



## CLEARING PERMIT

*Granted under section 51E of the Environmental Protection Act 1986*

### PERMIT DETAILS

Area Permit Number: CPS 10448/1  
File Number: DWERVT14175  
Duration of Permit: From 11 May 2024 to 11 May 2033

### PERMIT HOLDER

Mr Jamie Oates

### LAND ON WHICH CLEARING IS TO BE DONE

Lot 62 on Deposited Plan 49002, Ruabon

### AUTHORISED ACTIVITY

The permit holder must not clear more than seven (7) native trees within the area cross-hatched yellow in Figure 1 of Schedule 1.

### CONDITIONS

#### 1. Period during which clearing is authorised

The permit holder must not clear any *native vegetation* after 11 May 2026.

#### 2. Avoid, minimise, and reduce impacts and extent of clearing

In determining the *native vegetation* authorised to be cleared under this permit, the permit holder must apply the following principles, set out in descending order of preference:

- (a) avoid the clearing of *native vegetation*;
- (b) minimise the amount of *native vegetation* to be cleared; and
- (c) reduce the impact of clearing on any environmental value.

#### 3. Weed management

When undertaking any clearing authorised under this permit, the permit holder must take the following measures to minimise the risk of introduction and spread of *weeds*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no known *weed*-affected soil, *mulch*, *fill*, or other material is brought into the area to be cleared; and
- (c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

#### 4. Fencing

- (a) Within 12 months of the commencement date of this permit, the permit holder shall construct a fence enclosing the areas cross-hatched red on Figure 2 of Schedule 1.
- (b) Fences must be designed to prohibit access of livestock and kangaroos into the revegetation sites.

#### 5. Vegetation management – Mitigation planting

The permit holder must, within 24 months of undertaking clearing authorised under this permit:

- (a) undertake the *planting* of 0.91 hectares of *Corymbia calophylla* (marri), *Eucalyptus marginata* (jarrah), *Eucalyptus rudis* (flooded gum) and *Agonis flexuosa* (peppermint) within the areas cross-hatched red in Figure 2 of Schedule 1;
- (b) ensure only *local provenance* propagating material of plants are used;
- (c) ensure *planting* is undertaken at the *optimal time*;
- (d) undertake weed control and watering of *plantings* for at least three years post planting;
- (e) the permit holder must, within 24 months of planting the 0.91 hectares of *Corymbia calophylla* (marri), *Eucalyptus marginata* (jarrah), *Eucalyptus rudis* (flooded gum) and *Agonis flexuosa* (peppermint) in accordance with condition 5(a) of this permit;
  - (i) engage an *environmental specialist* to make a determination that the 0.91 hectares of *Corymbia calophylla* (marri), *Eucalyptus marginata* (jarrah), *Eucalyptus rudis* (flooded gum) and *Agonis flexuosa* (peppermint) will survive; and
  - (ii) if the determination made by the *environmental specialist* under condition 5(e)(i) that at least 0.91 hectares of *Corymbia calophylla* (marri), *Eucalyptus marginata* (jarrah), *Eucalyptus rudis* (flooded gum) and *Agonis flexuosa* (peppermint) will not survive, the permit holder must plant additional native trees that will result in at least 0.91 hectares of *Corymbia calophylla* (marri), *Eucalyptus marginata* (jarrah), *Eucalyptus rudis* (flooded gum) and *Agonis flexuosa* (peppermint) persisting within the area cross-hatched red in Figure 2 of Schedule 1.
- (f) where additional *planting* of native trees is undertaken in accordance with condition 5(e)(ii), the permit holder must repeat the activities required by condition 5(b), 5(c), and 5(d) of this permit.

## 6. Records that must be kept

The permit holder must maintain records relating to the listed relevant matters in accordance with the specifications detailed in Table 1.

**Table 1: Records that must be kept**

No.	Relevant matter	Specifications
1.	In relation to the authorised clearing activities generally	<ul style="list-style-type: none"> <li>(a) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to GDA2020, expressing the geographical coordinates in Eastings and Northings;</li> <li>(b) the date that the area was cleared;</li> <li>(c) the size of the area cleared (in trees);</li> <li>(d) actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 2; and</li> <li>(e) actions taken to minimise the risk of the introduction and spread of <i>weeds</i> in accordance with condition 3;</li> <li>(f) actions taken in accordance with condition 4</li> </ul>
2.	In relation to vegetation management pursuant to condition 5	<ul style="list-style-type: none"> <li>(a) the date <i>planting</i> activities commenced;</li> <li>(b) the number of each species planted;</li> <li>(c) weed control and watering activities undertaken;</li> <li>(d) determination made by an <i>environmental specialist</i>; and</li> <li>(e) the date and activities undertaken where additional <i>planting</i> is required</li> </ul>

## 7. Reporting

The permit holder must provide to the *CEO* the records required under condition 6 of this permit when requested by the *CEO*.

## DEFINITIONS

In this permit, the terms in Table 2 have the meanings defined.

**Table 2: Definitions**

Term	Definition
CEO	Chief Executive Officer of the department responsible for the

Term	Definition
	administration of the clearing provisions under the <i>Environmental Protection Act 1986</i> .
clearing	has the meaning given under section 3(1) of the EP Act.
condition	a condition to which this clearing permit is subject under section 51H of the EP Act.
fill	means material used to increase the ground level, or to fill a depression.
department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
environmental specialist	means a person who holds a tertiary qualification in environmental science or equivalent, and has a minimum of 2 years work experience relevant to the type of environmental advice that an environmental specialist is required to provide under this permit, or who is approved by the CEO as a suitable environmental specialist.
EP Act	<i>Environmental Protection Act 1986</i> (WA)
local provenance	means native vegetation seeds and propagating material from natural sources within 50 kilometres and the same IBRA subregion of the area cleared.
mulch	means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation.
native vegetation	has the meaning given under section 3(1) and section 51A of the EP Act.
weeds	means any plant – <ul style="list-style-type: none"> <li>(a) that is a declared pest under section 22 of the <i>Biosecurity and Agriculture Management Act 2007</i>; or</li> <li>(b) published in a Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or</li> <li>(c) not indigenous to the area concerned.</li> </ul>

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**END OF CONDITIONS**



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Ryan Mincham  
MANAGER  
NATIVE VEGETATION REGULATION

