like to thank you for your patience while we complete this essential work.		
20/10/2024	ECO113	Phone call	Dulwich Hill	OOH Noise	Dulwich Hill resident complaining of being woken up by grinder and 740am Sunday morning and not being notified of OOHW.	JHLORJV CRM reviewed model and work location for works being undertaken near resident. Works were being undertaken not near resident's address and resident had triggered for respite for the Sunday works. Works were notified in the Sydney Metro monthly construction notice. JHLORJV CRM spoke with resident to advise works were notified in the monthly notice for being undertaken on a Sunday and that the location of the works wasn't near resident's address. Resident advised they didn't like the new lay out of Sydney Metro construction notice and found it difficult to work out if works were going to be undertaken OOH.	No works in the area, no monitoring.	Closed
22/10/2024	ECO114	Email	Campsie	OOH Noise	Campsie resident complaining of noisy works OOH	Communication and Community Relations Manager emailed resident apologising for the noise disturbance, informing that works were notified in the Sydney Metro monthly construction notice which letter boxed to residents on or around the 25th of each month. The predictive noise model for the works did not trigger an additional notification for moderately or highly intrusive works triggering an offer of respite.	JHLOR were investigating complaint and were unable to obtain information from the team who were on fatigue leave so could not contact them until the evening. Stakeholder and Community Relations Manager reviewed the daily program and spoke with the team involved and confirmed it was JHLOR working.	Closed
23/10/2024	ECO115	Email	Canterbury	OOH Noise	Canterbury resident complaining of noisy works OOH	Communication and Community Relations Coordinator phoned resident apologising for the noise disturbance, informing that works were notified in the Sydney Metro monthly construction notice which letter boxed to residents on or around the 25th of each month. The predictive noise model for the works did not	Further investigation was undertaken and determined that based on the equipment used and scope of works, the noise model was likely adequate, however noise monitoring was missed, hence there is no validation data. This will be raised internally as a non-conformance with project requirements.	Closed

Date received	Complaint Identification	Complaint Method	Suburb complaint relates to	Construction site/work complaint relates to	Complaint description	Response provided to stakeholder by community team	Action taken by project team/team on site	Status
						trigger an additional notification or offer of respite.		
23/10/2024	ECO116	Email	Canterbury	OOH Noise	Canterbury resident complaining of noisy works OOH	Communication and Community Relations Coordinator phoned resident apologising for the noise disturbance, informing that works were notified in the Sydney Metro monthly construction notice which letter boxed to residents on or around the 25th of each month. The predictive noise model for the works did not trigger an additional notification or offer of respite.	Further investigation was undertaken and determined that based on the equipment used and scope of works, the noise model was likely adequate, however noise monitoring was missed, hence there is no validation data. This will be raised internally as a non-conformance with project requirements.	Closed
24/10/2024	ECO117	Email	Belmore	Noise & Vibration - OOHW, Working hours, Traffic, Transport & Parking	Redman Pde Belmore resident complaining of noise from Vehicle entering Belmore Triangle OOH	JHLORJV CRM reviewed work program and trigger list. Area is being used around the clock and the resident has been notified and offer alternative accommodation for the use of the area. Sydney Metro Project Communications Team responded to resident at their request. Providing information which has previously been provided to resident over the past 5 month.	No further action proposed. All at source noise controls in place, AMMMs have been offered.	Closed
24/10/2024	ECO118	Phone call	Marrickville	Noise	Marrickville resident complaining about loud workers and contractor vehicles parking on Warburton Street during std construction hours.	Communication and Community Relations Coordinator apologised for the disruption and stated we are working within our planning approval and EPL requirements. Followed up with an email advising to report vehicles to the 24/7 community information line or the community email so we can follow up on this immediately with the vehicle involved. Further mentioned that workers will be reminded in prestart meetings of neighbour friendly behaviour.	No further action proposed. All at source noise controls in place, AMMMs have been offered.	Closed
24/11/2024	ECO119	Phone call	Marrickville	Noise	Marrickville resident complaining about jackhammering activities on a Sunday - no notification or respite	JHLORJV CRM phoned resident and apologised for the noisy works occurring. Advised resident that works weren't scheduled and team had been asked to stop works for the day. Resident was appreciative of the call back and for works to be stopped.	Jackhammer activity discontinued for the day. Further investigation by the Environmental Advisor determined that only hand tools had been used to produce the noise model and no respite was necessary. Activities were conducted outside of the approved OOHW parameters. Misunderstanding of equipment types allowed for use during OOHW This will be raised internally as a non conformance with project requirements.	Closed
26/11/2024	ECO120	Email	Bankstown	Noise	Bankstown resident complained of being disturb by noisy OOH works (during the Monday night period)	JHLORJV CRM emailed resident to apologise for the disturbance and advise that works were approved to occur during the OOH period. These activities were notified in the monthly construction notice and didn't trigger respite.	JHLORJV CRM and Enviro Advisor reviewed the continuous noise monitoring (SiteHives at the works area) for the works and the actual VS predicative noise data. The noise generated by the activities were less than predicted for the night time period. Works were already notified in the Monthly construction notice and included in the approved OOH permit. No additional mitigation measures were applicable for the works. Unavoidable	Closed
5/12/2024	ECO121	Email	Belmore	OOH Noise	Belmore resident complaining works occurring OOH on Tuesday night and Wednesday morning 4 and 5 December with no respite.	JHLORJV CRM has emailed resident to advise resident we are investigating the unscheduled works.	JHLORJV Environmental Manager reviewed noise data at Belmore Triangle. 1 Laeq15min period over the night OOH (22:00-07:00) triggered RO at the complainants property, which was at the time of the complaint. It has since been identified the OHW team entered Belmore Triangle to undertake inaudible (<5dB above RBL) work	Closed

Date received	Complaint Identification	Complaint Method	Suburb complaint relates to	Construction site/work complaint relates to	Complaint description	Response provided to stakeholder by community team	Action taken by project team/team on site	Status
							undertaking pantograph checks. The works were included in the OOH Approval last week, however were not carried over to this weeks approval.	
5/12/2024	ECO122	Email	Canterbury	OOH Noise	Resident emailed to complain about rail noise.	JHLORJV CRM checked OOH register, and no works scheduled. Investigation commenced with team to identify works JHLORJV CRM email resident advising that there were no works occurring and the noise was due to noise was caused by an increase in the frequency of ARTC freight train movement overnight as identified by our continuous noise monitor at Canterbury Station.	JHLORJV Environmental Manager reviewed noise data and attributed it to ARTC operations. Complaint not related to project.	Closed
23/01/2025	ECO123	Phone call	Marrickville	OOH Noise	Resident emailed to complain about noise from rail activities.	JHLORJV CRM phoned resident to apologise for the disturbance and advised that the OOH works were approved during the period. These activities were notified in the monthly construction notice and didn't trigger respite (RO or AA).	JHLORJV CRM reviewed the actual continuous noise monitoring (SiteHives positioned between the resident and the work area) data generated by the works VS predicative noise. The actual noise generated by the activities were less than predicted for the night time period. Works had already been notified in the Monthly construction notice (Dec 24/Jan 25) and included in the approved OOH permit. No additional mitigation measures were applicable for the works. Unavoidable	Closed
18/02/2025	ECO124	Email	Dulwich Hill	OOH Noise	Resident emailed and stated that last night there was noisy activity in the construction site until at least 11pm. It was not machine noise, but loud grinding like shovelling gravel, or dragging metal across uneven surfaces.	JHLORJV CRM phoned resident to confirm that all SW Metro Works were checked, and no works occurred last night.	Investigation confirmed that no works occurred associated with the SW metro Project.	Closed

5 Mitigation Measures

5.1 Noise and Vibration

Standard and Additional mitigation measures as applicable were implemented as per Section 7 of the Construction Noise andVibration Management Plan, and Sections 6.2 and 6.4 of the Construction Noise and Vibration Impact Statement. These were effective during the reporting period.

A total of three (3) non-compliance notification reports (NCRs) related to noise and vibration were provided to EPA, SM and the Environmental Representative (ER):
NCR 001 Unapproved OOH delivery of water barriers at Ewart Lane I Dulwich Hill.
NCR 004 Unapproved tool (jack hammer) used in day OOH at Marrickville Sewer pile trimming.
NCR 005 Works at Belmore Triangle occurred without an OOHW permit.

5.2 Water

Standard mitigation measures were implemented as per Section 6 of the Construction Soil and Water Management Plan. A new area-checklist is completed for every new area JHLORJV works is planning to commence in. This considers existing ERSED issues and assists in the developing of ERSED control plans. Controls were, identified, installed and repaired as required throughout this reporting period.

6 Conclusion

Pre-construction surface water monitoring began in March 2021, with results showing several instances of poor water quality due to detritus and turbidity. Monitoring during the September 2024 – February 2025 period indicated no adverse impacts associated with JHLOR activities. Erosion-sediment control plans are maintained and reviewed regularly, and JHLOR conducts weekly and post rain environmental inspections. The Environment Representative also conductsbi-weekly inspections, and any observations are closed out within agreed timeframes.
Monitoring records have validated modelled noise and are consistent with the predicted impact of construction activities on noise catchment areas, including sensitive receivers.
There were zero (0) exceedances of the noise predictions for the current reporting period.

Appendix A – Sample of Water Monitoring Report

SWMC and BEW. Water Quality Monitoring Programme - Environmental Condition Surveys (CoA C8b)

Inspection type	Rain Event 30/11/2024(#44)
Rainfall (in previous 24hrs)	Total = +-38.4mm
Inspection by	Andre Kruize
Date(s) of inspection	Saturday 30/11/24 (07:00 onwards)
Other general notes	Cant Compound - Rain data, inspection and photos were taken through the corridor during the inspection Weather data from Canterbury Weather Station.

Latest Weather Observations for Canterbury

IDN60901

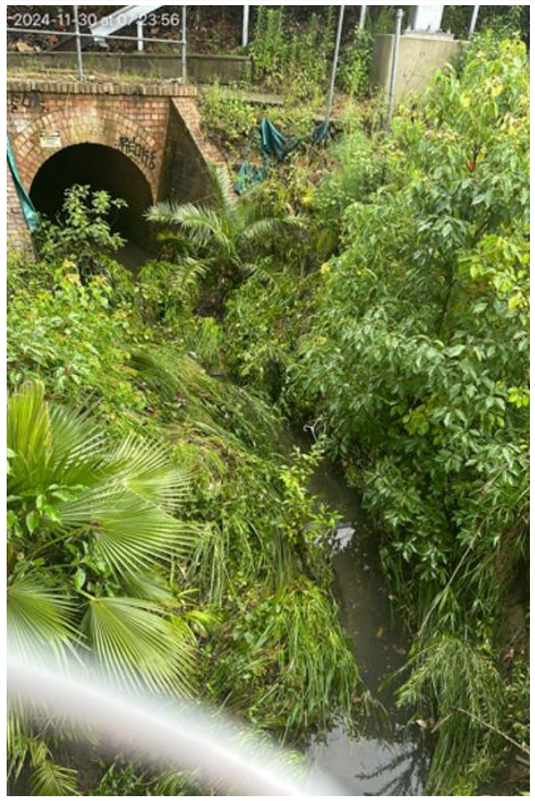
Issued at 11:11 am EDT Saturday 30 November 2024 (issued every 10 minutes, with the page automatically refreshed every 10 minutes)

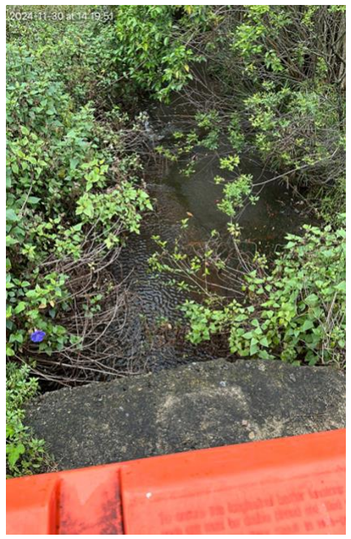
About weather observations | Map of Sydney area stations | Latest observations for Sydney area | Other Formats

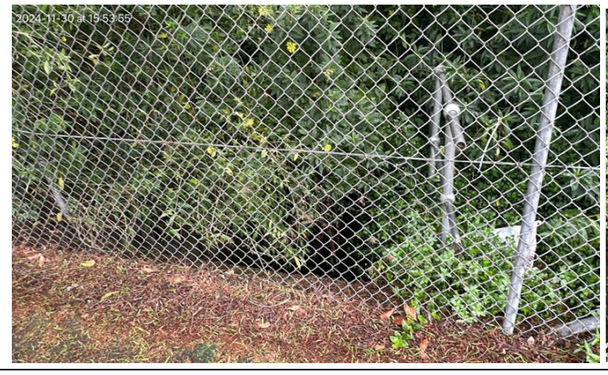
Station Details ID: 066194 Name: CANTERBURY RACECOURSE AWS Lat: -33.91 Lon: 151.11 Height: 3.0 m

Data from the previous 72 hours. | See also: Recent months at Canterbury

Date/Time EDT	Temp °C	App Temp °C	Dew Point °C	Rel Hum %	Delta-T °C	Wind					Press QNH hPa	Press MSL hPa	Rain since 9am mm
						Dir	Spd km/h	Gust km/h	Spd kts	Gust kts			
30/11:00am	22.1	23.5	21.8	98	0.2	NNE	17	28	9	15	-	-	0.2
30/10:30am	22.1	23.5	21.8	98	0.2	NE	17	26	9	14	-	-	0.2
30/10:00am	22.2	23.8	22.2	100	0.0	ENE	17	26	9	14	-	-	0.2
30/09:30am	21.9	23.3	21.9	100	0.0	NE	17	28	9	15	-	-	0.0
30/09:10am	21.7	23.4	21.7	100	0.0	NE	15	22	8	12	-	-	0.0
30/09:00am	21.7	23.4	21.7	100	0.0	NE	15	22	8	12	-	-	38.4
30/08:50am	21.6	23.3	21.6	100	0.0	NE	15	26	8	14	-	-	38.4
30/08:30am	21.7	24.2	21.7	100	0.0	ENE	11	20	6	11	-	-	38.4
30/08:00am	21.5	24.3	21.5	100	0.0	NE	9	17	5	9	-	-	38.4
30/07:30am	21.3	23.6	21.3	100	0.0	NE	11	17	6	9	-	-	38.4
30/07:00am	21.3	23.6	21.3	100	0.0	ENE	11	19	6	10	-	-	38.4
30/06:30am	21.4	23.7	21.4	100	0.0	ENE	11	19	6	10	-	-	38.2
30/06:29am	21.4	23.7	21.4	100	0.0	ENE	11	19	6	10	-	-	38.2
30/06:00am	21.4	23.0	21.4	100	0.0	ENE	15	22	8	12	-	-	38.2
30/05:30am	21.5	23.1	21.5	100	0.0	ENE	15	32	8	17	-	-	38.0
30/05:23am	21.5	23.9	21.5	100	0.0	E	11	15	6	8	-	-	38.0
30/05:00am	21.6	23.6	21.6	100	0.0	ENE	13	20	7	11	-	-	38.0
30/04:30am	21.6	24.0	21.6	100	0.0	NE	11	19	6	10	-	-	37.6
30/04:00am	21.4	23.7	21.4	100	0.0	NE	11	17	6	9	-	-	36.8
30/03:30am	21.4	24.5	21.4	100	0.0	NE	7	11	4	6	-	-	36.4
						ENE	11	19	6	10	-	-	36.2

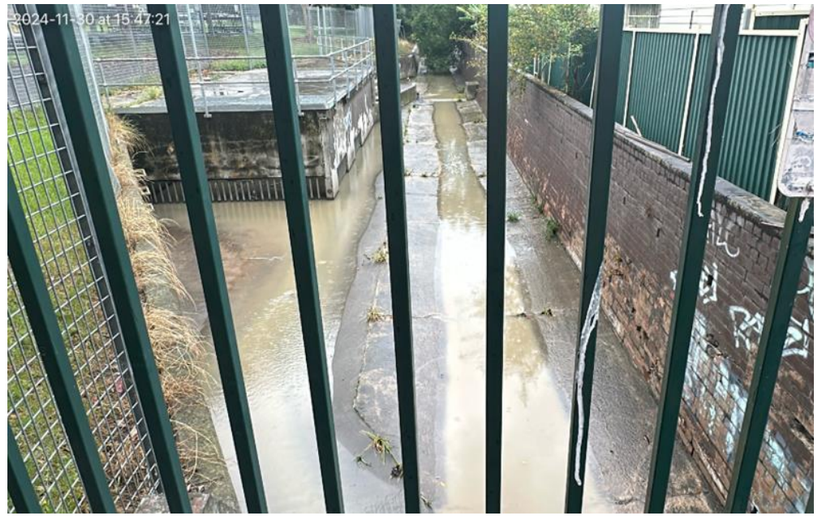
Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
Location 1 Dulwich Hill, country side, near commuter car park	JHLOR. Sporadic construction activities (sec fence) adjacent to culvert at 20m distance. No upstream activities at Ewart St in the corridor over the last week. Ewart St ERSED: Overland flow is arrested through a series of mid slope berms, coir logs and sediment fences. All pits are covered. No visible discharge of dirty water from site into existing water flows.	**Water clarity and colour:** Water in main culvert looks clean *Side inlet on LHS*: Not a clear line of sight due to vegetation growth BUT no sign of dirty water in main culvert *Side inlet on RHS:* Not a clear line of sight due to vegetation growth BUT no sign of dirty water in main culvert **Odour:** Nil **Description of flow and quantity/ Visible runoff (into the water body):** Currently low flow of water but signs of damage to vegetation - indicator of high volume flows. **Oil and Grease:** Nil **Details of any foreign objects within the water:** Nil **Other comments/description:** N/A	 **LHS Inlet** Unable to see – heavy vegetation growth **RHS Inlet** Unable to see – heavy vegetation growth			
Location 2 Hurlstone Park, countryside	No JHLOR construction/excavation activities along the corridor near this location	**Water clarity and colour:** **Odour:** N/A **Description of flow and quantity/ Visible runoff (into the water body):** N/A **Oil and Grease:** N/A **Details of any foreign objects within the water:** N/A **Other comments/description:** N/A	**NO PO AVAILABLE – AREA NOT INSPECTED**	Area alongside tracks and upstream from the open culvert are heavily vegetated.		
Location 3	No JHLOR construction/excavation activities along the corridor near this	**Water clarity and colour**: Clean water at outlet of SW pipe		Cooks River already running brown from rain event but water		

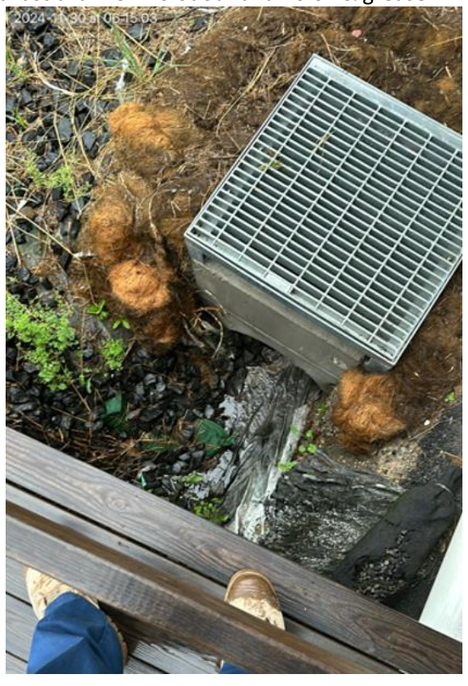
Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
West bank of Cook's River	location or up on Wairoa St bridge	**Odour:** Nil **Description of flow and quantity/ Visible runoff (into the water body):** **M**ed flow **Oil and Grease:** Nil **Details of any foreign objects within the water:** N/A **Other comments/description:** N/A	 	from SW outlet is clean. Wairoa St area - no work up in this area.		
Location 4 Belmore Triangle Access Road	BelmoreT – There is a ballast access road alongside this open channel Access track opens into BelmoreT transit space and also into Stockpile area at BelmoreT Wedge	**Water clarity and colour**: Clean water through SW pipe. **Odour:** Nil **Description of flow and quantity/ Visible runoff (into the water body):** Med flow. No visible signs of sediment flow from ballast access road. **Oil and Grease:** Nil **Details of any foreign objects within the water:** N/A **Other comments/description:** N/A	**SW oulet alongside access road.**   **Redman Pde – Upstream Status & Controls** No photos taken	This location is alongside a ballast stable track into BelmoreT **Belmore Triangle Area:** 1.Transit area. 2.Surface in the BelmoreT area is mostly covered by ballast. 3.There is a mid batter berm in place to divide catchment (concrete barrier divider placed). 4.Thick vegetated area around sed fence at bottom of area. Mulch berm added. 5.No stockpiling of spoil in this area as it is only a transit point for plant and vehicles to hi-rail pad and BelmoreT wedge. **Belmore Triangle Wedge Area:**		

Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
			Toe of batter on side of Access road – Clean water seen between the vegetation 	Stockpiles (spoil and Engineered fill) are located on top of batter above the access road. No sign of spoil movement down slope on ballast access road. Stockpile area is flat. Toe of spoil stockpile is surrounded by double barrier and geofab curtain over barriers		
Location 5 Lakemba, country side	No construction activities on the DWN side of corridor along top of batter at this location - working platform is also level with ERSED controls in place. No work on the UP side of corridor. Heavily vegetated, long batter slope down to boundary fence. No sign of spoil movement down slope Area around one of the the open culverts is overgrown.	**Water clarity and colour: Odour:** Clear **Description of flow and quantity/ Visible runoff (into the water body):** Low flow **Oil and Grease:** Nil **Details of any foreign objects within the water:** Nil **Other comments/description:** Nil	**Nth side of corridor (UP side)** Drainage network below ground/road – water from road discharges into drop pit. No visual on quality of water. **Sth side of corridor – Two culverts (Down Side)** No visual on the one culvert- overgrown with vegetation. Clean water flowing through other culvert.  			
Location 6 Wiley Park, countryside.	No JHLOR construction work on the UP (Nth side) of the tracks for a couple of months.	**Water clarity and colour:** Eastern culvert is turbid. Unknown source from upstream of corridor (residential area)	**NORTH SIDE OF CORRIDOR** Area upstream of Culvert. Gate WP3 and roadway below – Site access stabilised with ballast. Grass stabilised area above access gate.			

Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
		• **Downstream (Nth side):** See notes in photo section. • **Upstream (Sth side):** See notes in photo section. **Odour:** Nil **Description of flow and quantity/ Visible runoff (into the water body):** Low flows **Oil and Grease:** Nil **Details of any foreign objects within the water:** Nil. **Other comments/description:** Nil	  **Western most culvert** Clear water in western culvert.  **Middle culvert:** No flow. Ponding is due to blockage in outlet on the eastern culvert to which this spills. Clear water in middle culvert. 			

Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
			Eastern most culvert Low flow, slighted turbid water through main culvert. No spill, through flow from adjacent western culverts as it seems blocked. No oil & grease. No odour. Photos show culvert on corridor side & school side of Urunga Pde.   **SOUTH SIDE OF CORRIDOR** **Western most culvert** Low flow. Clear water flowing through main culvert 			

Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
			Middle culvert No standing water from slope runoff with no visual flow through culvert. This inlet area is dry  **Eastern most Culvert** Low flow, turbid water through main culvert. Photos show culvert on corridor side & school side of The Boulavard  			
Location 7 Bankstown	Nil activities in the area		**No PO available – not inspected – no JHLOR works in catchment.** NOTE: This flow line is below ground and runs across the corridor from Nth to Sth and can be seen through pits only. They are all inside corridor.			

Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
Location 7ALT City side of Bankstown DOWN track (near Stacey St)	No JHLOR excavation activities have been carried out alongside the corridor near this location in the last +-6 weeks. ERSED controls in place either side of culvert – jute mesh with grass and leaf litter stabilising area.	**<u>Sth Side</u>** **Water clarity and colour:** Low flow, clear water from LHS outlet but white cloudy substance from RHS outlet. Source from upstream unknown. **Odour:** Nil **Description of flow and quantity/ Visible runoff (into the water body):** see above. **Oil and Grease:** Nil **Details of any foreign objects within the water:** No debris in water **Other comments/description** Nil				
Location 8 Canterbury Compound	No JHLOR construction/excavation activities along the corridor near this location	**Water clarity and colour from Culvert Under Corridor.** Low flow, slightly turbid water. NOTE: Clear water flow from compound hard stand/asphalt carpark into ballast drain. **Odour:** Nil **Description of flow and quantity/ Visible runoff (into the water body):** Turbid water, low flow of water in eastern channel **Oil and Grease:** Nil **Details of any foreign objects within the water:** Nil **Other comments/description:** Nil	**Inside Canterbury Compound** Clear water flow through ballast channel. No odour and no oil & grease  	No excavation activities along the corridor near this location		

Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
			Eastern Channel. Outside Canterbury Compound boundary alongside pedestrian footpath: <u>Slightly turbid water.Upstream from JHLOR discharge point:</u>  <u>Downstream from JHLOR discharge point:</u> Downstream water observed to be slightly turbid. NOTE: Sign of batter slip on LHS of open channel, howevervegetation growth obstructs line of sight.			

Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
			 			
Location 9 Bankstown Platform works Culvert backfilled. No further inspections required for this waterway.		**Water clarity and colour:** **Odour:** **Description of flow and quantity/ Visible runoff (into the water body):** **Oil and Grease:** **Details of any foreign objects within the water:** **Other comments/description**	**JHLOR site.** Brick culvert filled in.  			

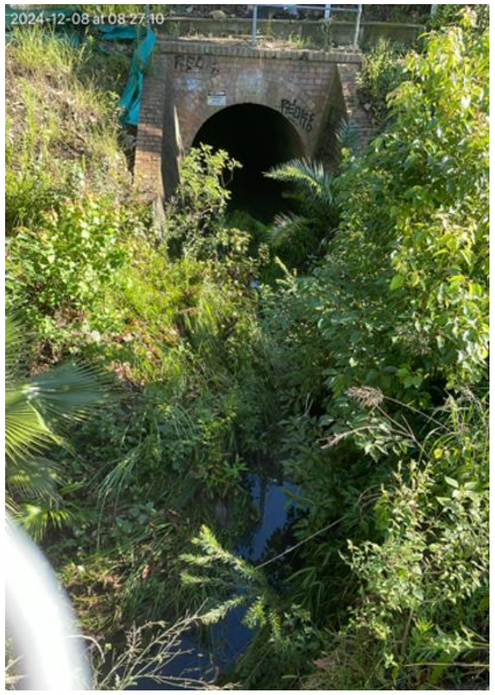
SWMC and BEW. Water Quality Monitoring Programme - Environmental Condition Surveys (CoA C8b)

Inspection type	Rain Event 07/12/2024(#45)
Rainfall (in previous 24hrs)	12.8mm to 09:00 on Saturday 07/12/24 + 14.8mm to 16:00 on Saturday 07/12/24 (Total 27.6 mm)
Inspection by	Ted Zhang
Date(s) of inspection	Sunday 08/12/24 (07:30 onwards)
Other general notes	Cant Compound - Rain data, inspection and photos were taken through the corridor during the inspection Weather data from Canterbury Weather Station.

Canterbury, New South Wales
December 2024 Daily Weather Observations

Date	Day	Temps Min °C	Temps Max °C	Rain mm	Evap mm	Sun hours	Max wind gust Dir	Spd km/h	Time local	9 am Temp °C	RH %	Cld 8th	Dir	Spd km/h	MSLP hPa	3 pm Temp °C	RH %	Cld 8th	Dir	Spd km/h	MSLP hPa
1	Su	19.4	29.8	0.8			NNW	80	13:36	24.3	79		NNW	9		20.4	95		ENE	20	
2	Mo	16.0	34.5	11.4			NNW	41	11:57	25.5	56		WNW	11		31.1	38		E	20	
3	Tu	19.1	32.9	0			NW	50	12:04	28.2	51		NNE	9		29.4	47		NW	22	
4	We	21.1	24.5	0			SSE	44	04:38	22.2	72		SSE	17		23.5	66		SE	22	
5	Th	19.8	26.7	0			E	33	15:55	22.2	76		Calm			26.4	69		NE	11	
6	Fr	21.8	30.6	0			SSE	28	09:47	26.4	75		NE	4		30.2	60		ESE	19	
7	Sa	22.1	29.3	12.8			W	30	20:29	23.7	97		WNW	2		25.3	96		NW	9	
8	Su	19.8	29.8	14.8			SE	43	13:03	26.9	67		SE	9		22.3	79		SE	22	

Date/Time EDT	Temp °C	App Temp °C	Dew Point °C	Rel Hum %	Delta-T °C	Wind Dir	Spd km/h	Gust km/h	Spd kts	Gust kts	Press QNH hPa	Press MSL hPa	Rain since 9am mm
07/11:30pm	24.4	25.2	19.0	72	3.4	WNW	13	20	7	11	-	-	14.8
07/11:00pm	25.4	26.2	19.1	68	4.0	WNW	13	20	7	11	-	-	14.8
07/10:30pm	26.2	26.9	19.6	67	4.3	WNW	15	24	8	13	-	-	14.8
07/10:00pm	27.5	28.8	20.1	64	4.8	NW	13	20	7	11	-	-	14.8
07/09:30pm	27.8	29.7	22.1	71	3.8	W	15	30	8	16	-	-	14.8
07/09:21pm	27.5	31.2	23.9	81	2.5	WNW	11	20	6	11	-	-	14.8
07/09:02pm	27.4	31.3	23.6	80	2.6	W	9	13	5	7	-	-	14.8
07/09:00pm	27.3	31.6	23.7	81	2.5	WSW	7	13	4	7	-	-	14.8
07/08:30pm	27.7	31.8	23.3	77	3.0	W	7	13	4	7	-	-	14.8
07/08:00pm	27.8	32.0	23.2	76	3.1	WNW	6	9	3	5	-	-	14.8
07/07:30pm	27.6	31.4	23.4	78	2.9	NW	9	13	5	7	-	-	14.8
07/07:00pm	28.5	32.7	23.2	73	3.6	NW	6	9	3	5	-	-	14.8
07/06:30pm	29.3	33.2	23.0	69	4.3	N	7	13	4	7	-	-	14.8
07/06:00pm	28.8	32.1	23.2	71	3.8	NNW	11	19	6	10	-	-	14.8
07/05:30pm	28.7	31.8	22.9	71	4.0	NNW	11	17	6	9	-	-	14.8
07/05:00pm	28.7	33.0	22.7	70	4.1	WNW	4	13	2	7	-	-	14.8
07/04:30pm	28.1	32.1	23.7	77	3.0	N	9	13	5	7	-	-	14.8
07/04:00pm	26.4	31.6	24.8	91	1.1	N	6	13	3	7	-	-	14.8
07/03:30pm	25.4	30.3	24.7	96	0.5	NNW	7	13	4	7	-	-	14.8
07/03:00pm	25.3	29.8	24.6	96	0.5	NW	9	15	5	8	-	-	14.4
07/02:30pm	24.6	29.0	24.4	99	0.1	NW	9	19	5	10	-	-	14.4
07/02:00pm	24.8	29.4	24.8	100	0.0	WNW	9	15	5	8	-	-	12.2
07/01:30pm	25.1	29.4	24.9	99	0.1	WNW	11	17	6	9	-	-	10.6
07/01:00pm	24.2	28.5	24.2	100	0.0	NNW	9	13	5	7	-	-	10.2
07/12:30pm	24.0	27.4	24.0	100	0.0	NW	13	20	7	11	-	-	7.4
07/12:24pm	24.2	28.1	24.2	100	0.0	NW	11	20	6	11	-	-	6.0
07/12:00pm	24.4	28.6	24.1	98	0.2	NW	9	17	5	9	-	-	4.2
07/11:30am	24.8	28.6	24.1	96	0.5	NW	11	17	6	9	-	-	3.0

Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
Location 1 Dulwich Hill, country side, near commuter car park	JHLOR. Sporadic construction activities (sec fence) adjacent to culvert at 20m distance. No upstream excavation activities at Ewart St or in on this day. Ewart St ERSED: Overland flow is arrested through a series of mid slope berms, coir logs and sediment fences. All pits are covered. No visible discharge of dirty water from site into existing water flows.	**Water clarity and colour:** Water in main culvert looks clean *Side inlet on LHS*: Not a clear line of sight due to vegetation growth BUT no sign of dirty water in main culvert *Side inlet on RHS:* Not a clear line of sight due to vegetation growth BUT no sign of dirty water in main culvert **Odour:** Nil **Description of flow and quantity/ Visible runoff (into the water body):** Currently low flow of water but minor signs of damage to vegetation - indicator of high volume flows. **Oil and Grease:** Nil **Details of any foreign objects within the water:** Nil **Other comments/description:** N/A	 **LHS Inlet** Unable to see – heavy vegetation growth **RHS Inlet** Unable to see – heavy vegetation growth			
Location 2 Hurlstone Park, countryside	No JHLOR construction/excavation activities along the corridor near this location	**Water clarity and colour:** **Odour:** N/A **Description of flow and quantity/ Visible runoff (into the water body):** N/A **Oil and Grease:** N/A **Details of any foreign objects within the water:** N/A **Other comments/description:** N/A	**NO PO AVAILABLE – AREA NOT INSPECTED**	Area alongside tracks and upstream from the open culvert are heavily vegetated.		
Location 3	No JHLOR construction/excavation activities along the corridor near this	**Water clarity and colour**: Clean water at outlet of SW pipe.		Cooks River – low tide		

Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
West bank of Cook's River	location. Sec fence post/mesh install above Wairoa St bridge (no excavation activities)	Cloudy substance in pond below outlet. **Odour:** Nil **Description of flow and quantity/ Visible runoff (into the water body):** Low flow **Oil and Grease:** Nil **Details of any foreign objects within the water:** N/A **Other comments/description:** N/A	 			
Location 4 Belmore Triangle Access Road	BelmoreT – There is a ballast access road alongside this open channel Access track opens into BelmoreT transit space and also into Stockpile area at BelmoreT Wedge	**Water clarity and colour**: Clean water through SW pipe. **Odour:** Nil **Description of flow and quantity/ Visible runoff (into the water body):** Low flow. No visible signs of sediment flow from ballast access road. **Oil and Grease:** Nil **Details of any foreign objects within the water:** N/A **Other comments/description:** N/A	**SW oulet alongside access road.**  **Redman Pde – Upstream Status & Controls.** Sweeper maintaining clean access & roadway.  	This location is alongside a ballast stable track into BelmoreT **Belmore Triangle Area:** 1.Transit area. 2.Surface in the BelmoreT area is mostly covered by ballast. 3.There is a mid batter berm in place to divide catchment (concrete barrier divider placed). 4.Thick vegetated area around sed fence at bottom of area. Mulch berm added. 5.No stockpiling of spoil in this area as it is only a transit point for plant and vehicles to hi-rail pad and BelmoreT wedge.		

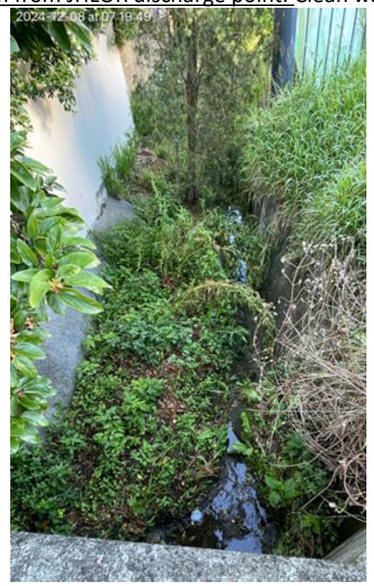
Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
			Toe of batter on side of Access road – No photos taken	**Belmore Triangle Wedge Area:** Stockpiles (spoil and Engineered fill) are located on top of batter above the access road. No sign of spoil movement down slope on ballast access road. Stockpile area is flat. Toe of spoil stockpile is surrounded by double barrier and geofab curtain over barriers		
Location 5 Lakemba, country side	No construction activities on the DWN side of corridor along top of batter at this location No work on the UP side of corridor. Heavily vegetated, long batter slope down to boundary fence. No sign of spoil movement down slope Area around one of the the open culverts is overgrown.	**Water clarity and colour: Odour:** Clear **Description of flow and quantity/ Visible runoff (into the water body):** Low flow **Oil and Grease:** Nil **Details of any foreign objects within the water:** Nil **Other comments/description:** Nil	**Nth side of corridor (UP side)** Drainage network below ground/road – water from road discharges into drop pit. No visual on quality of water. **Sth side of corridor – Two culverts (Down Side)** No visual on the one culvert- overgrown with vegetation. Clean water flowing through other culvert.  			
Location 6 Wiley Park, countryside.	No JHLOR construction work on the UP (Nth side) of the tracks for a couple of months.	**Water clarity and colour:** Eastern culvert has clear water flowing. • **Downstream (Nth side):** See notes in photo section. • **Upstream (Sth side):** See notes in photo section.	**NORTH SIDE OF CORRIDOR** Area upstream of Culvert. Inside corridor and Gate WP3 is stabilised – No photos taken **Western most culvert** NO water flowing in western culvert.			

Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
		Odour: Nil **Description of flow and quantity/ Visible runoff (into the water body):** Low flows **Oil and Grease:** Nil **Details of any foreign objects within the water:** Nil. **Other comments/description:** Nil	 **Middle culvert:** No flow. Ponding is due to blockage in outlet on the eastern culvert to which this spills. Clear water in middle culvert. 			

Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
			Eastern most culvert Low flow, clear water through main culvert. No spill, through flow from adjacent western culverts as it seems blocked. No oil & grease. No odour. Photos show culvert on corridor side of Urunga Pde.  **SOUTH SIDE OF CORRIDOR** **Western most culvert** Hardly any flow. Clear water flowing through main culvert. 			

Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
			Middle culvert No standing water from slope runoff with no visual flow through culvert. This inlet area is dry  **Eastern most Culvert** Low flow, clear water through main culvert. Photos show culvert on corridor side of The Boulevard  			
Location 7 Bankstown	Nil activities in the area		**No PO available – not inspected – no JHLOR works in catchment.** NOTE: This flow line is below ground and runs across the corridor from Nth to Sth and can be seen through pits only. They are all inside corridor.			

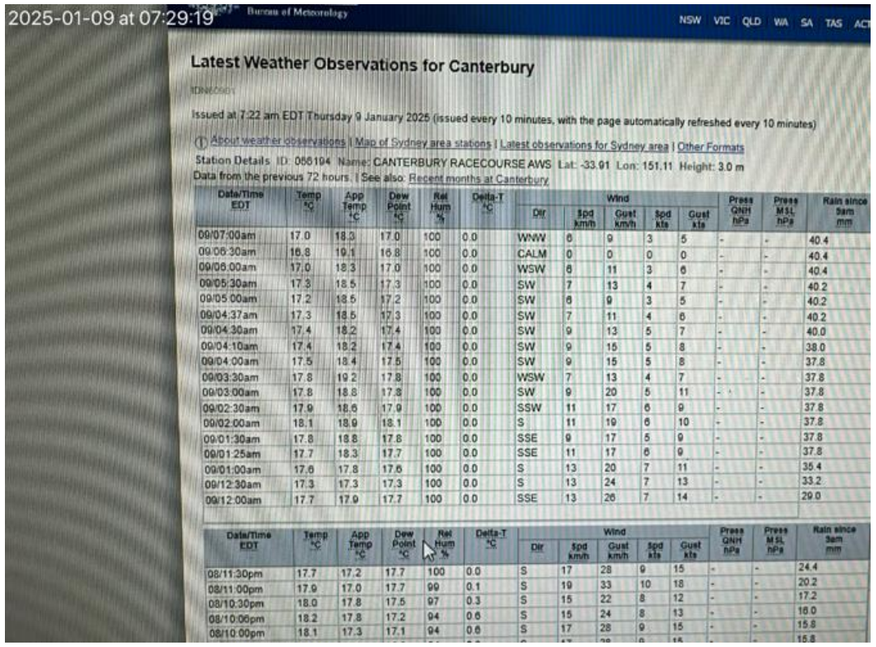
Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
Location 7ALT City side of Bankstown DOWN track (near Stacey St)	No JHLOR excavation activities have been carried out alongside the corridor near this location in the last+- 2 months weeks. ERSED controls in place either side of culvert – jute mesh with grass and leaf litter stabilising area.	**<u>Sth Side</u>** **Water clarity and colour:** Low flow, clear water from LHS outlet **Odour:** Nil **Description of flow and quantity/ Visible runoff (into the water body):** see above. **Oil and Grease:** Nil **Details of any foreign objects within the water:** No debris in water **Other comments/description** Nil				
Location 8 Canterbury Compound	No JHLOR construction/excavation activities along the corridor near this location	**Water clarity and colour from Culvert Under Corridor.** Low flow, slightly turbid water. NOTE: Clear water flow from compound hard stand/asphalt carpark into ballast drain. **Odour:** Nil **Description of flow and quantity/ Visible runoff (into the water body):** Turbid water, low flow of water in eastern channel **Oil and Grease:** Nil **Details of any foreign objects within the water:** Nil **Other comments/description:** Nil	**Inside Canterbury Compound** No water flow through ballast channel. No odour and no oil & grease  	No excavation activities along the corridor near this location		

Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
			Eastern Channel. Outside Canterbury Compound boundary alongside pedestrian footpath: <u>Upstream from JHLOR discharge point:</u> Clean water flow.  <u>Downstream from JHLOR discharge point:</u> Downstream water observed to be clear. NOTE: Sign of batter slip on LHS of open channel, however vegetation growth obstructs line of sight.  			

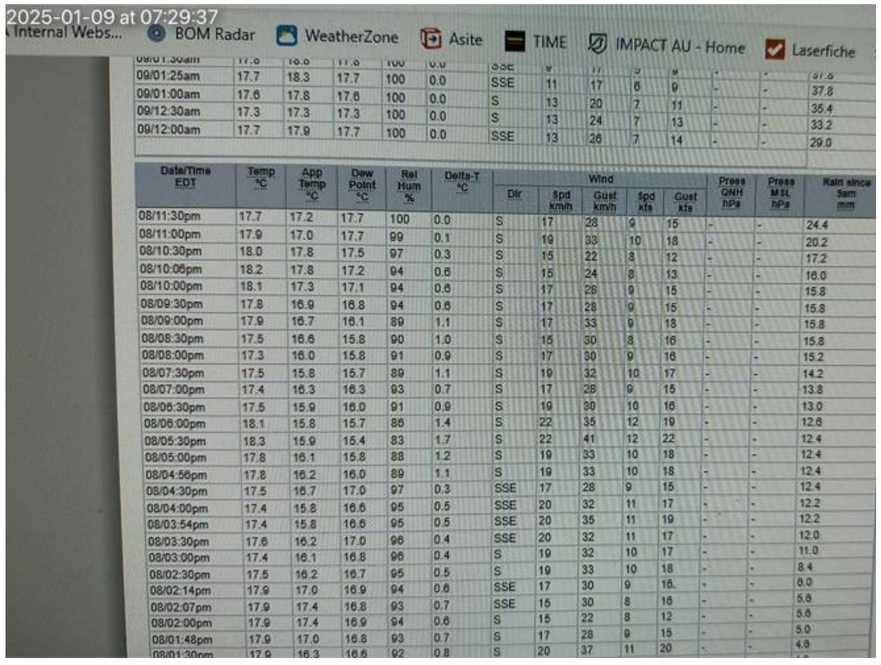
Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
Location 9 Bankstown Platform works	Culvert backfilled. No further inspections required for this waterway.	**Water clarity and colour:** **Odour:** **Description of flow and quantity/ Visible runoff (into the water body):** **Oil and Grease:** **Details of any foreign objects within the water:** **Other comments/description**	**JHLOR site.** Brick culvert filled in. No reporting & no photos required			

SWMC and BEW. Water Quality Monitoring Programme - Environmental Condition Surveys (CoA C8b)

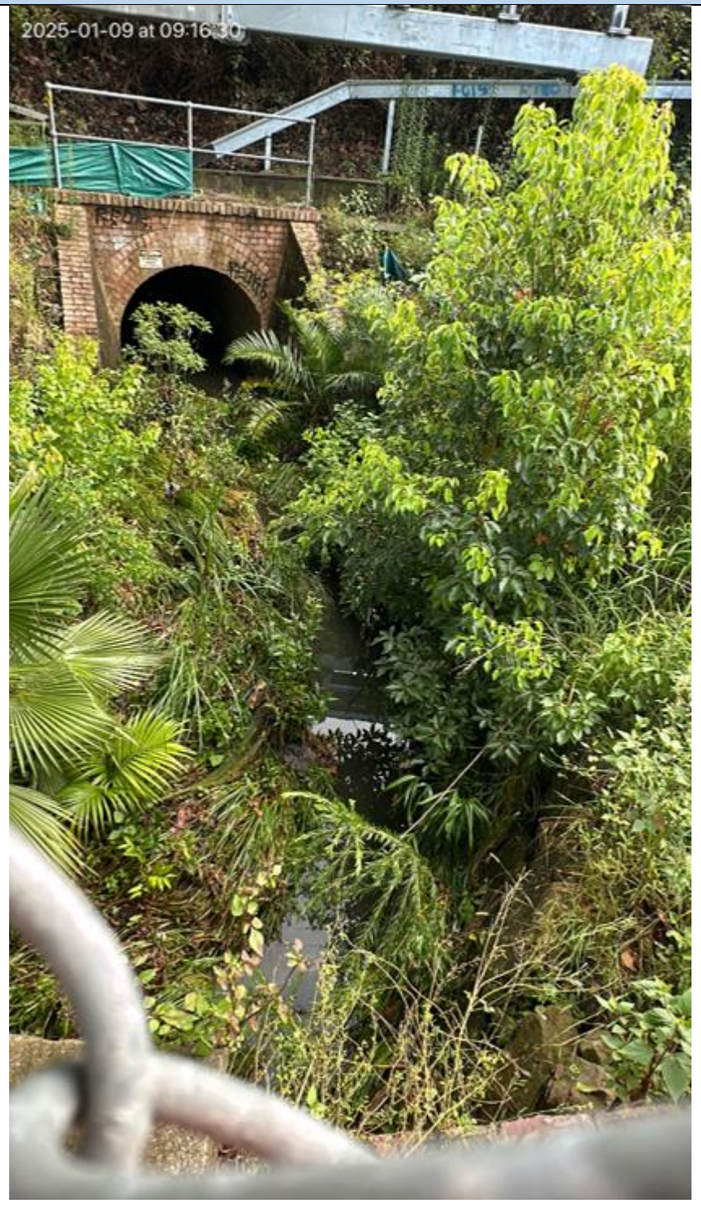
Inspection type	Rain Event 09/01/2025(#46)
Rainfall (in previous 24hrs)	40.4 mm
Inspection by	Andre Kruize and Ted Zhang
Date(s) of inspection	Thursday 09/01/25 (07:30 onwards)
Other general notes	Cant Compound - Rain data, inspection and photos were taken through the corridor during the inspection Weather data from Canterbury Weather Station.



Date/Time EDT	Temp °C	App Temp °C	Dew Point °C	Rel Hum %	Delta-T °C	Wind Dir	Wind Spd km/h	Wind Gust km/h	Wind Spd kts	Wind Gust kts	Press QNH hPa	Press MSL hPa	Rain since 9am mm
09/07:00am	17.0	18.3	17.0	100	0.0	WNW	6	9	3	5	-	-	40.4
09/06:30am	16.8	19.1	16.8	100	0.0	CALM	0	0	0	0	-	-	40.4
09/06:00am	17.0	18.3	17.0	100	0.0	WSW	6	11	3	6	-	-	40.4
09/05:30am	17.3	18.5	17.3	100	0.0	SW	7	13	4	7	-	-	40.2
09/05:00am	17.2	18.5	17.2	100	0.0	SW	6	9	3	5	-	-	40.2
09/04:37am	17.3	18.5	17.3	100	0.0	SW	7	11	4	6	-	-	40.2
09/04:30am	17.4	18.2	17.4	100	0.0	SW	9	13	5	7	-	-	40.0
09/04:10am	17.4	18.2	17.4	100	0.0	SW	9	15	5	8	-	-	38.0
09/04:00am	17.5	18.4	17.5	100	0.0	SW	9	15	5	8	-	-	37.8
09/03:30am	17.8	19.2	17.8	100	0.0	WSW	7	13	4	7	-	-	37.8
09/03:00am	17.8	18.8	17.8	100	0.0	SW	9	20	5	11	-	-	37.8
09/02:30am	17.9	18.6	17.9	100	0.0	SSW	11	17	6	9	-	-	37.8
09/02:00am	18.1	18.9	18.1	100	0.0	S	11	19	6	10	-	-	37.8
09/01:30am	17.8	18.8	17.8	100	0.0	SSE	9	17	5	9	-	-	37.8
09/01:25am	17.7	18.3	17.7	100	0.0	SSE	11	17	6	9	-	-	37.8
09/01:00am	17.6	17.8	17.6	100	0.0	S	13	20	7	11	-	-	35.4
09/12:30am	17.3	17.3	17.3	100	0.0	S	13	24	7	13	-	-	33.2
09/12:00am	17.7	17.9	17.7	100	0.0	SSE	13	26	7	14	-	-	29.0
08/11:30pm	17.7	17.2	17.7	100	0.0	S	17	28	9	15	-	-	24.4
08/11:00pm	17.9	17.0	17.7	99	0.1	S	19	33	10	18	-	-	20.2
08/10:30pm	18.0	17.8	17.5	97	0.3	S	15	22	8	12	-	-	17.2
08/10:06pm	18.2	17.8	17.2	94	0.6	S	15	24	8	13	-	-	16.0
08/10:00pm	18.1	17.3	17.1	94	0.6	S	17	28	9	15	-	-	15.8

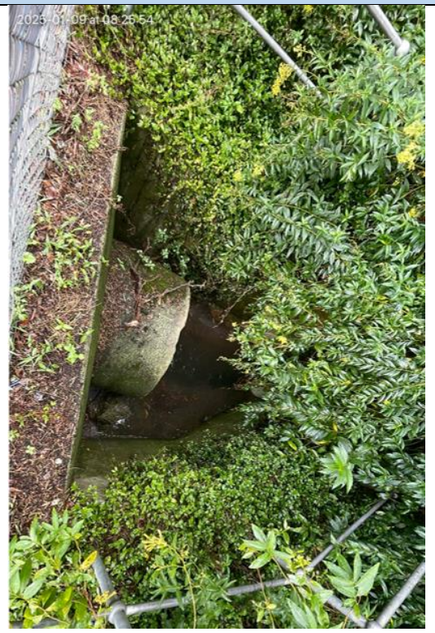
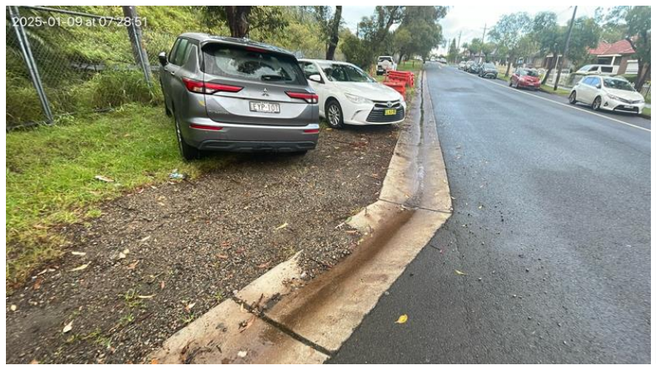


Date/Time EDT	Temp °C	App Temp °C	Dew Point °C	Rel Hum %	Delta-T °C	Wind Dir	Wind Spd km/h	Wind Gust km/h	Wind Spd kts	Wind Gust kts	Press QNH hPa	Press MSL hPa	Rain since 9am mm
09/01:25am	17.7	18.3	17.7	100	0.0	SSE	11	17	6	9	-	-	37.8
09/01:00am	17.6	17.8	17.6	100	0.0	S	13	20	7	11	-	-	35.4
09/12:30am	17.3	17.3	17.3	100	0.0	S	13	24	7	13	-	-	33.2
09/12:00am	17.7	17.9	17.7	100	0.0	SSE	13	26	7	14	-	-	29.0
08/11:30pm	17.7	17.2	17.7	100	0.0	S	17	28	9	15	-	-	24.4
08/11:00pm	17.9	17.0	17.7	99	0.1	S	19	33	10	18	-	-	20.2
08/10:30pm	18.0	17.8	17.5	97	0.3	S	15	22	8	12	-	-	17.2
08/10:06pm	18.2	17.8	17.2	94	0.6	S	15	24	8	13	-	-	16.0
08/10:00pm	18.1	17.3	17.1	94	0.6	S	17	28	9	15	-	-	15.8
08/09:30pm	17.8	16.9	16.8	94	0.6	S	17	28	9	15	-	-	15.8
08/09:00pm	17.9	16.7	16.1	89	1.1	S	17	33	9	18	-	-	15.8
08/08:30pm	17.5	16.6	15.8	90	1.0	S	15	30	8	16	-	-	15.8
08/08:00pm	17.3	16.0	15.8	91	0.9	S	17	30	9	16	-	-	15.2
08/07:30pm	17.5	15.8	15.7	89	1.1	S	19	32	10	17	-	-	14.2
08/07:00pm	17.4	16.3	16.3	93	0.7	S	17	28	9	15	-	-	13.8
08/06:30pm	17.5	15.9	16.0	91	0.9	S	19	30	10	16	-	-	13.0
08/06:00pm	18.1	15.8	15.7	86	1.4	S	22	35	12	19	-	-	12.6
08/05:30pm	18.3	15.9	15.4	83	1.7	S	22	41	12	22	-	-	12.4
08/05:00pm	17.8	16.1	15.8	88	1.2	S	19	33	10	18	-	-	12.4
08/04:56pm	17.8	16.2	16.0	89	1.1	S	19	33	10	18	-	-	12.4
08/04:30pm	17.5	16.7	17.0	97	0.3	SSE	17	28	9	15	-	-	12.4
08/04:00pm	17.4	15.8	16.6	95	0.5	SSE	20	32	11	17	-	-	12.2
08/03:54pm	17.4	15.8	16.6	95	0.5	SSE	20	35	11	19	-	-	12.2
08/03:30pm	17.6	16.2	17.0	96	0.4	SSE	20	32	11	17	-	-	12.0
08/03:00pm	17.4	16.1	16.8	96	0.4	S	19	32	10	17	-	-	11.0
08/02:30pm	17.5	16.2	16.7	95	0.5	S	19	33	10	18	-	-	8.4
08/02:14pm	17.9	17.0	16.9	94	0.6	SSE	17	30	9	16	-	-	8.0
08/02:07pm	17.9	17.4	16.8	93	0.7	SSE	15	30	8	16	-	-	5.6
08/02:00pm	17.9	17.4	16.9	94	0.6	S	15	22	8	12	-	-	5.6
08/01:48pm	17.9	17.0	16.8	93	0.7	S	17	28	9	15	-	-	5.0
08/01:30pm	17.9	16.3	16.6	92	0.8	S	20	37	11	20	-	-	4.6

Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
Location 1 Dulwich Hill MSB (Ewart Culvert), country side of commuter car park	JHLOR. Sporadic construction activities (sec fence) adjacent to culvert at 20m distance (no excavation). No upstream excavation activities at Ewart St on this day. Ewart St ERSED: Overland flow is arrested through a series of mid slope berms, coir logs and sediment fences. All pits are covered. No visible discharge of dirty water from site into existing water flow lines.	**Water clarity and colour:** Water in main culvert looks clean *Side inlet on LHS*: Not a clear line of sight due to vegetation growth Reduced visual BUT what can be seen looksl like clean flow (no cloud plume in main culvert) *Side inlet on RHS:* Not a clear line of sight due to vegetation growth BUT no sign of dirty water plume in main culvert **Odour:** Nil **Description of flow and quantity/ Visible runoff (into the water body):** Currently low flow of water but signs of damage to vegetation - indicator of high volume flows. **Oil and Grease:** Nil **Details of any foreign objects within the water:** Nil **Other comments/description:** N/A	 **LHS Inlet** Not a clear line of sight – heavy vegetation growth, but what can be seen looks like clean flow. No cloud plume in main culvert. **RHS Inlet** Not a clear line of sight – heavy vegetation growth. No cloud plume in main culvert			
Location 2	No JHLOR construction/excavation activities along the	**Water clarity and colour:** **Odour:** N/A	**NO PO AVAILABLE – AREA NOT INSPECTED**	Area alongside tracks and upstream from the		

Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
Hurlstone Park, countryside	corridor near this location	**Description of flow and quantity/ Visible runoff (into the water body):** N/A **Oil and Grease:** N/A **Details of any foreign objects within the water:** N/A **Other comments/description:** N/A		open culvert are heavily vegetated.		
Location 3 West bank of Cook's River	No JHLOR construction/excavation activities along the corridor near this location. Sec fence post/mesh install above Wairoa St bridge (no excavation activities)	**Water clarity and colour**: Clean water at outlet of SW pipe. Water in river is cloudy. **Odour:** Nil **Description of flow and quantity/ Visible runoff (into the water body):** Low flow **Oil and Grease:** Nil **Details of any foreign objects within the water:** N/A **Other comments/description:** N/A	**SW oulet alongside access road.**   	Cooks River – low tide		
Location 4 Belmore Triangle Access Road	BelmoreT – There is a ballast access road alongside this open channel Access track opens into BelmoreT transit space and also into Stockpile area at BelmoreT Wedge	**Water clarity and colour**: Clean water through SW pipe. **Odour:** Nil **Description of flow and quantity/ Visible runoff (into the water body):** Low flow. No visible signs of sediment flow from ballast access road. **Oil and Grease:** Nil **Details of any foreign objects within the water:** N/A	**SW oulet alongside access road.**   **Redman Pde – Upstream Status & Controls.** Sweeper maintaining clean access & roadway.	This location is alongside a ballast stable track into BelmoreT **Belmore Triangle Area:** 1.Transit area. 2.Surface in the BelmoreT area is mostly covered by ballast. 3.There is a mid batter berm in place to divide catchment (concrete barrier divider placed). 4.Thick vegetated area around sed		

Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
		Other comments/description: N/A	 **Toe of batter on side of Access road** – ponding of rain water. Obscured line of sight for photos due to heavy vegetation growth 	fence at bottom of area. Mulch berm added. 5.No stockpiling of spoil in this area as it is only a transit point for plant and vehicles to hi-rail pad and BelmoreT wedge. **Belmore Triangle Wedge Area:** Stockpiles (spoil and Engineered fill) are located on top of batter above the access road. No sign of spoil movement down slope on ballast access road. Stockpile area is flat. Toe of spoil stockpile is surrounded by double barrier and geofab curtain over barriers		
Location 5 Lakemba, country side	No construction activities on the DWN side of corridor along top of batter at this location No work on the UP side of corridor. Heavily vegetated, long batter slope down to boundary fence. No sign of spoil movement down slope Area around both open culverts is overgrown.	**Water clarity and colour:** **Odour:** Clear **Description of flow and quantity/ Visible runoff (into the water body):** Low flow **Oil and Grease:** Nil **Details of any foreign objects within the water:** Nil **Other comments/description:** Nil	**Nth side of corridor (UP side)** Drainage network below ground/road – water from road discharges into drop pit. No visual on quality of water. **Sth side of corridor – Two culverts (Down Side)** Obscured visual on the culvert- overgrown with vegetation. Looks like clean water flowing through both culverts.			

Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
			 			
Location 6 Wiley Park, countryside.	No JHLOR excavation works on the UP & DWN side of the tracks	**Water clarity and colour:** Eastern culvert has clear water flowing. • **Downstream (Nth side):** See notes in photo section. • **Upstream (Sth side):** See notes in photo section. **Odour:** Nil **Description of flow and quantity/ Visible runoff (into the water body):** Low flows **Oil and Grease:** Nil **Details of any foreign objects within the water:** Nil. **Other comments/description:** Nil	**NORTH SIDE OF CORRIDOR** Area upstream of Culvert. Inside corridor and Gate WP3 is stabilised – No photos taken Flow line shown in concrete gutter – water looks clean.   **Western most culvert** NO water flowing in western culvert – leaf litter is stationary No water flowing in from upstream inlet.			

Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
			 **Middle culvert:** No flow. Ponding is due to blockage in outlet on the eastern culvert to which this spills. Clear water in middle culvert.  **Eastern most culvert** Low flow, clear water through main culvert. No spill, through flow from adjacent western culverts as it seems blocked. No oil & grease. No odour. Photos show culvert on corridor side of Urunga Pde.			

Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
			 **SOUTH SIDE OF CORRIDOR** **Western most culvert** Low flow. Clear water flowing through main culvert.  **Middle culvert** No standing water from slope runoff with no visual flow through culvert.			

Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
			 **Eastern most Culvert** Low flow, clear water through main culvert. Photos show culvert on corridor side of The Boulevard 			
Location 7 Bankstown	Nil activities in the area		**No PO available – not inspected – no JHLOR works in catchment.** NOTE: This flow line is below ground and runs across the corridor from Nth to Sth and can be seen through pits only. They are all inside corridor.			

Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
Location 7ALT City side of Bankstown DOWN track (near Stacey St)	No JHLOR excavation activities have been carried out alongside the corridor near this location in the last couple of months. ERSED controls in place either side of culvert – jute mesh with grass and leaf litter stabilising area/slopes.	**<u>Sth Side</u>** **Water clarity and colour:** Low flow, clear water from LHS outlet **Odour:** Nil **Description of flow and quantity/ Visible runoff (into the water body):** see above. **Oil and Grease:** Nil **Details of any foreign objects within the water:** No debris in water **Other comments/description** Nil				
Location 8 Canterbury Compound	No JHLOR construction/excavation activities along the corridor near this location	**Water clarity and colour from Culvert Under Corridor.** Low flow, slightly turbid water. NOTE: There is clear water flow from compound hard stand/asphalt carpark into ballast drain. **Odour:** Nil **Description of flow and quantity/ Visible runoff (into the water body):** Turbid water, low flow of water in eastern channel **Oil and Grease:** Nil **Details of any foreign objects within the water:** Nil **Other comments/description:** Nil	**Inside Canterbury Compound** Low water flow through ballast channel. No odour and no oil & grease. Water is clean  	No excavation activities along the corridor near this location		

Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
			Eastern Channel. Outside Canterbury Compound boundary alongside pedestrian footpath: <u>Upstream from JHLOR discharge point.</u> Water observed to be slightly turbid.  <u>Downstream from JHLOR discharge point:</u> Downstream water observed to be slightly turbid. NOTE: Sign of batter slip on LHS of open channel, however vegetation growth obstructs line of sight.			

Inspection Type:	JHLOR Construction Activities in area	Comments from Inspection of waterways	Photos	Additional Observations Are there any impacts related to JHLOR construction works	Follow up action required	Outcome of follow up action
						
Location 9 Bankstown Platform works	Culvert backfilled. No further inspections required for this waterway.	**Water clarity and colour:** **Odour:** **Description of flow and quantity/ Visible runoff (into the water body):** **Oil and Grease:** **Details of any foreign objects within the water:** **Other comments/description**	**JHLOR site.** Brick culvert filled in. No reporting & no photos required			

Appendix B – Noise Monitoring Report

EPL 21147
R4.4 Validation Report

SWMC Truncation & Separation Stage-1 (30. Sep. 2024 - 08. Oct. 2024)

Security Fence auguring, Post and Panel/mesh screens; OHW footing installation; OHW structure installation, OHW cable dropping and pulling; GST Installation; Installation of Brackets at Stations; PSD and MGF installation; Bankstown upper platform and drainage construction; Bankstown Sydney Trains platform demolishing; Bankstown Sydney Trains platform hoarding board installation; Track side signal equipment demolition, Punchbowl Station parcel office demolition, Track reconditioning; Guard rail installation; Cabling and Trackside Equipment.

Document and Revision History

Document Details	
Title	R4.4 Validation Report
Client	Sydney Metro City & Southwest
JHLOR JV contract no.	K44

Revisions

Revision	Date	Description	Prepared by	Reviewed by
00	18/10/2024	Prepared for R4.4	Zhengyi Zhang	Lucas Dobrolot

Management reviews

Review date	Details	Reviewed by

Controlled:	NO	Copy no.:	Uncontrolled:	YES

Table of Contents

Introduction

This validation report has been prepared in accordance with EPL 21147 Condition R4.4 for out-of-hour works carried out over from 30th September 2024 to 8th October 2024 during the Truncation & Separation Stage-1 Rail Possession.

The possession is limited from Belmore Station to Yagoona Station on Sydney Train track for Truncation from 30th September 2024. From 4th October 2024, the Separation started and the possession extended from Sydenham Station to Yagoona Station on Sydney Train track.

The following activities were carried under condition L5.6 - Local Possessions;

- Security Fence auguring, Post and Panel/mesh screens;
- Segregation fence auguring, Post and Panel/mesh screens
- OHW footing installation;
- OHW structure installation,
- OHW cable dropping and pulling;
- GST Installation;
- Installation of Brackets at Stations;
- PSD and MGF installation;
- Bankstown upper platform and drainage construction;
- Bankstown Sydney Trains platform demolishing;
- Bankstown Sydney Trains platform hoarding board installation;
- Track side signal equipment demolition,
- Punchbowl Station parcel office demolition,
- Track reconditioning;
- Guard rail installation;
- Cabling and Trackside Equipment.

Refer to **Attachment 1** for monitoring results.

R4.4(a) For activities permitted under Condition L5.6 & L5.7, a validation report must be submitted to the EPA that includes the following detail:

1. Confirmation that the equipment used to undertake the works was as specified in the relevant Construction Noise and Vibration Impact Assessment for the worksite

The assessment prepared for the works included modelling for the following plant and equipment:

- Excavators 3T, 6 and13T (inc jack hammer, augering and demolition attachments)
- Balloon tyre dump trucks (Hydrema)
- Light vehicles
- Trucks
- Payloader
- Handheld powered tools
- Vac Trucks
- EWP/telehandler
- Front-end loader
- Concrete truck and line pump
- Portable Generators
- Compressors

- Compactor
- Bogie
- Water pumps
- 4T Dumpy
- Site lights
- Mobile crane
- Tamper
- Regulator

2. A copy of the community notification required under Condition L5.12

A copy of the community notification required under Condition L5.12 is appended as **Attachment 2**.

3. Noise monitoring as required by L5.8(d)

Truncation & Separation Stage-1 (30. Sep. 2024 - 08. Oct. 2024) noise monitoring was carried out at 12 locations on the perimeter of the rail corridor.

Based on program of the construction:

- Truncation started from 30. Sep 2024, 6 monitoring locations has been monitored from 30. Sep 2024.
- Separation started from 4. Oct 2024, additional 6 monitoring locations has been monitored from 4. Oct. 2024.

All monitoring locations are closer to the source of the noise than the nearest sensitive receiver.

Note: calculation will be done where the noise at monitoring location exceeds the predicted level at the nearest sensitive receiver.

6 monitoring locations enabling from 30. Sep 2024 for Truncation:

a. NCA 07 - (HEX531) 4m E of 1 Hall St, Belmore.
   - Noise Monitor is 1 m from the source of the noise
   - Sensitive Receiver is 4 m from the source of the noise
b. NCA 08 - (HEX328) 26m S of 27 Dennis St, Lakemba.
   - Noise Monitor is 30 m from the source of the noise
   - Sensitive Receiver is 55 m from the source of the noise
c. NCA 10 - (HEX421) 65m S of 37 Urunga Parade, Punchbowl.
   - Noise Monitor is 26 m from the source of the noise
   - Sensitive Receiver is 39 m from the source of the noise
d. NCA 12 - (HEX516) 135m NW of 196 South Terrace, Bankstown.
   - Noise Monitor is 25 m from the source of the noise
   - Sensitive Receiver is 142 m from the source of the noise
e. NCA 12 - (HEX618) 168m NW of 2 West Terrace, Bankstown.
   - Noise Monitor is 15 m from the source of the noise (track)
   - Sensitive Receiver is 39 m from the source of the noise (track)
f. NCA 12 - (HEX646) 66m S of 21 Bungalow Crescent, Bankstown.
   - Noise Monitor is 12 m from the source of the noise
   - Sensitive Receiver is 75 m from the source of the noise

6 monitoring locations enabling from 4. Oct. 2024 for Separation:

g. NCA 14 - (HEX615) 5m E of 110 Railway Rd, Sydenham.
   - Noise Monitor is 15 m from the source of the noise
   - Sensitive Receiver is 16 m from the source of the noise
h. NCA 14 - (HEX548) 20m W of 29 Bridge St, Tempe.
   - Noise Monitor is 17 m from the source of the noise
   - Sensitive Receiver is 30 m from the source of the noise
i. NCA 01 - (HEX548) 75m SW of 133 Meeks Rd, Marrickville.
   - Noise Monitor is 25 m from the source of the noise
   - Sensitive Receiver is 50 m from the source of the noise
j. NCA 01 - (HEX630) 25m NE of 29 Leofrene Ave, Marrickville.
   - Noise Monitor is 10 m from the source of the noise
   - Sensitive Receiver is 15 m from the source of the noise
k. NCA 02 - (HEX623) 11m N of 51A Ewart Lane, Dulwich Hill.
   - Noise Monitor is 17 m from the source of the noise
   - Sensitive Receiver is 17 m from the source of the noise
l. NCA 02 - (HEX649) 11m N of 81 Ewart Street, Dulwich Hill.
   - Noise Monitor is 21 m from the source of the noise
   - Sensitive Receiver is 32 m from the source of the noise

Refer to **Appendix 1** for noise monitoring results.

4. Details of any exceedances of predicted noise levels;

Noise (LAeq 15min) data was collected at the 12 locations between the 30th September 2024 to 8th October 2024, all Out Of Hour Works (OOHW) shift has been assessed.

During Truncation & Separation Stage-1, there were no exceedances of the noise predictions generated from the JHLORJV construction activity.

5. Details of the noise and vibration mitigation measures that were implemented as specified in the relevant Construction Noise and Vibration Impact Assessment for the worksite

The following noise mitigation measures are implemented:

- Potential source noise controls include mufflers fitted to exhausts, regular maintenance of plant, acoustic enclosure of machinery on plant items, non-tonal reversing alarms fitted to plant.
- General monthly community notification.
- Specific notification to impacted residents were provided no later than 5 days out from start of possession.
- Additional mitigation measures such as Alternative Accommodation and Respite Offers.
- Use of real time noise monitors at targeted work locations. Periodic desk top checks on data collected by the 12 real time monitoring instruments were carried out during work periods.
- Environmental surveillance
- On site mitigation instructions to crews:
  - No music, no dropping of objects
  - No shouting or unnecessary noise
  - Be respectful of neighbors when coming and going from site. As far as possible, avoid congregating near residential property boundaries.

- Position plant as far from residents as possible and orientate them if possible, to emit noise on non-resident side.
- Plant to be switched off when not in use.

6. The justification required under L5.6 for the carrying out of works outside of standard construction hours in L5.1.

The works carried out on Truncation & Separation Stage-1 could only be safely conducted during a rail possession due to works occurring within the rail corridor/danger zone. Works were completed in accordance with EPL Condition L5.6 (Local Possession). Carrying out the construction activities during standard construction hours (specified in L5.1) would cause unacceptable risks to construction personnel safety; rail passenger and railways personnel safety and railway network operational reliability.

Construction activities occurring within the rail corridor/danger zone can only be safely conducted during a rail possession during the absence of trains.

All feasible and reasonable at-source noise controls were implemented in accordance with Condition L4.1, and noise mitigation measures were implemented in accordance with JHLORJV's CNVIS and Interim Construction Noise Guideline (DECC 2009).

R4.4 (b) The validation report must be submitted to the EPA fortnightly from the commencement of the works permitted by L5.6 & L5.7 by no later than 2 business days from the end of each fortnight.

This R4.4 Validation report has been submitted to EPA by no later than two business days after the end of the fortnight.

Attachment 1 – Noise Monitoring Results

- Monitoring Result
- Monitoring Location

Table 1. Monitoring Location A: NCA 07 - (HEX531) 4m E of 1 Hall St, Belmore

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	30/09/2024 To 01/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	61	67	**YES**	• RBL: 35 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 61 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (61 dBA) is lower than the predicted level (67 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	01/10/2024 To 02/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			62	67	**YES**	• RBL: 35 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 62 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (62 dBA) is lower than the predicted level (67 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
3	02/10/2024 To 03/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			56	67	**YES**	• RBL: 35 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 56 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (56 dBA) is lower than the predicted level (67 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
4	03/10/2024 To 04/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			- Highest ambient LAeq in period at Monitoring Location is **70** - Due to the monitoring location being 1m from the source of the noise and sensitive receiver being 5m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is **56 (further attenuation from noise mats)**	67	**YES**	• RBL: 35 dBA • The calculated construction related highest LAeq in work period (56 dBA) is lower than the predicted level (67 dBA) • **Predicted noise levels (night shift works) in this area triggered offers for additional mitigation measures.** • **Actual noise levels (Night shift works) in this area triggered same offers for additional mitigation measures as prediction.** • **Appropriate additional mitigation measures being offered.** • **No further additional mitigation measures required.**
5	04/10/2024 To 05/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			59	67	**YES**	• RBL: 35 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 59 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (59 dBA) is lower than the predicted level (67 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
6	05/10/2024 To 06/10/2024	Night 22:00 to 08:00 (Modeled from 18:00 to 8:00)			62	67	**YES**	• RBL: 35 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 62 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (62 dBA) is lower than the predicted level (67 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
7	06/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			67	73	**YES**	• RBL: 41 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 67 dBA due to general construction noise between the hours 07:00 to 22:00. • The Highest LAeq in work period (67 dBA) is lower than the predicted level (73 dBA) • **Predicted noise levels (Day & Evening shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
8	06/10/2024 To 07/10/2024	Night 22:00 to 8:00 (Modeled from 18:00 to 8:00)			55	67	**YES**	• RBL: 35 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 55 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (55 dBA) is lower than the predicted level (67 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
9	07/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			68	73	**YES**	• RBL: 41 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 68 dBA due to general construction noise between the hours 07:00 to 22:00. • The Highest LAeq in work period (68 dBA) is lower than the predicted level (73 dBA) • **Predicted noise levels (Day & Evening shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
10	07/10/2024 To 08/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			58	67	**YES**	• RBL: 35 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 58 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (58 dBA) is lower than the predicted level (67 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**

Table 2. Monitoring Location B: NCA 08 - (HEX328) 26m S of 27 Dennis St, Lakemba

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	30/09/2024 To 01/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	54	65	**YES**	• RBL: 41 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 51 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (51 dBA) is lower than the predicted level (65 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	01/10/2024 To 02/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			58	65	**YES**	• RBL: 41 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 58 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (58 dBA) is lower than the predicted level (65 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
3	02/10/2024 To 03/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			53	65	**YES**	• RBL: 41 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 53 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (53 dBA) is lower than the predicted level (65 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
4	03/10/2024 To 04/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			55	65	**YES**	• RBL: 41 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 55 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (55 dBA) is lower than the predicted level (65 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
5	04/10/2024 To 05/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			58	65	**YES**	• RBL: 41 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 58 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (58 dBA) is lower than the predicted level (65 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
6	05/10/2024 To 06/10/2024	Night 22:00 to 08:00 (Modeled from 18:00 to 8:00)			56	65	**YES**	• RBL: 41 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 56 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (56 dBA) is lower than the predicted level (65 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
7	06/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			59	64	**YES**	• RBL: 47 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 59 dBA due to general construction noise between the hours 07:00 to 22:00. • The Highest LAeq in work period (59 dBA) is lower than the predicted level (64 dBA) • **Predicted noise levels (Day & Evening shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
8	06/10/2024 To 07/10/2024	Night 22:00 to 8:00 (Modeled from 18:00 to 8:00)			54	65	**YES**	• RBL: 41 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 54 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (54 dBA) is lower than the predicted level (65 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
9	07/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			61	64	**YES**	• RBL: 47 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 61 dBA due to general construction noise between the hours 07:00 to 22:00. • The Highest LAeq in work period (61 dBA) is lower than the predicted level (64 dBA) • **Predicted noise levels (Day & Evening shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered.**
10	07/10/2024 To 08/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			56	65	**YES**	• RBL: 41 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 56 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (56 dBA) is lower than the predicted level (65 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**

Table 3. Monitoring Location C: NCA 10 - (HEX421) 65m S of 37 Urunga Parade, Punchbowl

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	30/09/2024 To 01/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	59	65	**YES**	• RBL: 41 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 59 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (59 dBA) is lower than the predicted level (65 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	01/10/2024 To 02/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			58	65	**YES**	• RBL: 41 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 58 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (58 dBA) is lower than the predicted level (65 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
3	02/10/2024 To 03/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			57	65	**YES**	• RBL: 41 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 57 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (57 dBA) is lower than the predicted level (65 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
4	03/10/2024 To 04/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			63	65	**YES**	• RBL: 41 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 63 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (63 dBA) is lower than the predicted level (65 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
5	04/10/2024 To 05/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			62	65	**YES**	• RBL: 41 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 62 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (62 dBA) is lower than the predicted level (65 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
6	05/10/2024 To 06/10/2024	Night 22:00 to 08:00 (Modeled from 18:00 to 8:00)			56	65	**YES**	• RBL: 41 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 56 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (56 dBA) is lower than the predicted level (65 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
7	06/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			- Highest ambient LAeq in period at Monitoring Location is 62 - Excluding the following non-construction related event being identified: 6/10/2024 7:30 Urban Traffic 59 6/10/2024 12:15 Urban Siren 61 6/10/2024 13:00 Urban Traffic 60 6/10/2024 16:45 Urban Traffic 62 6/10/2024 20:00 Urban Traffic 60 - Construction related LAeq in period at Monitoring Location is 57	57	**YES**	• RBL: 47 dBA • LAeq15min matched predictions. • Noise monitor detect highest LAeq15min value of 57 dBA due to general construction noise between the hours 07:00 to 22:00. • The Highest LAeq in work period (57 dBA) is equal to the predicted level (57 dBA) • **Predicted noise levels (Day & Evening shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
8	06/10/2024 To 07/10/2024	Night 22:00 to 8:00 (Modeled from 18:00 to 8:00)			56	65	**YES**	• RBL: 41 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 54 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (54 dBA) is lower than the predicted level (65 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
9	07/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			- Highest ambient LAeq in period at Monitoring Location is 60 - Excluding the following non-construction related event being identified: 7/10/2024 9:00 Urban Traffic 58 7/10/2024 10:30 Animal Activity 57 7/10/2024 10:45 Animal Activity 59 7/10/2024 16:45 Urban Traffic 56 7/10/2024 17:30 Urban Traffic 60 7/10/2024 20:00 Urban Traffic 57 - Construction related LAeq in period at Monitoring Location is 56	57	**YES**	• RBL: 47 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 56 dBA due to general construction noise between the hours 07:00 to 22:00. • The Highest LAeq in work period (56 dBA) is lower than the predicted level (57 dBA) • **Predicted noise levels (Day & Evening shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
10	07/10/2024 To 08/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			57	65	**YES**	• RBL: 41 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 57 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (57 dBA) is lower than the predicted level (65 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**

Table 4. Monitoring Location D: NCA 12 - (HEX516) 135m NW of 196 South Terrace, Bankstown

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	30/09/2024 To 01/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	65	68	**YES**	• RBL: 42 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 65 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (65 dBA) is lower than the predicted level (68 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	01/10/2024 To 02/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			68	68	**YES**	• RBL: 42 dBA • LAeq15min equal to predictions. • Noise monitor detect highest LAeq15min value of 68 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (68 dBA) is lower than the predicted level (68 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
3	02/10/2024 To 03/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			64	68	**YES**	• RBL: 42 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 64 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (64 dBA) is lower than the predicted level (67 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
4	03/10/2024 To 04/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			65	68	**YES**	• RBL: 42 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 65 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (65 dBA) is lower than the predicted level (68 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
5	04/10/2024 To 05/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			64	68	**YES**	• RBL: 42 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 64 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (64 dBA) is lower than the predicted level (67 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
6	05/10/2024 To 06/10/2024	Night 22:00 to 08:00 (Modeled from 18:00 to 8:00)			65	68	**YES**	• RBL: 42 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 65 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (65 dBA) is lower than the predicted level (68 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
7	06/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			65	69	**YES**	• RBL: 54 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 65 dBA due to general construction noise between the hours 07:00 to 22:00. • The Highest LAeq in work period (65 dBA) is lower than the predicted level (69 dBA) • **Predicted noise levels (Day & Evening shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
8	06/10/2024 To 07/10/2024	Night 22:00 to 8:00 (Modeled from 18:00 to 8:00)			- Highest ambient LAeq in period at Monitoring Location is 71 - Excluding the following non-construction related event being identified: 7/10/2024 03:45 Urban Siren 71 - Construction related LAeq in period at Monitoring Location is 65	68	**YES**	• RBL: 42 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 65 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (65 dBA) is lower than the predicted level (68 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
9	07/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			68	69	**YES**	• RBL: 54 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 68 dBA due to general construction noise between the hours 07:00 to 22:00. • The Highest LAeq in work period (68 dBA) is lower than the predicted level (69 dBA) • **Predicted noise levels (Day & Evening shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
10	07/10/2024 To 08/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			63	68	**YES**	• RBL: 42 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 63 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (63 dBA) is lower than the predicted level (68 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**

Table 5. Monitoring Location E: NCA 12 - (HEX618) 168m NW of 2 West Terrace, Bankstown

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	30/09/2024 To 01/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	62	72	**YES**	• RBL: 42 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 65 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (65 dBA) is lower than the predicted level (72 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	01/10/2024 To 02/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			68	72	**YES**	• RBL: 42 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 68 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (68 dBA) is lower than the predicted level (72 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
3	02/10/2024 To 03/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			60	72	**YES**	• RBL: 42 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 60 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (60 dBA) is lower than the predicted level (72 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
4	03/10/2024 To 04/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			60	72	**YES**	• RBL: 42 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 60 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (60 dBA) is lower than the predicted level (72 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
5	04/10/2024 To 05/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			61	72	**YES**	• RBL: 42 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 61 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (61 dBA) is lower than the predicted level (72 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
6	05/10/2024 To 06/10/2024	Night 22:00 to 08:00 (Modeled from 18:00 to 8:00)			59	72	**YES**	• RBL: 42 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 59 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (59 dBA) is lower than the predicted level (72 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
7	06/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			61	74	**YES**	• RBL: 54 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 61 dBA due to general construction noise between the hours 07:00 to 22:00. • The Highest LAeq in work period (61 dBA) is lower than the predicted level (74 dBA) • **Predicted noise levels (Day & Evening shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
8	06/10/2024 To 07/10/2024	Night 22:00 to 8:00 (Modeled from 18:00 to 8:00)			54	72	**YES**	• RBL: 42 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 54 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (54 dBA) is lower than the predicted level (72 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
9	07/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			58	74	**YES**	• RBL: 54 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 58 dBA due to general construction noise between the hours 07:00 to 22:00. • The Highest LAeq in work period (58 dBA) is lower than the predicted level (74 dBA) • **Predicted noise levels (Day & Evening shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
10	07/10/2024 To 08/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			58	72	**YES**	• RBL: 42 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 58 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (58 dBA) is lower than the predicted level (72 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**

Table 6. Monitoring Location F: NCA 12 - (HEX646) 66m S of 21 Bungalow Crescent, Bankstown

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	30/09/2024 To 01/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	60	66	**YES**	• RBL: 42 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 60 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (60 dBA) is lower than the predicted level (66 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	01/10/2024 To 02/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			58	66	**YES**	• RBL: 42 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 58 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (58 dBA) is lower than the predicted level (66 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
3	02/10/2024 To 03/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			57	66	**YES**	• RBL: 42 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 57 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (57 dBA) is lower than the predicted level (66 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
4	03/10/2024 To 04/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			63	66	**YES**	• RBL: 42 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 63 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (63 dBA) is lower than the predicted level (66 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
5	04/10/2024 To 05/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			60	66	**YES**	• RBL: 42 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 60 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (60 dBA) is lower than the predicted level (66 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for Respite.**
6	05/10/2024 To 06/10/2024	Night 22:00 to 08:00 (Modeled from 18:00 to 8:00)			- Highest ambient LAeq in period at Monitoring Location is 65 - Excluding the following non-construction related event being identified: 6/10/2024 04:15 Urban Siren 65 - Construction related LAeq in period at Monitoring Location is 53	66	**YES**	• RBL: 42 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 53 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (53 dBA) is lower than the predicted level (66 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
7	06/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			57	64	**YES**	• RBL: 54 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 57 dBA due to general construction noise between the hours 07:00 to 22:00. • The Highest LAeq in work period (57 dBA) is lower than the predicted level (64 dBA) • **Predicted noise levels (Day & Evening shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
8	06/10/2024 To 07/10/2024	Night 22:00 to 8:00 (Modeled from 18:00 to 8:00)			63	66	**YES**	• RBL: 42 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 63 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (63 dBA) is lower than the predicted level (66 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
9	07/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			57	64	**YES**	• RBL: 54 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 57 dBA due to general construction noise between the hours 07:00 to 22:00. • The Highest LAeq in work period (57 dBA) is lower than the predicted level (64 dBA) • **Predicted noise levels (Day & Evening shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
10	07/10/2024 To 08/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			61	66	**YES**	• RBL: 42 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 61 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (61 dBA) is lower than the predicted level (66 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**

Table 7. Monitoring Location G: NCA 14 - (HEX615) 5m E of 110 Railway Rd, Sydenham

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	04/10/2024 To 05/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights - Mobile Crane	70	74	**YES**	• RBL: 42 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 70 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (70 dBA) is lower than the predicted level (74 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	05/10/2024 To 06/10/2024	Night 22:00 to 08:00 (Modeled from 18:00 to 8:00)			74	74	**YES**	• RBL: 42 dBA • LAeq15min equals to predictions. • Noise monitor detect highest LAeq15min value of 74 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (74 dBA) is equal to the predicted level (74 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
3	06/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			78	74	**YES**	• RBL: 51 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 78 dBA due to general construction noise between the hours 07:00 to 22:00. • The Highest LAeq in work period (78 dBA) is higher than the predicted level (74 dBA) • **Predicted noise levels (Day shift works) in this area triggered offers for additional mitigation measures.** • **Actual noise levels (Day shift works) in this area triggered same offers for additional mitigation measures as predicted.** • **Additional mitigation measures being offered is valid and appropriate.** • **No further additional mitigation measures required.**
4	06/10/2024 To 07/10/2024	Night 22:00 to 8:00 (Modeled from 18:00 to 8:00)			- Highest ambient LAeq in period at Monitoring Location is 75 - Excluding the following non-construction related event being identified: 6/10/2024 23:45 T4 Train 75 - Construction related LAeq in period at Monitoring Location is 72	74	**YES**	• RBL: 42 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 72 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (72 dBA) is lower than the predicted level (74 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
5	07/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			78	74	**YES**	• RBL: 51 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 78 dBA due to general construction noise between the hours 07:00 to 22:00. • The Highest LAeq in work period (78 dBA) is higher than the predicted level (74 dBA) • **Predicted noise levels (Day shift works) in this area triggered offers for additional mitigation measures.** • **Actual noise levels (Day shift works) in this area triggered same offers for additional mitigation measures as predicted.** • **Additional mitigation measures being offered is valid and appropriate.** • **No further additional mitigation measures required.**
6	07/10/2024 To 08/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			71	74	**YES**	• RBL: 42 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 71 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (71 dBA) is lower than the predicted level (74 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**

Table 8. Monitoring Location H: NCA 14 - (HEX548) 20m W of 29 Bridge St, Tempe

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	04/10/2024 To 05/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights - Mobile Crane	67	70	**YES**	• RBL: 40 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 67 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (67 dBA) is lower than the predicted level (70 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	05/10/2024 To 06/10/2024	Night 22:00 to 08:00 (Modeled from 18:00 to 8:00)			66	70	**YES**	• RBL: 40 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 66 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (66 dBA) is lower than the predicted level (70 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
3	06/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			- Highest ambient LAeq in period at Monitoring Location is **72** - Due to the monitoring location being 24 m from the source of the noise and sensitive receiver being 41 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is **67.**	70	**YES**	• RBL: 41 dBA • The calculated construction related highest LAeq in work period (67 dBA) is lower than the predicted level (70 dBA) • **Predicted noise levels (night shift works) in this area triggered offers for additional mitigation measures.** • **Actual noise levels (Night shift works) in this area triggered same offers for additional mitigation measures as prediction.** • **Appropriate additional mitigation measures being offered.** • **No further additional mitigation measures required.**
4	06/10/2024 To 07/10/2024	Night 22:00 to 8:00 (Modeled from 18:00 to 8:00)			67	70	**YES**	• RBL: 40 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 67 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (67 dBA) is lower than the predicted level (70 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
5	07/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			70	70	**YES**	• RBL: 41 dBA • LAeq15min equal to the predictions. • Noise monitor detect highest LAeq15min value of 70 dBA due to general construction noise between the hours 07:00 to 22:00. • The Highest LAeq in work period (70 dBA) is lower than the predicted level (64 dBA) • **Predicted noise levels (Day & Evening shift works) in this area didn't trigger offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
6	07/10/2024 To 08/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			67	70	**YES**	• RBL: 40 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 67 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (67 dBA) is lower than the predicted level (70 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**

Table 9. Monitoring Location I: NCA 01 - (HEX548) 75m SW of 133 Meeks Rd, Marrickville

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	04/10/2024 To 05/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights - Mobile Crane	- Highest ambient LAeq in period at Monitoring Location is 67 - Excluding the following non-construction related event being identified: 4/10/2024 22:15 ARTC Train 67 4/10/2024 22:30 ARTC Train 65 4/10/2024 23:15 ARTC Train 67 4/10/2024 23:45 ARTC Train 66 - Construction related LAeq in period at Monitoring Location is 62	66	**YES**	• RBL: 40 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 62 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (62 dBA) is lower than the predicted level (66 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	05/10/2024 To 06/10/2024	Night 22:00 to 08:00 (Modeled from 18:00 to 8:00)			- Highest ambient LAeq in period at Monitoring Location is 68 - Excluding the following non-construction related event being identified: 5/10/2024 23:00 ARTC Train 68 - Construction related LAeq in period at Monitoring Location is 57	66	**YES**	• RBL: 40 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 57 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (57 dBA) is lower than the predicted level (66 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
3	06/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			- Highest ambient LAeq in period at Monitoring Location is 70 - Excluding the following non-construction related event being identified: 6/10/2024 10:15 ARTC Train 68 6/10/2024 10:30 ARTC Train 65 6/10/2024 10:45 Aircraft 67 6/10/2024 11:30 ARTC Train 70 - Construction related LAeq in period at Monitoring Location is 63	66	**YES**	• RBL: 47 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 63 dBA due to general construction noise between the hours 07:00 to 22:00. • The Highest LAeq in work period (63 dBA) is lower than the predicted level (66 dBA) • **Predicted noise levels (Day & Evening shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
4	06/10/2024 To 07/10/2024	Night 22:00 to 8:00 (Modeled from 18:00 to 8:00)			- Highest ambient LAeq in period at Monitoring Location is 66 - Excluding the following non-construction related event being identified: 6/10/2024 23:00 ARTC Train 66 7/10/2024 3:30 ARTC Train 66 7/10/2024 6:45 Aircraft 61 - Construction related LAeq in period at Monitoring Location is 58	66	**YES**	• RBL: 40 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 58 dBA due to general construction noise between the hours 22:00 to 07:00. • The Highest LAeq in work period (58 dBA) is lower than the predicted level (66 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
5	07/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			65	66	**YES**	• RBL: 47 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 65 dBA due to general construction noise between the hours 07:00 to 22:00. • The Highest LAeq in work period (65 dBA) is lower than the predicted level (66 dBA) • **Predicted noise levels (Day & Evening shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
6	07/10/2024 To 08/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			- Highest ambient LAeq in period at Monitoring Location is **72** - Excluding the following non-construction related event being identified: 7/10/2024 23:00 ARTC Train Horn 65 - Construction related LAeq in period at Monitoring Location is 69 - Due to the monitoring location being 25 m from the source of the noise and sensitive receiver being 50 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is **63.**	66	**YES**	• RBL: 40 dBA • The calculated construction related highest LAeq in work period (63 dBA) is lower than the predicted level (66 dBA) • **Predicted noise levels (night shift works) in this area triggered offers for additional mitigation measures.** • **Actual noise levels (Night shift works) in this area triggered same offers for additional mitigation measures as prediction.** • **Appropriate additional mitigation measures being offered.** • **No further additional mitigation measures required.**

Table 10. Monitoring Location J: NCA 01 - (HEX630) 25m NE of 29 Leofrene Ave, Marrickville

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	04/10/2024 To 05/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights - Mobile Crane	No Construction Activity			
2	05/10/2024 To 06/10/2024	Night 22:00 to 08:00 (Modeled from 18:00 to 8:00)			No Construction Activity			
3	06/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			- Highest ambient LAeq in period at Monitoring Location is 76 - Excluding the following non-construction related event being identified: 6/10/2024 21:45 ARTC Train Passing 76 - Construction related LAeq in period at Monitoring Location is 70	73	**YES**	• RBL: 38 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 70 dBA due to general construction noise between the hours 07:00 to 22:00. • The Highest LAeq in work period (70 dBA) is lower than the predicted level (73 dBA) • **Predicted noise levels (Day & Evening shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
4	06/10/2024 To 07/10/2024	Night 22:00 to 8:00 (Modeled from 18:00 to 8:00)			No Construction Activity			
5	07/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			68	73	**YES**	• RBL: 38 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 68 dBA due to general construction noise between the hours 07:00 to 22:00. • The Highest LAeq in work period (68 dBA) is lower than the predicted level (73 dBA) • **Predicted noise levels (Day & Evening shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
6	07/10/2024 To 08/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			No Construction Activity			

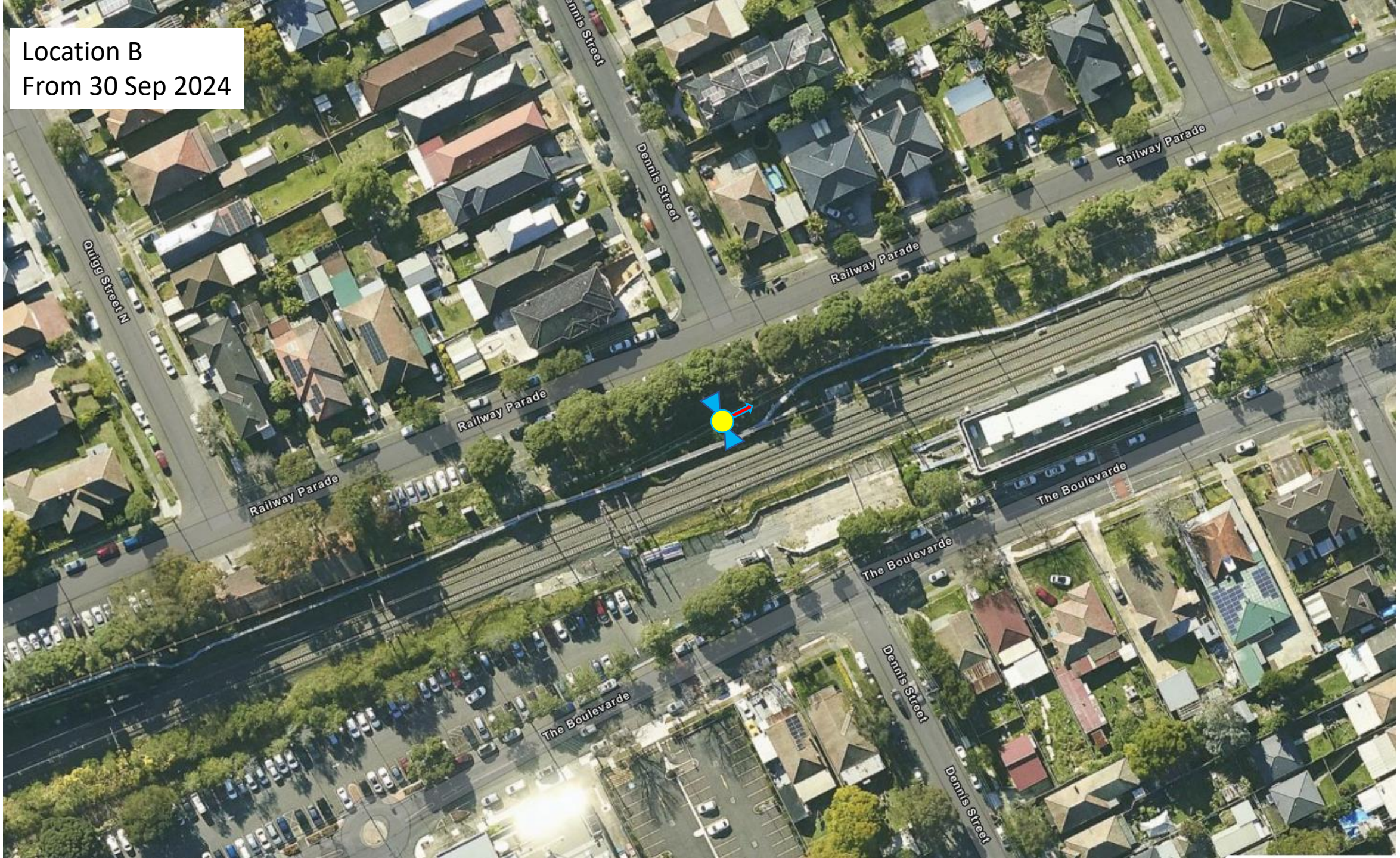
Table 11. Monitoring Location K: NCA 02 - (HEX623) 11m N of 51A Ewart Lane, Dulwich Hill.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	04/10/2024 To 05/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights - Mobile Crane	No Construction Activity			
2	05/10/2024 To 06/10/2024	Night 22:00 to 08:00 (Modeled from 18:00 to 8:00)			No Construction Activity			
3	06/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			62	75	**YES**	• RBL: 38 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 62 dBA due to general construction noise between the hours 07:00 to 22:00. • The Highest LAeq in work period (62 dBA) is lower than the predicted level (75 dBA) • **Predicted noise levels (Day & Evening shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
4	06/10/2024 To 07/10/2024	Night 22:00 to 8:00 (Modeled from 18:00 to 8:00)			No Construction Activity			
5	07/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			63	75	**YES**	• RBL: 38 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 63 dBA due to general construction noise between the hours 07:00 to 22:00. • The Highest LAeq in work period (63 dBA) is lower than the predicted level (75 dBA) • **Predicted noise levels (Day & Evening shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
6	07/10/2024 To 08/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			No Construction Activity			

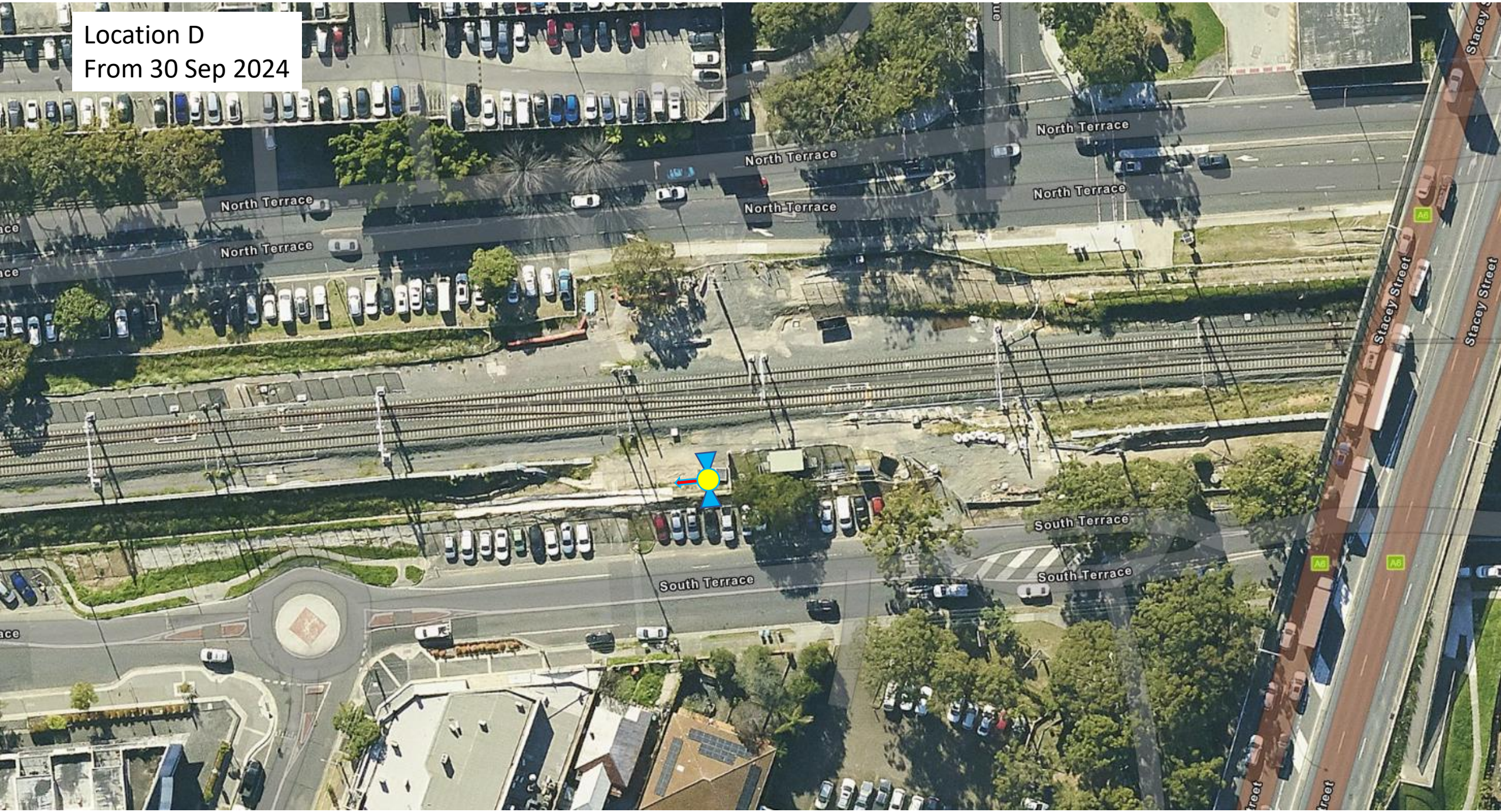
Table 12. Monitoring Location I: NCA 02 - (HEX649) 11m N of 81 Ewart Street, Dulwich Hill.

