

Dominic Crinnion
Director, Infrastructure Management
Department of Planning, Housing and
Infrastructure
GPO Box 39
Sydney NSW 2001

A70144968

Re: M1 Pacific Motorway extension to Raymond Terrace (SSI 7319)
Infrastructure Approval Condition E6 – updated clearing report

26 May 2025

Dear Dominic,

I refer to the subject project approved by the Minister for Planning on 8 November 2022 and subsequently modified on 18 November 2024.

In accordance with Condition E6, Transport provided a report to the Planning Secretary a report demonstrating how clearing of native vegetation has been minimised on 10 October 2024. This report has been updated. Key changes made to the report are:

- Table 3-1 has been updated to break the clearing areas into the two construction packages and also into the condition of each plant community type.
- Clearing areas have been amended to rectify a GIS calculation error. This error involved a number of areas of retained vegetation not being removed from the final clearing areas. This resulted in the area cleared by the project being over calculated.
- Additional chapter added to the report to detail clearing completed by third parties subject to separate environmental approvals.

In accordance with Condition E6, Transport is providing the updated Clearing report for information.

Please contact Lincoln Carter on 0408 070 354 or by email Lincoln.Carter@transport.nsw.gov.au if you require further information.

Yours sincerely



Belinda Ritchie

Project Director M1 Extension to Raymond Terrace

Encl:

M1 Pacific Motorway extension to Raymond Terrace – Condition E6 Updated
Credit Report

Transport
for NSW

M1 Pacific Motorway extension to Raymond Terrace Condition E6 Clearing Report

May 2025



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Acknowledgement of Country

Transport for NSW acknowledges the Awabakal, Wonnarua and Worimi Traditional Custodians of the land on which the M1 Pacific Motorway Extension to Raymond Terrace project is located.

We pay our respects to Awabakal, Wonnarua and Worimi Elders past and present and celebrate the diversity of Aboriginal people and their ongoing culture and connections to the lands and waters of NSW.

Many of the transport routes we use today – from rail lines, to roads, to water crossings – follow the traditional Songlines, trade routes and ceremonial paths in Country that our nation's First Peoples followed for tens of thousands of years.

Transport for NSW is committed to honouring Aboriginal peoples' cultural and spiritual connections to the land, waters and seas and their rich contribution to society.

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Document control

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Approved by	Belinda Ritchie Director M1 to Raymond Terrace Extension Project
Document number	V2
Department	Safety, Policy, Environment and Regulation

Versions

Version	Amendment notes
1.0	Draft for Transport review
2.0	Revised for issue
3.0	Updated to support submission to review offset requirements



1. Introduction

1.1 Background

1.1.1 Project background

Transport is extending the M1 Pacific Motorway from Black Hill to the Pacific Highway at Raymond Terrace, bypassing Beresfield, Hexham and Heatherbrae. The project passes through the City of Newcastle and Port Stephens Council local government areas (LGAs).

The project addresses a key national motorway ‘missing link’ between Sydney and Brisbane as the existing M1 Pacific Motorway, New England Highway and Pacific Highway carry some of the highest traffic volumes across the Hunter.

Once complete, the extension will remove thousands of vehicles from key congestion and merge points along this corridor. Key features of the project include:

- A 15km motorway comprised of a four-lane divided road (two lanes in each direction).
- Motorway access from the existing road network via four new interchanges at Black Hill, Tarro, Tomago and Raymond Terrace.
- A 2.6km 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.

The Ministers Conditions of Approval for the M12RT project made an allowance for construction and operation of the project to be carried out in stages. The development of a staging report to describe the proposed staging was accepted by the NSW Planning Secretary on 13 May 2023 and an updated staging report was accepted on 25 July 2023.

1.1.2 Planning approval background

Transport for NSW (Transport) completed an environmental impact statement (EIS) of the M1 Pacific Motorway from Black Hill to the Pacific Highway at Raymond Terrace Project (the M12RT project) in July 2021. The EIS identified a range of environmental, social and planning issues associated with the construction and operation of the M12RT project and proposed measures to mitigate and manage those potential impacts.

The EIS was publicly exhibited from 28 July 2021 to 24 August 2021. Following public exhibition, submissions from stakeholders were received and addressed by Transport in the Submissions Report, which was lodged in June 2022. The Submissions Report included a revised biodiversity report.

The Minister for Planning approved the M12RT project under section 5.19 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) on 8 November 2022 and subsequent modification on 18 November 2024 (the approval). The approval incorporated the Minister’s conditions of approval.

Part E (key issue conditions) of the approval includes several conditions relating to biodiversity credits which are relevant to this report. These conditions and their relevance are reviewed below in Table 1-1.

Table 1-1 Approval conditions relevant to this report

ID	Condition	Relevance
E5	The clearing of native vegetation, in particular Koala habitat and Mangroves, must be minimised with the objective of reducing impacts to threatened species and ecological communities and threatened species habitat.	This report addresses this requirement.
E6	A report on the final construction footprint demonstrating how clearing of native vegetation has been minimised, in particular Koala habitat and mangroves, must be provided to the Planning Secretary, BCS and AG DCCEEW for information, within 12 months of the commencement of construction.	This report addresses this requirement for an interim project footprint which is yet to be finalised. Refer to Section 1.3.
E7*	The Proponent must meet the biodiversity offset obligations for ecosystem and species credits as set out in Table 3 and Table 4 within 12 months of the commencement of construction. The retirement of the biodiversity credits must be carried out in accordance with the NSW Biodiversity Offsets Policy for Major Projects and can be achieved by: (a) acquiring and retiring “biodiversity credits” within the meaning of the Biodiversity Conservation Act 2016; and/or (b) properties secured with the NPWS, on the basis of a draft credit report to show what the property would provide and written confirmation from NPWS that the financial contributions for acquisition and management have been received; and/or (c) making a payment into the Biodiversity Conservation Fund; and/or (d) a Biodiversity Offset Strategy prepared in consultation with Biodiversity Conservation Trust, BCS and AG DCCEEW that provides supplementary measures or where the Proponent intends to utilise the biodiversity credit variation rules.	Condition E7 offset requirements are being addressed separate to this report. The Condition E7 offset requirements are based on the Plant Community Type (PCT) and habitat impacts identified in the revised biodiversity report. This report identifies reduced clearing impacts compared the revised biodiversity report.

