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Clearing Assessment Report – CPS 818

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Removal of one tree - Chidlow York Road SLK 28.98
Chidlow York Road (M010)
Wheatbelt Region

EOS#3608

D25#882601
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1 PROPOSAL

1.1 Purpose and Justification

Chidlow York Road is a single carriageway, inter-town linkage between Chidlow and York for commuter traffic and serves as an agricultural freight route for the surrounding farming industry. The road has an existing seal width of 7-8 metres (m). The narrow-sealed width poses a safety risk for road users. To reduce the incidence of run off road crashes, improve road condition to current road safety standards and enhance overall safety and functionality of the road, Main Roads proposes to extend the seal to a target seal width of 9 m. Culvert extension works will also be undertaken in multiple locations to cater for the road seal widening works.

1.1.1 Main Roads Approach to Road Safety and the Environment

Main Roads is committed to minimising the environmental impacts of all of its activities and manages the State road network to achieve balanced economic, social, safety and environmental benefits for the community. Main Roads recognises that Western Australia's environment is significant from a global perspective and the unique conservation values that are contained within its road reserve. Main Roads Road network often adjoins natural areas, and, in some locations, the reserve itself hosts remnant vegetation with high environmental values. Although the reserves were not established for this purpose, Main Roads recognises that it has a responsibility to conserve the environmental values that occur within the State's Road network and minimise the impact its proposals have on the environment. In addition to providing a safe and efficient road network for all people using the roads under its control, Main Roads is also committed to protecting the natural environment.

In accordance with National and State Government road safety policies, Main Roads is also committed to substantially reducing road trauma on the road network through Safe System principles. The Safe System approach acknowledges that more than two thirds of all serious crashes are due to human error rather than deliberate risk taking (e.g. speeding or drink driving) and seeks to improve behaviour through education and enforcement while managing the safety of vehicles, speeds and the road and road infrastructure. It is shown that improving sub-optimal road formation will substantially reduce the likelihood and severity of road crashes. For example, according to the Road Safety Management Guideline, increasing the sealed shoulder from 0.5 m to 2 m will reduce Killed and Seriously Injured numbers by more than 50%.

As the statutory authority responsible for providing and managing a safe and efficient main road network in Western Australia, Main Roads focuses on improving road safety by thoroughly considering all environmental, economic and community benefits and impacts. It operates on a hierarchy of avoiding, minimising, reducing and then, if required, offsetting our environmental impacts. This has been achieved through changes in proposal scope and design. Main Roads regularly reduces its clearing footprint by restricting earthworks limits for proposals, steepening batters, installing barriers, establishing borrow pits in cleared paddocks and avoiding temporary clearing for storage, stockpiles and turn around bays to avoid and minimise its impacts.

Further details on measures to avoid, minimise and reduce are provided in Section 1.5.

1.2 Proposal Scope

Main Roads proposes to undertake widening and shoulder sealing works on Chidlow York Road. The proposed works will comprise the following:

- Widening of Chidlow York Road to achieve a 9 m road seal width
- Culvert extensions where required to accommodate the widening
- Installation of Audible Edge Line (AEL) and Audible Centre Line (ACL) marking

- Reinstating table drains and offshoot drains as necessary to ensure no pooling of water.

To deliver the scope of works and achieve the intended road safety outcomes, one *Eucalyptus wandoo* tree with a Diameter at Breast Height (DBH) >300 mm that is within 5 m of road centreline (RCL) is required to be cleared:

- SLK 28.98 – *E. wandoo* 5m from RCL (DBH 1300mm and 25m tall)

1.3 Proposal Location

The Clearing Area comprises one individual tree located on Chidlow York Road (M010) at Straight Line Kilometre (SLK) 28.98 between the towns of Chidlow and York, in the Shire of York.

1.4 Clearing Details

Proposed Clearing to be undertaken using CPS 818:

Clearing of one mature *Eucalyptus wandoo* tree totalling approximately 0.0056 hectares (ha).

Areas of Native Vegetation Clearing:

The areas of native vegetation to be cleared are shown in **Figure 1**.

Type of Native Vegetation:

The type of vegetation to be cleared under this Proposal is *Eucalyptus wandoo* mid woodlands. Several introduced weed species are present within the understorey vegetation which reflects the highly modified agricultural landscape surrounding the Clearing Area.

1.5 Alternatives to Native Vegetation Clearing Considered During Proposal Development

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

- Preferentially locating the new alignment in cleared pasture areas over the existing road reserve, however this was considered cost prohibitive e.g. due to cost of resumption of farmland and construction of completely new road rather than widening in existing alignment and premature redundancy of State road asset, lack of adequate funding, stakeholder engagement, resource requirements. Under this option, clearing would still be required for tie-ins to the existing road network.
- Do not upgrade the road, however this will potentially result in a poorer safety outcome and may result in future fatalities or serious injuries and further degradation of the State road asset.
- Main Roads retains frangible vegetation where a clear zone is to be established for road projects. For this project, however, clearing will only be required to accommodate the road formation, with no clear zone being established. Accordingly, the retention of frangible vegetation does not apply to this proposal.
- Reducing the speed limit to minimise clearing requirements, while still balancing safety (driver fatigue) and freight efficiency.

1.6 Measures to Avoid, Minimise, Reduce and Manage Proposal Clearing Impacts

The design and management measures implemented to avoid and minimise the potential clearing impacts of the Proposal are provided in Table 1.