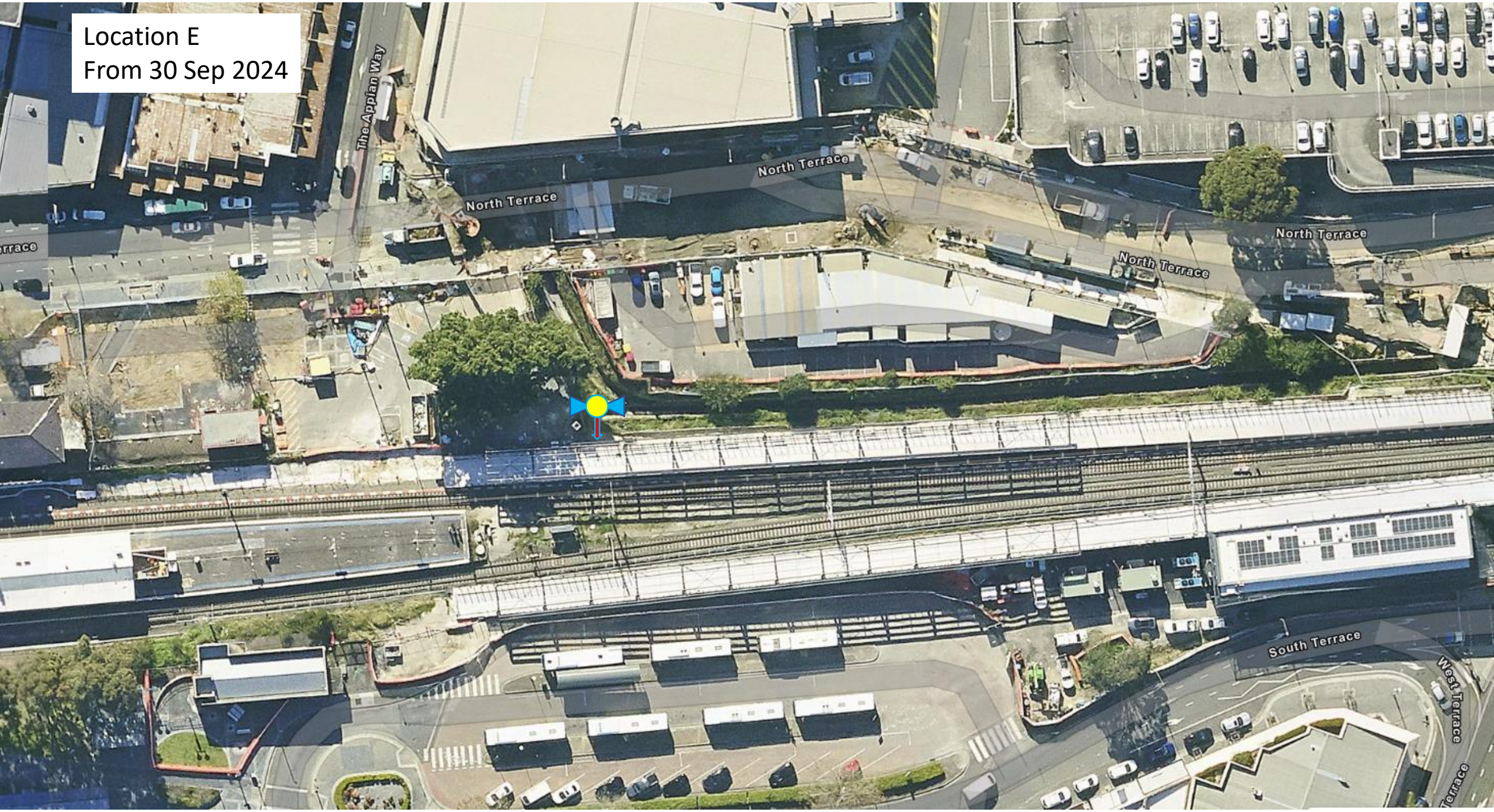
Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	04/10/2024 To 05/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights - Mobile Crane	No Construction Activity			
2	05/10/2024 To 06/10/2024	Night 22:00 to 08:00 (Modeled from 18:00 to 8:00)			No Construction Activity			
3	06/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			- Highest ambient LAeq in period at Monitoring Location is 81 - Excluding the following non-construction related event being identified: 6/10/2024 12:45 Aircraft and ARTC Train 81 - Construction related LAeq in period at Monitoring Location is 72	73	**YES**	• RBL: 38 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 72 dBA due to general construction noise between the hours 07:00 to 22:00. • The Highest LAeq in work period (72 dBA) is lower than the predicted level (73 dBA) • **Predicted noise levels (Day & Evening shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
4	06/10/2024 To 07/10/2024	Night 22:00 to 8:00 (Modeled from 18:00 to 8:00)			No Construction Activity			
5	07/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			- Highest ambient LAeq in period at Monitoring Location is 75 - Excluding the following non-construction related event being identified: 6/10/2024 13:45 ARTC Train Passing 75 - Construction related LAeq in period at Monitoring Location is 71	73	**YES**	• RBL: 38 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 71 dBA due to general construction noise between the hours 07:00 to 22:00. • The Highest LAeq in work period (71 dBA) is lower than the predicted level (73 dBA) • **Predicted noise levels (Day & Evening shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
6	07/10/2024 To 08/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			No Construction Activity			


Location A
From 30 Sep 2024
Campsie Street
Adelaide Street
Cecilia Street
Etela Street
Hall Street
Lark Street
Isabel Street
Sudbury Street
Redman Parade
Belmore Sportsground
Loftus Stree
Loch Street
Claremont Street
Hall Street

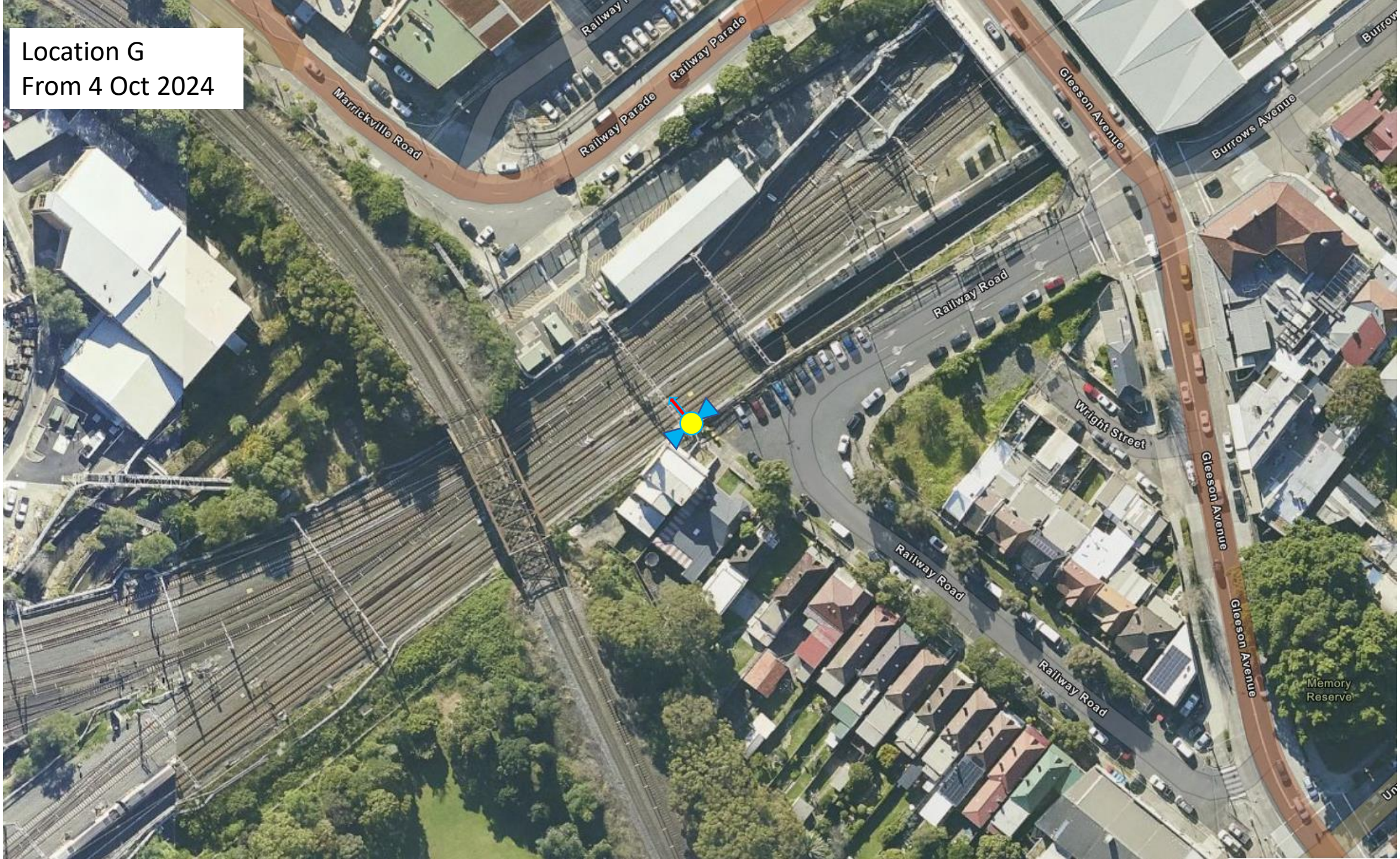

Location B
From 30 Sep 2024
Dennis Street
Railway Parade
Railway Parade
Railway Parade
Railway Parade
Quigg Street N
The Boulevarde
The Boulevarde
The Boulevarde
Dennis Street
Dennis Street

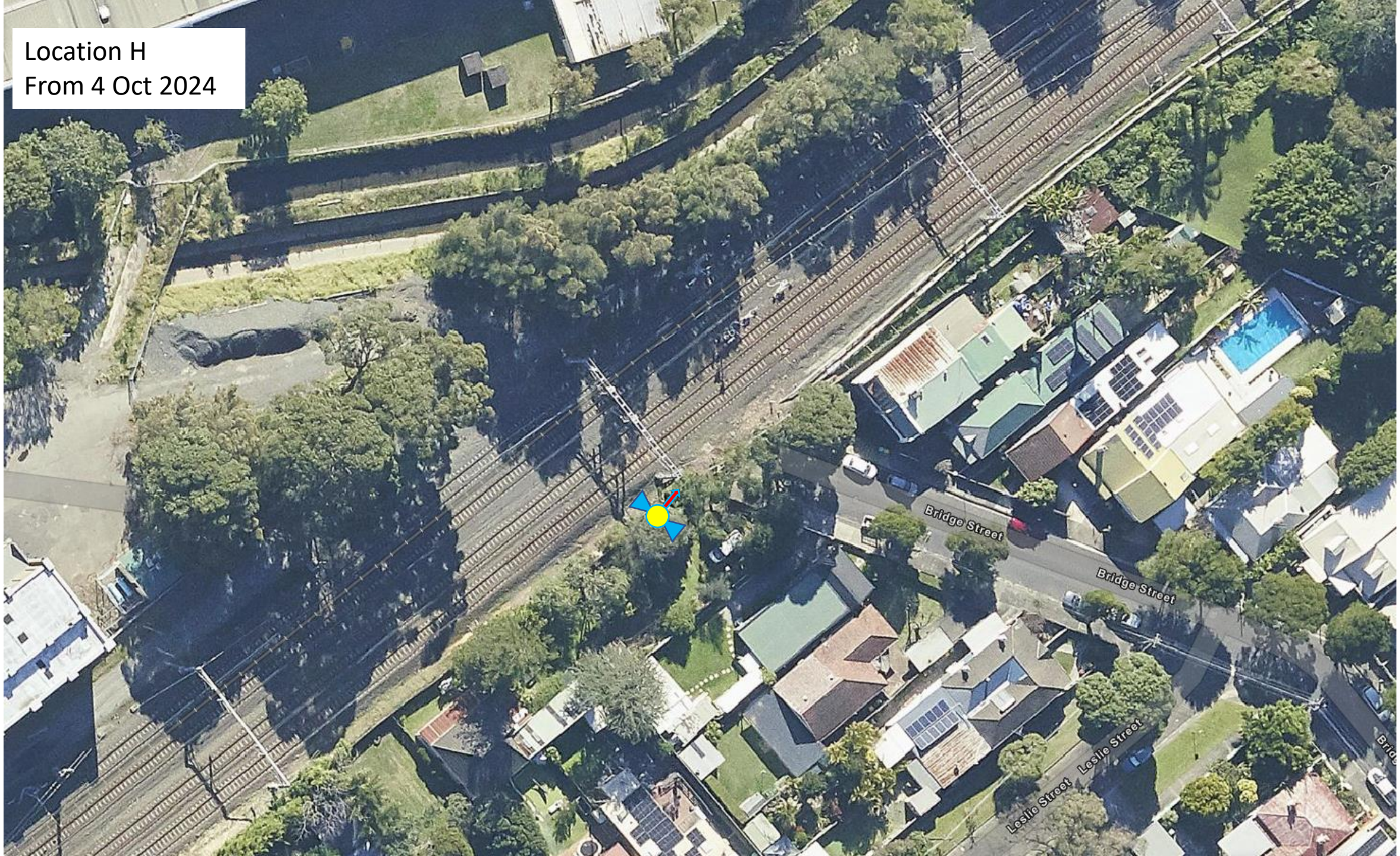

Location C
From 30 Sep 2024
Rickard Street
Urunga Parade
Urunga Parade
Urunga Parade
Urunga Parade
Urunga Parade
Urunga Parade
The Boulevarde
The Boulevarde


Location D
From 30 Sep 2024
North Terrace
North Terrace
North Terrace
North Terrace
North Terrace
North Terrace
South Terrace
South Terrace
South Terrace
Stacey Street
Stacey Street
Stacey Street
A6
A6
A6

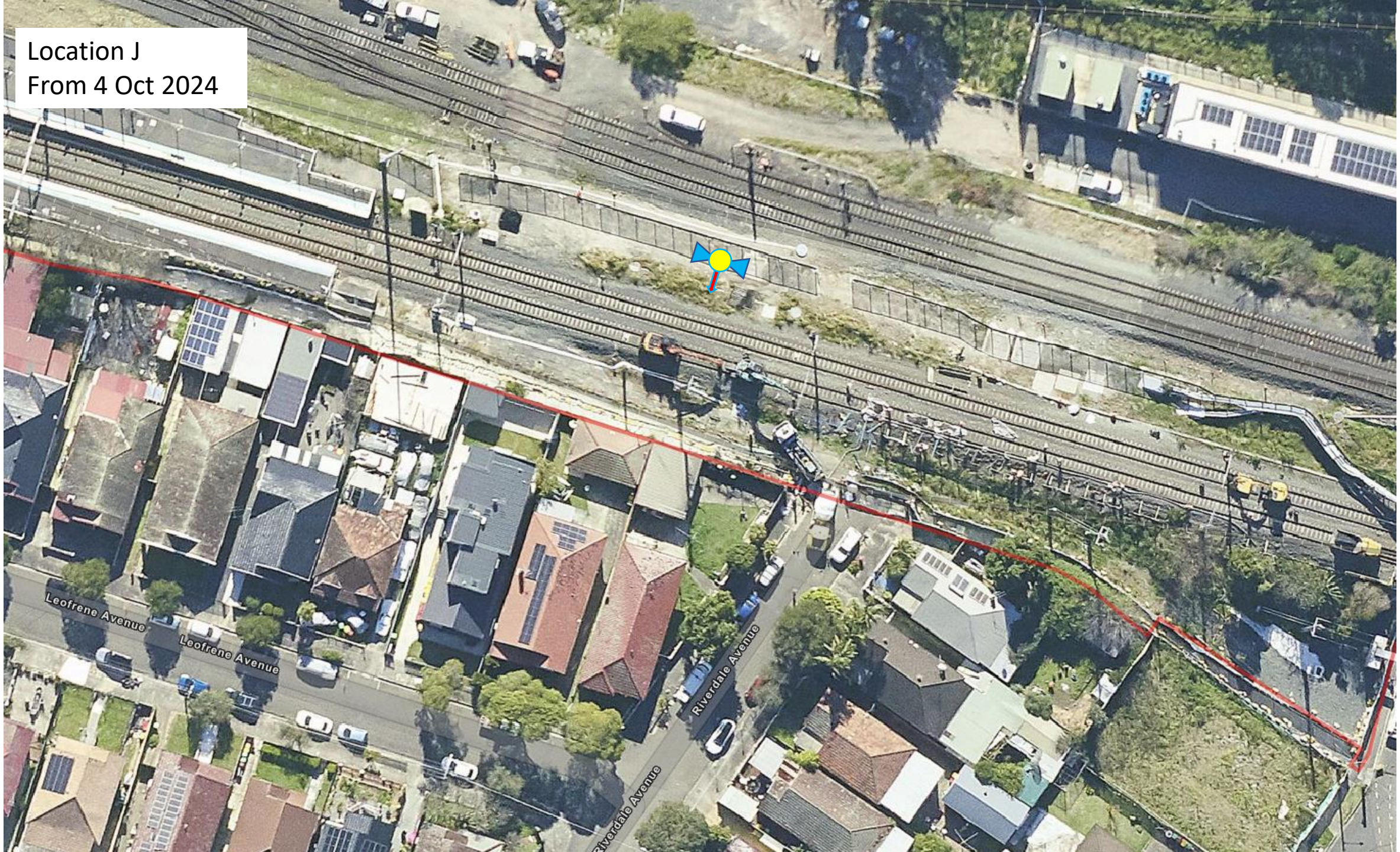

Location E
From 30 Sep 2024
The Applian Way
North Terrace
North Terrace
North Terrace
North Terrace
North Terrace
South Terrace
West Terrace


Location F
From 30 Sep 2024
Marion Street
n Street
Greenwood Avenue
Greenwood Avenue
Olympic Parade
Olympic Parade


Location G
From 4 Oct 2024
Marrickville Road
Railway Parade
Railway Parade
Railway Parade
Gleeson Avenue
Burrows Avenue
Railway Road
Wright Street
Gleeson Avenue
Railway Road
Railway Road
Gleeson Avenue
Memory Reserve


Location H
From 4 Oct 2024
Bridge Street
Bridge Street
Leslie Street
Leslie Street
Leslie Street


Location I
From 4 Oct 2024
Victoria Road
Meeks Road
Meeks Road
Meeks Lane
Meeks Road
Meeks Road
Maud Lane
Myrtle Street
Myrtle Street
Carrington Road


Location J
From 4 Oct 2024
Leofrene Avenue
Leofrene Avenue
Riverdale Avenue
Riverdale Avenue


Location K
From 4 Oct 2024
Keith Lane
Wardell Lane
Inner West Light Rail
Bedford Crescent
Wardell Road
Ewart Lane
Ewart Street
Dulwich Hill
Riverside Crescent
Dudley Street


Location L
From 4 Oct 2024
The Parade
The Parade
The Parade
The Parade
Terrace Road
Garnet Street
Garnet Street
Ewart Street
Ewart Street
Ewart Street
Ewart Street

EPL 21147
R4.4 Validation Report

SWMC Truncation & Separation Stage-2 (08. Oct. 2024 - 19. Oct. 2024)

Security Fence auguring, Post and Panel/mesh screens; OHW structure installation, OHW cable dropping and pulling; GST Installation; Installation of Brackets at Stations; PSD and MGF installation; Bankstown upper platform and drainage construction; Bankstown Sydney Trains platform demolishing; Bankstown Sydney Trains platform hoarding board installation; Track side signal equipment demolition, Punchbowl Station parcel office demolition, Track reconditioning; Cabling and Trackside Equipment.

Document and Revision History

Document Details	
Title	R4.4 Validation Report
Client	Sydney Metro City & Southwest
JHLOR JV contract no.	K44

Revisions

Revision	Date	Description	Prepared by	Reviewed by
00	31/10/2024	Prepared for R4.4	Zhengyi Zhang	Lucas Dobrolot

Management reviews

Review date	Details	Reviewed by

Controlled:	NO	Copy no.:	Uncontrolled:	YES

Table of Contents

Introduction

This validation report has been prepared in accordance with EPL 21147 Condition R4.4 for out-of-hour works carried out over from 8th October 2024 to 19th October 2024 during the Truncation & Separation Stage-2 Rail Possession. The possession extended from Sydenham Station to Yagoona Station on Sydney Train track.

The following activities were carried under condition L5.6 - Local Possessions;

- Security Fence auguring, Post and Panel/mesh screens;
- Segregation fence auguring, Post and Panel/mesh screens
- OHW structure installation,
- OHW cable dropping and pulling;
- GST Installation;
- Installation of Brackets at Stations;
- PSD and MGF installation;
- Bankstown upper platform and drainage construction;
- Bankstown Sydney Trains platform demolishing;
- Bankstown Sydney Trains platform hoarding board installation;
- Track side signal equipment demolition,
- Punchbowl Station parcel office demolition,
- Track reconditioning;
- Guard rail installation;
- Cabling and Trackside Equipment.

Refer to **Attachment 1** for monitoring results.

R4.4(a) For activities permitted under Condition L5.6 & L5.7, a validation report must be submitted to the EPA that includes the following detail:

1. Confirmation that the equipment used to undertake the works was as specified in the relevant Construction Noise and Vibration Impact Assessment for the worksite

The assessment prepared for the works included modelling for the following plant and equipment:

- Excavators 3T, 6 and13T (inc jack hammer, augering and demolition attachments)
- Balloon tyre dump trucks (Hydrema)
- Light vehicles
- Trucks
- Payloader
- Handheld powered tools
- Vac Trucks
- EWP/telehandler
- Front-end loader
- Concrete truck and line pump
- Portable Generators
- Compressors
- Compactor
- Bogie
- Water pumps
- 4T Dumpy
- Site lights

- Mobile crane
- Tamper
- Regulator

2. A copy of the community notification required under Condition L5.12

A copy of the community notification required under Condition L5.12 is appended as **Attachment 2**.

3. Noise monitoring as required by L5.8(d)

Truncation & Separation Stage-2 (08. Oct. 2024 - 19. Oct. 2024) noise monitoring was carried out at 12 locations on the perimeter of the rail corridor.

All monitoring locations are closer to the source of the noise than the nearest sensitive receiver.

Note: calculation will be done where the noise at monitoring location exceeds the predicted level at the nearest sensitive receiver.

Monitoring locations enabling from 08. Oct 2024 listed below:

a. NCA 07 - (HEX531) 4m E of 1 Hall St, Belmore.
   - Noise Monitor is 1 m from the source of the noise
   - Sensitive Receiver is 4 m from the source of the noise
b. NCA 08 - (HEX328) 26m S of 27 Dennis St, Lakemba.
   - Noise Monitor is 30 m from the source of the noise
   - Sensitive Receiver is 55 m from the source of the noise
c. NCA 10 - (HEX421) 65m S of 37 Urunga Parade, Punchbowl.
   - Noise Monitor is 26 m from the source of the noise
   - Sensitive Receiver is 39 m from the source of the noise
d. NCA 12 - (HEX516) 135m NW of 196 South Terrace, Bankstown.
   - Noise Monitor is 25 m from the source of the noise
   - Sensitive Receiver is 142 m from the source of the noise
e. NCA 12 - (HEX618) 168m NW of 2 West Terrace, Bankstown.
   - Noise Monitor is 15 m from the source of the noise (track)
   - Sensitive Receiver is 39 m from the source of the noise (track)
f. NCA 12 - (HEX646) 66m S of 21 Bungalow Crescent, Bankstown.
   - Noise Monitor is 12 m from the source of the noise
   - Sensitive Receiver is 75 m from the source of the noise
g. NCA 14 - (HEX615) 5m E of 110 Railway Rd, Sydenham.
   - Noise Monitor is 15 m from the source of the noise
   - Sensitive Receiver is 16 m from the source of the noise
h. NCA 14 - (HEX548) 20m W of 29 Bridge St, Tempe.
   - Noise Monitor is 17 m from the source of the noise
   - Sensitive Receiver is 30 m from the source of the noise
i. NCA 01 - (HEX548) 75m SW of 133 Meeks Rd, Marrickville.
   - Noise Monitor is 25 m from the source of the noise
   - Sensitive Receiver is 50 m from the source of the noise
j. NCA 01 - (HEX630) 25m NE of 29 Leofrene Ave, Marrickville.
   - Noise Monitor is 10 m from the source of the noise
   - Sensitive Receiver is 15 m from the source of the noise
k. NCA 02 - (HEX623) 11m N of 51A Ewart Lane, Dulwich Hill.
   - Noise Monitor is 17 m from the source of the noise
   - Sensitive Receiver is 17 m from the source of the noise

l. NCA 02 - (HEX649) 11m N of 81 Ewart Street, Dulwich Hill.
   - Noise Monitor is 21 m from the source of the noise
   - Sensitive Receiver is 32 m from the source of the noise

Refer to **Appendix 1** for noise monitoring results.

4. Details of any exceedances of predicted noise levels;

Noise (LAeq 15min) data was collected at the 12 locations between the 08th of October 2024 to 19th of October 2024, all Out of Hour Works (OOHW) shift has been assessed.

During Truncation & Separation Stage-2, there were no exceedances of the noise predictions generated from the JHLORJV construction activity.

5. Details of the noise and vibration mitigation measures that were implemented as specified in the relevant Construction Noise and Vibration Impact Assessment for the worksite

The following noise mitigation measures are implemented:

- Potential source noise controls include mufflers fitted to exhausts, regular maintenance of plant, acoustic enclosure of machinery on plant items, non-tonal reversing alarms fitted to plant.
- General monthly community notification.
- Specific notification to impacted residents were provided no later than 5 days out from start of possession.
- Additional mitigation measures such as Alternative Accommodation and Respite Offers.
- Use of real time noise monitors at targeted work locations. Periodic desk top checks on data collected by the 12 real time monitoring instruments were carried out during work periods.
- Environmental surveillance
- On site mitigation instructions to crews:
    - No music, no dropping of objects
    - No shouting or unnecessary noise
    - Be respectful of neighbors when coming and going from site. As far as possible, avoid congregating near residential property boundaries.
    - Position plant as far from residents as possible and orientate them if possible, to emit noise on non-resident side.
    - Plant to be switched off when not in use.

6. The justification required under L5.6 for the carrying out of works outside of standard construction hours in L5.1.

The works carried out on Truncation & Separation Stage-2 could only be safely conducted during a rail possession due to works occurring within the rail corridor/danger zone. Works were completed in accordance with EPL Condition L5.6 (Local Possession). Carrying out the construction activities during standard construction hours (specified in L5.1) would cause unacceptable risks to construction personnel safety; rail passenger and railways personnel safety and railway network operational reliability.

Construction activities occurring within the rail corridor/danger zone can only be safely conducted during a rail possession during the absence of trains.

All feasible and reasonable at-source noise controls were implemented in accordance with

Condition L4.1, and noise mitigation measures were implemented in accordance with JHLORJV's CNVIS and Interim Construction Noise Guideline (DECC 2009).

R4.4 (b) The validation report must be submitted to the EPA fortnightly from the commencement of the works permitted by L5.6 & L5.7 by no later than 2 business days from the end of each fortnight.

This R4.4 Validation report has been submitted to EPA by no later than two business days after the end of the fortnight.

Attachment 1 – Noise Monitoring Results

- Monitoring Result
- Monitoring Location

Table 1. Monitoring Location A: NCA 07 - (HEX531) 4m E of 1 Hall St, Belmore

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	08/10/2024 To 09/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	58	72	**YES**	• RBL: 35 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	09/10/2024 To 10/10/2024				66			
3	10/10/2024 To 11/10/2024				61			
4	11/10/2024 To 12/10/2024				59			
5	12/10/2024 To 13/10/2024				57			
6	13/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			63			• RBL: 41 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Day shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
7	13/10/2024 To 14/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			63			• RBL: 35 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
8	14/10/2024 To 15/10/2024				53			
9	15/10/2024 To 16/10/2024				53			
10	16/10/2024 To 17/10/2024				58			
11	17/10/2024 To 18/10/2024				49			
12	18/10/2024 To 19/10/2024				65			

Table 2. Monitoring Location B: NCA 08 - (HEX328) 26m S of 27 Dennis St, Lakemba

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	08/10/2024 To 09/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	• Highest ambient LAeq in period at Monitoring Location is **59** • Due to the monitoring location being 30 m from the source of the noise and sensitive receiver being 55 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is **54.**	54	**YES**	• RBL: 41 dBA • Noise monitor detect highest LAeq15min value due to general construction noise below or matching predictions. • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
2	09/10/2024 To 10/10/2024				- Highest ambient LAeq in period at Monitoring Location is 60 - Excluding the following non-construction related event being identified: 10/10/2024 06:30 Animal Activity 60 - Construction related LAeq in period at Monitoring Location is 52			
3	10/10/2024 To 11/10/2024				• Highest ambient LAeq in period at Monitoring Location is 59 • Due to the monitoring location being 30 m from the source of the noise and sensitive receiver being 55 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 54.			
4	11/10/2024 To 12/10/2024				• Highest ambient LAeq in period at Monitoring Location is 59 • Due to the monitoring location being 30 m from the source of the noise and sensitive receiver being 55 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 54.			
5	12/10/2024 To 13/10/2024				52			
6	13/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			• Highest ambient LAeq in period at Monitoring Location is 58 • Due to the monitoring location being 30 m from the source of the noise and sensitive receiver being 55 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 53.			• RBL: 47 dBA • Noise monitor detect highest LAeq15min value due to general construction noise below predictions. • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
7	13/10/2024 To 14/10/2024				• Highest ambient LAeq in period at Monitoring Location is 55 • Due to the monitoring location being 30 m from the source of the noise and sensitive receiver being 55 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 50.			• RBL: 47 dBA • LAeq15min below predictions. • Noise monitor detect highest LAeq15min value of 59 dBA due to general construction noise between the hours 07:00 to 22:00. • The Highest LAeq in work period (59 dBA) is lower than the predicted level (64 dBA) • **Predicted noise levels (Day & Evening shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
8	14/10/2024 To 15/10/2024	Night 22:00 to 8:00 (Modeled from 18:00 to 8:00)			54	69		• RBL: 41 dBA • Noise monitor detect highest LAeq15min value due to general construction noise below or matching predictions. • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
9	15/10/2024 To 16/10/2024				62			
10	16/10/2024 To 17/10/2024				61			• RBL: 41 dBA • Noise monitor detect highest LAeq15min value due to general construction noise below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
11	17/10/2024 To 18/10/2024				56			
12	18/10/2024 To 19/10/2024				54	54		• RBL: 41 dBA • Noise monitor detect highest LAeq15min value due to general construction noise matching predictions. • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**

Table 3. Monitoring Location C: NCA 10 - (HEX421) 65m S of 37 Urunga Parade, Punchbowl

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	08/10/2024 To 09/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	55	64	YES	• RBL: 41 dBA • Noise monitor detect highest LAeq15min value due to general construction noise below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	09/10/2024 To 10/10/2024				60			
3	10/10/2024 To 11/10/2024				62			
4	11/10/2024 To 12/10/2024				62			
5	12/10/2024 To 13/10/2024				60			
6	13/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			• Highest ambient LAeq in period at Monitoring Location is 63 • Due to the monitoring location being 12 m from the source of the noise and sensitive receiver being 55 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 50.	52		• RBL: 47 dBA • Noise monitor detect highest LAeq15min value due to general construction noise below predictions. • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
7	13/10/2024 To 14/10/2024	Night 22:00 to 8:00 (Modeled from 18:00 to 8:00)			57	64		• RBL: 41 dBA • Noise monitor detect highest LAeq15min value due to general construction noise below or matching predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
8	14/10/2024 To 15/10/2024				64			
9	15/10/2024 To 16/10/2024				60			
10	16/10/2024 To 17/10/2024				58			
11	17/10/2024 To 18/10/2024				58			
12	18/10/2024 To 19/10/2024				64			

Table 4. Monitoring Location D: NCA 12 - (HEX516) 135m NW of 196 South Terrace, Bankstown

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	08/10/2024 To 09/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	65	65	YES	• RBL: 42 dBA • Noise monitor detect highest LAeq15min value due to general construction noise below or matching predictions. • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
2	09/10/2024 To 10/10/2024				64			
3	10/10/2024 To 11/10/2024				• Highest ambient LAeq in period at Monitoring Location is 66 • Due to the monitoring location being 12 m from the source of the noise and sensitive receiver being 124 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 46.			
4	11/10/2024 To 12/10/2024				- Highest ambient LAeq in period at Monitoring Location is 69 - Excluding the following non-construction related event being identified: 11/10/2024 22:45 Urban Traffic 66 11/10/2024 23:15 Urban Traffic 66 12/10/2024 00:45 Urban Traffic 69 - Construction related LAeq in period at Monitoring Location is 65			
5	12/10/2024 To 13/10/2024				- Highest ambient LAeq in period at Monitoring Location is 69 - Excluding the following non-construction related event being identified: 12/10/2024 22:15 Urban Traffic 68 12/10/2024 23:45 Urban Traffic 67 - Construction related LAeq in period at Monitoring Location is 65			
6	13/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			- Highest ambient LAeq in period at Monitoring Location is 68 - Excluding the following non-construction related event being identified: 13/10/2024 22:15 Urban Traffic 67 13/10/2024 23:45 Urban Traffic 66 13/10/2024 23:45 Urban Traffic 66 13/10/2024 23:45 Urban Traffic 68 13/10/2024 23:45 Urban Traffic 65 - Construction related LAeq in period at Monitoring Location is 64	65		• RBL: 54 dBA • Noise monitor detect highest LAeq15min value due to general construction noise below predictions. • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
7	13/10/2024 To 14/10/2024	Night 22:00 to 8:00 (Modeled from 18:00 to 8:00)			63	65		• RBL: 42 dBA • Noise monitor detect highest LAeq15min value due to general construction noise below predictions. • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
8	14/10/2024 To 15/10/2024				- Highest ambient LAeq in period at Monitoring Location is 70 - Excluding the following non-construction related event being identified: 14/10/2024 22:15 Urban Traffic 65 14/10/2024 23:15 Urban Traffic 65 15/10/2024 02:45 Urban Traffic 70 15/10/2024 06:15 Urban Traffic 66 15/10/2024 06:30 Urban Traffic 64 15/10/2024 06:45 Urban Traffic 65 - Construction related LAeq in period at Monitoring Location is 64			
9	15/10/2024 To 16/10/2024				- Highest ambient LAeq in period at Monitoring Location is 66 - Excluding the following non-construction related event being identified: 15/10/2024 23:30 Urban Traffic 66 - Construction related LAeq in period at Monitoring Location is 64			
10	16/10/2024 To 17/10/2024				• Highest ambient LAeq in period at Monitoring Location is 75 • Due to the monitoring location being 12 m from the source of the noise and sensitive receiver being 124 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 55.			
11	17/10/2024 To 18/10/2024				• Highest ambient LAeq in period at Monitoring Location is 67 • Due to the monitoring location being 12 m from the source of the noise and sensitive receiver being 124 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 47.			
12	18/10/2024 To 19/10/2024				64			

Table 5. Monitoring Location E: NCA 12 - (HEX618) 168m NW of 2 West Terrace, Bankstown

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	08/10/2024 To 09/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	63	69	YES	• RBL: 42 dBA • Noise monitor detect highest LAeq15min value due to general construction noise below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	09/10/2024 To 10/10/2024				63			
3	10/10/2024 To 11/10/2024				65			
4	11/10/2024 To 12/10/2024				65			
5	12/10/2024 To 13/10/2024				• Highest ambient LAeq in period at Monitoring Location is 84 • Due to the monitoring location being 8 m from the source of the noise and sensitive receiver being 152 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 58.			
6	13/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			• Highest ambient LAeq in period at Monitoring Location is 84 • Due to the monitoring location being 8 m from the source of the noise and sensitive receiver being 152 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 58.	70		• RBL: 54 dBA • Noise monitor detect highest LAeq15min value due to general construction noise below predictions. • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
7	13/10/2024 To 14/10/2024	Night 22:00 to 8:00 (Modeled from 18:00 to 8:00)			63	69		• RBL: 42 dBA • Noise monitor detect highest LAeq15min value due to general construction noise below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
8	14/10/2024 To 15/10/2024				• Highest ambient LAeq in period at Monitoring Location is 71 • Due to the monitoring location being 8 m from the source of the noise and sensitive receiver being 152 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 45.			
9	15/10/2024 To 16/10/2024				• Highest ambient LAeq in period at Monitoring Location is 79 • Due to the monitoring location being 8 m from the source of the noise and sensitive receiver being 152 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 53.	70		
10	16/10/2024 To 17/10/2024				• Highest ambient LAeq in period at Monitoring Location is 73 • Due to the monitoring location being 8 m from the source of the noise and sensitive receiver being 152 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 47.	69		
11	17/10/2024 To 18/10/2024				68	70		
12	18/10/2024 To 19/10/2024				63	69		

Table 6. Monitoring Location F: NCA 12 - (HEX646) 66m S of 21 Bungalow Crescent, Bankstown

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	08/10/2024 To 09/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	56	59	YES	• RBL: 42 dBA • Noise monitor detect highest LAeq15min value due to general construction noise below or matching predictions. • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
2	09/10/2024 To 10/10/2024				• Highest ambient LAeq in period at Monitoring Location is 64 • Due to the monitoring location being 16 m from the source of the noise and sensitive receiver being 70 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 51.			
3	10/10/2024 To 11/10/2024				• Highest ambient LAeq in period at Monitoring Location is 71 • Due to the monitoring location being 16 m from the source of the noise and sensitive receiver being 70 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 58.			
4	11/10/2024 To 12/10/2024				- Highest ambient LAeq in period at Monitoring Location is 66 - Excluding the following non-construction related event being identified: 11/10/2024 23:30 Urban Siren 66 - Construction related LAeq in period at Monitoring Location is 56	58		
5	12/10/2024 To 13/10/2024				58			
6	13/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			58			• RBL: 54 dBA • Noise monitor detect highest LAeq15min value due to general construction noise matching predictions. • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
7	13/10/2024 To 14/10/2024	Night 22:00 to 8:00 (Modeled from 18:00 to 8:00)			- Highest ambient LAeq in period at Monitoring Location is 65 - Excluding the following non-construction related event being identified: 13/10/2024 23:30 Urban Siren 65 - Construction related LAeq in period at Monitoring Location is 56			
8	14/10/2024 To 15/10/2024				- Highest ambient LAeq in period at Monitoring Location is 60 - Excluding the following non-construction related event being identified: 14/10/2024 22:45 Urban Siren 60 - Construction related LAeq in period at Monitoring Location is 56			
9	15/10/2024 To 16/10/2024				- Highest ambient LAeq in period at Monitoring Location is 59 - Excluding the following non-construction related event being identified: 15/10/2024 23:45 Urban Siren 59 - Construction related LAeq in period at Monitoring Location is 56			
10	16/10/2024 To 17/10/2024				57			
11	17/10/2024 To 18/10/2024				- Highest ambient LAeq in period at Monitoring Location is 64 - Excluding the following non-construction related event being identified: 17/10/2024 23:45 Urban Siren 63 18/10/2024 02:00 Urban Siren 64 - Construction related LAeq in period at Monitoring Location is 58			
12	18/10/2024 To 19/10/2024				- Highest ambient LAeq in period at Monitoring Location is 60 - Excluding the following non-construction related event being identified: 18/10/2024 23:00 Urban Siren 60 - Construction related LAeq in period at Monitoring Location is 55	59		• RBL: 42 dBA • Noise monitor detect highest LAeq15min value due to general construction noise below predictions. • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**

Table 7. Monitoring Location G: NCA 14 - (HEX615) 5m E of 110 Railway Rd, Sydenham

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	08/10/2024 To 09/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	70	74	YES	• RBL: 42 dBA • Noise monitor detect highest LAeq15min value due to general construction noise below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	09/10/2024 To 10/10/2024				68			
3	10/10/2024 To 11/10/2024				71			
4	11/10/2024 To 12/10/2024				79	79		
5	12/10/2024 To 13/10/2024				69	74		
6	13/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			No Construction within 200m Radius			
7	13/10/2024 To 14/10/2024	Night 22:00 to 8:00 (Modeled from 18:00 to 8:00)						
8	14/10/2024 To 15/10/2024							
9	15/10/2024 To 16/10/2024							
10	16/10/2024 To 17/10/2024							
11	17/10/2024 To 18/10/2024							
12	18/10/2024 To 19/10/2024							

Table 8. Monitoring Location H: NCA 14 - (HEX548) 20m W of 29 Bridge St, Tempe

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	08/10/2024 To 09/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	64	66	**YES**	• RBL: 40 dBA • Noise monitor detect highest LAeq15min value due to general construction noise below predictions. • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
2	09/10/2024 To 10/10/2024				- Highest ambient LAeq in period at Monitoring Location is 67 - Excluding the following non-construction related event being identified: 10/10/2024 06:45 Sydney T3 Train 67 - Construction related LAeq in period at Monitoring Location is 64			
3	10/10/2024 To 11/10/2024				No Construction within 200m Radius			
4	11/10/2024 To 12/10/2024				63	66	**YES**	• RBL: 40 dBA • Noise monitor detect highest LAeq15min value due to general construction noise below predictions. • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
5	12/10/2024 To 13/10/2024				No Construction within 200m Radius			
6	13/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00						
7	13/10/2024 To 14/10/2024	Night 22:00 to 8:00 (Modeled from 18:00 to 8:00)						
8	14/10/2024 To 15/10/2024							
9	15/10/2024 To 16/10/2024							
10	16/10/2024 To 17/10/2024							
11	17/10/2024 To 18/10/2024							
12	18/10/2024 To 19/10/2024							

Table 9. Monitoring Location I: NCA 01 - (HEX548) 75m SW of 133 Meeks Rd, Marrickville

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	08/10/2024 To 09/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	- Highest ambient LAeq in period at Monitoring Location is 70 - Excluding the following non-construction related event being identified: 08/10/2024 22:30 ARTC Train 60 08/10/2024 23:45 ARTC Train 67 08/10/2024 01:45 ARTC Train 70 08/10/2024 03:00 ARTC Train 67 - Construction related LAeq in period at Monitoring Location is 54	64	YES	• RBL: 40 dBA • Noise monitor detect highest LAeq15min value due to general construction noise below or matching predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	09/10/2024 To 10/10/2024				67	67		
3	10/10/2024 To 11/10/2024				- Highest ambient LAeq in period at Monitoring Location is 70 - Excluding the following non-construction related event being identified: 11/10/2024 00:30 ARTC Train 70 - Construction related LAeq in period at Monitoring Location is 67	69		
4	11/10/2024 To 12/10/2024				- Highest ambient LAeq in period at Monitoring Location is 71 - Excluding the following non-construction related event being identified: 12/10/2024 01:45 ARTC Train 71 - Construction related LAeq in period at Monitoring Location is 68			
5	12/10/2024 To 13/10/2024				69			
6	13/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			• Highest ambient LAeq in period at Monitoring Location is 71 • Due to the monitoring location being 25 m from the source of the noise and sensitive receiver being 50 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 65.			• RBL: 47 dBA • Noise monitor detect highest LAeq15min value due to general construction noise below predictions. • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
7	13/10/2024 To 14/10/2024	Night 22:00 to 8:00 (Modeled from 18:00 to 8:00)			- Highest ambient LAeq in period at Monitoring Location is 70 - Excluding the following non-construction related event being identified: 13/10/2024 23:30 ARTC Train 70 - Construction related LAeq in period at Monitoring Location is 67	69		• RBL: 40 dBA • Noise monitor detect highest LAeq15min value due to general construction noise below or matching predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
8	14/10/2024 To 15/10/2024				67	68		
9	15/10/2024 To 16/10/2024				67			
10	16/10/2024 To 17/10/2024				- Highest ambient LAeq in period at Monitoring Location is 72 - Excluding the following non-construction related event being identified: 16/10/2024 22:15 ARTC Train 69 17/10/2024 05:15 ARTC Train 72 - Construction related LAeq in period at Monitoring Location is 67			
11	17/10/2024 To 18/10/2024				• Highest ambient LAeq in period at Monitoring Location is 71 • Due to the monitoring location being 25 m from the source of the noise and sensitive receiver being 50 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 65.	69		
12	18/10/2024 To 19/10/2024				68	68		

Table 10. Monitoring Location J: NCA 01 - (HEX630) 25m NE of 29 Leofrene Ave, Marrickville

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	08/10/2024 To 09/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	No Construction within 200m Radius			
2	09/10/2024 To 10/10/2024							
3	10/10/2024 To 11/10/2024				70	73	**Yes**	• RBL: 33 dBA • Noise monitor detect highest LAeq15min value due to general construction noise below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
4	11/10/2024 To 12/10/2024				68			
5	12/10/2024 To 13/10/2024				72			
6	13/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			73	74		• RBL: 38 dBA • Noise monitor detect highest LAeq15min value due to general construction noise below predictions. • **Predicted noise levels (Day shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
7	13/10/2024 To 14/10/2024	Night 22:00 to 8:00 (Modeled from 18:00 to 8:00)			68	73		• RBL: 33 dBA • Noise monitor detect highest LAeq15min value due to general construction noise below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
8	14/10/2024 To 15/10/2024				No Construction within 200m Radius			
9	15/10/2024 To 16/10/2024							
10	16/10/2024 To 17/10/2024							
11	17/10/2024 To 18/10/2024				67	67	**Yes**	• RBL: 33 dBA • Noise monitor detect highest LAeq15min value due to general construction noise below or matching predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
12	18/10/2024 To 19/10/2024				- Highest ambient LAeq in period at Monitoring Location is 69 - Excluding the following non-construction related event being identified: 19/10/2024 00:15 ARTC Train 69 19/10/2024 06:00 ARTC Train 68 - Construction related LAeq in period at Monitoring Location is 65	67		

Table 11. Monitoring Location K: NCA 02 - (HEX623) 11m N of 51A Ewart Lane, Dulwich Hill.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	08/10/2024 To 09/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	No Construction within 200m Radius			
2	09/10/2024 To 10/10/2024							
3	10/10/2024 To 11/10/2024							
4	11/10/2024 To 12/10/2024							
5	12/10/2024 To 13/10/2024							
6	13/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			64	73	Yes	• RBL: 38 dBA • Noise monitor detect highest LAeq15min value due to general construction noise below predictions. • **Predicted noise levels (Day shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
7	13/10/2024 To 14/10/2024	Night 22:00 to 8:00 (Modeled from 18:00 to 8:00)			No Construction within 200m Radius			
8	14/10/2024 To 15/10/2024							
9	15/10/2024 To 16/10/2024							
10	16/10/2024 To 17/10/2024							
11	17/10/2024 To 18/10/2024							
12	18/10/2024 To 19/10/2024							

Table 12. Monitoring Location I: NCA 02 - (HEX649) 11m N of 81 Ewart Street, Dulwich Hill.

<table>
<tr><th>Reference Number</th><th>Date</th><th>Period</th><th>Construction Activities</th><th>Main source of noise</th><th>Highest LAeq in work period at Monitoring Location (dBA)</th><th>Predicted noise level LAeq, 15min at resident (dBA)</th><th>Compliant</th><th>Comments</th></tr>
<tr><td>1</td><td>08/10/2024
To
09/10/2024</td><td rowspan="5">Night
22:00 to 7:00

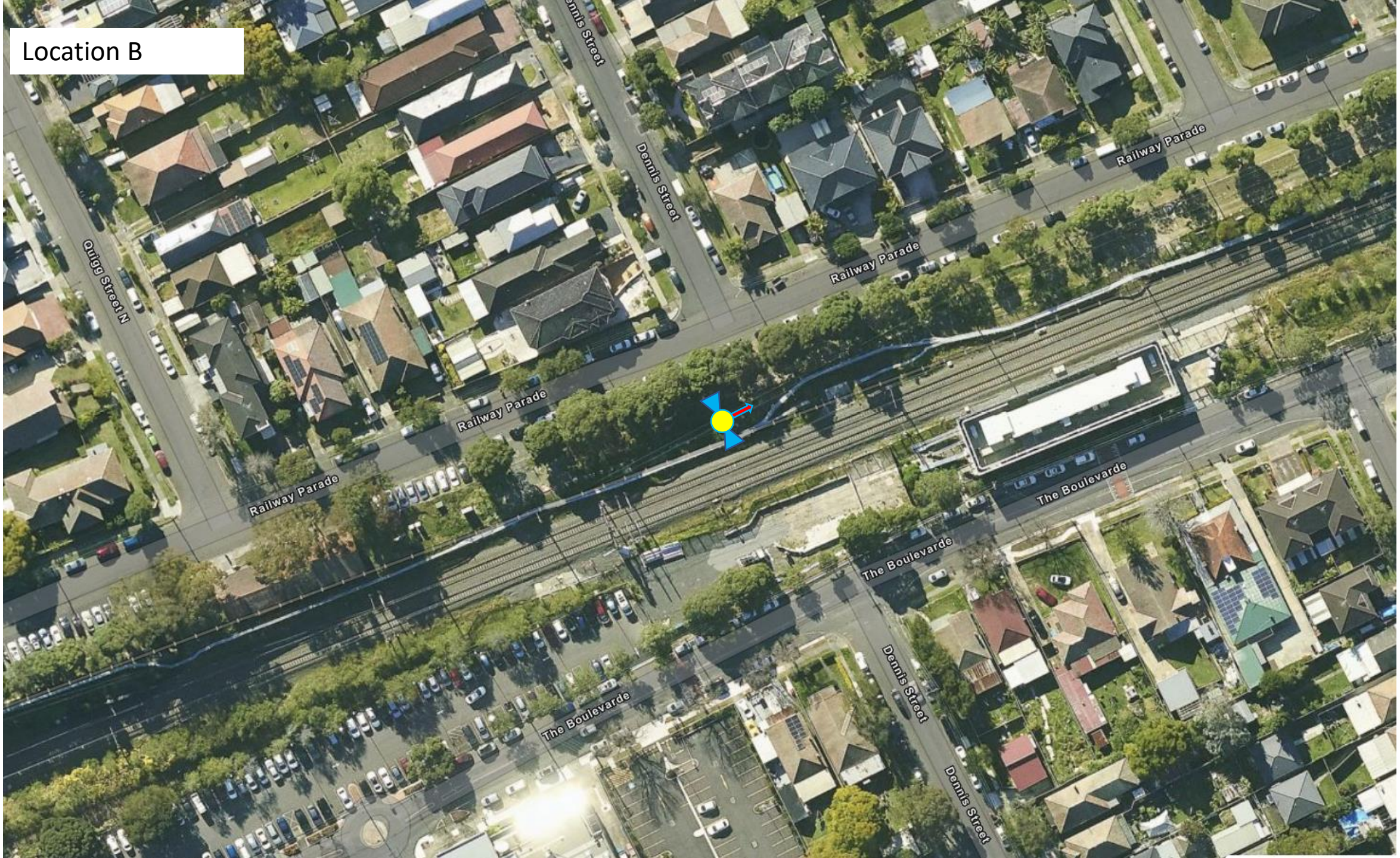
(Modeled from 18:00 to 7:00)</td><td rowspan="12">General track related construction activities</td><td rowspan="12">• Excavators 3T, 6 and13T (inc jack hammer attachments)
• Balloon tyre dump trucks (Hydrema)
• Light vehicles
• Trucks
• Payloader
• Handheld powered and non-powered tools
• Vac Trucks
• EWP/telehandler
• Front-end loader
• Concrete truck and line pump
• Portable Generators
• Compressors
• Compactor
• Bogie
• Water pumps
• 4T Dumpy
• Site lights
• Mobile Crane</td><td colspan="4">No Construction within 200m Radius</td></tr>
<tr><td>2</td><td>09/10/2024
To
10/10/2024</td></tr>
<tr><td>3</td><td>10/10/2024
To
11/10/2024</td></tr>
<tr><td>4</td><td>11/10/2024
To
12/10/2024</td></tr>
<tr><td>5</td><td>12/10/2024
To
13/10/2024</td></tr>
<tr><td>6</td><td>13/10/2024</td><td>Day
08:00 to 18:00
&
Evening
18:00 to 22:00</td><td>- Highest ambient LAeq in period at Monitoring Location is 74

- Excluding the following non-construction related event being identified:
Animal Activity: 07:21; 16:45
Aircraft: 07:37; 09:25; 09:46; 10:56; 11:16; 11:46; 12:07; 12:34; 12:56; 14:35; 15:13; 15:41; 17:04; 17:35; 17:50; 18:54; 19:22; 19:42; 20:04; 20:25; 20:43; 21:06;
ARTC Train: 08:27; 08:47; 09:02; 10:35; 13:12; 13:55; 14:51; 16:26; 18:05; 18:34; 21:26; 21:45

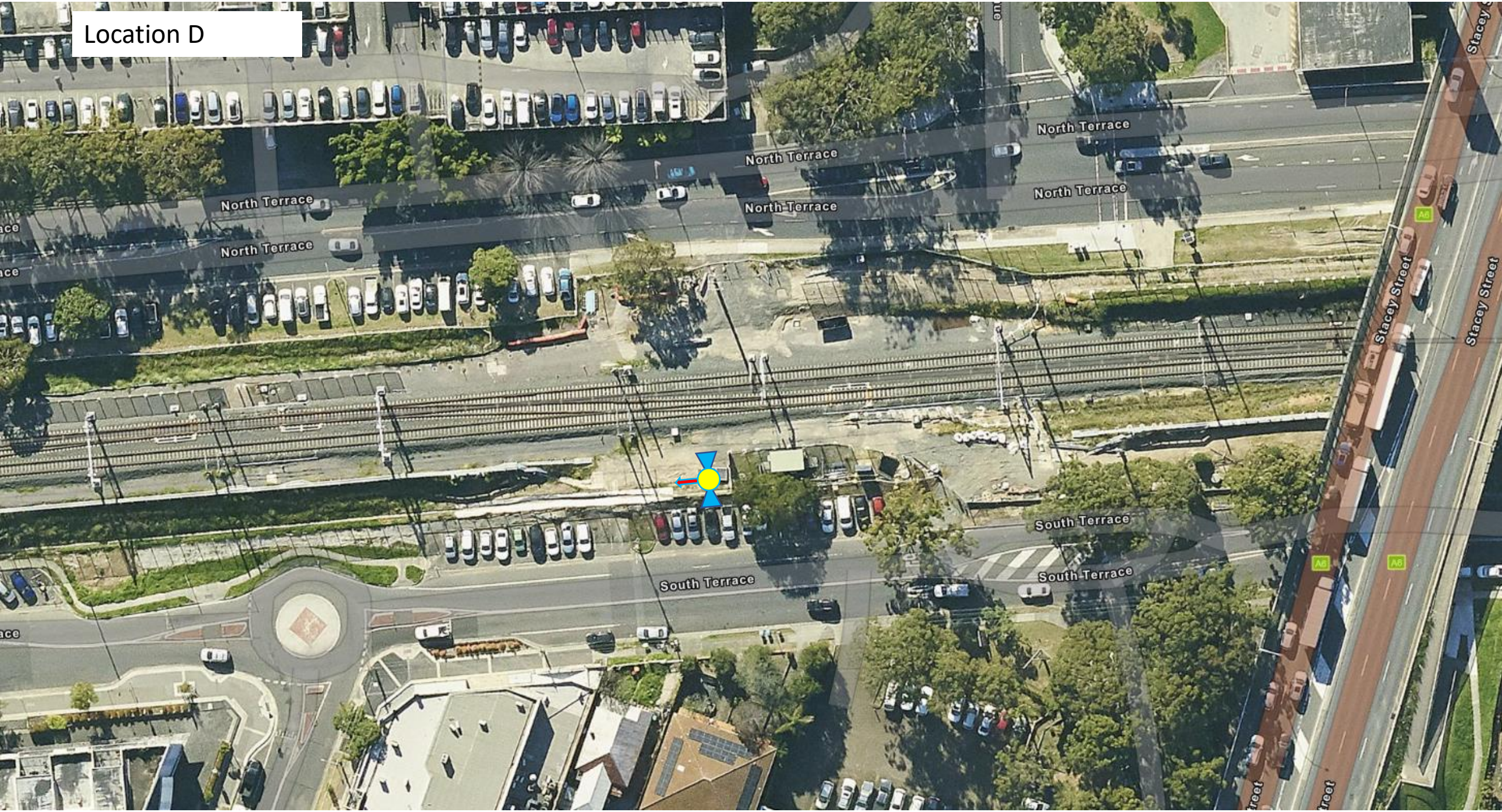
Construction related LAeq in period at Monitoring Location is 57</td><td>58</td><td>Yes</td><td>• RBL: 38 dBA
• Noise monitor detect highest LAeq15min value due to general construction noise below predictions.
• Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.
• Appropriate mitigation measures being offered</td></tr>
<tr><td>7</td><td>13/10/2024
To
14/10/2024</td><td rowspan="6">Night
22:00 to 8:00

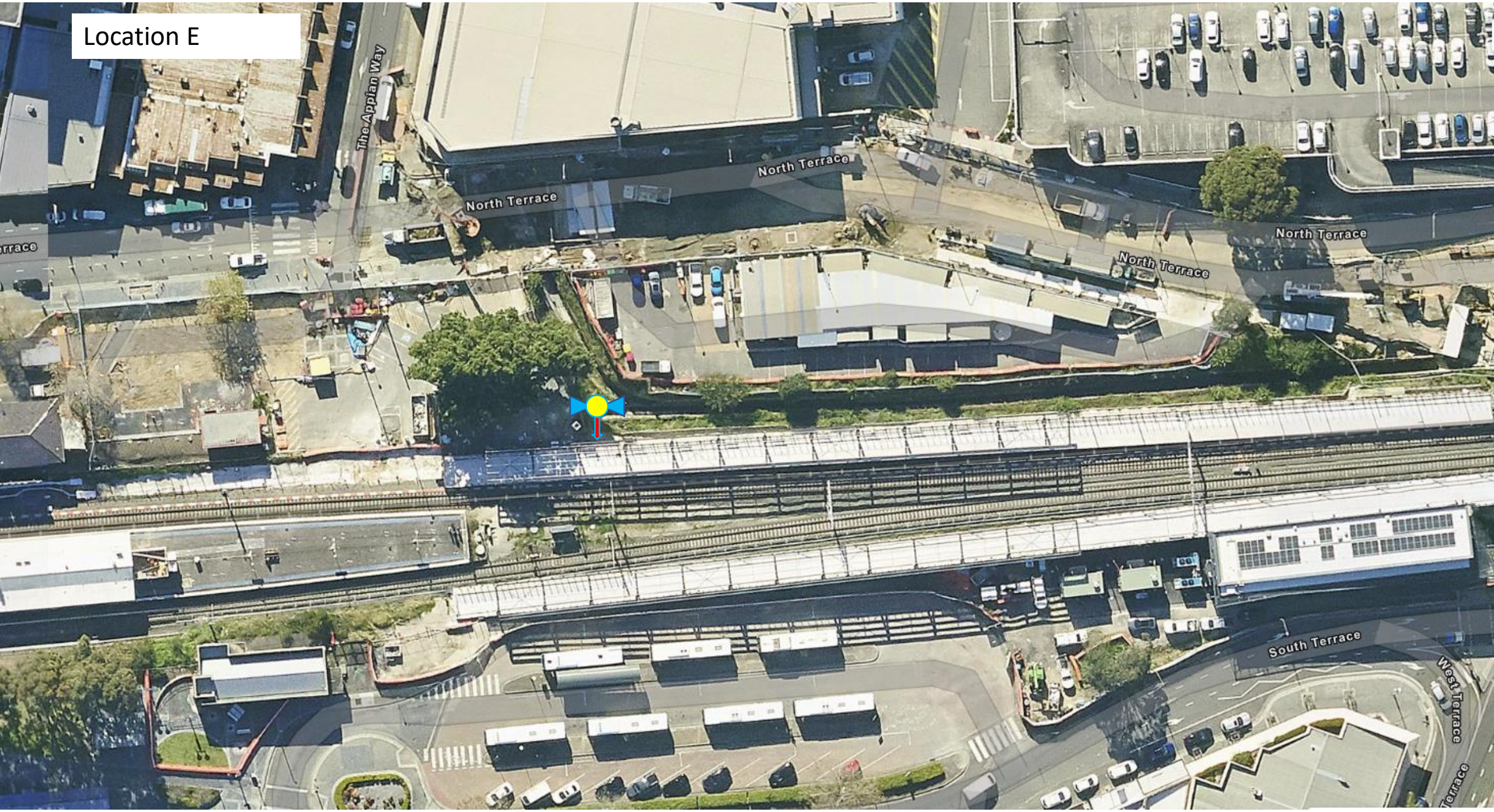
(Modeled from 18:00 to 8:00)</td><td colspan="4" rowspan="6">No Construction within 200m Radius</td></tr>
<tr><td>8</td><td>14/10/2024
To
15/10/2024</td></tr>
<tr><td>9</td><td>15/10/2024
To
16/10/2024</td></tr>
<tr><td>10</td><td>16/10/2024
To
17/10/2024</td></tr>
<tr><td>11</td><td>17/10/2024
To
18/10/2024</td></tr>
<tr><td>12</td><td>18/10/2024
To
19/10/2024</td></tr>
</table>