ID	Condition	Relevance
E8	The Proponent may review and update the ecosystem and species credit requirements in Table 3 and Table 4 to reflect the final construction footprint and resulting extent and type of plant community types to be cleared and the extent of threatened species habitat impacted by the construction of the CSSI. Amendments to the ecosystem and species credit requirements must be undertaken in consultation with BCs and AG DCCEEW and submitted to the Planning Secretary for approval within six months of determining the final construction footprint.	Condition E7 offset requirements are being addressed separate to this report. Transport will identify any changes to ecosystem and species credit requirements based on the final construction footprint when available.

* Tables 3 and 4 from the approval not reproduced.

1.2 Purpose of this report

The purpose of this report is to address the requirements of Condition E6 of the approval. In doing so the report:

- Provides the relevant environmental context, including a summary of native vegetation types present, mangroves and koala habitat
- Explains how native vegetation impacts have been reduced during the design and delivery of the project
- Identifies the clearing of native vegetation associated with the interim construction footprint and reduced impacts compared to the revised biodiversity assessment
- Identifies the extent of impacts on mangroves associated with the interim construction footprint reduced impacts compared to the revised biodiversity assessment
- Identifies that the extent of impacts on koala habitat associated with the interim construction footprint are reduced impacts compared to the revised biodiversity assessment.

1.3 Limitations

Some aspects of the project construction are still to be finalised. Additional clearing areas across the project may include but are not limited to local road upgrades, breakdown bays, operation stage signage and utilities/services connections and other adjustments. These project elements are expected to result in some minor changes to the clearing amounts documented in this report. Where required, an addendum to this report will be prepared to address any additional clearing for the final construction footprint.

The findings presented in this report are based on clearing data dated 12 May 2025.

2. Environmental context

2.1 Native vegetation

The native vegetation impacts of the proposal for the purposes on the approval are documented in Table 3-2 of the Revised Biodiversity Assessment Report and are reproduced below in Table 2-1. The location of each PCT in relation to the project construction boundary and clearing footprint is shown in Appendix A.

Table 2-1 Impacted Plant Community Types (revised biodiversity report)

PCT ID*	PCT name	Area within construction footprint (ha)	Threatened ecological community (TSC Act)#
1590	Spotted Gum – Broad-leaved Mahogany – Red Ironbark shrubby open forest	40.93	Yes
1588	Grey Ironbark - Broad-leaved Mahogany - Forest Red Gum shrubby open forest on Coastal Lowlands of the Central Coast	7.74	No
1646	Smooth-barked Apple - Blackbutt – Old Man Banksia woodland on coastal sands of the Central and Lower North Coast	27.73	No
1649	Smooth-barked Apple – Red Mahogany – Swamp Mahogany – <i>Melaleuca sieberi</i> heathy swamp woodlands of coastal lowlands	1.33	Yes
1598	Forest Red Gum grassy open forest on floodplains of the lower Hunter	0.51	Yes
1716	Prickly-leaved Paperbark Forest on coastal lowlands of the Central Coast and Lower North Coast	1.88	Yes
1717	Broad-leaved Paperbark - Swamp Mahogany – Swamp Oak – Saw Sedge swamp forest of the Central Coast and Lower North Coast	10.56	Yes
1724	Broad-leaved Paperbark - Swamp Oak – Saw Sedge swamp forest on coastal lowlands of the Central Coast and Lower North Coast	1.64	Yes
1727	Swamp Oak – Sea Rush – <i>Baumea juncea</i> swamp forest on coastal lowlands of the Central Coast and Lower North Coast	8.84	Yes
1736	Water Couch – Tall Spike Rush freshwater wetland of the Central Coast and lower Hunter	59.21	Yes

PCT ID*	PCT name	Area within construction footprint (ha)	Threatened ecological community (TSC Act)#
1742	Jointed Twig-rush sedgeland	1.79	Yes
1071	<i>Phragmites australis</i> and <i>Typha orientalis</i> coastal freshwater wetlands of the Sydney Basin Bioregion	8.05	Yes

* Legacy PCTs have been referenced consistent with the Revised Biodiversity Assessment Report.

Former provisions of *Threatened Species Conservation Act 1995* remain as the project was assessed under transitional arrangements

2.2 Mangroves

Mangroves occur within the Grey Mangrove low closed forest PCT (1747). This community occurs on saline muds within the tidal zone of estuaries, including the Hunter River and Purgatory Creek within in the construction boundary. This community is dominated by *Avicennia marina* (Grey Mangrove) with an open midstorey of *Aegiceras corniculatum* and a sparse muddy ground layer dominated by pneumatophores of the Grey Mangrove. Common understorey species includes a sparse cover of salt tolerant species.

A total of 2.28 hectares of Grey Mangrove low closed forest occurs within the construction boundary (2.05 hectares assessed as good condition and 0.23 hectares assessed as moderate condition). The location of Grey Mangrove low closed forest is shown on the maps in Appendix A.

2.3 Koala habitat

The Revised Biodiversity Assessment Report identifies the following six PCTs within the construction boundary as containing primary, secondary and supplementary koala feed tree species:

- 1588 Grey Ironbark – Broad-leaved Mahogany – Forest Red Gum shrubby open forest on Coastal Lowlands of the Central Coast
- 1590 Spotted Gum – Broad-leaved Mahogany – Red Ironbark shrubby open forest
- 1598 Forest Red Gum grassy open forest on floodplains of the lower Hunter
- 1646 Smooth-barked Apple - Blackbutt – Old Man Banksia woodland on coastal sands of the Central and Lower North Coast
- 1717 Broad-leaved Paperbark - Swamp Mahogany – Swamp Oak – Saw Sedge swamp forest of the Central Coast and Lower North Coast
- 1724 Broad-leaved Paperbark - Swamp Oak – Saw Sedge swamp forest on coastal lowlands of the Central Coast and Lower North Coast

A total of 89.11 hectares of koala habitat (based on the koala species polygon) occurs within the construction boundary which is shown in Figure 8-2 of the report. This amount is also referenced in Table 4 to Condition E7 in the approval.

3. Native vegetation clearing

3.1 Measures to reduce native vegetation impacts

Transport has sought to minimise native vegetation clearing throughout the design and construction of the project. Construction contract requirements require the clearing of native vegetation to be minimised and allowable clearing limits under the contract are lower than the extent of native vegetation impacts identified in the Revised Biodiversity Assessment Report.

Any variations to the contract clearing limits have been subject to Transport agreement and each has required detailed justification. The types of works that have been allowed to exceed contract clearing limits include:

- Drainage works
- Boundary fencing
- Services connections and utility adjustments
- Additional working area for embankments and bridge works
- Property accesses, site access and ancillary facilities
- Line of site for traffic signs and trimming for electrical lines.

