

John Holland Gamuda Joint Venture
EPL Monthly Monitoring Report
Reporting Period: February 2024

Project	M1 Motorway Extension to Raymond Terrace – Black Hill to Tomago
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Document Approval

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Contents

1. Introduction	3
2. Environmental Protection Licence and Reporting Requirements	5
3. Water Monitoring	6
4. Noise Monitoring.....	7

Table of Figures

Figure 1 M12RT Project Overview Northern Section	4
Figure 1 M12RT Project Overview Southern Section.....	4

Table of Tables

Table 1 and 2 Water quality monitoring results.....	Error! Bookmark not defined.
Table 3. Noise monitoring results	8

1. Introduction

M12RT will extend the M1 Pacific Motorway from Black Hill to the Pacific Highway at Raymond Terrace,

about 15 kilometres, bypassing Beresfield, Hexham, and Heatherbrae (refer Figure 2-1). M12RT traverses the City of Newcastle and Port Stephens Council local government areas (LGAs). The suburbs of Beresfield, Tarro, Heatherbrae, and Raymond Terrace are located to the north of the Project, with Black Hill, Hexham and Tomago located to the south of the Project.

M12RT will provide a critical link in the National Land Transport Network, particularly for the coastal Sydney to Brisbane corridor. M12RT includes the following key features:

- Black Hill: connection to the M1 Pacific Motorway
- Tarro: connection and upgrade (six lanes) to the New England Highway between John Renshaw Drive and the existing Tarro interchange at Anderson Drive
- Tomago: connection to the Pacific Highway and Old Punt Road
- Raymond Terrace: connection to the Pacific Highway.
- A 2.6-kilometre viaduct over the Hunter River floodplain including new bridge crossings over the Hunter River, the Main North Rail Line, and the New England Highway
- Bridge structures over local waterways at Tarro and Raymond Terrace, and an overpass for Masonite Road in Heatherbrae
- Connections and modifications to the adjoining local road network
- Traffic management facilities and features
- Roadside furniture including safety barriers, signage, fauna fencing and crossings, and street lighting
- Adjustment of waterways, including at Purgatory Creek at Tarro and a tributary of Viney Creek
- Environmental management measures, including surface water quality control measures
- Adjustment, protection and/or relocation of existing utilities
- Walking and cycling considerations, allowing for existing and proposed cycleway route access
- Permanent and temporary property adjustments and property access refinements
- Construction activities, including establishment and use of temporary ancillary facilities, temporary access tracks, haul roads, batching plants, temporary wharves, soil treatment and environmental controls.

The M12RT delivery strategy includes construction via two collaborative Design and Construct (D&C)

contracts:

- A southern D&C contract (known as Black Hill to Tomago) to deliver the southern 10 kilometres of M12RT, with an interface located at Tomago
- A northern D&C contract (known as Heatherbrae Bypass) to deliver the northern 5 kilometres of M12RT.

The JHGA JV will deliver the southern contract.

package works.

