Clearing Desktop Report – Short Form



1. PROPOSAL DETAILS

Proposal Name:	T4 Widening - M041 – York Merredin – SLK 112.32 – 143.41		
Region/Directorate:	Wheatbelt		
Local Government Authority:	Shire of Bruce Rock		
Road/Bridge Name and No:	York Merredin M041		
Proposal Location (SLK):	SLK 112.32 – 143.41		
TRIM Link to Spatial Data:	CPS 818 shapefile - D22#885668		
EOS No:	2701		
Expected Proposal Start Date:	October 2022		
Project No:	30000432 Task Code: 19130		19130
LISC TRIM No:	D22#685135 HRA TRIM No: D22#191933		D22#191933

2. PURPOSE OF CLEARING

The proposed works involve widening the seal to 4.5m either side of centreline to a total width of 9.0m. The existing seal is 8m. The proposed seal width is reduced to 8.6m in localised areas so that no formation widening works are required. The proposed works also include 10 culvert extensions.

A single standing tree located at SLK 123.93 is displayed in **Appendix 1**. A further tree which has fallen is also required to be cleared (SLK 131.05) (**Appendix 1**).

The proposal will involve the clearing of **0.02 ha** native vegetation.

• This assessment will focus on the two trees (one standing and one fallen) identified as being impacted by this Proposal. Photographs and descriptions of proposed clearing are provided in **Appendix 1**, and the locations of proposed clearing are displayed in **Appendix 2: Figures**



Figure 1 (Appendix 2).

Required Clearing:

IDENTIFIER	SLK	PROPOSED WORKS
Tree 1	123.93 - RHS	Remove – One tree (<i>Eucalyptus wandoo</i>) Height approx. 12m. No hollows. DBH >50 Surrounding vegetation condition Completely degraded
Tree 2	131.05 - LHS	Remove – One fallen tree <i>Eucalyptus loxophleba</i> (York Gum) DBH >40cm Contains hollows, however, unsuitable for cockatoos due to proximity to ground and accessibility by foxes and feral cats. Surrounding vegetation condition Completely degraded
B. ALTERNATIVES TO CLEARING		

This section is to be widened on both sides as part of the Blackspot programme following several fatalities and serious crashes along this section in recent years. Where possible, clearing has been avoided and pruning of

branches has been employed. As the project will require the clearing to achieve a 9.0 m wide sealed formation on an alignment, no alternatives to clearing exist.

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

The design and management measures implemented to avoid and minimise the clearing impacts by the project are:

- Steepen batter slopes The widened seal is proposed to stay within the existing road formation. Batters will be steepened as required to achieve the target seal width.
- Installation of safety barriers The two trees are too close to the road to allow for the safe and effective use of safety barriers.
- Alignment to one side of existing road The widened seal is proposed to stay within the existing road formation which occurs on either side of the seal.

In addition, impacts to vegetation will be minimised through the implementation of the following measures:

- the clearing area will be demarcated prior to the commencement of native vegetation clearing;
- where possible vegetation will be pruned as opposed to removed;
- further Project clearing will be avoided as the site office, materials storage areas, construction vehicles/machinery and access tracks will be located on previously disturbed or cleared areas; and
- development and implementation of a site-specific CEMP which will establish the following vegetation management actions including:
 - o clearing and access control measures (such as demarcation of clearing boundaries);
 - o weed and dieback management;
 - erosion and sediment control;
 - o waste and fire management;
 - o topsoil management;
 - $\circ\,$ dust control; and
 - \circ tree and vegetation retention where possible.

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 510 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

O. CLEARING AREA				
Clearing Area (ha):	0.02 ha		No. Trees Cleared:	2
Species Name:	Tree 1 - Eucalyptus wandoo, Tree 2 - Eucalyptus loxophleba			
Easting and Northing:	Tree 1 – GDA 94 MGA Zone 50 589568mN 6468480mE Tree 2 – GDA 94 MGA Zone 50 595610mN 6471726mE			
7. EXISTING ENVIRONMENT AND SITE INFORMATION				
Site Vegetation Description/Associati on:	Vegetation within the proposed clearing area comprises isolated individuals of native vegetation in a narrow road reserve adjacent to farmland, with an understory comprised of introduced weed species, to the exclusion of native species. No conservation significant flora species were noted from the site inspection conducted by Main Roads Senior Environmental Officers.			
Site Vegetation Condition:	Vegetation proposed to be cleared is in a completely degraded condition.			
Pre-European Extent Remaining (%):	Vegetation Association Mount Caroline (1023) retains 10.79% of its representation at the State-wide scale, 6.70% at the IBRA Subregion scale and 5.94% within the Shire of Bruce Rock.			
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.		Vegetation within the clearing area is Completely degraded and comprises isolated trees located within the road reserve, adjacent to historically cleared		