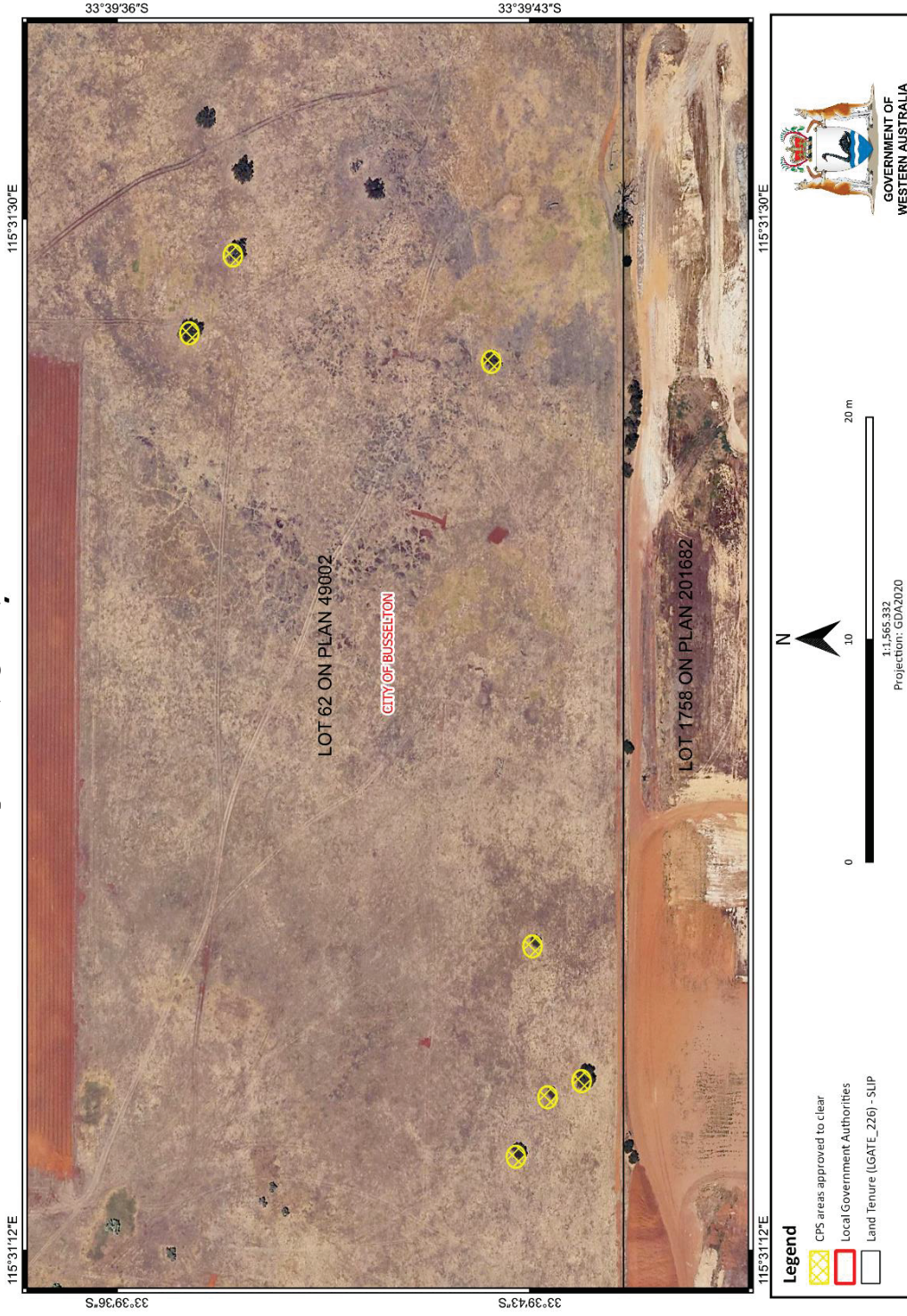
*Officer delegated under Section 20  
of the Environmental Protection Act 1986*

18 April 2024



# SCHEDULE 1

The boundary of the area authorised to be cleared is shown in the map below (Figure 1).



**Figure 1: Map of the boundary of the area within which clearing may occur.**



The boundary of the area subject to conditions is shown in the map below (Figure 2).

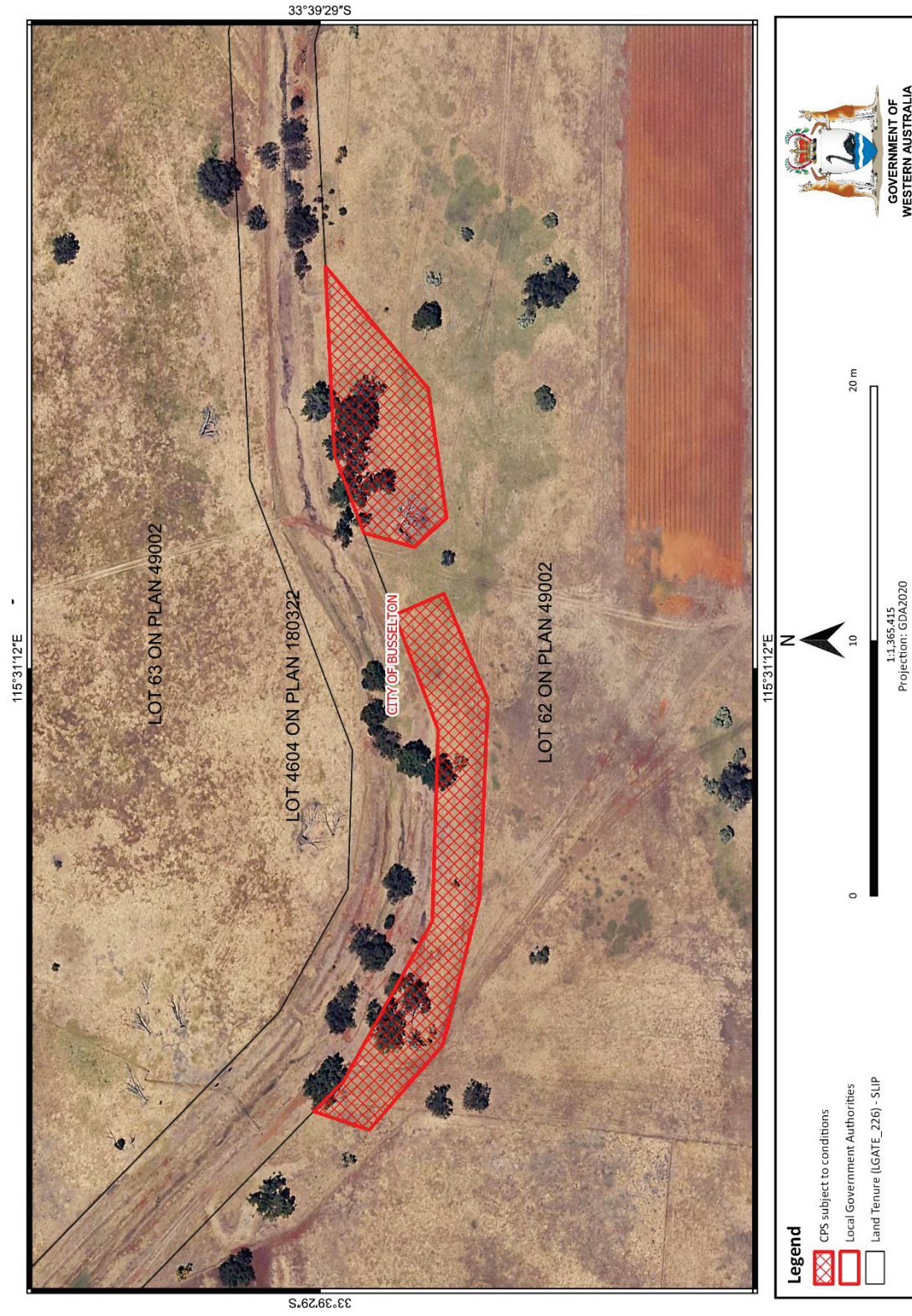


Figure 2: Map of the boundary of the area subject to revegetation conditions.