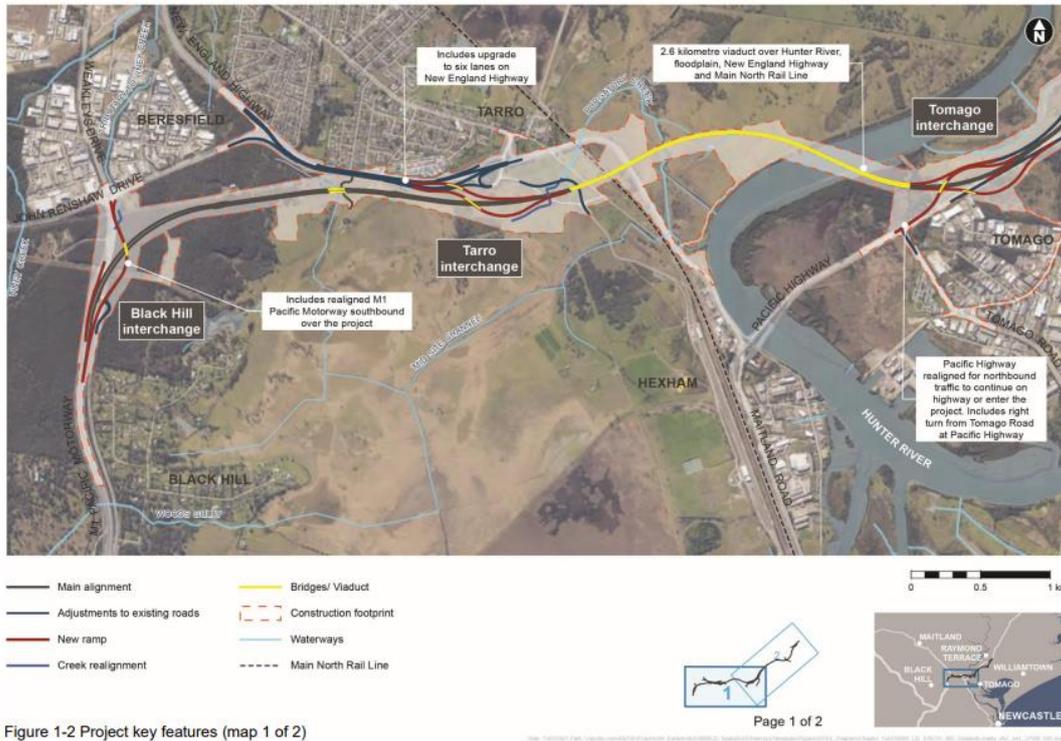


Figure 1 M12RT Project Overview – Southern Section (Source: M1 Pacific Motorway to Raymond Terrace EIS)

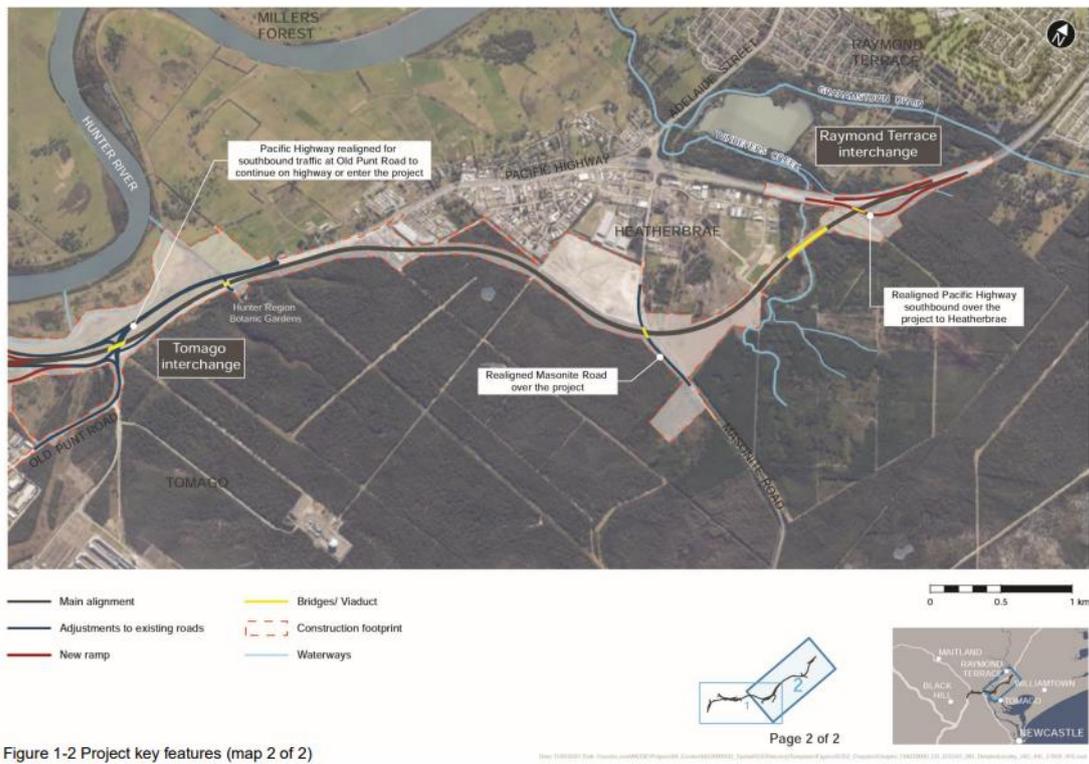


Figure 2 M12RT Project Overview – Northern Section (Source: M1 Pacific Motorway to Raymond Terrace EIS)

2. Environmental Protection Licence and Reporting Requirements

John Holland Gamuda JV obtained the Environment Protection Licence (EPL No. 21808) from the NSW Environment Protection Authority for the M1 Motorway Extension to Raymond Terrace – Black Hill to Tomago in September 2023. The licence is for construction works relating to 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 construction works, and specifically as they relate to:

- Water discharge limits
- Noise limits

The following report details environmental monitoring undertaken during this reporting month conducted in accordance with the EPL.

