

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

July 2024



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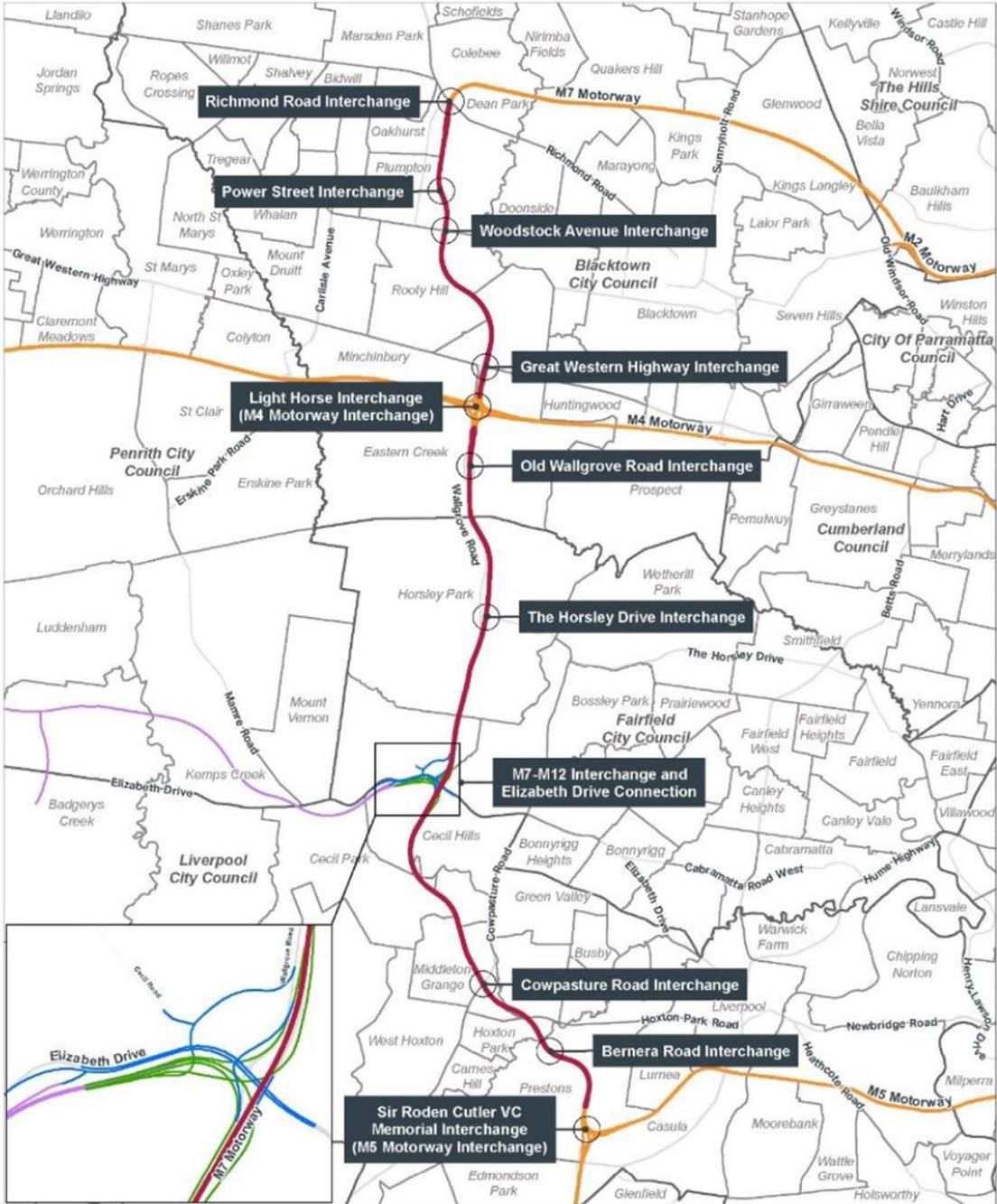
1 Project summary

