

M7-M12 Integration project
Environment Protection Licence –
Environmental Monitoring Data Report

June 2024



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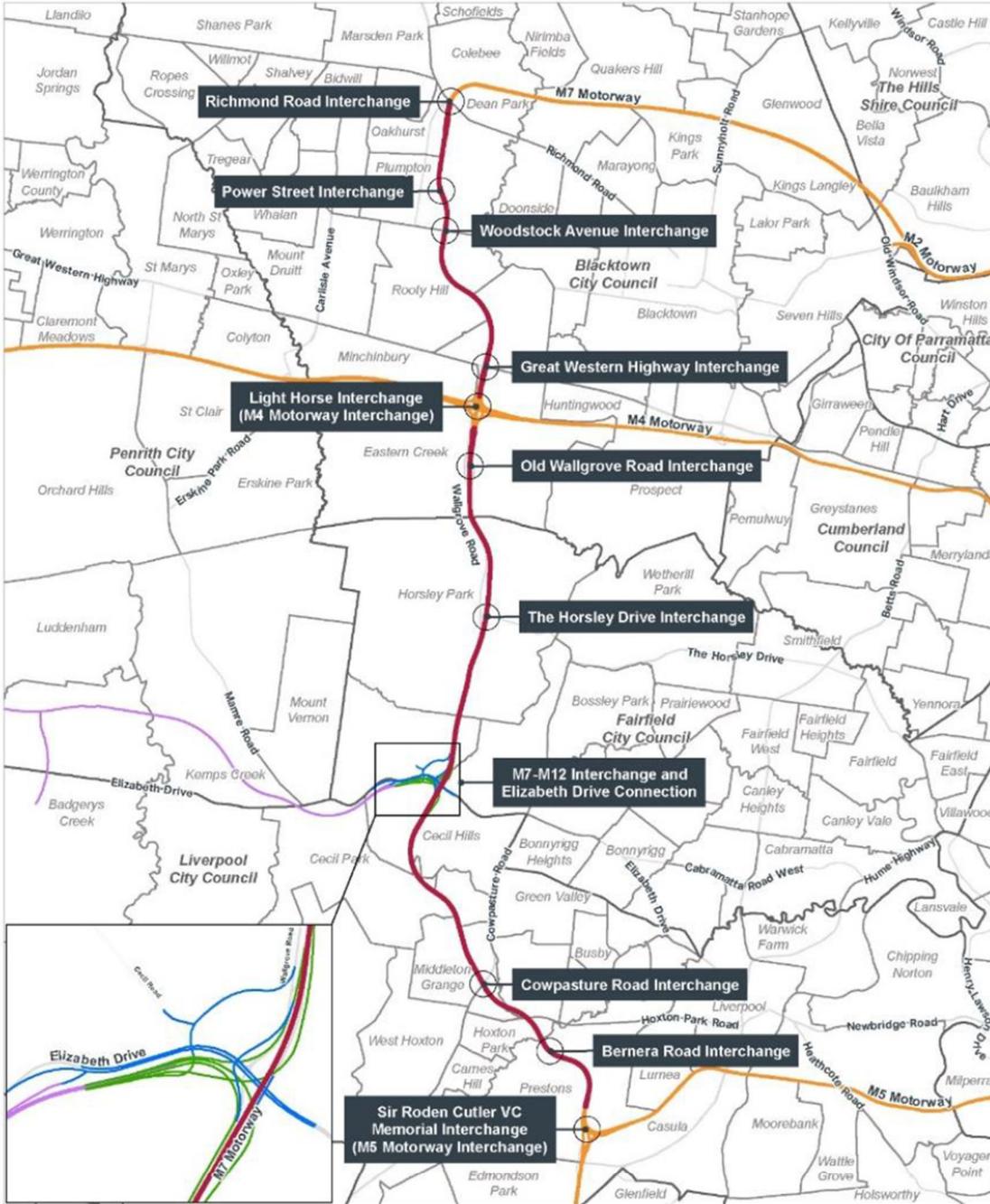
1 Project summary

The M7 Motorway (Modification 6 Widening; SSI-663-Mod-6) (M7 Widening) and the M12 East package of the M12 Motorway project (SSI 9364) will be delivered together under what is referred to as the M7-M12 Integration project (the project) (refer to Figure 1-1) by John Holland.

