Native Vegetation Data Report

Verdun Interchange Upgrade, South Eastern Freeway.

Clearance under Reg 12(32): Works on behalf of Commissioner of Highways

Prepared by Sheree Edwards, Terra Gana Pty Ltd
26th November 2025

Document Information

Client	BMD Leed Joint Venture for Department for Infrastructure and Transport
Issue Date	V4.0 FINAL – 26th November 2025.
	V3.0 FINAL - 14th November 2025. Review by DIT
Version	V2.0 DRAFT – 11th November 2025. Review by Project Team
	V1.0 DRAFT - 24th October 2025. Review by Project Team
Author	Sheree Edwards, Senior Environmental Consultant
Title	DRAFT Native Vegetation Data Report – Verdun Interchange Upgrade. South Eastern Freeway

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1. Application information

Application Details

Applicant:	Department for Infrastructure and Transport		
Key contact:			
Landowner:	Commissioner of Highways – Department for Infrastructure and Transport		
Site Address:	Mount Barker Road, Verdun Ramp to Adelaide and the South Eastern Freeway, Verdun Inclusive of Roadsides adjacent South Eastern Freeway and Mount Barker Road.		
Local Government Area:	Adelaide Hills	Hundred:	Noarlunga
Title ID:	CT/6287/468 (Trees 1-7) CT/6291/510 (E1) CT/6291/511 (E1) CT/5257/459 (Trees 16-20) CT/5794/855 (F1)	Parcel ID	D131725 A369 D131723 A363 D131723 A362 F139734 A4 F159540 A63

Summary of proposed clearance

Purpose of clearance	Native vegetation clearance associated with the upgrade of the Verdun Interchange on the South Eastern Freeway.
Native Vegetation Regulation	Regulation 12, Schedule 1; clause 32 –Works on behalf of Commissioner of Highways
Description of the vegetation under application	A1 - 1.12 ha *Eucalyptus obliqua* low open shrubby forest B1 - 0.83 ha *Eucalyptus leucoxylon* open grassy woodland C1 - 0.15 ha Sparse grassland with emergent *Pteridium esculentum, Dodonaea viscosa* and *Acacia pycnantha* D1 – 0.34 ha *Eucalyptus leucoxylon, Eucalyptus viminalis* low open woodland over mixed Acacia sp. tall shrubland E1 – 0.06 Sparse *Themeda triandra* open grassland with dense *Bromus sp, Ixia sp.* F1 - 0.86 ha *Eucalyptus obliqua* low open woodland over *Acacia pycnantha, Acacia paradoxa* *10 x Eucalyptus viminalis ssp. viminalis* *4 x Eucalyptus obliqua* *1 x Eucalyptus leucoxylon ssp. leucoxylon* *4 x Eucalyptus camaldulensis* *3 x Acacia pycnantha*
Total proposed clearance - area (ha) and number of trees	2.36 ha and 22 scattered trees are proposed to be cleared.
Level of clearance	Level 4
Overlay (Planning and Design Code)	Native Vegetation Overlay only.
Mitigation hierarchy	Refer to Section: Address the Mitigation Hierarchy.
SEB Offset proposal	Payment into the Native Vegetation Fund.

2. Purpose of clearance

2.1 Description and Background

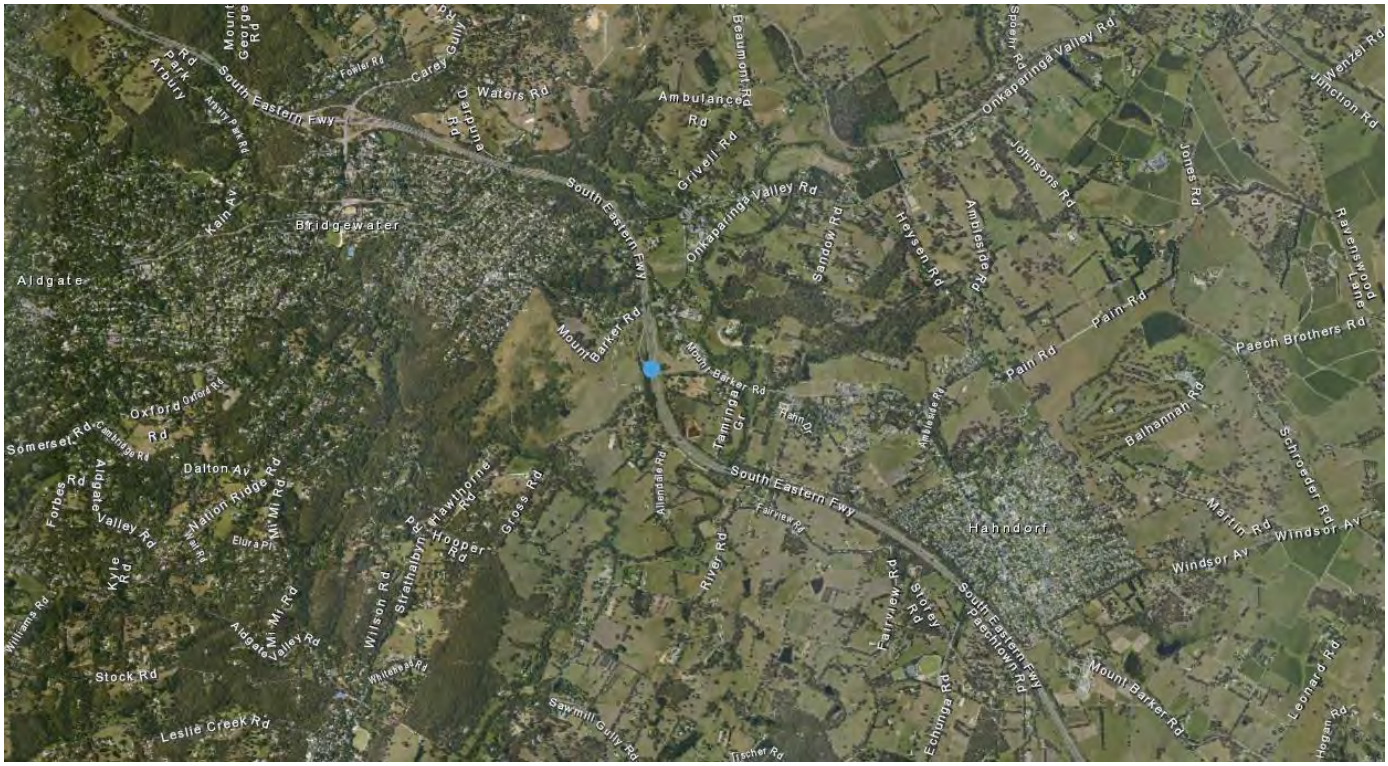
Native vegetation is proposed to be cleared to allow for the construction of the Verdun Interchange upgrade. The Verdun Interchange currently only allows access to and from metropolitan Adelaide. There were 11 crashes reported at the interchange between 2019 and 2023. Upgrading this interchange will improve connectivity, traffic efficiency and commuter safety in the area.

The existing Verdun Interchange will be upgraded to a full interchange, allowing access to and from the South Eastern Freeway in all directions. Upgrading this interchange will improve connectivity, traffic efficiency and commuter safety in the area.

Key features of the upgrade include:

- a new eastbound entry ramp towards Mount Barker;
- a new westbound exit ramp;
- a new single lane roundabout at the Mount Barker Road and Silver Road junction;
- existing Bus Stop 48A on both sides of Mount Barker Road to be consolidated with Bus Stop 49;
- minor realignment of the freeway to accommodate the new exit ramp.

2.2 General location map



Proposed Native Vegetation Clearance Impacts

TERRA GANA

0 0.05 0.1 0.2 Kilometers

N

Disclaimer: Map data provided by Terra Gana is for reference only; accuracy is not guaranteed and users should verify before relying on it.

2.3 Details of the proposal

Refer to Attachment 1: Site Plans

2.4 Approvals **required** ***or*** **obtained**

- *Landscapes SA Act 2019* –
    - Water Affecting Activity Permit may be Required,
    - Permit for movement of Declared Pest Plants Required.

2.5 Native Vegetation Regulation

It is suggested that this application is assessed under Regulation 12(32) –Works on behalf of Commissioner of Highways in Schedule 1 in Division 5 of the *Native Vegetation Regulations 2017* (Regulations).

3. Method

3.1 Flora assessment

A preliminary native vegetation assessment was undertaken in 2022 by Eco Logical Australia as part of the initial planning and scoping of this project. The findings are detailed in the document 'Eco Logical Australia 2022. Hahndorf Township Access Improvement – Verdun Interchange -Ecological Constraints Assessment. Prepared for Department for Infrastructure and Transport c/o AECOM / Arup, Adelaide.' Much of the impact area was assessed in this report.

The data from that assessment has been utilised as a foundation for this assessment. Field validation was completed by Sheree Edwards, Accredited Native Vegetation Consultant on the 15th and 21st of October 2025. The field validation reviewed and collated existing data and obtained additional data in areas not previously surveyed.

The alignment of the proposed construction works, intercepts patches of planted vegetation and individual amenity trees, scattered trees and patches of bushland. The scattered trees and patches of bushland have been assessed using the Scattered Tree and Bushland Assessment Methodologies approve by the Native Vegetation Council, by Eco Logical Australia and recently validated by Terra Gana Pty Ltd.

3.2 Fauna assessment

The fauna assessment is based on a habitat suitability assessment relying largely on database records and corroborated with the suitable habitat present on site. Field observations of threatened fauna or signs of inhabitance recorded. Data has also been utilised from the initial assessment work completed by Eco Logical Australia. Refer to Section 4.2: Threatened Species Assessment. Database records were obtained for threatened fauna species listed under the National Parks and Wildlife Act 1972 (SA) and the Environmental Protection and Biodiversity Conservation Act 1999 (Commonwealth). The following databases were queried for records since 1995 and within 5km's of the proposed clearance site - EPBC Act Protected Matters Search Tool, Biological Database of South Australia, and Atlas of Living Australia.

4. Assessment Outcomes

4.1 Vegetation Assessment

General description of the vegetation, the site and matters of significance

The assessment area is located adjacent to the South Eastern Freeway near Verdun, within the Mount Lofty Ranges region of South Australia. The landform is characterised by gently undulating terrain with minor drainage lines and

scattered rocky outcrops. Soils within the site are primarily loamy with some clay content, consistent with the geology of the Adelaide Hills.

A seasonal watercourse is adjacent to the assessment area, supporting riparian vegetation and contributing to the area's ecological function. The vegetation comprises remnant Eucalyptus woodland, with dominant species including *Eucalyptus camaldulensis* and *Eucalyptus obliqua*, and an understorey of native grasses, scattered shrubs and introduced plants. The condition of the vegetation is variable, with higher-quality remnants located on less disturbed ground near outcrops and drainage features, and more degraded patches evident along cleared or previously disturbed boundaries. Invasive flora species are present in some areas, though native groundcovers remain locally intact in places.

