



## **CLEARING PERMIT**

Granted under section 51E of the Environmental Protection Act 1986

### **PERMIT DETAILS**

Area Permit Number:	CPS 10367/1
File Number:	DWERVT13742
Duration of Permit:	From 12 February 2024 to 12 February 2036

### **PERMIT HOLDER**

City of Bunbury

### LAND ON WHICH CLEARING IS TO BE DONE

Lot 1 on Plan 2138, South Bunbury Lot 295 on Plan 2138, South Bunbury Lot 296 on Plan 2138, South Bunbury Lot 151 on Plan 4687, South Bunbury Closed road reserve (PIN 504797), South Bunbury

### AUTHORISED ACTIVITY

The permit holder must not clear more than four (4) 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 12 February 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 and dieback 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* and *dieback*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no known *dieback* or *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. Directional clearing

The permit holder must:

- (a) conduct clearing activities in a slow, progressive manner towards *native vegetation*; and
- (b) allow reasonable time for fauna present within the area being cleared to move into adjacent *native vegetation* ahead of the clearing activity.

### 5. Fauna management – western ringtail possums

- (a) In relation to the area cross-hatched yellow in Figure 1 of Schedule 1, the permit holder must engage a *fauna specialist* to inspect that area immediately prior to, and for the duration of clearing activities, for the presence of western ringtail possum(s) (*Pseudocheirus occidentalis*).
- (b) Clearing activities must cease in any area where fauna referred to in condition 5(a) are identified until either:
  - (i) the western ringtail possum(s) individual has moved on from that area to adjoining *suitable habitat*; or
  - (ii) the western ringtail possum(s) individual has been removed by a *western ringtail possum specialist*.
- (c) Any western ringtail possum(s) individual removed in accordance with condition 5(b)(ii) must be relocated by a *western ringtail possum specialist* to a *suitable habitat*, or as otherwise approved by the *CEO*.
- (d) Where fauna is identified under condition 5(a), the permit holder must within 14 calendar days provide the following records to the *CEO*:
  - (i) the number of individuals identified;
  - (ii) the date each individual was identified;
  - (iii) the location where each individual was identified recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 2020

(GDA2020), expressing the geographical coordinates in Eastings and Northings or decimal degrees;

- (iv) the number of individuals removed and relocated;
- (v) the relevant qualifications of the *western ringtail possum specialist* undertaking removal and relocation;
- (vi) the date each individual was removed;
- (vii) the method of removal;
- (viii) the date each individual was relocated;
- (ix) the location where each individual was relocated to, recorded using a GPS unit set to GDA2020, expressing the geographical coordinates in Eastings and Northings or decimal degrees; and
- (x) details pertaining to the circumstances of any death of, or injury sustained by, an individual.

#### 6. **Revegetation and rehabilitation**

- (a) Within 12 months of undertaking clearing authorised under this permit and no later than 12 February 2026, the permit holder must:
  - undertake *planting* of at least 16 *Agonis flexuosa* (peppermint) trees within the areas cross-hatched red in Figure 1 of Schedule 2 within Hands Oval (Closed road reserve (PIN 504797 and PIN 504803), Lot 151 on Plan 4687, Lot 295 on Plan 2138, Lot 1 on Plan 2138, Lot 10 on Plan 2326, Lot 11 on Plan 2326 and Lot 16 on Plan 2326), South Bunbury;
  - (ii) ensure only *local provenance* seeds and propagating material are used;
  - (iii) ensure *planting* is undertaken at the *optimal time*; and
  - (iv) undertake *weed* control and watering of *plantings* for at least two years post *planting*.
- (b) Within 24 months of undertaking *planting* in accordance with condition 6(a)(i) of this permit, the permit holder must;
  - (i) engage an *environmental specialist* to make a determination that at least 16 *planted Agonis flexuosa* (peppermint) trees will survive;
  - (ii) if the determination is made by the *environmental specialist* under condition 6(b)(i) that at least 16 *planted Agonis flexuosa* (peppermint) trees will not survive, the permit holder must plant additional trees that will result in at least 16 *Agonis flexuosa* (peppermint) trees persisting within the areas cross-hatched red in Figure 1 of Schedule 2; and
  - (iii) where additional *planting* of trees is undertaken in accordance with condition 6 (b)(ii), the permit holder must repeat the activities required by conditions 6 (a) (i-iv) and 6 (b) (i-ii) of this permit.