The M12 Motorway extends between the M7 Motorway at Cecil Hills and The Northern Road at Luddenham, over a distance of about 16 km. It will be delivered in multiple packages including the M12 West package, M12 Central package and M12 East package (this package is part of the M7-M12 Integration project). The M12 East package involves two components of work:

- Connecting Elizabeth Drive to the M12 Motorway and the upgrade of approximately two kilometres of Elizabeth Drive from east of Duff Road to 300 metres east of the M7 Motorway
- Providing a grade separated motorway to motorway connection between the M7 Motorway and M12 Motorway.

The M7 Widening project will enable the construction and operation of an additional lane in both directions within the existing median of the Westlink M7 for approximately 26 kilometres (km). Works will occur from about 140 metres (m) south of the Kurrajong Road overhead bridge at Prestons (southern end) to the Richmond Road interchange at Oakhurst/Glendenning (northern end), excluding widening through the Westlink M7/M4 Motorway (Light Horse) Interchange.



**M7-M12 INTEGRATION PROJECT
LOCATION OVERVIEW**



- Legend**
- M7 Widening
 - M7-M12 Interchange
 - Elizabeth Drive Connection
 - M12 Motorway
 - Existing motorway
 - Interchange
 - LGA boundary
 - Suburb boundary

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Figure 1-1 M7-M12 Integration Project

2 Environmental Protection Licence and Reporting Requirements

John Holland Pty Ltd obtained the Environment Protection Licence (EPL No. 21829) from the NSW Environment Protection Authority for the project. The licence is for road construction as defined under Schedule 1 of the *Protection of the Environment Operations Act 1997* (POEO Act).

The licence describes monitoring and reporting requirements for the Works. The following report details environmental monitoring undertaken during the June 2024 monitoring period conducted in accordance with the EPL.

The EPL can be found by following the link below to the EPA's website: epa.nsw.gov.au

3 Noise and vibration monitoring

3.1 Noise monitoring

Noise monitoring was undertaken during the reporting period in accordance with the requirements of the M7M12 Construction Noise and Vibration Monitoring Program (M712UDC-JHGRP-M7A-EN-PLN-000074).

All works were deemed compliant as they complied with applicable criteria, monitoring was predominantly dominated by background noise sources such as local traffic and are detailed in Table 3-1.

Table 3-1 Noise monitoring data

Location Description	Monitoring date	Monitoring period	NCA	Attended or Continuous	Parameter	Measured value dB(A)	Goals and targets dB(A)	Project OOHW Compliance	Comments/Field Observations
1111-1114 Elizabeth Drive, Cecil Park	12/06/2024	Night	TfNSW_NCA35	Attended	LAeq (15 min)	62.9	55	Compliant	The dominant noise source was the traffic on the M7 and Elizabeth Drive. The works were inaudible during the monitoring period. JHG works compliant.
37-73 Wallgrove Road, Cecil Park	12/06/2024	Night	M7_NCA17	Attended	LAeq (15 min)	62.6	60	Compliant	The dominant noise source was the traffic on the M7 and Wallgrove Road. The works were inaudible during the monitoring period. JHG works compliant.
23 Isabel Street, Cecil Hills	12/06/2024	Night	TfNSW_16b	Attended	LAeq (15 min)	44.8	58	Compliant	The dominant noise source was the traffic on the M7 and Elizabeth Drive. The works were compliant with the PNL. JHG works compliant.
395 Wallgrove Road, Cecil Park	13/06/2024	Night	M7_NCA20	Attended	LAeq (15 min)	50	53	Compliant	The dominant noise source was the traffic on the M7 and Wallgrove Road. The works were compliant with the PNL. JHG works compliant.
33 Isabel St, Cecil Hills	13/06/2024	Night	TfNSW_NCA16b	Attended	LAeq (15 min)	43	58	Compliant	The dominant noise source was the traffic on the M7 and Elizabeth Drive. The works were compliant with the PNL. JHG works compliant.
158-163 Duff Road, Cecil Park	17/06/2024	Night	TfNSW_NCA03	Attended	LAeq (15 min)	54.9	43	Compliant	The dominant noise source was the traffic on Duff Road and Elizabeth Drive. The works were compliant with the PNL. JHG works compliant.
1 Duff Road, Cecil Park	17/06/2024	Night	TfNSW_NCA04	Attended	LAeq (15 min)	56.6	52	Compliant	The dominant noise source was the traffic on the Duff Road and Elizabeth Drive. The works were compliant with the PNL. JHG works compliant.