The vegetation is not homogeneous and reflects variation in both structure and condition across the site. Overall, the area represents a remnant patch of native vegetation within a predominantly modified landscape comprising agricultural land use and transport infrastructure.

In terms of landscape context, the site contributes to local habitat connectivity and functions as a minor ecological corridor. It is situated within several kilometers of formally protected areas, including 6 Heritage Agreements within 2kms and 3 Conservation Parks within a 5km (Mylor, Kenneth Striling and Mount George Conservation Parks.

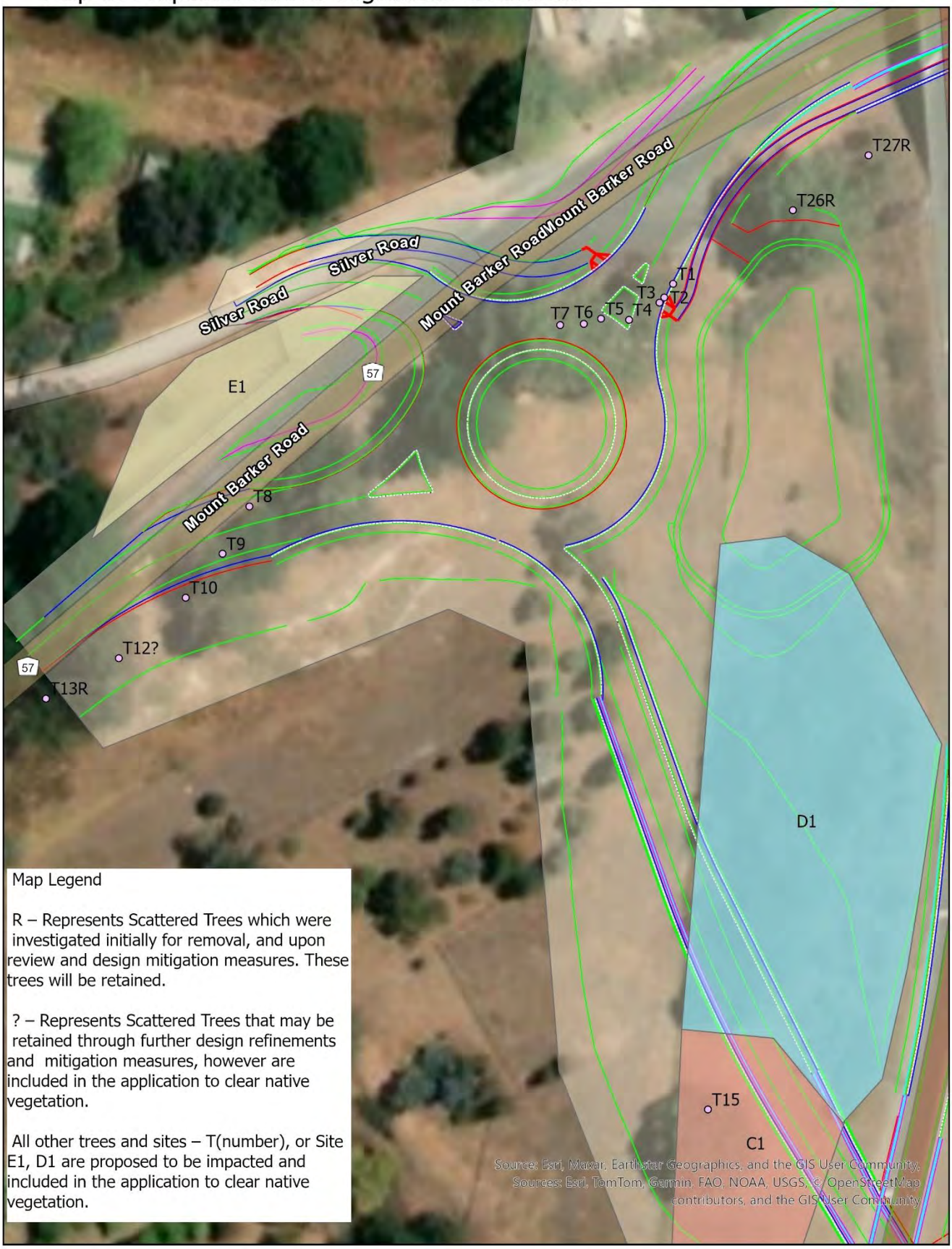
Assessment particulars

For efficiency the General descriptions of vegetation association have been copied from the Eco Logical Australia Report produced in 2022. The descriptions have been reviewed and validated to ensure that they adequately describe the vegetation association surveyed by Terra Gana Pty Ltd in August 2025.

Native Vegetation Impacts Table

Tree/ Vegetation Association	**Cause of Impact to Vegetation**
Trees 1-7	Conflict with re-aligned Mount Barker Road and new roundabout
Trees 8-12	Conflict with re-aligned Mount Barker Road
Tree 14	Conflict with proposed formalised footpath on Mount Barker Road
Tree 15	Conflict with proposed western exit ramp and associated cut & fill
Trees 16 & 17	Conflict with proposed drainage tie-in point
Trees 21-25	Conflict with proposed eastern entry ramp and associated cut & fill
Vegetation Association A1	Conflict with drainage installation on western side of SE Freeway
Vegetation Association B1, C1 & D1	Conflict with proposed western exit ramp and associated cut & fill
Vegetation Association E1	Conflict with re-aligned Silver Road and proposed roundabout
Vegetation Association F1	Conflict with proposed eastern entry ramp and associated cut & fill

Map 1: Proposed Native Vegetation Clearance



Map Legend

R – Represents Scattered Trees which were investigated initially for removal, and upon review and design mitigation measures. These trees will be retained.

? – Represents Scattered Trees that may be retained through further design refinements and mitigation measures, however are included in the application to clear native vegetation.

All other trees and sites – T(number), or Site E1, D1 are proposed to be impacted and included in the application to clear native vegetation.

TERRA GANA

0 0.01 0.02 0.04 Kilometers

N

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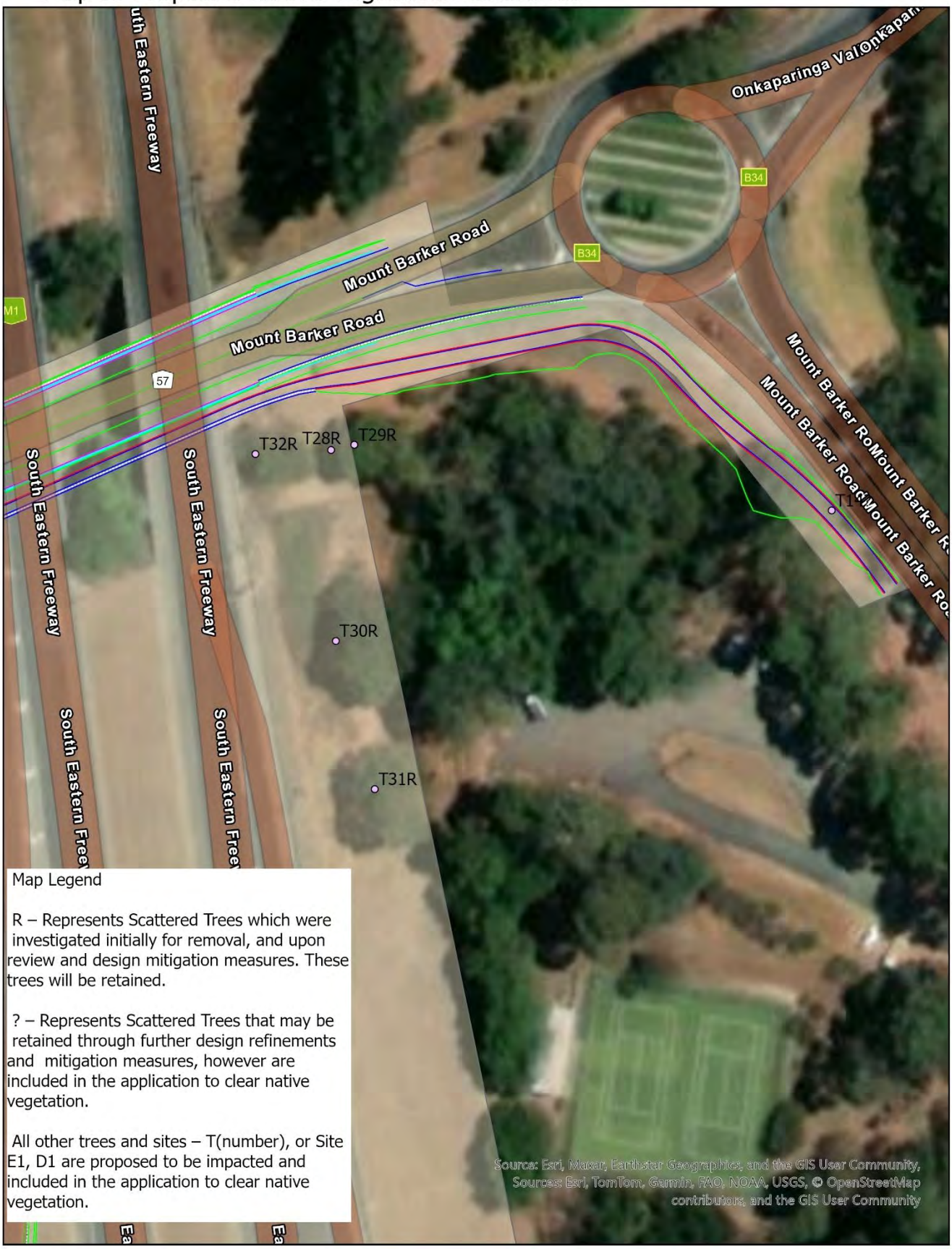
Map 2: Proposed Native Vegetation Clearance