Figure 1. Clearing Area 28.98 SLK

Table 1. Measures Undertaken to Avoid, Minimise, Reduce and Manage the Proposal Clearing Impacts

Design or Management Measure	Discussion and Justification
Alignment to one side of existing road	This is not a suitable measure as the works are being undertaken on the existing formation and within the maintenance areas, i.e. there is no realignment or adding of additional traffic lanes involved. Changing the alignment would result in increased clearing of native vegetation.
Alternative alignment located within pasture or degraded areas	This is not a suitable measure as the works are being undertaken on the existing formation and within the maintenance areas, i.e. there is no realignment or adding of additional traffic lanes involved.
Simplification of design to reduce number of lanes and/or complexity of intersections	The design is already very simple, with works outside of the existing road formation footprint and maintenance zone kept to a minimum. The widening works cannot be further simplified whilst retaining the necessary safety benefits and construction integrity. In locations where there are side roads, the seal should tie into existing roads without environmental impact.
Steepen batter slopes	The chosen work method of profiling and ex-situ stabilisation of the road shoulders will mean that there will be limited intrusion into the adjacent verge. Almost all of the work to form and seal the shoulders is able to be done from the existing roadway. No new batters will be constructed under this Proposal.
Installation of barriers	Mature trees that are >5 m from road centreline are to be retained to reduce the clearing footprint of the Proposal. Upon completion of the works, safety assessments are to be conducted on the mature trees within 6 m of centreline. Trees deemed to be dangerous will potentially have crash barriers installed to increase the safety of the road and avoid clearing of trees.
Installation of kerbing	As the works are for the most part being done on the existing rural open road highway raised formation and within the existing maintenance zone, incorporating kerbing would not provide any material benefit in lessening the construction footprint but would significantly add to the cost of the works. It may also introduce a safety hazard, which is counter-productive to the project purpose.
Use of existing cleared areas for access tracks, construction storage and stockpiling	Further clearing for the project will be avoided as supporting infrastructure such as the site office, materials storage areas, construction vehicles/machinery parking and access tracks will be located on previously disturbed or cleared areas.
Drainage modification	Culvert extensions are included to give an absolute minimum clearance of 0.5m between the new seal edge and the culvert end wall. Table drain batter slopes have been steepened to reduce the project footprint as referred to above.

1.7 Approved Policies and Planning Instruments

The clearing of native vegetation in Western Australia is regulated under the 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, Main Roads has also had regard to the below instruments where relevant.

Other Legislation potentially relevant 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 and D Act)
- *Soil and Land Conservation Act 1945* (WA)
- *Rights in Water and Irrigation Act 1914* (WA) (RIWI Act)
- *Aboriginal Heritage Act 1972* (WA).

Environmental Protection Policies:

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

Other relevant policies and guidance documents:

- Environmental Offsets Policy (Government of Western Australia, 2011)
- A guide to the assessment of applications to clear native vegetation (DER, 2014)
- Procedure: Native vegetation clearing permits (DWER, 2021)
- Environmental Offsets Guidelines (Government of Western Australia, 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.
- Referral guideline for 3 WA threatened black cockatoo species (DAWE, 2022)

2 SCOPE AND METHODOLOGY ASSESSMENT OF CLEARING

Native vegetation will be cleared to accommodate this Proposal. This clearing will be undertaken using the Main Roads Statewide Clearing Permit CPS 818.

To comply with CPS 818, Main Roads must prepare a Clearing Assessment Report (CAR).

The CAR outlines the key activities associated with the Proposal, the existing environment and an assessment of native vegetation clearing. This assessment provides an evaluation of the vegetation clearing impacts associated with the Proposal using the ten Clearing Principles listed under s51 of the *Environmental Protection Act 1986* (EP Act) and strategies used to manage vegetation clearing.

2.1 Report Terminology and Sources

The following terms are used in this Clearing Report:

Clearing Area – The maximum amount of native vegetation to be cleared for the Proposal that will accommodate the designed earthworks and, typically, a nominal buffer to allow for the safe movement of machinery during construction. The Clearing Area for this proposal is 0.0056 ha.

Study Area – Area covered by the Desktop Assessment. The Study Area for the Proposal is confined to a local area of a 20 km radius.

Survey Area – Area covered by Biological Survey(s).

2.2 Desktop Assessment

A desktop assessment of the Study Area was undertaken by viewing internal datasets and other government agency managed databases, and consulting with relevant stakeholders where necessary.

GIS layer viewing and mapping is done using ArcMap and/or Main Roads corporate mapping system known as iMaps. Referencing of the GIS layers accessed is done under the relevant methodology section of each clearing principle. Government managed databases were searched to locate additional information, which are found under References in Section 10.

2.3 Surveys and Assessments

Biological and targeted surveys conducted for the proposal are outlined in Table 2 and a summary of the findings in these reports are presented in Sections 3.1 and 3.2.

