Clearing Desktop Report – Short Form



1. PROPOSAL DETAILS

Proposal Name:	T6/7 Narrogin Kondinin Rd (M038) SLK 139.47 – 162.56 Low Cost Shoulder Sealing (LCSS)		
Region/Directorate:	Wheatbelt		
Local Government Authority:	Shires of Kulin & Kondinin		
Road/Bridge Name and No:	Narrogin Kondinin Rd (M038)		
Proposal Location (SLK):	139.47 – 162.56		
TRIM Link to Spatial Data:	<u>D23#468595</u>		
EOS No:	2939		
Expected Proposal Start Date:	Jan 2024		
Project No:	30000432	Task Code:	19135
LISC TRIM No:	D22#924370	HRA TRIM No:	D23#345809

2. PURPOSE OF CLEARING

Main Roads proposes to undertake a shoulder sealing programme along Narrogin Kondinin Road between the town sites of Kulin and Kondinin (SLK 139.47 and 162.56) to improve safety and reduce run off road crashes. The Scope of Works is detailed in <u>D22#1135320</u>.

The proposal will comprise the following components:

- Shoulder widening and sealing from 139.47-149 SLK to achieve a seal width of 8.4 m within an existing 8-9 m formation.
- Shoulder widening and sealing from 149-162.56 SLK to achieve a seal width of 9 m within an existing 9-9.5 m formation.

The proposed widening equates to a 0.9-1.2m extension to the seal on each side of the road, depending on the section of road.

Five trees and one stump (with a total canopy area of 0.0514 ha) are proposed to be removed as part of shoulder sealing works, as they are located too close to the proposed new seal. It is proposed to manage this clearing under CPS 818.

The five trees and one stump, henceforth referred to as "the clearing area/s", are described below:

Tree No.	SLK	Description of tree and surrounding vegetation
1	140.23 LHS	Remove tree – Wandoo. 10-11 m high, 70 cm DBH, 2 small hollows (not suitable), no scars. Completely Degraded. 0.02 ha canopy.
2	140.31 LHS	Remove tree – Wandoo. 10 m high, 60 cm DBH, no observable hollows, no scars. Completely Degraded. 0.01 ha canopy.
3	141.97 RHS	Remove tree – Kondinin Blackbutt. Dead, no hollows. Completely Degraded. 0.001 ha canopy.
4	147.26 RHS	Remove tree stump. 0.9 m high, no hollow, no scar. 0.0004 ha.
5	157.61 LHS	Remove tree – likely Salmon Gum. 12 m high, 89 cm DBH, split hollow (not suitable). Completely Degraded. 0.01 ha canopy.

6	158.34 LHS	Remove tree – Salmon Gum. 12m high, 89 cm DBH. Horizontal hollow, vertical
		hollow, angled hollow (all unsuitable). Completely Degraded. 0.01 ha canopy.

3. ALTERNATIVES TO CLEARING

As the proposed clearing is for the removal of five trees and one stump within 1.5 metres of the edge of the new seal, and would pose a safety issue if left uncleared, there is limited scope to alter the clearing. The clearing locations are in a Degraded to Completely Degraded condition.

The construction of barrier around the trees or the relocation of the road to avoid the trees is not feasible.

4. MEASURES TO AVOID, MINIMISE, MITIGATE AND MANAGE PROPOSAL CLEARING IMPACTS

There are limited measures to avoid or mitigate clearing impacts, being the removal of five trees and one stump, due to the safety risk to road users and the location of the trees.

The trees are proposed to be removed progressively by hand using an EWP (or similar), reducing the potential for impact on surrounding vegetation that would normally be impacted when using other felling techniques. The trees will be mulched with chip being used as mulch on adjacent land if there is no native understorey vegetation in the proposed mulching spread area. Otherwise, the chipped mulch will be removed offsite. Where possible, millable timber will be removed offsite for reuse, and where possible /required, wood/branches/chip from the Wandoo trees will be collected and used in artificial Cockatoo hollow manufacture.

5. APPROVED POLICES AND PLANNING INSTRUMENTS

The clearing of native vegetation in Western Australia is regulated under the *Environmental Protection Act* 1986 (EP Act) and the Environmental Protection (Clearing of Native Vegetation) Regulations 2004 (Clearing Regulations).