TERRA GANA

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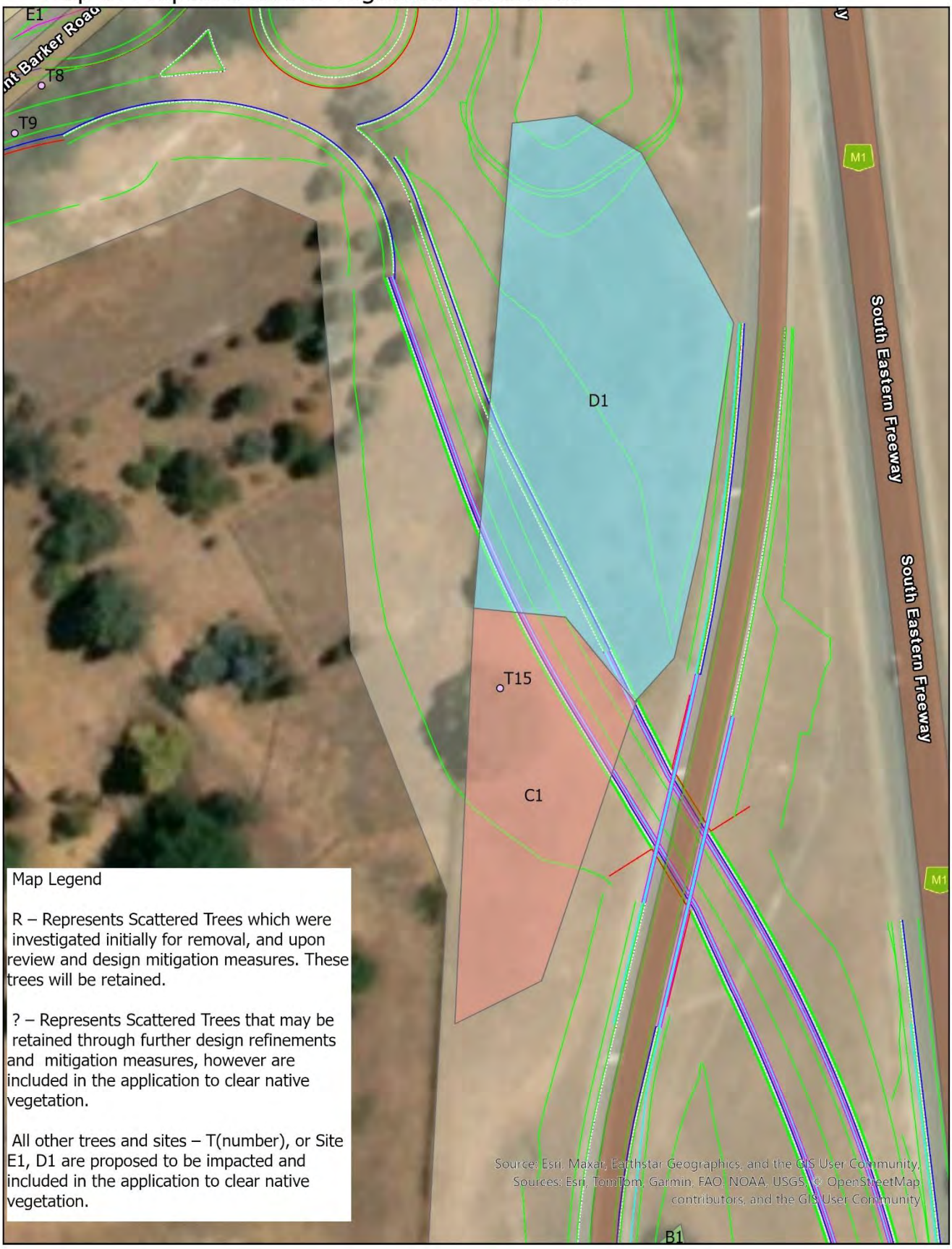
Map 3: Proposed Native Vegetation Clearance



TERRA GANA

0 0.01 0.02 0.04 Kilometers

N

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Map 4: Proposed Native Vegetation Clearance

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TERRA GANA

0 0.01 0.02 0.04 Kilometers

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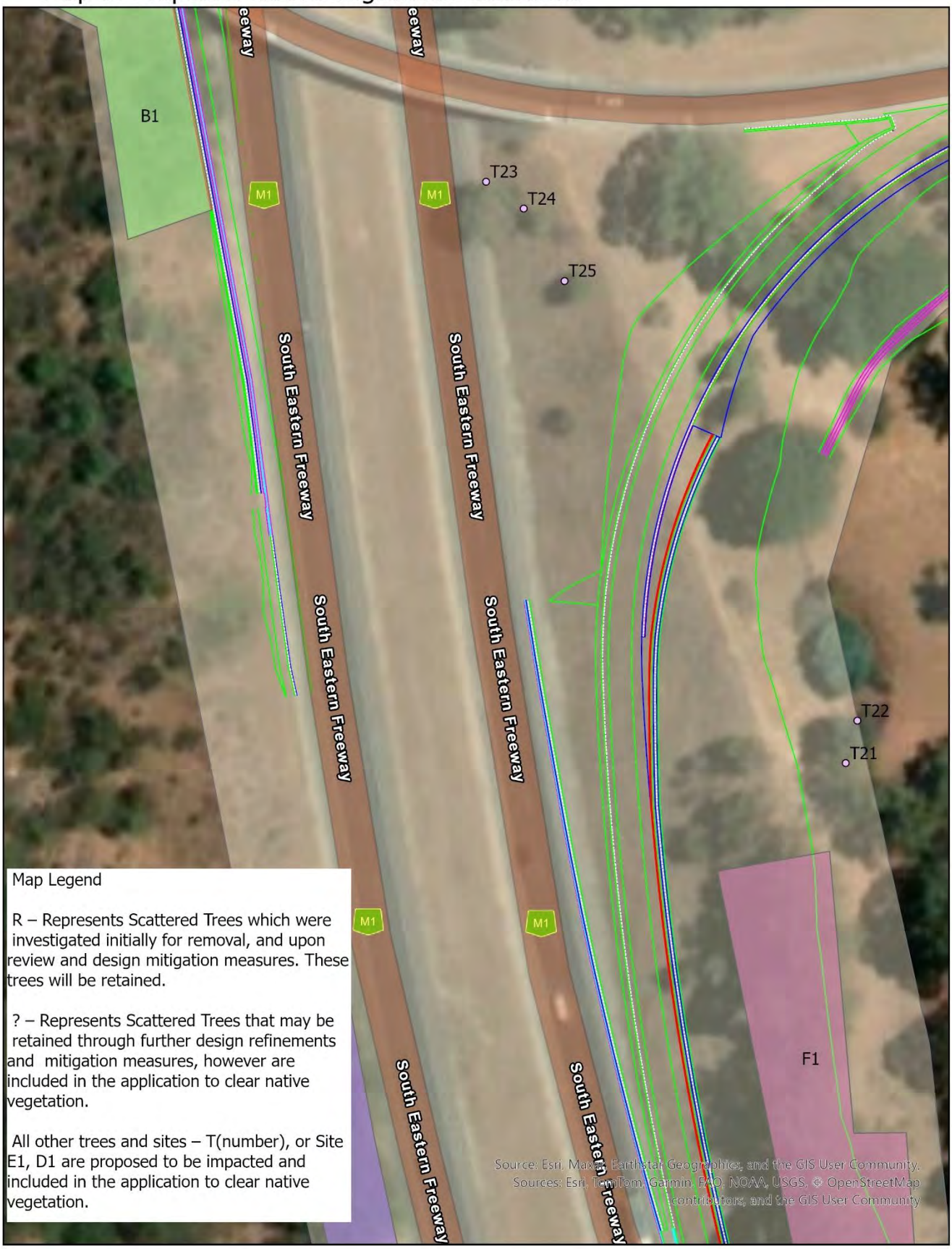
Map 5: Proposed Native Vegetation Clearance



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TERRA GANA

0 0.01 0.02 0.04 Kilometers

N

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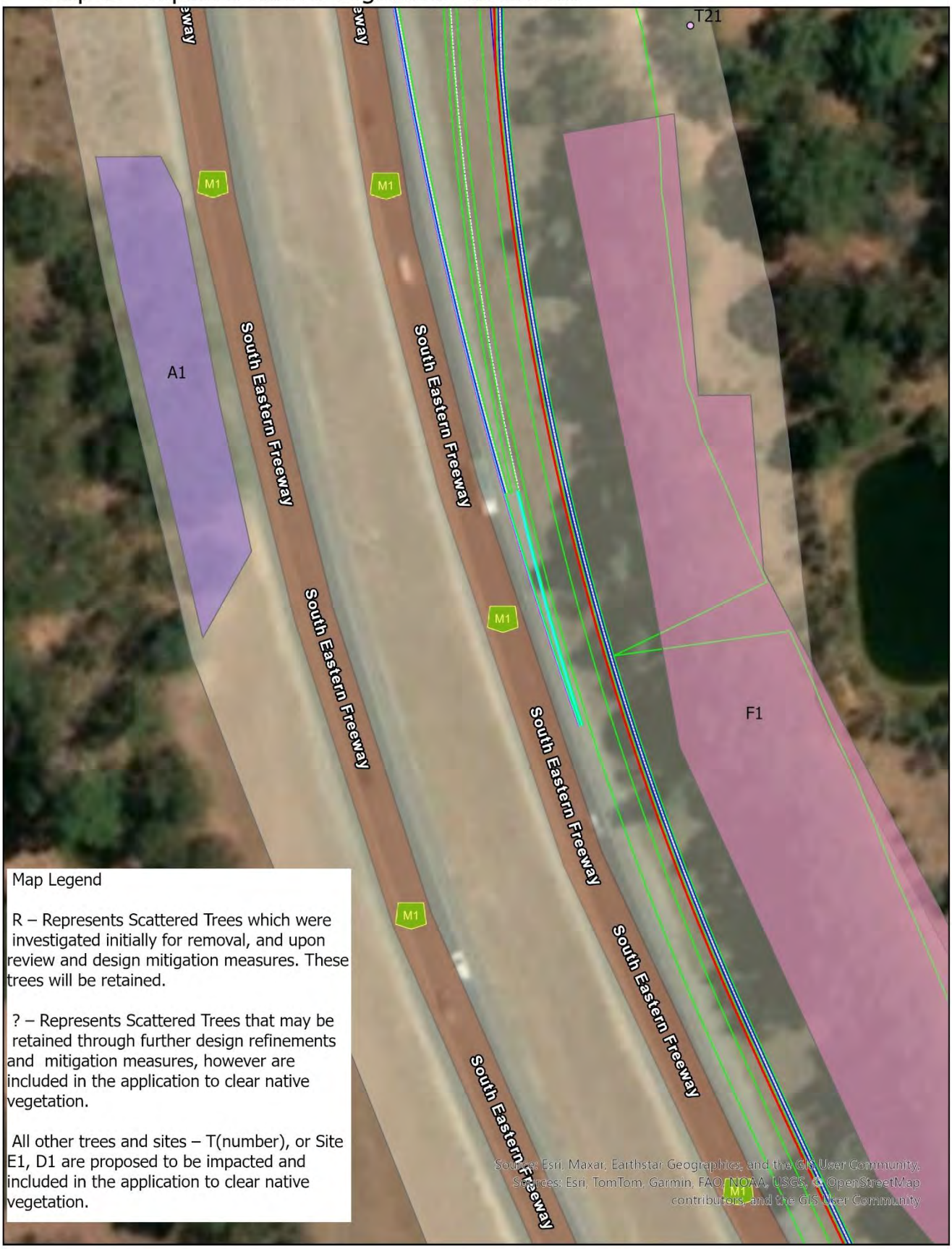
Map 6: Proposed Native Vegetation Clearance