Location A
Campsie Street
Adelaide Street
Cecilia Street
Etela Street
Hall Street
Lark Street
Isabel Street
Sudbury Street
Redman Parade
Belmore Sportsground
Loftus Stree
Loch Street
Claremont Street
Hall Street


Location B
Dennis Street
Railway Parade
Railway Parade
Railway Parade
Railway Parade
Quigg Street N
The Boulevarde
The Boulevarde
The Boulevarde
Dennis Street
Dennis Street


Location C
Rickard Street
Urunga Parade
Urunga Parade
Urunga Parade
Urunga Parade
Urunga Parade
Urunga Parade
The Boulevarde
The Boulevarde


Location D
North Terrace
North Terrace
North Terrace
North Terrace
North Terrace
North Terrace
South Terrace
South Terrace
South Terrace
Stacey Street
Stacey Street
Stacey Street
A6
A6
A6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North Terrace
South Terrace
West Terrace


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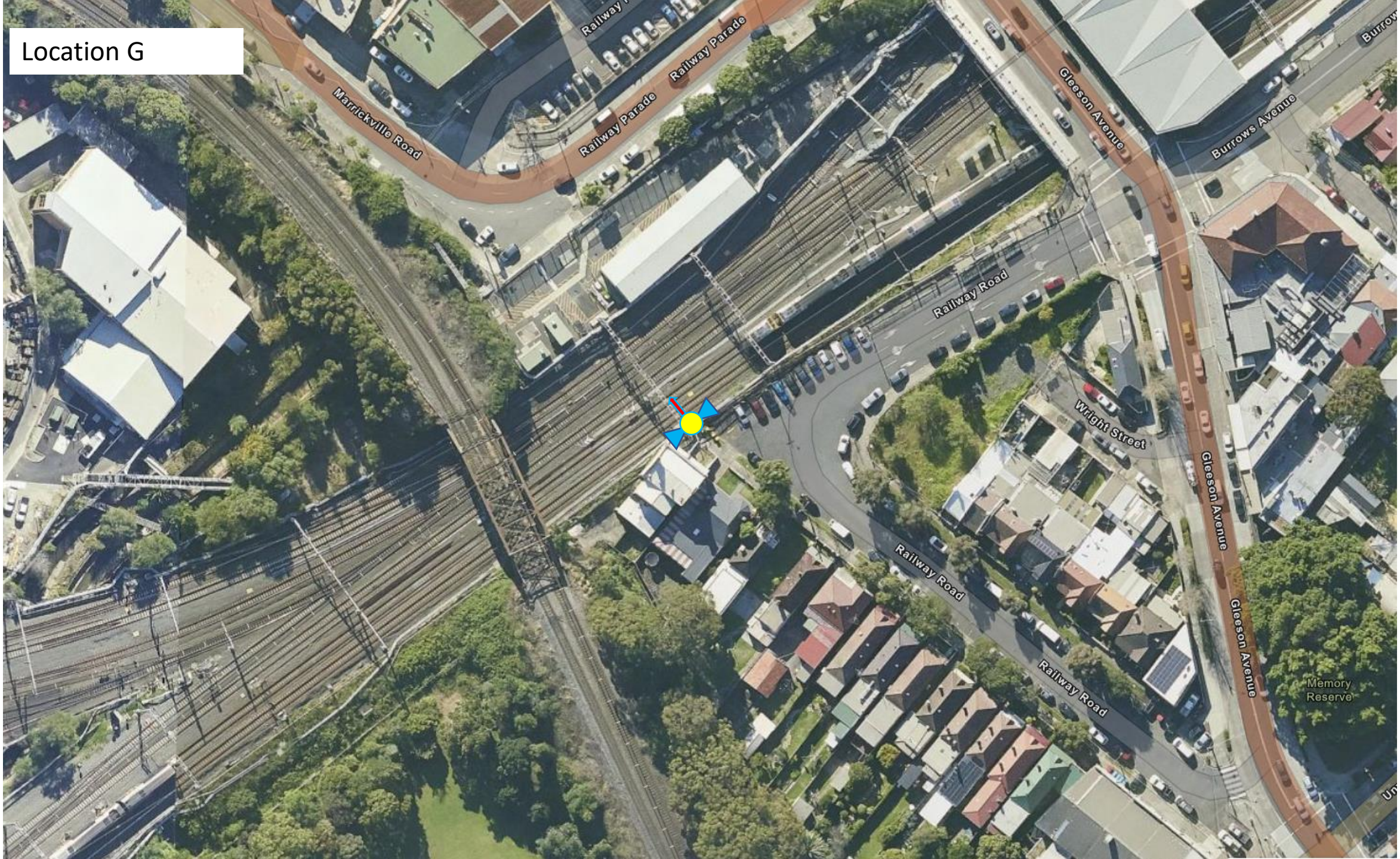
Olympic Parade
Olympic Parade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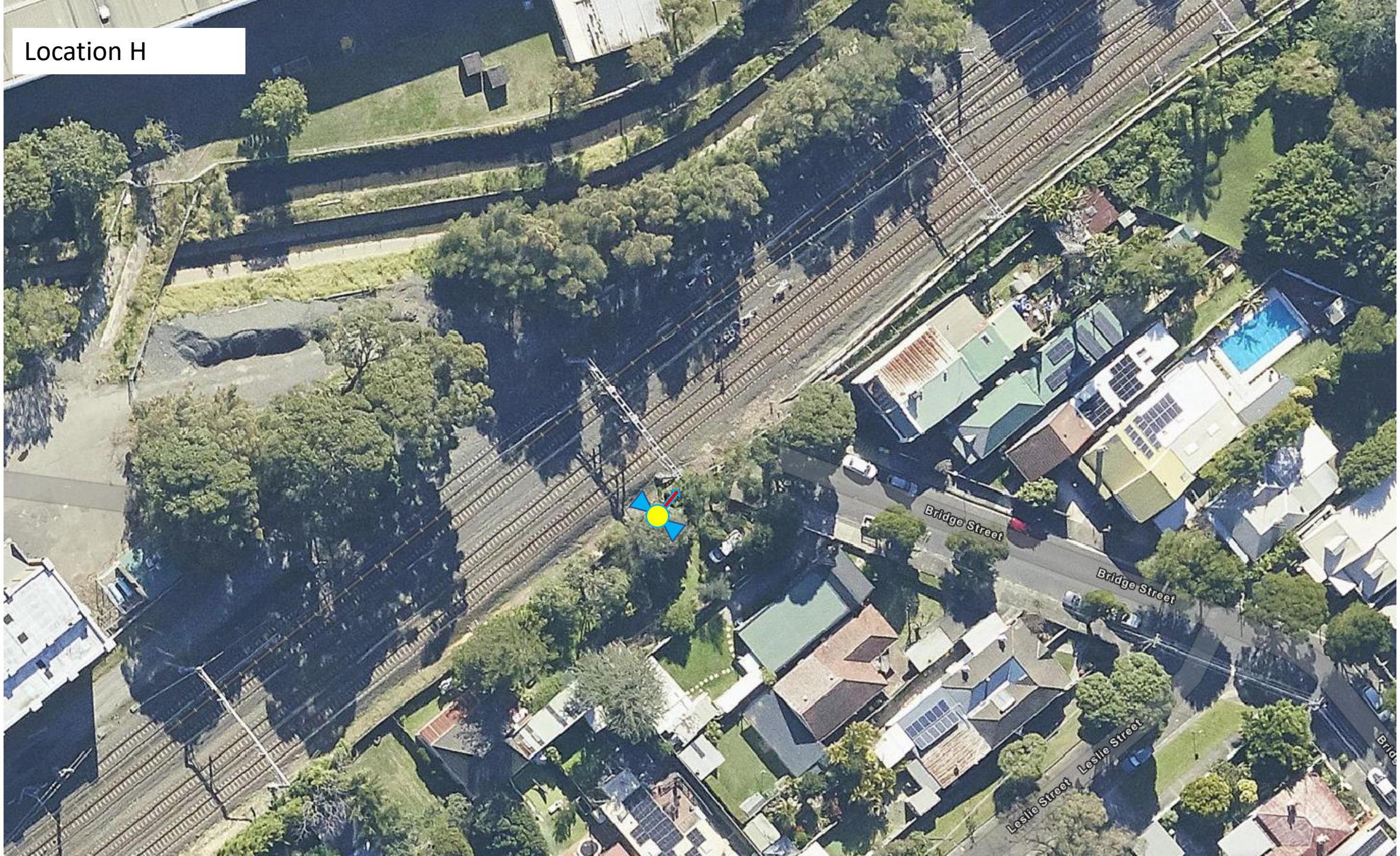
Railway Road
Railway Road
Gleeson Avenue
Memory Reserve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Bridge Street
Leslie Street
Leslie Street


Location I
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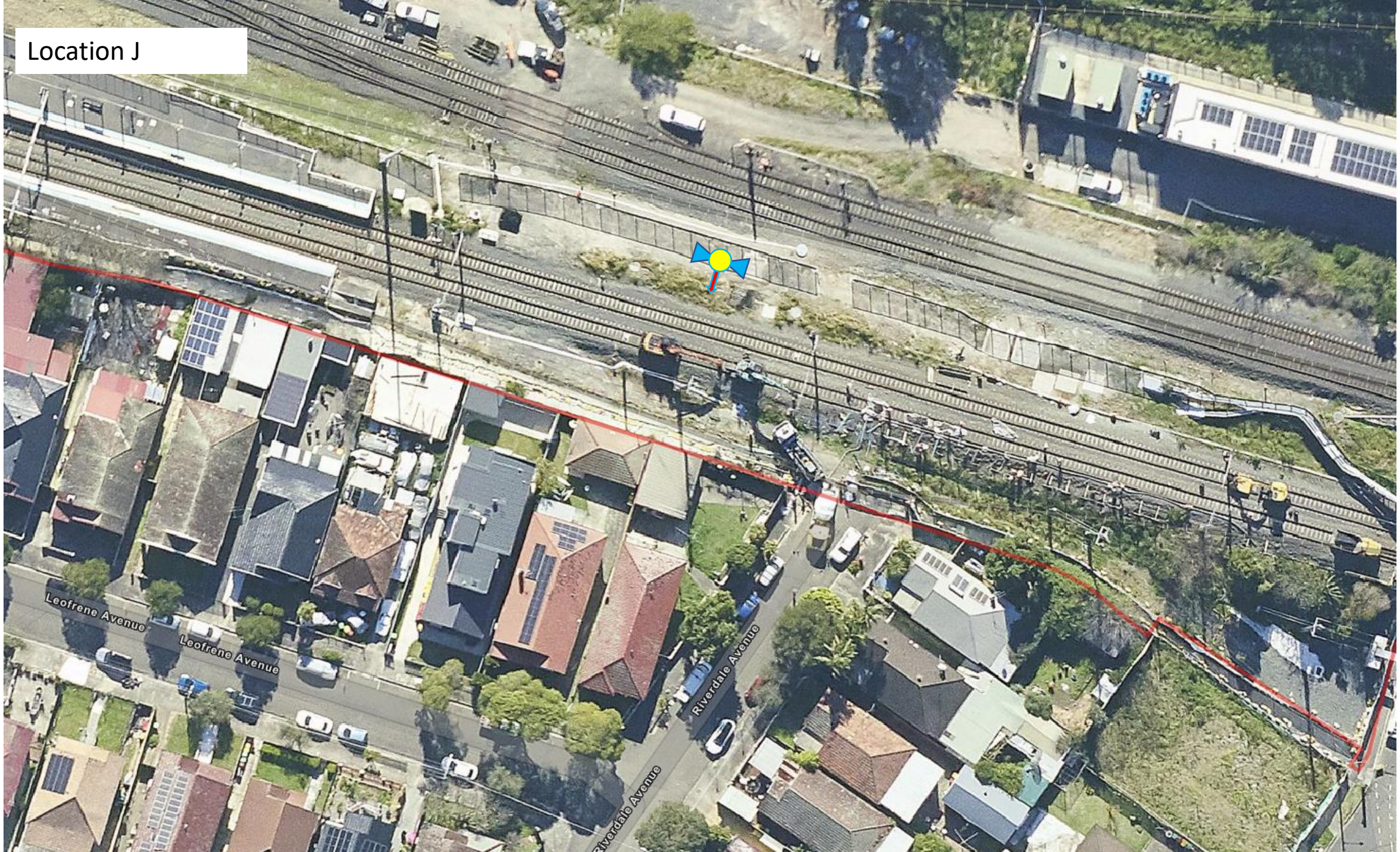
Meeks Road
Maud Lane
Myrtle Street
Myrtle Street
Carrington Road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Riverdale Avenue
Riverdale Avenue


Location K
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Wardell Lane
Inner West Light Rail
Bedford Crescent
Wardell Road
Ewart Lane
Ewart Street
Dulwich Hill
Riverside Crescent
Dudley Street


Location L
The Parade
The Parade
The Parade
The Parade
Terrace Road
Garnet Street
Garnet Street
Ewart Street
Ewart Street
Ewart Street
Ewart Street

EPL 21147
R4.4 Validation Report

SWMC Final Conversion Stage-3
(19. Oct. 2024 - 04. Nov. 2024)

Security Fence auguring, Post and Panel/mesh screens; OHW structure installation, OHW cable dropping and pulling; GST Installation; Installation of Brackets at Stations; PSD and MGF installation; Bankstown upper platform and drainage construction; Bankstown Sydney Metro Plaza Construction; Track side signal equipment demolition; Cabling and Trackside Equipment.

Document and Revision History

Document Details	
Title	R4.4 Validation Report
Client	Sydney Metro City & Southwest
JHLOR JV contract no.	K44

Revisions

Revision	Date	Description	Prepared by	Reviewed by
00	08/11/2024	Prepared for R4.4	Zhengyi Zhang	Lucas Dobrolot

Management reviews

Review date	Details	Reviewed by

Controlled:	NO	Copy no.:	Uncontrolled:	YES

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Introduction

This validation report has been prepared in accordance with EPL 21147 Condition R4.4 for out-of-hour works carried out over from 19th October 2024 to 4th November 2024 during the Final Conversion Stage-3 Rail Possession.

The possession extended from Sydenham Station to Bankstown Station on Sydney Train track from 19th October 2024 to 4th November 2024.

ARTC track isolated on 19th & 20th October 2024 and 2nd & 3rd November 2024 between 08:00 am to 18:00 pm.

The following activities were carried under condition L5.6 - Local Possessions;

- Security Fence auguring, Post and Panel/mesh screens;
- Segregation fence auguring, Post and Panel/mesh screens
- OHW structure installation,
- OHW cable dropping and pulling;
- HV pole removal;
- GST Installation;
- Installation of Brackets at Stations;
- PSD and MGF installation;
- Bankstown upper platform and drainage construction;
- Bankstown Sydney Metro Plaza construction;
- Track side signal equipment demolition,
- Guard rail installation;
- Cabling and Trackside Equipment.

Refer to **Attachment 1** for monitoring results.

R4.4(a) For activities permitted under Condition L5.6 & L5.7, a validation report must be submitted to the EPA that includes the following detail:

1. Confirmation that the equipment used to undertake the works was as specified in the relevant Construction Noise and Vibration Impact Assessment for the worksite

The assessment prepared for the works included modelling for the following plant and equipment:

- Excavators 3T, 6 and13T (inc jack hammer, augering and demolition attachments)
- Balloon tyre dump trucks (Hydrema)
- Light vehicles
- Trucks
- Payloader
- Handheld powered tools
- Vac Trucks
- EWP/telehandler
- Front-end loader
- Concrete truck and line pump
- Portable Generators
- Compressors
- Compactor
- Bogie

- Water pumps
- 4T Dumpy
- Site lights
- Mobile crane

2. A copy of the community notification required under Condition L5.12

A copy of the community notification required under Condition L5.12 is appended as **Attachment 2**.

3. Noise monitoring as required by L5.8(d)

Final Conversion Stage-3 (19. Oct. 2024 - 04. Nov. 2024) noise monitoring was carried out at 10 locations on the perimeter of the rail corridor.

All monitoring locations are closer to the source of the noise than the nearest sensitive receiver.

Note: calculation will be done where the noise at monitoring location exceeds the predicted level at the nearest sensitive receiver.

Monitoring locations listed below:

a. NCA 07 - (HEX531) 4m E of 1 Hall St, Belmore.
   - 19. Oct. 2024 - 04. Nov. 2024
   - Noise Monitor is 1 m from the source of the noise
   - Sensitive Receiver is 4 m from the source of the noise

b. NCA 08 - (HEX328) 26m S of 27 Dennis St, Lakemba.
   - 19. Oct. 2024 - 04. Nov. 2024
   - Noise Monitor is 30 m from the source of the noise
   - Sensitive Receiver is 55 m from the source of the noise

c. NCA 10 - (HEX421) 65m S of 37 Urunga Parade, Punchbowl.
   - 19. Oct. 2024 - 04. Nov. 2024
   - Noise Monitor is 11 m from the source of the noise
   - Sensitive Receiver is 54 m from the source of the noise

d. NCA 12 - (HEX516) 135m NW of 196 South Terrace, Bankstown.
   - 19. Oct. 2024 - 04. Nov. 2024
   - Noise Monitor is 13 m from the source of the noise
   - Sensitive Receiver is 128 m from the source of the noise

e. NCA 12 - (HEX618) 40 m NW of 2 West Terrace, Bankstown.
   - 19. Oct. 2024 - 04. Nov. 2024
   - Noise Monitor is 6 m from the source of the noise (track)
   - Sensitive Receiver is 46 m from the source of the noise (track)

f. NCA 01 - (HEX630) 25m NE of 29 Leofrene Ave, Marrickville.
   - 19. Oct. 2024 - 04. Nov. 2024)
   - Noise Monitor is 10 m from the source of the noise
   - Sensitive Receiver is 15 m from the source of the noise

g. NCA 02 - (HEX623) 11m N of 51A Ewart Lane, Dulwich Hill.
   - 19. Oct. 2024 - 04. Nov. 2024
   - Noise Monitor is 17 m from the source of the noise
   - Sensitive Receiver is 17 m from the source of the noise

h. NCA 02 - (HEX649) 11m N of 81 Ewart Street, Dulwich Hill.
   - 19. Oct. 2024 - 04. Nov. 2024
   - Noise Monitor is 7 m from the source of the noise
   - Sensitive Receiver is 18 m from the source of the noise

i. NCA 01 – (HEX615) 10m NE from 17 Warburton St, Marrickville
   - 02. Oct. 2024 - 04. Nov. 2024
   - Noise Monitor is 16 m from the source of the noise
   - Sensitive Receiver is 26 m from the source of the noise

j. NCA 05 – (HEX631) 18m S from 32-24 Campsie St, Campsie
   - 02. Oct. 2024 - 03. Nov. 2024
   - Noise Monitor is 14 m from the source of the noise
   - Sensitive Receiver is 32 m from the source of the noise

Refer to **Appendix 1** for noise monitoring results.

4. Details of any exceedances of predicted noise levels;

Noise (LAeq 15min) data was collected at the 10 locations between the 19th of October 2024 to 04th of November 2024, all Out of Hour Works (OOHW) shift has been assessed.

During Final Conversion Stage-3 (19th of October 2024 to 04th of November 2024), there were no exceedances of the noise predictions generated from the JHLORJV construction activity.

5. Details of the noise and vibration mitigation measures that were implemented as specified in the relevant Construction Noise and Vibration Impact Assessment for the worksite

The following noise mitigation measures are implemented:

- Potential source noise controls include mufflers fitted to exhausts, regular maintenance of plant, acoustic enclosure of machinery on plant items, non-tonal reversing alarms fitted to plant.
- General monthly community notification.
- Specific notification to impacted residents were provided no later than 5 days out from start of possession.
- Additional mitigation measures such as Alternative Accommodation and Respite Offers.
- Use of real time noise monitors at targeted work locations. Periodic desk top checks on data collected by the 10 real time monitoring instruments were carried out during work periods.
- Environmental surveillance
- On site mitigation instructions to crews:
    - No music, no dropping of objects
    - No shouting or unnecessary noise
    - Be respectful of neighbors when coming and going from site. As far as possible, avoid congregating near residential property boundaries.
    - Position plant as far from residents as possible and orientate them if possible, to emit noise on non-resident side.
    - Plant to be switched off when not in use.

6. The justification required under L5.6 for the carrying out of works outside of standard construction hours in L5.1.

The works carried out on Final Conversion Stage-3 could only be safely conducted during a rail possession due to works occurring within the rail corridor/danger zone. Works were completed in accordance with EPL Condition L5.6 (Local Possession). Carrying out the construction activities during standard construction hours (specified in L5.1) would cause unacceptable risks to construction personnel safety; rail passenger and railways personnel safety and railway network

operational reliability.

Construction activities occurring within the rail corridor/danger zone can only be safely conducted during a rail possession during the absence of trains.

All feasible and reasonable at-source noise controls were implemented in accordance with Condition L4.1, and noise mitigation measures were implemented in accordance with JHLORJV's CNVIS and Interim Construction Noise Guideline (DECC 2009).

R4.4 (b) The validation report must be submitted to the EPA fortnightly from the commencement of the works permitted by L5.6 & L5.7 by no later than 2 business days from the end of each fortnight.

This R4.4 Validation report has been submitted to EPA by no later than two business days after the end of the fortnight.

Attachment 1 – Noise Monitoring Results

- Monitoring Result
- Monitoring Location

Table 1. Monitoring Location A: NCA 07 - (HEX531) 4m E of 1 Hall St, Belmore

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	19/10/2024 To 20/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	64	71	YES	• RBL: 35 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	20/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			69	71		• RBL: 41 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Day shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
3	20/10/2024 To 21/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			50	71		• RBL: 35 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
4	21/10/2024 To 22/10/2024				No Work Within 200m			
5	22/10/2024 To 23/10/2024							
6	23/10/2024 To 24/10/2024							
7	24/10/2024 To 25/10/2024				63	66	YES	• RBL: 35 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
8	25/10/2024 To 26/10/2024				52	66		
9	26/10/2024 To 27/10/2024				No Work Within 200m			
10	27/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			51	71	YES	• RBL: 41 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Day shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
11	27/10/2024 To 28/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			No Work Within 200m			
12	28/10/2024 To 29/10/2024							
13	29/10/2024 To 30/10/2024							
14	30/10/2024 To 31/10/2024							
15	31/10/2024 To 01/11/2024							
16	01/11/2024 To 02/11/2024							
17	02/11/2024 To 03/11/2024				61	72	YES	• RBL: 35 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
18	03/11/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			69	71		• RBL: 41 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Day shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
19	03/11/2024 To 04/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00			66	72		• RBL: 35 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**

Table 2. Monitoring Location B: NCA 08 - (HEX328) 26m S of 27 Dennis St, Lakemba

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	19/10/2024 To 20/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			No Work Within 200m			
2	20/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			• Highest ambient LAeq in period at Monitoring Location is 70 • Excluding the following non-construction related event being identified: 20/10/2024 13:45 Urban Siren 56 20/10/2024 15:15 Animal Activity 62 20/10/2024 15:30 Animal Activity 56 20/10/2024 16:45 Animal Activity 70 20/10/2024 17:00 Urban Traffic 57 20/10/2024 18:15 Urban Siren 56 • Construction related LAeq in period at Monitoring Location is 55	55	**YES**	• RBL: 47 dBA • Noise monitor detect highest LAeq15min value related to construction matched predictions. • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
3	20/10/2024 To 21/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	No Work Within 200m			
4	21/10/2024 To 22/10/2024							
5	22/10/2024 To 23/10/2024							
6	23/10/2024 To 24/10/2024							
7	24/10/2024 To 25/10/2024							
8	25/10/2024 To 26/10/2024							
9	26/10/2024 To 27/10/2024							
10	27/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00						
11	27/10/2024 To 28/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)						
12	28/10/2024 To 29/10/2024							
13	29/10/2024 To 30/10/2024							
14	30/10/2024 To 31/10/2024							
15	31/10/2024 To 01/11/2024							
16	01/11/2024 To 02/11/2024							
17	02/11/2024 To 03/11/2024							
18	03/11/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00						
19	03/11/2024 To 04/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00						

Table 3. Monitoring Location C: NCA 10 - (HEX421) 65m S of 37 Urunga Parade, Punchbowl

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	19/10/2024 To 20/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	• Highest ambient LAeq in period at Monitoring Location is 56 • Excluding the following non-construction related event being identified: 19/10/2024 22:30 Urban Traffic 56 19/10/2024 23:15 Urban Traffic 55 20/10/2024 0:45 Urban Traffic 55 20/10/2024 5:30 Urban Traffic 55 • Construction related LAeq in period at Monitoring Location is 53	53	Yes	• RBL: 41 dBA • Noise monitor detect highest LAeq15min value related to construction matched predictions. • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
2	20/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			• Highest ambient LAeq in period at Monitoring Location is 63 • Due to the monitoring location being 11 m from the source of the noise and sensitive receiver being 54 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 49.	53		• **RBL**: 47 dBA • The calculated construction related highest LAeq in work period (49 dBA) is lower than the predicted level (53 dBA) • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
3	20/10/2024 To 21/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			• Highest ambient LAeq in period at Monitoring Location is 58 • Excluding the following non-construction related event being identified: 21/10/2024 1:00 Aircraft 58 21/10/2024 6:15 Urban Traffic 55 21/10/2024 6:30 Urban Traffic 54 21/10/2024 6:45 Urban Traffic 57 • Construction related LAeq in period at Monitoring Location is 54 • Due to the monitoring location being 11 m from the source of the noise and sensitive receiver being 54 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 40.	53		• RBL: 41 dBA • The calculated construction related highest LAeq in work period (40 dBA) is lower than the predicted level (53 dBA). • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
4	21/10/2024 To 22/10/2024				• Highest ambient LAeq in period at Monitoring Location is 59 • Excluding the following non-construction related event being identified: 21/10/2024 23:30 Urban Traffic 59 • Construction related LAeq in period at Monitoring Location is 56 • Due to the monitoring location being 11 m from the source of the noise and sensitive receiver being 54 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 42.	53		• RBL: 41 dBA • The calculated construction related highest LAeq in work period (42 dBA) is lower than the predicted level (53 dBA). • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
5	22/10/2024 To 23/10/2024				No Work Within 200m			
6	23/10/2024 To 24/10/2024							
7	24/10/2024 To 25/10/2024				58	63	Yes	• RBL: 41 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
8	25/10/2024 To 26/10/2024				56	63		
9	26/10/2024 To 27/10/2024				No Work Within 200m			
10	27/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			62	62	Yes	• RBL: 47 dBA • Noise monitor detect highest LAeq15min value matches predictions. • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
11	27/10/2024 To 28/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			No Work Within 200m			
12	28/10/2024 To 29/10/2024							
13	29/10/2024 To 30/10/2024				55	63	Yes	• RBL: 41 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
14	30/10/2024 To 31/10/2024				55	63		
15	31/10/2024 To 01/11/2024				55	63		
16	01/11/2024 To 02/11/2024				60	63		
17	02/11/2024 To 03/11/2024				62	63		
18	03/11/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			60	62		• RBL: 47 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
19	03/11/2024 To 04/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00			56	63		• RBL: 41 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**

Table 4. Monitoring Location D: NCA 12 - (HEX516) 135m NW of 196 South Terrace, Bankstown

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	19/10/2024 To 20/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	No Work Within 200m			
2	20/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00						
3	20/10/2024 To 21/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)						
4	21/10/2024 To 22/10/2024							
5	22/10/2024 To 23/10/2024							
6	23/10/2024 To 24/10/2024							
7	24/10/2024 To 25/10/2024				• Highest ambient LAeq in period at Monitoring Location is 67 • Excluding the following non-construction related event being identified: 24/10/2024 22:45 Urban Traffic 64 25/10/2024 6:00 Urban Traffic 64 25/10/2024 6:15 Urban Traffic 67 25/10/2024 6:30 Urban Traffic 64 • Construction related LAeq in period at Monitoring Location is 63 • Due to the monitoring location being 13 m from the source of the noise and sensitive receiver being 128 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 43.	51	**Yes**	• RBL: 42 dBA • The calculated construction related highest LAeq in work period (43 dBA) is lower than the predicted level (51 dBA). • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
8	25/10/2024 To 26/10/2024							
9	26/10/2024 To 27/10/2024							
10	27/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			No Work Within 200m			
11	27/10/2024 To 28/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)						
12	28/10/2024 To 29/10/2024							
13	29/10/2024 To 30/10/2024							
14	30/10/2024 To 31/10/2024							
15	31/10/2024 To 01/11/2024							
16	01/11/2024 To 02/11/2024							
17	02/11/2024 To 03/11/2024							
18	03/11/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00						
19	03/11/2024 To 04/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00						

Table 5. Monitoring Location E: NCA 12 - (HEX618) 40m NW of 2 West Terrace, Bankstown

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	19/10/2024 To 20/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	No Work Within 200m			
2	20/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			• Highest ambient LAeq in period at Monitoring Location is 69 • Excluding the following non-construction related event being identified: 20/10/2024 21:45 Urban Traffic 69 • Construction related LAeq in period at Monitoring Location is 67	67	**Yes**	• RBL: 54 dBA • Noise monitor detect highest LAeq15min value related to construction matched predictions. • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
3	20/10/2024 To 21/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			No Work Within 200m			
4	21/10/2024 To 22/10/2024							
5	22/10/2024 To 23/10/2024							
6	23/10/2024 To 24/10/2024							
7	24/10/2024 To 25/10/2024				• Highest ambient LAeq in period at Monitoring Location is 67 • Excluding the following non-construction related event being identified: 25/10/2024 5:45 Urban Traffic 62 25/10/2024 6:00 Urban Traffic 64 25/10/2024 6:15 Urban Traffic 65 25/10/2024 6:30 Urban Traffic 63 25/10/2024 6:45 Urban Traffic 62 • Construction related LAeq in period at Monitoring Location is 62 • Due to the monitoring location being 6 m from the source of the noise and sensitive receiver being 46 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 44.	53	**Yes**	• RBL: 42 dBA • The calculated construction related highest LAeq in work period (44 dBA) is lower than the predicted level (53 dBA). • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
8	25/10/2024 To 26/10/2024				No Work Within 200m			
9	26/10/2024 To 27/10/2024							
10	27/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			• Highest ambient LAeq in period at Monitoring Location is 70 • Due to the monitoring location being 6 m from the source of the noise and sensitive receiver being 46 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 52.	69	**Yes**	• RBL: 54 dBA • The calculated construction related highest LAeq in work period (52 dBA) is lower than the predicted level (69 dBA). • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
11	27/10/2024 To 28/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			No Work Within 200m			
12	28/10/2024 To 29/10/2024							
13	29/10/2024 To 30/10/2024							
14	30/10/2024 To 31/10/2024							
15	31/10/2024 To 01/11/2024							
16	01/11/2024 To 02/11/2024							
17	02/11/2024 To 03/11/2024							
18	03/11/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00						
19	03/11/2024 To 04/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00						

Table 6. Monitoring Location F: NCA 01 - (HEX630) 25m NE of 29 Leofrene Ave, Marrickville.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	19/10/2024 To 20/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			No Work Within 200m			
2	20/10/2024	Day 08:00 to 18:00 Evening 18:00 to 22:00						
3	20/10/2024 To 21/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)						
4	21/10/2024 To 22/10/2024							
5	22/10/2024 To 23/10/2024							
6	23/10/2024 To 24/10/2024							
7	24/10/2024 To 25/10/2024							
8	25/10/2024 To 26/10/2024							
9	26/10/2024 To 27/10/2024			• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane				
10	27/10/2024	Day 08:00 to 18:00 Evening 18:00 to 22:00						
11	27/10/2024 To 28/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)						
12	28/10/2024 To 29/10/2024		General track related construction activities		• Highest ambient LAeq in period at Monitoring Location is 71 • Excluding the following non-construction related event being identified: 29/10/2024 1:30 ARTC Train 68 29/10/2024 5:00 ARTC Train 71 • Construction related LAeq in period at Monitoring Location is 66 • Due to the monitoring location being10 m from the source of the noise and sensitive receiver being 15 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 62.	58	Yes	• RBL: 33 dBA • The calculated construction related highest LAeq in work period (62 dBA) is higher than the predicted level (58 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Actual noise levels (Night shift works) in this area did not trigger offers above the Respite limit.** • **No further additional mitigation measures required.**
13	29/10/2024 To 30/10/2024				• Highest ambient LAeq in period at Monitoring Location is 68 • Excluding the following non-construction related event being identified: 30/10/2024 4:30 ARTC Train 68 30/10/2024 6:15 ARTC Train 67 • Construction related LAeq in period at Monitoring Location is 67 • Due to the monitoring location being10 m from the source of the noise and sensitive receiver being 15 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 63.			• RBL: 33 dBA • The calculated construction related highest LAeq in work period (63 dBA) is higher than the predicted level (58 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Actual noise levels (Night shift works) in this area did not trigger offers above the Respite limit.** • **No further additional mitigation measures required.**
14	30/10/2024 To 31/10/2024				• Highest ambient LAeq in period at Monitoring Location is 71 • Excluding the following non-construction related event being identified: 30/10/2024 22:15 ARTC Train 71 31/10/2024 0:00 ARTC Train 68 31/10/2024 0:15 ARTC Train 68 31/10/2024 1:45 ARTC Train 69 31/10/2024 5:45 ARTC Train 67 • Construction related LAeq in period at Monitoring Location is 67 • Due to the monitoring location being10 m from the source of the noise and sensitive receiver being 15 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 63.			• RBL: 33 dBA • The calculated construction related highest LAeq in work period (63 dBA) is higher than the predicted level (58 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Actual noise levels (Night shift works) in this area did not trigger offers above the Respite limit.** • **No further additional mitigation measures required.**
15	31/10/2024 To 01/11/2024				• Highest ambient LAeq in period at Monitoring Location is 69 • Excluding the following non-construction related event being identified: 31/10/2024 23:30 ARTC Train 64 1/11/2024 1:45 ARTC Train 65 1/11/2024 2:00 ARTC Train 67 1/11/2024 2:30 ARTC Train 64 1/11/2024 3:30 ARTC Train 66 1/11/2024 4:45 ARTC Train 63 1/11/2024 5:15 ARTC Train 69 1/11/2024 6:30 ARTC Train 65 • Construction related LAeq in period at Monitoring Location is 63 • Due to the monitoring location being10 m from the source of the noise and sensitive receiver being 15 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 59.			• RBL: 33 dBA • The calculated construction related highest LAeq in work period (59 dBA) is higher than the predicted level (58 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Actual noise levels (Night shift works) in this area did not trigger offers above the Respite limit.** • **No further additional mitigation measures required.**

16	01/11/2024 To 02/11/2024				No Work Within 200m
17	02/11/2024 To 03/11/2024				
18	03/11/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			
19	03/11/2024 To 04/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00			

Table 7. Monitoring Location G: NCA 02 - (HEX623) 11m N of 51A Ewart Lane, Dulwich Hill

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	19/10/2024 To 20/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	No Work Within 200m			
2	20/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			63	76	**Yes**	• RBL: 38 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Day shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
3	20/10/2024 To 21/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			No Work Within 200m			
4	21/10/2024 To 22/10/2024							
5	22/10/2024 To 23/10/2024							
6	23/10/2024 To 24/10/2024							
7	24/10/2024 To 25/10/2024							
8	25/10/2024 To 26/10/2024							
9	26/10/2024 To 27/10/2024							
10	27/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			63	76	**Yes**	• RBL: 38 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Day shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
11	27/10/2024 To 28/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			No Work Within 200m			
12	28/10/2024 To 29/10/2024							
13	29/10/2024 To 30/10/2024							
14	30/10/2024 To 31/10/2024							
15	31/10/2024 To 01/11/2024							
16	01/11/2024 To 02/11/2024							
17	02/11/2024 To 03/11/2024							
18	03/11/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			73	76	**Yes**	• RBL: 38 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Day shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
19	03/11/2024 To 04/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00			No Work Within 200m			

Table 8. Monitoring Location H: NCA 02 - (HEX649) 11m N of 81 Ewart Street, Dulwich Hill

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	19/10/2024 To 20/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane				
2	20/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			• Highest ambient LAeq in period at Monitoring Location is 66 • Excluding the following non-construction related event being identified: 20/10/2024 7:45 ARTC Train 73 20/10/2024 7:45 ARTC Train 73 20/10/2024 18:30 ARTC Train 71 20/10/2024 18:45 ARTC Train 71 20/10/2024 19:00 ARTC Train 76 20/10/2024 19:30 ARTC Train 72 20/10/2024 20:00 ARTC Train 69 • Construction related LAeq in period at Monitoring Location is 69 • Due to the monitoring location being 7 m from the source of the noise and sensitive receiver being 18 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 61.	63	**Yes**	• RBL: 38 dBA • The calculated construction related highest LAeq in work period (61 dBA) is lower than the predicted level (63 dBA). • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
3	20/10/2024 To 21/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)						
4	21/10/2024 To 22/10/2024							
5	22/10/2024 To 23/10/2024							
6	23/10/2024 To 24/10/2024							
7	24/10/2024 To 25/10/2024							
8	25/10/2024 To 26/10/2024							
9	26/10/2024 To 27/10/2024							
10	27/10/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00						
11	27/10/2024 To 28/10/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)						
12	28/10/2024 To 29/10/2024							
13	29/10/2024 To 30/10/2024							
14	30/10/2024 To 31/10/2024							
15	31/10/2024 To 01/11/2024							
16	01/11/2024 To 02/11/2024							
17	02/11/2024 To 03/11/2024							
18	03/11/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00			• Highest ambient LAeq in period at Monitoring Location is 78 • An Excavator identified idling adjacent to the noise mointor • Due to the monitoring location being 2 m from the source of the noise and sensitive receiver being 7.5 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 61.	68	**Yes**	• RBL: 38 dBA • The calculated construction related highest LAeq in work period (61 dBA) is lower than the predicted level (68 dBA). • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
19	03/11/2024 To 04/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00						

Table 9. Monitoring Location I: NCA 01 – (HEX615) 10m NE from 17 Warburton St, Marrickville

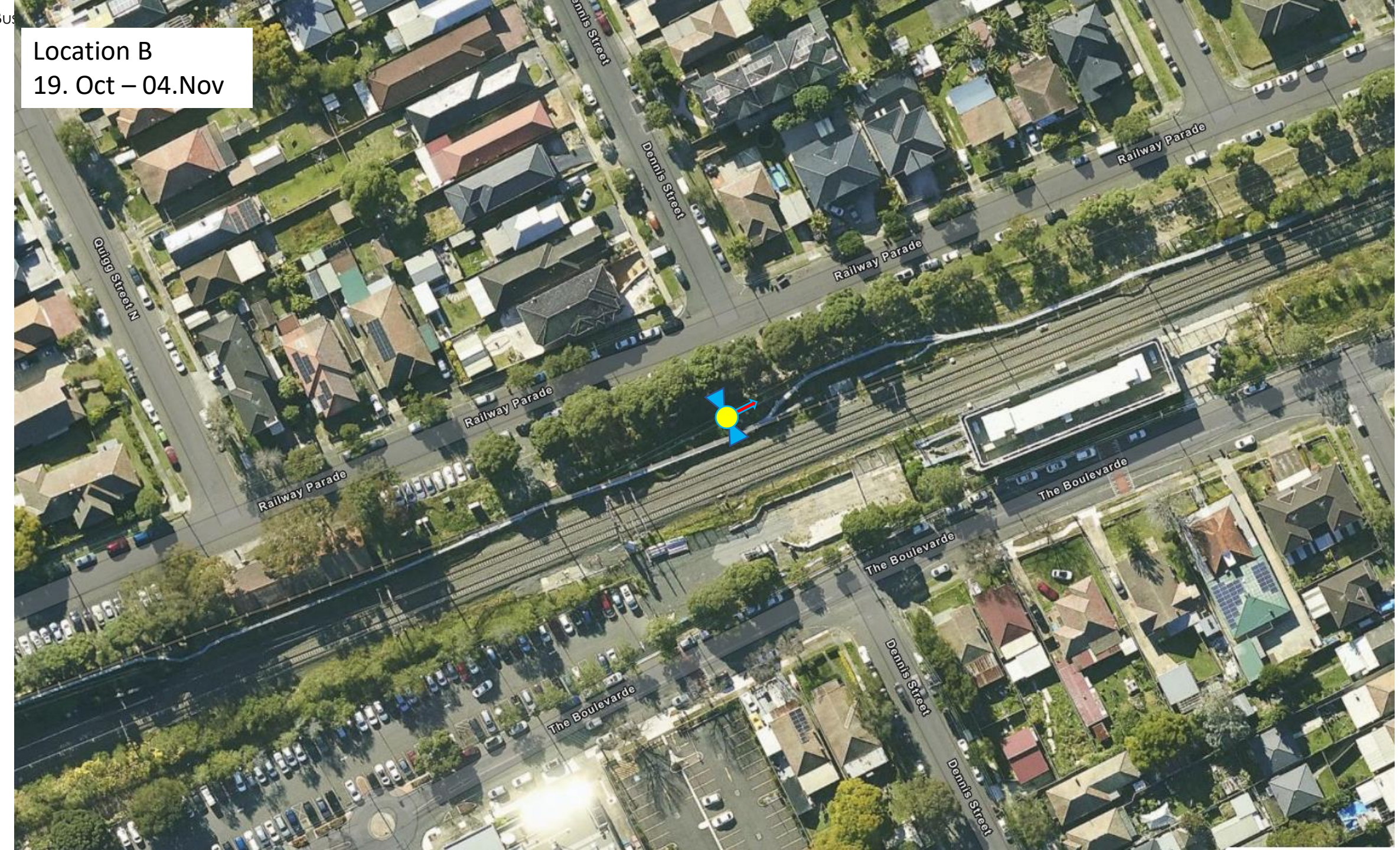
Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	3/11/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	63	64		• RBL: 38 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**

Table 10. Monitoring Location J: NCA 05 – (HEX631) 18m S from 32-24 Campsie St, Campsie

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	3/11/2024	Day 08:00 to 18:00 & Evening 18:00 to 22:00	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	• Highest ambient LAeq in period at Monitoring Location is 56 • Excluding the following non-construction related event being identified: 3/11/2024 7:45 ARTC Train 65 3/11/2024 12:30 Human Activity 71 3/11/2024 14:00 ARTC Train 65 3/11/2024 18:30 ARTC Train 66 3/11/2024 21:00 ARTC Train 64 • Construction related LAeq in period at Monitoring Location is 61	63		• RBL: 38 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**


Location A
19. Oct – 04.Nov
Campsie Street
Adelaide Street
Cecilia Street
Etela Street
Hall Street
Lark Street
Isabel Street
Sudbury Street
Redman Parade
Belmore Sportsground
Loftus Stree
Loch Street
Claremont Street
Hall Street

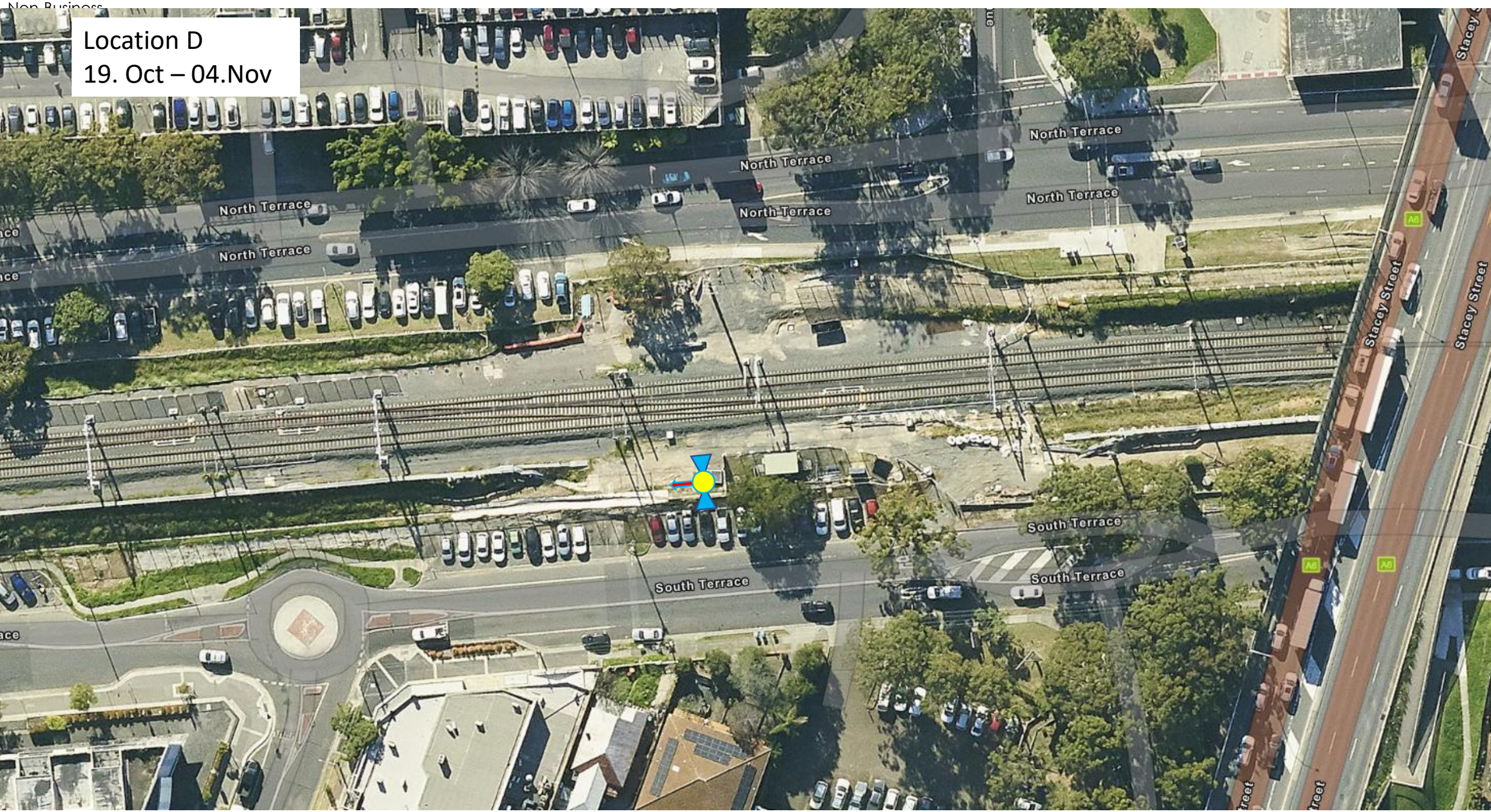
Non-Bus


Location B
19. Oct – 04.Nov
Dennis Street
Railway Parade
Quigg Street N
Railway Parade
Railway Parade
Railway Parade
The Boulevarde
The Boulevarde
The Boulevarde
Dennis Street
Dennis Street

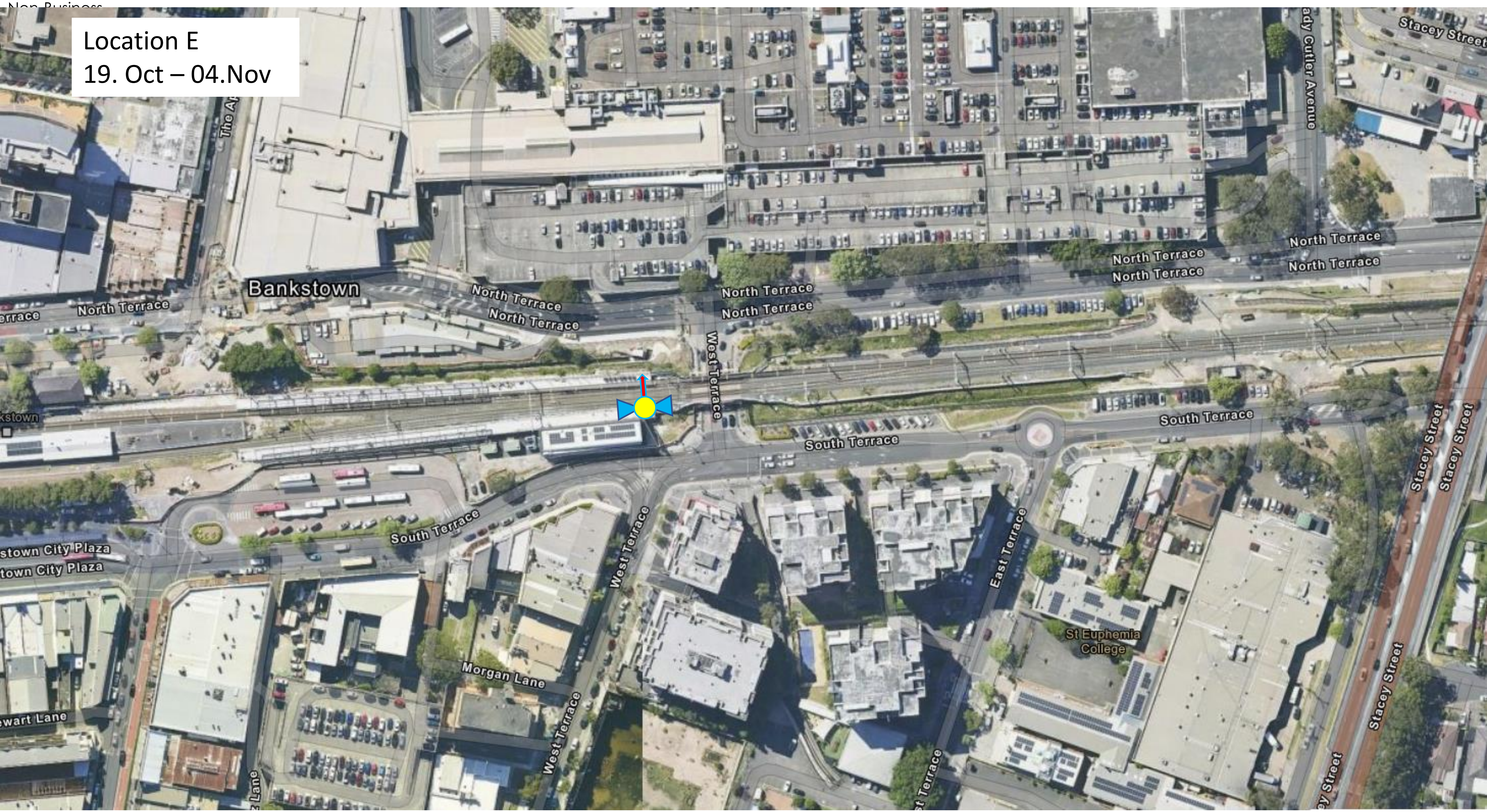
Non-Bu


Location C
19. Oct – 04.Nov
Rickard Street
Urunga Parade
Urunga Parade
Urunga Parade
Urunga Parade
Urunga Parade
Urunga Parade
The Boulevarde
The Boulevarde

Non Business



Location E
19. Oct – 04.Nov



Non-Bu


Location F
19. Oct – 04.Nov
Leofrene Avenue
Leofrene Avenue
Riverdale Avenue
Riverdale Avenue

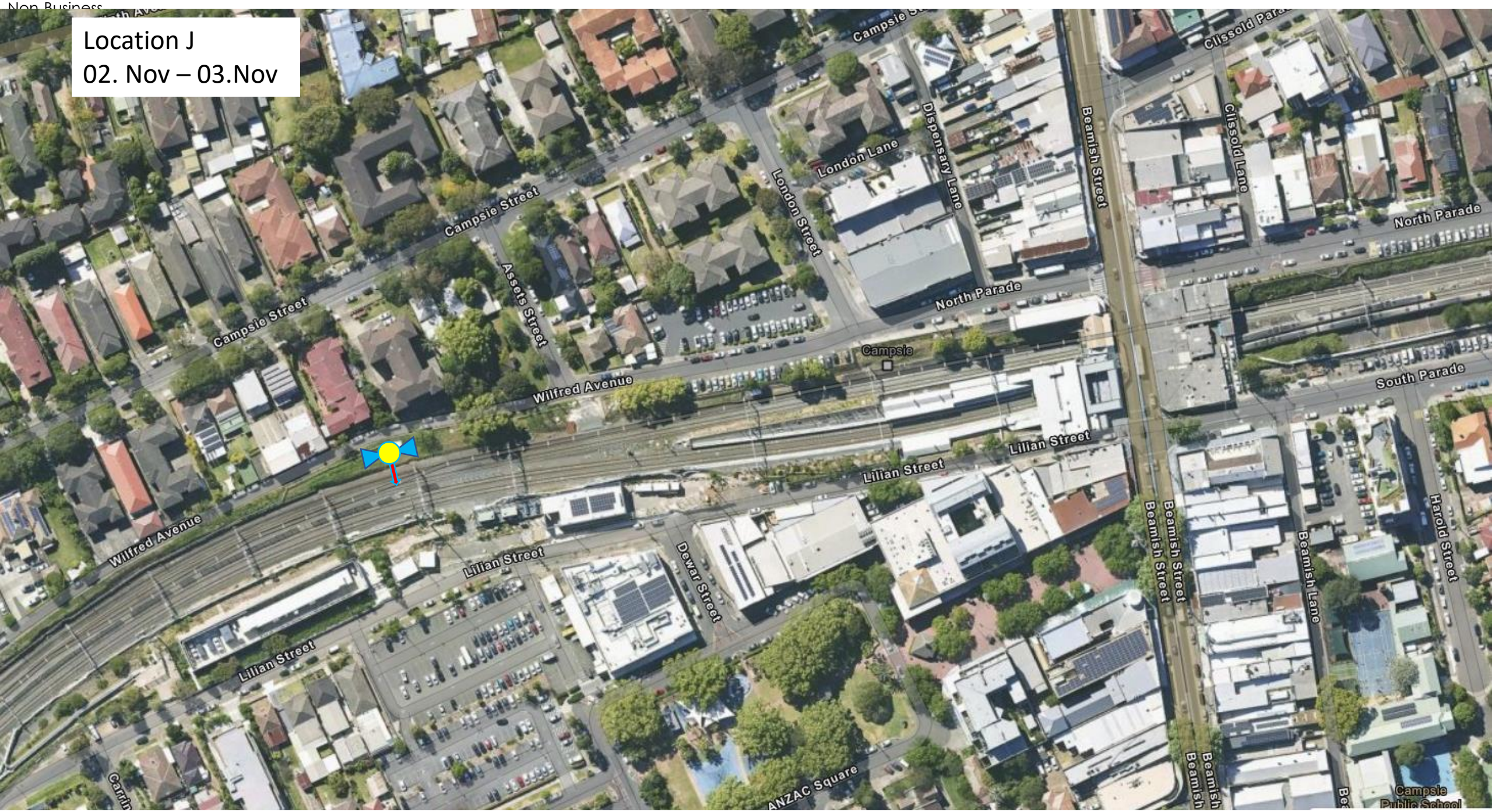
Non-Bu


Location G
19. Oct – 04.Nov
Keith Lane
Wardell Lane
Inner West Light Rail
Bedford Crescent
Wardell Road
Ewart Lane
Ewart Street
Dulwich Hill
Riverside Crescent
Dudley Street

Non-Business

Non Business

Location J
02. Nov – 03.Nov



EPL 21147
R4.4 Validation Report

SWMC WE18 Utility and Local Area Works

CCTV, Sewer Jetting and Road line marking

Document and Revision History

Document Details	
Title	R4.4 Validation Report
Client	Sydney Metro City & Southwest
JHLOR JV contract no.	K44

Revisions

Revision	Date	Description	Prepared by	Reviewed by
00	21 Nov 2024	Prepared for R4.4	Zhengyi Zhang	Lucas

Management reviews

Review date	Details	Reviewed by

Controlled: NO Copy no.: Uncontrolled: YES

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Introduction

This validation report has been prepared for out-of-hour works carried out over 7th to 8th November 2024 in Week 18 over one (1) nights of Utility Works under condition L5.7 – Local Area and Utility Works. The Utility works were undertaken at the following locations:

- CCTV and Jetting works at North of Sydenham Station on Railway Parade (No sensitive receiver with in 100m radius)
- CCTV and Jetting works at South of Sydenham Station on Burrows Ave close to Bolton St (5 m north-west of 30 Hogan Ave)
- Line remarking works at South of Sydenham Station on Bolton St close to Burrows Ave (16 m north of 30 Hogan Ave)

R4.4(a)

1. Confirmation that the equipment used to undertake the works was as specified in the relevant Construction Noise and Vibration Impact Assessment for the worksite

The assessment prepared for the works included modelling for the following plant and equipment:

- Vacuum Truck
- Skid-steer loader with grinder attachment.

