Clearing Assessment Report

Mandurah Summer Ready - Old Coast Road, Bouvard

October 2024

Western Power

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Document Control

Document version history

Version	Date	Amendment
A	12/09/2024	Initial version
B	16/09/2024	Internal draft
0	08/10/2024	Final
1	25/10/2024	Rev 1
2	30/10/2024	Rev 2
3	28/03/2025	Rev3
4	23/04/2025	Rev 0

1. Project Information

Assessor: N/A	**Email: N/A**	**Ph: N/A**
Responsible person (Western Power (WP) Project Manager or equivalent)		
WP Project Owner: N/A	**Email: N/A**	**Ph: N/A**
WP Delegate: N/A	**Email: N/A**	**Ph: N/A**
Project Area		
Project name: MH Summer Ready – Old Coast Road Bouvard		**Contract/Work Order No:** N0535290 / MR014112
Main purpose of clearing	**Permanent/Temporary**	**Clearing area (ha)**
New ring main site	Permanent ☒	0.01
	Temporary ☐	0
Proposed start date: 1/02/2025		**Expected completion date:** 1/04/2025
Method of clearing: Mechanical and manual		**Machinery to be used:** Excavation & directional drill machinery, truck & chipper, bobcat, service vehicles.
Project details (the 'Proposal'): The project involves the installation of a Ring Main unit (RMU), ground mounted transformer and maintenance access track.		
Guardian Permit ID reference number: REF-0001192		**Permit/Exemption number:** PER-0001446

2. Map/photos


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Harvey Estuary
Estuary Rd
Old Coast Rd
PROJECT LOCATION
WESTERN AUSTRALIA
WYNDHAM
KUNUNURRA
BROOME
DERBY
KARRATHA
PORT HEDLAND
EXMOUTH
NEWMAN
CARNARVON
MT MAGNET
GERALDTON
KALGOORLIE-BOULDER
PERTH
NORSEMAN
BUNBURY
ESPERANCE
ALBANY
373900
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374000
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374100
374150
374200
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AECOM Delivering a better world
PROJECT ID 60733430 CREATED BY ROB.MCGREGOR
DATE MODIFIED 17.SEP.2024 APPROVED BY M.WALLINGTON
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0 10 20 30 40
metres
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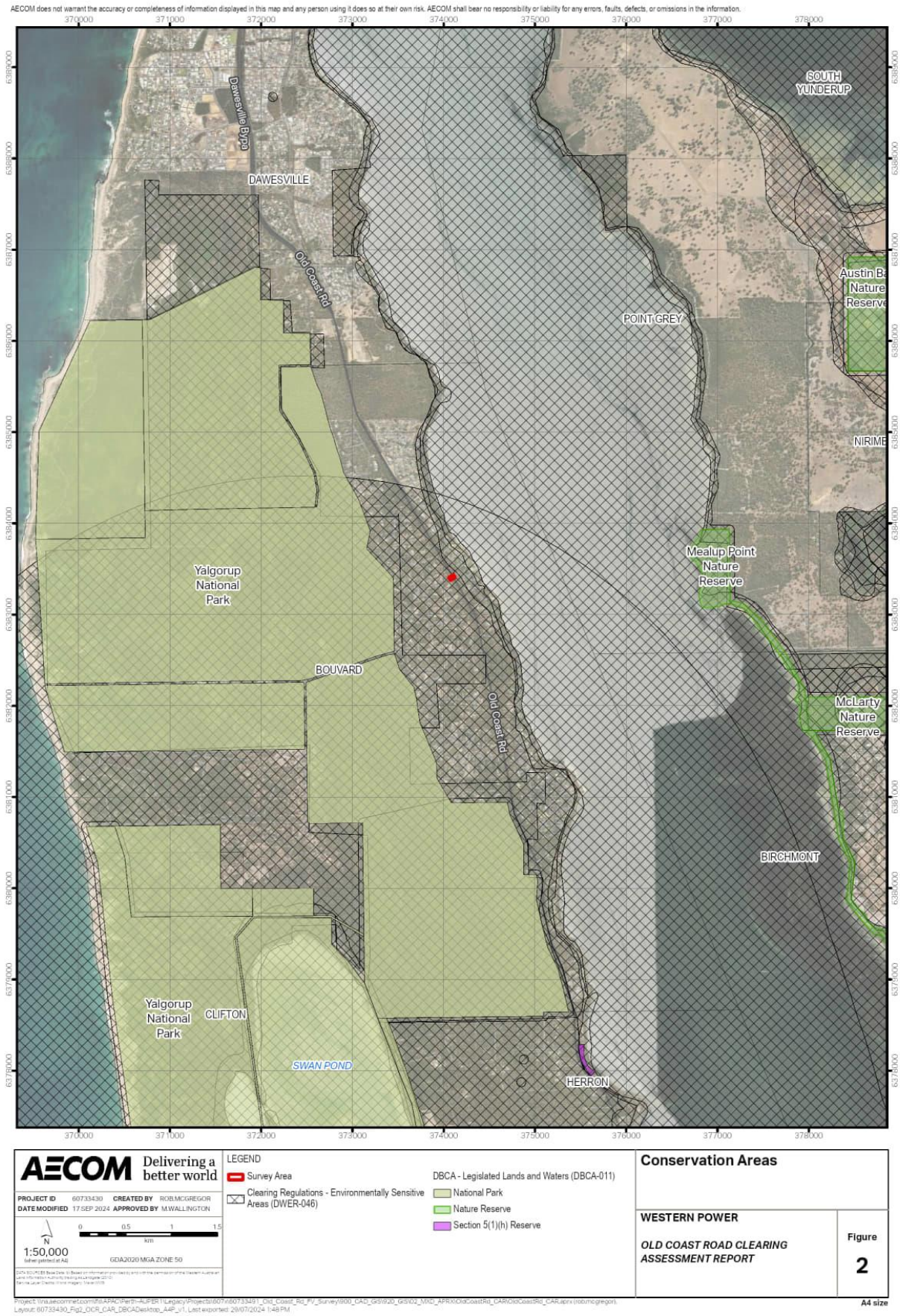
(when printed at A4)
GDA2020 MGA ZONE 50
LEGEND
Survey Area
Clearing Area
Clearing Location
WESTERN POWER
OLD COAST ROAD CLEARING ASSESSMENT REPORT
Figure
1
A4 size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Dawesville Bypass
DAWESVILLE
Old Coast Rd
SOUTH YUNDERUP
Austin Bay Nature Reserve
POINT GREY
NIRIMBA
Mealup Point Nature Reserve
Yalgorup National Park
BOUVARD
Old Coast Rd
McLarty Nature Reserve
BIRCHMONT
Yalgorup National Park
CLIFTON
SWAN POND
HERRON
AECOM Delivering a better world
PROJECT ID 60733430 CREATED BY ROB.MCGREGOR
DATE MODIFIED 17.SEP 2024 APPROVED BY M.WALLINGTON
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km
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(when printed at A4)
GDA2020 MGA ZONE 50
LEGEND
Survey Area
Clearing Regulations - Environmentally Sensitive Areas (DWER-046)
DBCA - Legislated Lands and Waters (DBCA-011)
National Park
Nature Reserve
Section 5(1)(h) Reserve
Conservation Areas
WESTERN POWER
OLD COAST ROAD CLEARING ASSESSMENT REPORT
Figure 2
A4 size