TERRA GANA

0 0.01 0.02 0.04 Kilometers

N

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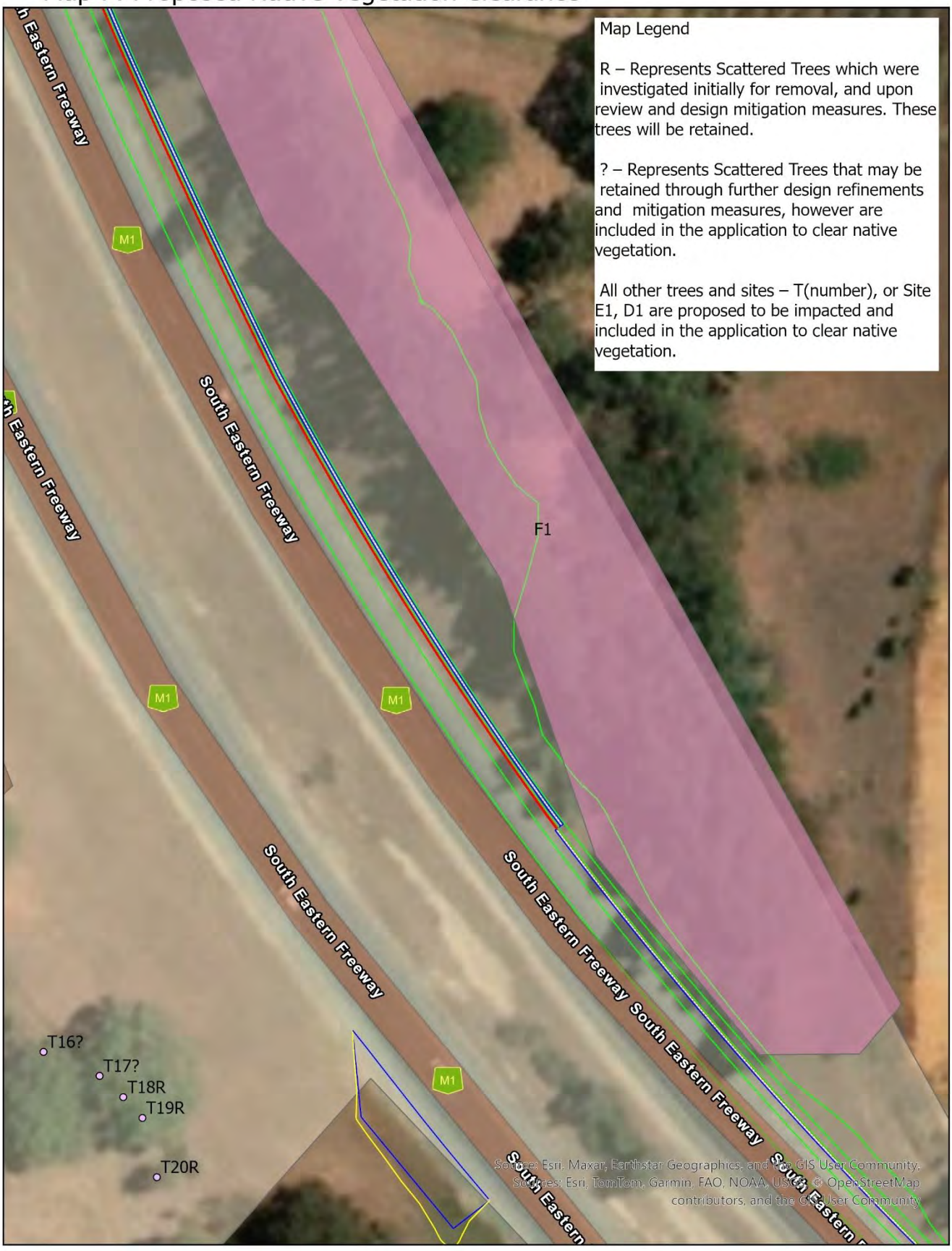
Map 7: Proposed Native Vegetation Clearance



TERRA GANA

0 0.01 0.02 0.04 Kilometers

N

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Details of the vegetation associations proposed to be impacted

<table>
<tr><td colspan="6">Vegetation Association A1: Eucalyptus obliqua low open shrubby forest</td></tr>
<tr><td colspan="6"> 
*Photo from Eco Logical Australia's Report (due to safety concerns surveying a major arterial road)</td></tr>
<tr><td>General description</td><td colspan="5">A1 was recorded in moderate condition along the South Eastern Freeway heading west. This community is bordered by highly disturbed and managed roadsides with mainly ground cover and grassy weeds except for Rubus aggregate (Blackberry). The native vegetation was young with minimal regeneration and consists of scattered over and midstory species including Eucalyptus obliqua (Messmate Stringybark), Acacia pycnantha (Golden Wattle), A. (Varnish Wattle) and A. (Myrtle Wattle) over ground storey species such as Thelymitra sp. (Sun-orchid), Microlaena stipoides var. stipoides (Weeping Rye-Grass), Microtis sp. (Onion orchid), Pultenaea daphnoides (Large-leaf Bush Pea), Opercularia turpis (Twiggy Stinkweed) and Arcotriche serrulata (Ground Cushion-berry). The community is being out competed by exotic grass and forbs so is low in native ground covers.

<u>The design and construction methodology in this section of the project is being progressed with the intent of minimising vegetation impacts.</u></td></tr>
<tr><td>Threatened species or community</td><td colspan="5">No threatened flora or fauna under the NP&W Act or EPBC Act listed species or community recorded.</td></tr>
<tr><td>Landscape context score</td><td>1.16</td><td>Vegetation Condition Score</td><td>26.46</td><td>Conservation significance score</td><td>1.10</td></tr>
<tr><td>Unit biodiversity Score</td><td>33.76</td><td>Area (ha)</td><td>0.12</td><td>Total biodiversity Score</td><td>4.05</td></tr>
</table>

Vegetation Association B1: *Eucalyptus leucoxylon* open grassy woodland

General description	B1 is a grassy open woodland which was observed as minimally disturbed with higher numbers of exotics but at very low projective foliage cover. The canopy and midstory species are dominated by *Eucalyptus leucoxylon* hybrid (South Australian Blue Gum Hybrid, *Acacia pycnantha* (Golden Wattle) and *Dodonaea viscosa* (Sticky Hop-bush) with a diverse ground cover including *Austrostipa elegantissima* (Feather Spear-grass), *Opercularia turpis* (Twiggy Stinkweed), *Pultenaea laxiflora* (Loose-flower Bush-pea) and *Dianella revoluta var*. (Black Flax-lily). Significant infestation of *Watsonia meriana var bulbillifera* (Bulbil Watsonia), and an isolated patch of *Hyparrhenia hirta* (Coolatai Grass) on the southern side of the existing overpass was recorded. The previous survey recorded *Nassella neesiana* (Chilean Needle Grass), however this was not recorded during the survey in October.				
Threatened species or community	No threatened flora or fauna under the NP&W Act or EPBC Act listed species or community recorded.				
Landscape context score	1.16	Vegetation Condition Score	29.69	Conservation significance score	1.10
Unit biodiversity Score	37.88	Area (ha)	0.83	Total biodiversity Score	31.44

Vegetation Association C1: Sparse grassland with emergent *Pteridium esculentum, Dodonaea viscosa* and *Acacia pycnantha*

General description	C1 is an open mixed grassland with emergent midstory species and is observed in low condition highly dominated by exotic species in terms of both richness and cover. The was no canopy community present and only three midstory species observed including *Pteridium ensculentum* (Bracken fern), *Dodonaea viscosa* (Sticky Hop-bush) and *Acacia pycnantha* (Golden Wattle). Ground cover natives were minimal, including *Enneapogon nigricans* (Black-head Grass), *Austrostipa Eremophila* (Rusty Spear-grass) and *Rytidosperma ceaspitosum* (Common Wallaby-grass). The areas has likely been 'mown' to manage fuel loads and amenity values, Reducing opportunities for mid and upperstorey regeneration.				
Threatened species or community	No threatened flora or fauna under the NP&W Act or EPBC Act listed species or community recorded.				
Landscape context score	1.16	Vegetation Condition Score	11.39	Conservation significance score	1.10
Unit biodiversity Score	14.53	Area (ha)	0.15	Total biodiversity Score	2.18

Vegetation Association D1: *Eucalyptus leucoxylon* ± *Eucalyptus viminalis* low open woodland over mixed *Acacia* sp. tall shrubland

General description	D1 was observed in good condition though very isolated from continuous patches of vegetation with cleared area surrounding (apart from where it adjoins C1). It has low disturbance with greater natives to exotics for richness and cover and few native species regenerating. The canopy was dominated by *Eucalyptus viminalis* (Manna Gum) and some scattered *Eucalyptus leucoxylon* hybrid (South Australian Blue Gum Hybrid. Midstory species include the very dominant *Acacia paradoxa* (Kangaroo Thorn) as well as *A. pycnantha* (Golden Wattle), *A. melanoxylon* (Blackwood) and *Allocasuarina muelleriana* (Common Oak-bush). Low cover midstorey species include *A. verticillata* (Drooping Sheoak), *A. myrtifolia* (Myrtle Wattle) and *Dodonaea viscosa* (Sticky Hop-bush), with ground covers including *Lepidosperma semiteres* (Wire Rapier-sedge) and *Opercularia turpis* (Twiggy Stinkweed).
Threatened species or community	*Eucalyptus viminalis ssp viminalis* has been recorded in D1. The flora species is rated Rare under the National Parks and Wildlife Act 1972 (SA). No other threatened flora or fauna under the NP&W Act or EPBC Act listed species or community recorded.

Landscape context score	1.16	Vegetation Condition Score	23.35	Conservation significance score	1.14
Unit biodiversity Score	30.88	Area (ha)	0.34	Total biodiversity Score	10.50

Vegetation Association E1: Sparse *Themeda triandra* open grassland with dense *Bromus* sp, *Ixia* sp.