2. A copy of the community notification required under Condition L5.12

A copy of the community notification required under Condition L5.12 This is appended as Attachment 2.

3. Noise monitoring as required by L5.8(d)

Week 18 Night utility works attended noise monitoring was carried out adjacent to 30 Hogan Ave, Sydenham during shifts on 7th November 2024. Please refer to Attachment 1 – Noise Monitoring below for results of noise monitoring.

4. Details of any exceedances of predicted noise levels;

Two (2) round of attended monitoring sessions has been carried out for CCTV jetting and line remarking works.

Attended noise monitoring has been carried out adjacent to 30 Hogan Ave. The predicted LAeq15min value is 77 dBA. The highest LAeq15min recorded below (with background Sydney Train noise):

- Line remarking works at South of Sydenham Station on Bolton St close to Burrows Ave: 72 dBA
- CCTV and Jetting works at South of Sydenham Station on Burrows Ave close to Bolton St: 76 dBA

No exceedance was recorded during attended monitoring sessions during the works on 7th November 2024, with reference to Attachment 1 – Noise Monitoring validated the predictions.

5. **Details of the noise and vibration mitigation measures that were implemented as specified in the relevant Construction Noise and Vibration Impact Assessment for the worksite**

The mitigation measures that were implemented included:

- The Engineer in charge of the works briefed the works team on the OOHW.
- Works occur within the hours agreed in the OOHW in accordance with the Road Occupancy License (ROL)
- All plant positioned so that the exhaust (or noisiest side of the plant) is pointing away from sensitive receivers, where possible.
- The engine of any plant is to be turned off when not in use
- Workers are not to shout, slam doors, drop objects or make any other unnecessary noise
- Workers are to be mindful of residents when mobilizing and demobilizing

Additional mitigation measures in accordance with the Sydney Metro Construction Noise and Vibration Strategy were implemented which included:

- Letter box drops
- Attended noise monitoring
- Respite for receivers with potential noise exceedance of over 20dB and alternative accommodation offered for receivers with potential noise exceedance of over 30dB.

6. **The justification required under L5.7 for the carrying out of works outside of standard construction hours in L5.1.**

The works carried out during the night period was carried under condition L5.7(a)(iv) - Local Area and Utility Works Possessions. Due to high daytime traffic volumes on Railway Parade, Bolton St and Burrows Ave. Transport For NSW (the road authority in this area) has only approved Road Occupancy Licence (ROL) to JHLOR to conduct these activities at night as it minimizes disruptions to traffic, pedestrians and community as a whole. The Local Traffic Committee (Council, Fire, Police & Ambos) have endorsed the traffic plan for the activity.

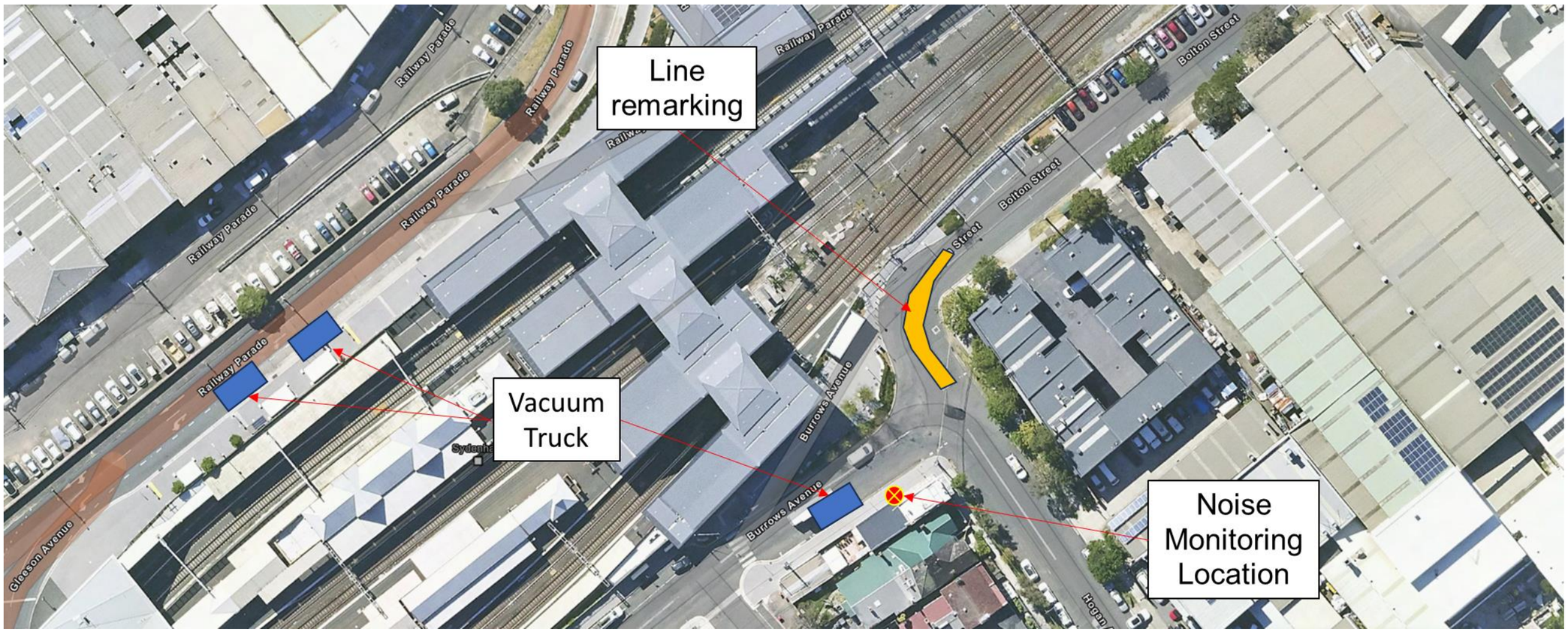
All feasible and reasonable at-source noise controls were implements in accordance with Condition L4.1, and noise mitigation measures were implemented in accordance with JHLORJV's CNVIS and Interim Construction Noise Guideline (DECC 2009).

R4.4 (b) The validation report must be submitted to the EPA fortnightly from the commencement of the works permitted by L5.6 & L5.7 by no later than 2 business days from the end of each fortnight.

This R4.4 Validation report has been submitted to EPA by no later than two business days after the end of the fortnight.

Attachment 1 – Noise Monitoring

Reference Number	Monitoring Location (Address)	Attended or Continuous	Weather	Date	Time (hrs)	Construction Activities	Main source of noise	Highest LAeq 15min in work period	Period	Predicted noise level LAeq,15min	Compliant	Comments
1	North wall of 30 Hogan Ave	Attended	Good	07/11/2024	22:15 to 22:30	Road surface grinding Line remarking	Skid-steer loader with grinder attachment	72	Night	77	Yes	RBL: 42 Highest LAeq15min value of 72 dBA due to general construction noise between the hours of 22:15 to 22:30 as approved in the ROL. Prediction of LAeq15min 77dBA validated. Respite and alternate accommodation provided to residents.
2					22:36 to 22:51	CCTV Jetting	Vacuum Truck	76				RBL: 42 Highest LAeq15min value of 76 dBA due to general construction noise between the hours of 22:36 to 22:51 as approved in the ROL. Prediction of LAeq15min 77dBA validated. Respite and alternate accommodation provided to residents.



EPL 21147
R4.4 Validation Report

SWMC Final Conversion Stage-3
(04. Nov. 2024 - 17. Nov. 2024)

Track tamping, Track adjustment, Track grinding, Marrickville track sewer upgrade, Victoria Transom Rail Bridge upgrade, Track side signal equipment demolition; Cabling and Trackside Equipment.

Document and Revision History

Document Details	
Title	R4.4 Validation Report
Client	Sydney Metro City & Southwest
JHLOR JV contract no.	K44

Revisions

Revision	Date	Description	Prepared by	Reviewed by
00	29/11/2024	Prepared for R4.4	Zhengyi Zhang	Lucas Dobrolot

Management reviews

Review date	Details	Reviewed by

Controlled:	NO	Copy no.:	Uncontrolled:	YES

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Introduction

This validation report has been prepared in accordance with EPL 21147 Condition R4.4 for out-of-hour works carried out over from 04th November 2024 to 17th November 2024 during the Final Conversion Stage-3 Rail Possession.

The possession extended from Sydenham Station to Bankstown Station on Sydney Train track.

The following activities were carried under condition L5.6 - Local Possessions;

- Track tamping,
- Track adjustment,
- Track grinding,
- Marrickville track sewer upgrade,
- Victoria Transom Rail Bridge upgrade,
- Track side signal equipment demolition,
- Cabling and Trackside Equipment.

Refer to **Attachment 1** for monitoring results.

R4.4(a) For activities permitted under Condition L5.6 & L5.7, a validation report must be submitted to the EPA that includes the following detail:

1. Confirmation that the equipment used to undertake the works was as specified in the relevant Construction Noise and Vibration Impact Assessment for the worksite

The assessment prepared for the works included modelling for the following plant and equipment:

- Excavators 3T, 6 and13T (inc jack hammer, augering and demolition attachments)
- Balloon tyre dump trucks (Hydrema)
- Light vehicles
- Trucks
- Payloader
- Handheld powered tools
- Vac Trucks
- EWP/telehandler
- Front-end loader
- Concrete truck and line pump
- Portable Generators
- Compressors
- Compactor
- Bogie
- Water pumps
- 4T Dumpy
- Site lights
- Mobile crane
- Taper
- Regulator
- Track grinder
- Track thermos-welding kit

2. A copy of the community notification required under Condition L5.12

A copy of the community notification required under Condition L5.12 is appended as **Attachment 2**.

3. Noise monitoring as required by L5.8(d)

Final Conversion Stage-3 (19. Oct. 2024 - 04. Nov. 2024) noise monitoring was carried out at 10 locations on the perimeter of the rail corridor.

All monitoring locations are closer to the source of the noise than the nearest sensitive receiver.

Note: calculation will be done where the noise at monitoring location exceeds the predicted level at the nearest sensitive receiver.

Monitoring locations listed below:

a. NCA 01 - (HEX630) 25m NE of 29 Leofrene Ave, Marrickville.
   - Noise Monitor is 99 m from the source of the noise
   - Sensitive Receiver is 101 m from the source of the noise
b. NCA 01 – (HEX615) 10m NE from 17 Warburton St, Marrickville
   - Noise Monitor is 16 m from the source of the noise
   - Sensitive Receiver is 26 m from the source of the noise
c. NCA 02 - (HEX623) 11m N of 51A Ewart Lane, Dulwich Hill.
   - Noise Monitor is 20 m from the source of the noise
   - Sensitive Receiver is 32 m from the source of the noise
d. NCA 02 - (HEX649) 11m N of 81 Ewart Street, Dulwich Hill.
   - Noise Monitor is 6 m from the source of the noise
   - Sensitive Receiver is 33 m from the source of the noise
e. NCA 07 - (HEX531) 4m E of 1 Hall St, Belmore.
   - Noise Monitor is 1 m from the source of the noise
   - Sensitive Receiver is 4 m from the source of the noise
f. NCA 08 - (HEX328) 26m S of 27 Dennis St, Lakemba.
   - Noise Monitor is 30 m from the source of the noise
   - Sensitive Receiver is 55 m from the source of the noise
g. NCA 10 - (HEX421) 65m S of 37 Urunga Parade, Punchbowl.
   - Noise Monitor is 11 m from the source of the noise
   - Sensitive Receiver is 54 m from the source of the noise

Refer to **Appendix 1** for noise monitoring results.

4. Details of any exceedances of predicted noise levels;

Noise (LAeq 15min) data was collected at the 7 locations between the 04th of November 2024 to 17th of November 2024, all Out of Hour Works (OOHW) shift has been assessed.

During Final Conversion Stage-3 (04th of November 2024 to 17th of November 2024), there were no exceedances of the noise predictions generated from the JHLORJV construction activity.

5. Details of the noise and vibration mitigation measures that were implemented as specified in the relevant Construction Noise and Vibration Impact Assessment for the worksite

The following noise mitigation measures are implemented:

- Potential source noise controls include mufflers fitted to exhausts, regular maintenance of plant, acoustic enclosure of machinery on plant items, non-tonal reversing alarms fitted to plant.
- General monthly community notification.
- Specific notification to impacted residents were provided no later than 5 days out from start of possession.
- Additional mitigation measures such as Alternative Accommodation and Respite Offers.
- Use of real time noise monitors at targeted work locations. Periodic desk top checks on data collected by the 7 real time monitoring instruments were carried out during work periods.
- Environmental surveillance
- On site mitigation instructions to crews:
    - No music, no dropping of objects
    - No shouting or unnecessary noise
    - Be respectful of neighbors when coming and going from site. As far as possible, avoid congregating near residential property boundaries.
    - Position plant as far from residents as possible and orientate them if possible, to emit noise on non-resident side.
    - Plant to be switched off when not in use.

6. The justification required under L5.6 for the carrying out of works outside of standard construction hours in L5.1.

The works carried out on Final Conversion Stage-3 could only be safely conducted during a rail possession due to works occurring within the rail corridor/danger zone. Works were completed in accordance with EPL Condition L5.6 (Local Possession). Carrying out the construction activities during standard construction hours (specified in L5.1) would cause unacceptable risks to construction personnel safety; rail passenger and railways personnel safety and railway network operational reliability.

Construction activities occurring within the rail corridor/danger zone can only be safely conducted during a rail possession during the absence of trains.

All feasible and reasonable at-source noise controls were implemented in accordance with Condition L4.1, and noise mitigation measures were implemented in accordance with JHLORJV's CNVIS and Interim Construction Noise Guideline (DECC 2009).

R4.4 (b) The validation report must be submitted to the EPA fortnightly from the commencement of the works permitted by L5.6 & L5.7 by no later than 2 business days from the end of each fortnight.

This R4.4 Validation report has been submitted to EPA by no later than two business days after the end of the fortnight.

Attachment 1 – Noise Monitoring Results

- Monitoring Result
- Monitoring Location

Table 1. Monitoring Location A: NCA 01 - (HEX630) 25m NE of 29 Leofrene Ave, Marrickville.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	04/11/2024 To 05/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	• Highest ambient LAeq in period at Monitoring Location is 69 • Excluding the following non-construction related event being identified: 4/11/2024 22:30 67 ARTC Train 4/11/2024 23:15 62 ARTC Train 5/11/2024 0:00 65 ARTC Train 5/11/2024 0:30 68 ARTC Train Horn 5/11/2024 0:45 65 ARTC Train 5/11/2024 1:15 62 ARTC Train 5/11/2024 1:30 62 ARTC Train 5/11/2024 2:00 61 ARTC Train 5/11/2024 2:15 61 ARTC Train 5/11/2024 2:30 66 ARTC Train 5/11/2024 4:30 65 ARTC Train 5/11/2024 5:45 67 ARTC Train 5/11/2024 6:30 69 ARTC Train • Construction related LAeq in period at Monitoring Location is 61	65	Y	• RBL: 33 dBA • Noise monitor detect highest LAeq15min value related to construction below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
2	05/11/2024 To 06/11/2024				66	65	Y	• RBL: 33 dBA • Noise monitor detect highest LAeq15min value related to construction above predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Actual noise levels (Night shift works) in this area did not trigger offers above the Respite limit.** • **Appropriate mitigation measures being offered..** • **No further additional mitigation measures required.**
3	06/11/2024 To 07/11/2024				• Highest ambient LAeq in period at Monitoring Location is 69 • Excluding the following non-construction related event being identified: 6/11/2024 22:30 65 ARTC Train 6/11/2024 23:15 68 ARTC Train 7/11/2024 1:00 66 ARTC Train 7/11/2024 2:00 67 ARTC Train 7/11/2024 2:15 67 ARTC Train 7/11/2024 4:00 65 ARTC Train 7/11/2024 6:30 69 ARTC Train • Construction related LAeq in period at Monitoring Location is 65	65	Y	• RBL: 33 dBA • Noise monitor detect highest LAeq15min value related to construction matched predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
4	07/11/2024 To 08/11/2024				• Highest ambient LAeq in period at Monitoring Location is 73 • Excluding the following non-construction related event being identified: 7/11/2024 22:15 67 ARTC Train 7/11/2024 23:15 65 ARTC Train 8/11/2024 0:30 67 ARTC Train 8/11/2024 1:00 68 ARTC Train 8/11/2024 1:45 64 ARTC Train 8/11/2024 4:45 73 ARTC Train 8/11/2024 5:45 66 ARTC Train • Construction related LAeq in period at Monitoring Location is 61	65	Y	• RBL: 33 dBA • Noise monitor detect highest LAeq15min value related to construction below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
5	10/11/2024	Day 08:00 to 18:00			• Highest ambient LAeq in period at Monitoring Location is 71 • Excluding the following non-construction related event being identified: 10/11/2024 9:15 63 ARTC Train 10/11/2024 9:30 64 ARTC Train 10/11/2024 10:00 67 ARTC Train 10/11/2024 13:30 68 ARTC Train 10/11/2024 14:15 64 ARTC Train 10/11/2024 16:00 71 ARTC Train 10/11/2024 16:15 62 ARTC Train 10/11/2024 17:45 65 ARTC Train • Construction related LAeq in period at Monitoring Location is 58	61	Y	• RBL: 38 dBA • Noise monitor detect highest LAeq15min value related to construction below predictions. • **Predicted noise levels (Day shift works) in this area didn't trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**

Table 2. Monitoring Location B: NCA 01 – (HEX615) 10m NE from 17 Warburton St, Marrickville

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	04/11/2024 To 05/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	64	69	Y	• RBL: 33 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	05/11/2024 To 06/11/2024				65	69	Y	
3	06/11/2024 To 07/11/2024				63	69	Y	
4	07/11/2024 To 08/11/2024				• Highest ambient LAeq in period at Monitoring Location is 70 • Excluding the following non-construction related event being identified: 7/11/2024 23:30 66 ARTC Train 8/11/2024 1:45 70 ARTC Train 8/11/2024 5:45 69 ARTC Train • Construction related LAeq in period at Monitoring Location is 61	69	Y	• RBL: 33 dBA • Noise monitor detect highest LAeq15min value related to construction below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
5	10/11/2024	Day 08:00 to 18:00			65	70	Y	• RBL: 38 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Day shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**

Table 3. Monitoring Location C: NCA 02 - (HEX623) 11m N of 51A Ewart Lane, Dulwich Hill.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	04/11/2024 To 05/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Handheld powered and non-powered tools	• Highest ambient LAeq in period at Monitoring Location is 57 • Excluding the following non-construction related event being identified: 5/11/2024 1:45 57 ARTC Train • Construction related LAeq in period at Monitoring Location is 54	54	Y	• RBL: 33 dBA • Noise monitor detect highest LAeq15min value related to construction below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	05/11/2024 To 06/11/2024				• Highest ambient LAeq in period at Monitoring Location is 58 • Due to the monitoring location being 20 m from the source of the noise and sensitive receiver being 32 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 53.	54	Y	• RBL: 33 dBA • The calculated construction related highest LAeq in work period (53 dBA) is lower than the predicted level (54 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
3	06/11/2024 To 07/11/2024				57	65	Y	• RBL: 33 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
4	07/11/2024 To 08/11/2024				61	65	Y	
5	10/11/2024	Day 08:00 to 18:00			56	61	Y	• RBL: 38 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Day shift works) in this area didn't trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**

Table 4. Monitoring Location D: NCA 02 - (HEX649) 11m N of 81 Ewart Street, Dulwich Hill

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	04/11/2024 To 05/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Handheld powered and non-powered tools	• Highest ambient LAeq in period at Monitoring Location is 73 • Excluding the following non-construction related event being identified: 5/11/2024 1:15 71 ARTC Train 5/11/2024 1:45 71 ARTC Train 5/11/2024 2:00 73 ARTC Train 5/11/2024 5:30 71 ARTC Train 5/11/2024 6:00 68 ARTC Train 5/11/2024 6:30 71 ARTC Train • Construction related LAeq in period at Monitoring Location is 68 • Due to the monitoring location being 6 m from the source of the noise and sensitive receiver being 33 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 53.	55	Y	• RBL: 33 dBA • The calculated construction related highest LAeq in work period (53 dBA) is lower than the predicted level (55 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
2	05/11/2024 To 06/11/2024				• Highest ambient LAeq in period at Monitoring Location is 71 • Excluding the following non-construction related event being identified: 5/11/2024 23:00 69 ARTC Train 6/11/2024 0:00 67 ARTC Train 6/11/2024 0:45 71 ARTC Train 6/11/2024 1:00 68 ARTC Train 6/11/2024 1:15 70 ARTC Train 6/11/2024 2:30 71 ARTC Train 6/11/2024 4:45 69 ARTC Train • Construction related LAeq in period at Monitoring Location is 67 • Due to the monitoring location being 6 m from the source of the noise and sensitive receiver being 33 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 52.	55	Y	• RBL: 33 dBA • The calculated construction related highest LAeq in work period (52 dBA) is lower than the predicted level (55 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
3	06/11/2024 To 07/11/2024				• Highest ambient LAeq in period at Monitoring Location is 75 • Excluding the following non-construction related event being identified: 6/11/2024 23:15 70 ARTC Train 6/11/2024 23:30 68 ARTC Train 6/11/2024 23:45 63 ARTC Train 7/11/2024 0:15 72 ARTC Train 7/11/2024 0:45 72 ARTC Train 7/11/2024 1:30 59 ARTC Train 7/11/2024 2:00 71 ARTC Train 7/11/2024 2:15 70 ARTC Train 7/11/2024 2:30 68 ARTC Train 7/11/2024 3:30 69 ARTC Train 7/11/2024 4:00 75 ARTC Train 7/11/2024 4:30 71 ARTC Train 7/11/2024 5:15 64 ARTC Train 7/11/2024 6:15 67 ARTC Train 7/11/2024 6:30 70 Aircraft 7/11/2024 6:45 57 ARTC Train • Construction related LAeq in period at Monitoring Location is 51	54	Y	• RBL: 33 dBA • Noise monitor detect highest LAeq15min value related to construction below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
4	07/11/2024 To 08/11/2024				• Highest ambient LAeq in period at Monitoring Location is 73 • Excluding the following non-construction related event being identified: 7/11/2024 22:15 71 ARTC Train 7/11/2024 22:30 68 ARTC Train 7/11/2024 23:00 66 ARTC Train 7/11/2024 23:30 72 ARTC Train 7/11/2024 23:45 67 ARTC Train 8/11/2024 0:30 69 ARTC Train 8/11/2024 0:45 68 ARTC Train 8/11/2024 1:15 63 ARTC Train 8/11/2024 1:30 66 ARTC Train 8/11/2024 1:45 73 ARTC Train 8/11/2024 2:30 61 ARTC Train 8/11/2024 3:45 60 ARTC Train 8/11/2024 4:45 68 ARTC Train 8/11/2024 6:00 64 ARTC Train • Construction related LAeq in period at Monitoring Location is 54	54	Y	
5	10/11/2024	Day 08:00 to 18:00			• Highest ambient LAeq in period at Monitoring Location is 77 • Excluding the following non-construction related event being identified: 10/11/2024 9:45 62 ARTC Train 10/11/2024 10:00 68 ARTC Train 10/11/2024 12:45 68 ARTC Train 10/11/2024 13:30 77 ARTC Train • Construction related LAeq in period at Monitoring Location is 69 • Due to the monitoring location being 6 m from the source of the noise and sensitive receiver being 33 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 54.	62	Y	• RBL: 38 dBA • The calculated construction related highest LAeq in work period (54 dBA) is lower than the predicted level (62 dBA) • **Predicted noise levels (Day shift works) in this area didn't trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**

Table 5. Monitoring Location E: NCA 07 - (HEX531) 4m E of 1 Hall St, Belmore.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	10/11/2024	Day 08:00 to 18:00	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Bogie • Water pumps • 4T Dumpy • Mobile Crane	58	67	Y	• RBL: 41 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Day shift works) in this didn't trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
2	17/11/2024				61	67	Y	

Table 6. Monitoring Location F: NCA 08 - (HEX328) 26m S of 27 Dennis St, Lakemba.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	17/11/2024	Day 08:00 to 18:00	General track related construction activities	• Tamper • Regulator • Rail grinder • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Excavators 3T, 6 and13T	62	66	Y	• RBL: 47 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Day shift works) in this didn't trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**

Table 7. Monitoring Location G: NCA 10 - (HEX421) 65m S of 37 Urunga Parade, Punchbowl.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	17/11/2024	Day 08:00 to 18:00	General track related construction activities	• Tamper • Regulator • Rail grinder • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Excavators 3T, 6 and13T	• Highest ambient LAeq in period at Monitoring Location is 65 • Excluding the following non-construction related event being identified: 17/11/2024 8:30 65 Traffic Horn • Construction related LAeq in period at Monitoring Location is 59	64	Y	• RBL: 47 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Day shift works) in this didn't trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**

Non-Bu


Location A
Leofrene Avenue
Leofrene Avenue
Riverdale Avenue
Riverdale Avenue

Non-Business

Location B

Non-Bu


Location C
Keith Lane
Wardell Lane
Bedford Crescent
Inner West Light Rail
Wardell Road
Ewart Lane
Ewart Street
Dulwich Hill
Riverside Crescent
Dudley Street

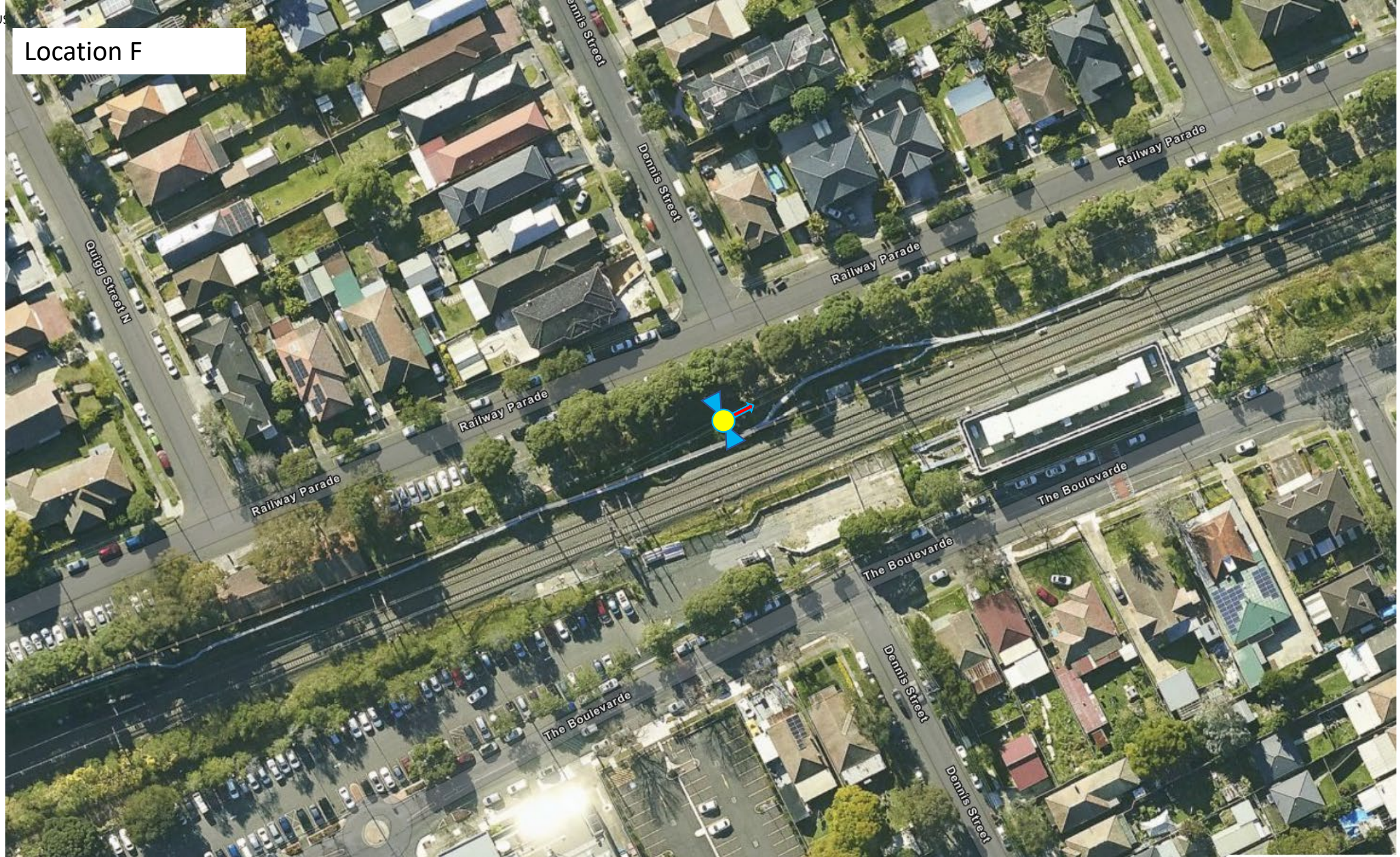
Location D


The Parade
The Parade
The Parade
The Parade
Terrace Road
Garnet Street
Garnet Street
Ewart Street
Ewart Street
Ewart Street
Ewart Street

Nor

Location E

Non-Bus


Location F
Dennis Street
Railway Parade
Quigg Street N
Railway Parade
Railway Parade
Railway Parade
The Boulevarde
The Boulevarde
The Boulevarde
Dennis Street
Dennis Street

Non-Bu

Location G

EPL 21147
R4.4 Validation Report

SWMC Final Conversion Stage-3
(16. Nov. 2024 - 01. Dec. 2024)

Security Fence auguring, Post and Panel/mesh screens; OHW structure installation, OHW cable dropping and pulling; GST Installation; Installation of Brackets at Stations; PSD and MGF installation; Track tamping, Track adjustment, Track grinding, Marrickville track sewer upgrade, Victoria Transom Rail Bridge upgrade, Track side signal equipment demolition; Cabling and Trackside Equipment.

Document and Revision History

Document Details	
Title	R4.4 Validation Report
Client	Sydney Metro City & Southwest
JHLOR JV contract no.	K44

Revisions

Revision	Date	Description	Prepared by	Reviewed by
00	12/12/2024	Prepared for R4.4	Zhengyi Zhang	Lucas Dobrolot

Management reviews

Review date	Details	Reviewed by

Controlled:	NO	Copy no.:	Uncontrolled:	YES

Table of Contents

Introduction

This validation report has been prepared in accordance with EPL 21147 Condition R4.4 for out-of-hour works carried out over from 16th November 2024 to 01st December 2024 during the Final Conversion Stage-3 Rail Possession.

The possession extended from Sydenham Station to Bankstown Station on Sydney Train track.

The following activities were carried under condition L5.6 - Local Possessions;

- Security Fence auguring, Post and Panel/mesh screens;
- Segregation fence auguring, Post and Panel/mesh screens
- OHW structure installation,
- OHW cable dropping and pulling;
- HV pole removal;
- GST Installation;
- Installation of Brackets at Stations;
- PSD and MGF installation
- Track tamping,
- Track adjustment,
- Track grinding,
- Marrickville track sewer upgrade,
- Victoria Transom Rail Bridge upgrade,
- Track side signal equipment demolition,
- Cabling and Trackside Equipment.

Refer to **Attachment 1** for monitoring results.

R4.4(a) For activities permitted under Condition L5.6 & L5.7, a validation report must be submitted to the EPA that includes the following detail:

1. Confirmation that the equipment used to undertake the works was as specified in the relevant Construction Noise and Vibration Impact Assessment for the worksite

The assessment prepared for the works included modelling for the following plant and equipment:

- Excavators 3T, 6 and13T (inc jack hammer, augering and demolition attachments)
- Balloon tyre dump trucks (Hydrema)
- Light vehicles
- Trucks
- Payloader
- Handheld powered tools
- Vac Trucks
- EWP/telehandler
- Front-end loader
- Concrete truck and line pump
- Portable Generators
- Compressors
- Compactor
- Bogie
- Water pumps
- 4T Dumpy

- Site lights
- Mobile crane
- Taper
- Regulator
- Track grinder
- Track thermos-welding kit

2. A copy of the community notification required under Condition L5.12

A copy of the community notification required under Condition L5.12 is appended as **Attachment 2**.

3. Noise monitoring as required by L5.8(d)

Final Conversion Stage-3 (16. Nov. 2024 - 01. Dec. 2024) noise monitoring was carried out at 11 locations on the perimeter of the rail corridor.

All monitoring locations are closer to the source of the noise than the nearest sensitive receiver.

Note: calculation will be done where the noise at monitoring location exceeds the predicted level at the nearest sensitive receiver.

Monitoring locations listed below:

a. NCA 01 - (HEX630) 25m NE of 29 Leofrene Ave, Marrickville.
   - Noise Monitor is 5.5 m from the source of the noise
   - Sensitive Receiver is 25.5 m from the source of the noise

b. NCA 01 – (HEX615) 10m NE from 17 Warburton St, Marrickville
   - Noise Monitor is 2.5 m from the source of the noise
   - Sensitive Receiver is 13 m from the source of the noise

c. NCA 02 - (HEX623) 11m N of 51A Ewart Lane, Dulwich Hill.
   - Noise Monitor is 20 m from the source of the noise
   - Sensitive Receiver is 32 m from the source of the noise

d. NCA 02 - (HEX649) 11m N of 81 Ewart Street, Dulwich Hill.
   - Noise Monitor is 6 m from the source of the noise
   - Sensitive Receiver is 18 m from the source of the noise

e. NCA 04 - (HEX548) 30m SE of 10-12 Broughton Street, Canterbury.
   - Noise Monitor is 33 m from the source of the noise
   - Sensitive Receiver is 62 m from the source of the noise

f. NCA 05 – (HEX631) 18m S from 32-24 Campsie St, Campsie
   - Noise Monitor is 19 m from the source of the noise
   - Sensitive Receiver is 34 m from the source of the noise

g. NCA 07 - (HEX531) 4m E of 1 Hall St, Belmore.
   - Noise Monitor is 1 m from the source of the noise
   - Sensitive Receiver is 4 m from the source of the noise

h. NCA 08 - (HEX328) 26m S of 27 Dennis St, Lakemba.
   - Noise Monitor is 30 m from the source of the noise
   - Sensitive Receiver is 55 m from the source of the noise

i. NCA 09 - (HEX646) 50m SE of 17 Alice Street North, Wiley Park.
   - Noise Monitor is 9 m from the source of the noise
   - Sensitive Receiver is 25 m from the source of the noise

j. NCA 10 - (HEX421) 65m S of 37 Urunga Parade, Punchbowl.
   - Noise Monitor is 11 m from the source of the noise
   - Sensitive Receiver is 53 m from the source of the noise

k. NCA 12 - (HEX516) 135m NW of 196 South Terrace, Bankstown.
   - Noise Monitor is 13 m from the source of the noise
   - Sensitive Receiver is 128 m from the source of the noise

Refer to **Appendix 1** for noise monitoring results.

4. Details of any exceedances of predicted noise levels;

Noise (LAeq 15min) data was collected at the 11 locations between the 16th of November 2024 to 01st of December 2024, all Out of Hour Works (OOHW) shift has been assessed.

During Final Conversion Stage-3 (16th of November 2024 to 01st of December 2024), there were one (1) exceedances of the noise predictions generated from the JHLORJV construction activity. A detailed *S2B- EPL 21147 - R4.3 Exceedance of the Best Achievable Noise Performance Objectives Report* has been submitted to EPA on Thu 28/11/2024.

5. Details of the noise and vibration mitigation measures that were implemented as specified in the relevant Construction Noise and Vibration Impact Assessment for the worksite

The following noise mitigation measures are implemented:

- Potential source noise controls include mufflers fitted to exhausts, regular maintenance of plant, acoustic enclosure of machinery on plant items, non-tonal reversing alarms fitted to plant.
- General monthly community notification.
- Specific notification to impacted residents were provided no later than 5 days out from start of possession.
- Additional mitigation measures such as Alternative Accommodation and Respite Offers.
- Use of real time noise monitors at targeted work locations. Periodic desk top checks on data collected by the 7 real time monitoring instruments were carried out during work periods.
- Environmental surveillance
- On site mitigation instructions to crews:
  - No music, no dropping of objects
  - No shouting or unnecessary noise
  - Be respectful of neighbors when coming and going from site. As far as possible, avoid congregating near residential property boundaries.
  - Position plant as far from residents as possible and orientate them if possible, to emit noise on non-resident side.
  - Plant to be switched off when not in use.

6. The justification required under L5.6 for the carrying out of works outside of standard construction hours in L5.1.

The works carried out on Final Conversion Stage-3 could only be safely conducted during a rail possession due to works occurring within the rail corridor/danger zone. Works were completed in accordance with EPL Condition L5.6 (Local Possession). Carrying out the construction activities during standard construction hours (specified in L5.1) would cause unacceptable risks to construction personnel safety; rail passenger and railways personnel safety and railway network operational reliability.

Construction activities occurring within the rail corridor/danger zone can only be safely conducted during a rail possession during the absence of trains.

All feasible and reasonable at-source noise controls were implemented in accordance with Condition L4.1, and noise mitigation measures were implemented in accordance with JHLORJV's CNVIS and Interim Construction Noise Guideline (DECC 2009).

R4.4 (b) The validation report must be submitted to the EPA fortnightly from the commencement of the works permitted by L5.6 & L5.7 by no later than 2 business days from the end of each fortnight.

This R4.4 Validation report has been submitted to EPA by no later than two business days after the end of the fortnight.

Attachment 1 – Noise Monitoring Results

- Monitoring Result
- Monitoring Location

Table 1. Monitoring Location A: NCA 01 - (HEX630) 25m NE of 29 Leofrene Ave, Marrickville.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	18/11/2024 To 19/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	• Highest ambient LAeq in period at Monitoring Location is 70 • Excluding the following non-construction related event being identified: 18/11/2024 22:15 70 ARTC Train 18/11/2024 23:15 63 ARTC Train 18/11/2024 23:30 53 ARTC Train 19/11/2024 0:30 66 ARTC Train 19/11/2024 1:00 65 ARTC Train 19/11/2024 1:15 61 ARTC Train 19/11/2024 1:45 66 ARTC Train 19/11/2024 4:00 64 ARTC Train 19/11/2024 5:45 67 Animal Activity 19/11/2024 6:00 65 ARTC Train • Construction related LAeq in period at Monitoring Location is 65 • Due to the monitoring location being 5.5 m from the source of the noise and sensitive receiver being 25.5 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 52.	52	Y	• RBL: 33 dBA • The calculated construction related highest LAeq in work period (52 dBA) is equal to the predicted level (52 dBA) • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
2	19/11/2024 To 20/11/2024				• Highest ambient LAeq in period at Monitoring Location is 67 • Excluding the following non-construction related event being identified: 19/11/2024 22:15 62 ARTC Train 19/11/2024 22:30 66 ARTC Train 19/11/2024 22:45 62 Aircraft 19/11/2024 23:00 63 ARTC Train 19/11/2024 23:30 67 ARTC Train 20/11/2024 0:15 59 ARTC Train 20/11/2024 0:30 65 ARTC Train 20/11/2024 0:45 67 ARTC Train 20/11/2024 1:00 67 ARTC Train 20/11/2024 1:45 58 ARTC Train 20/11/2024 2:00 66 ARTC Train 20/11/2024 2:15 66 ARTC Train 20/11/2024 3:45 64 ARTC Train 20/11/2024 4:15 62 ARTC Train 20/11/2024 5:00 64 ARTC Train 20/11/2024 5:45 66 ARTC Train 20/11/2024 6:00 63 ARTC Train 20/11/2024 6:30 66 ARTC Train 20/11/2024 6:45 60 Aircraft • Construction related LAeq in period at Monitoring Location is 61 • Due to the monitoring location being 5.5 m from the source of the noise and sensitive receiver being 25.5 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 48.	52	Y	• RBL: 33 dBA • The calculated construction related highest LAeq in work period (48 dBA) is below the predicted level (52 dBA) • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**

Table 2. Monitoring Location B: NCA 01 – (HEX615) 10m NE from 17 Warburton St, Marrickville

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	18/11/2024 To 19/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	• Highest ambient LAeq in period at Monitoring Location is 64 • Excluding the following non-construction related event being identified: 18/11/2024 22:15 57 ARTC Train 18/11/2024 22:30 64 ARTC Train 19/11/2024 0:30 60 ARTC Train 19/11/2024 1:00 61 ARTC Train 19/11/2024 1:15 61 ARTC Train 19/11/2024 1:45 56 ARTC Train 19/11/2024 5:45 59 ARTC Train 19/11/2024 6:00 57 ARTC Train • Construction related LAeq in period at Monitoring Location is 62 • Due to the monitoring location being 2.5 m from the source of the noise and sensitive receiver being 13 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is **48**.	59	**Y**	
2	19/11/2024 To 20/11/2024				• Highest ambient LAeq in period at Monitoring Location is 66 • Excluding the following non-construction related event being identified: 19/11/2024 22:15 69 ARTC Train 19/11/2024 22:30 56 ARTC Train 19/11/2024 22:45 57 Aircraft 19/11/2024 23:30 63 ARTC Train 20/11/2024 0:30 62 ARTC Train 20/11/2024 1:00 57 ARTC Train 20/11/2024 2:00 58 ARTC Train 20/11/2024 2:15 57 ARTC Train 20/11/2024 2:30 59 ARTC Train 20/11/2024 5:45 58 ARTC Train 20/11/2024 6:15 58 ARTC Train 20/11/2024 6:45 57 ARTC Train • Construction related LAeq in period at Monitoring Location is 66 • Due to the monitoring location being 2.5 m from the source of the noise and sensitive receiver being 13 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is **52**.	59	Y	• RBL: 33 dBA • The calculated construction related highest LAeq in work period is below the predicted level. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
3	20/11/2024 To 21/11/2024				• Highest ambient LAeq in period at Monitoring Location is 69 • Excluding the following non-construction related event being identified: 20/11/2024 22:15 69 ARTC Train 20/11/2024 22:30 55 Aircraft 20/11/2024 22:45 62 Aircraft 20/11/2024 23:15 56 ARTC Train 21/11/2024 0:30 64 ARTC Train 21/11/2024 0:45 65 ARTC Train • Construction related LAeq in period at Monitoring Location is 60 • Due to the monitoring location being 2.5 m from the source of the noise and sensitive receiver being 13 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is **46**.	55	Y	
4	21/11/2024 To 22/11/2024				• Highest ambient LAeq in period at Monitoring Location is 64 • Excluding the following non-construction related event being identified: 21/11/2024 22:30 63 ARTC Train 22/11/2024 0:30 64 ARTC Train 22/11/2024 1:00 60 ARTC Train 22/11/2024 1:45 60 ARTC Train 22/11/2024 2:45 55 ARTC Train 22/11/2024 4:30 62 ARTC Train 22/11/2024 5:45 58 ARTC Train 22/11/2024 6:30 58 ARTC Train • Construction related LAeq in period at Monitoring Location is 58 • Due to the monitoring location being 2.5 m from the source of the noise and sensitive receiver being 13 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is **44**.	55	Y	
5	22/11/2024 To 23/11/2024				61	64	Y	• RBL: 33 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
6	24/11/2024	Day 08:00 to 18:00			***An Exceedance has been reported during shift***. A detailed ***S2B- EPL 21147 - R4.3 Exceedance of the Best Achievable Noise Performance Objectives Report*** has been submitted on Thu 28/11/2024.			
7	25/11/2024 To 26/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			69	69	Y	• RBL: 33 dBA • Noise monitor detect highest LAeq15min value matching or below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
8	26/11/2024 To 27/11/2024				69	66	Y	
9	01/12/2024	Day 08:00 to 18:00			• Highest ambient LAeq in period at Monitoring Location is 71 • Excluding the following non-construction related event being identified: 1/12/2024 7:15 63 ARTC Train 1/12/2024 9:15 62 Aircraft 1/12/2024 9:45 62 Aircraft 1/12/2024 10:00 60 Aircraft 1/12/2024 13:45 61 ARTC Train 1/12/2024 14:45 71 Thunderstorm 1/12/2024 16:00 61 Aircraft 1/12/2024 19:00 64 Aircraft 1/12/2024 19:15 63 Aircraft 1/12/2024 20:15 62 Aircraft 1/12/2024 20:30 64 ARTC Train • Construction related LAeq in period at Monitoring Location is **60**	62	Y	• RBL: 33 dBA • Noise monitor detect highest LAeq15min value related to construction below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**

Table 3. Monitoring Location C: NCA 02 - (HEX623) 11m N of 51A Ewart Lane, Dulwich Hill.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	17/11/2024	Day 08:00 to 18:00	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	70	71	Y	• RBL: 38 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Day shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	18/11/2024 To 19/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			54	57	Y	• RBL: 33 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
3	19/11/2024 To 20/11/2024				57	57	Y	
4	20/11/2024 To 21/11/2024				• Highest ambient LAeq in period at Monitoring Location is **61** • Excluding the following non-construction related event being identified: 20/11/2024 22:45 60 Aircraft 21/11/2024 6:45 61 Animal Activity • Construction related LAeq in period at Monitoring Location is **57**	57	Y	• RBL: 33 dBA • Noise monitor detect highest LAeq15min value related to construction below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
5	21/11/2024 To 22/11/2024				• Highest ambient LAeq in period at Monitoring Location is **64** • Excluding the following non-construction related event being identified: 21/11/2024 22:30 59 Aircraft 22/11/2024 0:30 64 ARTC Train • Construction related LAeq in period at Monitoring Location is **55**	57	Y	
6	23/11/2024 To 24/11/2024				57	68	Y	• RBL: 33 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
7	24/11/2024	Day 08:00 to 18:00			60	68	Y	• RBL: 38 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Day shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
8	24/11/2024 To 25/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			61	68	Y	• RBL: 33 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
9	25/11/2024 To 26/11/2024				60	68	Y	
10	26/11/2024 To 27/11/2024				58	68	Y	
11	01/12/2024	Day 08:00 to 18:00			• Highest ambient LAeq in period at Monitoring Location is **72** • Excluding the following non-construction related event being identified: 1/12/2024 14:30 63 Thunder Storm 1/12/2024 14:45 72 Thunder Storm 1/12/2024 19:00 62 Aircraft • Construction related LAeq in period at Monitoring Location is **60**	62	Y	• RBL: 38 dBA • Noise monitor detect highest LAeq15min value related to construction below predictions. • **Predicted noise levels (Dayshift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**

Table 4. Monitoring Location D: NCA 02 - (HEX649) 11m N of 81 Ewart Street, Dulwich Hill