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Cleared
AfJsOp
Old Coast Rd
Vegetation Communities
Q1
Vegetation Condition
Fauna Habitat
AECOM Delivering a better world
PROJECT ID 60733430 CREATED BY ROB.MCGREGOR
DATE MODIFIED 17 SEP 2024 APPROVED BY M.WALLINGTON
1:800
GDA2020 MGA ZONE 50
LEGEND
Survey Area
Tuart (Eucalyptus gomphocephala)
Vegetation Communities
AfJsOp
Cleared
Quadrat
Vegetation Condition
Degraded
Cleared
Marri (Corymbia calophylla)
Fauna Habitat
Peppermint Open Woodland
Cleared
Black Cockatoo Foraging Score (Bamford Consulting, 2020) [note, same for all three species]
Low to Moderate (3)
Vegetation Communities, Condition and Fauna Habitat
WESTERN POWER
OLD COAST ROAD CLEARING ASSESSMENT REPORT
Figure 3
A4 size

Site Inspection Photos	

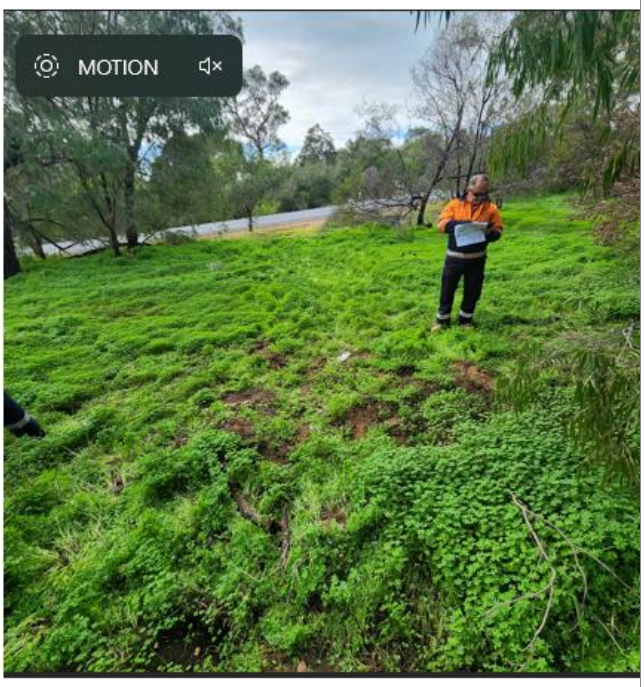
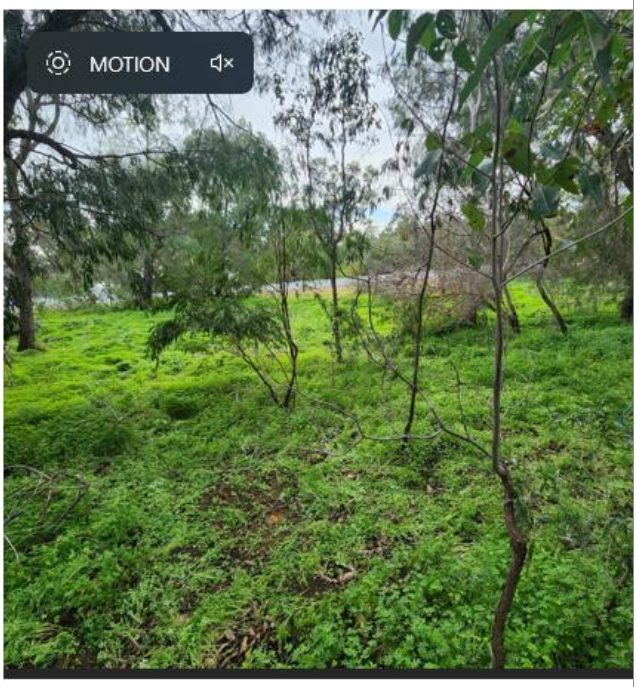

	

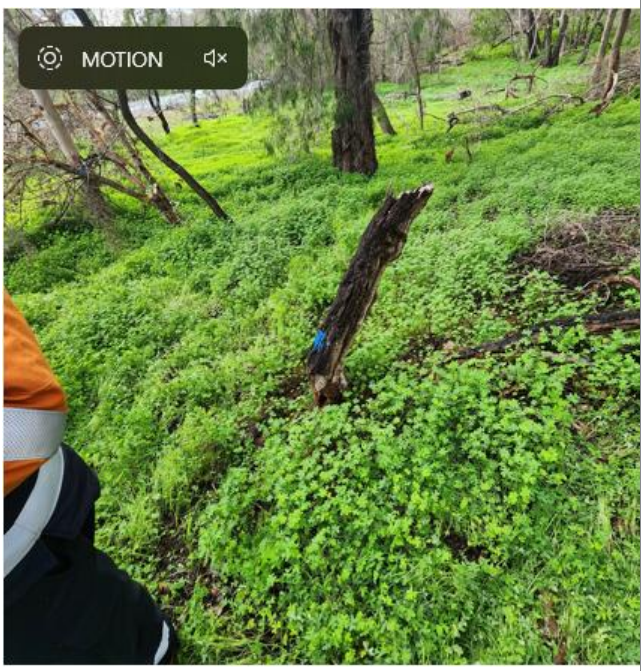
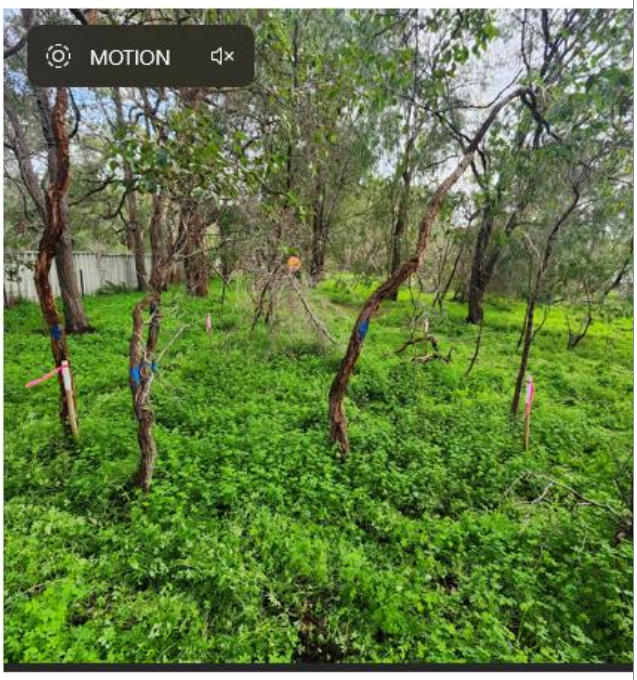
Photo 1- Photo taken on East side of Old Coast Road, where access road will be constructed. No clearing required.	Photo 2 -Photo taken on Eastern side of Old Coast Road. Saplings to be cleared for access road to RMU and transformer location.
	