General description	E1 is highly disturbed though contained within a fence along a residential road off Mount Barker Road (Figure 2). It's dominated by exotics with nearly a third native species to exotics but did contain a moderate cover of perennial native grasses. Isolated midstorey species are present *Leptospermum myrsinoides* (Heath Tea-tree) with only three native ground covers including *Themeda triandra* (Kangaroo Grass), *Enneapogon* sp. (Bottle-washers) and *Sonchus hydrophilus* (Native Sowthistle). The design and construction methodology in this section of the project is being progressed with the intent of minimising vegetation impacts.				
Threatened species or community	No threatened flora or fauna under the NP&W Act or EPBC Act listed species or community recorded.				
Landscape context score	1.16	Vegetation Condition Score	10.78	Conservation significance score	1.10
Unit biodiversity Score	13.76	Area (ha)	0.06	Total biodiversity Score	0.83

Vegetation Association F1: *Eucalyptus obliqua* low open woodland over *Acacia pycnantha,* Acacia paradoxa

General description	F1 was the most diverse of the vegetation associations proposed to be impacted, with an even mix of exotics and natives by richness and cover. It's in moderate condition and inhomogeneous with patches of dense weed infestations of *Watsonia meriana var bulbillifera* (Bulbil Watsonia) and *Genista monspessulana* (Montpellier Broom). Scattered patches of *Rubus fruticosus* (Blackberry). *Eucalyptus obliqua* (Messmate Stringybark) dominates the canopy with scattered *Eucalyptus. camaldulensis* (River Red Gum). Midstorey species include *Acacia pycnantha* (Golden Wattle), *Acacia paradoxa* (Kangaroo Thorn) and *Acacia verniciflua* (Varnish Wattle) and *Pultenaea daphnoides* (Large-leaf Bush-pea). Dominant ground covers include *Lepidosperma semiteres* (Wire Rapier-sedge), *Rytidosperma sp.* (Wallaby Grass) and *Hibbertia exutiacies* (Prickly Guinea Flower). There is a long line of mature planted *Eucalyptus camaldulensis* which are growing along the ridge of this area within F1. They provide significant habitat structure for the other flora species occurring in this area. They have been detailed in the amenity report. <u>The design and construction methodology in this section of the project is being progressed with the intent of minimising vegetation impacts.</u>
Threatened species or community	No threatened flora or fauna under the NP&W Act or EPBC Act listed species or community recorded.

Landscape context score	1.16	Vegetation Condition Score	26.17	Conservation significance score	1.10
Unit biodiversity Score	33.39	Area (ha)	0.86	Total biodiversity Score	28.72

Details of the scattered trees proposed to be impacted

"*" Removal approval sought, aim to retain through design minimisation and construction methodology refinement

Tree #	Tree spp.	No. of trees	Height (m)	Hollows	Diameter (cm)	Canopy dieback (%)	Biodiversity Score
1	*Eucalyptus viminalis ssp viminalis*	1	6.8	-	28	0	0.33
2	*Eucalyptus viminalis ssp viminalis*	1	15.0	-	70	0	3.77
3	*Eucalyptus viminalis ssp viminalis*	1	15.0	-	70	0	3.77
4	*Eucalyptus viminalis ssp viminalis*	1	15.0	-	70	0	3.77
5	*Eucalyptus viminalis ssp viminalis*	1	15.0	-	70	0	3.77
6	*Eucalyptus viminalis ssp viminalis*	1	15.0	-	70	0	3.77
7	*Eucalyptus viminalis ssp viminalis*	1	15.0	-	70	0	3.77
8	*Eucalyptus obliqua*	1	7.0	-	38	5	0.96
9	*Eucalyptus obliqua*	1	7.0	-	65	5	1.32
10	*Eucalyptus leucoxylon ssp leucoxylon*	1	6.0	-	45	0	1.01
12*	*Eucalyptus obliqua*	1	8.0	-	86	20	1.30
14*	*Eucalyptus camaldulensis var camaldulensis*	2	9.6	-	28	0	1.00
15	*Eucalyptus viminalis ssp viminalis*	1	10.0	-	123	0	3.71
16*	*Eucalyptus viminalis ssp viminalis*	1	11.9	-	37	0	1.14
17*	*Eucalyptus viminalis ssp viminalis*	1	23.4	-	118	5	7.80
21	*Eucalyptus obliqua*	1	10.5	-	55	0	1.30
22	*Eucalyptus camaldulensis var camaldulensis*	1	9.0	-	50	0	1.20
23	*Eucalyptus camaldulensis var camaldulensis*	1	10.0	-	38	0	0.48
24	*Acacia pycnantha*	2	3.0	-	5	20	0.26
25	*Acacia pycnantha*	1	3.0	-	17	0	0.30

Scattered Trees – Reference Photographs


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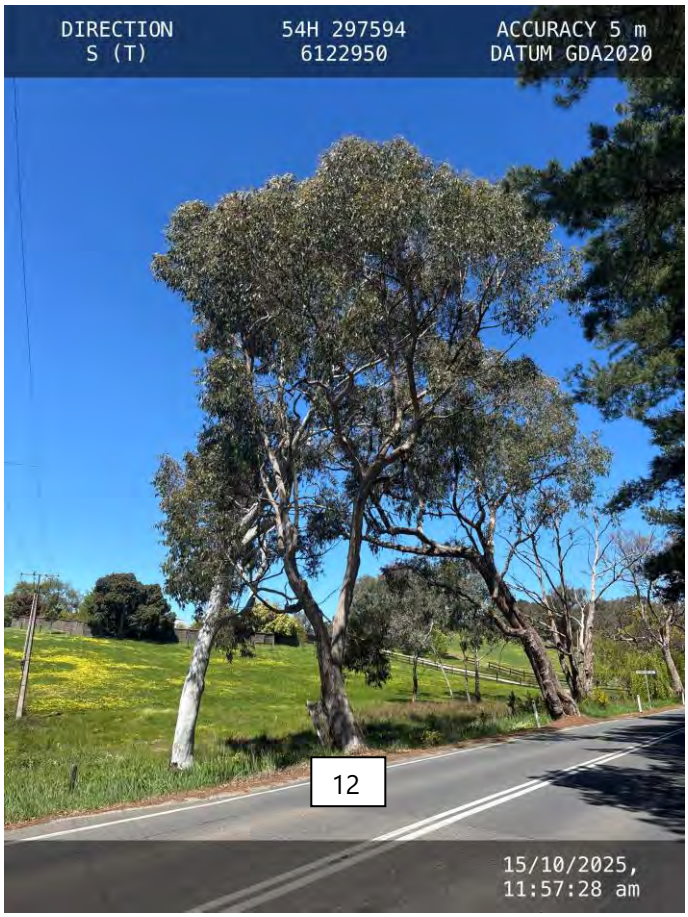
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DATUM GDA2020
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24
23
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Representative photos of areas void of native vegetation, and where amenity and planted native vegetation has been recorded. *DIT Amenity Report details all planted native and ornamental vegetation.


DIRECTION
S (T)
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ACCURACY 4 m
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DIRECTION
W (T)
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DIRECTION
S (T)
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DIRECTION
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4.2 Threatened Species assessment

Species observed on site, or recorded within 5 km of the application area since 1995, or the vegetation is considered to provide suitable habitat

***Highlights threatened fauna species which were included in the scattered tree assessment.**

Species (Common name)	EPBC Act	NP&W Act	Data source	Date of last record	Species known habitat preferences and likelihood of use for habitat – Comments
Corcorax melanorhamphos (White-winged Chough)	-	R	1,3	10-Apr-2024	Possible – White-winged Chough prefer woodland and forest habitats with trees available for perching and open areas for foraging. They tend to prefer areas with abundant leaf litter, for feeding and nest building.
**Falco peregrinus macropus* (Peregrine Falcon)	-	R	1,3	26-Sep-2022	Likely - Peregrine Falcon is found in most habitats. It requires abundant prey and secure nest sites and prefers coastal and inland cliffs or open woodlands near water and may even be found nesting on high city buildings. Tall Eucalyptus camaldulensis in the Mount Lofty Ranges provide significant perching habitat for this species.
**Falcunculus frontatus frontatus* (Eastern Shriketit)	-	R	1,3	08-Apr-2006	Possible – however marginal habitat for this species. Found in eucalypt forests and woodlands, forested gullies and along rivers in drier areas. It is sometimes seen in parks and gardens, on farms with scattered trees.
Hylacola pyrrhopygia parkeri (Chestnut-rumped Heathwren)	EN	E	1,3,5	11-Jul-2001	Unlikely – no suitable habitat for this species. Heathy eucalypt woodland, forest, mallee woodland and mallee forest structural formations, often with a low open upper stratum. Usually with a multi-layered understorey of low–tall mainly heath shrubs, with low–mid sedges. Generally, at least one dense layer of vegetation below 3m.
**Microeca fascinans fascinans* (Jacky Winter)	-	R	1,3	02-Jul-2018	Likely - Hooded Robins are found in lightly timbered woodland, mainly dominated by acacia and/or eucalypts.
Neophema elegans elegans (Elegant Parrot)	-	R	1,3	18-Apr-2019	Possible – however marginal habitat for this species. Inhabiting open habitats, the Elegant Parrot can be found in a wide variety of habitats, including grasslands, shrublands, mallee, woodlands and thickets, bluebush plains, heathlands, saltmarsh and farmland.
**Petroica boodang boodang* (Scarlet Robin)	-	R	1,3	22-Dec-2024	Likely – The impact areas provide woodland and forest habitats with trees available for perching and areas for foraging.

**Zanda funerea whiteae* (Yellow-tailed Black Cockatoo)	-	V	1,3	22-Dec-2024	Likely – They prefer habitat which ranges from coastal heath, woodland and forest but they are increasingly to be found in pine plantations and patches of pine trees in urban and rural areas. The tall, scattered trees near mature Pine Trees will provide refuge and foraging resources. The site will not support nesting or breeding due to a lack of hollow bearing trees.
Stagonopleura guttat (Diamond Firetail)	VU	V	5	-	Possible – however no recent records of this species in the Biological Database of SA within 5kms to suggest this species would frequent the impacts sites. Diamond Firetails are found in open grassy woodland, heath and farmland or grassland with scattered trees.
Zoothera lunulata halmaturina (South Australian Bassian Thrush	EN	R	1,3,5	27-Jun-2023	Unlikely – no suitable habitat for this species. The subspecies mostly inhabits damp eucalypt forest or woodland. Densely forested areas and gullies are favoured, usually with a thick canopy overhead, a thick understorey of small trees and tall shrubs, and leaf-litter below
Antechinus flavipes (Yellow-footed Antechinus)		V	1,3	08-Jul-2022	Unlikely – no suitable habitat for this species. Most commonly found in woodland and forest communities. The strongest influence on their presence is the cover of litter, the density of hollow-bearing trees and rock cover. All features, the impact area is deficient in.
Isoodon obesulus obesulus (Southern Brown Bandicoot	EN	V	1,3,5	27-Apr-2021	Unlikely – no suitable habitat for this species. Lacking food resources and the vegetation structure required to support this species, including dense shrubs and understorey for protection from predators.
**Pteropus poliocephalus* (Grey-headed Flying-fox)	VU	R	1,3,5	24-Mar-2020	Likely – Grey Headed Flying-Fox are a canopy-feeding frugivore and nectarivore, which utilises vegetation communities including rainforests, open forests, closed and open woodlands, Melaleuca swamps and Banksia woodlands. The site provides habitat for this species. Despite no known camps in the surrounding area, they move and migrate in small numbers utilizing urban gardens and fruit crops as food sources. There are records of this species nearby in similar vegetation, of particular interest taller trees present and adjoining F1.
**Trichosurus vulpecula* (Common Brushtail Possum)	-	R	1,3	30-Apr-2025	Likely - Common Brushtail Possums are found in Eucalyptus and Sheoak woodlands. As arboreal animals, they make their nests (also known as dens) in tree hollows or other dark confined spaces such as hollow logs, dense vegetation or rock crevices.