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	17/11/2024	Day 08:00 to 18:00	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	• Highest ambient LAeq in period at Monitoring Location is 73 • Excluding the following non-construction related event being identified: 17/11/2024 7:30 70 ARTC Train 17/11/2024 7:45 57 Aircraft & Animal Activity 17/11/2024 8:00 64 ARTC Train 17/11/2024 8:30 65 ARTC Train 17/11/2024 9:30 64 ARTC Train 17/11/2024 9:45 71 Aircraft & Animal Activity 17/11/2024 10:00 68 Aircraft & Animal Activity 17/11/2024 11:00 64 Aircraft 17/11/2024 11:45 69 ARTC Train 17/11/2024 12:30 68 Aircraft 17/11/2024 12:45 69 Aircraft 17/11/2024 13:30 73 ARTC Train 17/11/2024 14:30 58 ARTC Train 17/11/2024 18:30 68 ARTC Train 17/11/2024 19:45 69 ARTC Train 17/11/2024 20:00 67 ARTC Train 17/11/2024 20:45 62 Thunderstorm 17/11/2024 21:00 61 Thunderstorm 17/11/2024 21:30 65 ARTC Train 17/11/2024 21:45 67 Aircraft • Construction related LAeq in period at Monitoring Location is 67 • Due to the monitoring location being 6 m from the source of the noise and sensitive receiver being 18 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 57.	62	Y	• RBL: 38 dBA • The calculated construction related highest LAeq in work period (57 dBA) is lower than the predicted level (62 dBA) • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
2	18/11/2024 To 19/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			• Highest ambient LAeq in period at Monitoring Location is 73 • Excluding the following non-construction related event being identified: 18/11/2024 22:15 66 ARTC Train 18/11/2024 22:30 65 ARTC Train 18/11/2024 23:15 69 ARTC Train 18/11/2024 23:30 59 ARTC Train 18/11/2024 23:45 61 ARTC Train 19/11/2024 0:00 64 ARTC Train 19/11/2024 0:45 73 ARTC Train 19/11/2024 1:00 69 ARTC Train 19/11/2024 1:15 69 ARTC Train 19/11/2024 1:45 64 ARTC Train 19/11/2024 3:15 69 ARTC Train 19/11/2024 4:00 63 ARTC Train 19/11/2024 5:30 68 ARTC Train 19/11/2024 6:00 66 ARTC Train • Construction related LAeq in period at Monitoring Location is 61 • Due to the monitoring location being 6 m from the source of the noise and sensitive receiver being 18 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 51.	60	Y	• RBL: 33 dBA • The calculated construction related highest LAeq in work period (51 dBA) is lower than the predicted level (60 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
3	19/11/2024 To 20/11/2024				• Highest ambient LAeq in period at Monitoring Location is 77 • Excluding the following non-construction related event being identified: 19/11/2024 22:15 63 ARTC Train 19/11/2024 22:30 64 ARTC Train 19/11/2024 22:45 59 Aircraft 19/11/2024 23:00 70 ARTC Train 19/11/2024 23:15 70 ARTC Train 20/11/2024 0:00 59 ARTC Train 20/11/2024 0:30 67 ARTC Train 20/11/2024 0:45 71 ARTC Train 20/11/2024 1:15 72 ARTC Train 20/11/2024 1:45 56 ARTC Train 20/11/2024 2:00 70 ARTC Train 20/11/2024 2:30 69 ARTC Train 20/11/2024 3:45 66 ARTC Train 20/11/2024 4:15 66 ARTC Train 20/11/2024 4:45 69 ARTC Train 20/11/2024 5:45 67 ARTC Train 20/11/2024 6:15 63 ARTC Train 20/11/2024 6:30 69 ARTC Train • Construction related LAeq in period at Monitoring Location is 67 • Due to the monitoring location being 6 m from the source of the noise and sensitive receiver being 18 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 57.	60	Y	• RBL: 33 dBA • The calculated construction related highest LAeq in work period (57 dBA) is lower than the predicted level (60 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
4	20/11/2024 To 21/11/2024				• Highest ambient LAeq in period at Monitoring Location is 71 • Excluding the following non-construction related event being identified: 20/11/2024 22:15 63 ARTC Train 20/11/2024 22:45 60 Aircraft 20/11/2024 23:15 65 ARTC Train 21/11/2024 0:00 69 ARTC Train 21/11/2024 0:15 64 ARTC Train 21/11/2024 0:30 65 ARTC Train 21/11/2024 0:45 69 ARTC Train 21/11/2024 1:00 70 ARTC Train 21/11/2024 1:15 71 ARTC Train 21/11/2024 2:00 66 ARTC Train 21/11/2024 2:15 66 ARTC Train 21/11/2024 2:30 70 ARTC Train 21/11/2024 4:00 68 ARTC Train 21/11/2024 4:30 71 ARTC Train 21/11/2024 5:00 63 ARTC Train 21/11/2024 6:00 69 ARTC Train 21/11/2024 6:15 70 ARTC Train 21/11/2024 6:30 67 ARTC Train • Construction related LAeq in period at Monitoring Location is 63 • Due to the monitoring location being 6 m from the source of the noise and sensitive receiver being 18 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 53.	60	Y	• RBL: 33 dBA • The calculated construction related highest LAeq in work period (53 dBA) is lower than the predicted level (60 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
5	21/11/2024 To 22/11/2024				• Highest ambient LAeq in period at Monitoring Location is 72 • Excluding the following non-construction related event being identified: 21/11/2024 22:30 65 Aircraft 21/11/2024 23:00 64 ARTC Train 21/11/2024 23:45 69 ARTC Train 22/11/2024 0:30 72 ARTC Train 22/11/2024 0:45 67 ARTC Train 22/11/2024 1:00 69 ARTC Train 22/11/2024 1:45 70 ARTC Train 22/11/2024 2:15 68 ARTC Train 22/11/2024 2:45 64 ARTC Train 22/11/2024 3:30 62 ARTC Train 22/11/2024 4:00 64 ARTC Train 22/11/2024 4:30 69 ARTC Train 22/11/2024 5:30 70 ARTC Train 22/11/2024 6:30 67 ARTC Train • Construction related LAeq in period at Monitoring Location is 66 • Due to the monitoring location being 6 m from the source of the noise and sensitive receiver being 18 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 56.	60	Y	• RBL: 33 dBA • The calculated construction related highest LAeq in work period (56 dBA) is lower than the predicted level (60 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
6	23/11/2024 To 24/11/2024				• Highest ambient LAeq in period at Monitoring Location is 71 • Excluding the following non-construction related event being identified: 23/11/2024 22:45 59 Aircraft 23/11/2024 23:15 63 ARTC Train 24/11/2024 0:15 68 ARTC Train 24/11/2024 1:00 69 ARTC Train 24/11/2024 1:45 64 ARTC Train 24/11/2024 4:00 71 ARTC Train 24/11/2024 4:15 64 ARTC Train 24/11/2024 5:45 70 ARTC Train 24/11/2024 6:00 67 ARTC Train 24/11/2024 6:45 69 ARTC Train • Construction related LAeq in period at Monitoring Location is 56	69	Y	• RBL: 33 dBA • Noise monitor detect highest LAeq15min value related to construction below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
7	24/11/2024	Day 08:00 to 18:00			• Highest ambient LAeq in period at Monitoring Location is 74 • Excluding the following non-construction related event being identified: 24/11/2024 7:30 70 ARTC Train 24/11/2024 8:00 73 Animal Activity 24/11/2024 8:45 65 ARTC Train 24/11/2024 9:00 55 ARTC Train 24/11/2024 9:30 61 ARTC Train 24/11/2024 9:45 62 Aircraft 24/11/2024 10:00 61 ARTC Train 24/11/2024 10:45 58 ARTC Train 24/11/2024 11:00 64 Aircraft 24/11/2024 11:30 61 Aircraft 24/11/2024 11:45 59 ARTC Train 24/11/2024 12:00 69 ARTC Train 24/11/2024 12:15 74 ARTC Train 24/11/2024 12:45 66 ARTC Train 24/11/2024 13:00 71 ARTC Train 24/11/2024 13:45 70 ARTC Train 24/11/2024 14:00 61 ARTC Train 24/11/2024 19:00 63 ARTC Train 24/11/2024 19:15 67 Aircraft 24/11/2024 19:30 68 ARTC Train 24/11/2024 19:45 68 ARTC Train • Construction related LAeq in period at Monitoring Location is 68	68	Y	• RBL: 38 dBA • Noise monitor detect highest LAeq15min value related to construction matched the predictions. • **Predicted noise levels (Day shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
8	24/11/2024 To 25/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			• Highest ambient LAeq in period at Monitoring Location is 71 • Excluding the following non-construction related event being identified: 24/11/2024 22:15 65 ARTC Train 24/11/2024 22:45 68 Aircraft 24/11/2024 23:00 67 ARTC Train 25/11/2024 0:15 63 ARTC Train 25/11/2024 0:45 66 ARTC Train 25/11/2024 1:00 68 ARTC Train 25/11/2024 1:15 70 ARTC Train 25/11/2024 2:00 68 ARTC Train 25/11/2024 2:45 70 ARTC Train 25/11/2024 3:00 61 ARTC Train 25/11/2024 5:15 69 ARTC Train 25/11/2024 5:45 69 ARTC Train 25/11/2024 6:15 68 ARTC Train • Construction related LAeq in period at Monitoring Location is 71 • Due to the monitoring location being 6 m from the source of the noise and sensitive receiver being 18 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 61.	69	Y	• RBL: 33 dBA • The calculated construction related highest LAeq in work period (61 dBA) is lower than the predicted level (69 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
9	25/11/2024 To 26/11/2024				• Highest ambient LAeq in period at Monitoring Location is 72 • Excluding the following non-construction related event being identified: 25/11/2024 22:15 64 ARTC Train 25/11/2024 22:30 64 ARTC Train 25/11/2024 22:45 69 ARTC Train 25/11/2024 23:00 71 ARTC Train 25/11/2024 23:45 69 ARTC Train 26/11/2024 0:15 67 ARTC Train 26/11/2024 0:45 69 ARTC Train 26/11/2024 1:15 63 ARTC Train 26/11/2024 1:45 72 ARTC Train 26/11/2024 2:00 66 ARTC Train 26/11/2024 2:30 68 ARTC Train 26/11/2024 4:15 70 ARTC Train 26/11/2024 4:30 63 ARTC Train 26/11/2024 6:00 71 ARTC Train • Construction related LAeq in period at Monitoring Location is 69 • Due to the monitoring location being 6 m from the source of the noise and sensitive receiver being 18 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 59.	68	Y	• RBL: 33 dBA • The calculated construction related highest LAeq in work period (59 dBA) is lower than the predicted level (68 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
10	26/11/2024 To 27/11/2024				• Highest ambient LAeq in period at Monitoring Location is 71 • Excluding the following non-construction related event being identified: 26/11/2024 22:15 67 ARTC Train 26/11/2024 23:15 66 ARTC Train 27/11/2024 0:00 71 ARTC Train 27/11/2024 0:45 72 ARTC Train 27/11/2024 1:15 63 ARTC Train 27/11/2024 1:45 72 ARTC Train 27/11/2024 2:00 70 ARTC Train 27/11/2024 2:15 64 ARTC Train 27/11/2024 3:15 61 ARTC Train 27/11/2024 4:15 64 ARTC Train 27/11/2024 5:30 69 ARTC Train 27/11/2024 6:00 70 ARTC Train • Construction related LAeq in period at Monitoring Location is 70 • Due to the monitoring location being 6 m from the source of the noise and sensitive receiver being 18 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 60.	68	Y	• RBL: 33 dBA • The calculated construction related highest LAeq in work period (60 dBA) is lower than the predicted level (68 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**

Table 5. Monitoring Location E: NCA 04 - (HEX548) 30m SE of 10-12 Broughton Street, Canterbury

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	17/11/2024	Day 08:00 to 18:00	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	• Highest ambient LAeq in period at Monitoring Location is 73 • Excluding the following non-construction related event being identified: 17/11/2024 7:30 66 ARTC Train 17/11/2024 8:00 65 ARTC Train 17/11/2024 8:30 73 ARTC Train 17/11/2024 9:30 65 ARTC Train 17/11/2024 9:45 73 ARTC Train 17/11/2024 11:00 68 ARTC Train 17/11/2024 11:45 65 ARTC Train 17/11/2024 12:30 66 ARTC Train 17/11/2024 13:30 69 ARTC Train 17/11/2024 13:45 64 ARTC Train 17/11/2024 17:30 62 ARTC Train 17/11/2024 18:15 69 ARTC Train 17/11/2024 18:30 61 ARTC Train 17/11/2024 19:30 64 ARTC Train 17/11/2024 19:45 66 ARTC Train 17/11/2024 20:00 62 Thunderstorm • Construction related LAeq in period at Monitoring Location is 69	72	Y	• RBL: 40 dBA • Noise monitor detect highest LAeq15min value related to construction below the predictions. • **Predicted noise levels (Day shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	18/11/2024 To 19/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			• Highest ambient LAeq in period at Monitoring Location is 73 • Excluding the following non-construction related event being identified: 18/11/2024 22:15 67 ARTC Train 18/11/2024 22:30 61 ARTC Train 18/11/2024 23:00 63 ARTC Train 18/11/2024 23:30 55 ARTC Train 18/11/2024 23:45 62 ARTC Train 19/11/2024 0:00 68 ARTC Train 19/11/2024 0:45 73 ARTC Train 19/11/2024 1:15 66 ARTC Train 19/11/2024 1:30 62 ARTC Train 19/11/2024 1:45 62 ARTC Train 19/11/2024 3:15 66 ARTC Train 19/11/2024 4:00 60 ARTC Train 19/11/2024 5:30 64 ARTC Train 19/11/2024 6:00 62 ARTC Train • Construction related LAeq in period at Monitoring Location is 57	60	Y	• RBL: 35 dBA • Noise monitor detect highest LAeq15min value related to construction below the predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
3	19/11/2024 To 20/11/2024				• Highest ambient LAeq in period at Monitoring Location is **69** • Excluding the following non-construction related event being identified: 19/11/2024 22:15 60 ARTC Train 19/11/2024 22:30 62 ARTC Train 19/11/2024 23:00 65 ARTC Train 19/11/2024 23:15 68 ARTC Train 19/11/2024 23:30 66 ARTC Train 20/11/2024 0:00 62 ARTC Train 20/11/2024 0:15 57 ARTC Train 20/11/2024 0:45 69 ARTC Train 20/11/2024 1:00 63 ARTC Train 20/11/2024 1:15 68 ARTC Train 20/11/2024 2:00 68 ARTC Train 20/11/2024 2:30 69 ARTC Train 20/11/2024 3:45 62 ARTC Train 20/11/2024 4:45 66 ARTC Train 20/11/2024 5:45 64 ARTC Train 20/11/2024 6:15 64 ARTC Train 20/11/2024 6:30 69 ARTC Train • Construction related LAeq in period at Monitoring Location is 59	60	Y	• RBL: 35 dBA • Noise monitor detect highest LAeq15min value related to construction below the predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
4	20/11/2024 To 21/11/2024				• Highest ambient LAeq in period at Monitoring Location is 71 • Excluding the following non-construction related event being identified: 20/11/2024 22:15 60 ARTC Train 20/11/2024 22:30 64 ARTC Train 20/11/2024 23:15 67 ARTC Train 21/11/2024 0:00 66 ARTC Train 21/11/2024 0:15 61 ARTC Train 21/11/2024 0:30 65 ARTC Train 21/11/2024 0:45 68 ARTC Train 21/11/2024 1:00 69 ARTC Train 21/11/2024 1:15 67 ARTC Train 21/11/2024 2:00 64 ARTC Train 21/11/2024 2:15 66 ARTC Train 21/11/2024 2:30 71 ARTC Train 21/11/2024 2:45 65 ARTC Train 21/11/2024 4:00 64 ARTC Train 21/11/2024 4:30 70 ARTC Train 21/11/2024 5:00 57 ARTC Train 21/11/2024 6:00 65 ARTC Train 21/11/2024 6:30 63 ARTC Train • Construction related LAeq in period at Monitoring Location is 63 • Due to the monitoring location being 33 m from the source of the noise and sensitive receiver being 62 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 58.	60	Y	• RBL: 35 dBA • The calculated construction related highest LAeq in work period (58 dBA) is lower than the predicted level (60 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
5	30/11/2024 To 01/12/2024				• Highest ambient LAeq in period at Monitoring Location is 75 • Excluding the following non-construction related event being identified: 30/11/2024 22:45 59 ARTC Train 1/12/2024 0:00 68 ARTC Train 1/12/2024 0:15 71 ARTC Train 1/12/2024 0:45 65 ARTC Train 1/12/2024 1:00 65 ARTC Train 1/12/2024 1:30 68 ARTC Train 1/12/2024 2:15 75 ARTC Train 1/12/2024 3:45 64 ARTC Train 1/12/2024 4:15 64 ARTC Train 1/12/2024 4:30 64 ARTC Train 1/12/2024 5:15 55 ARTC Train 1/12/2024 5:30 60 ARTC Train 1/12/2024 6:00 65 ARTC Train • Construction related LAeq in period at Monitoring Location is 53 • Due to the monitoring location being 33 m from the source of the noise and sensitive receiver being 62 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 48.	52	Y	• RBL: 35 dBA • The calculated construction related highest LAeq in work period (48 dBA) is lower than the predicted level (52 dBA) • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
6	01/12/2024 To 02/12/2024				• Highest ambient LAeq in period at Monitoring Location is 74 • Excluding the following non-construction related event being identified: 1/12/2024 22:15 58 ARTC Train 1/12/2024 22:45 63 ARTC Train 1/12/2024 23:00 66 ARTC Train 1/12/2024 23:15 61 ARTC Train 1/12/2024 23:30 59 ARTC Train 1/12/2024 23:45 65 ARTC Train 2/12/2024 0:15 59 ARTC Train 2/12/2024 0:30 63 ARTC Train 2/12/2024 0:45 67 ARTC Train 2/12/2024 1:00 71 ARTC Train 2/12/2024 1:45 62 ARTC Train 2/12/2024 2:00 65 ARTC Train 2/12/2024 2:15 70 ARTC Train 2/12/2024 2:45 59 ARTC Train 2/12/2024 4:30 65 ARTC Train 2/12/2024 5:45 64 ARTC Train 2/12/2024 6:00 74 ARTC Train 2/12/2024 6:15 68 ARTC Train • Construction related LAeq in period at Monitoring Location is 57 • Due to the monitoring location being 33 m from the source of the noise and sensitive receiver being 62 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 52.	52	Y	• RBL: 35 dBA • The calculated construction related highest LAeq in work period (52 dBA) matched the predicted level (52 dBA) • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**

Table 6. Monitoring Location F: NCA 06 – (HEX631) 18m S from 32-24 Campsie St, Campsie

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	18/11/2024 To 19/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Bogie • Water pumps • 4T Dumpy • Mobile Crane	• Highest ambient LAeq in period at Monitoring Location is **64** • Excluding the following non-construction related event being identified: 18/11/2024 22:15 56 ARTC Train 18/11/2024 22:30 54 ARTC Train 18/11/2024 22:45 55 ARTC Train 18/11/2024 23:00 64 ARTC Train 18/11/2024 23:30 57 ARTC Train 18/11/2024 23:45 53 ARTC Train 19/11/2024 0:45 68 ARTC Train 19/11/2024 1:15 61 ARTC Train 19/11/2024 1:30 55 ARTC Train 19/11/2024 1:45 55 ARTC Train 19/11/2024 3:15 64 ARTC Train 19/11/2024 4:00 57 ARTC Train 19/11/2024 5:30 63 ARTC Train 19/11/2024 6:00 61 ARTC Train • Construction related LAeq in period at Monitoring Location is 61	61	Y	• RBL: 35 dBA • Noise monitor detect highest LAeq15min value related to construction matched the predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	19/11/2024 To 20/11/2024				• Highest ambient LAeq in period at Monitoring Location is 67 • Excluding the following non-construction related event being identified: 19/11/2024 22:15 59 ARTC Train 19/11/2024 22:30 59 ARTC Train 19/11/2024 22:45 61 ARTC Train 19/11/2024 23:15 67 ARTC Train 19/11/2024 23:45 58 ARTC Train 20/11/2024 0:00 54 ARTC Train 20/11/2024 0:15 54 ARTC Train 20/11/2024 0:30 59 ARTC Train 20/11/2024 0:45 62 ARTC Train 20/11/2024 1:00 64 ARTC Train 20/11/2024 1:15 64 ARTC Train 20/11/2024 2:00 65 ARTC Train 20/11/2024 2:30 61 ARTC Train 20/11/2024 3:30 62 ARTC Train 20/11/2024 4:15 58 ARTC Train 20/11/2024 4:45 59 ARTC Train 20/11/2024 5:45 67 ARTC Train 20/11/2024 6:15 59 ARTC Train • Construction related LAeq in period at Monitoring Location is 63 • Due to the monitoring location being 19 m from the source of the noise and sensitive receiver being 34 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 58.	61	Y	• RBL: 35 dBA • The calculated construction related highest LAeq in work period (58 dBA) matched the predicted level (61 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
3	20/11/2024 To 21/11/2024				• Highest ambient LAeq in period at Monitoring Location is 67 • Excluding the following non-construction related event being identified: 20/11/2024 22:15 59 ARTC Train 20/11/2024 23:15 58 ARTC Train 21/11/2024 0:00 62 ARTC Train 21/11/2024 0:15 53 ARTC Train 21/11/2024 0:30 60 ARTC Train 21/11/2024 0:45 66 ARTC Train 21/11/2024 1:00 62 ARTC Train 21/11/2024 2:00 56 ARTC Train 21/11/2024 2:30 65 ARTC Train 21/11/2024 4:00 63 ARTC Train 21/11/2024 4:30 69 ARTC Train 21/11/2024 5:00 51 ARTC Train 21/11/2024 6:00 67 ARTC Train 21/11/2024 6:30 62 ARTC Train • Construction related LAeq in period at Monitoring Location is 63 • Due to the monitoring location being 19 m from the source of the noise and sensitive receiver being 34 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 58.	61	Y	• RBL: 35 dBA • The calculated construction related highest LAeq in work period (58 dBA) matched the predicted level (61 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
4	21/11/2024 To 22/11/2024				• Highest ambient LAeq in period at Monitoring Location is 67 • Excluding the following non-construction related event being identified: 21/11/2024 22:15 60 ARTC Train 21/11/2024 22:45 58 ARTC Train 21/11/2024 23:00 65 ARTC Train 21/11/2024 23:30 63 ARTC Train 22/11/2024 0:15 66 ARTC Train 22/11/2024 0:45 63 ARTC Train 22/11/2024 1:45 65 ARTC Train 22/11/2024 2:15 61 ARTC Train 22/11/2024 3:00 63 ARTC Train 22/11/2024 4:00 59 ARTC Train 22/11/2024 4:30 65 ARTC Train 22/11/2024 5:30 61 ARTC Train 22/11/2024 5:45 67 ARTC Train • Construction related LAeq in period at Monitoring Location is 65 • Due to the monitoring location being 19 m from the source of the noise and sensitive receiver being 34 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 60.	61	Y	• RBL: 35 dBA • The calculated construction related highest LAeq in work period (60 dBA) matched the predicted level (61 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
5	22/11/2024 To 23/11/2024				72	75	Y	• RBL: 35 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
6	27/11/2024 To 28/11/2024				• Highest ambient LAeq in period at Monitoring Location is **68** • Excluding the following non-construction related event being identified: 27/11/2024 23:00 59 ARTC Train 27/11/2024 23:30 57 ARTC Train 28/11/2024 0:00 60 ARTC Train 28/11/2024 0:15 60 ARTC Train 28/11/2024 1:00 66 ARTC Train 28/11/2024 1:30 67 ARTC Train 28/11/2024 1:45 59 ARTC Train 28/11/2024 2:15 59 ARTC Train 28/11/2024 2:30 66 ARTC Train 28/11/2024 2:45 59 ARTC Train 28/11/2024 3:45 68 ARTC Train 28/11/2024 4:15 61 ARTC Train 28/11/2024 5:45 58 ARTC Train 28/11/2024 6:30 60 ARTC Train • Construction related LAeq in period at Monitoring Location is 59	59	**Y**	• RBL: 35 dBA • Noise monitor detect highest LAeq15min value related to construction matched the predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
7	28/11/2024 To 29/11/2024				• Highest ambient LAeq in period at Monitoring Location is **71** • Excluding the following non-construction related event being identified: 28/11/2024 22:15 58 ARTC Train 28/11/2024 22:45 59 ARTC Train 28/11/2024 23:15 59 ARTC Train 28/11/2024 23:45 63 ARTC Train 29/11/2024 0:00 60 ARTC Train 29/11/2024 0:45 55 ARTC Train 29/11/2024 1:00 71 ARTC Train 29/11/2024 1:15 54 ARTC Train 29/11/2024 1:45 65 ARTC Train 29/11/2024 2:00 61 ARTC Train 29/11/2024 4:15 61 ARTC Train 29/11/2024 4:45 67 ARTC Train 29/11/2024 5:00 61 ARTC Train 29/11/2024 5:45 65 ARTC Train 29/11/2024 6:00 57 ARTC Train 29/11/2024 6:45 61 ARTC Train • Construction related LAeq in period at Monitoring Location is 53	55	**Y**	• RBL: 35 dBA • Noise monitor detect highest LAeq15min value related to construction below the predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
8	30/11/2024 To 01/12/2024				• Highest ambient LAeq in period at Monitoring Location is 67 • Excluding the following non-construction related event being identified: 30/11/2024 22:45 55 ARTC Train 30/11/2024 23:45 60 ARTC Train 1/12/2024 0:15 66 ARTC Train 1/12/2024 0:45 63 ARTC Train 1/12/2024 1:30 59 ARTC Train 1/12/2024 2:00 58 ARTC Train 1/12/2024 2:15 67 ARTC Train 1/12/2024 3:45 63 ARTC Train 1/12/2024 4:15 61 ARTC Train 1/12/2024 4:30 55 ARTC Train 1/12/2024 5:30 58 ARTC Train 1/12/2024 6:00 65 ARTC Train • Construction related LAeq in period at Monitoring Location is 60 • Due to the monitoring location being 19 m from the source of the noise and sensitive receiver being 34 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 55.	58	**Y**	• RBL: 35 dBA • The calculated construction related highest LAeq in work period (55 dBA) matched the predicted level (58 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
9	01/12/2024	Day 08:00 to 18:00			• Highest ambient LAeq in period at Monitoring Location is **71** • Excluding the following non-construction related event being identified: 28/11/2024 22:15 58 ARTC Train 28/11/2024 22:45 59 ARTC Train 28/11/2024 23:15 59 ARTC Train 28/11/2024 23:45 63 ARTC Train 29/11/2024 0:00 60 ARTC Train 29/11/2024 0:45 55 ARTC Train 29/11/2024 1:00 71 ARTC Train 29/11/2024 1:15 54 ARTC Train 29/11/2024 1:45 65 ARTC Train 29/11/2024 2:00 61 ARTC Train 29/11/2024 4:15 61 ARTC Train 29/11/2024 4:45 67 ARTC Train 29/11/2024 5:00 61 ARTC Train 29/11/2024 5:45 65 ARTC Train 29/11/2024 6:00 57 ARTC Train 29/11/2024 6:45 61 ARTC Train • Construction related LAeq in period at Monitoring Location is 47	66	**Y**	• RBL: 45 dBA • Noise monitor detect highest LAeq15min value related to construction matched the predictions. • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**

Table 7. Monitoring Location G: NCA 07 - (HEX531) 4m E of 1 Hall St, Belmore.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	17/11/2024	Day 08:00 to 18:00	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Bogie • Water pumps • 4T Dumpy • Mobile Crane	66	67	Y	• RBL: 41 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Day shift works) in this didn't trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
2	17/11/2024 To 18/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			61	66	Y	• RBL: 35 dBA • Noise monitor detect highest LAeq15min value matched or below the predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
3	18/11/2024 To 19/11/2024				67	67	Y	
4	19/11/2024 To 20/11/2024				59	70	Y	
5	20/11/2024 To 21/11/2024				53	70	Y	
6	21/11/2024 To 22/11/2024				63	70	Y	
7	22/11/2024 To 23/11/2024				61	66	Y	
8	26/11/2024 To 27/11/2024				58	69	Y	
9	27/11/2024 To 28/11/2024				65	69	Y	
10	28/11/2024 To 29/11/2024				53	69	Y	
11	01/12/2024	Day 08:00 to 18:00			• Highest ambient LAeq in period at Monitoring Location is **73** • Excluding the following non-construction related event being identified: 1/12/2024 14:45 73.084 Thunderstorm • Construction related LAeq in period at Monitoring Location is 65	69	Y	• RBL: 41 dBA • The calculated construction related highest LAeq in work period (65 dBA) matched the predicted level (69 dBA) • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**

Table 8. Monitoring Location H: NCA 08 - (HEX328) 26m S of 27 Dennis St, Lakemba.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	17/11/2024	Day 08:00 to 18:00	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Bogie • Water pumps • 4T Dumpy • Mobile Crane	65	66	Y	• RBL: 47 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Day shift works) in this didn't trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
2	17/11/2024 To 18/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			57	71	Y	• RBL: 41 dBA • Noise monitor detect highest LAeq15min value below the predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
3	18/11/2024 To 19/11/2024				66	71	Y	
4	19/11/2024 To 20/11/2024				• Construction related LAeq in period at Monitoring Location is 55 • Due to the monitoring location being 30 m from the source of the noise and sensitive receiver being 55 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 50.	52	Y	• RBL: 41 dBA • The calculated construction related highest LAeq in work period matched or below the predicted level • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
5	20/11/2024 To 21/11/2024				• Highest ambient LAeq in period at Monitoring Location is **53** • Excluding the following non-construction related event being identified: 21/11/2024 3:45 53 Resident Light Vehicle • Construction related LAeq in period at Monitoring Location is 52	52	Y	
6	21/11/2024 To 22/11/2024				• Highest ambient LAeq in period at Monitoring Location is **53** • Excluding the following non-construction related event being identified: 21/11/2024 22:45 53 Resident Light Vehicle 22/11/2024 5:45 52 Animal Activity 22/11/2024 6:00 52 Animal Activity 22/11/2024 6:15 53 Animal Activity • Construction related LAeq in period at Monitoring Location is 51	52	Y	
7	23/11/2024 To 24/11/2024				52	59	Y	• RBL: 41 dBA • Noise monitor detect highest LAeq15min value below the predictions. • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
8	24/11/2024	Day 08:00 to 18:00			57	60	Y	• RBL: 47 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Day shift works) in this didn't trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
9	24/11/2024 To 25/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			54	59	Y	• RBL: 41 dBA • Noise monitor detect highest LAeq15min value below the predictions. • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
10	26/11/2024 To 27/11/2024				• Construction related LAeq in period at Monitoring Location is 57 • Due to the monitoring location being 30 m from the source of the noise and sensitive receiver being 55 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 52.	56	Y	• RBL: 41 dBA • The calculated construction related highest LAeq in work period below the predicted level • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
11	27/11/2024 To 28/11/2024				56	56	Y	• RBL: 41 dBA • Noise monitor detect highest LAeq15min value below the predictions. • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
12	28/11/2024 To 29/11/2024				52	55	Y	
13	01/12/2024	Day 08:00 to 18:00			68	74	Y	• RBL: 47 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Day shift works) in this didn't trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**

Table 9. Monitoring Location I: NCA 09 - (HEX646) 50m SE of 17 Alice Street North, Wiley Park.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	25/11/2024 To 26/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Bogie • Water pumps • 4T Dumpy • Mobile Crane	• Construction related LAeq in period at Monitoring Location is 59 • Due to the monitoring location being 9 m from the source of the noise and sensitive receiver being 25 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 47.	58	Y	• RBL: 36 dBA • The calculated construction related highest LAeq in work period below the predicted level • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	26/11/2024 To 27/11/2024				• Construction related LAeq in period at Monitoring Location is 63 • Due to the monitoring location being 9 m from the source of the noise and sensitive receiver being 25 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 54.	58	Y	
3	27/11/2024 To 28/11/2024				58	58	Y	• RBL: 36 dBA • Noise monitor detect highest LAeq15min value matched the predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**

Table 10. Monitoring Location J: NCA 10 - (HEX421) 65m S of 37 Urunga Parade, Punchbowl.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	17/11/2024	Day 08:00 to 18:00	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Bogie • Water pumps • 4T Dumpy • Mobile Crane	• Construction related LAeq in period at Monitoring Location is 65 • Due to the monitoring location being 11 m from the source of the noise and sensitive receiver being 53 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 49.	64	Y	• RBL: 47 dBA • The calculated construction related highest LAeq in work period below the predicted level. • **Predicted noise levels (Day shift works) in this didn't trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
2	17/11/2024 To 18/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			60	69	Y	• RBL: 41 dBA • Noise monitor detect highest LAeq15min value below the predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
3	18/11/2024 To 19/11/2024				56	69	Y	
4	20/11/2024 To 21/11/2024				58	69	Y	
5	21/11/2024 To 22/11/2024				63	69	Y	
6	24/11/2024 To 25/11/2024				55	57	Y	
7	25/11/2024 To 26/11/2024				• Construction related LAeq in period at Monitoring Location is 61 • Due to the monitoring location being 11 m from the source of the noise and sensitive receiver being 53 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 47.	57	Y	• RBL: 41 dBA • The calculated construction related highest LAeq in work period below the predicted level • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
8	26/11/2024 To 27/11/2024				• Construction related LAeq in period at Monitoring Location is 72 • Due to the monitoring location being 11 m from the source of the noise and sensitive receiver being 53 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 58.	57	Y	• RBL: 41 dBA • The calculated construction related highest LAeq in work period above the predicted level • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Actual noise levels (Night shift works) in this area did not trigger offers above the Respite limit.** • **Appropriate mitigation measures being offered..** • **No further additional mitigation measures required**
9	27/11/2024 To 28/11/2024				• Construction related LAeq in period at Monitoring Location is 58 • Due to the monitoring location being 11 m from the source of the noise and sensitive receiver being 53 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 44.	57	Y	• RBL: 41 dBA • The calculated construction related highest LAeq in work period below the predicted level • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**

Table 11. Monitoring Location K: NCA 12 - (HEX516) 135m NW of 196 South Terrace, Bankstown.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	26/11/2024 To 27/11/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Tamper • Regulator • Rail grinder • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Excavators 3T, 6 and13T	• Construction related LAeq in period at Monitoring Location is 69 • Due to the monitoring location being 13 m from the source of the noise and sensitive receiver being 128 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 44.	68	Y	• RBL: 42 dBA • The calculated construction related highest LAeq in work period below the predicted level • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**

Non-Bu


Location A
Leofrene Avenue
Leofrene Avenue
Riverdale Avenue
Riverdale Avenue

Non-Business

Non-Bu

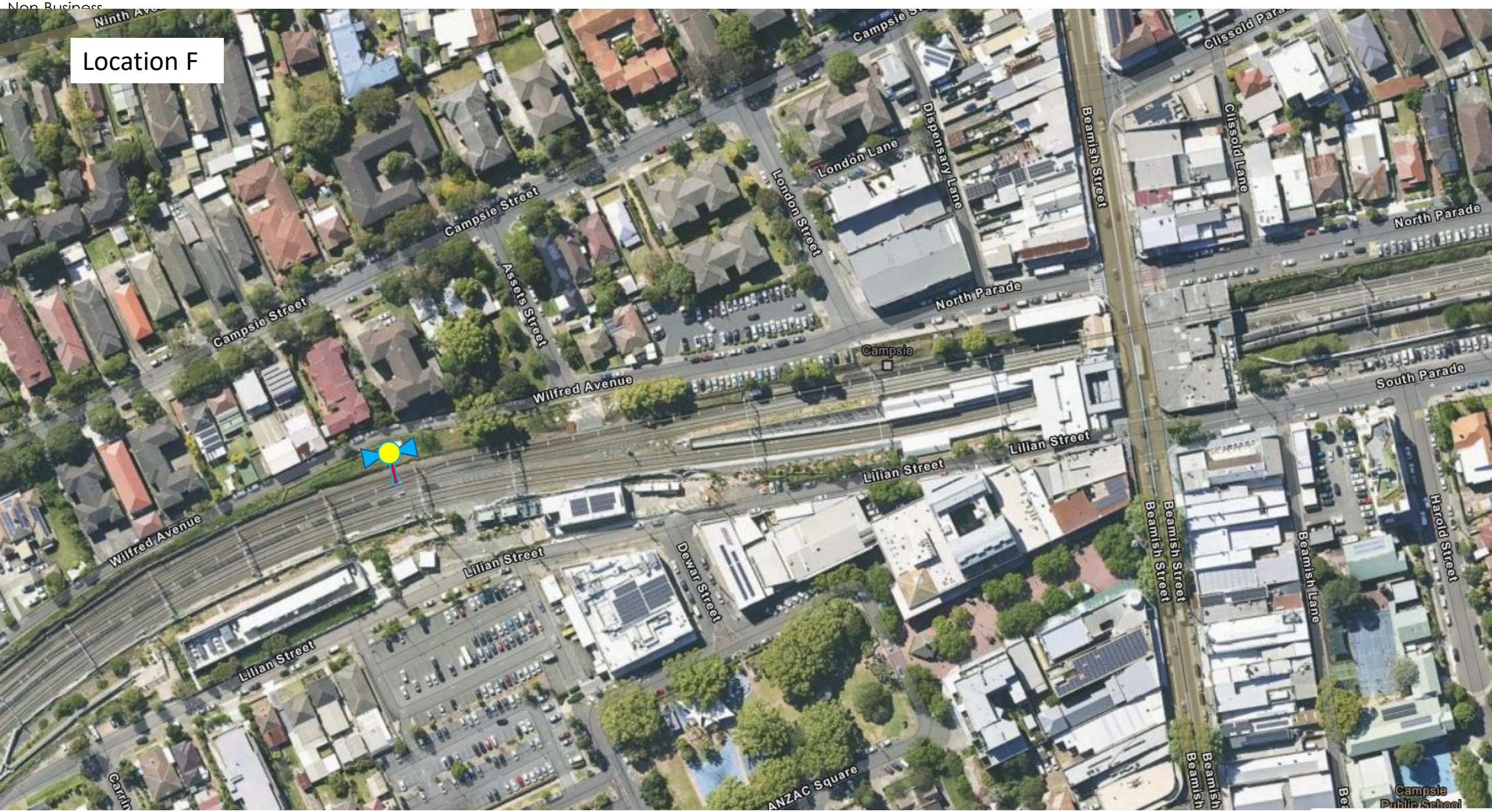

Location C
Keith Lane
Wardell Lane
Bedford Crescent
Inner West Light Rail
Wardell Road
Ewart Lane
Ewart Street
Dulwich Hill
Riverside Crescent
Dudley Street


Location D
The Parade
The Parade
The Parade
The Parade
Terrace Road
Garnet Street
Garnet Street
Ewart Street
Ewart Street
Ewart Street
Ewart Street

Non-Bu


Location E
John Street
Charles Street
Charles Street
Broughton Street
Broughton Street
Canterbury

Non Business

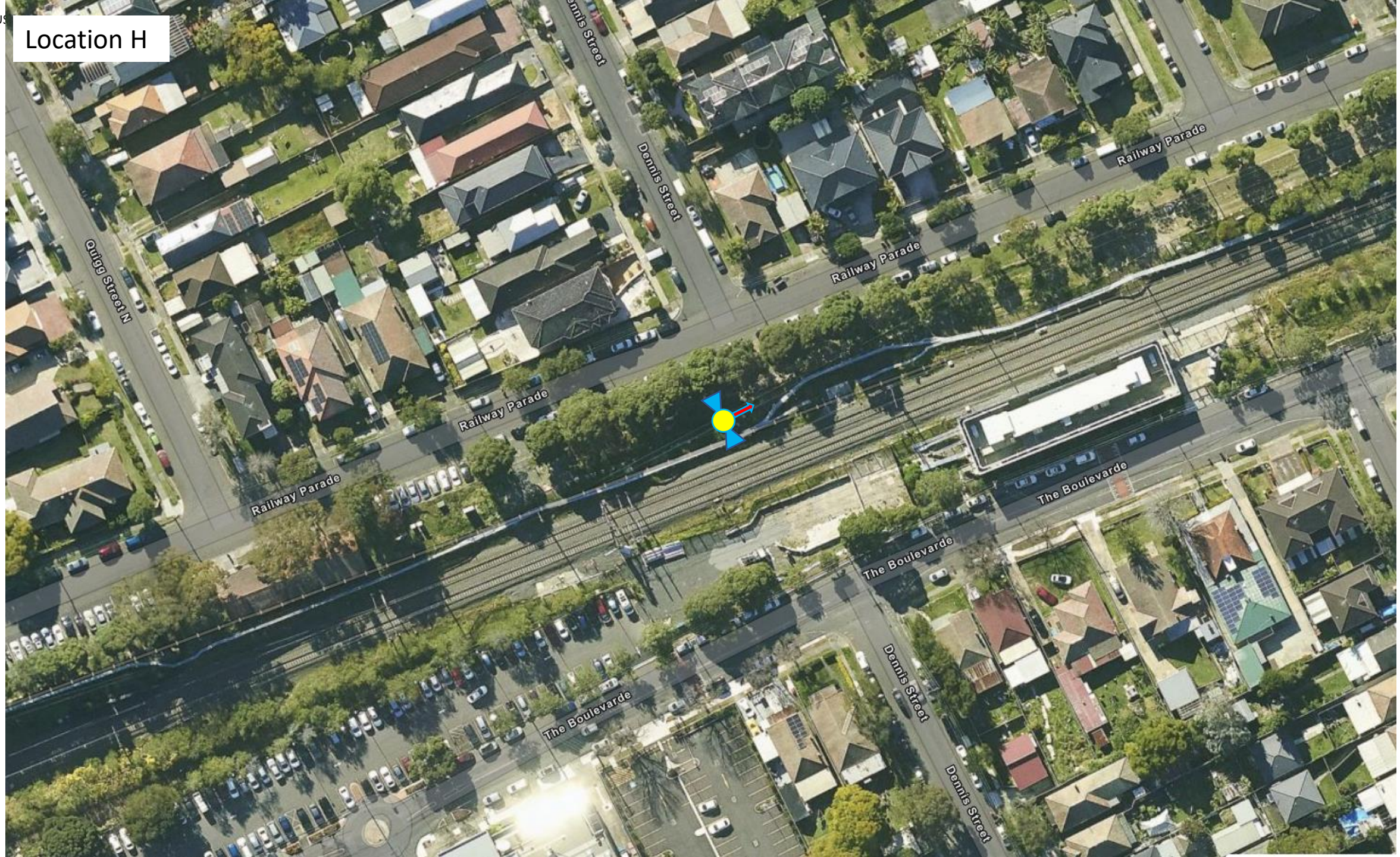


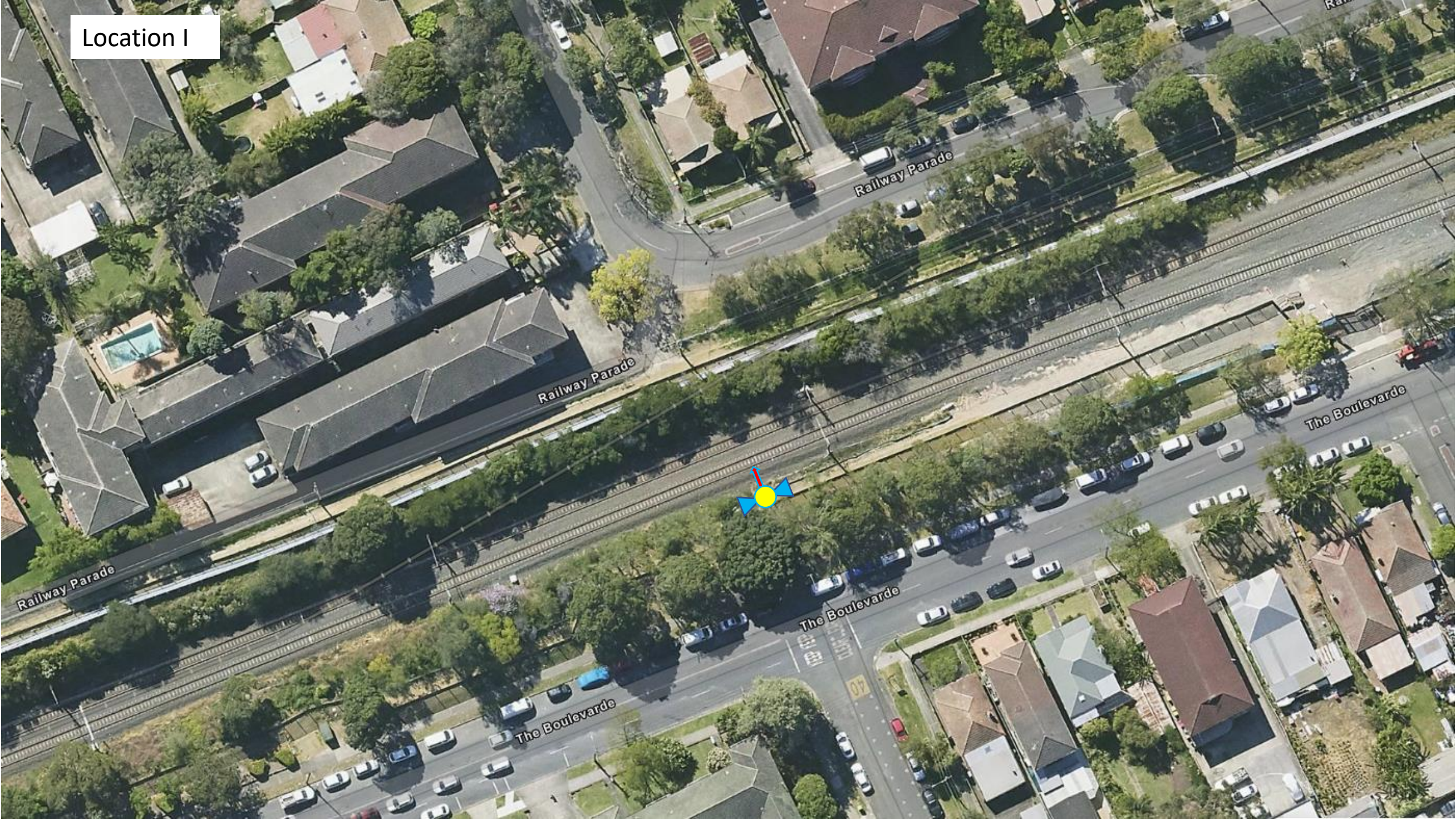
Nor

Location G

Non-Bus

Location H

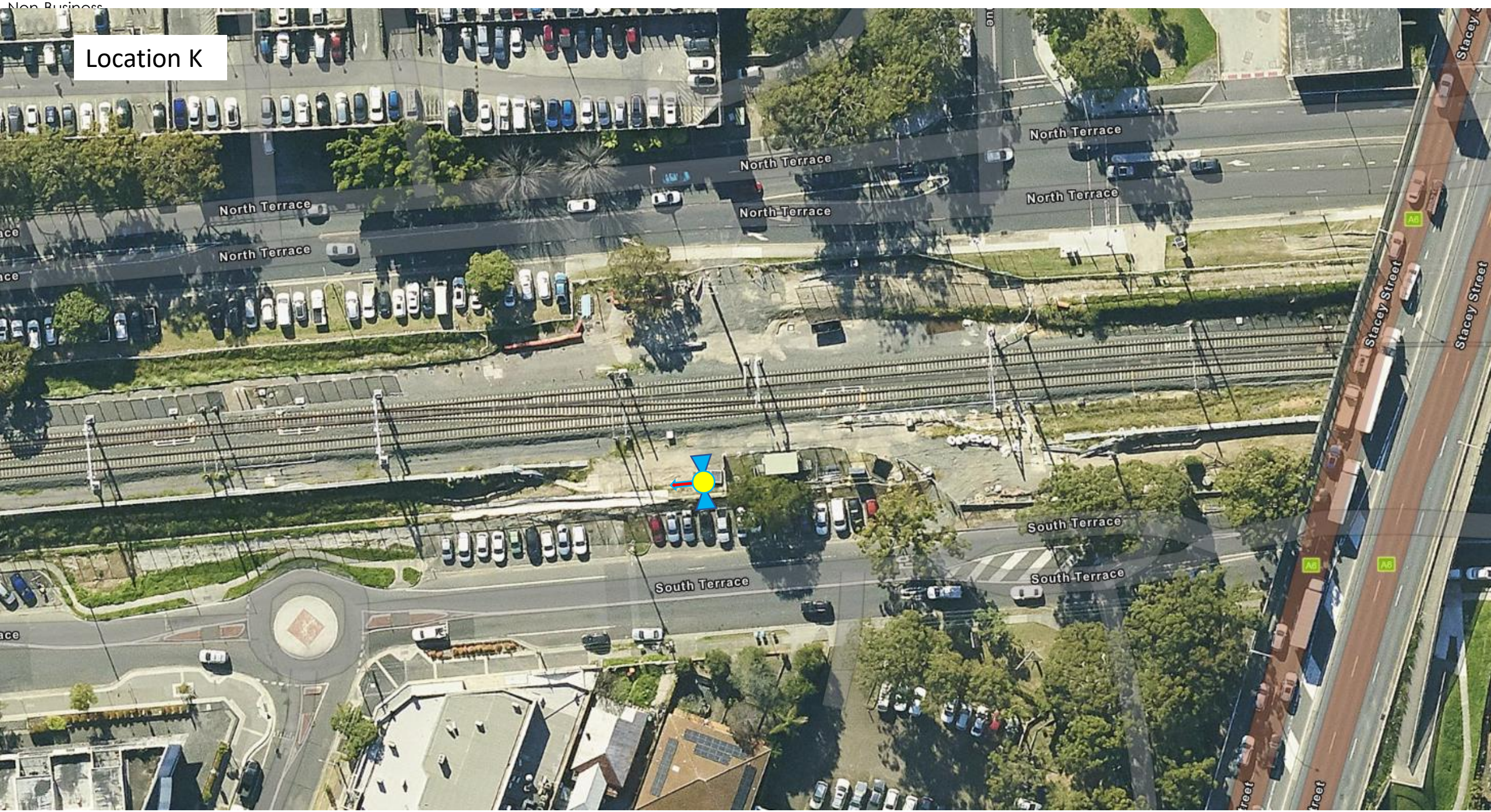



Location I
Railway Parade
Railway Parade
Railway Parade
The Boulevarde
The Boulevarde
The Boulevarde
The Boulevarde

Non-Bu

Location J

Non Business



EPL 21147
R4.4 Validation Report

SWMC Final Conversion Stage-3
(02. Dec. 2024 - 15. Dec. 2024)

Security Fence auguring, Post and Panel/mesh screens; OHW structure installation, OHW cable dropping and pulling; GST Installation; Installation of Brackets at Stations; PSD and MGF installation; Track tamping, Track adjustment, Track grinding, Marrickville track sewer upgrade, Victoria Transom Rail Bridge upgrade, Track side signal equipment demolition; Cabling and Trackside Equipment.

Document and Revision History

Document Details	
Title	R4.4 Validation Report
Client	Sydney Metro City & Southwest
JHLOR JV contract no.	K44

Revisions

Revision	Date	Description	Prepared by	Reviewed by
00	24/12/2024	Prepared for R4.4	Zhengyi Zhang	Lucas Dobrolot

Management reviews

Review date	Details	Reviewed by

Controlled:	NO	Copy no.:	Uncontrolled:	YES

Table of Contents

Introduction

This validation report has been prepared in accordance with EPL 21147 Condition R4.4 for out-of-hour works carried out over from 02nd December 2024 to 15th December 2024 during the Final Conversion Stage-3 Rail Possession.

The possession extended from Sydenham Station to Bankstown Station on Sydney Metro and Sydney Train track.

The following activities were carried under condition L5.6 - Local Possessions;

- Security Fence auguring, Post and Panel/mesh screens;
- Segregation fence auguring, Post and Panel/mesh screens
- OHW structure installation,
- OHW cable dropping and pulling;
- HV pole removal;
- GST Installation;
- Installation of Brackets at Stations;
- PSD and MGF installation
- Track tamping,
- Track adjustment,
- Track grinding,
- Marrickville track sewer upgrade,
- Victoria Transom Rail Bridge upgrade,
- Track side signal equipment demolition,
- Cabling and Trackside Equipment.

Refer to **Attachment 1** for monitoring results.

R4.4(a) For activities permitted under Condition L5.6 & L5.7, a validation report must be submitted to the EPA that includes the following detail:

1. Confirmation that the equipment used to undertake the works was as specified in the relevant Construction Noise and Vibration Impact Assessment for the worksite

The assessment prepared for the works included modelling for the following plant and equipment:

- Excavators 3T, 6 and13T (inc jack hammer, augering and demolition attachments)
- Balloon tyre dump trucks (Hydrema)
- Light vehicles
- Trucks
- Payloader
- Handheld powered tools
- Vac Trucks
- EWP/telehandler
- Front-end loader
- Concrete truck and line pump
- Portable Generators
- Compressors
- Compactor
- Bogie
- Water pumps

- 4T Dumpy
- Site lights
- Mobile crane
- Taper
- Regulator
- Track grinder
- Track thermos-welding kit

2. A copy of the community notification required under Condition L5.12

A copy of the community notification required under Condition L5.12 is appended as **Attachment 2**.

3. Noise monitoring as required by L5.8(d)

Final Conversion Stage-3 (02. Dec. 2024 - 15. Dec. 2024) noise monitoring was carried out at 10 locations on the perimeter of the rail corridor.

All monitoring locations are closer to the source of the noise than the nearest sensitive receiver.

Note: calculation will be done where the noise at monitoring location exceeds the predicted level at the nearest sensitive receiver.

Monitoring locations listed below:

a. NCA SSJ – (HEX646) 90m SE of 133 Meeks Road, Marrickville.
   - Noise Monitor is 58 m from the source of the noise
   - Sensitive Receiver is 147 m from the source of the noise
b. NCA 01 - (HEX630) 25m NE of 29 Leofrene Ave, Marrickville.
   - Noise Monitor is 13 m from the source of the noise
   - Sensitive Receiver is 25 m from the source of the noise
c. NCA 01 – (HEX615) 10m NE from 17 Warburton St, Marrickville
   - Noise Monitor is 19 m from the source of the noise
   - Sensitive Receiver is 30 m from the source of the noise
d. NCA 02 - (HEX623) 11m N of 51A Ewart Lane, Dulwich Hill.
   - Noise Monitor is 3 m from the source of the noise
   - Sensitive Receiver is 17 m from the source of the noise
e. NCA 02 - (HEX649) 11m N of 81 Ewart Street, Dulwich Hill.
   - Noise Monitor is 6 m from the source of the noise
   - Sensitive Receiver is 18 m from the source of the noise
f. NCA 05 – (HEX631) 18m S from 32-24 Campsie St, Campsie
   - Noise Monitor is 19 m from the source of the noise
   - Sensitive Receiver is 33 m from the source of the noise
g. NCA 07 - (HEX531) 4m E of 1 Hall St, Belmore.
   - Noise Monitor is 1 m from the source of the noise
   - Sensitive Receiver is 4 m from the source of the noise
h. NCA 08 - (HEX328) 26m S of 27 Dennis St, Lakemba.
   - Noise Monitor is 30 m from the source of the noise
   - Sensitive Receiver is 55 m from the source of the noise
i. NCA 09 - (HEX646) 50m SE of 17 Alice Street North, Wiley Park.
   - Noise Monitor is 9 m from the source of the noise
   - Sensitive Receiver is 22 m from the source of the noise
j. NCA 10 - (HEX421) 65m S of 37 Urunga Parade, Punchbowl.
   - Noise Monitor is 11 m from the source of the noise

- Sensitive Receiver is 53 m from the source of the noise

Refer to **Appendix 1** for noise monitoring results.

4. Details of any exceedances of predicted noise levels;

Noise (LAeq 15min) data was collected at the 11 locations between the 02nd of December 2024 to 15th of December 2024, all Out of Hour Works (OOHW) shift has been assessed.

During Final Conversion Stage-3 (02nd of December 2024 to 15th of December 2024), there were zero (0) exceedances of the noise predictions generated from the JHLORJV construction activity.

5. Details of the noise and vibration mitigation measures that were implemented as specified in the relevant Construction Noise and Vibration Impact Assessment for the worksite

The following noise mitigation measures are implemented:

- Potential source noise controls include mufflers fitted to exhausts, regular maintenance of plant, acoustic enclosure of machinery on plant items, non-tonal reversing alarms fitted to plant.
- General monthly community notification.
- Specific notification to impacted residents were provided no later than 5 days out from start of possession.
- Additional mitigation measures such as Alternative Accommodation and Respite Offers.
- Use of real time noise monitors at targeted work locations. Periodic desk top checks on data collected by the 7 real time monitoring instruments were carried out during work periods.
- Environmental surveillance
- On site mitigation instructions to crews:
    - No music, no dropping of objects
    - No shouting or unnecessary noise
    - Be respectful of neighbors when coming and going from site. As far as possible, avoid congregating near residential property boundaries.
    - Position plant as far from residents as possible and orientate them if possible, to emit noise on non-resident side.
    - Plant to be switched off when not in use.

6. The justification required under L5.6 for the carrying out of works outside of standard construction hours in L5.1.

The works carried out on Final Conversion Stage-3 could only be safely conducted during a rail possession due to works occurring within the rail corridor/danger zone. Works were completed in accordance with EPL Condition L5.6 (Local Possession). Carrying out the construction activities during standard construction hours (specified in L5.1) would cause unacceptable risks to construction personnel safety; rail passenger and railways personnel safety and railway network operational reliability.

Construction activities occurring within the rail corridor/danger zone can only be safely conducted during a rail possession during the absence of trains.

All feasible and reasonable at-source noise controls were implemented in accordance with Condition L4.1, and noise mitigation measures were implemented in accordance with JHLORJV's CNVIS and Interim Construction Noise Guideline (DECC 2009).

R4.4 (b) The validation report must be submitted to the EPA fortnightly from the commencement of the works permitted by L5.6 & L5.7 by no later than 2 business days from the end of each fortnight.

This R4.4 Validation report has been submitted to EPA by no later than two business days after the end of the fortnight.