The flora and fauna management subplans for the M12RT project include measures to minimise biodiversity impacts (including clearing of native vegetation) during construction. This has included implementation of a Flora and Fauna Protection Procedure which includes limits on native vegetation clearing, a vegetation clearing permit process, pre-clearing procedures and reporting, clearing procedures, and post-clearing reporting.

Pre-clearing measures have been implemented to reduce the risk of error or misinterpretation of clearing limits and have included:

- Identification of the approved limits of clearing and exclusion zones by clearly visible markers placed on each side of the road formation and bridges
- Installation of “No-go” Zone fencing and signage
- Delineation of clearing limits using signage and highly visible barrier or tape such as flagging, bunting, nightline or other robust and durable material
- Establishment of tree protection zones around all trees retained within and adjacent to the disturbance footprint using signage and highly visible barrier or tape such as flagging, bunting, nightline or other robust and durable material.

3.2 Areas cleared within project footprint by third parties

Biodiversity surveys for the project were complete in 2015 and 2018. Following completion of surveys, it was identified during property acquisition discussions that the owner of a property intended to clear the portion of their property subject to acquisition by Transport to allow the extraction of sand for use in their development. This clearing was subject to approval by Port Stephens Council under Development Application Modification 16-2006-636-10 on 9 July 2019. As part of this approval, 9.3 ha of koala habitat were required to be rehabilitated to offset the impacts of the DA modification. The area was cleared prior to acquisition by Transport and the commencement of construction. A total of 3.3 ha of PCT 1646 was cleared within the projects construction footprint. Figure A2 in appendix 2 shows the extent of this clearing.

Due to timing and the completion of biodiversity surveys, this area was not recognised as cleared in projects Biodiversity Assessment Report and was included in the area to subject to biodiversity offsetting in Condition E7. As an area of koala habitat is required to be rehabilitated to offset the impacts of the DA modification, it has been removed from the projects clearing in Table 3-1.

3.3 Native vegetation clearing

The clearing required for the project (noting the limitations identified in Section 1.3) is shown in Table 3-1. This table shows the clearing associated with each package of work, Black Hill to Tomago (BH2T) and Heatherbrae bypass (HB), as well as total for the project. The reduction in native vegetation clearing compared the impacts Revised Biodiversity Assessment Report is also provided.

Table 3-1 Impacted Plant Community Types (revised biodiversity report)

PCT ID	PCT name	Condition	Revised BAR impact (ha)	BH2T Clearing (ha)	HB Clearing (ha)	Total clearing (ha)	Total clearing savings (ha)
1590	Spotted Gum – Broad-leaved Mahogany – Red Ironbark shrubby open forest	Good	24.68	17.82	0.00	17.82	6.86
		Moderate	8.04	7.61	0.00	7.61	0.43
		Regenerating	8.21	4.60	0.00	4.60	3.61
		Total	40.93	30.03	0.00	30.03	10.90
1588	Grey Ironbark - Broad-leaved Mahogany - Forest Red Gum shrubby open forest on Coastal Lowlands of the Central Coast	Moderate	6.92	6.86	0.00	6.86	0.06
		Regenerating	0.82	0.25	0.00	0.25	0.57
		Total	7.74	7.11	0.00	7.11	0.63
1646	Smooth-barked Apple - Blackbutt – Old Man Banksia woodland on coastal sands of the Central and Lower North Coast	Good	20.80	0.19	12.25	12.44	8.36
		Poor	6.93	0.22	3.10	3.32	3.61
		Total	27.73	0.41	15.35	15.76	11.97
1649	Smooth-barked Apple – Red Mahogany – Swamp Mahogany – <i>Melaleuca sieberi</i> heathy swamp woodlands of coastal lowlands	Good	1.33	0.00	1.06	1.06	0.27

PCT ID	PCT name	Condition	Revised BAR impact (ha)	BH2T Clearing (ha)	HB Clearing (ha)	Total clearing (ha)	Total clearing savings (ha)
1598	Forest Red Gum grassy open forest on floodplains of the lower Hunter	Moderate	0.51	0.31	0.00	0.31	0.20
1716	Prickly-leaved Paperbark Forest on coastal lowlands of the Central Coast and Lower North Coast	Good	1.88	1.88	0.00	1.88	0.00
1717	Broad-leaved Paperbark - Swamp Mahogany – Swamp Oak – Saw Sedge swamp forest of the Central Coast and Lower North Coast	Good	3.90	1.22	1.56	2.78	1.12
		Poor	6.66	0.00	2.78	2.78	3.88
		Total	10.56	1.22	4.34	5.56	5.00
1724	Broad-leaved Paperbark - Swamp Oak – Saw Sedge swamp forest on coastal lowlands of the Central Coast and Lower North Coast	Good	1.64	0.72	0.00	0.72	0.92
1727	Swamp Oak – Sea Rush – <i>Baumea juncea</i> swamp forest on coastal lowlands of the Central Coast and Lower North Coast	Moderate	8.84	6.20	0.00	6.20	2.64

PCT ID	PCT name	Condition	Revised BAR impact (ha)	BH2T Clearing (ha)	HB Clearing (ha)	Total clearing (ha)	Total clearing savings (ha)
1736	Water Couch – Tall Spike Rush freshwater wetland of the Central Coast and lower Hunter	Good	33.29	16.68	0.00	16.68	16.61
		Moderate	25.92	17.99	0.00	17.99	7.93
		Total	59.21	34.67	0.00	34.67	24.54
1742	Jointed Twig-rush sedgeland	Good	1.79	0.03	1.04	1.07	0.72
1071	<i>Phragmites australis</i> and <i>Typha orientalis</i> coastal freshwater wetlands of the Sydney Basin Bioregion	Good	8.05	5.48	0.00	5.48	2.57
1746	Saltmarsh Estuarine Complex	Good	1.33	0.12	0.00	0.12	1.21
1747	Grey Mangrove low closed forest	Good	2.05	0.72	0.00	0.72	1.33
		Moderate	0.23	0.11	0.00	0.11	0.12
		Total	2.28	0.83	0.00	0.83	1.45

3.4 Mangrove impacts

Mangroves within the project construction boundary occur within PCT 1747 Grey Mangrove low closed forest and are shown below in Figure 3-1. The calculated clearing of mangroves is 0.83 hectares, which is a reduction of 1.45 hectares compared to the impact identified in the Revised Biodiversity Assessment Report.