Varanus rosenbergi (Heath Goanna)	-	V	1,3	01-Jan-2014	Unlikely – The impact area does not support the habitat required for this species. Found in heath, open forest, and woodland. Associated with termites, the mounds of which this species nests in; termite mounds are a critical habitat component.
Source; 1- BDBSA, 2 - AoLA, 3 – NatureMaps 4 – Observed/recorded in the field, 5 - Protected matters search tool, 6 – others NP&W Act; E= Endangered, V = Vulnerable, R= Rare EPBC Act; Ex = Extinct, CR = Critically endangered, EN = Endangered; VU = Vulnerable					

Criteria for the likelihood of occurrence of species within the Study area.

Likelihood	**Criteria**
Highly Likely/Known	Recorded in the last 10 years, the species does not have highly specific niche requirements, the habitat is present and falls within the known range of the species distribution or; The species was recorded as part of field surveys.
Likely	Recorded within the previous 20 years, the area falls within the known distribution of the species and the area provides habitat or feeding resources for the species.
Possible	Recorded within the previous 20 years, the area falls inside the known distribution of the species, but the area provide limited habitat or feeding resources for the species. Recorded within 20 -40 years, survey effort is considered adequate, habitat and feeding resources present, and species of similar habitat needs have been recorded in the area.
Unlikely	Recorded within the previous 20 years, but the area provide no habitat or feeding resources for the species, including perching, roosting or nesting opportunities, corridor for movement or shelter. Recorded within 20 -40 years; however, suitable habitat does not occur, and species of similar habitat requirements have not been recorded in the area. No records despite adequate survey effort.

4.3 Cumulative impact

When exercising a power or making a decision under Division 5 of the Regulations, the NVC must consider the potential cumulative impact, both direct and indirect, that is reasonably likely to result from a proposed clearance activity.

All likely impacts to native vegetation have been considered and addressed as part of this application. Including the clearance directly required for the development, e.g. road construction footprint, batters and drainage areas. In addition, areas required for site lay down, vehicle storage, temporary and permanent soil disposal areas.

The development is expected to be undertaken over the next 2 years, operating under a Construction Environmental Management Plan for the site as approved by the Department for Infrastructure and Transport. One of the components this plan will consider will be an appropriate Phytophthora Management Strategy for all aspects of the project.

The field assessment collated a list of *Phytophthora cinnamomi* host plants present onsite and field observations of potential *Phytophthora cinnamomi* dieback. This information will inform the measures required to manage the spread of *Phytophthora cinnamomi* within the site, and the surrounding areas.

4.4 Address the Mitigation Hierarchy

When exercising a power or making a decision under Division 5 of the Regulations, the NVC must have regard to the mitigation hierarchy. The NVC will also consider, with the aim to minimise, impacts on biological diversity, soil, water and other natural resources, threatened species or ecological communities under the EPBC Act or listed species under the NP&W Act.

a) Avoidance – outline measures taken to avoid clearance of native vegetation

Native vegetation impacts could not be avoided in this proposal, due to the fixed location of the South Eastern freeway, the existing Verdun Interchange and adjoining road infrastructure linking the proposed interchange works.

The road design has used existing pavement areas as much as possible to limit the extent of construction area required. This has resulted in avoidance of vegetation adjacent to the South Eastern Freeway. Other avoidance measures include retaining the existing Verdun Interchange (to and from Adelaide), minimising design parameters, and steepening batters as far as practical to achieve DIT safety requirements, access roads during construction to be within the permanent disturbance area and utilising existing drainage structures wherever possible.

b) Minimisation – if clearance cannot be avoided, outline measures taken to minimise the extent, duration and intensity of impacts of the clearance on biodiversity to the fullest possible extent (whether the impact is direct, indirect or cumulative).

Large parts of the project area are devoid of native vegetation protected under the Native Vegetation Act, with some vegetation identified as amenity and planted (either native or ornamental). Native vegetation impacts are unavoidable due to the road design and geometry being relatively rigid/inflexible, constraints from safety and engineering. Continuing engagement throughout the design and construction phase will allow mitigation measures to minimise and avoid impacts to areas of native vegetation and scattered trees. Specific measures to minimise to date are documented below:

- *1 in 2 batter slopes have been adopted across project area to minimise vegetation clearance footprint and associated vegetation impacts.*
- *Lighting conduits to be run within 2m of road design to minimise excavations and footprint.*
- *Existing stobie poles to be utilised, preventing need for further excavations and disturbance.*
- *Note to be added to all design drawing sets recommending arborist advice be sought for roots >50mm in diameter encountered during excavations.*
- *Vegetation interface meetings have been held with the road, drainage, and lighting packages to identify vegetation impacts and opportunities for vegetation retention. These meetings will continue with all design packages through until final design.*
- *Aim to retain trees marked as "?", with agreement from construction team to retain these trees through both re-design and refinement of construction methodology.*

- *Trees marked with a 'R' on the maps will be retained.*

The design and construction methodology of the project is being progressed with the intent of minimising vegetation impacts. There is a likelihood that further areas of native vegetation and scattered trees included in this report will be retained through this process. Some scattered trees and vegetation associations have been noted in this report as being possibilities for retention (i.e. trees marked with '?')

Where clearance cannot be avoided, all reasonable measures will be taken to minimise further impacts to native vegetation during construction activities. Such measures include: delineating native vegetation with exclusion zone fencing, use of non-destructive excavation techniques where practical, education and training of site staff regarding native vegetation protection, strict use of designated access points/routes etc, engagement of suitably qualified consultants/personnel (ecologist, arborists), ongoing weed management to avoid the introduction and spread of weed species, erosion control, effective dust mitigation by ongoing dust suppression and revegetation of disturbed areas.

The project team reviewed the initial native vegetation assessment which resulted in further minimizing impacts to native vegetation, with 1 x Eucalyptus obliqua and 3 x Eucalyptus viminalis ssp viminalis being retained.

c) Rehabilitation or restoration – outline measures taken to rehabilitate ecosystems that have been degraded, and to restore ecosystems that have been degraded, or destroyed by the impact of clearance that cannot be avoided or further minimised, such as allowing for the re-establishment of the vegetation.

Construction of the Verdun Interchange will provide an opportunity to revegetate roadside swales & batters. General rehabilitation of these areas will consist of a topsoil treatment with a mix of native hydroseed mix and replanting of native species suitable to the area.

d) Offset – any adverse impact on native vegetation that cannot be avoided or further minimised should be offset by the achievement of a significant environmental benefit that outweighs that impact.

Payment into the Native Vegetation Fund.

4.5 Principles of Clearance (Schedule 1, *Native Vegetation Act 1991*)

The NVC will consider Principles 1(b), 1(c) and 1(d) when assigning a level of Risk under Regulation 16 of the Native Vegetation Regulations. The NVC will consider all the Principles of clearance of the Act as relevant, when considering an application referred under the *Planning, Development and Infrastructure Act 2016*.

Principle of clearance	Considerations
Principle 1a - it comprises a high level of diversity of plant species	<u>Relevant information</u> Patch A1: Bushland Plant Diversity Score – 9 Patch B1: Bushland Plant Diversity Score – 14 Patch C1: Bushland Plant Diversity Score – 6 Patch D1: Bushland Plant Diversity Score – 9 Patch E1: Bushland Plant Diversity Score – 6 Patch F1: Bushland Plant Diversity Score – 14 <u>Assessment against the principle: At Variance – B1 & F1</u>

Principle of clearance	Considerations
Principle 1b - significance as a habitat for wildlife	Relevant information Patch A1 - Threatened Fauna Score: 0.1 | Unit Biodiversity Score: 33.76 Patch B1 - Threatened Fauna Score: 0.1 | Unit Biodiversity Score: 37.88 Patch C1 - Threatened Fauna score: 0.1 | Unit Biodiversity Score: 14.53 Patch D1 - Threatened Fauna score: 0.1 | Unit Biodiversity Score: 30.88 Patch E1 - Threatened Fauna score: 0.1 | Unit Biodiversity Score: 13.76 Patch F1 - Threatened Fauna score: 0.1 | Unit Biodiversity Score: 33.39 Trees 1, 23, 24 & 25: Fauna Habitat Score = 0 Trees 2-7 = 1.80 Trees 8-10, Tree 15 = 1.40 Trees 14, 16 & 21= 1.0 Biodiversity Scores – Refer Scattered Tree Table for Individual Scores (per tree) Assessment against the principle: Seriously at Variance - Trees 1-12, Tree 15 & Tree 17. At Variance – Trees 14, 16 & 21 Moderating factors that may be considered by the NVC: Habitat Significance and Landscape Context The vegetation proposed for clearance provides moderate habitat value at a local scale but is not considered critical for the ongoing persistence of fauna species within the broader landscape. Although the calculated biodiversity score of 144 places the clearance as seriously at variance with Principle 1(b), several moderating factors reduce the overall significance of the impact. The patches are highly fragmented and edge-affected, situated within a linear road corridor already subject to long-term disturbance, weed invasion, and vehicle-related pressures. Connectivity to large, intact remnants is limited, and the area does not represent a known refuge or breeding site for threatened fauna species. Habitat structure is simplified, with reduced understorey diversity and limited hollows, offering only transient foraging or movement habitat for common bird and mammal species rather than essential habitat for species of conservation concern. In the context of the surrounding landscape, substantial areas of similar or higher-quality habitat are retained nearby and adjacent conservation and rural landholdings, which collectively maintain regional habitat function and connectivity. Accordingly, the clearance does not result in a significant net loss of habitat availability for threatened fauna species at the landscape scale. Given these considerations, the habitat value—while locally relevant—is not of high conservation significance, and impacts can be moderated from 'seriously at variance' to 'at variance' under Principle 1(b), supported by proposed offset and revegetation measures that will contribute to the re-establishment of native vegetation and fauna movement opportunities over time.