Photo 3 – Blue taped tree stump to be cleared for new access road. Larger vegetation avoided for clearing area.	Photo 4 – Blue taped saplings to be cleared for RMU and transformer location within pegged area (facing South).

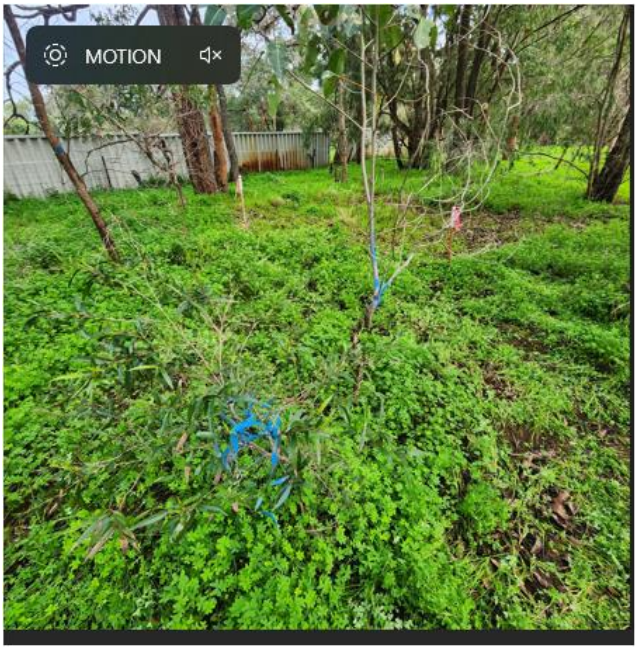
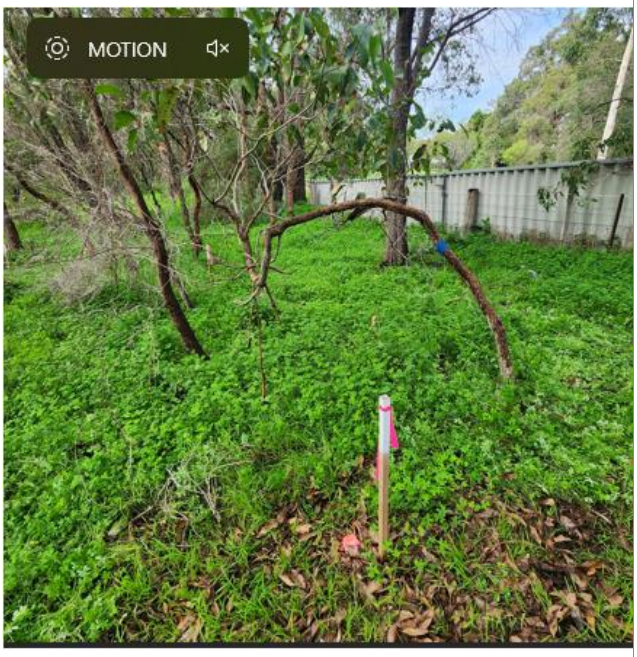

	

Photo 5 – Small blue taped saplings and dead vegetation to be cleared within pegged area (facing South).	Photo 6 – Small blue taped tree within pegged area to be cleared. Larger vegetation will remain (facing North).

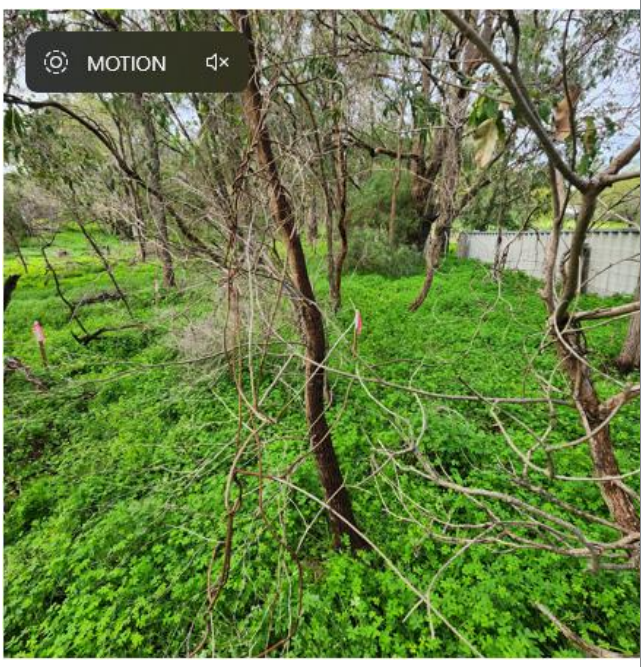
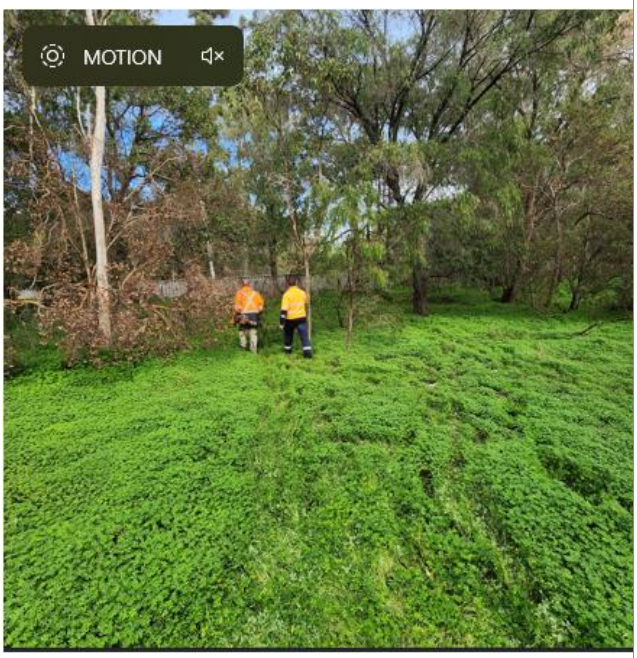

	

Photo 7 – Pegged area facing North.	Photo 8 – Photo taken from Old Coast Road facing RMU and transformer location.