In addition to the matters considered in accordance with section 51O of the EP Act (see Section 1.3), Main Roads has also had regard to the following documents.

Environmental Protection Policies:

- Environmental Protection (Peel Inlet Harvey Estuary) Policy 1992
- Environmental Protection (Western Swamp Tortoise Habitat) Policy 2011

Other legislation of relevance for assessment of clearing and planning/other matters:

- Biodiversity Conservation Act 2016 (WA) (BC Act)
- Conservation and Land Management Act 1984 (WA) (CALM Act)
- Country Areas Water Supply Act 1947 (WA) (CAWS Act)
- Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act)
- Planning and Development Act 2005 (WA) (P&D Act)
- Soil and Land Conservation Act 1945 (WA)
- *Rights in Water and Irrigation Act 1914* (WA) (RIWI Act)
- Aboriginal Heritage Act 1972 (WA) (AHA)
- Town Planning and Development Act (WA) 1928

Relevant other policies and guidance documents:

- Environmental Offsets Policy (Government of Western Australia, 2011)
- A guide to the assessment of applications to clear native vegetation (DEC, December 2014)
- Procedure: Native vegetation clearing permits (DWER, October 2019)
- Environmental Offsets Guidelines (Government of Western Australia, August 2014)
- Technical guidance Flora and Vegetation Surveys for Environmental Impact Assessment (EPA, 2016)

- Technical guidance Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment (EPA, 2020)
- Approved conservation advice under section 266B of the EPBC Act for threatened flora/fauna/vegetation communities
- Approved Recovery Plans for threatened species
- EPBC Act Referral guidelines for the three threatened black cockatoo species
- Strategic advice EPA

6. CLEARING AREA			
Clearing Area (ha):	0.0514 ha (canopy)	No. Trees Cleared:	5 trees and 1 stump
Species Name:	Two Wandoo, one Kondinin Blackbutt (dead), two Salmon Gum and one unknown sp. stump		
Easting and Northing:	118.2087912, -32.6188139		
7. EXISTING ENVIRONMENT A	ND SITE INFORMATION		
Site Vegetation Description/Association:	Two trees are located within Vegetation Association (VA)131, described as Woodland/Mallee. Three trees and one stump are located within VA 960, described as Mallee; Eucalyptus shrubland, Eucalyptus eremophila, E. redunca, E. spp.		
Site Vegetation Condition:	Degraded to Completely Degraded		
Pre-European Extent Remaining (%):	VA 131: 14,875.75 ha (8.21%) remains at a Statewide level with 1,570.98 ha (8.34%) remaining at a LGA level. VA 960: 30,376.26 ha (13.78%) remains at a Statewide level with 5,554.03 ha (10.16%) remaining at a LGA level.		

8 ASSESSMENT OF PROPOSAL AGAINST CLEARING PRINCIPLES

8. ASSESSMENT OF PROPOSAL AGAINST CLEARING PRINCIPLES		
Is vegetation to be cleared at variance with:	Justification or Evidence:	
Principle (a) – Native vegetation should not be cleared if it comprises a high level of biological diversity.	The proposal requires the clearing of five individual trees and one stump located in or on the edge of the maintenance zone. The vegetation consists of little to no native understorey and is in a Degraded to Completely Degraded condition.	
	According to Main Roads GIS WA Herbarium layer and GIS Rare Flora layer, the closest Threatened Flora record is:	
	Eremophila verticillate –Southwest of the clearing area.	
	The closest Priority 1 Flora record is	
	Acacia sclerophylla var. teretiuscula —Southwest of the clearing area.	
	Other Priority Flora records near the clearing areas are:	
	 Eremophila veneta (P4) –Southwest of the clearing area. Styphelia sp. Dumbleyung (P3) –North of the clearing area. Acacia inophloia (P3) – North of the clearing area. 	
	No impacts on Threatened or Priority flora are expected due to the localised nature of the removal of the five trees and one stump.	
	One dead Kondinin Blackbutt to be removed at SLK 141.97 is within a mapped TEC (Eucalypt woodlands of the Western Australian Wheatbelt). The tree is within the existing maintenance zone, and as the vegetation is in a Completely Degraded condition, with introduced plant species accounting for	

over 70% of understorey vegetation, it does not meet the minimum condition thresholds for a Eucalypt Woodland TEC as described in Wheatbelt Woodlands TEC Factsheet (D19#584174).