# Clearing Permit Decision Report

## 1 Application details and outcome

### 1.1. Permit application details

<b>Permit number:</b>	CPS 10448/1
<b>Permit type:</b>	Area permit
<b>Applicant name:</b>	Jamie Oates
<b>Application received:</b>	12 December 2023
<b>Application area:</b>	Seven (7) native trees
<b>Purpose of clearing:</b>	Gravel extraction
<b>Method of clearing:</b>	Mechanical
<b>Property:</b>	Lot 62 on Deposited Plan 49002
<b>Location (LGA area/s):</b>	City of Busselton
<b>Localities (suburb/s):</b>	Ruabon

### 1.2. Description of clearing activities

The vegetation proposed to be cleared comprises seven *Eucalyptus rudis* (flooded gum) trees within a previously cleared paddock composed of largely bare areas with pasture grasses. The trees proposed to be cleared are isolated individuals scattered throughout the paddock (see Figure 1, Section 1.5).

### 1.3. Decision on application

<b>Decision:</b>	Granted
<b>Decision date:</b>	18 April 2024
<b>Decision area:</b>	Seven (7) native trees, as depicted in Section 1.5, below.

### 1.4. Reasons for decision

This clearing permit application was submitted, accepted, assessed and determined in accordance with sections 51E and 51O of the *Environmental Protection Act 1986* (EP Act). The Department of Water and Environmental Regulation (DWER) advertised the application for 21 days and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (see Appendix B), relevant datasets (see Appendix F.1), photographs of the vegetation (see Appendix E), the clearing principles set out in Schedule 5 of the EP Act (see Appendix C), relevant planning instruments and any other matters considered relevant to the assessment (see Section 3).

The assessment identified that the proposed clearing will result in:

- the loss of native vegetation that is potentially suitable habitat for black cockatoos;
- the loss of native vegetation that is significant as a remnant of native vegetation in an area that has been extensively cleared;
- the loss of native vegetation growing in association with a mapped wetland.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined the proposed clearing is unlikely to lead to appreciable land

degradation or have long-term adverse impacts on environmental values and can be minimised and managed to unlikely lead to an unacceptable risk to environmental values. The applicant has suitably demonstrated avoidance and minimisation measures.

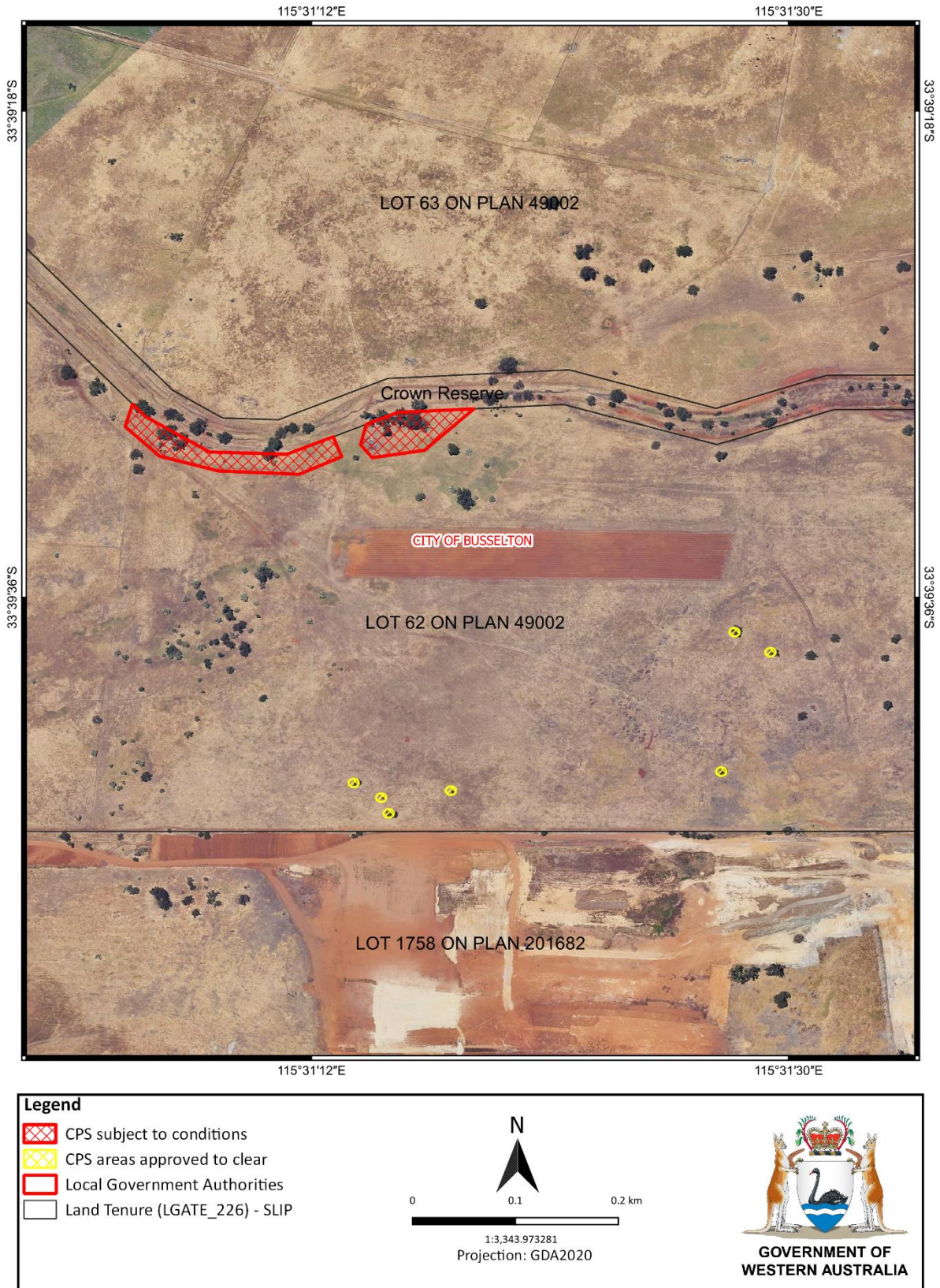
The Delegated Officer decided to grant a clearing permit subject to conditions to:

- avoid, minimise to reduce the impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds;
- planting and ensuring the long-term survival of 0.91 ha of native vegetation.



1.5. Site map

# CPS 10448/1



**Figure 1.** Map of the application area

The areas cross-hatched yellow indicate the areas authorised to be cleared under the granted clearing permit. The areas cross-hatched red indicate areas within which revegetation conditions apply.