3. Avoid, minimise and reduce extent and impact of clearing

Alternatives to clearing considered during the development of this project are outlined in Table 1:

Alternative to Clearing	Applicable	Discussion
Directional drilling of underground cables instead of open trenching	*Yes*	Directional drilling underground cable from pole S147822 to the RMU and transformer location.
Existing tracks are utilised where possible	*Yes*	The project will utilise Old Coast Road for access. Clearing will be limited to the area required to install the new infrastructure.
Utilising previously cleared areas where possible	*Yes*	Of the proposal area (0.02 ha) 0.01 ha is currently cleared. The RMU and transformer location was placed in an area with limited vegetation, consisting of small native samplings and no established trees.
Consideration of alternative engineering and design options	*Yes*	The access path to the RMU and transformer location has been designed to with a minimal width of <3m to minimise vegetation clearing within the proposal area.
Other	*No*	

4. Site context

4.1 Land Tenure (Cadastral Information)

The Proposal is located in the City of Mandurah, mostly within the Road reserve (regional road). The eastern corridor (approximately 1 m width) is Freehold land (Type 01).

4.2 Vegetation description

Beard et al. (2013) mapping is used to determine the current extent of remnant vegetation remaining when compared to pre-European vegetation extent. The survey area occurs within the mapped Vegetation Association 6, described as medium woodland of Jarrah (*Eucalyptus marginata*) and Marri (*Corymbia calophylla*).

AECOM Australia Pty Ltd (AECOM) conducted an ecological survey of the field survey area (0.23 ha) on 11 July 2024, the proposal area (0.02 ha) is within this survey area. The field survey (0.23 ha) was traversed on foot and data collected from observations. The primary focus was on areas supporting native vegetation, and verification of the presence of significant environmental values. A summary of the survey results is described below.

4.3 Summary of results of surveys

4.3.1 Flora and vegetation

AECOM (2024) undertook an ecological survey of the field survey area (0.23 ha), this included a comprehensive desktop assessment, flora and vegetation assessment, fauna habitat assessment and targeted Black Cockatoo survey.

AECOM (2024) identified two DBCA Priority Ecological Communities (PEC) with potential to occur in the survey area during the desktop assessment. These are listed below:

- Banksia Woodlands of the Swan Coastal Plain ecological community (Banksia Woodlands) (listed as Endangered under the *Environment Protection and Biodiversity Conservation Act 1999* [EPBC Act] and as Priority 3 by the Department of Biodiversity, Conservation and Attractions [DBCA]).
- Tuart (*Eucalyptus gomphocephala*) Woodland and Forests of the Swan Coastal Plain (Tuart Forest) (listed as Critically Endangered under the *EPBC* Act and as Priority 3 by DBCA).

AECOM (2024) recorded one vegetation type during the field survey: *Agonis* Open Forest (0.10 ha) in Degraded condition. The remainder of the survey area was identified as cleared area (0.13 ha). The *Agonis* Open Forest vegetation community was described as a mid to low open forest of *Agonis flexuosa* and *Corymbia calophylla* over tall-isolated shrubs (*Jacksonia sternbergiana* and *Banksia sessilis* var. *sessilis*) with weedy grasses. Weed invasion has displaced all native groundcover species, with weeds occupying more than 90% of groundcover.

No vegetation representing a Threatened or Priority Ecological Community (TEC/PEC) was recorded during the survey.

Fifty-four (54) significant flora species were identified during the desktop assessment, of which one species, *Rumex drummondii* (Priority 4) was considered 'low' likelihood of occurrence. The remaining 53 species were assessed as 'negligible' likelihood of occurring.

AECOM (2024) recorded nine native flora species during the field survey, including six within the quadrat and three opportunistically. Another three weed species were recorded. One of these, **Poaceae spp*. is likely to represent several weedy grass species that were sterile at the time of the survey.

No Threatened or Priority flora were identified in the survey, and none are anticipated to occur in the post-survey assessment.

4.3.2 Fauna

Ninety-nine (99) significant fauna species were identified within a 20 km buffer from the survey area, during the desktop assessment. Of these species, four species had a 'high' likelihood of occurrence within the survey area:

- Western Ringtail Possum (*Pseudocheirus occidentalis*) Critically Endangered under the EPBC Act and BC Act.
- Carnaby's Black Cockatoo (*Zanda latirostris*) Endangered under the EPBC Act and BC Act.
- Baudin's Black Cockatoo (*Zanda baudinii*) Endangered under the EPBC Act and BC Act.
- Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*) Vulnerable under EPBC Act and under BC Act.

The survey area was within the known range for the three threatened Black Cockatoo species. One potential breeding tree with a DBH of 520 mm was recorded (*Corymbia calophylla*). No suitable hollows

were recorded. No direct or indirect evidence (foraging, seen, heard) of Black Cockatoo's were recorded during the survey.

All native vegetation in the survey area (0.1 ha) represents suitable foraging habitat due to the presence of small-fruited Eucalyptus spp. (*Eucalyptus gomphocephala,* planted Eucalyptus spp.), and *Corymbia* calophylla. Scattered *Banksia sessilis* var. *sessilis* were observed. The Bamford (2020) foraging score was 3 'Low to Moderate' with foraging trees representing less than 10 % of the canopy. Contextually the survey area is a small fragment of habitat in comparison to the surrounding (15 km radius) of suitable habitat. Furthermore, no foraging evidence was recorded which further reduces the score.