Table 2. Summary of Biological Surveys Relevant to the Proposal

Consultant and Survey Name	Survey Details
AECOM (Australia) Pty Ltd (2022) Chidlow York Road 2.57 - 46.1 SLK Upgrade Biological Survey	Survey Area: the Survey Area comprised a linear corridor totalling 174.46 ha from SLK 2.57 – SLK 46.10. Type: Detailed and Targeted Flora and Vegetation Survey, Basic Fauna Survey and Targeted Black Cockatoo Habitat Assessment. Timing: Fieldwork conducted from 4 th to 8 th of October 2021. Survey Results Shapefile TRIM Ref: D22#344610 Document TRIM Ref: D22#113269

3 SURVEY RESULTS

3.1 Summary of Flora and Vegetation Surveys

Main Roads Western Australia (Main Roads) commissioned AECOM Australia Pty Ltd (AECOM) to undertake a biological survey to support the proposed upgrades to Chidlow York Road, also known as 'Great Southern Highway', between the Lakes Roadhouse and York. The Survey Area was a linear corridor totalling 174.46 ha from Straight Line Kilometre (SLK) 2.00 – 46.10. The biological survey included a Detailed and Targeted Flora and Vegetation Survey, Basic Fauna Survey, and Targeted Black Cockatoo Habitat Assessment.

During the field survey one patch of the Eucalypt Woodlands of the Western Australian Wheatbelt Threatened Ecological Community (TEC) (hereafter referred to as the Eucalypt Woodlands TEC) was recorded. This patch was in a Very Good condition and characterised by an overstorey of *Eucalyptus accedens* over sparse native shrubs and herbs. However, this patch of TEC does not coincide with the Clearing Area. Roadside vegetation was assessed to determine whether it was representative of the Eucalypt Woodlands TEC. The assessment deemed roadside vegetation was not representative of Eucalypt Woodlands TEC due to weeds covering up to 100% of the understorey stratum and therefore not meeting the key diagnostic characteristics or condition thresholds outlined in the Approved conservation advice.

Six vegetation communities were mapped, none of which were considered to be restricted to the Survey Area and were mapped as extending into the 500 m context area. All roadside vegetation

showed some sign of decline from weed invasion, rubbish and edge effects, which is typical of roadside vegetation. Vegetation communities mapped within the Survey Area are described below:

- 1. AhCclm (Allocasuarina Forest):** *Allocasuarina huegeliana* low open forest over *Chamaescilla corymbosa* var. *corymbosa*, *Stylidium dichotomum* and *Lomandra micrantha* low open herbs with *Borya sphaerocephala*, *Neurachne alopecuroidea* and **Briza maxima* low grassland.
- 2. EwBeDf (Eucalypt Woodland):** *Eucalyptus wandoo* with occasional patches of *Eucalyptus accedens* mid woodland over *Bossiaea eriocarpa*, *Lechenaultia biloba* and *Hibbertia hypericoides* low open shrubland over *Desmocladius flexuosus*, *Opercularia vaginata* and *Dampiera linearis* low open herbland.
- 3. EaGtBm (Eucalypt Woodland):** *Eucalyptus accedens* low woodland over *Gastrolobium trilobum*, *Styphelia propinqua* and *Daviesia preissii* mid sparse shrubland over **Briza maxima*, *Austrostipa compressa* and *Thelymitra macrophylla* mixed low sparse grass and herbland.
- 4. CcHhLs (Eucalypt Woodland):** *Corymbia calophylla* and *Eucalyptus marginata* mid woodland over *Hibbertia hypericoides*, *Bossiaea ornata* and *Banksia dallanneyi* subsp. *dallanneyi* low open shrubland over *Lepidosperma squamatum*, *Tetraria octandra* and *Lepidosperma leptostachyum* low open sedgeland.
- 5. MsJs (Wetland):** *Melaleuca* sp., and *Tecticornia* sp. mid to low sparse shrubs over *Juncus subsecundus*, *Millotia tenuifolia*, *Isolepis marginata* mixed sedges and herbland
- 6. ErMiAb (Wetland):** *Eucalyptus rudis* subsp. *rudis* mid open woodland over *Melaleuca incana* and *Acacia acuminata* tall open shrubland over **Avena barbata* and **Ehrharta calycina* tall grassland. EaGtBm

The proposed clearing will impact only one of the six vegetation types that were mapped within the Survey Area. The one tree within the Clearing Area was broadly mapped as being part of a Eucalypt Woodland (EwBeDf).

No threatened flora species were recorded by AECOM (2022) and no Threatened flora species were considered likely to occur in the Survey Area based on the post survey Likelihood of Occurrence Assessment. Four Priority flora species were recorded within the Survey Area:

- *Adenanthos cygnorum* subsp. *chamaephyton* (P4), comprising one individual, the identification of this subspecies is subjective (pers comm, taxonomist at Western Australian Herbarium)
- *Drosera albonata* (P2), comprising 290 individuals at six locations
- *Hemigenia platyphylla* (P4), comprising 324 individuals along REDACTED km of the Survey Area
- *Synaphea diabolica* (P3), comprising 103 individuals along REDACTED km of the Survey Area.

Despite being recorded within the Survey Area, the above mentioned Priority flora species do not occur within the Clearing Area. The AECOM (2022) survey recorded Priority flora approximately 4.7 km west of the Clearing Area.

3.2 Summary and Analysis of Fauna Surveys

The AECOM (2022) Basic Fauna Survey and Targeted Black Cockatoo Habitat Assessment was undertaken to identify potential Black Cockatoo breeding trees, assess foraging quality, and undertake fauna habitat mapping. Five fauna habitats were mapped by AECOM (2022):

- Eucalyptus Forest - Contains tall forest trees such as Wandoo, Jarrah and Marri with sparse understorey of proteaceous shrubland.

- Casuarina Shrubland - Casuarina dominant shrubland. Small lizards and skinks could be found amongst the leaf litter and low-lying dense understory.
- Trees - Remnant overstory trees in agricultural areas, lacking understorey. Groundcover of pasture weeds.
- Wetland - Wetland ecosystem vegetation.
- Planted - Revegetated areas including Eucalypts, tall understorey shrubs and sparse herbs.