	farmland. The understorey is dominated by introduced weeds to the exclusion of native species. Clearing is limited to two individual trees.
	As the understory is comprised entirely of introduced weed species, no clearing of native understory vegetation is proposed. Analysis of GIS Flora databases reveal that few Threatened or Priority flora species are known from the clearing area locality.
	Not at variance
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	Analysis of Main Roads GIS Threatened Fauna layer reveal that very few Threatened or Priority fauna species are known from the clearing area locality (Figure 2).
habitat for fauna indigenous to Western Australia.	The isolated vegetation within the Completely degraded and sparsely vegetated road corridor provides very limited habitat for any fauna and no functional habitat linkage for native fauna.
	Trees proposed to be cleared do not provide significant habitat for fauna species and are unlikely to provide significant foraging or roosting habitat for black cockatoo species (specifically Carnaby's cockatoo). The removal of one individual of Wandoo containing no hollows is not anticipated to have an impact on the species. The fallen York gum contained a hollow, however, this hollow is unsuitable for Carnabys cockatoo as the fallen tree is easily accessible to foxes and feral cats.
	Not at variance
Principle (c) – Native vegetation should not be cleared if it includes, or is necessary for the continued existence of rare flore.	The open and Completely degraded nature of the proposed clearing area allowed for easy identification of species during the site inspection. No rare flora was observed.
existence of, rare flora.	As the understory is comprised entirely of introduced weed species, no clearing of native understory vegetation is proposed.
	Analysis of GIS Flora databases indicate that few Threatened or Priority flora species are known from the clearing area locality and none are expected to be impacted by the proposed clearing.
	Not at variance
Principle (d) – Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community.	The clearing of one tree (SLK 123.93) is located within the mapped buffer of the P1 Priority Ecological Community (PEC) " <i>Banksia prionotes</i> and <i>Xylomelum angustifolium</i> low woodlands on transported yellow sands" (Figure 3). The tree proposed to be cleared at this location is a <i>Eucalyptus wandoo</i> (Appendix 2) and does not represent the vegetation of the PEC. Furthermore, the tree proposed to be cleared (Tree 1, Figure 1) is an isolated individual within a very narrow (<5m) section of completely degraded vegetation between the road reserve and cleared agricultural land. The surrounding vegetation does not represent the description of the PEC and the clearing of the individual tree within the PEC buffer zone will not impact have any impact on the values of the PEC.
	Analysis of GIS datasets suggest that the Commonwealth listed TEC <i>Eucalypt woodlands of the Western Australian Wheatbelt</i> occurs within 1,500m of the proposed clearing area (Figure 3).
	No proposed clearing areas intersect these mapped areas of TEC. Furthermore, the vegetation proposed does not represented the TEC in accordance with the criteria listed in <i>"Eucalypt Woodlands of the Western</i>

	Australian Wheatbelt: a nationally protected ecological community" (Commonwealth of Australia 2016).
	Not at variance
Principle (e) – Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.	The proposed clearing is located within the Merredin subregion of the Avon Wheatbelt Bioregion, and within the Mount Caroline Vegetation Association (Figure 4). Vegetation Association Mount Caroline (1023) retains 10.79% of its representation at the State-wide scale, 6.70% at the IBRA Subregion scale and 5.94% within the Shire of Bruce Rock. Although there is not a high proportion of the vegetation association remaining, the clearing of one standing and one fallen tree within a Completely degraded area does not represent a significant remnant of native vegetation. Not at variance
Principle (f) – Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.	<pre>getation. pt at variance e proposed clearing is not located within or in association with a attercourse or wetland and the species proposed to be removed are not etand/riparian' species (</pre>
	Author: C9093 Author: C9093