## 2 Legislative context

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 (see Section 1.4), the Delegated Officer has also had regard to the objects and principles under section 4A of the EP Act, particularly:

- the precautionary principle
- the principle of intergenerational equity
- the polluter pays principle
- the principle of the conservation of biological diversity and ecological integrity.

Other legislation of relevance for this assessment include:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
- *Planning and Development Act 2005* (WA) (P&D Act)

The key guidance documents which inform this assessment are:

- *A guide to the assessment of applications to clear native vegetation* (DER, December 2013)
- *Procedure: Native vegetation clearing permits* (DWER, October 2019)

## 3 Detailed assessment of application

### 3.1. Avoidance and mitigation measures

#### Avoidance and minimisation

When selecting a location to extract gravel and construct a haulage road, the applicant has avoided the clearing of native vegetation as far as practicable while still being able to extract suitable gravel. This means that the haulage road will not require the clearing of any native vegetation.

#### Mitigation

##### Fauna management

To mitigate potential impacts to fauna, the applicant has proposed the following mitigation measures:

- Peg/flag areas to be cleared to avoid any unnecessary disturbance to adjacent vegetation;
- Restrict all vehicle use to designated roads and access tracks;
- Enforce compliance with onsite speed limits at all times;
- During clearing, a qualified fauna expert will be present to direct clearing operators, particularly when clearing trees that are occupied by fauna, to ensure that these are cleared in a way that allows the animals to safely mobilise to adjacent areas. In addition, they will supervise any animal handling and the rescue of injured animals should this be required;
- No stockpiling of topsoil or other material is to occur outside of the clearing boundary.

##### Weed and pathogen management

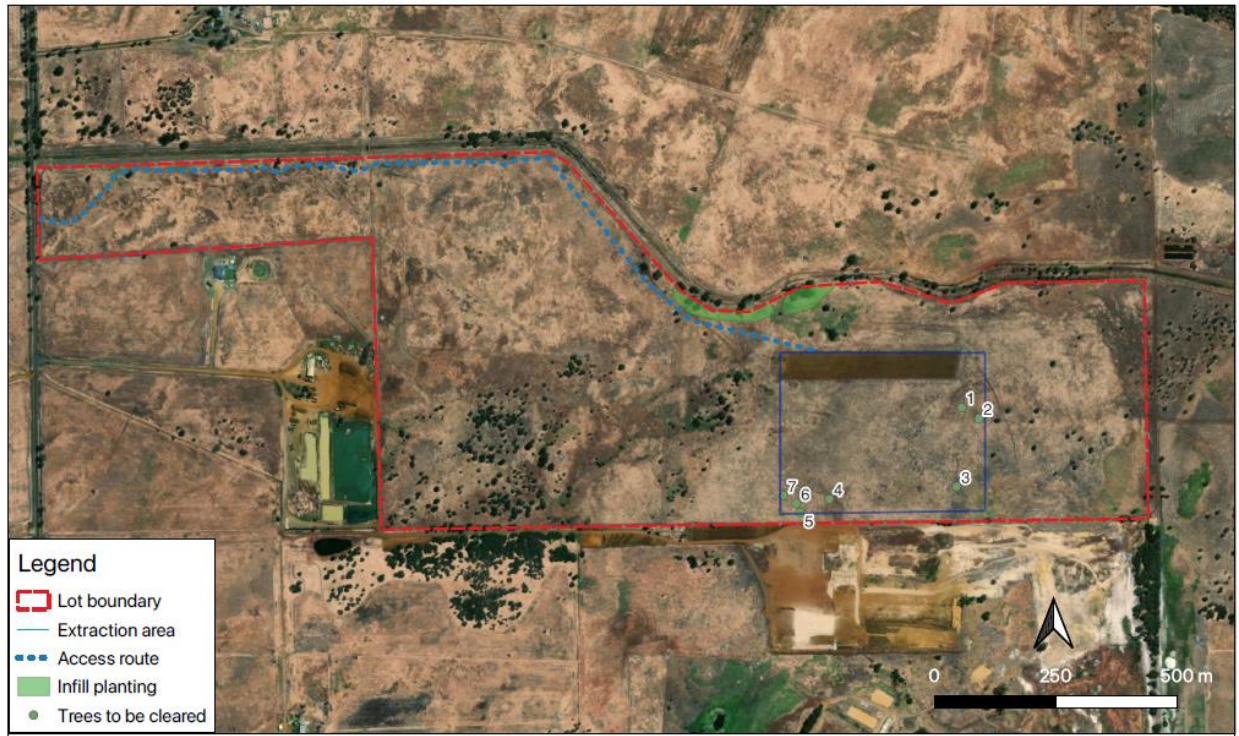
To mitigate and minimise the spread of weeds and pathogens the applicant will ensure that all earthmoving and ground engaging equipment will be inspected and cleaned of vegetation, mud and soil prior to entry and exit of the impact area.

##### Vegetation management

The applicant proposed to undertake planting of 0.91 hectares of native vegetation within the property to counterbalance the loss of the trees (Figure 2). The proposed planting will be fenced and planted at a density of (1) tree per five square metres (5 m<sup>2</sup>) with the following species:

- *Corymbia calophylla*;
- *Eucalyptus marginata*;
- *Eucalyptus rudis*;
- *Agonis flexuosa*.





**Figure 2.** Location of the proposed revegetation (Accendo, 2023)

The proposed revegetation site is sparsely vegetated, similar to that of the proposed clearing area (Figure 3). The applicant has selected this location within the property with the intention that the planted vegetation will provide habitat for fauna such as black cockatoos and western ringtail possums and enhance ecological linkage values within the area (Accendo, 2023). A mitigation calculation using the WA Offsets Metric determined that the planting of 0.91 hectares of native vegetation would be satisfactory to counterbalance the loss of seven *Eucalyptus rudis* trees.



**Figure 3.** Photographs of the proposed revegetation locations

The Delegated Officer was satisfied that the applicant has undertaken reasonable measures to avoid and minimise potential impacts of the proposed clearing on environmental values.

### 3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (see Appendix B) and the extent to which the impacts of the proposed clearing present a risk to biological, conservation, or land and water resource values.

The assessment against the clearing principles (see Appendix C) identified that the impacts of the proposed clearing present a risk to biological values (fauna, adjacent vegetation), significant remnant vegetation and land and water resources. The consideration of these impacts, and the extent to which they can be managed through conditions applied in line with sections 51H and 51I of the EP Act, is set out below.

