

Clearing Desktop Report – Short Form

1. PROPOSAL DETAILS

Proposal Name:	H005 Great Eastern Hwy – Package 4b and 5 – Offshoot Drain 7		
Region/Directorate:	Wheatbelt Region		
Local Government:	Shire of Yilgarn		
Road/Bridge Name & Number:	Great Eastern Hwy (H005)		
Proposal Location (SLK):	325.8		
CDR Short Form TRIM Number:	D24#418219, D24#1323188 (Redacted)		
Spatial Data TRIM Number:	D24#418505		
EOS Number:	1775		
Expected Proposal Start Date:	April 2024		
Oracle Project No:	21115077	Task Code:	11.05
LISC TRIM Number:	D24#387841	HRA TRIM Number:	D19#760449

2. PURPOSE OF CLEARING

The Contractor (Highway Construction) constructing GEH Package 4b and 5 has advised Main Roads that to allow drainage water to drain freely away from the road formation, extension of the offshoot drain at 325.8 SLK is required. Pooled water adjacent to the road formation can affect the soil moisture level of the formation, causing the pavement to fail prematurely.

3. ALTERNATIVES TO CLEARING

Due to the topography of the area, there are limited opportunities to not install an offshoot drain at this location. However the design of the offshoot drain has been amended to a maximum width of 4m and is proposed to be aligned to avoid as much vegetation clearing as possible.

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

The following alternatives to clearing were considered during the development of the Proposal:

- Reduce offshoot drain width through mapped TEC, minimise impact.
- Align offshoot drain to avoid the clearing of vegetation (where practicable).

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 (DER, December 2014)
- Procedure: Native vegetation clearing permits (DWER, October 2021)
- 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):	Up to 0.01 ha in 0.041 ha Development Envelope	No. Trees Cleared:	To be avoided
Species Name(s):	<i>Eucalyptus loxophleba</i> subsp. lissophloia open mallee forest		
Easting and Northing:	118.938961, -31.347480		

7. EXISTING ENVIRONMENT AND SITE INFORMATION

Site Vegetation Description/Association:	GHD (2016) <i>Eucalyptus loxophleba</i> subsp. lissophloia open mallee forest DPIRD - VA8, Medium woodland; salmon gum & gimlet
Site Vegetation Condition:	EPA and DPaw (2015) – Condition 3 (Vegetation structure altered obvious signs of disturbance. Disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing).
Pre-European Extent Remaining (%):	49.87% Statewide, 10.62% Avon Wheatbelt, LGA 36.6%

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.	<p>The proposal involves clearing of up to 0.01 ha of <i>Eucalyptus loxophleba</i> subsp. lissophloia open mallee with a vegetation structure with obvious signs of disturbance.</p> <p>GHD (2016) and Ecologia (2020) undertook flora, and vegetation surveys of the area.</p> <p>Past surveys did not record any Threatened or Priority Flora, or Diameter at Breast Height (DBH) trees in the Proposal area. GHD (2016) mapped the Proposal area as aligning to the Eucalypt Woodlands of the Western Australian Wheatbelt Threatened Ecological Community (TEC). However, Main Roads' Eucalypt Woodlands of the Western Australian Wheatbelt Woodland Factsheet advises that in regard to <i>Eucalyptus loxophleba</i>, only stands dominated by the subspecies <i>loxophleba</i> are included in the Wheatbelt Woodlands TEC.</p> <p>As GHD mapped the Proposal area as <i>Eucalyptus loxophleba</i> subsp. lissophloia open mallee forest, this vegetation type is not considered to be TEC.</p>