Principle 1c - plants of a rare, vulnerable or endangered species	Relevant information *Eucalyptus viminalis ssp. viminalis* (Manna Gum) trees are proposed to be cleared as scattered trees within this proposal. 13 scattered trees, and it is contained within vegetation association D1. It is listed as Rare under the National Parks and Wildlife Act 1972 (SA). Other rare, vulnerable or endangered flora species were not recorded during field assessments. The Protected Matters Search Tool (EPBC Act 1999) Report identified 11 flora species that are likely to occur and/ or known to occur within 5km of the impact area. *Caladenia behrii* (Pink-lipped Spider-orchid) *Caladenia rigida* (Stiff White Spider-orchid) *Caladenia gladiolata* (Bayonet Spider-orchid) *Euphrasia collina ssp osbornii* (Osborn's Eyebright) *Glycine latrobeana* (Clover Glycine) *Olearia pannosa ssp pannosa* (Silver Daisy-bush) *Prasophyllum pallidum* (Pale Leek-orchid) *Prasophyllum pruinosum* (Plum Leek-orchid) *Pterostylis cucullata* (Leafy Greenhood) *Thelymitra matthewsii* (Spiral Sun-orchid) *Veronica derwentiana ssp homalodonta* (Mount Lofty Speedwell) None of these flora species were observed during the field assessments in October 2025 by Terra Gana Pty Ltd, or by Eco Logical Australia in previous assessments completed in 2022. Both surveys were conducted during Spring, increasing the likelihood of detection of these species. In addition, there is low habitat suitability for the species listed above. The Biological Database of SA (BDBSA) search (2kms, records since 1995) listed the following rare and endangered flora species protected under the National Parks and Wildlife Act 1972 (SA). *Acacia gunnii* (Ploughshare Wattle) *Acacia stricta* (Hop Wattle) *Pultenaea graveolens* (Scented Bush-pea) *Logania saxatilis* (Rock Logania) *Eucalyptus dalrympleana ssp. dalrympleana* (Candlebark Gum) *Eucalyptus fasciculosa* (Pink Gum) *Eucalyptus viminalis ssp. viminalis* (Manna Gum) *Thelymitra ixioides* (Spotted Sun-orchid) *Poa umbricola* (Shade Tussock-grass) *Grevillea aquifolium* (Prickly Grevillea) *Leionema hillebrandii* (Mount Lofty Phebalium) None of these flora species were observed during the field assessments in October 2025 by Terra Gana Pty Ltd, or by Eco Logical Australia in previous assessments completed in 2022. Threatened Flora Scores Trees 1-6 & Trees 15-17: 0.30 Trees 7-17 & Trees 21-25: 0 Vegetation Associations A1, B1, C1, E1, & F1 = 0 Vegetation Association D1 = 0.04 Assessment against the principle: At Variance – Trees 1-6 & Trees 15-17

Principle of clearance	Considerations
***Principle 1d - the vegetation comprises the whole or part of a plant community that is Rare, Vulnerable or endangered*:**	Relevant information No vegetation that comprises the whole or part of a plant community that is Rare, Vulnerable or endangered was recorded. According to the Protected Matter Search Tool Report, two Threatened Ecological Communities (TEC) may occur within a 10km radius of the proposed impact site. These are: • Peppermint Box (*Eucalyptus odorata*) Grassy Woodland of South Australia. • Grey Box (*Eucalyptus microcarpa*) Grassy Woodlands and Derived Native Grasslands of South-Eastern Australia Neither community was recorded during the vegetation survey, nor any ecological indicators to suggest that the communities may exist in highly degraded remnants (i.e. individual *Eucalyptus odorata* or *Eucalyptus microcarpa* trees, or other key species aligning with the listing for either TEC protected under the Environment Protection and Biodiversity Conservation Act 1999). These communities are considered unlikely to occur. Threatened Community Score – 1 Assessment against the principle - Not at Variance

Principle 1e - it is significant as a remnant of vegetation in an area which has been extensively cleared.	Relevant information Remnancy figures IBRA Association (Hahndorf) – 8% IBRA Subregion (Mount Lofty Ranges) – 15% The vegetation occurring along the road verge and within fragmented patches surrounding the Verdun Interchange comprises a mixture of remnant native species, naturalised exotic vegetation, and planted amenity trees. Overall, vegetation conditions is variable, reflecting historical disturbance, edge effects, and ongoing exposure to road infrastructure pressures. Remnant native vegetation persists mainly in small, linear fragments along the outer verge and embankment areas, dominated by *Eucalyptus leucoxylon, Eucalyptus camaldulensis*, and scattered *Eucalyptus viminalis* with an understorey of native grasses and occasional shrub species. The fragmented nature of vegetation around the interchange results in limited habitat connectivity and reduced ecological resilience. Small, isolated patches support limited fauna movement and are prone to edge effects such as weed invasion and drying of soil profiles. The reduced patch size also amplifies impacts of microclimatic extremes, further diminishing long-term ecosystem and vegetation function. There is a lack of recruitment of understorey or juvenile trees due to mowing and weed competition. Combined with hydrological modification through roadside drainage and compaction reducing infiltration, the longevity and long-term diversity of scattered trees and remnant vegetation patches is limited. Total Biodiversity Score – 122.45 Assessment against the principle: Seriously at Variance Moderating factors that may be considered by the NVC: The Hahndorf IBRA Association retains approximately 8% of its pre-European native vegetation, indicating a highly cleared and fragmented landscape. On this basis, the proposed clearance would ordinarily be considered seriously at variance with this principle. However, a moderating factor could be considered applicable. The vegetation proposed for removal is located within a heavily modified road and interchange environment adjacent to the South Eastern Freeway at Verdun. The remnant is highly degraded and fragmented, with limited native understorey, a predominance of exotic groundcover species, and a simplified structure that provides low habitat value and minimal contribution to landscape connectivity. The patches are isolated from larger areas of intact native vegetation and is already subject to edge effects, weed invasion, and disturbance associated with the existing transport corridor. As such, its clearance is unlikely to materially diminish the ecological integrity or representation of native vegetation within the Hahndorf Association.

Principle of clearance	Considerations
Principle 1f - it is growing in, or in association with, a wetland environment.	Relevant information The native vegetation under application is NOT associated with a wetland. Assessment against the principle - Not at Variance
Principle 1g - it contributes significantly to the amenity of the area in which it is growing or is situated.	Relevant information The vegetation occurring at the Verdun section of the South Eastern Freeway contributes to the visual and landscape amenity of the surrounding area, forming part of the vegetated buffer between the freeway corridor and the adjoining rural and township interface. Patches of native woodland and scattered mature Eucalyptus trees provide a natural visual backdrop that softens the appearance of transport infrastructure and maintains the semi-rural character of the interchange and adjacent land. The clearance of native vegetation and large scattered trees for proposed works will result in a localised reduction in amenity value, primarily through the loss of mature canopy cover and a decrease in visual screening and landscape cohesion. The removal of established trees will temporarily expose constructed surfaces, reducing the visual continuity of the roadside corridor and diminishing the perceived naturalness of the setting. While the affected vegetation is not of exceptional landscape significance at a regional scale, it plays an important local role in maintaining visual quality for road users and residents within the Verdun township and freeway approaches. The impact on amenity is therefore assessed as moderate, with the loss being partially reversible over time through appropriate revegetation and landscape reinstatement. Mitigation through targeted replanting, canopy replacement, and use of local native species consistent with the surrounding vegetation associations will assist in restoring long-term amenity value. With effective establishment and maintenance, reinstated plantings are expected to provide comparable visual and screening functions within the medium term (10–15 years).

Principles of Clearance (h-m) will be considered by comments provided by the local NRM Board or relevant Minister. The Data Report should contain information on these principles where relevant and where sufficient information or expertise is available.

4.6 Risk Assessment

Level of risk associated with the application

Total clearance	No. of trees	22
	Area (ha)	2.36
	Total biodiversity Score	122.45
Seriously at variance with principle 1(b), 1(c) or 1 (d)		1(b)
Risk assessment outcome		Level 4

4.7 NVC Guidelines

Regulation 12(32) – Works on behalf of Commissioner of Highways

To allow clearance of vegetation incidental to new work being undertaken by or on behalf of the Commissioner of Highways including roads and ports infrastructure.

Proponent must comply with the following additional requirements:

1. Clearance of vegetation incidental to new work being undertaken by or on behalf of the Commissioner of Highways; and/or
2. Clearance is undertaken in accordance with an NVC approved Standard Operating Procedure.

5. Clearance summary

Clearance Area Summary table

**The design and construction methodology in this section of the project is being progressed with the intent of minimising vegetation impacts.*"

Block	Site	Species diversity score	Threatened Ecological community Score	Threatened plant score	Threatened fauna score	UBS	Area (ha)	Total Biodiversity score	Loss factor	Loadings	Reductions	SEB Points required	SEB payment	Admin Fee
A	1	9	1	0	0.1	33.76	0.12	4.05	1			4.46	$6,325.58	$347.91
B	1	16	1	0	0.1	41.15	0.83	34.15	1			37.57	$48,825.54	$2,685.40
C	1	6	1	0	0.1	14.53	0.15	2.18	1			2.40	$3,360.46	$184.83
D	1	9	1	.04	0.1	30.88	0.34	10.13	1			11.55	$16,308.12	$896.95
E	1	6	1	0	0.1	13.75	0.06	0.83	1			0.91	$1,284.88	$70.67
F	1	14	1	0	0.1	33.39	0.86	28.72	1			31.59	$44,603.78	$2,453.21
						Total	**2.36**	**77.72**				**85.49**	**$120,708.40**	**$6,638.97**

Scattered Trees Summary table

"" Removal approval sought, with the aim to retain through design minimisation and construction methodology refinement*"

Tree ID	Number of trees	Fauna Habitat score	Threatened flora score	Biodiversity score	Loss factor	SEB Points required	SEB Payment	Admin fee
1	1	0.00	0.30	0.33	1	0.36	$508.31	$27.96
2	1	1.80	0.30	3.77	1	4.15	$5,859.63	$322.28
3	1	1.80	0.30	3.77	1	4.15	$5,859.63	$322.28
4	1	1.80	0.30	3.77	1	4.15	$5,859.63	$322.28
5	1	1.80	0.30	3.77	1	4.15	$5,859.63	$322.28
6	1	1.80	0.30	3.77	1	4.15	$5,859.63	$322.28
7	1	1.80	0.30	3.77	1	4.15	$5,859.63	$322.28
8	1	1.40	0.00	0.96	1	1.06	$1,496.68	$82.32