A search of Main Roads GIS shapefiles layers indicates that the closest nature reserve, conservation areas or Bush Forever Site is an un-named Nature Reserve (R18311/C Class), located more than 1 km North of the clearing area at SLK 147.26. Due to the distance and the nature and scale of the vegetation clearing, no impacts are anticipated.

The clearing areas are not located within a mapped Environmentally Sensitive Area (ESA).

The clearing areas do not contain trees with suitable hollows for Black Cockatoo species. Advice from Kirkby (2023) (D23#466885) states that Carnaby's cockatoos are no longer found in Kondinin and the Proposal area is outside of their current estimated distribution (EPA 2019). As black cockatoo species are no longer found in the region, the clearing will not impact black cockatoo species or habitat.

Based on the above, the clearing areas have limited biodiversity value and the proposed clearing is not at variance to this Principle.

Principle (b) – Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.

According to the DBCA Threatened and Priority Fauna layer, the closest Threatened Fauna record is:

- Myrmecobius fasciatus (EN) (numbat) –Southwest of the clearing area
- Leipoa ocellata (VU) (malleefowl) –North of the clearing area

The closest Priority Fauna record is:

• *Notamacropus Irma* (P4) (western brush wallaby) –Southwest of the clearing area.

The western brush wallaby and numbat records are historical records from 1964 and 1954 respectively. Both records are within the town site of Kulin.

No suitable habitat for malleefowl is present in the clearing areas as they lack a suitable understorey.

There are several historical sightings of Carnaby's Cockatoo between 1971 and 1975 approximately 12.76 km from the clearing area and one sighting of a White-tailed Black Cockatoo (2000) 12.76 km from the clearing area. Advice from Kirkby (2023) (D23#466885) states that Carnaby's cockatoos are no longer found in Kondinin and the Proposal area is outside of their current estimated distribution (EPA 2019). As black cockatoo species are no longer found in the region, the clearing will not impact black cockatoo species or habitat.

No signs of conservation significant fauna were detected during the site visit.

Removal of the five trees and one stump is highly unlikely to be significant habitat for fauna indigenous to Western Australia. Based on the above, the proposed clearing is not at variance to this Principle.

Principle (c) – Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.

According to Main Roads GIS WA Herbarium layer and GIS Rare Flora layer, the closest Threatened Flora record is:

• Eremophila verticillate –Southwest of the clearing area.

No other Threatened Flora records were identified within 9 km of the clearing areas.

Due to the vegetation within the Clearing Area being in a Degraded to Completely Degraded condition, with an understory dominated by introduced species, it is unlikely that Threatened Flora species will be present. The removal of the five trees and one stump will not significantly impact (directly or indirectly) Threatened flora. Based on the above, the proposed clearing is not at variance to this Principle. One dead Kondinin Blackbutt to be removed at SLK 141.97 is within a **Principle (d)** – Native vegetation mapped TEC (Eucalypt woodlands of the Western Australian Wheatbelt). The should not be cleared if it comprises tree is within the existing maintenance zone, and as the vegetation is in a the whole or a part of, or is Completely Degraded condition, with introduced plant species accounting for necessary for the maintenance of, a over 70% of understorey vegetation, it does not meet the minimum condition threatened ecological community. thresholds for a Eucalypt Woodland TEC as described in the Wheatbelt Woodlands TEC Factsheet (D19#584174). The other trees are in a Degraded to Completely Degraded condition with a predominantly weed understory and do not meet the classification requirements for TEC as described in the Wheatbelt Woodlands TEC Factsheet (D19#584174). Based on the above, the proposed clearing is not at variance to this Principle. Two vegetation associations (Beard 1976) have been mapped over the Principle (e) - Native vegetation clearing areas. should not be cleared if it is significant as a remnant of native Two trees (0.03 ha) are located within VA 131, which has 14,875.75 ha (8.21%) vegetation in an area that has been remaining at a State-wide level and 1,570.98 ha (8.34%) remaining at a LGA extensively cleared. level. This clearing area equates to 0.0019% of VA 131 at a LGA level. They are in a Degraded to Completely Degraded condition in or on the edge of the maintenance zone and are not vegetation that is significant as a remnant. Three tees and one stump (0.0214 ha) are located within VA 960, which has 30,376.26 ha (13.78%) remaining at a State-wide level and 5,554.03 ha (10.16%) remaining at a LGA level. This clearing area equates to 0.00038% of VA 960 at a LGA level. They are in a Degraded to Completely Degraded condition in or on the edge of the maintenance zone and are not vegetation that is significant as a remnant. Based on the above, the proposed clearing is not at variance to this Principle. Wandoo, Salmon Gum and Kondinin Blackbutt are not representative of Principle (f) - Native vegetation riparian vegetation. The closest mapped waterways are in the following should not be cleared if it is growing locations: in, or in association with, an environment associated with a 224 m East of SLK 141.97 watercourse or wetland. 25 m North of SLK 147.26 300 m North of SLK 158.35 The trees/stump to be removed are not considered to be growing in association with a watercourse or wetland. Based on the above, the proposed clearing is not at variance to this Principle. DPIRD mapping indicates risk levels for the map units in the following **Principle (g)** – Native vegetation locations: should not be cleared if the clearing of the vegetation is likely to cause SLK 140.23, 140.31 and 141.97 appreciable land degradation. 0% has very poor to poor drainage potential 10-30% high to extreme wind erosion risk 10-30% moderate to high salinity risk or is presently saline