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 July 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
37-73 Wallgrove Road	01/07/2024	Evening	M7_NCA17	Attended	LAeq (15 min)	60.8	62	Compliant	The dominant noise source was the traffic on the M7 and Wallgrove Road. The works compliant with the PNL. JHG works compliant.
37-73 Wallgrove Road	01/07/2024	Night	M7_NCA17	Attended	LAeq (15 min)	48.9	50	Compliant	The dominant noise source was traffic on M7 and Wallgrove Road. The works were inaudible during the monitoring period. JHG works compliant.
2,10 Kosevitch Place	02/07/2024	Night	M7_NCA17	Attended	LAeq (15 min)	58.7	50	Compliant	The dominant noise source was the traffic on the M7 and Wallgrove Road. The works compliant with the PNL. JHG works compliant.
132 Station Street, Rooty Hill	02/07/2024	Day	M7_NCA26	Attended	LAeq (15 min)	58.7	74	Compliant	The dominant noise source was traffic on the M7 and Station Street. The works were inaudible during the monitoring period. JHG works compliant.
37-73 Wallgrove Road	08/07/2024	Evening	M7_NCA17	Attended	LAeq (15 min)	70.3	60	Compliant	The dominant noise source was traffic on the M7 and Wallgrove Road. The works were inaudible during the monitoring period. JHG works compliant.
37-73 Wallgrove Road	08/07/2024	Night	M7_NCA17	Attended	LAeq (15 min)	71.9	58	Compliant	The dominant noise source was the traffic on the M7 and Wallgrove Road. The works compliant with the PNL. JHG works compliant.
1111-1114 Elizabeth Drive, Cecil Park	08/07/2024	Night	TfNSW_NCA35	Attended	LAeq (15 min)	60.5	56	Compliant	The dominant noise source was 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
33 Isabel Street, Cecil Hills	08/07/2024	Night	TfNSW_NCA16b	Attended	LAeq (15 min)	47.6	57	Compliant	The dominant noise source was traffic on the M7 and Elizabeth Drive. The works were inaudible during the monitoring period. JHG works compliant.
11 Gilpin Place, Plumpton	09/07/2024	Night	M7_NCA28	Attended	LAeq (15 min)	47.2	59	Compliant	The dominant noise source was traffic on the M7. The works were inaudible during the monitoring period. JHG works compliant.
68 Armitage Drive, Glendenning	09/07/2024	Night	M7_NCA31	Attended	LAeq (15 min)	55.7	60	Compliant	The dominant noise source was traffic on the M7. The works were inaudible during the monitoring period. JHG works compliant.
6 Gregory Street, Glendenning	09/07/2024	Night	M7_NCA32	Attended	LAeq (15 min)	46.7	52	Compliant	The dominant noise source was traffic on the M7. The works were inaudible during the monitoring period. JHG works compliant.
145 Eskdale Street, Minchinbury	10/07/2024	Night	M7_NCA26	Attended	LAeq (15 min)	56.4	44	Compliant	The dominant noise source was the traffic on the M7 and Great Western Highway. The works were inaudible during the monitoring period. JHG works compliant.
132 Station Street, Rooty Hill	10/07/2024	Night	M7_NCA23	Attended	LAeq (15 min)	66	50	Compliant	The dominant noise source was the traffic on the M7 and Woodstock Avenue. The works compliant with the PNL. JHG works compliant.
763-781 Wallgrove Road, Horsley Park	10/07/2024	Night	M7_NCA21	Attended	LAeq (15 min)	67.3	41	Compliant	The dominant noise source was traffic on the M7 and Wallgrove Road. The works were inaudible during the monitoring period. JHG works compliant.
20 Mavis Street, Rooty Hill	11/07/2024	Night	M7_NCA22	Attended	LAeq (15 min)	49.7	52	Compliant	The dominant noise source was traffic on the M7 and local roads. 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
11 Rene Place, Cecil Hills	12/07/2024	Day	M12_NCA16b	Attended	LAeq (15 min)	48	58	Compliant	The dominant noise source was traffic from M7 and Elizabeth Drive and Fauna. The works compliant with the PNL. JHG works compliant.
15 Lambert Avenue, Plumpton	16/07/2024	Night	M7_NCA31	Attended	LAeq (15 min)	52.6	62	Compliant	The dominant noise source was traffic from M7. The works were inaudible during the monitoring period. JHG works compliant.
20 Woodley Crescent, Glendenning	17/07/20274	Night	M7_NCA31	Attended	LAeq (15 min)	47.8	51	Compliant	The dominant noise source was traffic on the M7 and local roads. The works were inaudible during the monitoring period. JHG works compliant.
132 Station Street, Rooty Hill	16/07/2024	Night	M7_NCA26	Attended	LAeq (15 min)	51.5	53	Compliant	The dominant noise source was traffic on the M7. The works were inaudible during the monitoring period. JHG works compliant.
36 Chilton Avenue, Oakhurst	16/07/2024	Night	M7_NCA30	Attended	LAeq (15 min)	45.7	43	Compliant	The dominant noise source was traffic on the M7 and local roads. The works compliant with the PNL. JHG works compliant.
183 Middleton Drive, Middleton Grange	17/07/2024	Day	M7_NCA_10	Attended	LAeq (15 min)	61.8	64	Compliant	The dominant noise source was traffic on the M7. The works compliant with the PNL. JHG works compliant.
6 Wilson Road, Hinchinbrook	17/07/2024	Day	M7_NCA_07	Attended	LAeq (15 min)	60.8	55	Compliant	The dominant noise source was traffic on the M7. The works compliant with the PNL. JHG works compliant.
78 Inverell Avenue, Hinchinbrook	17/07/2024	Day	M7_NCA_07	Attended	LAeq (15 min)	56.9	57	Compliant	The dominant noise source was traffic on the M7 and Inverell Avenue. The works compliant with the PNL. JHG works compliant.
11 Legendre Place, Hinchinbrook	17/07/2024	Day	M7_NCA_07	Attended	LAeq (15 min)	56.1	57	Compliant	The dominant noise source was traffic on the M7 and Rossini Drive. The works 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
18 Rene Place, Cecil Hills	18/07/2024	Day	TfNSW_NCA_16b	Attended	LAeq (15 min)	55.1	75	Compliant	The dominant noise source was JHG works however works compliant with the PNL. JHG work compliant.
26 Isabel Street, Cecil Hills	18/07/2024	Day	TfNSW_NCA_16b	Attended	LAeq (15 min)	53.2	74	Compliant	The dominant noise source was JHG works however works compliant with the PNL. JHG work compliant.
31 Isabel Street, Cecil Hills	18/07/2024	Night	TfNSW_NCA_16b	Attended	LAeq (15 min)	46.3	54	Compliant	The dominant noise source was traffic on the M7 and Elizabeth Drive. The works compliant with the PNL. JHG works compliant.
1111-1114 Elizabeth Drive, Cecil Park	18/07/2024	Night	TfNSW_NCA_35	Attended	LAeq (15 min)	64	68	Compliant	The dominant noise source was traffic on the M7 and Elizabeth Drive. The works compliant with the PNL. JHG works compliant.
37-73 Wallgrove Road, Cecil Park	18/07/2024	Night	M7_NCA_17	Attended	LAeq (15 min)	56.3	59	Compliant	The dominant noise source was traffic on the M7 and Wallgrove Road. The works were inaudible during the monitoring period. JHG works compliant.
9-17 Duff Road, Cecil Park	24/07/2024	Day	M12_NCA_04	Attended	LAeq (15 min)	64.8	59	Compliant	The dominant noise source was traffic on the Duff Road and Elizabeth Drive. The works were inaudible during the monitoring period. JHG works compliant.
34 Angledool Avenue, Hinchinbrook	24/07/2024	Night	M7_NCA_07	Attended	LAeq (15 min)	50.5	52	Compliant	The dominant noise source was traffic on the M7. The works compliant with the PNL. JHG works compliant.
42 Lightning Ridge Road, Hinchinbrook	24/07/2024	Night	M7_NCA_07	Attended	LAeq (15 min)	49.7	64	Compliant	The dominant noise source was traffic on the M7. The works compliant with the PNL. JHG works compliant.
66 Inverell Avenue, Hinchinbrook	24/07/2024	Night	M7_NCA_07	Attended	LAeq (15 min)	50.4	58	Compliant	The dominant noise source was traffic on the M7. The works 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
145 Eskdale Street, Minchinbury	25/07/2024	Night	M7_NCA_23	Attended	LAeq (15 min)	52.5	48	Compliant	The dominant noise source was traffic on the Great Western Highway. The works compliant with the PNL. JHG works compliant.
37 Rossini Drive, Hinchinbrook	25/07/2024	Night	M7_NCA_07	Attended	LAeq (15 min)	48.4	60	Compliant	The dominant noise source was traffic on the M7. The works compliant with the PNL. JHG works compliant.
9-17 Duff Road, Cecil Park	26/07/2024	Day	M12_NCA_04	Attended	LAeq (15 min)	61.3	59	Compliant	The dominant noise source was traffic on the Duff Road and Elizabeth Drive. The works compliant with the PNL. JHG works compliant.
28 Cecil Road, Cecil Park	26/07/2024	Day	M7_NCA_35	Attended	LAeq (15 min)	55.6	68	Compliant	The dominant noise source was traffic on the Elizabeth Drive and Cecil Road. The works compliant with the PNL. JHG works compliant.
145 Eskdale Street, Minchinbury	29/07/2024	Night	M7_NCA_23	Attended	LAeq (15 min)	52.3	54	Compliant	The dominant noise source was traffic on The Western Highway and fauna. The works were inaudible during the monitoring period. JHG works compliant.
11 Gilpin Place, Plumpton	29/07/2024	Night	M7_NCA_28	Attended	LAeq (15 min)	46.9	60	Compliant	The dominant noise source was traffic on the M7. The works compliant with the PNL. JHG works compliant.
6 Gregory Street, Glendenning	30/07/2024	Night	M7_NCA_32	Attended	LAeq (15 min)	46.7	51	Compliant	The dominant noise source was traffic on the M7. The works compliant with the PNL. JHG works compliant.
132 Station Street, Rooty Hill	31/07/2024	Evening	M7_NCA26	Attended	Compliant	62.7	55	Compliant	The dominant noise source was traffic on the M7 and Woodstock Avenue. The works compliant with the PNL. JHG works compliant.
132 Station Street, Rooty Hill	31/07/2024	Night	M7_NCA26	Attended	Compliant	63.1	46	Compliant	The dominant noise source was traffic on the M7 and Woodstock