The Proposal area (0.02 ha) includes native vegetation clearing of 0.01 ha, the remaining 0.01 ha is a cleared area. The vegetation within the proposal area represents a much smaller section of threatened Black Cockatoo habitat compared to the vegetation within the survey area (0.1 ha). The proposal area does not contain any potential breeding trees (DBH >500mm) or *Banksia sessilis* varieties further reducing the potential foraging habitat for threatened Black Cockatoo species.

5. Spatial assessment (SPIDA View)

Western Power's online risk GIS database was analysed, and the following layers are indicated as having the potential for clearing impacts within a local area search radius of 50m.

DBCA managed tenure	☐	Bush Forever	☐	CAWS Act Area	☐	Native Vegetation Clearing Regs ESAs	☒
Conservation listed fauna	☐	Conservation listed flora	☐	Western Power ESA sites	☐	Native vegetation remaining	☒
Threatened ecological communities	☒	Acid Sulfate Soils	☐	PDWSA	☐	Ramsar or Important Wetlands	☐
Geomorphic or other mapped wetlands	☐	Disease Risk Areas	☐	Erosion risk	☐	Offset areas	☐
Watercourses	☐	Land Degradation	☐		☐		
Other ☐ Details:							

6. Assessment of vegetation clearing impacts

Clearing of native vegetation is regulated by Department of Water and Environmental Regulation (DWER) that administers the clearing provisions under the *Environmental Protection Act 1986* (EP Act). Clearing of native vegetation requires a clearing permit under Part V of the EP Act, except when the clearing is of a kind set out in Schedule 6 of the Act or is prescribed by regulation in the *Environmental Protection (Clearing Native Vegetation) Regulations 2004*.

The proposed native vegetation clearing has been assessed against each of the 10 Clearing Principles listed under Schedule 5 of the EP Act in accordance with the DWER guideline "*A guide to the assessment of applications to clear native vegetation under Part V Division 2 of the Environment Protection Act 1986"* (DER 2014). The assessment is detailed in **Table 1**.

Table 1 Clearing permit principles assessment

Clearing permit principles full assessment	
a) Native vegetation should not be cleared if it comprises a high level of biodiversity.	**Not likely to be at variance**
Assessment: AECOM (2024) conducted an ecological survey of the field survey area (0.23 ha), which included a comprehensive desktop assessment, flora and vegetation assessment, fauna habitat assessment and targeted Black Cockatoo survey. The desktop assessment was based on the DBCA flora, fauna and communities' database searches within 20 km of the Proposal, Protected Matters Search Tool (PMST) within 20 km, and Western Power Environmental Sensitive Areas (ESAs). **Vegetation communities:** During the desktop assessment, AECOM (2024) identified two PECs with potential to occur in the Proposal area, including: • Banksia Woodlands of the Swan Coastal Plain ecological community (P3) • Tuart (*Eucalyptus gomphocephala*) Woodland and Forests of the Swan Coastal Plain (P3). AECOM (2024) mapped one native vegetation community within the Proposal area, *Agonis* Open Forest, in Degraded condition. No vegetation representing TEC or PEC was recorded during the survey. **Flora:** In the desktop assessment, 54 significant flora species within a 20 km buffer from the survey area were identified. Of the 54 flora species, one species was assessed with a 'low' likelihood to occur in the survey (*Rumex drummondii*, P4), while the remaining species were assessed with a 'negligible' likelihood of occurring. AECOM (2024) recorded nine native flora species during the survey and three weed species. No Threatened or Priority species were recorded. The full list of these species is provided in the Flora and Fauna Assessment Report (AECOM, 2024). **Fauna:** Ninety-nine (99) significant fauna species were identified in the desktop assessment, within a 20 km buffer from the survey area. Of these species, four Threatened species had a 'high' likelihood of occurrence within the survey area: • Critically Endangered - Western Ringtail Possum (*Pseudocheirus occidentalis*) • Endangered - Carnaby's Black Cockatoo (*Zanda latirostris*) • Endangered - Baudin's Black Cockatoo (*Zanda baudinii*) • Vulnerable - Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*). Of the remaining species, 40 were assessed 'low' likelihood to occur and 51 species were assessed 'negligible' likelihood to occur. The full list of these species is provided in the Flora and Fauna Assessment Report (AECOM, 2024). No direct or indirect evidence of any significant fauna was recorded in the field survey (AECOM, 2024). In the post-survey assessment, it was determined that the *Agonis* Open Forest habitat could be potentially utilised by four significant fauna species as listed below: • Western Ringtail Possum (*Pseudocheirus occidentalis*)	

- Carnaby's Black Cockatoo (*Zanda latirostris*)
- Baudin's Black Cockatoo (*Zanda baudinii*)
- Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*).

The *Agonis* Open Forest has been described as Peppermint Forest comprising *Agonis flexuosa* and *Corymbia calophylla* and provides a potential habitat for the Threatened Western Ringtail Possum and foraging habitat for all three Threatened Black Cockatoo species within the proposal area (0.02 ha)

While the Peppermint Forest is suitable for the four fauna species listed above, this vegetation and habitat type have been shown to extend outside of the survey area and are locally common in the region (AECOM, 2024).

The Proposal area (0.02 ha) includes native vegetation clearing of 0.01 ha in a Degraded condition. The remaining 0.01 ha is a cleared area. The vegetation within the Proposal does not represent any TEC or PEC or provide critical habitat to any significant flora or fauna species.

Based on the above information, the Proposal is not likely to be at variance to this principle.

b) Native vegetation should not be cleared if it comprises whole or part of, or is necessary for the maintenance of, a significant habitat for fauna.	**Is at variance**

Assessment:

AECOM (2024) identified 99 significant fauna species with potential to occur in the field survey area (0.23 ha), and 20 km search buffer during the desktop assessment. Of these, the Threatened Western Ringtail Possum and all three Threatened Black Cockatoos were assessed to have 'high' likelihood of occurrence within the survey area.

No conservation significance fauna species were recorded, heard, or seen during the field survey undertaken by AECOM.

AECOM (2024) identified one native vegetation community within the survey area: *Agonis* Open Forest (Peppermint Forest). This vegetation was characterised as Peppermint Tree *(Agonis flexuosa)* open forest with *Eucalyptus* sp., and *Banksia sessilis* var. *sessilis.* Habitat value is considered Moderate to High quality and has the potential to be utilised by the Western Ringtail Possum and the three Threatened Western Australian Black Cockatoos.