- 3-10% high to extreme water erosion risk
- <3% moderate to high land instability hazard

SLK 147.26, 157.61 and 158.35

- 3% has very poor to poor potential
- 10-30% high to extreme wind erosion risk
- <3% moderate to high salinity risk or is presently saline
- <3% high to extreme water erosion risk
- <3% moderate to high land instability hazard

The Australian Soil Resource Information System (ASRIS) has been used to determine the likelihood of Acid Sulphate Soils (ASS). The ASRIS database (accessed 25th March 2023) indicates there is a low probability of occurrence within the clearing areas.

The removal of five trees and one stump in a Completely Degraded condition will not cause appreciable land degradation, especially as the majority of the land where the vegetation is located is covered with road infrastructure and agricultural pursuits.

Based on the above, the proposed clearing is not at variance to this Principle.

Principle (h) – Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

A search of Main Roads GIS shapefiles layers indicates that the closest nature reserve, conservation areas or Bush Forever Site is an un-named Nature Reserve (R18311/C Class), located more than 1 km North of the clearing area (stump) at SLK 147.26. Due to the distance and the nature and scale of the vegetation clearing, no impacts are anticipated.

Based on the above, the proposed clearing is not at variance to this Principle.

Principle (i) – Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

Proposal area is not located within 100m of the following areas:

- Public Drinking Water Source Area;
- catchment proclaimed under the Country Areas Water Supply Act 1947 (CAWS Act); or
- surface water area proclaimed under the Rights in Water and Irrigation Act 1914 (RIWI Act).

The trees at SLK 157.61 and 158.35 are located within the RIWI Proclaimed Kondinin-Ravensthorpe Groundwater Area (Status: to be developed).

A minor non-perennial watercourse intersects the road 25 m North of the clearing area (stump) at SLK 147.26.

As the work is limited to the removal of five trees and one stump and works will not require dewatering, there will be minimal disturbance and no change to surface or groundwater level or quality will occur as a result of these works.

Based on the above, the proposed clearing is not at variance to this Principle.

Principle (j) – Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

The removal of five trees and one stump in a Degraded to Completely Degraded condition is unlikely to cause, or exacerbate, the incidence or intensity of flooding.

DPIRD mapping indicates that the area has:

- <3% moderate to high flood risk
- 10-30% moderate to very high waterlogging risk

A review of ArcGIS shapefiles has confirmed that the proposed works will not disturb or interrupt any natural drainage and surface run-off patterns.

Based on the above, the proposed clearing is not at variance to this Principle.