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
									Avenue. 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	22/07/2024	Continuous	N/A	N/A	Compliant	0.11	10	Compliant	Works were monitored and found to be compliant with associated criteria,
14 Rene Place, Cecil Hills	12/07/2024	Attended	0.13	0.4	Compliant	0.2	20	Compliant	Works were monitored and found to be compliant with associated criteria.
183 Middleton Drive, Hinchinbrook	17/07/2024	Attended	0.03	0.4	Compliant	0.11	20	Compliant	Works were monitored and found to be compliant with associated criteria.
6 Wilson Road, Hinchinbrook	17/07/2024	Attended	0.03	0.4	Compliant	0.11	20	Compliant	Works were monitored and found to be compliant with associated criteria.
78 Inverell Avenue, Hinchinbrook	17/07/2024	Attended	0.03	0.4	Compliant	0.11	20	Compliant	Works were monitored and found to be compliant with associated criteria.
11 Legendre Place, Hinchinbrook	17/07/2024	Attended	0.03	0.4	Compliant	0.1	20	Compliant	Works were monitored and found to be compliant with associated criteria.
11 Rene Place, Cecil Hills	18/07/2024	Attended	0.05	0.4	Compliant	0.07	20	Compliant	Works were monitored and found to be compliant with associated criteria.
26 Isabel Street, Cecil Hills	18/07/2024	Attended	0.08	0.4	Compliant	0.12	20	Compliant	Works were monitored and found to be compliant with associated criteria.
9-17 Duff Road, Cecil Park	24/07/2024	Attended	0.12	0.4	Compliant	0.19	20	Compliant	Works were monitored and found to be compliant with associated criteria.
9-17 Duff Road, Cecil Park	26/07/2024	Attended	0.08	0.4	Compliant	0.12	20	Compliant	Works were monitored and found to be compliant with associated criteria.
28 Cecil Road, Cecil Park	26/07/2024	Attended	0.05	0.4	Compliant	0.08	20	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 July 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 July 2024