Attachment 1 – Noise Monitoring Results

- Monitoring Result
- Monitoring Location

Table 1. Monitoring Location A: NCA SSJ – (HEX646) 90m SE of 133 Meeks Road, Marrickville

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	12/12/2024 To 13/12/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	• Highest ambient LAeq in period at Monitoring Location is 76 • Excluding the following non-construction related event being identified: 12/12/2024 22:15 64 Aircraft 12/12/2024 22:30 61 Aircraft 12/12/2024 23:00 59 ARTC Train 12/12/2024 23:15 66 ARTC Train 13/12/2024 1:00 61 ARTC Train 13/12/2024 1:30 60 ARTC Train 13/12/2024 2:15 57 ARTC Train 13/12/2024 3:45 61 ARTC Train 13/12/2024 5:15 59 ARTC Train 13/12/2024 6:00 64 ARTC Train • Construction related LAeq in period at Monitoring Location is 62 • Due to the monitoring location being 58 m from the source of the noise and sensitive receiver being 147 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 54.	54	Y	• RBL: 40 dBA • The calculated construction related highest LAeq in work period (54 dBA) is lower than the predicted level (54 dBA) • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
2	13/12/2024 To 14/12/2024				• Highest ambient LAeq in period at Monitoring Location is 69 • Excluding the following non-construction related event being identified: 13/12/2024 22:15 59 Aircraft 13/12/2024 22:45 61 ARTC Train 13/12/2024 23:15 60 ARTC Train 14/12/2024 0:15 62 ARTC Train 14/12/2024 1:30 63 ARTC Train 14/12/2024 2:15 69 ARTC Train 14/12/2024 3:00 64 ARTC Train 14/12/2024 6:30 62 ARTC Train • Construction related LAeq in period at Monitoring Location is 56 • Due to the monitoring location being 58 m from the source of the noise and sensitive receiver being 147 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 48.	54	Y	• RBL: 40 dBA • The calculated construction related highest LAeq in work period (48 dBA) is lower than the predicted level (54 dBA) • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
3	15/12/2024	Day 08:00 to 18:00			• Highest ambient LAeq in period at Monitoring Location is 67 • Excluding the following non-construction related event being identified: 15/12/2024 7:15 61 ARTC Train 15/12/2024 8:15 65 ARTC Train 15/12/2024 8:45 64 ARTC Train 15/12/2024 9:30 62 ARTC Train 15/12/2024 10:15 60 ARTC Train 15/12/2024 12:00 61 ARTC Train 15/12/2024 12:30 67 ARTC Train 15/12/2024 16:00 57 ARTC Train 15/12/2024 17:45 60 ARTC Train 15/12/2024 18:45 58 ARTC Train 15/12/2024 19:15 58 ARTC Train 15/12/2024 20:00 61 ARTC Train 15/12/2024 20:45 55 ARTC Train 15/12/2024 21:15 57 ARTC Train 15/12/2024 21:45 59 ARTC Train • Construction related LAeq in period at Monitoring Location is 65	66	Y	• RBL: 47 dBA • The calculated construction related highest LAeq in work period (65 dBA) is lower than the predicted level (66 dBA) • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**

Table 2. Monitoring Location B: NCA 01 - (HEX630) 25m NE of 29 Leofrene Ave, Marrickville.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	06/12/2024 To 07/12/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	• Highest ambient LAeq in period at Monitoring Location is 68 • Excluding the following non-construction related event being identified: 6/12/2024 22:15 59 Aircraft 6/12/2024 22:30 68 ARTC Train 6/12/2024 23:00 66 ARTC Train 6/12/2024 23:30 62 ARTC Train 6/12/2024 23:45 67 ARTC Train 7/12/2024 0:00 66 ARTC Train 7/12/2024 0:30 65 ARTC Train 7/12/2024 1:15 65 ARTC Train • Construction related LAeq in period at Monitoring Location is 61 • Due to the monitoring location being 13 m from the source of the noise and sensitive receiver being 25 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 55.	59	Y	• RBL: 33 dBA • The calculated construction related highest LAeq in work period (55 dBA) is lower than the predicted level (59 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	07/12/2024 To 08/12/2024				• Highest ambient LAeq in period at Monitoring Location is 63	73	Y	• RBL: 33 dBA • The detected highest LAeq in work period (63 dBA) is below the predicted level (73 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
3	08/12/2024	Day 08:00 to 18:00			• Highest ambient LAeq in period at Monitoring Location is 71	73	Y	• RBL: 38 dBA • The detected highest LAeq in work period (71 dBA) is below the predicted level (73 dBA) • **Predicted noise levels (Day shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
4	08/12/2024 To 09/12/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			• Highest ambient LAeq in period at Monitoring Location is 82 • Excluding the following non-construction related event being identified: 8/12/2024 22:15 76 ARTC Train 8/12/2024 22:30 82 ARTC Train 9/12/2024 2:45 67 ARTC Train 9/12/2024 4:30 61 ARTC Train 9/12/2024 5:00 69 ARTC Train 9/12/2024 5:15 63 ARTC Train 9/12/2024 5:30 63 ARTC Train 9/12/2024 6:00 65 ARTC Train • Construction related LAeq in period at Monitoring Location is 55	73	Y	• RBL: 33 dBA • The highest construction related LAeq in work period (55 dBA) is below the predicted level (73 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
5	09/12/2024 To 10/12/2024				• Highest ambient LAeq in period at Monitoring Location is 82 • Excluding the following non-construction related event being identified: 9/12/2024 22:30 60 ARTC Train 9/12/2024 22:45 71 ARTC Train 9/12/2024 23:00 68 ARTC Train 9/12/2024 23:15 58 ARTC Train 9/12/2024 23:30 66 ARTC Train 9/12/2024 23:45 66 ARTC Train 10/12/2024 0:45 65 ARTC Train 10/12/2024 1:00 61 ARTC Train 10/12/2024 1:30 70 ARTC Train 10/12/2024 1:45 66 ARTC Train 10/12/2024 2:00 64 ARTC Train 10/12/2024 2:30 67 ARTC Train 10/12/2024 3:45 65 ARTC Train 10/12/2024 5:00 68 ARTC Train 10/12/2024 6:45 68 ARTC Train • Construction related LAeq in period at Monitoring Location is 57	63	Y	• RBL: 33 dBA • The highest construction related LAeq in work period (57 dBA) is below the predicted level (73 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
6	10/12/2024 To 11/12/2024				• Highest ambient LAeq in period at Monitoring Location is 69 • Excluding the following non-construction related event being identified: 10/12/2024 22:30 55 ARTC Train 10/12/2024 22:45 69 ARTC Train 10/12/2024 23:15 65 ARTC Train 11/12/2024 0:15 56 ARTC Train 11/12/2024 0:30 64 ARTC Train 11/12/2024 0:45 69 ARTC Train 11/12/2024 1:45 64 ARTC Train 11/12/2024 2:00 63 ARTC Train 11/12/2024 2:30 61 ARTC Train 11/12/2024 2:45 68 ARTC Train 11/12/2024 3:00 62 ARTC Train 11/12/2024 3:45 65 ARTC Train 11/12/2024 6:30 66 ARTC Train • Construction related LAeq in period at Monitoring Location is 65 • Due to the monitoring location being 13 m from the source of the noise and sensitive receiver being 25 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 59.	63	Y	• RBL: 33 dBA • The calculated construction related highest LAeq in work period (59 dBA) is lower than the predicted level (63 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**

7	11/12/2024 To 12/12/2024				• Highest ambient LAeq in period at Monitoring Location is 71 • Excluding the following non-construction related event being identified: 11/12/2024 22:30 64 ARTC Train 11/12/2024 22:45 68 Aircraft 11/12/2024 23:15 58 ARTC Train 12/12/2024 0:30 67 ARTC Train 12/12/2024 0:45 65 ARTC Train 12/12/2024 1:30 70 ARTC Train 12/12/2024 1:45 68 ARTC Train 12/12/2024 2:45 71 ARTC Train 12/12/2024 3:45 64 ARTC Train 12/12/2024 4:30 65 ARTC Train 12/12/2024 5:15 62 ARTC Train 12/12/2024 5:30 70 ARTC Train 12/12/2024 6:30 66 ARTC Train • Construction related LAeq in period at Monitoring Location is 62 • 8Due to the monitoring location being 13 m from the source of the noise and sensitive receiver being 25 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 56.	60	Y	• RBL: 33 dBA • The calculated construction related highest LAeq in work period (56 dBA) is lower than the predicted level (60 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
8	12/12/2024 To 13/12/2024				• Highest ambient LAeq in period at Monitoring Location is 71 • Excluding the following non-construction related event being identified: 12/12/2024 22:15 61 Aircraft 12/12/2024 23:00 68 ARTC Train 12/12/2024 23:15 71 ARTC Train 13/12/2024 0:30 60 ARTC Train 13/12/2024 1:00 65 ARTC Train 13/12/2024 1:15 71 ARTC Train 13/12/2024 1:30 68 ARTC Train 13/12/2024 2:15 66 ARTC Train 13/12/2024 3:45 67 ARTC Train 13/12/2024 5:00 64 ARTC Train 13/12/2024 5:15 65 ARTC Train 13/12/2024 5:45 64 ARTC Train 13/12/2024 6:00 71 ARTC Train • Construction related LAeq in period at Monitoring Location is 57	60	Y	• RBL: 33 dBA • The highest construction related LAeq in work period (57 dBA) is below the predicted level (60 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
9	13/12/2024 To 14/12/2024				• Highest ambient LAeq in period at Monitoring Location is 70 • Excluding the following non-construction related event being identified: 13/12/2024 22:45 69 ARTC Train 13/12/2024 23:15 65 ARTC Train 14/12/2024 0:00 58 ARTC Train 14/12/2024 0:15 67 ARTC Train 14/12/2024 1:15 65 ARTC Train 14/12/2024 1:30 68 ARTC Train 14/12/2024 2:15 62 ARTC Train 14/12/2024 3:00 70 ARTC Train 14/12/2024 3:45 63 ARTC Train 14/12/2024 4:45 64 ARTC Train 14/12/2024 6:30 67 ARTC Train • Construction related LAeq in period at Monitoring Location is 63 • Due to the monitoring location being 13 m from the source of the noise and sensitive receiver being 25 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 57.	60	Y	• RBL: 33 dBA • The calculated construction related highest LAeq in work period (57 dBA) is lower than the predicted level (60 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
10	15/12/2024	Day 08:00 to 18:00			• Highest ambient LAeq in period at Monitoring Location is 71	73	Y	• RBL: 38 dBA • The detected highest LAeq in work period (71 dBA) is below the predicted level (73 dBA) • **Predicted noise levels (Day shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**

Table 3. Monitoring Location C: NCA 01 – (HEX615) 10m NE from 17 Warburton St, Marrickville

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	06/12/2024 To 07/12/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	• Highest ambient LAeq in period at Monitoring Location is 60 • Excluding the following non-construction related event being identified: 7/12/2024 5:45 60 Weahter Rain • Construction related LAeq in period at Monitoring Location is 59 • Due to the monitoring location being 19 m from the source of the noise and sensitive receiver being 30 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 55.	55	Y	• RBL: 33 dBA • The calculated construction related highest LAeq in work period (55 dBA) is matched the predicted level (55 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	07/12/2024 To 08/12/2024				• Highest ambient LAeq in period at Monitoring Location is 60	69	Y	• RBL: 33 dBA • The detected highest LAeq in work period (60 dBA) is below the predicted level (69 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	08/12/2024	Day 08:00 to 18:00			• Highest ambient LAeq in period at Monitoring Location is 68	69	Y	• RBL: 38 dBA • The detected highest LAeq in work period (68 dBA) is below the predicted level (69 dBA) • **Predicted noise levels (Day shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
4	08/12/2024 To 09/12/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			• Highest ambient LAeq in period at Monitoring Location is 65	69	Y	• RBL: 33 dBA • The detected highest LAeq in work period (65 dBA) is below the predicted level (73 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
5	09/12/2024 To 10/12/2024				• Highest ambient LAeq in period at Monitoring Location is 65	65	Y	

Table 4. Monitoring Location D: NCA 02 - (HEX623) 11m N of 51A Ewart Lane, Dulwich Hill.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	07/12/2024 To 08/12/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	• Highest ambient LAeq in period at Monitoring Location is 57	58	Y	• RBL: 33 dBA • The detected highest LAeq in work period (57 dBA) is below the predicted level (58 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	08/12/2024	Day 08:00 to 18:00			• Construction related LAeq in period at Monitoring Location is 70 • Due to the monitoring location being 3 m from the source of the noise and sensitive receiver being 17 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is **55**.	56	Y	• RBL: 38 dBA • The calculated construction related highest LAeq in work period (55 dBA) is below the predicted level (56 dBA) • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
3	08/12/2024 To 09/12/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			• Highest ambient LAeq in period at Monitoring Location is 53	58	Y	• RBL: 33 dBA • The detected highest LAeq in work period (53 dBA) is below the predicted level (58 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
4	09/12/2024 To 10/12/2024				• Highest ambient LAeq in period at Monitoring Location is 61 • Excluding the following non-construction related event being identified: 9/12/2024 22:45 61 Aircraft 10/12/2024 2:30 57 ARTC Train 10/12/2024 5:15 58 ARTC Train • Construction related LAeq in period at Monitoring Location is 55	56	**Y**	• RBL: 33 dBA • The highest construction related LAeq in work period (55 dBA) is below the predicted level (56 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
5	10/12/2024 To 11/12/2024				• Highest ambient LAeq in period at Monitoring Location is 57 • Excluding the following non-construction related event being identified: 11/12/2024 2:15 57 ARTC Train • Construction related LAeq in period at Monitoring Location is 53	56	**Y**	• RBL: 33 dBA • The highest construction related LAeq in work period (53 dBA) is below the predicted level (56 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
6	15/12/2024	Day 08:00 to 18:00			• Highest ambient LAeq in period at Monitoring Location is 57 • Excluding the following non-construction related event being identified: 15/12/2024 10:30 57 Train Horn 15/12/2024 15:30 56 Urban Siren • Construction related LAeq in period at Monitoring Location is 56 • Due to the monitoring location being 3 m from the source of the noise and sensitive receiver being 17 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is **41**.	55	Y	• RBL: 38 dBA • The calculated construction related highest LAeq in work period (41 dBA) is below the predicted level (55 dBA) • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**

Table 5. Monitoring Location E: NCA 02 - (HEX649) 11m N of 81 Ewart Street, Dulwich Hill

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	07/12/2024 To 08/12/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	• Highest ambient LAeq in period at Monitoring Location is 63	73	Y	• RBL: 33 dBA • The detected highest LAeq in work period (63 dBA) is below the predicted level (73 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	08/12/2024	Day 08:00 to 18:00			• Highest ambient LAeq in period at Monitoring Location is 73 • Excluding the following non-construction related event being identified: 8/12/2024 19:45 73 Urban Traffic • Construction related LAeq in period at Monitoring Location is 71	72	Y	• RBL: 38 dBA • The highest construction related LAeq in work period (71 dBA) is below the predicted level (72 dBA) • **Predicted noise levels (Day shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
3	08/12/2024 To 09/12/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			• Highest ambient LAeq in period at Monitoring Location is 69	73	Y	• RBL: 33 dBA • The detected highest LAeq in work period (69 dBA) is below the predicted level (73 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
4	09/12/2024 To 10/12/2024				• Highest ambient LAeq in period at Monitoring Location is 71 • Excluding the following non-construction related event being identified: 9/12/2024 22:30 70 ARTC Train 9/12/2024 22:45 67 Aircraft 9/12/2024 23:00 67 ARTC Train 9/12/2024 23:15 61 ARTC Train 9/12/2024 23:30 71 ARTC Train 9/12/2024 23:45 67 ARTC Train 10/12/2024 0:45 66 ARTC Train 10/12/2024 1:00 63 ARTC Train 10/12/2024 1:45 70 ARTC Train 10/12/2024 2:00 69 ARTC Train 10/12/2024 2:30 65 ARTC Train 10/12/2024 3:45 64 ARTC Train 10/12/2024 5:00 70 ARTC Train 10/12/2024 5:15 70 ARTC Train 10/12/2024 6:45 66 ARTC Train • Construction related LAeq in period at Monitoring Location is 54 • Due to the monitoring location being 6 m from the source of the noise and sensitive receiver being 18 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is **44**.	52	**Y**	• RBL: 33 dBA • The calculated construction related highest LAeq in work period (44 dBA) is matched the predicted level (52 dBA) • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**

5	10/12/2024 To 11/12/2024				• Highest ambient LAeq in period at Monitoring Location is 73 • Excluding the following non-construction related event being identified: 10/12/2024 22:15 61 ARTC Train 10/12/2024 22:30 62 ARTC Train 10/12/2024 22:45 66 ARTC Train 10/12/2024 23:00 65 ARTC Train 10/12/2024 23:15 64 ARTC Train 10/12/2024 23:30 68 ARTC Train 11/12/2024 0:15 56 ARTC Train 11/12/2024 0:30 62 ARTC Train 11/12/2024 0:45 70 ARTC Train 11/12/2024 1:00 68 ARTC Train 11/12/2024 1:30 66 ARTC Train 11/12/2024 1:45 65 ARTC Train 11/12/2024 2:00 70 ARTC Train 11/12/2024 2:15 73 ARTC Train 11/12/2024 2:45 68 ARTC Train 11/12/2024 3:00 64 ARTC Train 11/12/2024 3:45 64 ARTC Train 11/12/2024 5:00 69 ARTC Train 11/12/2024 6:30 65 ARTC Train • Construction related LAeq in period at Monitoring Location is 51	52	Y	• RBL: 38 dBA • The highest construction related LAeq in work period (51 dBA) is below the predicted level (52 dBA) • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
6	15/21/2024	Day 08:00 to 18:00			• Highest ambient LAeq in period at Monitoring Location is 68 • Excluding the following non-construction related event being identified: 15/12/2024 7:15 66 ARTC Train 15/12/2024 8:00 68 ARTC Train 15/12/2024 8:30 61 ARTC Train 15/12/2024 8:45 68 ARTC Train 15/12/2024 8:30 61 ARTC Train 15/12/2024 8:45 68 ARTC Train 15/12/2024 9:15 57 ARTC Train 15/12/2024 9:30 64 ARTC Train 15/12/2024 10:15 63 ARTC Train 15/12/2024 10:30 64 ARTC Train 15/12/2024 11:45 61 ARTC Train 15/12/2024 12:30 64 ARTC Train 15/12/2024 13:15 60 ARTC Train 15/12/2024 13:45 56 ARTC Train 15/12/2024 14:15 66 ARTC Train 15/12/2024 16:15 64 ARTC Train 15/12/2024 17:15 63 ARTC Train 15/12/2024 17:30 58 ARTC Train 15/12/2024 17:45 62 ARTC Train 15/12/2024 18:30 63 ARTC Train 15/12/2024 18:45 57 ARTC Train 15/12/2024 19:15 64 ARTC Train 15/12/2024 20:00 63 Animal Activity 15/12/2024 20:30 66 ARTC Train 15/12/2024 21:00 66 ARTC Train 15/12/2024 21:15 62 ARTC Train 15/12/2024 21:45 66 ARTC Train • Construction related LAeq in period at Monitoring Location is 63 • Due to the monitoring location being 6 m from the source of the noise and sensitive receiver being 18 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 53.	57	Y	• RBL: 38 dBA • The calculated construction related highest LAeq in work period (53 dBA) is matched the predicted level (57 dBA) • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**

Table 6. Monitoring Location F: NCA 06 – (HEX631) 18m S from 32-24 Campsie St, Campsie

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	07/12/2024 To 08/12/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie	• Highest ambient LAeq in period at Monitoring Location is 50	66	Y	• RBL: 35 dBA • The detected highest LAeq in work period (50 dBA) is below the predicted level (66 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	08/12/2024	Day 08:00 to 18:00			• Construction related LAeq in period at Monitoring Location is 71 • Due to the monitoring location being 19 m from the source of the noise and sensitive receiver being 33 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 66.	66	Y	• RBL: 45 dBA • The calculated construction related highest LAeq in work period (66 dBA) matched the predicted level (66 dBA) • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
3	08/12/2024 To 09/12/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			• Highest ambient LAeq in period at Monitoring Location is 68 • Excluding the following non-construction related event being identified: 8/12/2024 23:00 63 ARTC Train 9/12/2024 2:45 61 ARTC Train 9/12/2024 4:15 65 ARTC Train 9/12/2024 4:30 62 ARTC Train 9/12/2024 4:45 68 ARTC Train 9/12/2024 5:00 61 ARTC Train 9/12/2024 5:30 64 ARTC Train 9/12/2024 6:00 67 ARTC Train • Construction related LAeq in period at Monitoring Location is 54	66	Y	• RBL: 35 dBA • The highest construction related LAeq in work period (54 dBA) is below the predicted level (66 dBA) • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**

4	15/12/2024	Day 08:00 to 18:00		• Water pumps • 4T Dumpy • Site lights • Mobile Crane	• Highest ambient LAeq in period at Monitoring Location is 68 • Excluding the following non-construction related event being identified: 15/12/2024 7:15 60 ARTC Train 15/12/2024 7:45 65 ARTC Train 15/12/2024 8:00 65 ARTC Train 15/12/2024 8:30 60 ARTC Train 15/12/2024 8:45 66 ARTC Train 15/12/2024 9:00 63 ARTC Train 15/12/2024 9:15 65 ARTC Train 15/12/2024 9:30 65 ARTC Train 15/12/2024 10:15 66 ARTC Train 15/12/2024 10:30 61 ARTC Train 15/12/2024 11:30 61 ARTC Train 15/12/2024 12:30 62 ARTC Train 15/12/2024 12:45 56 ARTC Train 15/12/2024 13:00 61 ARTC Train 15/12/2024 14:00 68 ARTC Train 15/12/2024 14:15 61 ARTC Train 15/12/2024 16:15 63 ARTC Train 15/12/2024 17:00 61 ARTC Train 15/12/2024 17:15 61 ARTC Train 15/12/2024 17:30 59 ARTC Train 15/12/2024 18:00 61 ARTC Train 15/12/2024 18:15 60 ARTC Train 15/12/2024 18:30 60 ARTC Train 15/12/2024 18:45 57 ARTC Train 15/12/2024 19:15 54 ARTC Train 15/12/2024 19:30 64 ARTC Train 15/12/2024 20:15 63 ARTC Train 15/12/2024 20:30 65 ARTC Train 15/12/2024 21:00 64 ARTC Train 15/12/2024 21:45 66 ARTC Train • Construction related LAeq in period at Monitoring Location is 59 • Due to the monitoring location being 19 m from the source of the noise and sensitive receiver being 33 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 54.	56	Y	• RBL: 45 dBA • The calculated construction related highest LAeq in work period (54 dBA) matched the predicted level (56 dBA) • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**

Table 7. Monitoring Location G: NCA 07 - (HEX531) 4m E of 1 Hall St, Belmore.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	07/12/2024 To 08/12/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Bogie • Water pumps • 4T Dumpy • Mobile Crane	• Highest ambient LAeq in period at Monitoring Location is **66**	71	Y	• RBL: 35 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Night shift works) in this triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	08/12/2024	Day 08:00 to 18:00			• Highest ambient LAeq in period at Monitoring Location is **68**	71	Y	• RBL: 41 dBA • Noise monitor detect highest LAeq15min value below the predictions. • **Predicted noise levels (Day shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
3	08/12/2024 To 09/12/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			• Highest ambient LAeq in period at Monitoring Location is **53**	71	Y	• RBL: 35 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Night shift works) in this triggered offer for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
4	09/12/2024 To 10/12/2024				• Highest ambient LAeq in period at Monitoring Location is **53**	66	Y	
5	10/12/2024 To 11/12/2024				• Highest ambient LAeq in period at Monitoring Location is **61**	66	Y	
6	11/12/2024 To 12/12/2024				• Highest ambient LAeq in period at Monitoring Location is **61**	66	Y	
7	15/12/2024	Day 08:00 to 18:00			• Highest ambient LAeq in period at Monitoring Location is **59**	67	Y	• RBL: 41 dBA • Noise monitor detect highest LAeq15min value below the predictions. • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**

Table 8. Monitoring Location H: NCA 08 - (HEX328) 26m S of 27 Dennis St, Lakemba.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	07/12/2024 To 08/12/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	• Highest ambient LAeq in period at Monitoring Location is 54	58	Y	• RBL: 41 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Night shift works) did not trigger offer for additional mitigation measures.** • **Appropriate mitigation measures being offered**
2	08/12/2024	Day 08:00 to 18:00			• Highest ambient LAeq in period at Monitoring Location is 72 • Excluding the following non-construction related event being identified: 8/12/2024 20:00 60 Urban Traffic 8/12/2024 21:15 68 Illegal Firework 8/12/2024 21:30 72 Illegal Firework • Construction related LAeq in period at Monitoring Location is 59 • Due to the monitoring location being 30 m from the source of the noise and sensitive receiver being 55 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is **54**.	58	Y	• RBL: 47 dBA • The calculated construction related highest LAeq in work period (54 dBA) matched the predicted level (58 dBA) • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
3	08/12/2024 To 09/12/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			• Highest ambient LAeq in period at Monitoring Location is 58	58	Y	• RBL: 41 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Night shift works) did not trigger offer for additional mitigation measures.** • **Appropriate mitigation measures being offered**
4	15/12/2024	Day 08:00 to 18:00			• Highest ambient LAeq in period at Monitoring Location is 57 • Excluding the following non-construction related event being identified: 15/12/2024 10:15 57 Urban Traffic 15/12/2024 12:45 56 Urban Traffic 15/12/2024 14:00 56 Urban Traffic 15/12/2024 16:30 57 Animal Activity 15/12/2024 16:45 56 Animal Activity • Construction related LAeq in period at Monitoring Location is 54 • Due to the monitoring location being 19 m from the source of the noise and sensitive receiver being 33 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is **49**.	52	Y	• RBL: 47 dBA • The calculated construction related highest LAeq in work period (54 dBA) matched the predicted level (58 dBA) • **Predicted noise levels (Day shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**

Table 9. Monitoring Location I: NCA 09 - (HEX646) 50m SE of 17 Alice Street North, Wiley Park.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	07/12/2024 To 08/12/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Portable Generators • Compressors • Compactor • Bogie • Water pumps • 4T Dumpy • Site lights • Mobile Crane	• Highest ambient LAeq in period at Monitoring Location is 62 • Excluding the following non-construction related event being identified: 7/12/2024 22:15 62 Urban Traffic 7/12/2024 22:30 55 Urban Traffic 7/12/2024 22:45 56 Urban Traffic • Construction related LAeq in period at Monitoring Location is 56 • Due to the monitoring location being 9 m from the source of the noise and sensitive receiver being 22 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is **48**.	55	Y	• RBL: 36 dBA • The calculated construction related highest LAeq in work period (48 dBA) matched the predicted level (55 dBA) • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
2	08/12/2024	Day 08:00 to 18:00			• Highest ambient LAeq in period at Monitoring Location is 65	81	Y	• RBL: 44 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Day shift works) in this triggered offer for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
3	08/12/2024 To 09/12/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			• Highest ambient LAeq in period at Monitoring Location is 68 • Excluding the following non-construction related event being identified: 8/12/2024 22:15 57 Urban Traffic 8/12/2024 22:30 55 Urban Traffic 8/12/2024 22:45 55 Urban Traffic 8/12/2024 23:00 56 Urban Traffic 9/12/2024 0:30 54 Urban Traffic 9/12/2024 6:00 54 Animal Activity 9/12/2024 6:30 55 Urban Traffic 9/12/2024 6:45 58 Urban Traffic • Construction related LAeq in period at Monitoring Location is 56 • Due to the monitoring location being 9 m from the source of the noise and sensitive receiver being 22 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is **48**.	55	Y	• RBL: 36 dBA • The calculated construction related highest LAeq in work period (48 dBA) matched the predicted level (55 dBA) • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
4	10/12/2024 To 11/12/2024				• Highest ambient LAeq in period at Monitoring Location is 55	55		• RBL: 44 dBA • Noise monitor detect highest LAeq15min value below predictions. • **Predicted noise levels (Day shift works) did not trigger offer for additional mitigation measures.** • **Appropriate mitigation measures being offered**

Table 10. Monitoring Location J: NCA 10 - (HEX421) 65m S of 37 Urunga Parade, Punchbowl.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	07/12/2024 To 08/12/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Excavators 3T, 6 and13T (inc jack hammer attachments) • Balloon tyre dump trucks (Hydrema) • Light vehicles • Trucks • Payloader • Handheld powered and non-powered tools • Vac Trucks • EWP/telehandler • Front-end loader • Concrete truck and line pump • Bogie • Water pumps • 4T Dumpy • Mobile Crane	• Highest ambient LAeq in period at Monitoring Location is 65 • Excluding the following non-construction related event being identified: 7/12/2024 23:45 65 Illegal Firework • Construction related LAeq in period at Monitoring Location is 55	63	Y	• RBL: 41 dBA • The calculated construction related highest LAeq in work period below the predicted level. • **Predicted noise levels (Night shift works) triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	08/12/2024	Day 08:00 to 18:00			• Highest ambient LAeq in period at Monitoring Location is 63 • Excluding the following non-construction related event being identified: 8/12/2024 8:15 60 Urban Traffic & Animal Activity 8/12/2024 8:30 62 Urban Traffic & Animal Activity 8/12/2024 8:45 61 Urban Traffic & Animal Activity 8/12/2024 9:00 60 Urban Traffic & Animal Activity 8/12/2024 9:15 63 Urban Traffic & Animal Activity 8/12/2024 9:30 63 Urban Traffic & Animal Activity • Construction related LAeq in period at Monitoring Location is 60	60	Y	• RBL: 47 dBA • The construction related highest LAeq in work period matched the predicted level. • **Predicted noise levels (Day shift works) in this didn't trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
3	08/12/2024 To 09/12/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)			• Highest ambient LAeq in period at Monitoring Location is 59	63	Y	• RBL: 41 dBA • Noise monitor detect highest LAeq15min value below the predictions. • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
4	09/12/2024 To 10/12/2024				• Highest ambient LAeq in period at Monitoring Location is 57 • Excluding the following non-construction related event being identified: 9/12/2024 22:15 57 Urban Traffic 10/12/2024 4:15 52 Urban Traffic 10/12/2024 5:30 54 Urban Traffic • Construction related LAeq in period at Monitoring Location is 55 • Due to the monitoring location being 11 m from the source of the noise and sensitive receiver being 53 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is **41**.	52	Y	• RBL: 41 dBA • The calculated construction related highest LAeq in work period below the predicted level. • **Predicted noise levels (Night shift works) did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
5	10/12/2024 To 11/12/2024				• Highest ambient LAeq in period at Monitoring Location is 60 • Excluding the following non-construction related event being identified: 11/12/2024 6:45 60 Urban Traffic • Construction related LAeq in period at Monitoring Location is 54 • Due to the monitoring location being 11 m from the source of the noise and sensitive receiver being 53 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is **40**	52	Y	
6	11/12/2024 To 12/12/2024				• Highest ambient LAeq in period at Monitoring Location is 58 • Excluding the following non-construction related event being identified: 11/12/2024 22:15 58 Urban Traffic • Construction related LAeq in period at Monitoring Location is 55	55	Y	• RBL: 41 dBA • The construction related highest LAeq in work period matched the predicted level. • **Predicted noise levels (Night shift works) in this didn't trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
7	12/12/2024 To 13/12/2024				• Highest ambient LAeq in period at Monitoring Location is 55	55	Y	• RBL: 41 dBA • Noise monitor detect highest LAeq15min value below the predictions. • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
8	13/12/2024 To 14/12/2024				• Highest ambient LAeq in period at Monitoring Location is 58 • Excluding the following non-construction related event being identified: 13/12/2024 22:15 55 Urban Traffic 13/12/2024 22:30 58 Urban Traffic 13/12/2024 22:45 54 Urban Traffic 13/12/2024 23:00 55 Urban Traffic 13/12/2024 23:30 55 Urban Traffic 14/12/2024 0:45 54 Urban Traffic 14/12/2024 1:00 54 Urban Traffic 14/12/2024 6:00 53 Urban Traffic 14/12/2024 6:15 52 Animal Activity • Construction related LAeq in period at Monitoring Location is 53 • Due to the monitoring location being 11 m from the source of the noise and sensitive receiver being 53 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is **39**.	51	Y	• RBL: 41 dBA • The calculated construction related highest LAeq in work period below the predicted level • **Predicted noise levels (Night shift works) in this area did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**


Location A
Meeks Road
Myrtle Street
Carrington Road

Non-Bu


Location B
Leofrene Avenue
Leofrene Avenue
Riverdale Avenue
Riverdale Avenue

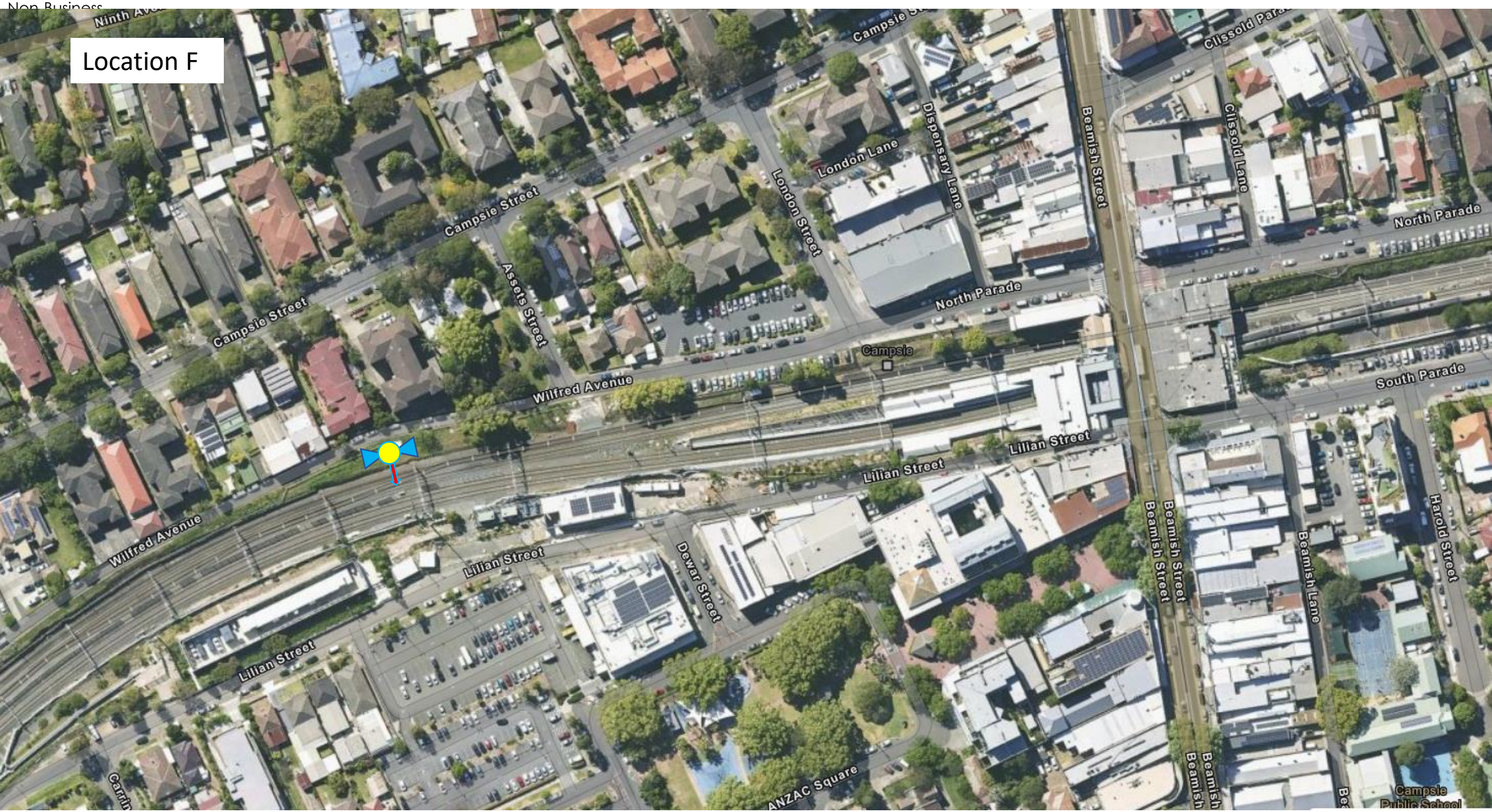
Non-Business

Non-Bu

Location D


Location E
The Parade
The Parade
The Parade
The Parade
Terrace Road
Garnet Street
Garnet Street
Ewart Street
Ewart Street
Ewart Street
Ewart Street

Non Business

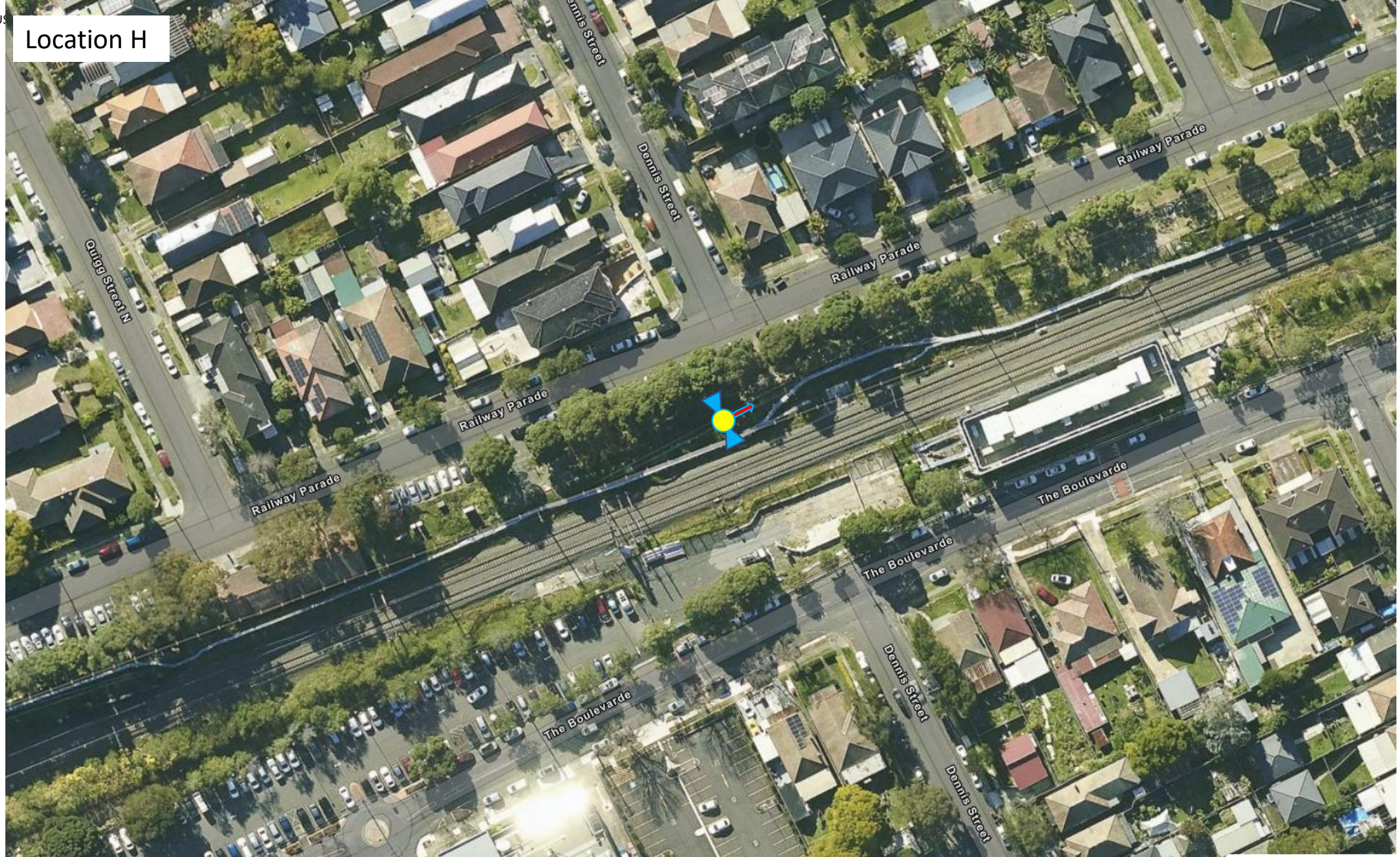


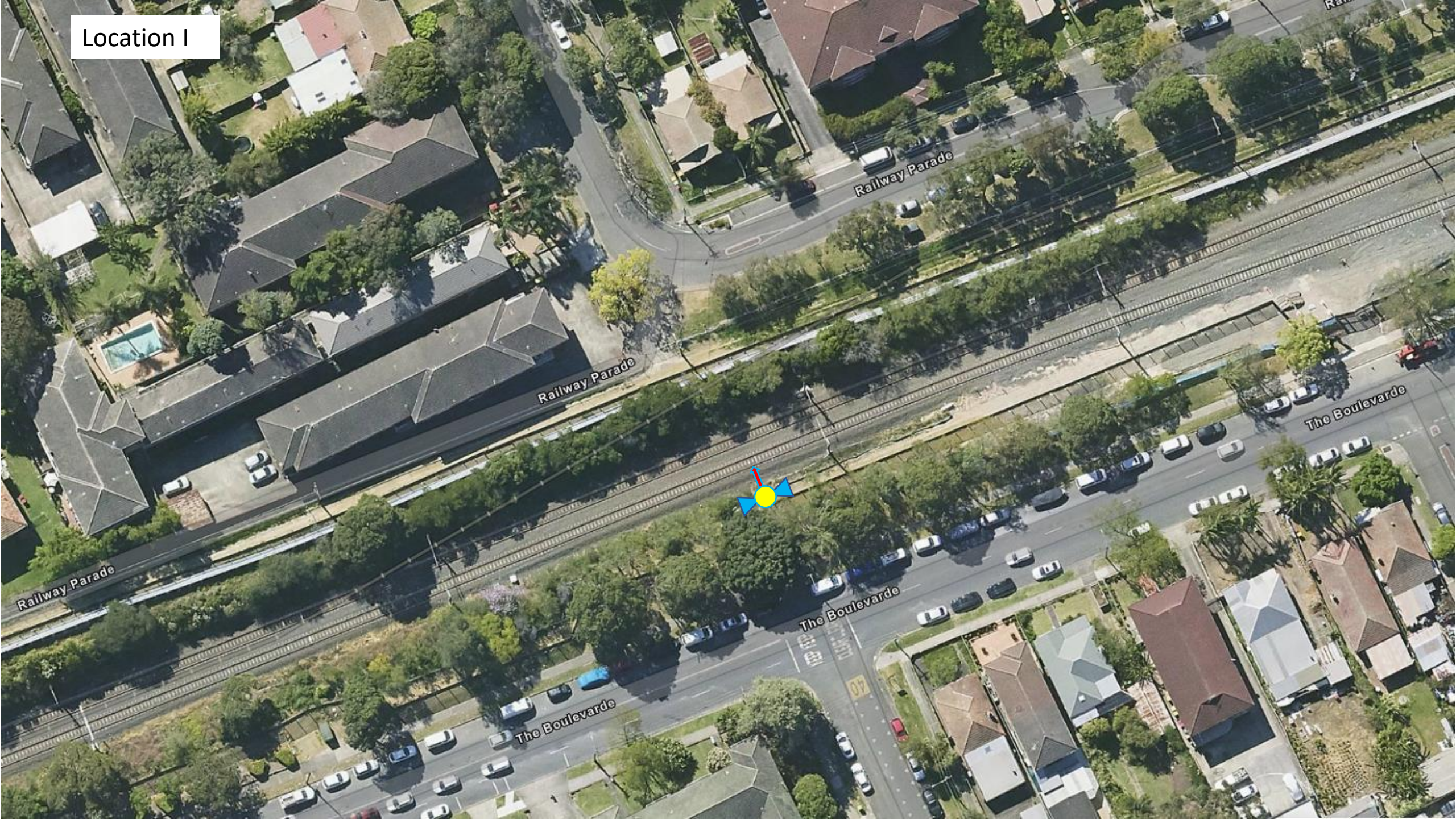
Nor

Location G

Non-Bus

Location H




Location I
Railway Parade
Railway Parade
Railway Parade
The Boulevarde
The Boulevarde
The Boulevarde
The Boulevarde

Non-Bu

Location J

Attachment 2 – Community Notification

Community Notifications were provided to residents of:

- Sydenham
- Marrickville
- Canterbury
- Hurlstone Park
- Dulwich Hill
- Campsie
- Belmore
- Wiley Park
- Punchbowl to Bankstown

Please refer to the following community notifications for works.

EPL 21147
R4.4 Validation Report

SWMC Final Conversion Stage-3
(16. Dec. 2024 - 22. Dec. 2024)

Victoria Rail Transom Bridge platform removal & Hyundai Movex Hurlstone Park MGF/PSD electrical works.

Document and Revision History

Document Details	
Title	R4.4 Validation Report
Client	Sydney Metro City & Southwest
JHLOR JV contract no.	K44

Revisions

Revision	Date	Description	Prepared by	Reviewed by
00	27/12/2024	Prepared for R4.4	Zhengyi Zhang	Lucas Dobrolot

Management reviews

Review date	Details	Reviewed by

Controlled:	NO	Copy no.:	Uncontrolled:	YES

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Introduction

This validation report has been prepared in accordance with EPL 21147 Condition R4.4 for out-of-hour works carried out over from 16th December 2024 to 22nd December 2024 during the Final Conversion Stage-3 Rail Possession.

The possession extended from Sydenham Station to Bankstown Station on Sydney Metro track.

The following activities were carried under condition L5.6 - Local Possessions;

- Victoria Rail Transom Bridge platform removal; and
- Hyundai Movex Hurlstone Park MGF/PSD electrical works.

Refer to **Attachment 1** for monitoring results.

R4.4(a) For activities permitted under Condition L5.6 & L5.7, a validation report must be submitted to the EPA that includes the following detail:

1. Confirmation that the equipment used to undertake the works was as specified in the relevant Construction Noise and Vibration Impact Assessment for the worksite

The assessment prepared for the works included modelling for the following plant and equipment:

- Light vehicles
- Trucks
- Handheld powered tools
- EWP/telehandler

2. A copy of the community notification required under Condition L5.12

A copy of the community notification required under Condition L5.12 is appended as **Attachment 2**.

3. Noise monitoring as required by L5.8(d)

Final Conversion Stage-3 (16. Dec. 2024 - 22. Dec. 2024) noise monitoring was carried out at 2 locations on the perimeter of the rail corridor.

All monitoring locations are closer OR equal to the source of the noise than the nearest sensitive receiver.

Monitoring locations listed below:

a. NCA SSJ – (HEX646) 35m N of 1 Charlotte Avenue, Marrickville.
   - Noise Monitor is 31 m from the source of the noise
   - Sensitive Receiver is 31 m from the source of the noise

b. NCA 01 - (HEX630) 13.5m NW of 3A Commons Street, Hurlstone Park.
   - Noise Monitor is 3 m from the source of the noise
   - Sensitive Receiver is 16 m from the source of the noise

Refer to **Appendix 1** for noise monitoring results.

4. Details of any exceedances of predicted noise levels;

Noise (LAeq 15min) data was collected at the 2 locations between the 16th of December 2024 to 22nd of December 2024, all Out of Hour Works (OOHW) shift has been assessed.

During Final Conversion Stage-3 (16th of December 2024 to 22nd of December 2024), there were zero (0) exceedances of the noise predictions generated from the JHLORJV construction activity.

5. Details of the noise and vibration mitigation measures that were implemented as specified in the relevant Construction Noise and Vibration Impact Assessment for the worksite

The following noise mitigation measures are implemented:

- Potential source noise controls include mufflers fitted to exhausts, regular maintenance of plant, acoustic enclosure of machinery on plant items, non-tonal reversing alarms fitted to plant.
- General monthly community notification.
- Specific notification to impacted residents were provided no later than 5 days out from start of possession.
- Additional mitigation measures such as Alternative Accommodation and Respite Offers.
- Use of real time noise monitors at targeted work locations. Periodic desk top checks on data collected by the 7 real time monitoring instruments were carried out during work periods.
- Environmental surveillance
- On site mitigation instructions to crews:
    - No music, no dropping of objects
    - No shouting or unnecessary noise
    - Be respectful of neighbors when coming and going from site. As far as possible, avoid congregating near residential property boundaries.
    - Position plant as far from residents as possible and orientate them if possible, to emit noise on non-resident side.
    - Plant to be switched off when not in use.

6. The justification required under L5.6 for the carrying out of works outside of standard construction hours in L5.1.

The works carried out on Final Conversion Stage-3 could only be safely conducted during a rail possession due to works occurring within the rail corridor/danger zone. Works were completed in accordance with EPL Condition L5.6 (Local Possession). Carrying out the construction activities during standard construction hours (specified in L5.1) would cause unacceptable risks to construction personnel safety; rail passenger and railways personnel safety and railway network operational reliability.

Construction activities occurring within the rail corridor/danger zone can only be safely conducted during a rail possession during the absence of trains.

All feasible and reasonable at-source noise controls were implemented in accordance with Condition L4.1, and noise mitigation measures were implemented in accordance with JHLORJV's CNVIS and Interim Construction Noise Guideline (DECC 2009).

R4.4 (b) The validation report must be submitted to the EPA fortnightly from the commencement of the works permitted by L5.6 & L5.7 by no later than 2 business days from the end of each fortnight.

This R4.4 Validation report has been submitted to EPA by no later than two business days after the end of the fortnight.

Attachment 1 – Noise Monitoring Results

- Monitoring Result
- Monitoring Location

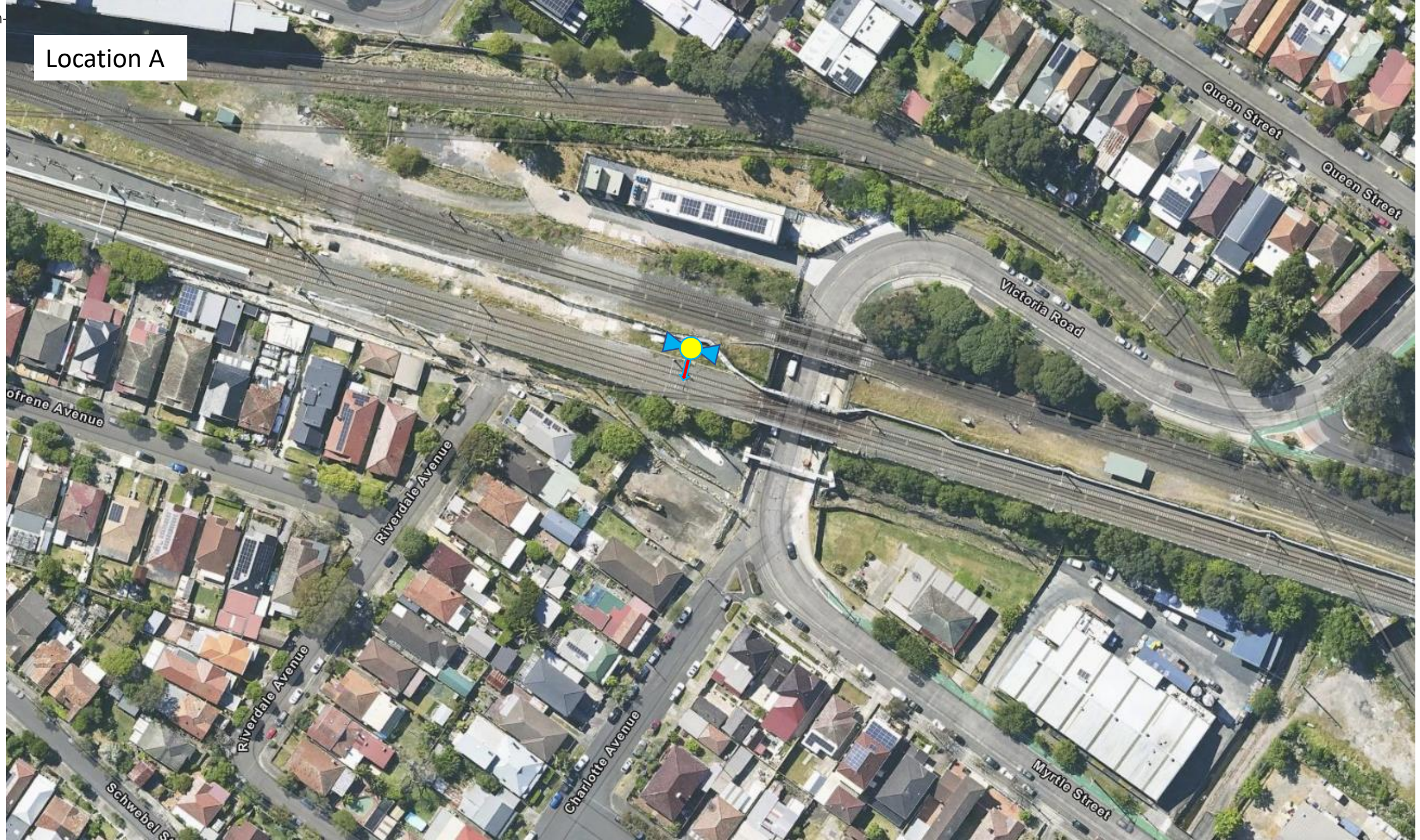
Table 1. Monitoring Location A: NCA SSJ – (HEX646) 35m N of 1 Charlotte Avenue, Marrickville.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	18/12/2024 To 19/12/2024	Night 22:00 to 7:00 (Modeled from 18:00 to 7:00)	General track related construction activities	• Light vehicles • Trucks • Handheld powered and non-powered tools • EWP/telehandler	• Highest ambient LAeq in period at Monitoring Location is 66 • Excluding the following non-construction related event being identified: 18/12/2024 22:45 65 ARTC Train 18/12/2024 23:00 58 ARTC Train 19/12/2024 0:15 62 ARTC Train 19/12/2024 0:30 56 ARTC Train 19/12/2024 1:00 65 ARTC Train 19/12/2024 1:45 64 ARTC Train 19/12/2024 2:00 55 ARTC Train 19/12/2024 3:30 62 ARTC Train 19/12/2024 4:15 59 ARTC Train 19/12/2024 5:00 60 ARTC Train 19/12/2024 5:30 63 ARTC Train 19/12/2024 6:00 66 ARTC Train • Construction related LAeq in period at Monitoring Location is 62	68	Y	• RBL: 33 dBA • The construction related highest LAeq in work period is lower than the predicted level • **Predicted noise levels (Night shift works) in this area triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	19/12/2024 To 20/12/2024				• Highest ambient LAeq in period at Monitoring Location is 67 • Excluding the following non-construction related event being identified: 19/12/2024 22:15 62 ARTC Train 19/12/2024 22:45 60 ARTC Train 20/12/2024 0:00 53 Aircraft 20/12/2024 0:45 67 ARTC Train 20/12/2024 1:00 64 ARTC Train 20/12/2024 1:30 62 ARTC Train 20/12/2024 2:15 62 ARTC Train 20/12/2024 2:30 57 ARTC Train 20/12/2024 4:45 58 ARTC Train 20/12/2024 5:30 64 ARTC Train 20/12/2024 5:45 58 ARTC Train 20/12/2024 6:00 58 ARTC Train • Construction related LAeq in period at Monitoring Location is 63			
3	20/12/2024 To 21/12/2024				• Highest ambient LAeq in period at Monitoring Location is 66 • Excluding the following non-construction related event being identified: 20/12/2024 22:15 61 ARTC Train 20/12/2024 22:45 57 ARTC Train 20/12/2024 23:00 61 ARTC Train 21/12/2024 0:15 54 ARTC Train 21/12/2024 0:30 66 ARTC Train 21/12/2024 1:00 61 ARTC Train 21/12/2024 1:15 60 ARTC Train 21/12/2024 1:30 66 ARTC Train 21/12/2024 3:00 61 ARTC Train 21/12/2024 4:15 62 ARTC Train 21/12/2024 4:30 58 ARTC Train 21/12/2024 6:00 64 ARTC Train 21/12/2024 6:15 63 ARTC Train 21/12/2024 6:45 65 ARTC Train • Construction related LAeq in period at Monitoring Location is 63			

Table 2. Monitoring Location B: NCA 01 - (HEX630) 13.5m NW of 3A Commons Street, Hurlstone Park.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	22/12/2024	Day 08:00 to 18:00	General track related construction activities	• Handheld powered and non-powered tools	• Highest ambient LAeq in period at Monitoring Location is 65 • Excluding the following non-construction related event being identified: 22/12/2024 11:00 65 Worker talking next to Monitor 22/12/2024 13:30 63 Worker talking next to Monitor 22/12/2024 13:45 61 Worker talking next to Monitor • Construction related LAeq in period at Monitoring Location is 61	64	Y	• RBL: 38 dBA • The construction related highest LAeq in work period is lower than the predicted level. • **Predicted noise levels (Day shift works) in this didn't trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**

Non-


Location A
Queen Street
Queen Street
Victoria Road
ofrene Avenue
Riverdale Avenue
Riverdale Avenue
Charlotte Avenue
Myrtle Street


Location B
Floss Street
Floss Street
Hurlstone Park
Duntroon Street
Duntroon Street

Attachment 2 – Community Notification

Community Notifications were provided to residents of:

- Sydenham
- Marrickville
- Canterbury
- Hurlstone Park
- Dulwich Hill
- Campsie
- Belmore
- Wiley Park
- Punchbowl to Bankstown

Please refer to the following community notifications for works.

