M7-M12 Integration Project

Environment Protection Licence – Environmental Monitoring Data Report

December 2024

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Contents

Tables

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.

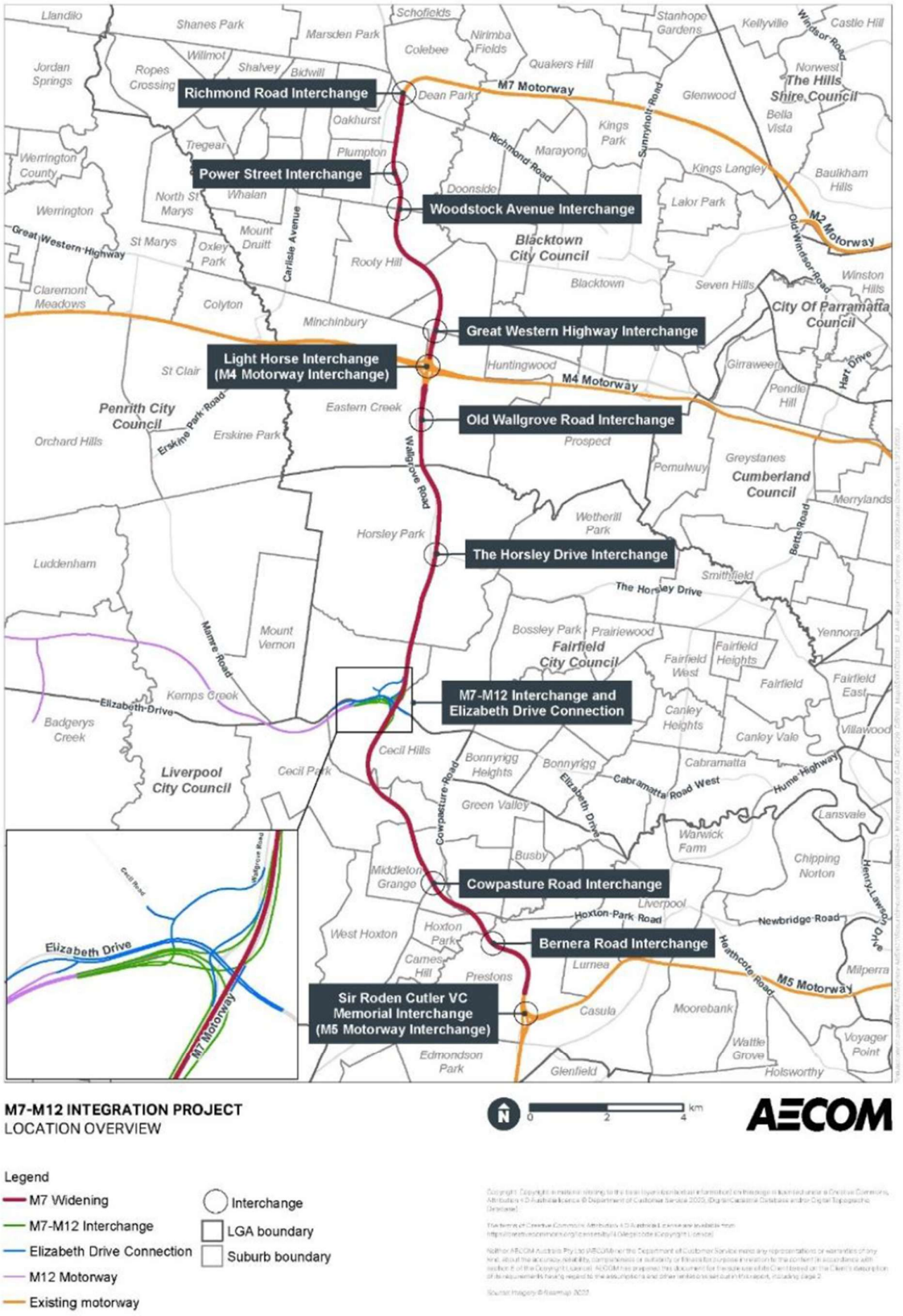

Figure 1-1 M7-M12 Integration Project

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 December 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
20 Redmayne Road, Horsley Park	04/12/2024	Night	M7_NCA_18	Attended	LAeq (15 min)	55.5	52	Compliant	The dominant noise source was traffic from Wallgrove Road. Works were inaudible during monitoring period. JHG works compliant.
22-38 Redmayne Road, Horsley Park	16/12/2024	Night	M7_NCA_18	Attended	LAeq (15 min)	56.2	66	Compliant	The dominant noise source was traffic from M7. Works compliant with the PNL. JHG works compliant.
22-38 Redmayne Road, Horsley Park	16/12/2024	Night	M7_NCA_18	Attended	LAeq (15 min)	57.9	66	Compliant	The dominant noise source was traffic from M7. Works compliant with the PNL. JHG works compliant.
28 Cecil Road, Cecil Park	16/12/2024	Night	TfNSW_NCA_35	Attended	LAeq (15 min)	48.7	53	Compliant	The dominant noise source was traffic from M7, Elizabeth Drive and Cecil Road. Works compliant with the PNL. JHG works compliant.
31 Isabel Street, Cecil Hills	16/12/2024	Night	TfNSW_NCA_16b	Attended	LAeq (15 min)	46	64	Compliant	The dominant noise source was traffic from Elizabeth Drive. Works compliant with the PNL. JHG works compliant.
9,17 Duff Road, Cecil Park	17/12/2024	Day	M12_NCA_04	Attended	LAeq (15 min)	60.7	64	Compliant	The dominant noise source was traffic from Elizabeth Drive and Duff Road. Works were inaudible during monitoring period. JHG works compliant.
18 Rene Place, Cecil Hills	17/12/2024	Day	TfNSW_NCA_16b	Attended	LAeq (15 min)	51.1	68	Compliant	The dominant noise source was the JHG works. Works were compliant with the PNL. JHG works compliant.
132 Station St, Rooty Hill	18/12/2024	Night	M7_NCA26	Attended	LAeq (15 min)	61.5	63	Compliant	The dominant noise source was traffic from Woodstock Ave and the M7. 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
9-17 Duff Road, Cecil Park	17/12/2024	Attended	0.10	0.4	Compliant	0.16	20	Compliant	Works were monitored and found to be compliant with associated criteria