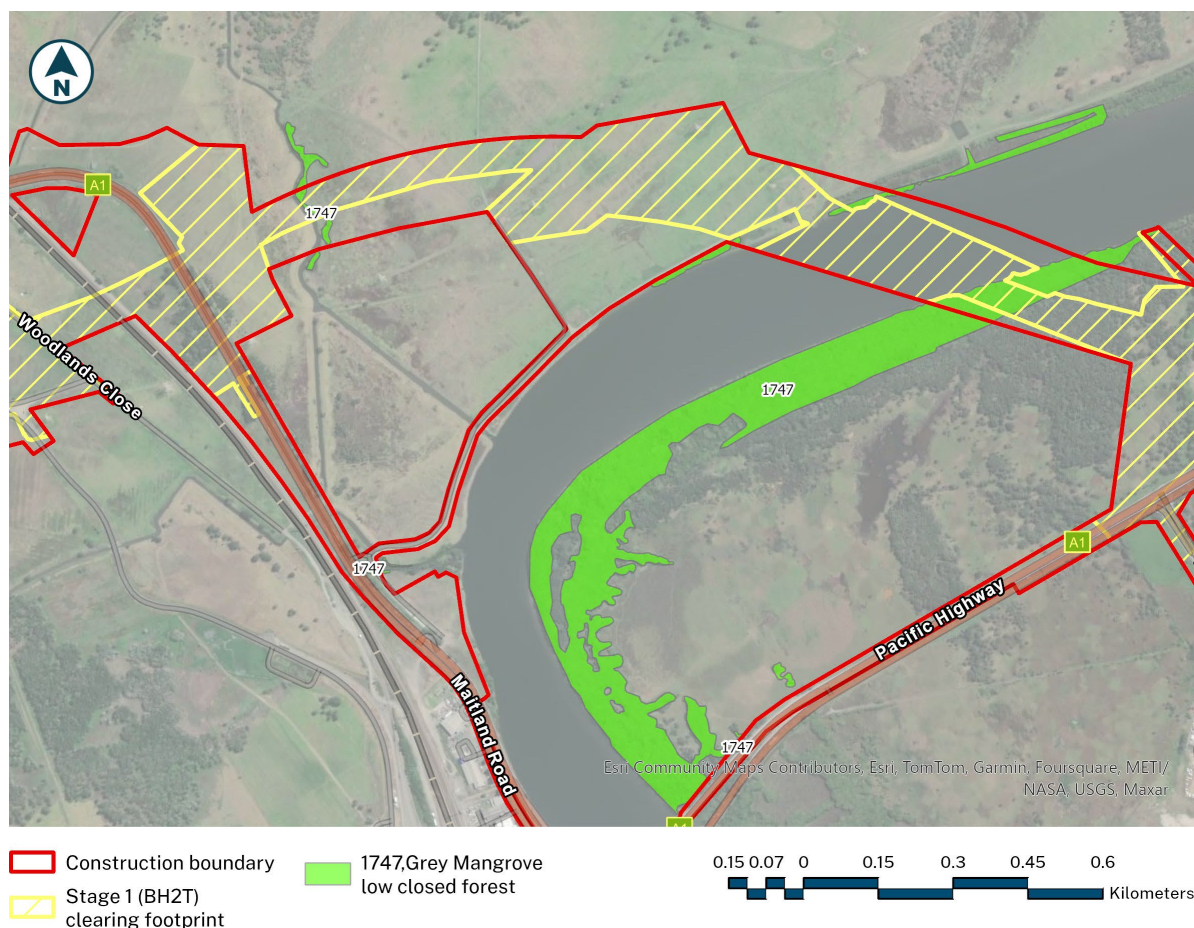


Figure 3-1: PCT 1747 Grey Mangrove low closed forest locations

3.5 Koala habitat impacts

Koala habitat within the project construction boundary occurs within PCTs 1588, 1590, 1598, 1646, 1717 and 1724 and is further refined by the koala species polygon included in Table 8-2 of the Revised Biodiversity Assessment Report.

The calculated clearing of koala habitat is 59.49 hectares, which is a reduction of 29.62 hectares compared to the impact identified in the Revised Biodiversity Assessment Report (and Table 4 to Condition E7 in the approval).

4. Conclusion

Condition E6 of the approval requires preparation of a report on the final construction footprint demonstrating how clearing of native vegetation has been minimised, in particular Koala habitat and mangroves.

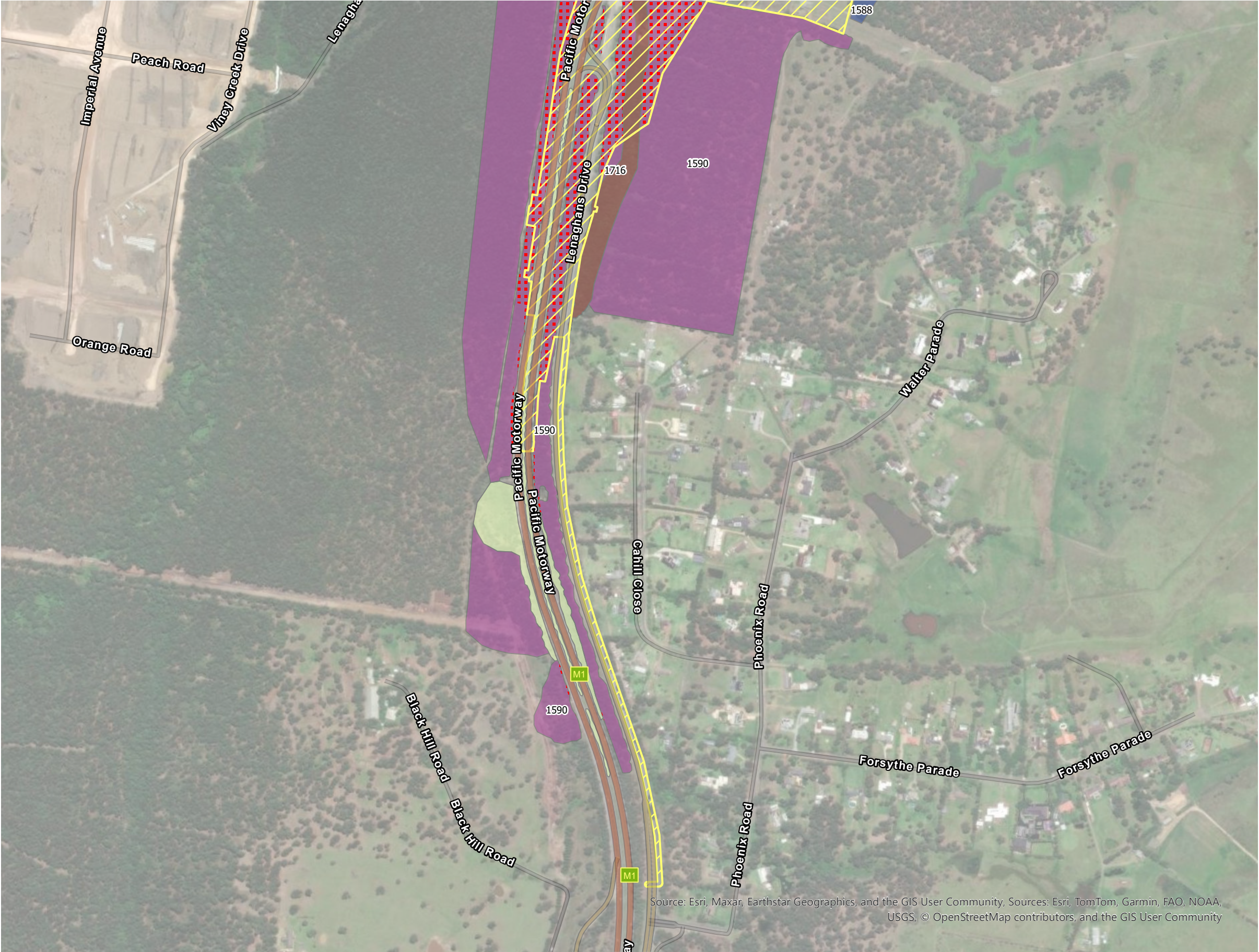
This report shows that impacts on native vegetation, mangroves and koala habitat have been minimised as follows:

- Native vegetation impacts reduced within most PCTs totalling 62.82 hectares retained.
- Mangrove impacts reduced by 1.45 hectares
- Koala habitat impacts (based on the koala species polygons in the Revised Biodiversity Assessment Report) reduced by 29.62 hectares.

Some minor changes to clearing amounts are expected for project elements including local road upgrades, breakdown bays, operation stage signage and utilities/services connections and adjustments. Where required, an update to this report will be prepared to address any additional clearing for the final construction footprint.

Appendix A

Native vegetation clearing – mapping



- Stage 1 (BH2T) clearing footprint
- Stage 2 (HB) clearing footprint
- Koala habitat
- Grey Ironbark - Broad-leaved Mahogany - Forest Red Gum shrubby open forest on Coastal Lowlands of the Central Coast (1588)
- Planted native vegetation
- Prickly-leaved Paperbark forest on coastal lowlands of the Central Coast and Lower North Coast (1716)
- Spotted Gum - Broad-leaved Mahogany - Red Ironbark shrubby open forest (1590)

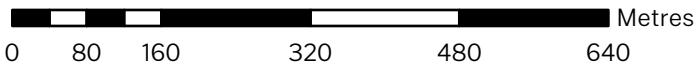


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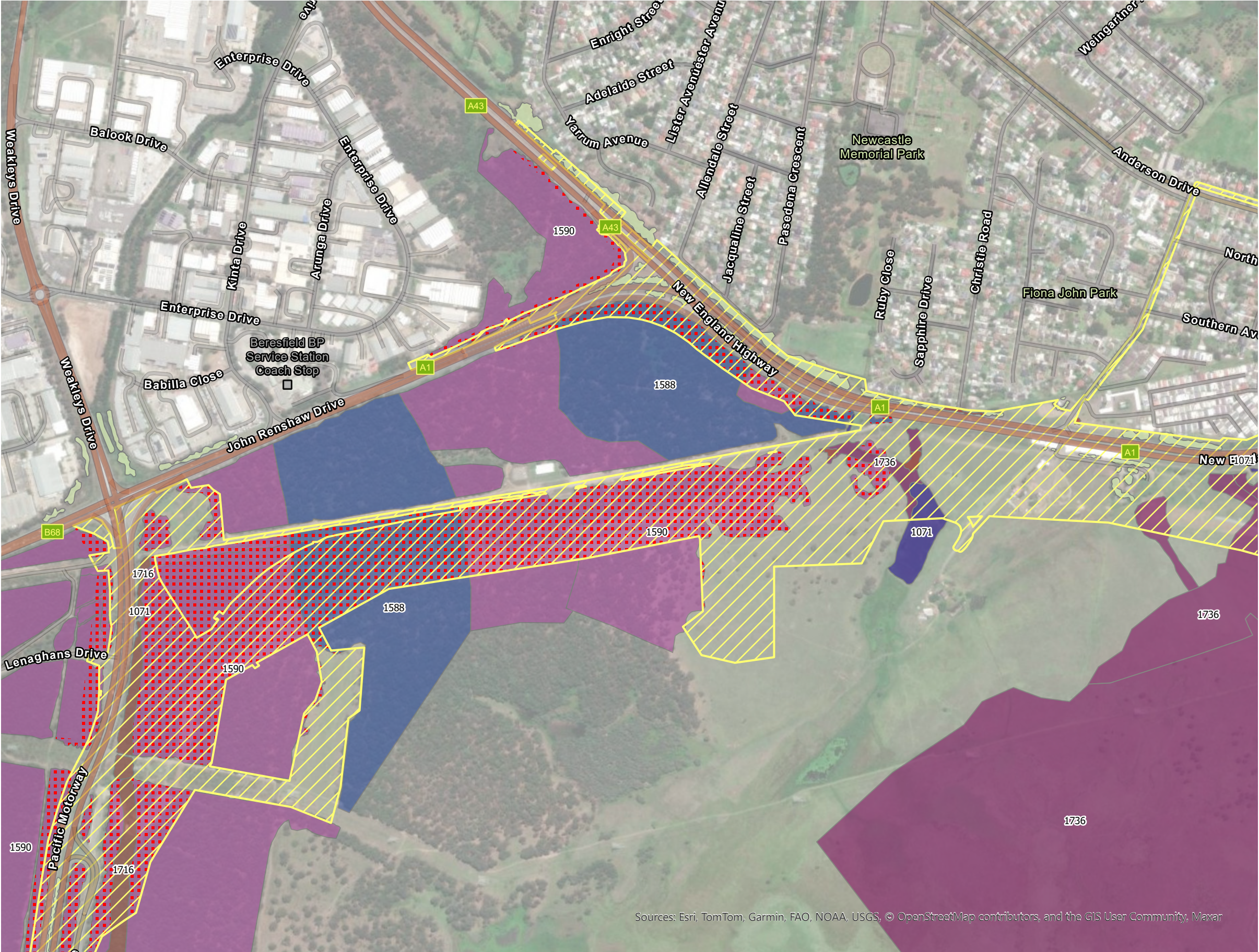


Figure A1 Native vegetation clearing - mapping Page 1 of 9

Legacy PCTs shown consistent with Revised biodiversity assessment report (June 2022)



Disturbance footprint as of 20 May 2025. Subject to change prior to finalisation of M12RT Construction Boundary.