Of these five fauna habitat types, the most common was Eucalypt Forest which provides suitable habitat for:

- Three Black Cockatoo species listed under the EPBC Act and BC Act, Carnaby's Cockatoo (*Zanda latirostris*) (Endangered) and Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*) (Vulnerable), which were directly observed, and Baudin's Cockatoo (*Zanda baudinii*) (Endangered) which was indirectly observed through foraging evidence in the Survey Area.
- The Red-tailed Phascogale (*Phascogale calura*) listed as Vulnerable under the EPBC Act and Conservation Dependent under the BC Act, and Southern-western Brush-tailed Phascogale (*Phascogale tapoatafa wambenger*) listed as Conservation Dependent under the BC Act. These two species have been recorded in the Study Area based on the desktop study results (i.e. previously records of both species in the study Area).

Breeding, roosting and foraging habitat was observed for all three Black Cockatoo species. Two trees with hollows suitable for use and evidence of use were recorded, eight trees contained suitable hollows with no evidence of use and another 18 trees contained hollows not currently suitable but could become suitable in the future when hollows/limbs degrade or fall. The Clearing Area contains one DBH tree without hollows (AECOM, 2022). A total of 2,067 DBH potential breeding trees were recorded in the wider AECOM (2022) survey area, including the tree within the Clearing Area. Foraging quality for the Black Cockatoo species was predominantly 'Moderate' for Carnaby's Cockatoo and Baudin's Cockatoo, and 'Low' for Forest Red-tailed Black Cockatoo.

3.2.1 Black Cockatoos

Main Roads has commissioned Australia Black Cockatoo Specialists (ABCS) to provide a species list for plant species utilised by Black Cockatoos: "*Plants used by Black Cockatoos in the South-West of Western Australia*" (ABCS, 2025).

The resultant list has been compiled from a variety of sources, including 18 referenced publications (including Bamford and Groom) and the professional expertise of the author Rick Dawson. The comprehensive list of flora species utilised by Black Cockatoo identifies a High, Medium or Low value to each of three Black Cockatoo species for the factors of foraging, roosting and nesting.

Utilising this species list, Main Roads is able to conduct detailed analysis of the foraging value of species present within vegetation types which occur in the Clearing Area. This information is subsequently able to be used in the development of a site condition score to inform a foraging assessment model which also incorporates site context and stocking rate.

Vegetation within the Clearing Area was assigned Black Cockatoo habitat value based on the Bamford Scoring System (Bamford 2020). The Bamford system provides a method of calculating Black Cockatoo habitat value based on the type, density and condition of trees and shrubs in an area and can be influenced by the context such as the availability of foraging habitat nearby. As each of the Black Cockatoo species have different preferred forage species, the Bamford system assigns different values for each of the species. Analysis of the vegetation type within the Clearing Area has been provided based on the foraging value to relevant species of Black Cockatoo as presented in Table 3.

Within the Clearing Area the following Black Cockatoo habitat values were recorded:

- 0.0056 ha (100 %) as 3/10

The Clearing Area contains one suitable DBH tree without hollows. No Black Cockatoo breeding sites were recorded within the Clearing Area or 20 km Study Area. No Black Cockatoo roosting sites were recorded within the Clearing Area or 10 km radius of the Clearing Area.

Table 3. An assessment of proposed CPS 818 clearing against Bamford Consulting Ecologists (2020) scoring system for the assessment of foraging value of vegetation for Black Cockatoos

Aspect	Description of proposed clearing
A. Site condition (out of 6)	
Description of Clearing	Analysis
The Clearing Area consists of one <i>E. wandoo</i> tree with no native understorey. The proposed clearing area is not representative of a Eucalypt Woodland, as was broadly mapped by AECOM (2022).	The one tree proposed for clearing provides limited foraging value for Black Cockatoo species. According to Australian Black Cockatoo Specialists (2025), <i>E. wandoo</i> provides low quality foraging habitat for Carnaby's Black Cockatoo and is not a known foraging species for Forest Red-tailed Black Cockatoo or Baudin's Black Cockatoo. The main Black Cockatoo habitat value associated with <i>Eucalyptus wandoo</i> is as a potential roosting and breeding tree. According to Australian Black Cockatoo Specialists (2025), <i>E. wandoo</i> is a high value breeding and roosting tree for Carnaby's Cockatoo and a high value breeding tree for Forest Red-tailed Black Cockatoo. It is a low value breeding and roosting species for Baudin's Cockatoo. The tree proposed for clearing currently contains no hollows suitable for Black Cockatoo breeding. The tree proposed for clearing is not mapped as a known roosting site.
	Score: 2
B. Site Context (out of 3)	
Description of Clearing	Analysis
Within the local area (15 km radius of the Clearing Area), there is 31,315 ha of remnant vegetation which may be available foraging habitat for Black Cockatoo species. Total proposed clearing of suitable black cockatoo habitat is 0.0056 ha. The Clearing Area is approximately 38 km from the nearest confirmed Forest Red-tailed Black Cockatoo breeding site, approximately 24 km from the nearest confirmed Baudin's/Carnaby's Cockatoo breeding site. Therefore, the Clearing Area is not within an area where breeding is known/likely.	Vegetation proposed to be cleared represents 0.00002% of the existing native vegetation within the local area (15 km radius of the Clearing Area).
	Score: 0
C. Species Stocking Rate (out of 1)	
Description of Clearing	Analysis
Forest Red-tailed Black Cockatoo and Carnaby's Cockatoo were directly observed (seen and heard) during the AECOM (2022) survey, and foraging evidence of all three Black Cockatoo species was located.	Based on the findings of AECOM (2022), within the nearby area, all three Black Cockatoo species are seen or reported regularly and/or there is abundant foraging evidence.
	Score: 1
Total Score (out of 10)	3

The foraging value of the Clearing Area, as presented in Table 3 above, is more site-specific than the AECOM (2022) Survey Area which covered approximately 174.46 ha. As such, information presented in Table 3 is used in the assessment of the Clearing Principles as it relates to Black Cockatoos.