	Figure 5).
	Not at variance
Principle (g) – Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.	Given the very small area (0.02 ha) and isolated nature of the clearing associated with sealing of areas for road construction, the proposed clearing is not likely to lead to an appreciable increase in land degradation. Standard erosion and dust management control measures will be implemented during construction to reduce the incidence of wind erosion.
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 ArcGIS shapefiles indicates no nature reserves, conservation areas, Environmentally Sensitive Areas or Bush Forever Sites are located within 100 metres of the clearing area (Figure 6). Not at variance
Principle (i) – Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface	 The proposed clearing is not located within a watercourse. Analysis of GIS databases (Figure 6, Figure 7) show that the Clearing Area is not located within a: RIWI Act Ground Water or Irrigation district:
or underground water.	Public Drinking Water Source Area: or
	CAWSA Clearing Control Catchment.
	Although the Clearing area is mapped to be within a surface water area proclaimed under the RIWI Act (Figure 6), no clearing will occur in a mapped watercourse Dewatering is not proposed and no change to groundwater level or quality is anticipated from the removal of the trees. Standard operational controls will be implemented with regards to potential spill risks.
	Given no dewatering or major drainage modifications are likely to be required and the scale of clearing is very minor and linear in nature, no deterioration of surface or underground water levels or quality is expected to result from clearing.
Dringinle (i) Native vegetation	Online data from the Duracy of Mateoreleans was analyzed for annual minfall
Principle (j) – Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity	Online data from the Bureau of Meteorology was analysed for annual rainfall data at the closest weather station to the clearing area, Bruce Rock (Station Number 10016), located approximately 12.7km to the east of the clearing area. Mean annual Rainfall for Bruck Rock is 330mm per annum (BOM 2022).
of flooding.	According to DPIRDs Natural Resource Soil Information, the Clearing Area has a low flood hazard risk. The Clearing Area is located in the following soil landscape map units:
	 Kwolyin 2 subsystem: very smoothly undulating sandy aeolian deposits on uplands located directly south east of valley sources, comprising deep yellow sands and earths with gravels forming from recent lateritisation Kellerberrin 3 non-saline phase: Areas of reddish, powdery surfaced, "Morrel soils", often adjacent to salt lakes
	Both of the above map units have been assessed as exhibiting a very low risk
	The proposed clearing involves the removal of two trees (0.02ba) adjacent to
	an existing road corridor. Given the very small, isolated patches of clearing proposed within a largely vegetated local landscape, clearing is unlikely to exacerbate the incidence or intensity of flooding.
	Not at variance

Methodology Used and References:		Bureau of Meteorology (BOM) 2022. Climatic Statistics for Australian Locations: Monthly climate statistics, [Online], Australian Government, Available from: <u>http://www.bom.gov.au/climate/averages/tables/</u>
		Commonwealth of Australia (2016) ' <i>Eucalypt Woodlands of the Western</i> Australian Wheatbelt: a nationally protected ecological community' Department of Environment and Energy
		Main Roads Site Inspection: 29 July 2022
		Photographs of each tree: Appendix 1
		Shapefile of clearing area/trees: D22#885668
		Natural Resource Management in WA. 2021 SLIP portal, Soil-Landscape Mapping. Available online from:
		http://maps.agric.wa.gov.au/nrminfo/framesetup.asp. Accessed 2022.
Completed By:		
Job Title	Environmental officer	
Date	24/08/2022	

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

DECISION ON CLEARING ASSESSMENT			
Clearing Assessment	ENDORSED 🖂		
Comments	l agree that the proposed clearing of two trees under CPS 818 will result in low impact and is not variance to clearing principles.		
Job Title	Senior Environment Officer		
Date	25/08/2022		

Appendix 1: Photographs and Descriptions of Trees Proposed to be Cleared

IDENTIFIER	COMMENT	PHOTOS
Tree 1 (SLK123.93 – RHS)	1 x Mature <i>Eucalyptus</i> sp. DBH >50cm Height 12m No hollows To be cleared under CPS 818	Bruce Rock Quairading Rd D123.95 Lt/Long: -31.9160/ki 117.947291 Created on: 29/97/2022 2:45:80 //
Tree 2 (SLK131.05 – LHS)	1 x Fallen <i>Eucalyptus</i> <i>loxophleba</i> (York Gum) DBH >40cm Contains hollows however unsuitable for cockatoos due to proximity to ground and accessibility by foxes and feral cats. To be cleared under CPS 818	<image/> <text><text></text></text>

Appendix 2: Figures



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Figure 1: Proposed Clearing locations



Figure 2: Conservation Significant Fauna



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Figure 3: Threatened Ecological Communities and Priority Ecological Communities



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Figure 4: Pre-European vegetation



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Figure 6: DBCA Managed Lands and Environmentally Significant Areas



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