- Stage 1 (BH2T) clearing footprint
- Stage 2 (HB) clearing footprint
- Koala habitat
- Exotic vegetation
- Grey Ironbark - Broad-leaved Mahogany - Forest Red Gum shrubby open forest on Coastal Lowlands of the Central Coast (1588)
- Phragmites australis and Typha orientalis coastal freshwater wetlands of the Sydney Basin Bioregion (1071)
- Planted native vegetation
- Prickly-leaved Paperbark forest on coastal lowlands of the Central Coast and Lower North Coast (1716)
- Spotted Gum - Broad-leaved Mahogany - Red Ironbark shrubby open forest (1590)
- Water Couch - Tall Spike Rush freshwater wetland of the Central Coast and lower Hunter (1736)

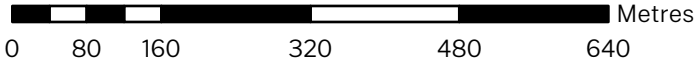


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Datum: GDA 1994



Figure A1 Native vegetation clearing - mapping Page 2 of 9

Legacy PCTs shown consistent with Revised biodiversity assessment report (June 2022)



Disturbance footprint as of 20 May 2025. Subject to change prior to finalisation of M12RT Construction Boundary.

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Prepared for: Transport for NSW



- Stage 1 (BH2T) clearing footprint
- Stage 2 (HB) clearing footprint
- Koala habitat
- Exotic vegetation
- Grey Mangrove low closed forest (1747)
- Phragmites australis and Typha orientalis coastal freshwater wetlands of the Sydney Basin Bioregion (1071)
- Planted native vegetation
- Saltmarsh Estuarine Complex (1746)
- Swamp Oak - Sea Rush - Baumea juncea swamp forest on coastal lowlands of the Central Coast and Lower North Coast (1727)
- Water Couch - Tall Spike Rush freshwater wetland of the Central Coast and lower Hunter (1736)



Spatial Reference
Name: GDA 1994 MGA Zone 56
PCS: GDA 1994 MGA Zone 56
GCS: GCS GDA 1994
Datum: GDA 1994



Figure A1 Native vegetation clearing - mapping Page 3 of 9

Legacy PCTs shown consistent with Revised biodiversity assessment report (June 2022)

0 80 160 320 480 640 Metres

Disturbance footprint as of 20 May 2025. Subject to change prior to finalisation of M12RT Construction Boundary.

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Prepared for: Transport for NSW



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- Water Couch - Tall Spike Rush freshwater wetland of the Central Coast and lower Hunter (1736)



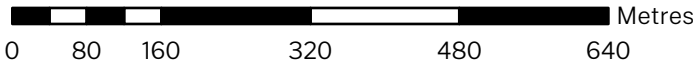
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Datum: GDA 1994



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Maxar

Figure A1 Native vegetation clearing - mapping Page 4 of 9

Legacy PCTs shown consistent with Revised biodiversity assessment report (June 2022)



Disturbance footprint as of 20 May 2025. Subject to change prior to finalisation of M12RT Construction Boundary.

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Prepared for: Transport for NSW



- Stage 1 (BH2T) clearing footprint
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- Forest Red Gum grassy open forest on floodplains of the lower Hunter (1598)
- Grey Mangrove low closed forest (1747)
- Phragmites australis and Typha orientalis coastal freshwater wetlands of the Sydney Basin Bioregion (1071)
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- Saltmarsh Estuarine Complex (1746)
- Smooth-barked Apple - Blackbutt - Old Man Banksia woodland on coastal sands of the Central and Lower North Coast (1646)
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Datum: GDA 1994

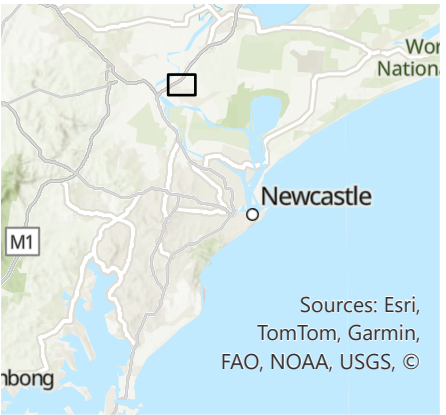
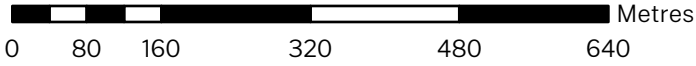


Figure A1 Native vegetation clearing - mapping Page 5 of 9

Legacy PCTs shown consistent with Revised biodiversity assessment report (June 2022)



Disturbance footprint as of 20 May 2025. Subject to change prior to finalisation of M12RT Construction Boundary.



- Stage 1 (BH2T) clearing footprint
- Stage 2 (HB) clearing footprint
- Koala habitat
- Broad-leaved Paperbark - Swamp Mahogany - Swamp Oak - Saw Sedge swamp forest of the Central Coast and Lower North Coast (1717)
- Exotic vegetation
- Forest Red Gum grassy open forest on floodplains of the lower Hunter (1598)
- Jointed Twig-rush sedgeland (1742)
- Phragmites australis and Typha orientalis coastal freshwater wetlands of the Sydney Basin Bioregion (1071)
- Planted native vegetation
- Saltmarsh Estuarine Complex (1746)
- Smooth-barked Apple - Blackbutt - Old Man Banksia woodland on coastal sands of the Central and Lower North Coast (1646)
- Swamp Oak - Sea Rush - Baumea juncea swamp forest on coastal lowlands of the Central Coast and Lower North Coast (1727)
- Water Couch - Tall Spike Rush freshwater wetland of the Central Coast and lower Hunter (1736)

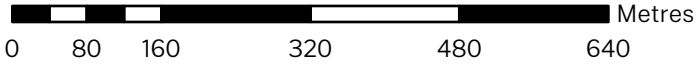


Spatial Reference
Name: GDA 1994 MGA Zone 56
PCS: GDA 1994 MGA Zone 56
GCS: GCS GDA 1994
Datum: GDA 1994



Figure A1 Native vegetation clearing - mapping Page 6 of 9

Legacy PCTs shown consistent with Revised biodiversity assessment report (June 2022)



Disturbance footprint as of 20 May 2025. Subject to change prior to finalisation of M12RT Construction Boundary.