4 DESKTOP ASSESSMENT OF VEGETATION

4.1 Desktop Vegetation Description

The tree in the Clearing Area is located in the Jarrah Forest (JAF) IBRA Bioregion. The Clearing Area is located within the Shire of York.

Tables 4, 5 and 6 provide details of the broadly mapped vegetation types and their condition within the Clearing Area and the remaining extents of these associations.

Table 4. Summary of Native Vegetation Types within the Clearing Area and AECOM (2022) Survey Area

Vegetation Type	Extent within Clearing Area (ha)	Total Extent Mapped (ha) within Survey Area
AhCcLm (Allocasuarina Forest) <i>Allocasuarina huegeliana</i> low open forest over <i>Chamaescilla corymbosa</i> var. <i>corymbosa</i> , <i>Stylidium dichotomum</i> and <i>Lomandra micrantha</i> low open herbs with <i>Borya sphaerocephala</i> , <i>Neurachne alopecuroidea</i> and <i>*Briza maxima</i> low grassland.	0	2.07
EwBeDf (Eucalypt Woodland) <i>Eucalyptus wandoo</i> with occasional patches of <i>Eucalyptus accedens</i> mid woodland over <i>Bossiaea eriocarpa</i> , <i>Lechenaultia biloba</i> and <i>Hibbertia hypericoides</i> low open shrubland over <i>Desmocladius flexuosus</i> , <i>Opercularia vaginata</i> and <i>Dampiera linearis</i> low open herbland.	0	22.0
CcHhLs (Eucalypt Woodland) <i>Corymbia calophylla</i> and <i>Eucalyptus marginata</i> mid woodland over <i>Hibbertia hypericoides</i> , <i>Bossiaea ornata</i> and <i>Banksia dallanneyi</i> subsp. <i>dallanneyi</i> low open shrubland over <i>Lepidosperma squamatum</i> , <i>Tetraria octandra</i> and <i>Lepidosperma leptostachyum</i> low open sedgeland.	0	21.28
MsJs (Wetland) <i>Melaleuca</i> sp., and <i>Tecticornia</i> sp. mid to low sparse shrubs over <i>Juncus subsecundus</i> , <i>Millotia tenuifolia</i> , <i>Isolepis marginata</i> mixed sedges and herbland	0	0.5
ErMiAb (Wetland) <i>Eucalyptus rudis</i> subsp. <i>rudis</i> mid open woodland over <i>Melaleuca incana</i> and <i>Acacia acuminata</i> tall open shrubland over <i>*Avena barbata</i> and <i>*Ehrharta calycina</i> tall grassland.	0	1.52
Other Trees – comprising of trees over weeds Cleared – devoid of native species Planted – garden scape	0.0056 0 0	25.84 95.54 0.81
Total	0.0056	174.46

Table 5. Vegetation Condition within Clearing Area and AECOM (2022) Survey Area

Vegetation Condition (EPA, 2019)	Extent within Clearing Area (ha)	Total Extent Mapped (ha) within Survey Area
Excellent	0	0.49
Very Good	0	27.59
Good	0	9.64
Degraded	0	8.82
Completely Degraded	0.0056	27.14
Cleared	0	95.54
Unassigned	0	5.23
Total	0.0056	174.46

Table 6. Pre-European Vegetation Representation

Pre-European Vegetation Association	Scale	Pre-European Extent (ha)	Current Extent (ha)	% Remaining	% Current Extent in DBCA Managed Land (proportion of pre-European Extent)
Veg Assoc No. 4 Medium woodland; marri & wandoo	Statewide	1,054,279.89	284,102.41	26.95	6.43
	IBRA Bioregion <i>Jarrah Forest (JAF)</i>	1,022,712.69	277,087.18	27.09	0.84
	IBRA Sub-region <i>Northern Jarrah Forest (JAF01)</i>	614,200	197,903	32.22	9.85
	Local Government Authority <i>Shire of York</i>	65,867.08	37,726.07	57.28	39.98

5 ASSESSMENT AGAINST THE TEN CLEARING PRINCIPLES

In assessing whether the Proposal’s proposed clearing is likely to have a significant impact on the environment, the Proposal was assessed against the ten Clearing Principles (EP Act, Schedule 5).

Each principle has been assessed in accordance with the former Department of Environment Regulation (now Department of Water and Environmental Regulation (DWER) ‘*A Guide to the Assessment of Applications to Clear Native Vegetation*’ (Department of Environment Regulation, 2014) and other relevant clearing permit application decision reports prepared by DWER.

The proposed clearing is not likely to be at variance, or not at variance, to all of the Clearing Principles.

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Proposed clearing is not likely to be at variance to this Principle.