#### 3.2.1. Biological values (fauna) - Clearing Principle (b)

##### Assessment

The desktop assessment identified 797 records of 17 conservation significant fauna species in the local area (10-kilometre radius) composed of eight birds, one invertebrate, and eight mammals. It was determined that three fauna species had suitable habitat within the proposed clearing area:

- *Calyptorhynchus banksii naso* (red-tailed black cockatoo)
- *Zanda baudinii* (Baudin's cockatoo); and
- *Zanda latirostris* (Carnaby's cockatoo)

The proposed clearing is mapped within the known distribution of all three threatened black cockatoo species. There are five records of the Baudin's cockatoo (*Zanda baudinii*) in the local area, the nearest being 3.08 km from the proposed clearing, 59 records of Carnaby's cockatoo (*Zanda latirostris*), the nearest being 0.99 km away and six records of the forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*), the nearest being 3.65 km away. Additionally, seven records of *Zanda* sp. 'white-tailed black cockatoo' are recorded within the local area, the nearest being 3.45 km from the proposed clearing.

While habitat requirements for the species of black cockatoos differ, the requirements in general can be categorised as breeding habitat, foraging habitat and night roosting habitat. *Eucalyptus rudis* (flooded gum) is generally considered to have breeding and roosting habitat value to black cockatoos.

##### Breeding

Suitable breeding habitat for black cockatoos includes trees which either have a suitable nest hollow or are of a suitable diameter at breast height (DBH) to develop a nest hollow (DAWE, 2022). *Eucalyptus rudis* (flooded gum) has been identified as a species used for breeding by Carnaby's cockatoo (DAWE, 2022). The proposed clearing is located just outside of the mapped breeding distribution of Carnaby's cockatoo, however, breeding could still occur in the area. Habitat trees considered potentially suitable for black cockatoo breeding have a DBH greater than 500 millimetres (for salmon gum and wandoo, suitable DBH is 300 millimetres) (DAWE, 2022). One breeding site was identified within the local area, approximately 4.29 km northwest of the proposed clearing area.

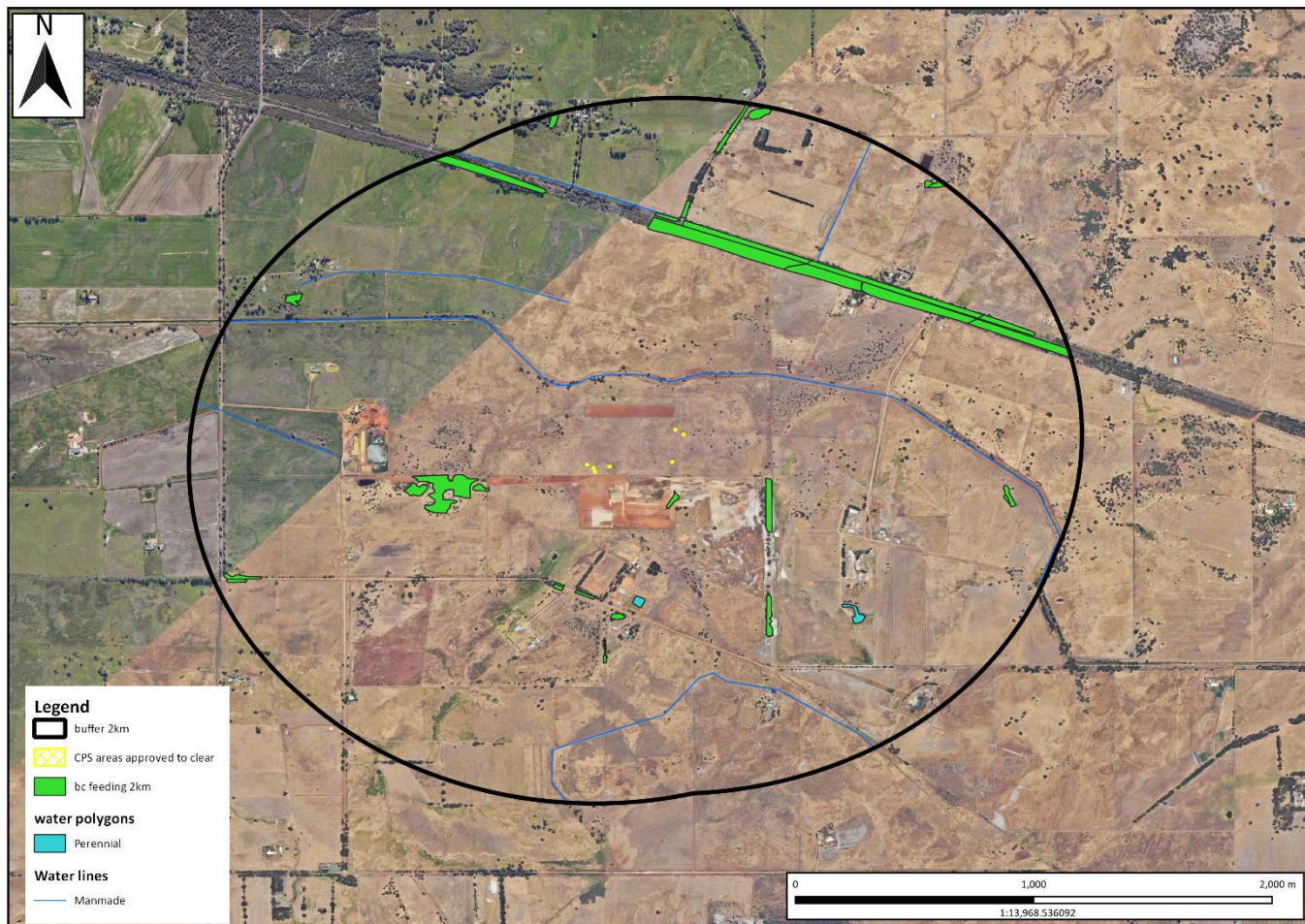
All three black cockatoo species are generally associated with breeding in areas of woodland and forest (DAWE, 2022), and while they have been known to breed within partially cleared woodland and forest, the lack of habitat values in the surrounding area means that the site may not be a preferable breeding location for black cockatoos. Additionally, the photographs of the trees proposed to be cleared do not show any observable hollows and do not appear to be large enough to develop hollows (Appendix E). Therefore, it is considered that the proposed clearing area is not likely to impact breeding habitat for black cockatoos.

##### Roosting

Black cockatoo night roosts are usually located in the tallest trees of an area and in close proximity to both a food supply and surface water (DAWE, 2022). *Eucalyptus rudis* is known to be a preferred night roosting species for Baudin's cockatoo and Carnaby's cockatoo. Black cockatoo flocks will utilise different roosts, often for weeks or until the local food supply is exhausted. Black cockatoo flocks show some consistency in roost site preference, with sites used in most years to access high quality feeding sites. One roosting site is mapped within the local area, located approximately 4.99 km southwest of the proposed clearing.

The potential value of the proposed clearing area as a night roost is considered in the context of surrounding habitat since black cockatoos rely upon the availability of night roosting habitat in proximity to foraging resources and access to watering points, usually within two kilometres of a night roost (DAWE, 2022). Within two kilometres of the proposed clearing there is limited availability of water sources and foraging habitat preferred by black cockatoos (Figure 4). This is a result of the proposed clearing's location within a highly modified landscape. Therefore, it is considered not likely that the proposed clearing would contain significant roosting habitat for black cockatoos.