Location Description	Monitoring date	Monitoring period	NCA	Attended or Continuous	Parameter	Measured value dB(A)	Goals and targets dB(A)	Project OOHW Compliance	Comments/Field Observations
2073-2081 Elizabeth Drive, Cecil Park	17/06/2024	Night	TfNSW_NCA35	Attended	LAeq (15 min)	62.9	69	Compliant	The dominant noise source was the traffic on Elizabeth Drive. The works were compliant with the PNL. JHG works compliant.
33 Isabel St, Cecil Hills	17/06/2024	Night	TfNSW_NCA16b	Attended	LAeq (15 min)	45.9	52	Compliant	The dominant noise source was the traffic on Elizabeth Drive. The works were compliant with the PNL. JHG works compliant.
145 Eskdale St, Minchinbury	19/06/2024	Night	M7_NCA23	Attended	LAeq (15 min)	52.9	45	Compliant	The dominant noise source was the traffic on the M7 and Great Western Highway. The works were inaudible and compliant with the PNL. JHG works compliant.
33 Isabel St, Cecil Hills	20/06/2024	Day	TfNSW_NCA16b	Attended	LAeq (15 min)	54.4	58	Compliant	The dominant noise source was the traffic on the M7 and Elizabeth Drive. The works compliant with the PNL. JHG works compliant.
1111-1114 Elizabeth Drive	21/06/2024	Night	TfNSW_NCA35	Attended	LAeq (15 min)	62.3	45	Compliant	The dominant noise source was the traffic on the M7 and Elizabeth Drive. The works were inaudible during the monitoring period. JHG works compliant.
37-73 Wallgrove Road	21/06/2024	Night	M7_NCA17	Attended	LAeq (15 min)	65.9	52	Compliant	The dominant noise source was the traffic on the M7 and Wallgrove Road. The works were inaudible during the monitoring period. JHG works compliant.
24 Isabel Street, Cecil Hills	21/06/2024	Night	NCA16b	Attended	LAeq (15 min)	46	47.6	Compliant	The dominant noise source was the traffic on the M7 and Elizabeth Drive. The works were inaudible during the monitoring period. JHG works compliant.
1111-1114 Elizabeth Drive	21/06/2024	Night	TfNSW_NCA35	Attended	LAeq (15 min)	60.7	45	Compliant	The dominant noise source was the traffic on the M7 and Elizabeth Drive. The works were inaudible during the monitoring period. JHG works compliant.

Location Description	Monitoring date	Monitoring period	NCA	Attended or Continuous	Parameter	Measured value dB(A)	Goals and targets dB(A)	Project OOHW Compliance	Comments/Field Observations
37-73 Wallgrove Road, Cecil Park	21/06/2024	Night	M7_NCA17	Attended	LAeq (15 min)	61.6	52	Compliant	The dominant noise source was the traffic on the M7 and Elizabeth Drive. The works were inaudible during the monitoring period. JHG works compliant.
2073-2081 Elizabeth Drive, Cecil Park	24/06/2024	Day	TfNSW_NCA35	Attended	LAeq (15 min)	63.8	68	Compliant	The dominant noise source was the traffic on the M7 and Elizabeth Drive. The works were compliant with the PNL. JHG works compliant.
33 Isabel Street, Cecil Hills	25/06/2024	Evening	TfNSW_NCA16b	Attended	LAeq (15 min)	52.7	46	Compliant	The dominant noise source was the traffic on the M7 and Elizabeth Drive. The works were inaudible during the monitoring period. JHG works compliant.
23 Isabel St. Cecil Hills	27/06/2024	Evening	TfNSW_NCA16b	Attended	LAeq (15 min)	49.9	46	Compliant	The dominant noise source was the traffic on Elizabeth Drive and M7. The works compliant with the PNL. JHG works compliant.
111 Dobroyd Ave, Elizabeth Hills	27/06/2024	Night	M7_NCA13	Attended	LAeq (15 min)	52.5	55	Compliant	The dominant noise source was the traffic on M7. The works were inaudible during the monitoring period. JHG works compliant.
1 Duff Road, Cecil Park	27/06/2024	Night	M12_NCA04	Attended	LAeq (15 min)	54.4	58	Compliant	The dominant noise source was the traffic on Elizabeth Drive. The works compliant with the PNL. JHG works compliant.
132 Station St, Rooty Hill	27/06/2024	Evening	M7_NCA26	Attended	LAeq (15 min)	57.7	69	Compliant	The dominant noise source was the traffic on the M7 and local road. The works compliant with the PNL. JHG works compliant.
15 Darice Pl, Plumpton	28/06/2024	Night	M7_NCA28	Attended	LAeq (15 min)	50.3	57	Compliant	The dominant noise source was the traffic on the M7 and local road. The works compliant with the PNL. JHG works compliant.
24 Isabel Street, Cecil Hills	28/06/2024	Night	TfNSW_NCA16b	Attended	LAeq (15 min)	47.8	53	Compliant	The dominant noise source was the traffic on the M7 and Elizabeth Drive. The works