### 7. 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.

No.	Relevant matter	Specifications				
1.	In relation to the authorised clearing	(a)	the species composition, structure, and density of the cleared area;			
	activities generally		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;			
		(c)	the date that the area was cleared;			
		(d)	the size of the area cleared (in hectares); and			
		(e)	actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 2; and			
		(f)	actions taken to minimise the risk of the introduction and spread of <i>weeds</i> and <i>dieback</i> in accordance with condition 3;			
		(g)	actions taken to ensure directional clearing in accordance with condition 4; and			
		(h)	actions taken to manage and mitigate impacts to western ringtail possums in accordance with condition 5.			
2.	In relation to <i>planting</i>	(a)	the size of the <i>planted</i> area;			
	pursuant to condition 6.	(b)	the date(s) on which the <i>planting</i> was undertaken;			
		(c)	the boundaries of the area planted (recorded digitally as a shapefile);			
		(d)	a description of the <i>planting</i> activities undertaken pursuant to condition 6(a), including <i>planted</i> species composition and density, and actions taken to implement watering and <i>weed</i> control;			
		(a)	a copy of the <i>environmental specialist's</i> monitoring report and determination; and			
		(e)	a description of any remedial actions undertaken pursuant to conditions			

Table 1: Records that must be kept

ľ	No.	Relevant matter	Specifications
			6(b)(ii)-(iii), where the <i>environmental specialist</i> indicates that <i>planted</i> trees will not survive.

# 8. 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 have the meanings defined.

### Table 2: Definitions

Term	Definition				
CEO	Chief Executive Officer of the department responsible for the 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.				
department	means the department established under section 35 of the <i>Public Sector</i> <i>Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.				
dieback	means the effect of <i>Phytophthora</i> species on native vegetation.				
environmental specialist	means a person who holds a tertiary qualification specialising 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 the permit, or who is approved by the <i>CEO</i> as a suitable <i>environmental specialist</i> .				
EP Act	Environmental Protection Act 1986 (WA)				
fauna specialist	means a person who holds a tertiary qualification specialising in environmental science or equivalent, and has a minimum of 2 years work experience in fauna identification and surveys of fauna native to the region being inspected or surveyed, or who is approved by the <i>CEO</i> as a suitable fauna specialist for the bioregion, and who holds a valid fauna licence issued under the <i>Biodiversity Conservation Act 2016</i> .				
fill	means material used to increase the ground level, or to fill a depression				
local provenance	means native vegetation seeds and propagating material from natural sources within 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.				
optimal time	means the period from May to September for undertaking planting and seeding.				
planting/ed	means the re-establishment of vegetation by creating soil conditions a planting seedlings of the desired species.				
rehabilitate	means the re-establishment of a cover of <i>local provenance</i> native vegetation in an area using methods such as natural regeneration, direct seeding and/or <i>planting</i> , so that the species composition, structure and density is similar to pre-clearing vegetation types in that area.				
revegetate/ion	means actively managing an area containing native vegetation in order to improve the ecological function of the area.				
suitable habitat (western ringtail possum)	means habitat known to support western ringtail possums ( <i>Pseudocheirus occidentalis</i> ) within the known current distribution of the species, typically characterised by abundant foliage, presence of suitable nesting structures such as tree hollows, as well as high canopy				

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Term	Definition				
	cover and continuity. Known habitat includes peppermint ( <i>Agonis</i> <i>flexuosa</i> ) dominated woodlands, jarrah ( <i>Eucalyptus marginata</i> ) and marri ( <i>Corymbia calophylla</i> ) forests, riparian vegetation with a canopy of Bullich ( <i>Eucalyptus megacarpa</i> ) or flooded gum ( <i>Eucalyptus rudis</i> ), karri ( <i>Eucalyptus diversicolor</i> ) forests, sheoak ( <i>Allocasuarina</i> <i>fraseriana</i> ) dominated woodlands, and other stands of myrtaceous trees growing near swamps, watercourses or floodplains.				
weeds	<ul> <li>means any plant – <ul> <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> </li> </ul>				
western ringtail possum specialist	means a <i>fauna specialist</i> who holds a tertiary qualification specialising in environmental science or equivalent, has a minimum of two years of work experience in western ringtail possum ( <i>Pseudocheirus</i> <i>occidentalis</i> ) identification, surveys of western ringtail possums and capture and handling of western ringtail possums, and holds a valid fauna licence issued under the <i>Biodiversity Conservation Act 2016</i> .				