**Figure 4.** Availability of foraging and water resources within two kilometres of the proposed clearing.

### Conclusion

Based on the above assessment, the proposed clearing is not likely to provide significant habitat to black cockatoos and potential impacts can be managed effectively through the Applicant's avoidance and mitigation measures (Section 3.1.).

### Conditions

No fauna management conditions required.

### **3.2.2. Significant remnant vegetation and conservation areas (vegetation) - Clearing Principle (e)**

#### Assessment

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

The proposed clearing is located within the Swan Coastal Plain which has been subject to extensive clearing for urban and rural development and currently has approximately 38.62 per cent of its pre-European extent remaining (Government of Western Australia, 2019). The local area (10 kilometre radius) retains approximately 24.99 per cent of its original, additionally, the vegetation is mapped within the Abba Complex which retains approximately 6.54 per cent of its original extent (Government of Western Australia, 2019).

The Abba complex is described as a mixture of open forest of *Corymbia calophylla* (Marri) - *Eucalyptus marginata* (Jarrah) - *Banksia* species and woodland of *Corymbia calophylla* (Marri) with minor occurrences of *Corymbia haematoxylon* (Mountain Marri). Woodland of *Eucalyptus rudis* (Flooded Gum) - *Melaleuca* species along creeks and on flood plains. The vegetation within the application area is in very degraded (Keighery, 1994) condition, mainly composed of parkland cleared areas with *E. rudis* individuals. While *E. rudis* is present, the absence of creek lines and other key indicator species within the application area indicates that the proposed clearing is not representative of the Abba Vegetation complex. .

Noting the above and despite the degraded condition of the proposed clearing area, the native vegetation within the local area is below the 30 per cent retention target. Additionally, the surrounding area is composed of largely cleared

agricultural areas with patches of remnant vegetation scattered throughout. The trees proposed to be cleared may facilitate the movement of fauna into surrounding remnants by acting as 'stepping stones' within the extensively cleared landscape.

#### Conclusion

Based on the above assessment, the proposed clearing will result in the loss of remnant native vegetation within an area that has been extensively cleared. It was determined that the Applicant's proposal to revegetate 0.91 hectares of native vegetation within the property would be an effective measure to counterbalance the loss of the *E. rudis* trees, further strengthened through a condition on the permit.

#### Conditions

To address the above impacts, the following management measures will be required as conditions on the clearing permit:

- undertake planting and ensure long-term survival of at least 0.91 hectares of native vegetation which comprise of species representative of the Abba Complex including *Corymbia calophylla*, *Eucalyptus marginata*, *Eucalyptus rudis* and *Agonis flexuosa*.

### **3.2.3. Land and water resources (wetland) - Clearing Principle (f)**

#### Assessment

The application is entirely mapped within a large Multiple Use Wetland (MUW) and therefore the native vegetation proposed to be cleared is considered to be growing in association with a wetland. MUW's are considered to have few remaining important attributes or functions and are not considered to be a priority for conservation (DBCA, 2017).

It is recommended that MUW's are managed in the context of ecologically sustainable development and best management practice catchment planning (DBCA, 2017). Given the small size of the application, the very degraded (Keighery, 1994) condition of the native vegetation and that the landscape within and surrounding the wetland is highly modified with minimal native vegetation, it is unlikely that the proposed clearing will represent any significant residual impact to the hydrography of the local area.

#### Conclusion

For the reasons set out above, it is considered that potential impacts of the proposed clearing on the multiple-use wetland does not constitute a significant residual impact.

#### Conditions

No wetland management conditions required.

### **3.3. Relevant planning instruments and other matters**

Other relevant authorisations required for the proposed land use include:

- Development approval under the *Planning and Development Act 2005* (issued by the City of Busselton)

The City of Busselton (the City) advised DWER that a Development Application for extractive industry (gravel) was approved through the Regional Joint Development Assessment Panel (JDAP) on 12 February 2024 (DAP23/23/02533 and City reference DA23/0501). The City did not register any objections to the proposed clearing and advised that the City recommended support for the Development Approval when it was presented to the JDAP (City of Busselton, 2024).

No Aboriginal sites of significance have been mapped within the application area. It is the permit holder's responsibility to comply with the *Aboriginal Heritage Act 1972* (WA) and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

**End**

## Appendix A. Additional information provided by applicant

Summary of comments	Consideration of comment
Photographs of the proposed revegetation site provided to assist in mitigation calculation.	See Section 3.1. Avoidance and mitigation measures.

## Appendix B. Site characteristics

### B.1. Site characteristics

Characteristic	Details
Local context	<p>The area proposed to be cleared comprises isolated remnant native vegetation in a highly cleared landscape within the intensive land use zone of Western Australia. It is surrounded by previously cleared farmland.</p> <p>Spatial data indicates the local area (10-kilometre radius from the centre of the area proposed to be cleared) retains approximately 24.99 per cent of the original native vegetation cover.</p>
Ecological linkage	The proposed clearing is mapped approximately 0.95 km from a linkage under the South West Regional Ecological Linkages dataset.
Conservation areas	The proposed clearing is not mapped within or adjacent to any conservation areas. The nearest conservation area is Ruabon Townsite Nature Reserve located approximately 2.29 km from the proposed clearing.
Vegetation description	<p>Photographs and supporting information supplied by the applicant indicate the vegetation within the proposed clearing area consists of cleared paddocks with scattered individuals of <i>Eucalyptus rudis</i>. Representative photos are available in Appendix E.</p> <p>This is not consistent with the mapped vegetation type(s):</p> <ul style="list-style-type: none"> <li>Abba Complex, which is described as A mixture of open forest of <i>Corymbia calophylla</i> (Marri) - <i>Eucalyptus marginata</i> (Jarrah) - Banksia species and woodland of <i>Corymbia calophylla</i> (Marri) with minor occurrences of <i>Corymbia haematoxylon</i> (Mountain Marri). Woodland of <i>Eucalyptus rudis</i> (Flooded Gum) - <i>Melaleuca</i> species along creeks and on flood plains (Government of Western Australia, 2019).</li> </ul> <p>The mapped vegetation type retains approximately 6.54 per cent of the original extent (Government of Western Australia, 2019).</p>
Vegetation condition	<p>Photographs supplied by the applicant and aerial imagery indicate the vegetation within the proposed clearing area is in completely degraded (Keighery, 1994) condition, described as:</p> <ul style="list-style-type: none"> <li>The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.</li> </ul> <p>The full Keighery (1994) condition rating scale is provided in Appendix D. Representative photos are available in Appendix E.</p>
Climate and landform	The Busselton region is considered to have a Mediterranean climate with an average maximum temperature of 22 degrees Celsius and 796 mm of rainfall. Landform of the proposed clearing area is noted as poorly draining flats and depressions.
Soil description	The soil is mapped as Abba wet ironstone flats phase which is described as winter wet flats and slight depressions with shallow red brown sands and loams over ironstone (i.e. bog iron ore soils).
Land degradation risk	The mapped soil within the proposed clearing area is at high to very high risk of subsurface acidification and is at very high to extreme risk of phosphorous export.
Waterbodies	The desktop assessment and aerial imagery indicated that the proposed clearing is entirely mapped within a multiple use category palusplain wetland.
Hydrogeography	The proposed clearing is mapped within the Busselton-Capel Groundwater area. The mapped soils have a moderate to very high risk of waterlogging and low risk of flooding.