- Stage 1 (BH2T) clearing footprint
- Stage 2 (HB) clearing footprint
- Koala habitat
- Broad-leaved Paperbark - Swamp Mahogany - Swamp Oak - Saw Sedge swamp forest of the Central Coast and Lower North Coast (1717)
- Exotic vegetation
- Forest Red Gum grassy open forest on floodplains of the lower Hunter (1598)
- Jointed Twig-rush sedgeland (1742)
- Phragmites australis and Typha orientalis coastal freshwater wetlands of the Sydney Basin Bioregion (1071)
- Pine plantation
- Planted native vegetation
- Smooth-barked Apple - Blackbutt - Old Man Banksia woodland on coastal sands of the Central and Lower North Coast (1646)
- Smooth-barked Apple - Red Mahogany - Swamp Mahogany - Melaleuca sieberi heathy swamp woodland of coastal lowlands (1649)

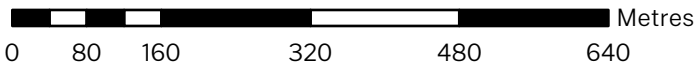


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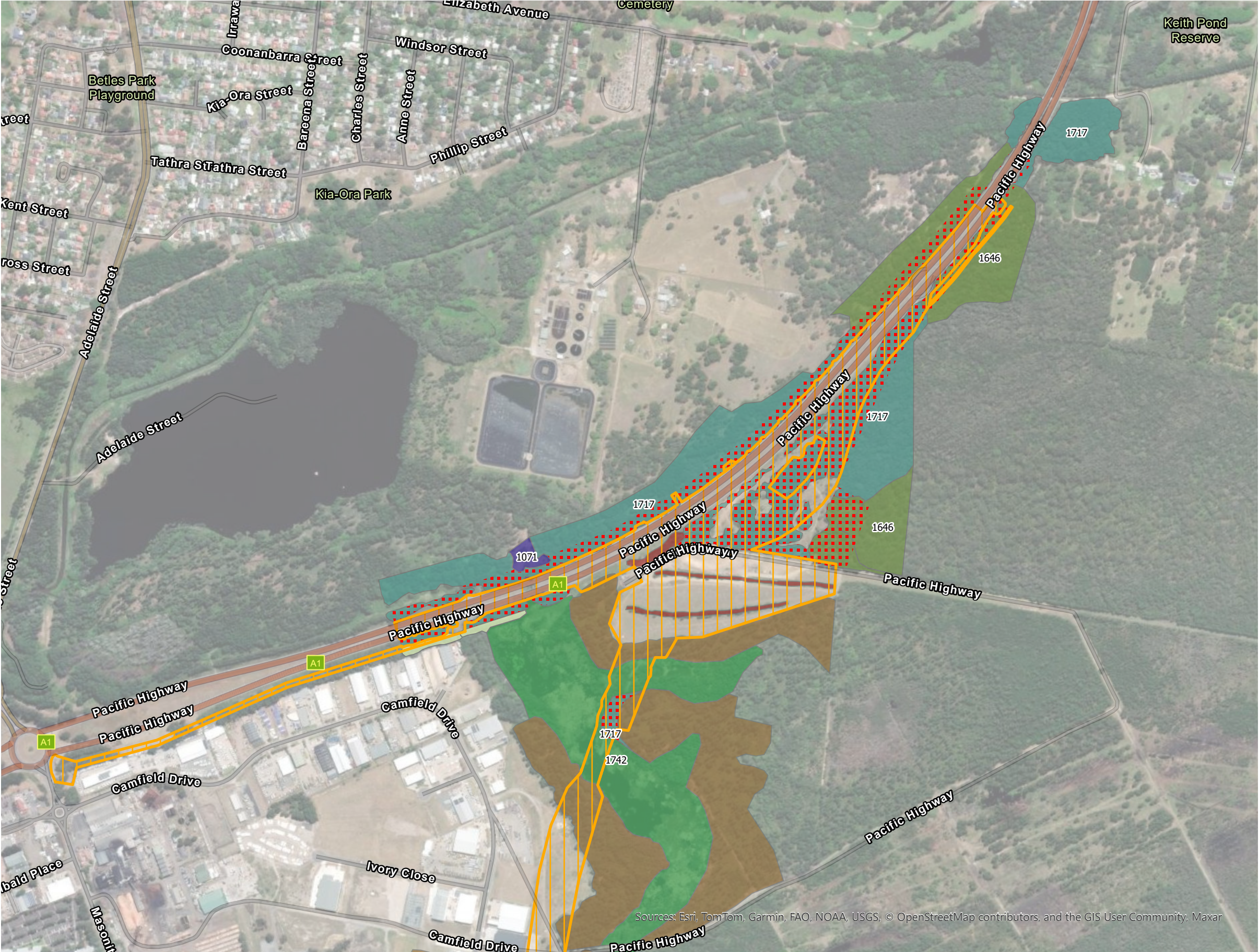


Figure A1 Native vegetation clearing - mapping Page 7 of 9

Legacy PCTs shown consistent with Revised biodiversity assessment report (June 2022)



Disturbance footprint as of 20 May 2025. Subject to change prior to finalisation of M12RT Construction Boundary.



- Stage 1 (BH2T) clearing footprint
- Stage 2 (HB) clearing footprint
- Koala habitat
- Broad-leaved Paperbark - Swamp Mahogany - Swamp Oak - Saw Sedge swamp forest of the Central Coast and Lower North Coast (1717)
- Exotic vegetation
- Jointed Twig-rush sedgeland (1742)
- Phragmites australis and Typha orientalis coastal freshwater wetlands of the Sydney Basin Bioregion (1071)
- Pine plantation
- Planted native vegetation
- Smooth-barked Apple - Blackbutt - Old Man Banksia woodland on coastal sands of the Central and Lower North Coast (1646)

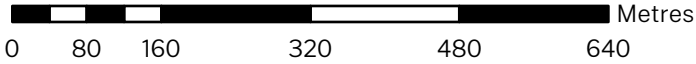


Spatial Reference
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PCS: GDA 1994 MGA Zone 56
GCS: GCS GDA 1994
Datum: GDA 1994



Figure A1 Native vegetation clearing - mapping Page 8 of 9

Legacy PCTs shown consistent with Revised biodiversity assessment report (June 2022)



Disturbance footprint as of 20 May 2025. Subject to change prior to finalisation of M12RT Construction Boundary.