		Clearing areas (Appendix 1)
		Photographs of each tree (Appendix 2)
		Australian Soil Resource Information System (ASRIS) Mapping (http://www.asris.csiro.au/mapping/viewer.htm)
Methodology Used and		DPIRD mapping (https://maps.agric.wa.gov.au/nrm-info/)
	ed and	Technical Guidance on the Threatened Ecological Community Eucalypt Woodlands of the Western Australian Wheatbelt: D19#584174
References:		Kirkby (2023) Email Advice Tony Kirkby to EO - Narrogin Kondinin M038 SLK 139.47 - 162.56 LCSW - No Carnabys in Kondinin: D23#466885
		Environmental Protection Authority, 2019, Carnaby's Cockatoo in Environmental Impact Assessment in the Perth and Peel Region, EPA, Western Australia
		https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/Carnaby %27s%20cockatoo_new%20FINAL.pdf
Completed By:		
Job Title	Graduate Environment Officer	
Date	01/06/2023	

Once all sections are completed, send the form to CRSP for review and endorsement.

DECISION ON CLEARING ASSESSMENT			
Clearing Assessment	ENDORSED ⊠	REFUSED □	
Comments	 I note the following: The proposed clearing is for the removal of five trees and one stump (with a total canopy area of 0.0514 ha) The clearing area consists of little to no native understorey and is in a Degraded to Completely Degraded condition. The clearing is unlikely to impact threatened or priority flora or fauna species The clearing will not impact Threated or Priority Ecological Communities. 		
Job Title	Environment Contractor		
Date	08/06/2023		