The Western Ringtail Possum resides in Peppermint (*Agonis flexuosa*) forest and woodland and Tuart (*Eucalyptus gomphocephala*) with a peppermint mid-story (Van Dyck & Strahan, 2008). The 'Peppermint Forest' represents preferred habitat for the species and serves as an essential connective corridor, linking fragmented remnants of native vegetation (Van Dyck & Strahan, 2008). This connectivity is crucial for maintaining ecological integrity, allowing for the movement, foraging and genetic exchange for the Western Ringtail Possum.

The Western Ringtail Possum is a well-known species in the region, with 551 records from DBCA within a 20 km radius of the survey area. The most recent record within this radius was verified in 2023. The closest known DBCA record of the species is 11 m north of the survey area, with a confirmed dead specimen recorded in 2017.

In addition, the Peppermint Forest was identified as a foraging, potential breeding, and roosting habitat for all three Threatened Black Cockatoo species within the survey area. One potential breeding tree with a Diameter at Breast Height (DBH) of 520 mm was recorded (*Corymbia calophylla*) during the survey, however, the tree is located outside of the Proposal area.

All native vegetation in the survey area (0.10 ha) represents suitable foraging habitat due to the presence of small-fruited *Eucalyptus* spp. (*Eucalyptus gomphocephala*, planted *Eucalyptus* spp.), and *Corymbia calophylla* and Scattered *Banksia sessilis* var. *sessilis*. The Bamford (2020) foraging score was 3 'Low to Moderate' with foraging trees representing less than 10 % of the canopy. However, the vegetation within the Proposal area (0.01 ha) represents a much smaller section of threatened Black Cockatoo habitat compared to the vegetation within the survey area (0.1 ha). The proposal area does not contain any potential breeding trees (DBH >500mm) or Banksia sessilis varieties further reducing the potential foraging habitat for threatened Black Cockatoo.

Given the presence of similar native vegetation adjacent to the proposal area, absence of evidence for significant fauna species and the scale of the native vegetation clearing (0.01 ha) compared to the surrounding 15 km radius of suitable habitat, it is unlikely that the Proposal area will form a significant habitat for Black Cockatoo species.

The clearing of Peppermint Tree (*Agonis flexuosa*) and Eucalyptus spp saplings within the proposal area has the potential to impact connective corridors for Western Ringtail Possum. Clearing any suitable habitat for the Western Ringtail Possum may be significant as the species is Critically Endangered.

The Proposal is at variance with the clearing principle.

c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.	Not likely to be at variance

Assessment:

AECOM (2024) identified 15 Threatened flora species within a 20 km buffer from the survey area during the desktop assessment. All species were assessed with a 'negligible' likelihood of occurring.

No Threatened species were recorded during the field survey, and none were assessed with potential to occur in the post-survey assessment. The reduced likelihood reflects lack of suitable habitat, and the disturbed roadside vegetation represented in the survey area.

Given the absence of Threatened flora and suitable habitat, the proposal area is not likely to be considered as necessary for the existence of any threatened flora. Thus, the Proposal is not likely to be at variance with this clearing 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.	Not likely to be at variance

Assessment:

The desktop assessment identified 11 significant ecological communities within 20 km buffer from the survey area, as detailed below:

- Banksia Woodlands of the Swan Coastal Plain ecological community – Endangered (EPBC Act), mapped in survey area.
- *Corymbia calophylla – Eucalyptus marginata* woodlands on sandy clay soils of the southern Swan Coastal Plain (floristic community type 3b as originally described in Gibson et. al. 1994) – Endangered (BC Act), unlikely to occur due to distance from survey area and lack of suitable soil type.
- *Corymbia calophylla – Kingia australis* woodlands on heavy soils (floristic community type 3a as originally described in Gibson et. al. 1994) – Endangered (EPBC Act), unlikely to occur due to distance from survey area and lack of suitable soil.
- Elongate Fluvialtile Delta System – Peel-Harvey inlet – P1 (BC Act), unlikely to occur due to distance from survey area and lack of suitable soil.
- Forests and woodlands of deep seasonal wetlands of the Swan Coastal Plain (floristic community type 15 as originally described in Gibson et. al. 1994) – Critically Endangered (BC Act), unlikely to occur due to distance from survey area and lack of suitable soil.
- Herb rich saline shrublands in clay pans (floristic community type 7 as originally described in Gibson et. al. 1994) – Critically Endangered (EPBC Act), unlikely to occur due to distance from survey area and lack of suitable soil.
- *Melaleuca huegelii – M. systena* shrublands of limestone rides (floristic community type 26a as originally described in Gibson et. al. 1994) – Critically Endangered (EPBC Act), unlikely to occur due to distance from survey area and lack of suitable soil.
- Shrublands on dry clay flats (floristic community type 10a as originally described in Gibson et. al. 1994) – Critically Endangered (EPBC Act), unlikely to occur due to distance from survey area and lack of suitable soil.
- Stromatolite like freshwater microbialite community of coastal brackish lakes (Lake Clifton) – Critically Endangered (EPBC Act), unlikely to occur due to distance from survey area and lack of suitable soil.
- Subtropical and Temperate Coastal Saltmarsh – Vulnerable (EPBC Act), unlikely to occur due to distance from survey area and lack of suitable soil.
- Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain – Critically Endangered (EPBC Act), known to occur in the mapped survey area.

Within the field survey undertaken by AECOM, one native vegetation type was recorded: *Agonis* Open Forest AfJsOp characterised by emergent *Corymbia calophylla* over *Agonis flexuosa* open forest over isolated common native shrubs *Jacksonia stenostachya* and occasional *Macrozamia riedlei* amongst a dense ground storey of weedy grasses and **Oxalis pes-caprae* (clover) in Degraded condition. No PEC or TEC were identified.

No vegetation representing a TEC was recorded within the survey area. Clearing of 0.01 ha of native vegetation within the Proposal area is not likely to be at variance with this 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.	Not at variance

Assessment:

There is one pre-European vegetation association mapped across the survey area; vegetation association number 6; Jarrah (*Eucalyptus marginata*), Marri (*Corymbia calophylla*) and Wandoo (*Eucalyptus wandoo*). This vegetation association has an extent remaining below the 30% threshold set by the EPA. The Proposal area is within a constrained area (Swan Coastal Plain), therefore retention objectives may be varied to "at least 10%".

In the Swan Coastal Plain (SWA02) IBRA Subregion, 23.72% of the pre-European extent remains. This percentage is greater than the 10% retention objective.