The proposed clearing consists of one *Eucalyptus wandoo* tree totaling approximately 0.0056 ha. The condition of the vegetation to be cleared is Degraded to Completely Degraded, with an understorey completely dominated by agricultural weeds and devoid of native species. The one tree proposed for clearing is not Threatened or Priority-listed flora, nor does it form part of a Threatened Ecological Community (TEC) or Priority Ecological Community (PEC).

The main biodiversity value of the tree proposed for clearing is as potential breeding and roosting habitat for conservation significant Black Cockatoo species. According to ABCS (2025), E.

wandoo is a high value breeding and roosting tree for Carnaby’s Cockatoo and a high value breeding tree for Forest Red-tailed Black Cockatoo. It is a low value breeding and roosting species for Baudin’s Cockatoo. Whilst the tree proposed for clearing is a suitable DBH tree, it does not currently contain hollows suitable for Black Cockatoo breeding (AECOM, 2022). The tree is not mapped as a known roosting site.

In terms of Black Cockatoo foraging value, *E. wandoo* provides low quality foraging habitat for Carnaby’s Black Cockatoo and is not a known foraging species for Forest Red-tailed Black Cockatoo or Baudin’s Black Cockatoo (ABCS, 2025). The significance of the Clearing Area for Black Cockatoos is further assessed in Clearing Principle (b).

The tree to be cleared is located more than one kilometre from any mapped Conservation Reserve.

In summary, the native vegetation proposed to be cleared is not considered to comprise a high level of biological diversity given it consists of a single tree that is not Threatened or Priority-listed flora, nor does it form part of a Threatened or Priority Ecological Community or significant ecological linkage. The main biodiversity value of the tree proposed for clearing is the potential breeding and roosting habitat it may provide for conservation significant Black Cockatoo species. However, the tree does not currently contain hollows suitable to support Black Cockatoo breeding and it is not known to currently support roosting. Contextually, it provides a very small percentage of locally available foraging habitat and represents low foraging value for Carnaby’s Cockatoo only. Furthermore, there are no known Black Cockatoo breeding sites within 20 km that would be dependent on the single tree proposed for clearing as critical foraging habitat and no known roost sites within 10 km.

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

Methodology

- ABCS (2025)
- AECOM (2022)
- Government GIS Shapefiles:
 - DBCA Threatened and Priority Ecological Community database search (Accessed 18/07/2025)
 - DBCA Threatened and Priority flora database search (Accessed 18/07/2025)

(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.

Proposed clearing is not likely to be at variance to this Principle.

The main fauna habitat value of the single *E. wandoo* tree proposed for clearing is as potential breeding and roosting habitat for conservation significant Black Cockatoo species. According to ABCS (2025), *E. wandoo* is a high value breeding and roosting tree for Carnaby’s Cockatoo and a high value breeding tree for Forest Red-tailed Black Cockatoo. It is a low value breeding and roosting species for Baudin’s Cockatoo. Whilst the tree proposed for clearing is a suitable DBH tree, it does not currently contain hollows suitable for Black Cockatoo breeding (AECOM, 2022). The tree is not mapped as a known roosting site.

In terms of Black Cockatoo foraging value, *E. wandoo* provides low quality foraging habitat for Carnaby’s Black Cockatoo and is not a known foraging species for Forest Red-tailed Black Cockatoo or Baudin’s Black Cockatoo (ABCS, 2025).

To determine the significance of the foraging value in the Clearing Area, it is necessary to consider proximity to known breeding and roosting sites. The Clearing Area is approximately 38 km from the nearest confirmed Forest Red-tailed Black Cockatoo breeding site and approximately 24 km from the nearest confirmed Baudin's/Carnaby's Cockatoo breeding site. With respect to roosting, the nearest Black Cockatoo roosting site is approximately 14 km. Contextually, there is 31,315ha of remnant vegetation which may be available foraging habitat for Black Cockatoo species within the local area (15 km radius). The clearing of 0.0056 ha represents approximately 0.00002% of the existing native vegetation within the local area. Given the lack of known breeding and roosting sites in proximity to the tree proposed for clearing, and the availability of abundant habitat, the proposed clearing will not impact on habitat critical to the survival of Black Cockatoo species.

Apart from Black Cockatoos, the Clearing Area offers negligible habitat for other fauna species given the lack of native understorey species to provide shelter and dispersal habitat for ground-dwelling fauna. Although the AECOM (2022) fauna survey noted there are DBCA fauna records of other fauna species in the Study Area, such as the South-western brush-tailed Phascogale (*Phascogale tapoatafa wambenger*; Conservation Dependent – BC Act) and Red-tailed Phascogale (*Phascogale calura*; Vulnerable under the EPBC Act and Conservation Dependent under the BC Act), the Clearing Area would not constitute significant habitat for these species given the Degraded condition of the habitat, lack of connectivity to larger remnants of native vegetation and availability of much more suitable habitat locally (including large, intact tracts of land such as Wandoo National Park (>46,000 ha), Wambyn Nature Reserve (215 ha) and St Ronan's Nature Reserve (118 ha)).

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

Methodology

- ABCS (2025)
- AECOM (2022)
- Government GIS Shapefiles:
 - DBCA Threatened and Priority fauna database search (Accessed 21/07/2025)

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

Proposed clearing is not at variance to this Principle.

The Proposed clearing consists of one *E. wandoo* tree above an understorey dominated entirely by weeds. No native understorey species will be cleared, and *E. wandoo* is not a listed Threatened flora species.

Furthermore, no Threatened flora species were recorded by AECOM (2022) and no Threatened flora species were considered likely to occur in the Survey Area based on the post survey Likelihood of Occurrence Assessment.