Location Description	Monitoring date	Monitoring period	NCA	Attended or Continuous	Parameter	Measured value dB(A)	Goals and targets dB(A)	Project OOHW Compliance	Comments/Field Observations
									compliant with the PNL. JHG works compliant.
24 Isabel Street, Cecil Hills	28/06/2024	Night	TfNSW_NCA16b	Attended	LAeq (15 min)	49.2	53	Compliant	The dominant noise source was the traffic on the M7 and Elizabeth Drive. The works were compliant with the PNL. JHG works compliant.
24 Isabel Street, Cecil Hills	29/06/2024	Night	TfNSW_NCA16b	Attended	LAeq (15 min)	48.6	53	Compliant	The dominant noise source was the traffic on the M7 and Elizabeth Drive. The works compliant with the PNL. JHG works compliant.
24 Isabel Street, Cecil Hills	29/06/2024	Night	TfNSW_NCA16b	Attended	LAeq (15 min)	48.8	53	Compliant	The dominant noise source was the traffic on the M7 and Elizabeth Drive. The works compliant with the PNL. JHG works compliant.

Note:

1. LAeq (15min) - The A-weighted equivalent continuous (energy average) A-weighted sound pressure level over a 15-minute period.
2. dBA - Decibels using the A-weighted scale measured according to the frequency of the human ear.

3.2 Vibration monitoring

Vibration monitoring was undertaken during the reporting period in accordance with the requirements of the M7M12 Construction Noise and Vibration Monitoring Program (M712UDC-JHGRP-M7A-EN-PLN-000074).

All works were deemed compliant as they complied with applicable criteria and are detailed in Table 3-2.

Table 3-2 Vibration monitoring data

Monitoring Location	Monitoring Date	Attended or Continuous Monitoring	Measured VDV (m/s ^{1.75})	VDV Target (m/s ^{1.75})	VDV Compliant	Measured PPV (mm/s)	PPV Target (mm/s)	PPV Compliant	Comments/ Field Observations
Shaft 3	24/06/2024	Attended	N/A	N/A	Compliant	2.86	10	Compliant	Works were monitored and found to be compliant with associated criteria.
Shaft 3	25/06/2024	Attended	N/A	N/A	Compliant	2.12	10	Compliant	Works were monitored and found to be compliant with associated criteria.

Note:

1. VDV – Vibration Dose Value
2. PPV – Peak Particle Velocity

4 Discharge Water Quality Monitoring

Offsite discharge occurred during June 2024 from sediment basins across the Project.

All discharges were compliant with the requirements of the project EPL (#21829) and are outlined in Table 4-1.

Table 4-1 Sediment basin discharge monitoring data for June 2024

Location	Date	Analyte	Units	Limit	Result	Comments
SB-06	04/06/2024	pH	pH	6.5-8.5	7.62	Compliant with discharge criteria.
		Turbidity	NTU	50	31.9	
		Oil and grease	Visible	Not visible	Not visible	
SB-01	04/06/2024	pH	pH	6.5-8.5	8.39	Compliant with discharge criteria.
		Turbidity	NTU	50	31.6	
		Oil and grease	Visible	Not visible	Not visible	
SB-12	04/06/2024	pH	pH	6.5-8.5	7.54	Compliant with discharge criteria.
		Turbidity	NTU	50	34.8	
		Oil and grease	Visible	Not visible	Not visible	
SB-02	05/06/2024	pH	pH	6.5-8.5	8.35	Compliant with discharge criteria.
		Turbidity	NTU	50	49.3	
		Oil and grease	Visible	Not visible	Not visible	
SB-12	05/06/2024	pH	pH	6.5-8.5	8.04	Compliant with discharge criteria.
		Turbidity	NTU	50	49.2	
		Oil and grease	Visible	Not visible	Not visible	
SB-05	05/06/2024	pH	pH	6.5-8.5	7.85	Compliant with discharge criteria.
		Turbidity	NTU	50	41	
		Oil and grease	Visible	Not visible	Not visible	
SB-07	06/06/2024	pH	pH	6.5-8.5	7.75	Compliant with discharge criteria.
		Turbidity	NTU	50	35.9	
		Oil and grease	Visible	Not visible	Not visible	
SB-12	13/06/2024	pH	pH	6.5-8.5	8.19	Compliant with discharge criteria.
		Turbidity	NTU	50	11.5	