18 Rene Place, Cecil Hills	17/12/2024	Attended	0.06	0.4	Compliant	0.09	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 December 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 December 2024

Location	Date	Analyte	Units	Limit	Result	Comments
SB08	03/12/2024	pH	pH	6.5-8.5	**8.5**	Compliant with discharge criteria.
		Turbidity	NTU	50	**17.2**	
		Oil and grease	Visible	Not visible	**Not visible**	
SB08	04/12/2024	pH	pH	6.5-8.5	**8.5**	Compliant with discharge criteria.
		Turbidity	NTU	50	**44.6**	
		Oil and grease	Visible	Not visible	**Not visible**	
SB03	04/12/2024	pH	pH	6.5-8.5	**8.5**	Compliant with discharge criteria.
		Turbidity	NTU	50	**38.6**	
		Oil and grease	Visible	Not visible	**Not visible**	
SB01	04/12/2024	pH	pH	6.5-8.5	**7.67**	Compliant with discharge criteria.
		Turbidity	NTU	50	**24.7**	
		Oil and grease	Visible	Not visible	**Not visible**	
SB08	05/12/2024	pH	pH	6.5-8.5	**8.03**	Compliant with discharge criteria.
		Turbidity	NTU	50	**47.5**	
		Oil and grease	Visible	Not visible	**Not visible**	
SB03	09/12/2024	pH	pH	6.5-8.5	**8.47**	Compliant with discharge criteria.
		Turbidity	NTU	50	**8**	
		Oil and grease	Visible	Not visible	**Not visible**	
SB08	10/12/2024	pH	pH	6.5-8.5	**8.5**	Compliant with discharge criteria.
		Turbidity	NTU	50	**27.2**	
		Oil and grease	Visible	Not visible	**Not visible**	
SB13	10/12/2024	pH	pH	6.5-8.5	**8.3**	Compliant with discharge criteria.
		Turbidity	NTU	50	**39.8**	

		Oil and grease	Visible	Not visible	**Not visible**	
SB10	12/12/2024	pH	pH	6.5-8.5	**8.5**	Compliant with discharge criteria.
		Turbidity	NTU	50	**14.6**	
		Oil and grease	Visible	Not visible	**Not visible**	
SB03	13/12/2024	pH	pH	6.5-8.5	**8.16**	Compliant with discharge criteria.
		Turbidity	NTU	50	**46.1**	
		Oil and grease	Visible	Not visible	**Not visible**	
SB02	13/12/2024	pH	pH	6.5-8.5	**8.02**	Compliant with discharge criteria.
		Turbidity	NTU	50	**16.4**	
		Oil and grease	Visible	Not visible	**Not visible**	
SB01	16/12/2024	pH	pH	6.5-8.5	**7.55**	Compliant with discharge criteria.
		Turbidity	NTU	50	**45.7**	
		Oil and grease	Visible	Not visible	**Not visible**	
SB08	16/12/2024	pH	pH	6.5-8.5	**7.7**	Compliant with discharge criteria.
		Turbidity	NTU	50	**29.3**	
		Oil and grease	Visible	Not visible	**Not visible**	