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

Methodology

- AECOM (2022)

(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.

Proposed clearing is not at variance to this Principle.

AECOM (2022) mapped the Clearing Area as Degraded to Completely Degraded Trees over weeds. Based on the lack of native understorey, the Clearing Area does not meet the diagnostic criteria or condition thresholds to be considered representative of the Eucalypt Woodlands of the Western Australian Wheatbelt Threatened Ecological Community (AECOM, 2022; Department of the Environment and Energy, 2015).

The Clearing Area is not representative of any other TEC (AECOM, 2022).

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

Methodology

- AECOM (2022)
- Department of the Environment and Energy (2015)
- Government GIS shapefiles:
 - DBCA Threatened Ecological Community database search (Accessed 16/07/2025)

(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.

Proposed clearing is not likely to be at variance to this Principle.

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750 (i.e., pre-European settlement), below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001).

The Clearing Area occurs within the Jarrah Forest IBRA Bioregion which retains approximately 53.25 per cent of the pre-European vegetation extent (Government of Western Australia, 2019).

According to the broadscale mapping undertaken by Beard (Shepherd et al., 2001), the vegetation proposed to be cleared is broadly mapped as Vegetation Association 4 – Medium woodland; marri & wandoo. The remaining extent of this Vegetation Association is below the 30% retention target at the State, IBRA Bioregion and IBRA Subregion scales, but above the retention target at the Local Government Authority scale (see Table below).

Pre-European Vegetation Representation

Pre-European Vegetation Association	Scale	Pre-European Extent (ha)	Current Extent (ha)	% Remaining	% Remaining in DBCA Reserves
Veg Assoc No. 4 Medium woodland; marri & wandoo	Statewide	1,054,279	284,102	26.95	6.43
	IBRA Bioregion <i>Jarrah Forest (JAF)</i>	1,022,712	277,087	27.09	0.84
	IBRA Sub-region <i>Northern Jarrah Forest (JAF01)</i>	614,200	197,903	32.22	9.85
	Local Government Authority <i>Shire of York</i>	65,867	37,726	57.28	39.98

The Clearing Area consists of one remnant, roadside Wandoo tree (0.0056 ha) with no native understorey remaining. The single tree provides negligible landscape connectivity value and does not form a valuable ecological corridor. The lack of native understorey and dominance of agricultural weeds in the lower strata results in vegetation condition being Degraded to Completely Degraded and no longer being representative of a Medium Woodland.

Contextually, within a 20 km radius of the Clearing Area, there is approximately 53,471 ha of remnant native vegetation remaining. The clearing of one tree that equates to 0.0056 ha (0.00001% of remnant vegetation within 20 km of the Clearing Area) is unlikely to constitute a significant remnant of native vegetation in an area that has been extensively cleared.

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

Methodology

- AECOM (2022)
- Aerial photography
- Commonwealth of Australia (2001)
- Government of Western Australia (2019)
- Shepherd et al (2001)
- Government GIS shapefiles:
 - Native Vegetation Extent (Accessed 22/07/2025)
 - Pre-European vegetation (Accessed 22/07/2025)
 - Vegetation complexes (Accessed 22/07/2025)

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Proposed clearing is not at variance to this Principle.

Analysis of GIS hydrology datasets and Google Streetview imagery indicates the one roadside *E. wandoo* tree proposed for clearing is not growing in, or in association with, an environment associated with a watercourse or wetland. The tree is growing close to the edge of the road formation, which is an elevated part of the landscape in comparison to adjacent watercourses which are low points in the surrounding landscape. *E. wandoo* is not typically considered a riparian species (Western Australian Herbarium, 1998-).

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

Methodology

- Government GIS shapefiles:
 - Geomorphic Wetlands (Accessed 17/07/2025)
 - Ramsar Wetlands (Accessed 17/07/2025)
 - Important Wetlands (Accessed 17/07/2025)
 - Watercourses (Accessed 17/07/2025)
 - RIWI Act Rivers (Accessed 17/07/2025)
- Western Australian Herbarium (1998-)

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Proposed clearing is not likely to be at variance to this Principle.

The clearing of one roadside *E. wandoo* tree is unlikely to cause appreciable land degradation, noting that the local landscape has already been highly modified from broadscale agricultural

activities and the vegetation proposed to be cleared is small (0.0056 ha) and in a Degraded to Completely Degraded condition.

Clearing, construction works and project design will maintain the surface water hydrology in its current regime, thereby minimising the potential for waterlogging, flooding and water erosion from the proposed clearing. Given the minor scale and nature of the proposed clearing, the likelihood of wind erosion, salinisation or acid sulphate soil exposure is considered low.

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

Methodology

- Government GIS Shapefiles:
 - Acid Sulfate Soil Risk Map (Accessed 17/07/2025)
 - Soil landscape land quality – Water Erosion Risk (Accessed 17/07/2025)
 - Soil landscape land quality – Wind Erosion Risk (Accessed 17/07/2025)
 - Soil landscape land quality – Salinity Risk (Accessed 17/07/2025)
 - Soil landscape land quality – Surface Acidity (Accessed 17/07/2025)
 - Soil landscape land quality – Waterlogging Risk (Accessed 17/07/2025)
 - Soil landscape land quality – Flood Risk (Accessed 17/07/2025)

(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.

Proposed clearing is not likely to be at variance to this Principle.

The tree proposed to be cleared is greater than one kilometre from a conservation area.