APPENDIX 1: CLEARING AREAS

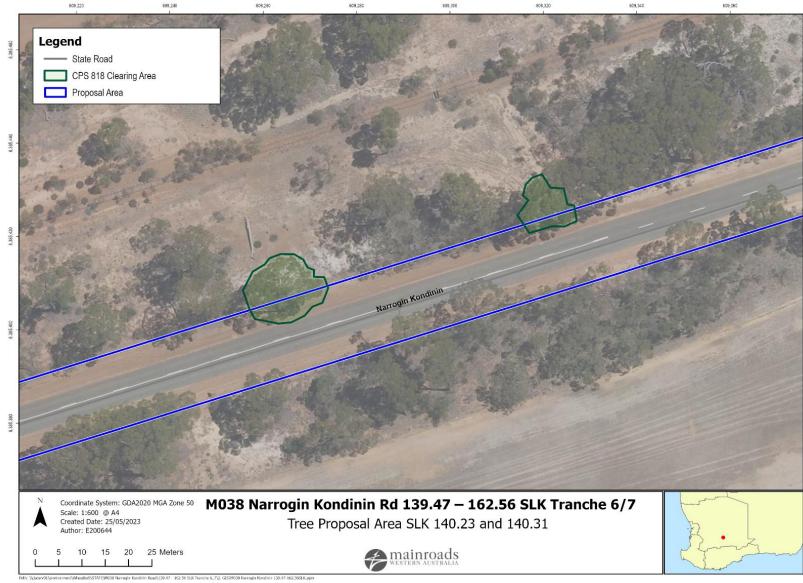


Figure 3. CPS 818 Clearing Area for Wandoo at SLK 140.23 and Wandoo at 140.31

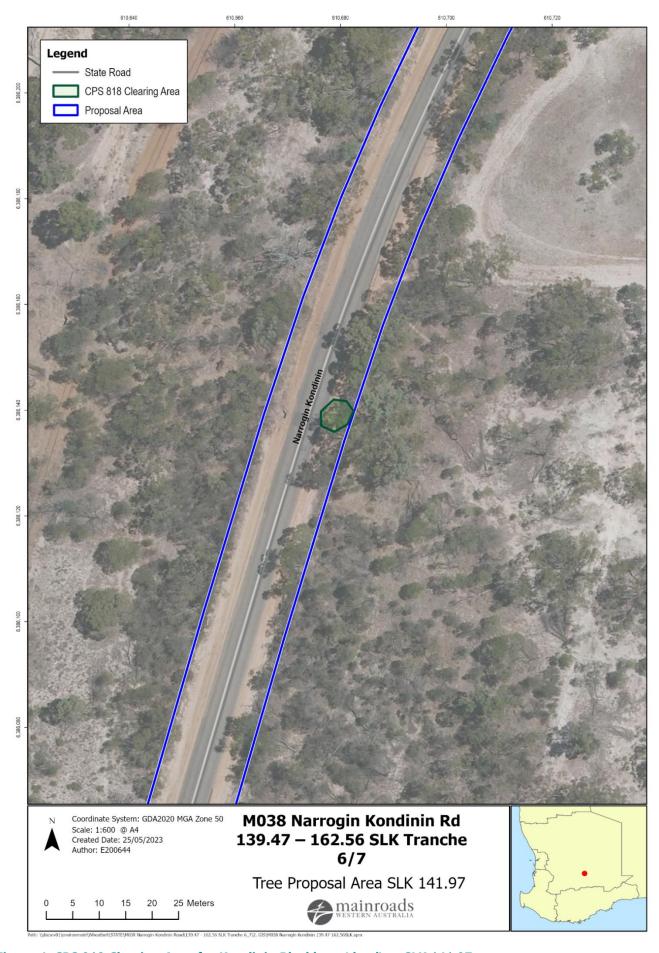


Figure 4. CPS 818 Clearing Area for Kondinin Blackbutt (dead) at SLK 141.97



Figure 5. CPS 818 Clearing Area for stump at SLK 147.26

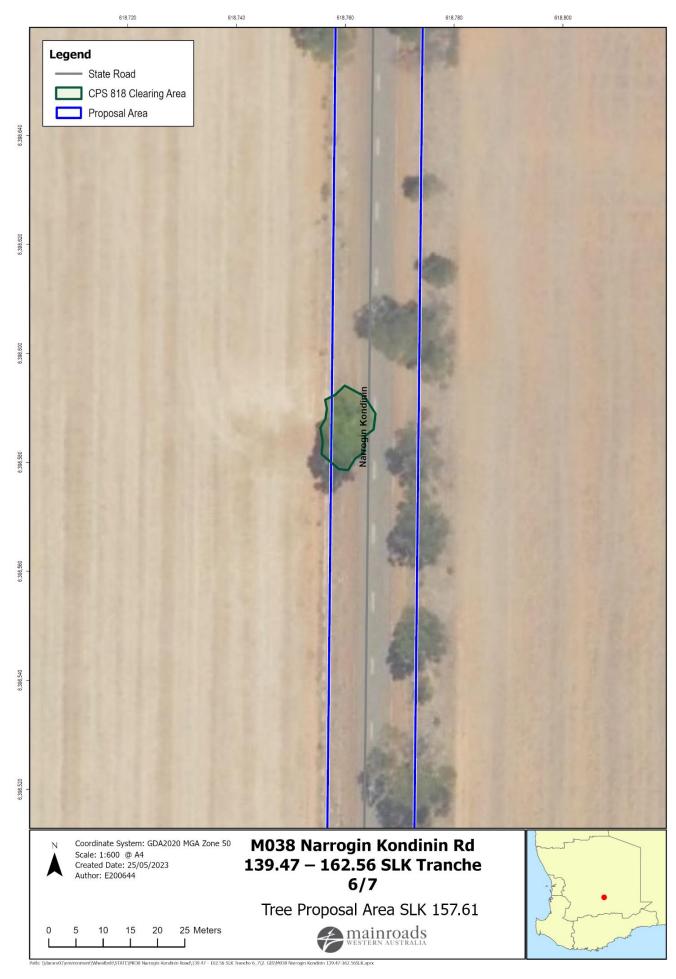


Figure 6. CPS 818 Clearing Area for (likely) Salmon Gum at SLK 157.61

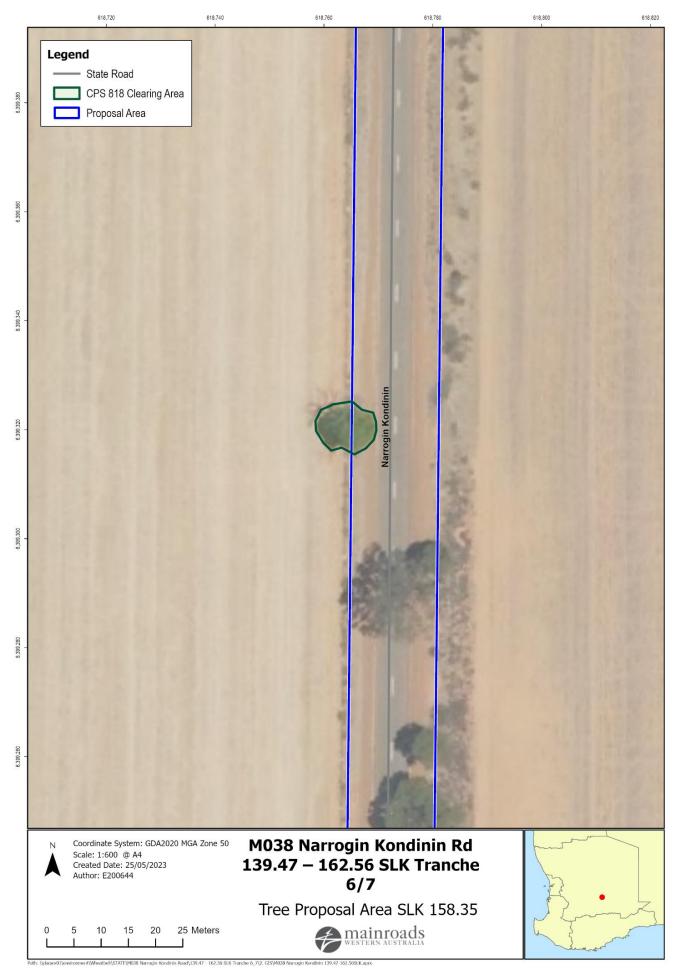


Figure 7. CPS 818 Clearing Area for Salmon Gum at SLK 158.35