- Stage 1 (BH2T) clearing footprint
- Stage 2 (HB) clearing footprint
- Koala habitat
- Broad-leaved Paperbark - Swamp Mahogany - Swamp Oak - Saw Sedge swamp forest of the Central Coast and Lower North Coast (1717)
- Smooth-barked Apple - Blackbutt - Old Man Banksia woodland on coastal sands of the Central and Lower North Coast (1646)

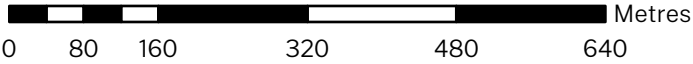


Spatial Reference
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Datum: GDA 1994



Figure A1 Native vegetation clearing - mapping Page 9 of 9

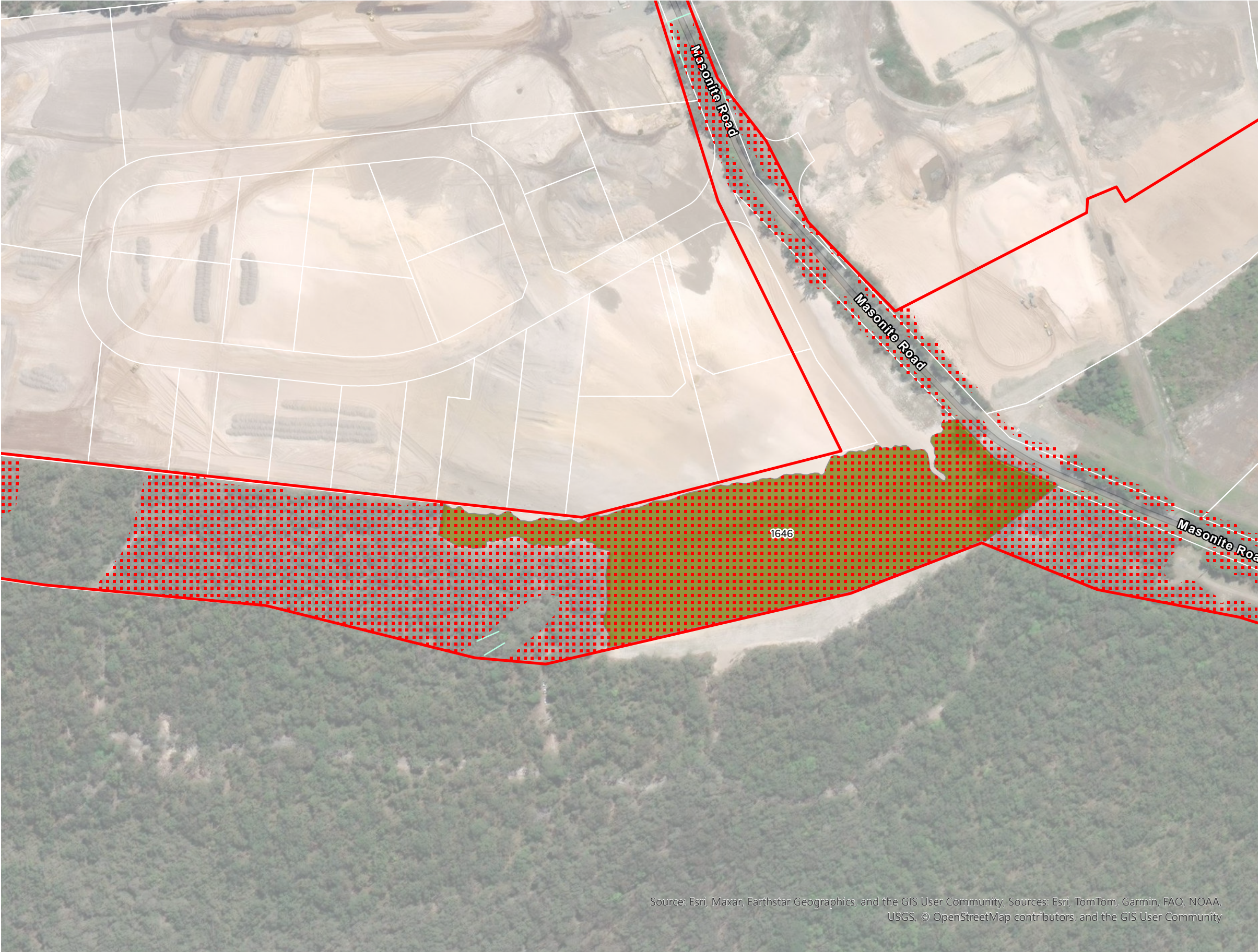
Legacy PCTs shown consistent with Revised biodiversity assessment report (June 2022)



Disturbance footprint as of 20 May 2025. Subject to change prior to finalisation of M12RT Construction Boundary.

Appendix B

Clearing prior to commencement of construction



- Construction boundary
- Koala habitat
- 1646, Smooth-barked Apple - Blackbutt - Old Man Banksia woodland on coastal sands of the Central and Lower North Coast (1646)



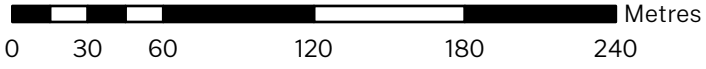
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GCS: GCS GDA 1994
Datum: GDA 1994

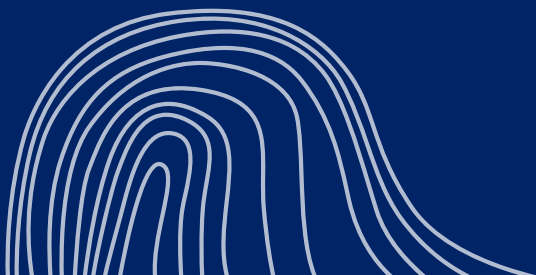


Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Figure A2 Areas cleared within project by third parties

Legacy PCTs shown consistent with Revised biodiversity assessment report (June 2022)





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