Characteristic	Details
Flora	<p>A total of 440 records across 79 species of significant flora are recorded within the local area (10-kilometre radius). Four species are recorded within one kilometre of the proposed clearing, three are listed as Threatened and one as Priority, namely:</p> <ul style="list-style-type: none"> <li>• <i>Banksia squarrosa</i> subsp. <i>argillacea</i> (T)</li> <li>• <i>Blennospora doliiformis</i> (P3)</li> <li>• <i>Petrophile latericola</i> (T)</li> <li>• <i>Grevillea elongata</i> (T)</li> </ul> <p>No threatened or priority flora are recorded within the proposed clearing area.</p>
Ecological communities	<p>The proposed clearing is not mapped within a threatened or priority ecological community. The nearest ecological community is the Shrublands on southern Swan Coastal Plain Ironstones (Busselton area) (floristic community type 10b as originally described in Gibson et al. 1994) threatened ecological community (Critically Endangered – BC Act, Endangered – EPBC Act), located approximately 1.10 km from the proposed clearing.</p>
Fauna	<p>A total of 797 records across 17 species of significant fauna are recorded within the local area (10-kilometre radius). One species is recorded within one kilometre of the proposed clearing, <i>Zanda latirostris</i> (Carnaby's cockatoo), located approximately 0.99 km from the application.</p> <p>One black cockatoo breeding site and one roosting site is mapped within the local area and are located approximately 4.99 km and 4.29 km from the proposed clearing respectively.</p>

## B.2. Vegetation extent

	Pre-European extent (ha)	Current extent (ha)	Extent remaining (%)	Current extent in all DBCA managed land (ha)	Current proportion (%) of pre-European extent in all DBCA managed land
IBRA bioregion*					
Swan Coastal Plain	1,501,221.93	579,813.47	38.62	222,916.97	17.98
Vegetation complex					
Abba Complex**	50,892.78	3,326.20	6.54	183.20	0.36
Local area					
10 km	22,543.39	5,634.22	24.99	-	-

\*Government of Western Australia (2019a)

\*\*Government of Western Australia (2019b)

## B.3. Fauna analysis table

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
<i>Calyptorhynchus banksii</i> naso (forest red-tailed black cockatoo)	VU	N	N	3.65	6	N/A
<i>Zanda baudinii</i> (Baudin's cockatoo)	EN	N	Y	3.08	5	N/A
<i>Zanda latirostris</i> (Carnaby's cockatoo)	EN	N	Y	0.99	59	N/A
<i>Zanda</i> sp. 'white-tailed black cockatoo' (white-tailed black cockatoo)	EN	N	Y	3.45	7	N/A

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

## Appendix C. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
<b>Environmental value: biological values</b>		
<p><u>Principle (a):</u> <i>“Native vegetation should not be cleared if it comprises a high level of biodiversity.”</i></p> <p><u>Assessment:</u> The area proposed to be cleared does not contain locally significant flora, fauna, habitats or assemblages of plants. The trees are located in a previously cleared paddock that lacks any understorey and biodiversity.</p>	Not likely to be at variance	No
<p><u>Principle (b):</u> <i>“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.”</i></p> <p><u>Assessment:</u> All three black cockatoo species have been recorded within the local area. <i>Eucalyptus rudis</i> may be utilised by these species for habitat, however, is not a primary foraging species. The photographs of the proposed clearing area indicate that the vegetation is unlikely to provide significant breeding or roosting habitat for threatened black cockatoo species.</p>	Not likely to be at variance	Yes <i>Refer to Section 3.2.1, above.</i>
<p><u>Principle (c):</u> <i>“Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.”</i></p> <p><u>Assessment:</u> Three threatened flora species are recorded in close proximity to the proposed clearing, however, given that the site has been previously cleared and is subject to ongoing disturbance, it is unlikely that the proposed clearing area would contain individuals of or critical habitat for threatened flora.</p>	Not likely to be at variance	No
<p><u>Principle (d):</u> <i>“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.”</i></p> <p><u>Assessment:</u> The area proposed to be cleared does not contain species that can indicate a threatened ecological community.</p>	Not likely to be at variance	No
<b>Environmental value: significant remnant vegetation and conservation areas</b>		
<p><u>Principle (e):</u> <i>“Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.”</i></p> <p><u>Assessment:</u> The extent of the mapped vegetation type and native vegetation in the local area is inconsistent with the national objectives and targets for biodiversity conservation in Australia. The vegetation in the local area retains 24.99 per cent of its original extent.</p>	At variance	Yes <i>Refer to Section 3.2.2, above.</i>
<p><u>Principle (h):</u> <i>“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.”</i></p> <p><u>Assessment:</u> Given the distance to the nearest conservation area, the proposed clearing is not likely to have an impact on the environmental values of nearby conservation areas.</p>	Not likely to be at variance	No
<b>Environmental value: land and water resources</b>		

Assessment against the clearing principles	Variance level	Is further consideration required?
<p><u>Principle (f):</u> <i>“Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.”</i></p> <p><u>Assessment</u> The proposed clearing is mapped within a multiple use category wetland, however, given that the site has largely been previously cleared, it is not likely the proposed clearing will impact on- or off-site hydrology.</p>	At variance	Yes  <i>Refer to Section 3.2.3, above.</i>
<p><u>Principle (g):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.”</i></p> <p><u>Assessment:</u> Given the small size of the proposed clearing and that it is surrounded previously cleared agricultural lands, it is not likely to cause or exacerbate land degradation risks.</p>	Not likely to be at variance	No
<p><u>Principle (i):</u> <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.”</i></p> <p><u>Assessment:</u> The proposed clearing is recorded within a wetland, however; noting the small extent of the clearing and the history of disturbance on the property and surrounding areas, it is not likely the proposed clearing will impact on surface or groundwater quality.</p>	Not likely to be at variance	No
<p><u>Principle (j):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.”</i></p> <p><u>Assessment:</u> The mapped soils and topographic contours in the surrounding area do not indicate the proposed clearing is likely to contribute to increased incidence or intensity of flooding.</p>	Not likely to be at variance	No

**Appendix D. Vegetation condition rating scale**

Vegetation condition is a rating given to a defined area of vegetation to categorise and rank disturbance related to human activities. The rating refers to the degree of change in the vegetation structure, density and species present in relation to undisturbed vegetation of the same type. The degree of disturbance impacts upon the vegetation’s ability to regenerate. Disturbance at a site can be a cumulative effect from a number of interacting disturbance types.

Considering its location, the scale below was used to measure the condition of the vegetation proposed to be cleared. This scale has been extracted from Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.