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		Oil and grease	Visible	Not visible	Not visible	
SB-12	13/06/2024	pH	pH	6.5-8.5	7.09	Compliant with discharge criteria.
		Turbidity	NTU	50	42.2	
		Oil and grease	Visible	Not visible	Not visible	
SB-02	13/06/2024	pH	pH	6.5-8.5	6.51	Compliant with discharge criteria.
		Turbidity	NTU	50	25.5	
		Oil and grease	Visible	Not visible	Not visible	
SB-08	13/06/2024	pH	pH	6.5-8.5	7.07	Compliant with discharge criteria.
		Turbidity	NTU	50	21	
		Oil and grease	Visible	Not visible	Not visible	
SB-10	13/06/2024	pH	pH	6.5-8.5	7.19	Compliant with discharge criteria.
		Turbidity	NTU	50	49.2	
		Oil and grease	Visible	Not visible	Not visible	
SB-01	14/06/2024	pH	pH	6.5-8.5	7.73	Compliant with discharge criteria.
		Turbidity	NTU	50	22.2	
		Oil and grease	Visible	Not visible	Not visible	
SB-12	14/06/2024	pH	pH	6.5-8.5	7.83	Compliant with discharge criteria.
		Turbidity	NTU	50	40.8	
		Oil and grease	Visible	Not visible	Not visible	
SB-11	14/06/2024	pH	pH	6.5-8.5	7.75	Compliant with discharge criteria.
		Turbidity	NTU	50	49	
		Oil and grease	Visible	Not visible	Not visible	
SB-12	18/06/2024	pH	pH	6.5-8.5	8.2	Compliant with discharge criteria.
		Turbidity	NTU	50	43.3	
		Oil and grease	Visible	Not visible	Not visible	

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SB-05	18/06/2024	pH	pH	6.5-8.5	7.82	Compliant with discharge criteria.
		Turbidity	NTU	50	47.4	
		Oil and grease	Visible	Not visible	Not visible	
SB-08	18/06/2024	pH	pH	6.5-8.5	8.2	Compliant with discharge criteria.
		Turbidity	NTU	50	5.7	
		Oil and grease	Visible	Not visible	Not visible	
SB-07	19/06/2024	pH	pH	6.5-8.5	7.72	Compliant with discharge criteria.
		Turbidity	NTU	50	39.5	
		Oil and grease	Visible	Not visible	Not visible	
SB-11	19/06/2024	pH	pH	6.5-8.5	7.79	Compliant with discharge criteria.
		Turbidity	NTU	50	9.4	
		Oil and grease	Visible	Not visible	Not visible	
SB-01	19/06/2024	pH	pH	6.5-8.5	7.2	Compliant with discharge criteria.
		Turbidity	NTU	50	48.3	
		Oil and grease	Visible	Not visible	Not visible	
SB-12	20/06/2024	pH	pH	6.5-8.5	6.95	Compliant with discharge criteria.
		Turbidity	NTU	50	23.8	
		Oil and grease	Visible	Not visible	Not visible	
SB-02	21/06/2024	pH	pH	6.5-8.5	8.21	Compliant with discharge criteria.
		Turbidity	NTU	50	37.1	
		Oil and grease	Visible	Not visible	Not visible	
SB-03	24/06/2024	pH	pH	6.5-8.5	8.41	Compliant with discharge criteria.
		Turbidity	NTU	50	38.8	
		Oil and grease	Visible	Not visible	Not visible	
SB-12	25/06/2024	pH	pH	6.5-8.5	8.36	Compliant with discharge criteria.

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		Turbidity	NTU	50	16.4	
		Oil and grease	Visible	Not visible	Not visible	
SB-09	27/06/2024	pH	pH	6.5-8.5	7.67	Compliant with discharge criteria.
		Turbidity	NTU	50	46.5	
		Oil and grease	Visible	Not visible	Not visible	
SB-15	27/06/2024	pH	pH	6.5-8.5	8.09	Compliant with discharge criteria.
		Turbidity	NTU	50	18	
		Oil and grease	Visible	Not visible	Not visible	
SB-01	27/06/2024	pH	pH	6.5-8.5	7.24	Compliant with discharge criteria.
		Turbidity	NTU	50	34	
		Oil and grease	Visible	Not visible	Not visible	
SB-06	28/06/2024	pH	pH	6.5-8.5	7.55	Compliant with discharge criteria.
		Turbidity	NTU	50	46.6	
		Oil and grease	Visible	Not visible	Not visible	