EPL 21147
R4.4 Validation Report
Y25 WE28 Hyundai Movex/UGL PSD/MGF Works.

Document and Revision History

Document Details	
Title	R4.4 Validation Report
Client	Sydney Metro City & Southwest
JHLOR JV contract no.	K44

Revisions

Revision	Date	Description	Prepared by	Reviewed by
01	13/01/2025	Prepared for R4.4	Zhengyi Zhang	Lucas Dobrolot

Management reviews

Review date	Details	Reviewed by

Controlled: NO Copy no.: Uncontrolled: YES

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Introduction

This validation report has been prepared in accordance with EPL 21147 Condition R4.4 for out-of-hour works carried out on 12th of January 2025 in Weekend 28 Possession (WE28) over 1 Sunday day shift. Works carried under condition L5.6- Local Possessions at the following locations;

- PSD/MGF electrical and grouting works

Refer to attachment 1 for monitoring results.

R4.4(a) For activities permitted under Condition L5.6 & L5.7, a validation report must be submitted to the EPA that includes the following detail:

1. **Confirmation that the equipment used to undertake the works was as specified in the relevant Construction Noise and Vibration Impact Assessment for the worksite**

The assessment prepared for the works included modelling for the following plant and equipment:

- Handheld powered and non-powered tools

2. **A copy of the community notification required under Condition L5.12**

A copy of the community notification required under Condition L5.12 is appended as Attachment 2.

3. **Noise monitoring as required by L5.8(d)**

WE28 works noise monitoring was carried out at the following locations along the project corridor.

- NCA 02 - Noise Monitor (HEX-000630) is 28 m north-east of 57A Ewart Ln, Dulwich Hill NSW 2203

Refer to attachment 1 for Monitoring Locations.

4. **Details of any exceedances of predicted noise levels;**

Throughout the works carried out over WE28, there were no exceedances of the noise predictions due to construction activity.

5. **Details of the noise and vibration mitigation measures that were implemented as specified in the relevant Construction Noise and Vibration Impact Assessment for the worksite**

The mitigation measures that were implemented included:

- All workers briefed at prestart of OOHW taking place.
- Works occur within the hours agreed in the OOHW only.
- All plant positioned so that the exhaust (or noisiest side of the plant) is pointing away from sensitive receivers, where possible.
- The engine of any plant is to be turned off when not in use
- Workers are not to shout, slam doors, drop objects or make any other unnecessary noise
- Workers are to be mindful of residents when mobilizing and demobilizing

Additional mitigation measures in accordance with the Sydney Metro Construction Noise and Vibration Strategy were implemented which included:

- Letter box drops
- Continuous monitoring
- Respite for receivers with potential noise exceedance of over 20dB and alternative accommodation offered for receivers with potential noise exceedance of over 30dB.

6. The justification required under L5.6 for the carrying out of works outside of standard construction hours in L5.1.

The works carried out on WE28 were completed under L5.6 (OOHW - local rail possession). ~~as~~ Carrying out these works and activities during standard construction hours as specified in L5.1 would cause unacceptable risks to construction personnel safety; rail passenger and railways personnel safety and railway network operational reliability.

The works could only be safely conducted during a rail possession due to works occurring within the rail corridor. All feasible and reasonable at-source noise controls were implements in accordance with Condition L4.1, and noise mitigation measures were implemented in accordance with JHLORJV's CNVIS and Interim Construction Noise Guideline (DECC 2009).

R4.4 (b) The validation report must be submitted to the EPA fortnightly from the commencement of the works permitted by L5.6 & L5.7 by no later than 2 business days from the end of each fortnight.

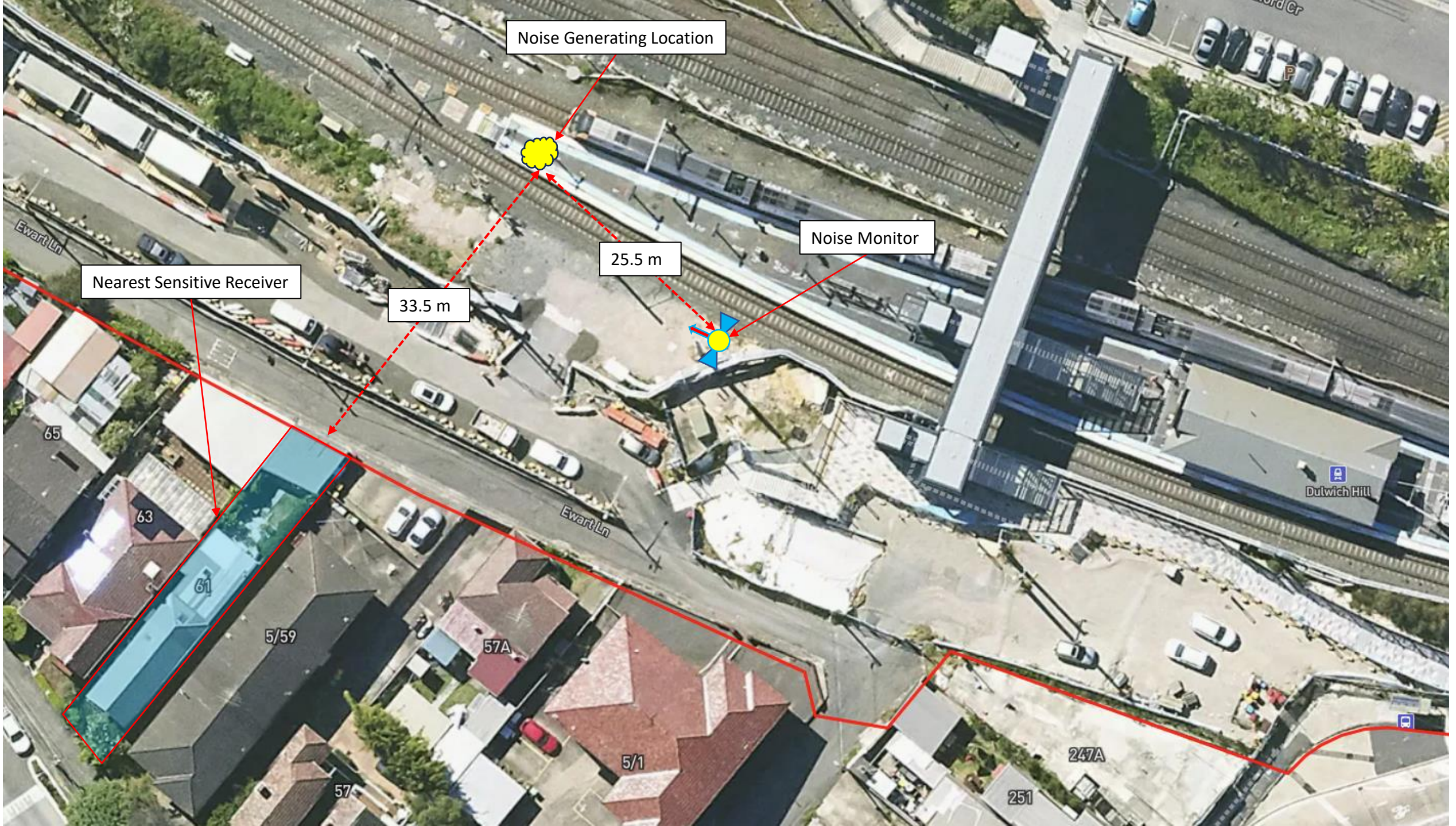
This R4.4 Validation report has been submitted to EPA by no later than two business days after the end of the fortnight.

Attachment 1 – Noise Monitoring Locations & Results

- Monitoring Result
- Monitoring Location

Table 1. Monitoring Location: NCA 02 - (HEX000630) 28 m north-east of 57A Ewart Ln, Dulwich Hill NSW 2203.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	12/01/2025	Day 08:00 to 18:00	PSD/MGF electrical and grouting works	• Handheld powered and non-powered tools	• Highest ambient LAeq in period at Monitoring Location is 66 • Excluding the following non-construction related event being identified: 12/01/2025 7:45 58 Aircraft 12/01/2025 9:30 57 Aircraft 12/01/2025 10:00 66 ARTC Train 12/01/2025 11:00 61 Aircraft 12/01/2025 11:30 60 Aircraft 12/01/2025 12:15 56 Aircraft 12/01/2025 12:45 59 Aircraft 12/01/2025 13:00 59 Aircraft 12/01/2025 13:30 60 ARTC Train 12/01/2025 15:15 62 Aircraft 12/01/2025 16:00 55 Aircraft 12/01/2025 16:30 62 Aircraft 12/01/2025 17:00 62 Aircraft 12/01/2025 18:00 61 Aircraft • Construction related LAeq in period at Monitoring Location is 63 • Due to the monitoring location being 25.5 m from the source of the noise and sensitive receiver being 33.5 m from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 61.	58	Y	• RBL: 38 dBA • The construction related highest LAeq in work period is lower than the predicted level. • **Predicted noise levels (Day shift works) didn't trigger offers for additional mitigation measures.** • **Actual construction related noise levels (Day shift works) area did not trigger offers above the Respite limit.** • **Appropriate mitigation measures being offered.** • **No further additional mitigation measures required**


Noise Generating Location
Noise Monitor
25.5 m
33.5 m
Nearest Sensitive Receiver
Ewart Ln
Ewart Ln
Dulwich Hill
65
63
61
5/59
57A
5/1
57
247A
251

Attachment 2 – Community Notification

Community Notifications were provided to residents of Canterbury, Marrickville, Hurlstone Park, Dulwich Hill, Wiley Park, Belmore, Campsie and Punchbowl to Bankstown.

Please refer to the following community notifications for works undertaken at the previously stated locations.

EPL 21147
R4.4 Validation Report
SWMC Final Conversion Stage-3
21. Jan & 25-27. Jan. 2025

Campsie Station lift pit pump out (21. Jan) and OHW structure installation, OHW cable dropping and pulling, Drainage Investigation, Metro Energisation Preparation (25-27. Jan)

Document and Revision History

Document Details	
Title	R4.4 Validation Report
Client	Sydney Metro City & Southwest
JHLOR JV contract no.	K44

Revisions

Revision	Date	Description	Prepared by	Reviewed by
01	06/02/2025	Prepared for R4.4	Zhengyi Zhang	Lucas Dobrolot

Management reviews

Review date	Details	Reviewed by

Controlled: NO Copy no.: Uncontrolled: YES

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Introduction

This validation report has been prepared in accordance with EPL 21147 Condition R4.4 for out-of-hour works carried out on

- 21st January 2025 in Week 29 (WE29), noise activity (NDD removal water from lift pit) being happened between 05:00-05:15 in the morning. Works were carried out under Condition L5.7- Utility & Local Area, Campsie Station

- 25th to 27th January 2025 in Week 30 (WE30). The possession extended from Sydenham Station to Bankstown Station on Sydney Metro and Sydney Train track.

  The following activities were carried under condition L5.6 - Local Possessions;
  - OHW structure installation (Marrickville Station to Sydenham Station),
  - OHW cable dropping and pulling (Marrickville Station to Sydenham Station),
  - Drainage Investigation (Marrickville Station to Sydenham Station),
  - Metro Energisation Preparation (Bankstown Station to Sydenham Station),

Refer to **Attachment 1** for monitoring results.

R4.4(a) For activities permitted under Condition L5.6 & L5.7, a validation report must be submitted to the EPA that includes the following detail:

1. **Confirmation that the equipment used to undertake the works was as specified in the relevant Construction Noise and Vibration Impact Assessment for the worksite**

The assessment prepared for the works included modelling for the following plant and equipment:

WE29 Campsie (21st January 2025)**:**

- NDD removal water from lift pit
  - Vacuum Truck

WE30 Sydenham Station to Bankstown Station (25th to 27th January 2025):

- OHW structure installation (Marrickville Station to Sydenham Station),
  - Light vehicles
  - Trucks
  - Payloader
  - Handheld powered tools
  - EWP/telehandler
  - Site lights

- OHW cable dropping and pulling (Marrickville Station to Sydenham Station),
  - Light vehicles
  - Trucks
  - Payloader
  - Handheld powered tools
  - EWP/telehandler
  - Site lights

- Drainage Investigation (Marrickville Station to Sydenham Station),
  - Vacuum Truck

- Metro Energisation Preparation (Bankstown Station to Sydenham Station),
  - Light vehicles
  - Handheld battery powered tools

2. A copy of the community notification required under Condition L5.12

A copy of the community notification required under Condition L5.12 is appended as Attachment 2.

3. Noise monitoring as required by L5.8(d)

WE29 works noise monitoring was carried out at the following locations along the project corridor.

A. NCA 06 Noise Monitor (HEX-000516) is 6 m North of 13-15 Anglo Rd, Campsie 2194
   - Noise Monitor is 58 m from the source of the noise
   - Sensitive Receiver is 59 m from the source of the noise

WE30 works noise monitoring was carried out at the following locations along the project corridor.

B. NCA SSJ Noise Monitor (HEX-000758) is 88 m SE of 133 Meeks Road, Marrickville 2204
   - Noise Monitor is 17 m from the source of the noise
   - Sensitive Receiver is 95 m from the source of the noise

C. NCA SSJ Noise Monitor (HEX-000421) is 146 m W of 110 Railway Rd, Sydenham 2044
   - Noise Monitor is 6 m from the source of the noise
   - Sensitive Receiver is 147 m from the source of the noise

D. NCA SSJ Noise Monitor (HEX-000630) is 20 m SW of 29 Bridge St, Tempe 2044
   - Noise Monitor is 4 m from the source of the noise
   - Sensitive Receiver is 21 m from the source of the noise

Refer to attachment 1 for Monitoring Locations.

E. Details of any exceedances of predicted noise levels;

Throughout the OOH works carried out between WE29 and WE20, there were no exceedances of the noise predictions due to construction activity.

F. Details of the noise and vibration mitigation measures that were implemented as specified in the relevant Construction Noise and Vibration Impact Assessment for the worksite

The mitigation measures that were implemented included:

- All workers briefed at prestart of OOHW taking place.
- Works occur within the hours agreed in the OOHW only.
- All plant positioned so that the exhaust (or noisiest side of the plant) is pointing away from sensitive receivers, where possible.
- The engine of any plant is to be turned off when not in use
- Workers are not to shout, slam doors, drop objects or make any other unnecessary noise
- Workers are to be mindful of residents when mobilizing and demobilizing

Additional mitigation measures in accordance with the Sydney Metro Construction Noise and Vibration Strategy were implemented which included:

- Letter box drops
- Continuous monitoring
- Respite for receivers with potential noise exceedance of over 20dB and alternative accommodation offered for receivers with potential noise exceedance of over 30dB.

G. The justification required under L5.6 for the carrying out of works outside of standard construction hours in L5.1.

The works carried out between WE29 were completed under L5.7 (OOHW – Utility & Local Area) as the relevant road network operator has advised the licensee in writing that carrying out the works and activities during the hours specified in Condition L5.1 would result in a high risk to road network operational performance. An ROL was granted for both works.

The works carried out on WE30 could only be safely conducted during a rail possession due to works occurring within the rail corridor/danger zone. Works were completed in accordance with EPL Condition L5.6 (Local Possession). Carrying out the construction activities during standard construction hours (specified in L5.1) would cause unacceptable risks to construction personnel safety; rail passenger and railways personnel safety and railway network operational reliability.

Construction activities occurring within the rail corridor/danger zone can only be safely conducted during a rail possession during the absence of trains.

All feasible and reasonable at-source noise controls were implements in accordance with Condition L4.1, and noise mitigation measures were implemented in accordance with JHLORJV's CNVIS and Interim Construction Noise Guideline (DECC 2009).

R4.4 (b) The validation report must be submitted to the EPA fortnightly from the commencement of the works permitted by L5.6 & L5.7 by no later than 2 business days from the end of each fortnight.

This R4.4 Validation report has been submitted to EPA by no later than two business days after the end of the fortnight.

Attachment 1 – Noise Monitoring Locations & Results

- Monitoring Result
- Monitoring Locations

Table 1. Monitoring Location A: NCA 06 Noise Monitor (HEX-000516), 6 m North of 13-15 Anglo Rd, Campsie 2194

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	21/12/2024	Night 05:00 to 05:15	Removal water from lift pit	• Vacuum Truck	• LAeq in period at Monitoring Location is 60 • Excluding the following non-construction related event being identified: 21/01/2025 05:15 60 ARTC Train • Ambient LAeq (no construction activity) at Monitoring Location is following: 21/01/2025 0:00 61 21/01/2025 0:15 64 21/01/2025 0:30 66 21/01/2025 0:45 61 21/01/2025 1:00 60 21/01/2025 1:15 59 21/01/2025 1:30 59 21/01/2025 1:45 62 21/01/2025 2:00 59 21/01/2025 2:15 61 21/01/2025 2:30 58 21/01/2025 2:45 59 21/01/2025 3:00 59 21/01/2025 3:15 59 21/01/2025 3:30 60 21/01/2025 3:45 60 21/01/2025 4:00 59 21/01/2025 4:15 58 21/01/2025 4:30 57 21/01/2025 4:45 61 21/01/2025 5:00 61 21/01/2025 5:30 59 21/01/2025 5:45 62 21/01/2025 6:00 66 21/01/2025 6:15 61 21/01/2025 6:30 61 21/01/2025 6:45 58 • The noise detected during the construction period (21/01/2025 05:15 60) with ARTC Train impact is consistent with the Ambient LAeq level. • No construction noise impact to the sensitive receiver.	41	Y	• RBL: 35 dBA • The noise detected during the construction period (05:00 to 05:15) with ARTC Train impact is consistent with the Ambient LAeq level. • Construction noise didn't introduce additional impact to the Ambient noise level at the monitoring location. • **Predicted noise levels (Night shift works) in this area not triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**

Table 2. Monitoring Location B: NCA SSJ Noise Monitor (HEX-000758), 88 m SE of 133 Meeks Road, Marrickville 2204.

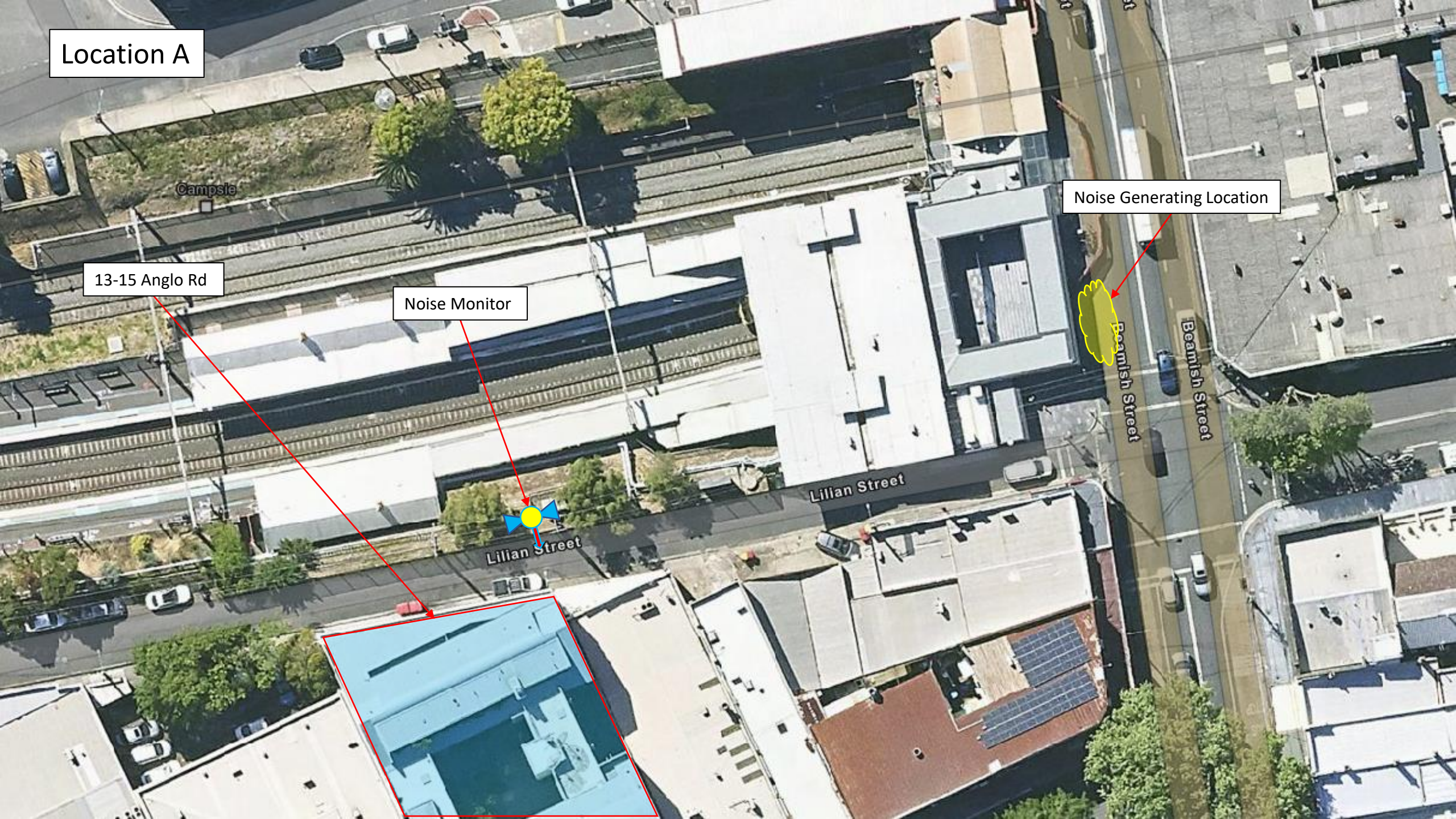
Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	25/01/2025 To 26/01/2025	Night 22:00 to 7:00 (Modelled from 18:00 to 7:00)	General OHW related construction activities	• Light vehicles • Trucks • Payloader • Handheld powered tools • EWP/telehandler • Site lights	• Highest ambient LAeq in period at Monitoring Location is 68 • Excluding the following non-construction related event being identified: 25/01/2025 22:15 63 Aircraft 25/01/2025 22:45 65 Aircraft 25/01/2025 23:15 66 ARTC Train 26/01/2025 0:15 67 ARTC Train 26/01/2025 0:30 59 ARTC Train 26/01/2025 1:00 58 ARTC Train 26/01/2025 1:45 64 ARTC Train 26/01/2025 3:15 60 ARTC Train 26/01/2025 4:00 68 ARTC Train 26/01/2025 4:30 67 ARTC Train 26/01/2025 5:00 67 ARTC Train 26/01/2025 5:45 58 ARTC Train 26/01/2025 6:15 66 ARTC Train • Construction related LAeq in period at Monitoring Location is 61	65	Y	• RBL: 40 dBA • The construction related highest LAeq in work period is lower than the predicted level. • **Predicted noise levels (Night shift works) triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	26/01/2026	Day 08:00 to 18:00 & Evening 18:00 to 22:00			• Highest ambient LAeq in period at Monitoring Location is 71 • Excluding the following non-construction related event being identified: 26/01/2025 7:30 67 ARTC Train 26/01/2025 8:15 71 ARTC Train 26/01/2025 9:30 63 ARTC Train 26/01/2025 10:00 69 ARTC Train 26/01/2025 10:15 63 ARTC Train 26/01/2025 11:00 59 ARTC Train 26/01/2025 11:45 60 ARTC Train 26/01/2025 13:15 68 ARTC Train 26/01/2025 14:15 57 ARTC Train 26/01/2025 15:15 60 ARTC Train 26/01/2025 19:00 66 ARTC Train 26/01/2025 20:15 68 ARTC Train 26/01/2025 21:15 66 ARTC Train 26/01/2025 22:00 68 ARTC Train • Construction related LAeq in period at Monitoring Location is 66	67	Y	• RBL: 47 dBA • The construction related highest LAeq in work period is lower than the predicted level. • **Predicted noise levels (Day shift works) did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
3	25/01/2025 To 26/01/2025	Night 22:00 to 7:00 (Modelled from 18:00 to 7:00)			• Highest ambient LAeq in period at Monitoring Location is 71 • Excluding the following non-construction related event being identified: 26/01/2025 23:30 59 ARTC Train 27/01/2025 0:15 66 ARTC Train 27/01/2025 1:15 71 ARTC Train 27/01/2025 2:00 54 ARTC Train 27/01/2025 2:30 65 ARTC Train 27/01/2025 4:00 64 ARTC Train 27/01/2025 5:00 65 ARTC Train 27/01/2025 6:00 59 ARTC Train 27/01/2025 6:15 56 Aircraft 27/01/2025 6:30 63 Aircraft • Construction related LAeq in period at Monitoring Location is 66 • Due to the monitoring location being **17 m** from the source of the noise and sensitive receiver being **95 m** from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 51.	65	Y	• RBL: 40 dBA • The calculated construction related highest LAeq in work period (51 dBA) is lower than the predicted level (65 dBA) • **Predicted noise levels (Night shift works) triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
4	26/01/2026	Day 08:00 to 18:00			• Highest ambient LAeq in period at Monitoring Location is 71 • Excluding the following non-construction related event being identified: 27/01/2025 7:15 64 Aircraft 27/01/2025 7:30 65 Aircraft 27/01/2025 8:00 60 ARTC Train 27/01/2025 8:30 67 ARTC Train 27/01/2025 9:00 58 Aircraft 27/01/2025 9:15 60 Aircraft 27/01/2025 9:30 64 ARTC Train 27/01/2025 9:45 68 Aircraft 27/01/2025 10:15 67 Aircraft 27/01/2025 10:30 58 Aircraft 27/01/2025 11:00 63 ARTC Train 27/01/2025 11:15 63 Aircraft 27/01/2025 11:30 63 Aircraft 27/01/2025 11:45 67 Aircraft 27/01/2025 12:00 65 Aircraft 27/01/2025 12:30 66 Aircraft 27/01/2025 12:45 62 Aircraft 27/01/2025 13:00 60 Aircraft 27/01/2025 13:15 69 Aircraft 27/01/2025 13:30 66 Aircraft 27/01/2025 13:45 64 Aircraft 27/01/2025 14:15 57 ARTC Train 27/01/2025 14:45 65 Aircraft 27/01/2025 15:00 56 Aircraft 27/01/2025 15:15 57 Aircraft 27/01/2025 15:30 62 Aircraft 27/01/2025 15:45 65 Aircraft 27/01/2025 16:00 57 Aircraft 27/01/2025 16:15 56 Aircraft 27/01/2025 16:30 57 Aircraft 27/01/2025 17:00 63 Aircraft 27/01/2025 17:30 62 Aircraft 27/01/2025 17:45 63 ARTC Train • Construction related LAeq in period at Monitoring Location is 66	67	Y	• RBL: 47 dBA • The construction related highest LAeq in work period is lower than the predicted level. • **Predicted noise levels (Day shift works) did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**

Table 3. Monitoring Location C: NCA SSJ Noise Monitor (HEX-000421), 146 m W of 110 Railway Rd, Sydenham 2044

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	25/01/2025 To 26/01/2025	Night 22:00 to 7:00 (Modelled from 18:00 to 7:00)	General OHW related construction activities	• Light vehicles • Trucks • Payloader • Handheld powered tools • EWP/telehandler • Site lights	• Highest LAeq in period at Monitoring Location is 71	74	Y	• RBL: 42 dBA • The construction related highest LAeq in work period is lower than the predicted level. • **Predicted noise levels (Night shift works) triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	26/01/2026	Day 08:00 to 18:00 & Evening 18:00 to 22:00			• Highest LAeq in period at Monitoring Location is 73	74	Y	• RBL: 51 dBA • The construction related highest LAeq in work period is lower than the predicted level. • **Predicted noise levels (Day shift works) did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**
3	25/01/2025 To 26/01/2025	Night 22:00 to 7:00 (Modelled from 18:00 to 7:00)			• Highest LAeq in period at Monitoring Location is 64	74	Y	• RBL: 42 dBA • The construction related highest LAeq in work period is lower than the predicted level. • **Predicted noise levels (Night shift works) triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
4	26/01/2026	Day 08:00 to 18:00			• Highest LAeq in period at Monitoring Location is 70	74	Y	• RBL: 51 dBA • The construction related highest LAeq in work period is lower than the predicted level. • **Predicted noise levels (Day shift works) did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**

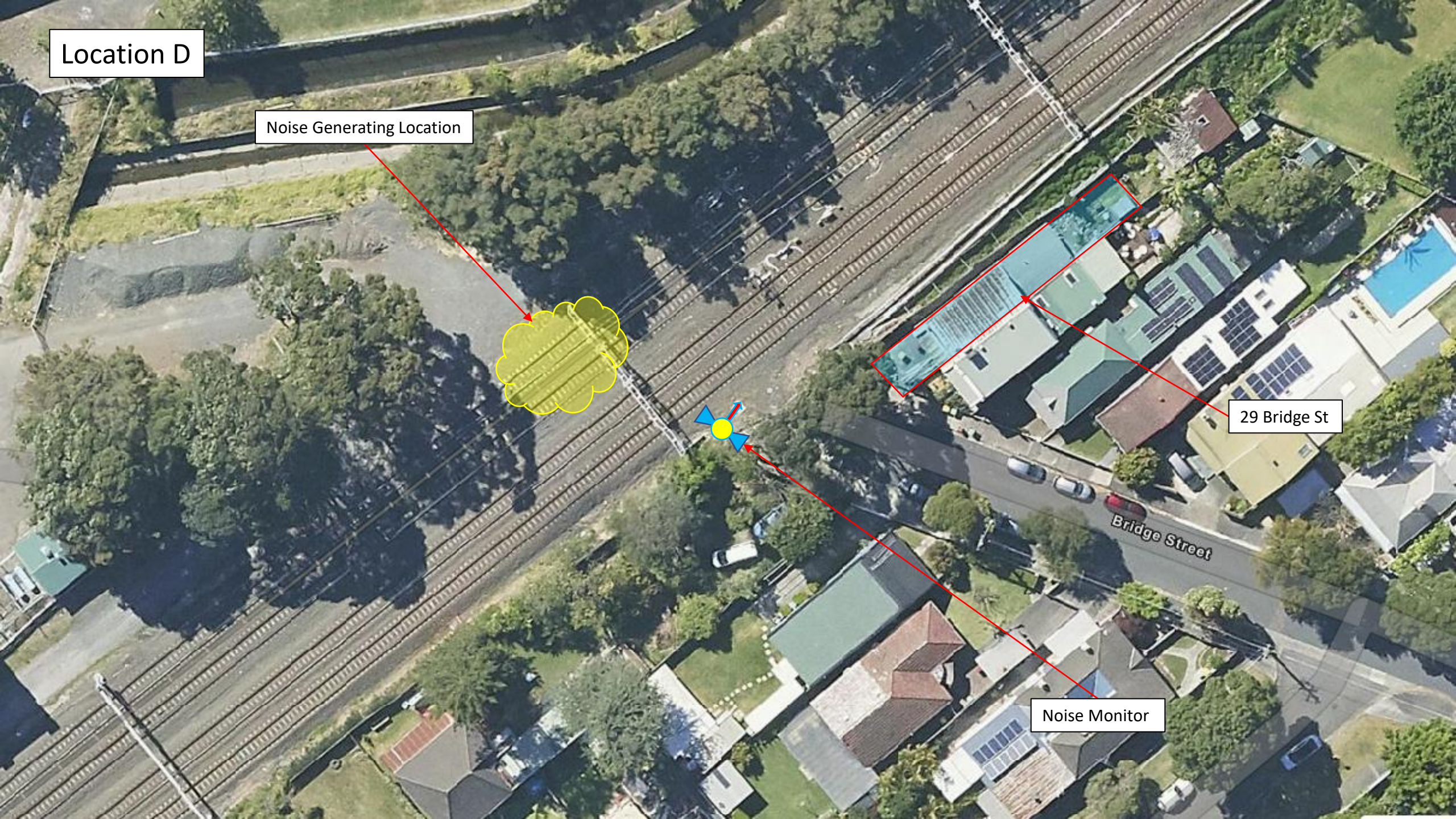
Table 4. Monitoring Location D: NCA SSJ Noise Monitor (HEX-000630), 20 m SW of 29 Bridge St, Tempe 2044.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	25/01/2025 To 26/01/2025	Night 22:00 to 7:00 (Modelled from 18:00 to 7:00)	General OHW related construction activities	• Light vehicles • Trucks • Payloader • Handheld powered tools • EWP/telehandler • Site lights	• Highest LAeq in period at Monitoring Location is 68	70	Y	• RBL: 40 dBA • The construction related highest LAeq in work period is lower than the predicted level. • **Predicted noise levels (Night shift works) triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
2	26/01/2026	Day 08:00 to 18:00 & Evening 18:00 to 22:00			• Construction related LAeq in period at Monitoring Location is 71 • Due to the monitoring location being **4 m** from the source of the noise and sensitive receiver being **21 m** from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 57.	69	Y	• RBL: 41 dBA • The calculated construction related highest LAeq in work period (57 dBA) is lower than the predicted level (69 dBA) • **Predicted noise levels (Night shift works) triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
3	25/01/2025 To 26/01/2025	Night 22:00 to 7:00 (Modelled from 18:00 to 7:00)			• Highest LAeq in period at Monitoring Location is 66	70	Y	• RBL: 40 dBA • The construction related highest LAeq in work period is lower than the predicted level. • **Predicted noise levels (Night shift works) triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**
4	26/01/2026	Day 08:00 to 18:00			• Highest ambient LAeq in period at Monitoring Location is 70 • Excluding the following non-construction related event being identified: 27/01/2025 7:30 62 Aircraft 27/01/2025 8:30 61 Aircraft 27/01/2025 9:00 59 Aircraft 27/01/2025 9:15 63 Aircraft 27/01/2025 9:45 70 Aircraft 27/01/2025 10:00 68 Aircraft 27/01/2025 10:15 68 Aircraft 27/01/2025 11:00 65 Aircraft 27/01/2025 11:15 66 Aircraft 27/01/2025 11:30 66 Aircraft 27/01/2025 11:45 68 Aircraft 27/01/2025 12:00 66 Aircraft 27/01/2025 12:15 62 Aircraft 27/01/2025 12:30 68 Aircraft 27/01/2025 12:45 63 Aircraft 27/01/2025 13:15 69 Aircraft 27/01/2025 13:30 66 Aircraft 27/01/2025 13:45 65 Aircraft 27/01/2025 14:45 62 Aircraft 27/01/2025 15:00 57 Aircraft 27/01/2025 15:15 59 Aircraft 27/01/2025 15:30 64 Aircraft 27/01/2025 15:45 65 Aircraft 27/01/2025 16:00 57 Aircraft 27/01/2025 16:15 60 Aircraft 27/01/2025 16:30 60 Aircraft 27/01/2025 17:00 61 Aircraft 27/01/2025 17:30 61 Aircraft 27/01/2025 18:00 61 Aircraft • Construction related LAeq in period at Monitoring Location is 67	69	Y	• RBL: 41 dBA • The construction related highest LAeq in work period is lower than the predicted level. • **Predicted noise levels (Day shift works) did not trigger offers for additional mitigation measures.** • **Appropriate mitigation measures being offered**


Location A
Campsie
13-15 Anglo Rd
Noise Monitor
Noise Generating Location
Lilian Street
Lilian Street
Beamish Street
Beamish Street


Location B
133 Meeks Road
Meeks Road
Meeks Road
Meeks Road
Meeks Road
Maud Lane
Noise Generating Location
Noise Monitor


Location C
Noise Generating Location
Noise Monitor
110 Railway Rd


Location D
Noise Generating Location
29 Bridge St
Bridge Street
Noise Monitor

Attachment 2 – Community Notification

Community Notifications were provided to residents of Canterbury, Marrickville, Hurlstone Park, Dulwich Hill, Wiley Park, Belmore, Campsie and Punchbowl to Bankstown.

Please refer to the following community notifications for works undertaken at the previously stated locations.

EPL 21147
R4.4 Validation Report
SWM3 Final Conversion Stage-3
17-18. Feb & 21-24. Feb. 2025

R5.6 Sydenham track grinding work (17-18. Jan) and R5.7 Bankstown bus depot service & road work (21-24. Feb)

Document and Revision History

Document Details	
Title	R4.4 Validation Report
Client	Sydney Metro City & Southwest
JHLOR JV contract no.	K44

Revisions

Revision	Date	Description	Prepared by	Reviewed by
01	03/03/2025	Prepared for R4.4	Zhengyi Zhang	Lucas Dobrolot

Management reviews

Review date	Details	Reviewed by

Controlled: NO Copy no.: Uncontrolled: YES

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Introduction

This validation report has been prepared in accordance with EPL 21147 Condition R4.4 for out-of-hour works carried out on

- 17th to 18th February 2025 in Week 33 (WE33), noise activity (track grinding) being happened between 2200 - 0700 in the engineering hours (no train) on Sydney Metro and Sydney Train track. Works were carried out under Condition L5.6 - Local Possessions.

- 21st to 24th February 2025 in Week 34 (WE34), noise activity (jack hammering, spoil loading out and concrete pumping) being happened during the following OOHW period:
  - 21st February 1800 – 22nd February 0800 (Friday Evening & Night)
  - 22nd February 1800 – 24th February 0700 (Saturday evening & night, Sunday day and Sunday evening & night)

  Works were carried out under ROL and in Bankstown South Terrace bus depot area. Condition L5.7- Utility & Local Area, Campsie Station applied.

Refer to **Attachment 1** for monitoring results.

R4.4(a) For activities permitted under Condition L5.6 & L5.7, a validation report must be submitted to the EPA that includes the following detail:

1. Confirmation that the equipment used to undertake the works was as specified in the relevant Construction Noise and Vibration Impact Assessment for the worksite

The assessment prepared for the works included modelling for the following plant and equipment:

WE33 Carrington Rd to Sydenham Station (17th February 2025)**:**

- Track grinding
  - Track grinder

WE34 Bankstown South Terrace Bus Depot (21st to 24th February 2025):

- Road and Service Work
  - Light tower
  - Excavator
  - Jack Hammer
  - Truck & dog
  - Concrete Truck
  - Concrete Pump

2. A copy of the community notification required under Condition L5.12

A copy of the community notification required under Condition L5.12 is appended as Attachment 2.

3. Noise monitoring as required by L5.8(d)

WE33 works noise monitoring was carried out at the following locations along the project corridor.

A. NCA SSJ Noise Monitor (HEX-000758) is 88 m SE of 133 Meeks Road, Marrickville 2204
   - Noise Monitor is 17 m from the source of the noise

- Sensitive Receiver is 95 m from the source of the noise

B. NCA SSJ Noise Monitor (HEX-000421) is 146 m W of 110 Railway Rd, Sydenham 2044
   - Noise Monitor is 6 m from the source of the noise
   - Sensitive Receiver is 147 m from the source of the noise

WE34 works noise monitoring was carried out at the following locations along the project corridor.

C. NCA 12 Noise Monitor (HEX-000618) is 45 m NW of 2 West Terrace, Bankstown 2200
   - Noise Monitor is 180 m from the source of the noise
   - Sensitive Receiver is 195 m from the source of the noise

Refer to attachment 1 for Monitoring Locations.

A. Details of any exceedances of predicted noise levels;

Throughout the OOH works carried out between WE33 and WE34, there were no exceedances of the noise predictions due to construction activity.

B. Details of the noise and vibration mitigation measures that were implemented as specified in the relevant Construction Noise and Vibration Impact Assessment for the worksite

The mitigation measures that were implemented included:

- All workers briefed at prestart of OOHW taking place.
- Works occur within the hours agreed in the OOHW only.
- All plant positioned so that the exhaust (or noisiest side of the plant) is pointing away from sensitive receivers, where possible.
- The engine of any plant is to be turned off when not in use
- Workers are not to shout, slam doors, drop objects or make any other unnecessary noise
- Workers are to be mindful of residents when mobilizing and demobilizing

Additional mitigation measures in accordance with the Sydney Metro Construction Noise and Vibration Strategy were implemented which included:

- Letter box drops
- Continuous monitoring
- Respite for receivers with potential noise exceedance of over 20dB and alternative accommodation offered for receivers with potential noise exceedance of over 30dB.

C. The justification required under L5.6 for the carrying out of works outside of standard construction hours in L5.1.

The works carried out on WE33 could only be safely conducted during a rail possession due to works occurring within the rail corridor/danger zone. Works were completed in accordance with EPL Condition L5.6 (Local Possession). Carrying out the construction activities during standard construction hours (specified in L5.1) would cause unacceptable risks to construction personnel safety; rail passenger and railways personnel safety and railway network operational reliability.

Construction activities occurring within the rail corridor/danger zone can only be safely conducted during a rail possession during the absence of trains.

The works carried out between WE34 were completed under L5.7 (OOHW – Utility & Local Area) as the relevant road network operator has advised the licensee in writing that carrying out the works and activities during the hours specified in Condition L5.1 would result in a high risk to

road network operational performance. An ROL was granted for both works.

All feasible and reasonable at-source noise controls were implements in accordance with Condition L4.1, and noise mitigation measures were implemented in accordance with JHLORJV's CNVIS and Interim Construction Noise Guideline (DECC 2009).

R4.4 (b) The validation report must be submitted to the EPA fortnightly from the commencement of the works permitted by L5.6 & L5.7 by no later than 2 business days from the end of each fortnight.

This R4.4 Validation report has been submitted to EPA by no later than two business days after the end of the fortnight.

Attachment 1 – Noise Monitoring Locations & Results

- Monitoring Result
- Monitoring Locations

Table 1. Monitoring Location A: NCA SSJ Noise Monitor (HEX-000758), 88 m SE of 133 Meeks Road, Marrickville 2204.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	17/02/2024	Night 22:00 to 05:15	Track Grinding	• Track Grinder	• LAeq in period at Monitoring Location is 68 • Excluding the following non-construction related event being identified:: 17/02/2025 22:15 66 ARTC Train 18/02/2025 0:15 68 ARTC Train 18/02/2025 1:30 66 ARTC Train 18/02/2025 1:45 66 ARTC Train 18/02/2025 2:00 65 ARTC Train 18/02/2025 3:00 59 ARTC Train 18/02/2025 4:30 61 ARTC Train 18/02/2025 5:00 63 ARTC Train 18/02/2025 6:15 56 Aircraft 18/02/2025 6:30 66 ARTC Train 18/02/2025 7:00 60 Aircraft • Construction related LAeq in period at Monitoring Location is 58 • Due to the monitoring location being **17 m** from the source of the noise and sensitive receiver being **95 m** from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 43.	52	Y	• RBL: 40 dBA • The calculated construction related highest LAeq in work period (53 dBA) is lower than the predicted level (52 dBA) • **Predicted noise levels (Night shift works) triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**

Table 2. Monitoring Location B: NCA SSJ Noise Monitor (HEX-000421), 146 m W of 110 Railway Rd, Sydenham 2044

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	17/02/2024	Night 22:00 to 05:15	Track Grinding	• Track Grinder	• Highest LAeq in period at Monitoring Location is 62	69	Y	• RBL: 42 dBA • The construction related highest LAeq in work period is lower than the predicted level. • **Predicted noise levels (Night shift works) triggered offers for additional mitigation measures.** • **Appropriate additional mitigation measures being offered**

Table 3. Monitoring Location C: NCA 12 Noise Monitor (HEX-000618), 45 m NW of 2 West Terrace, Bankstown 2200.

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
1	21/02/2025 To 22/02/2025	Night 22:00 to 7:00 (Modelled from 18:00 to 7:00)	General OHW related construction activities	• Light vehicles • Trucks • Payloader • Handheld powered tools • EWP/telehandler • Site lights	• Highest ambient LAeq in period at Monitoring Location is 63 • Excluding the following non-construction related event being identified: 21/02/2025 22:15 63 Urban Traffic 21/02/2025 23:15 61 Urban Traffic 21/02/2025 23:30 63 Urban Traffic 21/02/2025 23:45 62 Urban Traffic 22/02/2025 0:15 62 Urban Traffic 22/02/2025 0:30 59 Urban Traffic 22/02/2025 1:45 57 Urban Traffic 22/02/2025 2:00 57 Urban Traffic 22/02/2025 3:00 61 Urban Traffic 22/02/2025 5:00 57 Urban Traffic 22/02/2025 5:15 58 Urban Traffic 22/02/2025 5:45 59 Urban Traffic 22/02/2025 6:15 59 Urban Traffic 22/02/2025 6:45 59 Urban Traffic • Construction related LAeq in period at Monitoring Location is 61 • Due to the monitoring location being **180 m** from the source of the noise and sensitive receiver being **195 m** from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 60.	55	Y	• RBL: 42 dBA • The calculated construction related highest LAeq in work period (60 dBA) is higher than the predicted level (55 dBA) • **Predicted noise levels (Night shift works) did not trigger offers for additional mitigation measures.** • **The calculated construction related highest LAeq in work period did not trigger offers for additional mitigation measures** • **Appropriate mitigation measures being offered**
2	22/02/2025 To 23/02/2025	Night 22:00 to 7:00 (Modelled from 18:00 to 7:00)			• Highest ambient LAeq in period at Monitoring Location is 66 • Excluding the following non-construction related event being identified: 22/02/2025 22:15 66 Urban Traffic 22/02/2025 22:30 62 Urban Traffic 22/02/2025 22:45 63 Urban Traffic 22/02/2025 23:00 62 Urban Traffic 22/02/2025 23:15 63 Urban Traffic 22/02/2025 23:30 66 Urban Traffic 22/02/2025 23:45 61 Urban Traffic 23/02/2025 0:00 61 Urban Traffic 23/02/2025 0:15 61 Urban Traffic 23/02/2025 0:30 61 Urban Traffic 23/02/2025 1:00 62 Urban Traffic 23/02/2025 1:15 60 Urban Traffic 23/02/2025 1:45 59 Urban Traffic 23/02/2025 2:30 55 Urban Traffic 23/02/2025 3:00 55 Urban Traffic 23/02/2025 5:30 56 Urban Traffic 23/02/2025 5:45 57 Urban Traffic 23/02/2025 6:00 56 Urban Traffic 23/02/2025 6:30 58 Animal Activity	55	Y	• RBL: 42 dBA • The calculated construction related highest LAeq in work period (61 dBA) is higher than the predicted level (55 dBA) • **Predicted noise levels (Night shift works) did not trigger offers for additional mitigation measures.** • **The calculated construction related highest LAeq in work period did not trigger offers for additional mitigation measures** • **Appropriate mitigation measures being offered**

Reference Number	Date	Period	Construction Activities	Main source of noise	Highest LAeq in work period at Monitoring Location (dBA)	Predicted noise level LAeq, 15min at resident (dBA)	Compliant	Comments
					23/02/2025 6:45 57 Animal Activity • Construction related LAeq in period at Monitoring Location is 62 • Due to the monitoring location being **180 m** from the source of the noise and sensitive receiver being **195 m** from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 61.			
3	23/02/2025	Day 08:00 to 18:00 & Evening 18:00 to 22:00			• Highest ambient LAeq in period at Monitoring Location is 72 • Excluding the following non-construction related event being identified: 23/02/2025 7:00 61 Animal Activity 23/02/2025 8:15 61 Urban Traffic 23/02/2025 8:45 60 Urban Traffic 23/02/2025 9:15 60 Urban Traffic 23/02/2025 10:15 61 Urban Traffic 23/02/2025 10:30 61 Urban Traffic 23/02/2025 10:45 63 Urban Traffic 23/02/2025 11:00 62 Urban Traffic 23/02/2025 11:15 64 Urban Traffic 23/02/2025 11:30 63 Urban Traffic 23/02/2025 12:00 62 Urban Traffic 23/02/2025 12:15 63 Urban Traffic 23/02/2025 12:30 62 Urban Traffic 23/02/2025 12:45 62 Urban Traffic 23/02/2025 13:00 61 Urban Traffic 23/02/2025 13:15 62 Urban Traffic 23/02/2025 13:30 61 Urban Traffic 23/02/2025 14:00 63 Urban Traffic 23/02/2025 14:15 62 Urban Traffic 23/02/2025 14:30 64 Urban Traffic 23/02/2025 14:45 62 Urban Traffic 23/02/2025 15:00 62 Urban Traffic 23/02/2025 15:15 63 Urban Traffic 23/02/2025 15:30 63 Urban Traffic 23/02/2025 16:00 63 Urban Traffic 23/02/2025 16:15 63 Urban Traffic 23/02/2025 16:45 63 Urban Traffic 23/02/2025 17:00 62 Urban Traffic 23/02/2025 17:15 63 Urban Traffic 23/02/2025 18:00 63 Urban Traffic 23/02/2025 18:15 64 Urban Traffic 23/02/2025 18:30 62 Urban Traffic 23/02/2025 19:00 63 Urban Traffic 23/02/2025 19:15 62 Urban Traffic 23/02/2025 19:30 65 Urban Traffic 23/02/2025 19:45 72 Urban Traffic 23/02/2025 20:00 64 Urban Traffic 23/02/2025 20:15 62 Urban Traffic 23/02/2025 20:45 61 Urban Traffic 23/02/2025 21:15 63 Urban Traffic 23/02/2025 21:30 62 Urban Traffic 23/02/2025 21:45 62 Urban Traffic 23/02/2025 22:00 60 Urban Traffic • Construction related LAeq in period at Monitoring Location is 64 • Due to the monitoring location being **180 m** from the source of the noise and sensitive receiver being **195 m** from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 63.	55	Y	• RBL: 54 dBA • The calculated construction related highest LAeq in work period (63 dBA) is higher than the predicted level (55 dBA) • **Predicted noise levels (Night shift works) did not trigger offers for additional mitigation measures.** • **The calculated construction related highest LAeq in work period did not trigger offers for additional mitigation measures** • **Appropriate mitigation measures being offered**
4	23/02/2025 To 24/02/2025	Night 22:00 to 7:00 (Modelled from 18:00 to 7:00)			• Highest ambient LAeq in period at Monitoring Location is 62 • Excluding the following non-construction related event being identified: 23/02/2025 22:30 61 Urban Traffic 23/02/2025 22:45 62 Urban Traffic 23/02/2025 23:15 61 Urban Traffic 23/02/2025 23:30 62 Urban Traffic 24/02/2025 0:15 58 Urban Traffic 24/02/2025 0:45 59 Urban Traffic 24/02/2025 2:15 54 Urban Traffic 24/02/2025 2:30 54 Urban Traffic 24/02/2025 3:30 59 Urban Traffic 24/02/2025 4:00 58 Urban Traffic 24/02/2025 6:00 59 Urban Traffic 24/02/2025 6:30 61 Urban Traffic • Construction related LAeq in period at Monitoring Location is 61 • Due to the monitoring location being **180 m** from the source of the noise and sensitive receiver being **195 m** from the source of the noise, the calculated construction related highest LAeq at the sensitive receiver (Actual Noise level) is 60.	55	Y	• RBL: 42 dBA • The calculated construction related highest LAeq in work period (60 dBA) is higher than the predicted level (55 dBA) • **Predicted noise levels (Night shift works) did not trigger offers for additional mitigation measures.** • **The calculated construction related highest LAeq in work period did not trigger offers for additional mitigation measures** • **Appropriate mitigation measures being offered**


Location A
133 Meeks Road
Meeks Road
Meeks Road
Meeks Road
Meeks Road
Maud Lane
Noise Generating Location
Noise Monitor


Location B
Noise Generating Location
Noise Monitor
110 Railway Rd


Location C
Noise Generating Location
Noise Monitor
2 West Terrace
North Terrace
North Terrace
North Terrace
North Terrace
North Terrace
North Terrace
West Terrace
South Terrace
South Terrace
South Terrace
South Terrace
West Terrace
West Terrace
Morgan Lane
Restwell Street

Appendix C – Vibration Monitoring Data