**Measuring vegetation condition for the South West and Interzone Botanical Province (Keighery, 1994)**

Condition	Description
Pristine	Pristine or nearly so, no obvious signs of disturbance.
Excellent	Vegetation structure intact, with disturbance affecting individual species; weeds are non-aggressive species.
Very good	Vegetation structure altered, with obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and/or grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and/or grazing.

Condition	Description
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and/or grazing.
Completely degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.



**Appendix E. Photographs of the vegetation**



Plate 1: *Eucalyptus rudis* tree 1 subject to clearing.



Plate 2: *Eucalyptus rudis* tree 2 subject to clearing.



Plate 3: *Eucalyptus rudis* tree 3 subject to clearing.



Plate 4: *Eucalyptus rudis* tree 4 subject to clearing.



Plate 5: *Eucalyptus rudis* tree 5 subject to clearing.



Plate 6: *Eucalyptus rudis* tree 6 subject to clearing.



Plate 7: *Eucalyptus rudis* tree 7 subject to clearing.

**Figure 5.** Photographs of the vegetation proposed to be cleared (Accendo, 2023).



## Appendix F. Sources of information

### F.1. GIS databases

Publicly available GIS Databases used (sourced from [www.data.wa.gov.au](http://www.data.wa.gov.au)):

- 10 Metre Contours (DPIRD-073)
- Aboriginal Heritage Places (DPLH-001)
- Cadastre (LGATE-218)
- Contours (DPIRD-073)
- DBCA – Lands of Interest (DBCA-012)
- DBCA Legislated Lands and Waters (DBCA-011)
- Directory of Important Wetlands in Australia – Western Australia (DBCA-045)
- Environmentally Sensitive Areas (DWER-046)
- Flood Risk (DPIRD-007)
- Groundwater Salinity Statewide (DWER-026)
- Hydrography – Inland Waters – Waterlines
- Hydrological Zones of Western Australia (DPIRD-069)
- IBRA Vegetation Statistics
- Imagery
- Local Planning Scheme – Zones and Reserves (DPLH-071)
- Native Title (ILUA) (LGATE-067)
- Offsets Register – Offsets (DWER-078)
- Pre-European Vegetation Statistics
- Public Drinking Water Source Areas (DWER-033)
- Ramsar Sites (DBCA-010)
- Regional Parks (DBCA-026)
- Remnant Vegetation, All Areas
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Land Quality – Flood Risk (DPIRD-007)
- Soil Landscape Land Quality – Phosphorus Export Risk (DPIRD-010)
- Soil Landscape Land Quality – Subsurface Acidification Risk (DPIRD-011)
- Soil Landscape Land Quality – Water Erosion Risk (DPIRD-013)
- Soil Landscape Land Quality – Water Repellence Risk (DPIRD-014)
- Soil Landscape Land Quality – Waterlogging Risk (DPIRD-015)
- Soil Landscape Land Quality – Wind Erosion Risk (DPIRD-016)
- Soil Landscape Mapping – Best Available
- Soil Landscape Mapping – Systems

Restricted GIS Databases used:

- ICMS (Incident Complaints Management System) – Points and Polygons
- Threatened Flora (TPFL)
- Threatened Flora (WAHerb)
- Threatened Fauna
- Threatened Ecological Communities and Priority Ecological Communities
- Threatened Ecological Communities and Priority Ecological Communities (Buffers)

### F.2. References

- Accendo Australia (2023) *RE –Lot 62 (1098) Ludlow-Hithergreen Road, Abba River - Clearing Permit Application*, received 12 December 2023 (DWER Ref: DWERDT897274).
- City of Busselton (2024) *Advice for clearing permit application CPS 10448/1 – Development Approval*, received 21 March 2024 (DWER Ref: DWERDT922980).
- Commonwealth of Australia (2001) *National Objectives and Targets for Biodiversity Conservation 2001-2005*, Canberra.
- Department of Agriculture, Water and the Environment (DAWE) (2022). *Referral guideline for 3 WA threatened black cockatoo species*. Department of Agriculture, Water and the Environment, Canberra. Available from:

<https://www.dcceew.gov.au/sites/default/files/documents/referral-guideline-3-wa-threatened-black-cockatoo-species-2022.pdf>

Department of Biodiversity, Conservation and Attractions (DBCA) (2017) *A methodology for the evaluation of wetlands on the Swan Coastal Plain, Western Australia*. WA Department of Biodiversity, Conservation and Attractions, Perth. Available from: <https://www.dbca.wa.gov.au/management/wetlands/wetland-mapping>

Department of Environment Regulation (DER) (2013). *A guide to the assessment of applications to clear native vegetation*. Perth. Available from: [https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2\\_assessment\\_native\\_veg.pdf](https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2_assessment_native_veg.pdf).

Department of Primary Industries and Regional Development (DPIRD) (2019). *NRInfo Digital Mapping. Department of Primary Industries and Regional Development*. Government of Western Australia. URL: <https://maps.agric.wa.gov.au/nrm-info/>.

Department of Water and Environmental Regulation (DWER) (2019). *Procedure: Native vegetation clearing permits*. Joondalup. Available from: [https://dwer.wa.gov.au/sites/default/files/Procedure\\_Native\\_vegetation\\_clearing\\_permits\\_v1.PDF](https://dwer.wa.gov.au/sites/default/files/Procedure_Native_vegetation_clearing_permits_v1.PDF).

Government of Western Australia (2019) *2018 South West Vegetation Complex Statistics. Current as of March 2019*. WA Department of Biodiversity, Conservation and Attractions, Perth, <https://catalogue.data.wa.gov.au/dataset/dbca>

Government of Western Australia. (2019) *2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019*. WA Department of Biodiversity, Conservation and Attractions. <https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics>

Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Molloy, S., Wood, J., Hall, S., Wallrodt, S. and Whisson, G. (2009) *South West Regional Ecological Linkages Technical Report*, Western Australian Local Government Association and Department of Environment and Conservation, Perth.

Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68) *Atlas of Australian Soils*, Sheets 1 to 10, with explanatory data. CSIRO and Melbourne University Press: Melbourne.

Oates, J (2023) *Clearing permit application CPS 10448/1*, received 12 December 2023 (DWER Ref: DWERDT879434).

Schoknecht, N., Tille, P. and Purdie, B. (2004) *Soil-landscape mapping in South-Western Australia – Overview of Methodology and outputs* Resource Management Technical Report No. 280. Department of Agriculture.

Shah, B. (2006) *Conservation of Carnaby's Black-Cockatoo on the Swan Coastal Plain, Western Australia*. December 2006. Carnaby's Black-Cockatoo Recovery Project. Birds Australia, Western Australia.

Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) *Native Vegetation in Western Australia, Extent, Type and Status*. Resource Management Technical Report 249. Department of Agriculture, Western Australia.

Western Australian Herbarium (1998-). *FloraBase - the Western Australian Flora*. Department of Biodiversity, Conservation and Attractions, Western Australia. <https://florabase.dpaw.wa.gov.au/>