9	1	1.40	0.00	1.32	1	1.45	$2,047.34	$112.60
10	1	1.40	0.00	1.01	1	1.11	$1,567.27	$86.20
12*	1	1.40	0.00	1.30	1	1.43	$2,019.10	$111.05
14*	2	1.00	0.00	1.00	1	1.10	$1,553.15	$85.42
15	1	1.40	0.30	3.71	1	4.08	$5,760.79	$316.84
16*	1	1.00	0.30	1.14	1	1.25	$1,764.95	$97.07
17*	1	1.80	0.30	7.80	1	8.58	$12,114.61	$666.30
21	1	1.00	0.00	1.30	1	1.43	$2,019.10	$111.05
22	1	1.40	0.00	1.20	1	1.32	$1,863.79	$102.51
23	1	0.00	0.00	0.48	1	0.53	$748.34	$41.16
24	2	0.00	0.00	0.26	1	0.29	$409.47	$22.52
25	1	0.00	0.00	0.30	1	0.33	$465.95	$25.63
Total	22			44.73		49.22	$73,318.92	$3,822.31

Totals summary table

Economies of Scale Factor	0.5
Rainfall (mm) Factor	778
SEB Points of Gain/ha Factor	7

SEB Uplift Factor	1.10
Management Cost ($/ha)	$25,408

	Total Biodiversity score	**Total SEB points required**	**SEB Payment**	**Admin Fee**	**Total Payment**
Application	122.45	134.71	$194,027.28	$10,461.28	$204,488.56

6. Significant Environmental Benefit

A Significant Environmental Benefit (SEB) is required for approval to clear under Division 5 of the Regulations. The NVC must be satisfied that as a result of the loss of vegetation from the clearance that a SEB will result in a positive impact on the environment that is over and above the negative impact of the clearance.

Payment into the Native Vegetation Fund: $194,027.28 plus admin fee of $10,461.28= $204,488.56

Attachment 4: Flora Species List

Site: A1

Species	Common Name	EPBC	NPW	Introduced*
Eucalyptus obliqua	Messmate Stringybark			
Acacia pycnantha	Golden Wattle			
Acacia verniciflua	Varnish Wattle			
Thelymitra sp.	Sun-orchid			
Microtis sp.	Onion-orchid			
Microlaena stipoides var. stipoides	Weeping Rice-grass			
Acacia myrtifolia	Myrtle Wattle			
Pultenaea daphnoides	Large-leaf Bush Pea			
Opercularia turpis	Twiggy Stinkweed			
Acrotriche serrulata	Cushion Ground-berry			
Avena barbata	Bearded Oat			*
Sonchus oleraceus	Common Sow-thistle			*
Lolium sp.	Ryegrass			*
Plantago lanceolata var.	Ribwort			*
Rubus fruticosus aggregate	Blackberry			*
Vicia sativa ssp.	Common Vetch			*
Hypochaeris glabra	Smooth Cat's Ear			*
Lactuca serriola f.	Prickly Lettuce			*
Sisymbrium sp.	Wild Mustard			*
Holcus lanatus	Yorkshire Fog			*
Dactylis glomerata	Cocksfoot			*
Erica lusitanica	Spanish Heath			*
Briza maxima	Large Quaking-grass			*
Pentameris airoides ssp. airoides	False Hair-grass			*
Genista monspessulana	Montpellier Broom			*

Site: B1

Species	Common Name	EPBC	NPW	Introduced*
Acacia pycnantha	Golden Wattle			
Austrostipa elegantissima	Feather Spear-grass			
Eucalyptus leucoxylon ssp.	South Australian Blue Gum			
Dianella revoluta var. revoluta	Black-anther Flax-lily			
Styphelia humifusa	Cranberry Heath			
Sonchus asper	Rough Sow-thistle			*
Lolium sp.	Ryegrass			*
Avena barbata	Bearded Oat			*
Rubus fruticosus aggregate	Blackberry			*
Cytisus scoparius	English Broom			*
Hypochaeris glabra	Smooth Cat's Ear			*
Vicia sativa ssp.	Common Vetch			*
Watsonia meriana var. bulbillifera	Bulbil Watsonia			*
Genista monspessulana	Montpellier Broom			*
Opercularia ovata	Broad-leaf Stinkweed			
Hyparrhenia hirta	Tambookie Grass			*

Pultenaea pedunculata	Matted Bush-pea			
Gonocarpus mezianus	Broad-leaf Raspwort			
Senecio pterophorus	African Daisy			*
Acacia paradoxa	Kangaroo Thorn			
Erica lusitanica	Spanish Heath			*
Romulea minutiflora	Small-flower Onion-grass			*
Rytidosperma caespitosum	Common Wallaby-grass			
Thelymitra rubra	Salmon Sun-orchid			
Drosera whittakeri	Scented Sundew			
Stenanthera conostephioides	Flame Heath			
Isolepis cernua	Nodding Club-rush			
Themeda triandra	Kangaroo Grass			
Lepidosperma semiteres	Wire Rapier-sedge			
Hibbertia exutiacies	Prickly Guinea-flower			
Pultenaea laxiflora	Loose-flower Bush-pea			
Dactylis glomerata	Cocksfoot			*
Dodonaea viscosa ssp.	Sticky Hop-bush			
Briza maxima	Large Quaking-grass			*

Site: C1

Species	Common Name	EPBC	NPW	Introduced*
Pteridium esculentum ssp. esculentum	Bracken Fern			
Acacia pycnantha	Golden Wattle			
Holcus lanatus	Yorkshire Fog			*
Avena barbata	Bearded Oat			*
Dodonaea viscosa ssp.	Sticky Hop-bush			
Dactylis glomerata	Cocksfoot			*
Rytidosperma caespitosum	Common Wallaby-grass			
Echium plantagineum	Salvation Jane			*
Watsonia meriana var. bulbillifera	Bulbil Watsonia			*
Sixalix atropurpurea	Pincushion			*
Hypochaeris radicata	Rough Cat's Ear			*
Briza minor	Lesser Quaking-grass			*
Rubus fruticosus aggregate	Blackberry			*
Cytisus scoparius	English Broom			*
Juncus usitatus	Common Rush			*
Arctotheca calendula	Cape Weed			*
Enneapogon nigricans	Black-head Grass			
Medicago polymorpha	Burr-medic			*
Austrostipa eremophila	Rusty Spear-grass			

Site: D1

Species	Common Name	EPBC	NPW	Introduced*
Acacia paradoxa	Kangaroo Thorn			
Eucalyptus leucoxylon ssp.	South Australian Blue Gum			
Acacia melanoxylon	Blackwood			
Acacia pycnantha	Golden Wattle			
Eucalyptus viminalis ssp. viminalis	Manna Gum		R	
Allocasuarina verticillata	Drooping Sheoak			

Dodonaea viscosa ssp.	Sticky Hop-bush			
Lepidosperma semiteres	Wire Rapier-sedge			
Acacia myrtifolia	Myrtle Wattle			
Watsonia meriana var. bulbillifera	Bulbil Watsonia			*
Hypochaeris radicata	Rough Cat's Ear			*
Genista monspessulana	Montpellier Broom			*
Pentameris airoides ssp. airoides	False Hair-grass			*
Cytisus scoparius	English Broom			*
Sixalix atropurpurea	Pincushion			*
Holcus lanatus	Yorkshire Fog			*
Arctotheca calendula	Cape Weed			*
Rytidosperma caespitosum	Common Wallaby-grass			
Microlaena stipoides var. stipoides	Weeping Rice-grass			
Ehrharta erecta	Panic Veldt Grass			*
Allocasuarina muelleriana ssp.	Common Oak-bush			

Site: E1

Species	Common Name	EPBC	NPW	Introduced*
Themeda triandra	Kangaroo Grass			
Enneapogon nigricans	Black-head Grass			
Sonchus hydrophilus	Native Sow-thistle			
Briza maxima	Large Quaking-grass			*
Avena barbata/fatua	Wild Oat			*
Vicia sativa ssp.	Common Vetch			*
Sonchus oleraceus	Common Sow-thistle			*
Holcus lanatus	Yorkshire Fog			*
Medicago polymorpha	Burr-medic			*
Watsonia meriana var. bulbillifera	Bulbil Watsonia			*
Echium plantagineum	Salvation Jane			*
Romulea minutiflora	Small-flower Onion-grass			*
Prunus sp.	Plum			*
Plantago lanceolata var.	Ribwort			*
Sparaxis tricolor	Tricolor Harlequin Flower			*
Fumaria capreolata	White-flower Fumitory			*
Leptospermum myrsinoides	Heath Tea-tree			
Lysimachia arvensis	Pimpernel			*
Ixia sp.	Ixia			*
Bromus diandrus	Great Brome			*
Bromus rubens	Red Brome			*

Site: F1

Species	Common Name	EPBC	NPW	Introduced*
Eucalyptus obliqua	Messmate Stringybark			
Acacia pycnantha	Golden Wattle			
Lepidosperma semiteres	Wire Rapier-sedge			
Styphelia humifusa	Cranberry Heath			
Pultenaea daphnoides	Large-leaf Bush Pea			
Acacia verniciflua	Varnish Wattle			
Lomandra multiflora ssp. dura	Hard Mat-rush			

Enneapogon nigricans	Black-head Grass			
Eucalyptus camaldulensis ssp.	River Red Gum			
Thelymitra sp.	Sun-orchid			
Austrostipa elegantissima	Feather Spear-grass			
Watsonia meriana var. bulbillifera	Bulbil Watsonia			*
Briza maxima	Large Quaking-grass			*
Dactylis glomerata	Cocksfoot			*
Plantago lanceolata var.	Ribwort			*
Genista monspessulana	Montpellier Broom			*
Prunus sp.	Plum			*
Briza minor	Lesser Quaking-grass			*
Pentameris airoides ssp. airoides	False Hair-grass			*
Bromus diandrus	Great Brome			*
Hypochaeris glabra	Smooth Cat's Ear			*
Bromus rubens	Red Brome			*
Romulea minutiflora	Small-flower Onion-grass			*
Moraea flaccida	One-leaf Cape Tulip			*
Trifolium arvense var. arvense	Hare's-foot Clover			*
Medicago polymorpha	Burr-medic			*
Scaevola sp.	Fanflower			
Acacia paradoxa	Kangaroo Thorn			
Rytidosperma caespitosum	Common Wallaby-grass			
Centaurium tenuiflorum	Branched Centaury			*
Pteridium esculentum ssp. esculentum	Bracken Fern			
Dillwynia sericea	Showy Parrot-pea			
Hibbertia exutiacies	Prickly Guinea-flower			
Rubus fruticosus aggregate	Blackberry			*
Bursaria spinosa ssp.	Bursaria			
Allium triquetrum	Three-cornered Garlic			*
Ulex europaeus	Gorse			*