The EPL can be found by following the link below to the EPA's website:

[ViewPOEOLicence.aspx \(nsw.gov.au\)](http://ViewPOEOLicence.aspx (nsw.gov.au))

3. Water Monitoring

The following results were collected as part of monitoring for EPA Point 1 as per EPL condition M2.2:

Table 1. Water Quality monitoring results – Point 1

Pollutant	Date Sampled	Result (mg/L)
2,4,6-trichlorophenol	20/2/24	<1.0
2,4 Dichlorophenol	20/2/24	<1.0
2-Chlorophenol	20/2/24	<0.1
Benzene	20/2/24	<1.0
Cadmium	20/2/24	<0.0001
Total Chromium	20/2/24	<0.001
Chromium III	20/2/24	<0.001
Chromium VI	20/2/24	<0.001
Copper	20/2/24	0.001
Lead	20/2/24	<0.001
Napthalene	20/2/24	<5.0
Nickel	20/2/24	<0.001
Zinc	20/2/24	<0.005
o-Xylene	20/2/24	<2
Pentachlorophenol	20/2/24	<2
Phenol	20/2/24	<1.0
TPH>C10-C40 (sum) Fraction (TRH)	20/2/24	<100
TRH>C10-C36 (sum) Fraction (TPH)	20/2/24	<50
Oil and Grease	20/2/24	Not visible

Water quality monitoring was undertaken for a single sediment basin discharge event to BH2T_2 (EPA Point 4). Results as follows:

Table 2. Water Quality monitoring results Point 4 (BH2T_2)

Pollutant	Date Sampled	Result (mg/L)
Turbidity (NTU)	28/2/24	15
	29/2/24	25.4
pH	28/2/24	7.4
	29/2/24	7.2
Oils/Grease	28/2/24	No
	29/2/24	No

4. Noise Monitoring

Noise monitoring was undertaken during the February 2024 reporting period. Construction noise monitoring results were above NML in most cases however due to background noise levels (heavy continuous traffic M1/New England Hwy/Pacific Hwy/Tomago Road) and inaudibility of construction noise at sensitive receivers were generally compliant during this period. Where the predicted noise level was exceeded, this was result of extraneous activities (traffic passing etc). Construction noise was in line with the predicted levels. Table 3 contains detailed noise monitoring results.

Table 2. Noise monitoring results

Monitoring Location (Noise Catchment Area, Street, Suburb)	Date	Time	Attended or Continuous Monitoring	Parameter	Goal/Target dB(A)	Actual dB(A)	Comments
NCA03 54 Weakleys Dr, Beresfield	29/2/24	10:11	Attended	Laeq 15 minute	76	68.4	Compliant. Constant flow of traffic along Weakleys Dr. No audible noise from site construction works.
NCA01A 9 Babilla Close Beresfield	29/2/24	09:46	Attended	Laeq 15 minute	61	66.5	Non-compliant - Heavy traffic noise New England Highway between receiver and Project site. No audible noise from site construction works.
NCA01B 14 Walter Pde Black Hill	29/2/24	09:17	Attended	Laeq 15 minute	47	53.6	Non-compliant - Heavy traffic noise New England Highway between receiver and Project site. No audible noise from site construction works.
NCA01A 16 Cahill Cl Black Hill	29/2/24	12:35	Attended	Laeq 15 minute	61	48.9	Compliant - Heavy traffic noise New England. No audible noise from site construction works.
NCA04A 62 New England Hwy Tarro	29/2/24	10:27	Attended	Laeq 15 minute	61	67.2	Non-compliant - Heavy traffic noise Pacific Highway and Tomago Road. No audible noise from site construction works.
NCA06 15 Lawson Ave Beresfield	29/2/24	15:32	Attended	Laeq 15 minute	48	55.9	Non-compliant – Vehicle movements along Lawson Avenue

							and train movements along rail line. No audible noise from site construction works.
NCA05B 39 Anderson Dve Tarro	29/2/24	15:08	Attended	Laeq 15 minute	51	66.7	Non-compliant – Vehicle movements along Anderson Dr. No audible noise from site construction works.
NCA05A 5 Anderson Dve Tarro	29/2/24	14:44	Attended	Laeq 15 minute	65	67.6	Non-compliant – Vehicle movements along New England Highway. No audible noise from site construction works.
NCA04B 27 Eastern Ave Tarro	29/2/24	14:23	Attended	Laeq 15 minute	55	54.8	Compliant – Vehicle movements along New England Highway. No audible noise from site construction works.
NCA07 1 Woodlands Close Tarro	29/2/24	15:58	Attended	Laeq 15 minute	53	59.9	Non-compliant – Vehicle movements along New England Highway. Monitoring took place 200m closer to construction works as to not disturb 1 Woodlands CI resident.