APPENDIX 1: PHOTOGRAPHS OF TREES TO BE REMOVED

Photographs taken during a site visit on 10th Feb 2023.

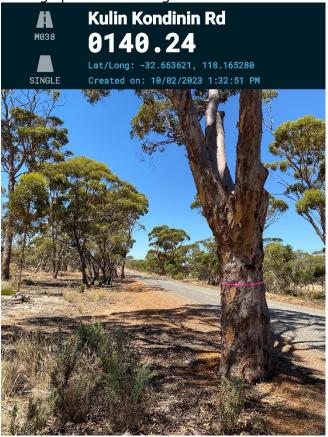


Figure 1. SLK 140.23 - Wandoo

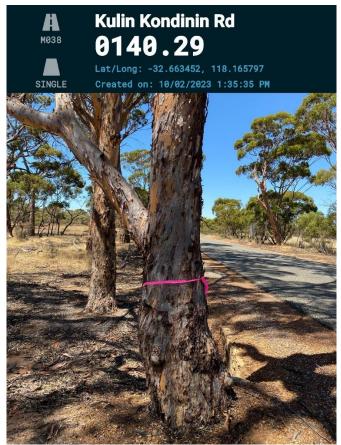


Figure 2. SLK 140.31 – Wandoo

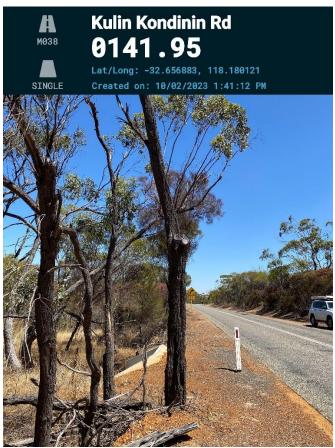


Figure 3. SLK 141.97 – Kondinin Blackbutt. Dead

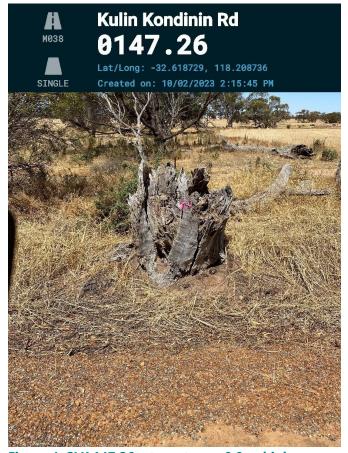


Figure 4. SLK 147.26 – tree stump. 0.9 m high.

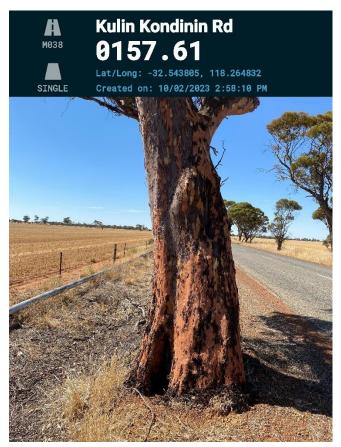


Figure 5. SLK 157.61 – likely Salmon Gum. 12 m high.



Figure 6. Salmon Gum. 12m high