One vegetation type was recorded during the field survey: Agonis Open Forest AfJsOp characterised by emergent *Corymbia calophylla* over *Agonis flexuosa* open forest over isolated common native shrubs *Jacksonia stenostachya* and occasional *Macrozamia riedlei* amongst a dense ground storey of weedy grasses and **Oxalis pes-caprae* (clover) in Degraded condition. The vegetation recorded does not appear to represent the pre-euro vegetation association 6. The clearing occurs in a wide, vegetated road reserve, and will not significantly reduce the extent of vegetation in the local area or remove any linkages.

Pre-European Vegetation Association	Scale	Pre-European extent (ha)	Current extent (ha)	Percent remaining	% Current Extent remaining in DBCA reserves (proportion of Current extent)
Vegetation Association No. 6	**Statewide**	56,343.01	13,362.25	23.72	13.93
	IBRA* Bioregion Swan Coastal Plain (SWA)	56,343.01	13,362.25	23.72	13.93
	IBRA* Sub-region SWA02	56,343.01	13,362.25	23.72	13.93
	Local Government Authority City of Mandurah	3,720.67	1,537.19	41.31	29

*IBRA = Interim Biogeographic Regionalisation of Australia

The proposal area is not at variance with this 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.	Not likely to be at variance

Assessment:

No publicly available data for waterbodies (wetlands, rivers) intersect the Proposal.

The proposal area does not intersect any wetlands of international importance (Ramsar) or nationally important wetlands. The nearest wetland is the Peel-Yalgorup System (Ramsar site 36) located 0.27 km from the proposed clearing area (PMST, 2024).

The vegetation community was recorded on grey sandy soils on slopes. The *Corymbia calophylla* trees were emergent above the *Agonis flexuosa* trees with the canopy forming an open forest. This vegetation does not represent riparian vegetation. The Proposal area is not likely to be at variance with this clearing principle.

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

Assessment:

The Proposal area occurs within the Spearwood landscape system, described as sand dunes and plains. The soil in this zone is classified as yellow deep sands, pale deep sands and yellow/brown shallow sands (DPIRD-064).

The salinity of the groundwater within the proposal area ranges between TDS 500-1,000 mg/L (DWER-026).

The nearest weather station is Halls Head (009572) with recorded mean annual rainfall of 874.9 mm (BoM, 2024). Given the scale of clearing required, it is not anticipated for the Proposal to cause soil erosion. In addition, the Atlas of Australian Acid Sulfate Soil (ASS) indicates no probability of ASS occurrence within the proposed clearing area.

Soils that are most at risk to wind erosion are deep sands, sandy duplexes and sandy earth on crests and upper slopes (DPIRD, 2005). However, the proposed clearing area is located on lower slopes (1-5%) of dune ridges, thus less susceptible to wind erosion.

None of the environmental aspects poses high risk of land degradation within the proposed clearing area. Given the size of the proposal area (0.01 ha lies across a small section of Old Coast Road), it is unlikely that the Proposal will cause significant land degradation. In addition, Western Power's standard environment management measures will be implemented to address erosion risk and other land degradation processes.

The Proposal area is not likely to be at variance to this 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.	**Not at variance**

Assessment:

The proposal area does not intersect with any known conservation areas. The nearest conservation area is Yalgorup National Park (R 11710) located approximately 750 m west of the proposal area.

The proposal area is not anticipated to have an impact on the environmental values of the Yalgorup National Park and does not provide significant buffer to the conservation area. Given the scale of the proposal area (0.01 ha lies across a small section of Old Coast Road), the proposed clearing is not anticipated to impact ecological connectivity or cause habitat fragmentation that could have indirect impact on the conservation area.

Based on the above information, the proposal area is not at variance with this 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.	**Not likely to be at variance**

Assessment:

The Proposal area does not intersect with Public Drinking Water Source Area (PDWSA) and any of the six Country Areas Water Supply Act 1946 (CAWS Act) controlled catchment areas.

The salinity of the groundwater within the proposal area ranges between TDS 500-1,000 mg/L (DWER-026). In addition, the Atlas of Australian Acid Sulfate Soil (ASS) indicates no probability of ASS occurrence within the proposal area.

Due to the vegetation not being representative of wetland surface water habitat, the degraded condition of the vegetation, and the small scale of clearing, the proposal area is not likely to be at variance with this principle.

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

Assessment:

The recorded mean annual rainfall in the Proposal area is 874.9 mm (BoM, 2024).

The closest area to the proposal area with a moderate to high risk of flooding, is 2.60 km from the proposal area (DPIRD-007). There is no watercourse with a flooding risk within the proposal area. The closest waterbody to the proposal area is the Peel-Yalgorup System (0.27 km), however this waterbody is not identified with a risk of flooding (DPIRD-007).

Given the scale of the proposal area (0.01 ha lies across a small section of Old Coast Road), and the proximity to flooding areas, the proposed clearing is not likely to cause, or exacerbate, the incidence or intensity of flooding. Hence, the proposal area is not likely to be at variance with this principle.

7. Planning instrument or other relevant matters

The Proposal area is within Old Coast Road State Government Road reserve. An initial notification of works in writing must be submitted to Main Roads Western Australia (MRWA) outlining the proposed works that will result in the need to access a road reserve under MRWA control.

The Proposal is unlikely to have a significant social/environmental impact or generate significant public interest due to the small scale of the work. Therefore, referral to the Environmental Protection Authority (EPA) and Department of Climate Change, Energy, the Environment and Water (DCCEEW) is not required.

No historic heritage sites, Aboriginal heritage sites, or land subject to native title are located within the works so no additional approvals are required.
The associated effect on the environment is consistent with approved Environmental Protection Policies.

Land on which clearing is to occur is not subject to an agreement to reserve under the *Soil and Land Conservation Act 1945.*

8. Clearing Permit Details

The Western Power Vegetation Clearing Permit outlining the relevant clearing conditions is available in EDM: 70225434 (PER-0001446). As this project is may be at variance to clearing principles (b) it is deemed to fall within the high-risk threshold. As such it will require a clearing intervention with an SEQT representative, or environmental consultant present on site to observe the clearing.

The proposed clearing will be completed under CPS 1918/11.

9. Post assessment requirements

Post assessment	Outcome	Justification / Further Action Required
Are submissions required?	No	Exemption granted from DWER
Could the area be affected by dieback?	Yes	Average annual rainfall >400mm (BoM, 2024)
Could the area be affected by other pathogens?	No	Not identified during field survey
Is a Vegetation Management Plan required?	Yes	Appendix A
Is rehabilitation/revegetation required?	No	Permanent clearing required
Is a Dieback Management Plan required?	No	Clearing in dry conditions only
Is an offset required?	No	Exemption granted from DWER

Appendix A Vegetation Management Plan

1.1 Introduction

AECOM Australia Pty Ltd (AECOM) has assessed the proposed native vegetation clearing by Western Power as part of the Mandurah Summer Ready project on Old Coast Road, Bouvard (the Project). This assessment was conducted against the 10 Clearing Principles outlined in Schedule 5 of the *Environmental Protection Act 1986* (EP Act), following the DWER guidelines "*A guide to the assessment of applications to clear native vegetation under Part V Division 2 of the Environment Protection Act 1986*" (DER 2014).