The proposed clearing of one roadside tree is not likely to have an impact on the environmental values of any adjacent or nearby conservation area, not the clearing will not sever any ecological linkages to conservation areas or contribute to edge effects.

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

Methodology

- Government GIS Shapefiles:
 - DBCA Legislated Lands and Waters & Lands of Interest (Accessed 22/07/2025)

(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.

Proposed clearing is not likely to be at variance to this Principle.

The Clearing Area is not located within a Public Drinking Water Source Area or a proclaimed Groundwater Area under the RIWI Act; however, it is located within the proclaimed Avon River Surface Water Area.

There are no Ramsar or Nationally Important Wetlands within or nearby the Clearing Area. The native vegetation to be cleared is small in size (0.0056 ha) and construction works, and project design will maintain the surface water hydrology in its current regime. Given that the surface and groundwater regimes adjacent to the Clearing Area have been significantly altered due to agricultural development and the proposed clearing is very small in relation to the extent of vegetation remaining within the local catchment, the proposed clearing of one roadside *E. wandoo* tree is not likely to cause deterioration in the quality of surface or underground water.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.
<p>Methodology</p> <ul style="list-style-type: none"> • Government GIS Shapefiles: <ul style="list-style-type: none"> - RIWI Act, Surface Water Areas and Irrigation Districts (Accessed 16/07/2025) - CAWSA Part 2A Clearing Control Catchments (Accessed 16/07/2025) - RIWI Act, Groundwater Areas (Accessed 16/07/2025) - Public Drinking Water Source Areas (Accessed 16/07/2025) - Ramsar Wetlands (Accessed 16/07/2025) - Directory of Important Wetlands in Australia – Western Australia (Accessed 16/07/2025)

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

Proposed clearing is not likely to be at variance to this Principle.
<p>Desktop GIS databases indicate there is a low risk of waterlogging and flooding in the Clearing Area. The project design incorporates culvert extensions and drainage design measures to prevent localised flooding and maintain existing water flow paths. The clearing of one roadside <i>E. wandoo</i> tree is unlikely to cause, or exacerbate, the incidence or intensity of flooding.</p> <p>Based on the above, the proposed clearing is not likely to be at variance to this Principle.</p>
<p>Methodology</p> <ul style="list-style-type: none"> • Government GIS Shapefiles: <ul style="list-style-type: none"> - Soil landscape land quality – Waterlogging Risk (Accessed 17/07/2025) - Soil landscape land quality – Flood Risk (Accessed 17/07/2025)

6 VEGETATION MANAGEMENT

Main Roads will avoid clearing native vegetation where possible. Where clearing cannot be avoided then this clearing is kept to a minimum.

7 REHABILITATION, REVEGETATION AND OFFSETS

7.1 Revegetation and Rehabilitation

No temporary clearing will be undertaken as part of the Proposal activities and therefore no revegetation or rehabilitation will be conducted under CPS 818.

7.2 Offset Proposal

No offset proposal is required as the proposed clearing will not result in significant residual impacts to native vegetation within the region.

8 STAKEHOLDER CONSULTATION

Main Roads will undertake stakeholder consultation in accordance with CPS 818 Condition 8.

9 COMPLIANCE WITH CPS 818

Table 7 summarises what further pre-clearing impact assessment is required in accordance with CPS 818.

Table 7. Summary of Additional Management Actions Required by CPS 818

Impact of Clearing	Yes/No or NA	Further Action Required
<p>1. The CAR indicates that the clearing is 'At Variance' or 'May be at Variance' with one or more of the Clearing Principles.</p>	<p>No</p>	<p>No further action required.</p>
<p>2. Clearing is at variance or may be at variance with Clearing Principle (g) land degradation, (i) surface or underground water quality or (j) the incidence of flooding.</p>	<p>No</p>	<p>No further action required.</p>
<p>3. Clearing is at variance with Clearing Principle (g) land degradation, (i) surface or underground water quality and (j) the incidence of flooding.</p>	<p>No</p>	<p>No further action required.</p>
<p>4. The Proposal involves clearing for temporary works (as defined by CPS 818).</p>	<p>No</p>	<p>No further action required.</p>
<p>5a. Proposal is within a Region that:</p> <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. 	<p>No</p>	<p>Standard Vehicle and Plant management actions from Principal Environmental Management Requirements (PEMRs) and Hygiene Checklists will be applied.</p>
<p>5b. Do the proposed works require clearing within or adjacent to DBCA managed lands in non-dry conditions?</p>	<p>No</p>	<p>No further action required.</p>
<p>6. 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.</p>	<p>No</p>	<p>No further action required.</p>
<p>7. Weeds are likely to spread to and result in environmental harm to adjacent areas of native vegetation that are in good or better condition.</p>	<p>No</p>	<p>No further action required.</p>
<p>8. Did an environmental specialist conduct the survey or field assessment?</p>	<p>Yes</p>	<p>The Environmental Specialist undertaking the biological assessments was suitably qualified and had more than three years' experience.</p>

Impact of Clearing	Yes/No or NA	Further Action Required
<p>9. Did an environmental specialist prepare the Assessment Report and any other associated documentation including the VMP, Dieback Management Plan or Offset Proposal?</p>	<p>Yes</p>	<p>The Environmental Specialist preparing the Assessment Report and any other associated documentation including the VMP, Dieback Management Plan or Offset Proposal was suitably qualified and had more than three years' experience.</p>

10 REFERENCES

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