Location	Date	Analyte	Units	Limit	Result	Comments
SB03	1/07/2024	pH	pH	6.5-8.5	8.12	Compliant with discharge criteria.
		Turbidity	NTU	50	35.8	
		Oil and grease	Visible	Not visible	Not visible	
SB10	1/07/2024	pH	pH	6.5-8.5	8.3	Compliant with discharge criteria.
		Turbidity	NTU	50	28	
		Oil and grease	Visible	Not visible	Not visible	
SB13	1/07/2024	pH	pH	6.5-8.5	7.89	Compliant with discharge criteria.
		Turbidity	NTU	50	8.5	
		Oil and grease	Visible	Not visible	Not visible	
SB02	2/07/2024	pH	pH	6.5-8.5	7.87	Compliant with discharge criteria.
		Turbidity	NTU	50	49.5	
		Oil and grease	Visible	Not visible	Not visible	
SB10	06/07/2024	pH	pH	6.5-8.5	8.17	Compliant with discharge criteria.
		Turbidity	NTU	50	46.4	
		Oil and grease	Visible	Not visible	Not visible	
SB10	10/07/2024	pH	pH	6.5-8.5	8.4	Compliant with discharge criteria.
		Turbidity	NTU	50	49	
		Oil and grease	Visible	Not visible	Not visible	
SB13	12/07/2023	pH	pH	6.5-8.5	7.65	Compliant with discharge criteria.
		Turbidity	NTU	50	24.9	
		Oil and grease	Visible	Not visible	Not visible	
SB12	15/07/2024	pH	pH	6.5-8.5	7.31	Compliant with discharge criteria.
		Turbidity	NTU	50	36.8	

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		Oil and grease	Visible	Not visible	Not visible	
SB10	19/07/2024	pH	pH	6.5-8.5	7.53	Compliant with discharge criteria.
		Turbidity	NTU	50	48.5	
		Oil and grease	Visible	Not visible	Not visible	
SB02	29/07/2024	pH	pH	6.5-8.5	7.43	Compliant with discharge criteria.
		Turbidity	NTU	50	14.1	
		Oil and grease	Visible	Not visible	Not visible	