	<p>The 0.041 ha proposal area is not likely to be representative of a high level of biological diversity given its small size, disturbed condition and immediate proximity to an existing road.</p> <p>Based on the above, the proposed clearing is not likely to be at variance to this Principle.</p>
<p>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.</p>	<p>GHD (2016) undertook a fauna survey of the larger Great Eastern Highway Package 4b and 5 area, which includes this proposal area.</p> <p>GHD reported 76 fauna species, consisting of 62 birds, three reptiles, ten mammals and one amphibian. Nine were introduced species (seven mammals and two birds). Two conservation significant fauna species were recorded in the wider survey area - Malleefowl and the Rainbow Bee-eater. The closest Malleefowl record is 1.4km northeast of the Proposal area. Although Malleefowl may use this area for foraging, there were no observed mounds within the Proposal area. There were no Rainbow Bee-eater records within 2km of the Proposal area. Although the Proposal area may be within the known range of Carnaby's Cockatoo and on the eastern range of Baudin's Cockatoo, GHD did not record any evidence of breeding, foraging or roosting within the wider survey area.</p> <p>The 0.041 ha proposal area is not known to contain unique or significant habitat features and is not considered significant habitat for fauna.</p> <p>Based on the above, the proposed clearing is not at variance to this Principle.</p>
<p>Principle (c) – Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.</p>	<p>Ecologia (2020) undertook a targeted flora survey between 311-339 SLK. No listed Threatened Flora were recorded within the survey area.</p> <p>Based on the above, the proposed clearing is not at variance to this Principle.</p>
<p>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.</p>	<p>Main Roads' Eucalypt Woodlands of the Western Australian Wheatbelt Woodland Factsheet advises that in regard to <i>Eucalyptus loxophleba</i>, only stands dominated by the subspecies <i>loxophleba</i> are included in the Wheatbelt Woodlands TEC. As GHD mapped the Proposal area as <i>Eucalyptus loxophleba</i> subsp. <i>lissophloia</i> open mallee forest, then this vegetation type is not considered to be TEC.</p> <p>Based on the above, the proposed clearing is not at variance to this Principle.</p>
<p>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.</p>	<p>GHD (2016) mapped the vegetation in the Proposal area as Condition 3 <i>Eucalyptus loxophleba</i> subsp. <i>lissophloia</i> open mallee forest.</p> <p>One vegetation association of Beard (1976) has been mapped over the Survey area, namely:</p>

	<ul style="list-style-type: none"> Vegetation Association 8 described as a Medium woodland; salmon gum & gimlet <p>The pre-European extent remaining of this Vegetation Association is 346,425 ha (49.87%) at a Statewide level with 59,992 (36.6%) remaining at a LGA level, over the 30% Guidance value.</p> <p>The removal of up to 0.01 ha of Condition 3 vegetation is not likely to represent an area that is significant as a remnant of native vegetation.</p> <p>Based on the above, the proposed clearing is not likely to be at variance to this Principle.</p>
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.	<p>The <i>Eucalyptus loxophleba</i> subsp. <i>Lissophloia</i> vegetation type mapped from the proposal area is not representative of riparian vegetation. The closest mapped waterway is approximately 6 km to the west of the Proposal area.</p> <p>Based on the above, the proposed clearing is not at variance to this Principle.</p>
Principle (g) – Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.	<p>DPIRD mapping indicates that the proposal area has:</p> <ul style="list-style-type: none"> <3% high to extreme hazard water erosion risk 30-50% high to extreme wind erosion risk 0% very poor to poor site drainage potential 6% moderate salinity hazard <p>The Australian Soil Resource Information System (ASRIS) has been used to determine the likelihood of Acid Sulphate Soils (ASS) occurring within the Proposal area. The ASRIS database (accessed 14-Mar-2024) indicates there is a low probability of occurrence within the Proposal area.</p> <p>The removal of 0.01 ha of vegetation is unlikely to cause appreciable land degradation.</p> <p>Based on the above, the proposed clearing is not likely to be at variance to this Principle.</p>
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.	<p>A search of Main Roads GIS shapefiles layers indicates the closest nature reserve, conservation areas or Bush Forever Sites is located 10 km west of the Proposal area. Therefore, no impacts to conservation areas are anticipated.</p> <p>Based on the above, the proposed clearing is not at variance to this Principle.</p>
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.	<p>The Proposal area and wider 10km Study area is not located within a Public Drinking Water Source Area (PDWSA) or a groundwater or surface water area proclaimed under the <i>Rights in Water and Irrigation Act 1914</i> (RIWI Act), or a catchment proclaimed under the <i>Country Areas Water Supply Act 1947</i> (CAWS Act).</p> <p>The construction of the offshoot drain will require some minor excavation below the surface, but as the Proposal is planned to</p>