The proposed clearing area (the Proposal) includes native vegetation that serves as a suitable habitat for the Critically Endangered Western Ringtail Possum. Thus, the clearing may be at variance with Clearing Principle (b) - Native vegetation should not be cleared if it comprises whole or part of, or is necessary for the maintenance of, a significant habitat for fauna.

This Vegetation Management Plan (VMP) has been prepared in compliance with condition 6 (j) of Clearing Permit CPS 1918/11.

1.2 Scope of the Project Activities

Western Power (WP) intends to install a new feeder cable, a new Ring Main Unit, and a new Ground Mounted Transformer, which requires clearing of 0.01 ha of native vegetation. This clearing may be at variance with Clearing Principle (b), which requires a Vegetation Management Plan (VMP) to comply with condition 6 (j) of Clearing Permit CPS 1918/11.

1.3 Scope of the Vegetation Management Plan

The VMP highlights the project management issues and provides actions required to be undertaken before, during and following project completion. The aim of this VMP is to provide management actions to avoid, mitigate and/or manage clearing impacts to the local environment, to allocate areas of responsibility required for the implementation of management actions identified and to provide timeframes for completion and monitoring actions.

1.4 Non-Compliance

All non-compliances related to this VMP will follow Western Power's incident management procedure and will be logged in Guardian.

1. Table 2: Management Actions

Project Component	Management Action	Evidence Action completed	Responsible Person	Completion Timeframe
Standard Actions				
Clearing	During pre-start meeting provide clear maps indicating the areas approved to be cleared to the crew undertaking the works	Record sheet to be signed at pre-start meeting by all personnel.	Site Supervisor	Prior to clearing commencing
	All access and laydown areas will be clearly delineated on plans	Plans to be captured in EDM.	Site Supervisor	Prior to clearing commencing
	All vegetation to be cleared will be demarcated on site prior to the commencement of project activities.	One compliance inspection will occur prior to clearing.	Site Supervisor	Prior to clearing commencing
	Fauna spotter/handler to conduct pre-clearing inspection of vegetated area.	Report provided by fauna spotter detailing findings / relocation efforts.	Site Supervisor/ Environmental Officer /Fauna Spotter	24-48 hours prior to clearing commencing.
	An electronic and hard copy of the VMP on site during the clearing activities	One compliance inspection will occur prior to clearing.	Site Supervisor	Once clearing has been completed
	Fauna spotter/handler to be present during clearing activities.	Report provided by fauna spotter detailing findings/relocation efforts.	Site Supervisor/Environmental Officer/ Fauna Spotter	During clearing activities.
	Clearing of vegetation shall not exceed the approved limits of clearing.	Compliance inspections to be carried out daily. Representative photos will be taken.	Site Supervisor	During clearing activities
	Any vegetation cleared beyond the extent of approvals shall be reported immediately and investigated. Rehabilitated to the pre-clearing condition will be required.	Clearing incident reported and investigated. Photo evidence of rehabilitation confirmed after 24 months.	Site Supervisor/Environmental Officer	Reported Immediately after the event. Rehabilitated within 24 months.

	Cleared vegetation will be repurposed for rehabilitation and habitat creation by being spread evenly in neighbouring vegetated areas after project activities are completed	One compliance inspection will occur after clearing.	Site Supervisor	Once clearing has been completed.
Specific Actions				
Principle b	Clearing will progress slowly in one direction to ensure Western Ringtail Possum has opportunity to move on	One compliance inspection will occur prior to clearing. Any incidents will be reported and investigated.	Site Supervisor or Fauna Spotter/Handler	During clearing activities.
	In the event that sick, injured or orphaned native wildlife are located on the project site, the WILDCARE Helpline ((08) 9474 9055) will be contacted for assistance and an incident will be lodged in Guardian.			
	Feeding, disturbance, harassing of fauna or the presence of firearms or pets is prohibited on site.			
	Ensure the Tuart tree (*Eucalyptus gomphocephala*), and the Marri tree (*Corymbia calophylla*) with a suitable Diameter at Breast Height (DBH) (>500 mm) which are both located close to the clearing area are retained and demarcated, and the importance of protecting these trees is communicated to the crew during the pre-start.	One compliance inspection will occur prior to clearing. Representative photos will be taken.	Site Supervisor	Prior to clearing activities.
	Any vegetation cleared beyond the extent of approvals shall be reported immediately and investigated. Rehabilitated to the pre-clearing condition will be required.	Clearing incident reported and investigated. Photo evidence of rehabilitation confirmed after 24 months.	Site Supervisor/Environmental Officer	Reported Immediately after the event. Rehabilitated within 24 months.

	Remove or kill any weeds growing in project area that are likely to spread and result in environmental harm to adjacent area of native vegetation that are in good or better condition.	Weed management plan required with weeds listed prior, during and after clearing with detailed treatment/removal measures. Chemical or Mechanical means.	Environmental Officer	Record Weed Species prior, during and after works. Record treatment/removal measures, Chemical or Mechanical means.
	Clean earth moving machinery of soil and vegetation prior to entry and exit to project areas adjacent to conservation areas.	Completed and sighted weed, seed and pathogen Sheet prior to mobilisation and after clearing activities Physical weed, seed and Pathogen check When on site.	Site supervisor/Environmental Officer	Prior to clearing activities. After clearing activities.
Standard Record Keeping				
Record Keeping-Clearing	Maintain the following records for the cleared area: • Location of clearing area as a shapefile. • Size of clearing (ha). • Date(s) on which clearing was done.	Clearing data via CPS 1918/11 Condition 14b submitted to Environment team.	WP Project Owner	Data to be submitted within 30 days of project clearing activities being completed.
Record Keeping - Clearing	Copies of all Vehicle Environmental Inspection Registers used to check that clearing machinery is free of soil and vegetative material must be maintained.	Copies of completed registers submitted to WP Project Owner	Site Supervisor	Copies of completed registers are to be submitted within 30 days of project clearing activities being completed.

10. References

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