	<p>occur over the summer months, no dewatering will be required, hence no change to surface or groundwater level or quality is expected.</p> <p>Based on the above, the proposed clearing is not at variance to this Principle.</p>
<p>Principle (j) – Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.</p>	<p>The removal of up to 0.01 ha of vegetation is unlikely to cause, or exacerbate, the incidence or intensity of flooding.</p> <p>DPIRD mapping indicates that the area has:</p> <ul style="list-style-type: none"> • <3% moderate to high flood hazard • <3% moderate to very high waterlogging and inundation risk <p>A review of ArcGIS shapefiles has confirmed that the proposed works will not disturb or interrupt any natural drainage and surface run-off patterns.</p> <p>Based on the above, the proposed clearing is not at variance to this Principle.</p>
<p>Methodology Used and References:</p>	<p>Proposal Area (Appendix 1)</p> <p>Photographs of the clearing area (Appendix 1)</p> <p>GHD (2016) Biological Report</p> <p>Ecologia (2020) Biological Report</p> <p>Main Roads (2021) Technical Guidance on the Threatened Ecological Community Eucalypt Woodlands of the Western Australian Wheatbelt</p> <p>Australian Soil Resource Information System (ASRIS) Mapping (http://www.asris.csiro.au/mapping/viewer.htm)</p> <p>DPIRD mapping (https://maps.agric.wa.gov.au/nrm-info/)</p> <p>Main Roads GIS Shapefiles</p>

9. REHABILITATION, REVEGETATION AND OFFSETS

<p>Offset Proposal:</p>	<p>No offset proposal is required as the proposed clearing will not result in significant residual impacts to native vegetation within the region. Further, an offset has already been paid for the adjacent road Proposal based on 17.08 ha of clearing. Clearing for this Proposal under CPS818 is almost complete with 16.46 ha of native vegetation cleared to date.</p>
<p>Revegetation and Rehabilitation:</p>	<p>No temporary clearing will be undertaken as part of the Proposal activities.</p>

10. COMPLIANCE WITH CPS818

The clearing associated with the Proposal is not at variance with the Clearing Principles. Additional management actions under CPS 818 are detailed below.

Impact of Clearing	Yes/No or NA	Further Action Required
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1. Proposal is within a Region that: <ul style="list-style-type: none"> • has rainfall greater than 400mm; and, • is South of the 26th parallel; and, • works are necessary in 'Other than dry conditions'; and, • works have potential for uninfested areas to be impacted. 	No	Standard Vehicle and Plant Management Actions from Annexure 204B (TABLE 204B.9.1) will be applied.
2. Do the proposed works require clearing within or adjacent to DBCA managed lands in non-dry conditions?	No	No further action required.
3. Main Roads has been notified by DWER or an environmental specialist that the area to be cleared is susceptible to a pathogen other than dieback.	No	No further action required.
4. Weeds are likely to spread to and result in environmental harm to adjacent areas of native vegetation that are in good or better condition.	No	No further action required.
Completed By:		
Name	REDACTED	
Signature	REDACTED	
Job Title	Senior Environment Officer	
Date	14 March 2024	

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

DECISION ON CLEARING ASSESSMENT	
Name	REDACTED
Signature	REDACTED
Job Title	Principal Environmental Officer
Date	18/03/2024

Appendix 1 -Figures and Photos





StreetView Image (May 2023) looking northeast