### **END OF CONDITIONS**

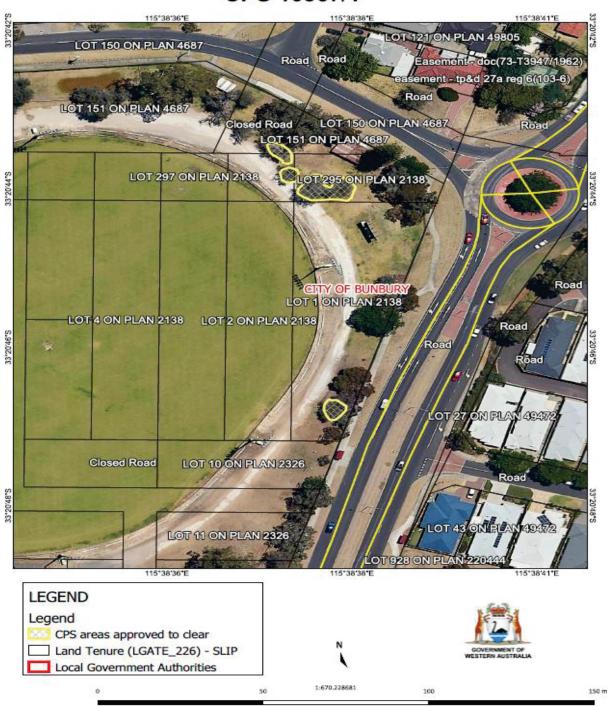
**Temika Mathieson** A/Manager NATIVE VEGETATION REGULATION

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

19 January 2024

# **SCHEDULE 1**

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



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

# **SCHEDULE 2**

The boundary of the area within which *planting* is to occur is shown in hatched red in the map below (Figure 1).



Figure 1: Map of the boundary of the area within which *planting* must occur



# **Clearing Permit Decision Report**

1 Application details and outcome						
1.1. Permit application	1.1. Permit application details					
Permit number:	CPS 10367/1					
Permit type:	Area permit					
Applicant name:	City of Bunbury					
Application received:	5 October 2023					
Application area:	Four (4) native trees (revised)					
Purpose of clearing:	Upgrading the existing ring road around Hands Oval					
Method of clearing:	Mechanical					
Property:	Lot 1 on Plan 2138					
	Lot 295 on Plan 2138					
	Lot 296 on Plan 2138					
	Lot 151 on Plan 4687					
	Closed Road reserve (PIN 504797)					
Location (LGA area/s):	City of Bunbury					
Localities (suburb/s):	South Bunbury					

### 1.2. Description of clearing activities

The City of Bunbury (The City) is proposing to undertake the clearing of native vegetation within the Hands Oval site, South Bunbury. The vegetation proposed to be cleared is contained within the western side of Hands Oval, South Bunbury (see Figure 1, Section 1.5). The application is to upgrade the existing ring-road around the oval, inclusive of drainage, bitumen, line marked parking bays, a new pedestrian pathway, upgrades to seating and a new dual lane entry way off Halsey Street (City of Bunbury, 2023a).

The application was revised during the assessment process upon further clarification regarding the number of native trees proposed to be cleared. The change resulted in the reduction of proposed clearing from six native trees to four native trees (City of Bunbury, 2023b).

### 1.3. Decision on application

Decision:	Granted	
Decision date:	19 January 2024	
Decision area:	4 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), the findings of an ecological survey (see Appendix EE), the clearing principles set out in Schedule 5 of the EP Act (see Appendix CC), relevant planning instruments and any other matters considered relevant to the assessment (see Section 3). The Delegated Officer also took into consideration that this is Stage 2 of the Hands Oval re-development as the preexisting facility did not have adequate facilities or meet the needs of the community (City of Bunbury, 2023a).

The assessment identified that the proposed clearing will result in:

- the loss of native vegetation that is suitable habitat for western ringtail possum (WRP) (*Pseudocheirus occidentalis*),
- the potential introduction and spread of weeds and dieback into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values, and
- potential land degradation in the form of wind erosion.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined that some of the impacts of the proposed clearing, including direct impacts to individual fauna, the potential for land degradation, and the potential to facilitate the introduction of weeds and dieback, can be minimised and managed to unlikely lead to an unacceptable risk to environmental values through permit conditioning. However, impacts to suitable habitat for WRP remained significant even after the application of minimisation and mitigation measures and constituted a significant residual impact.

The Delegated Officer determined that the deliberate planting of a minimum of 16 peppermint (*Agonis flexuosa*) trees within Lot 1 on Plan 2138, Lot 295 on Plan 2138, Lot 296 on Plan 2138, Lot 151 on Plan 4687, and Closed Road reserve (PIN 504797), South Bunbury (hereafter referred to as the Hands Oval site), is sufficient to mitigate the loss of four peppermint trees that provide suitable habitat for WRP and ensure a significant residual impact no longer exists (see Section 3.2.1).

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

- avoid, minimise, and reduce the impacts and extent of clearing,
- plant and maintain a minimum of 16 peppermint trees within the Hands Oval site, as a mitigation measure for the clearing of four native peppermint trees that provide habitat value for WRP,
- take hygiene steps to minimise the risk of the introduction and spread of weeds and dieback,
- commence works within two months of undertaking the proposed clearing to minimise the risk of wind erosion,
- undertake slow, progressive one directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity, and
- engage a fauna specialist to inspect the clearing area prior to, and for the duration of, clearing activities, for the presence of WRP, to mitigate direct impacts to individuals resulting from clearing activities.

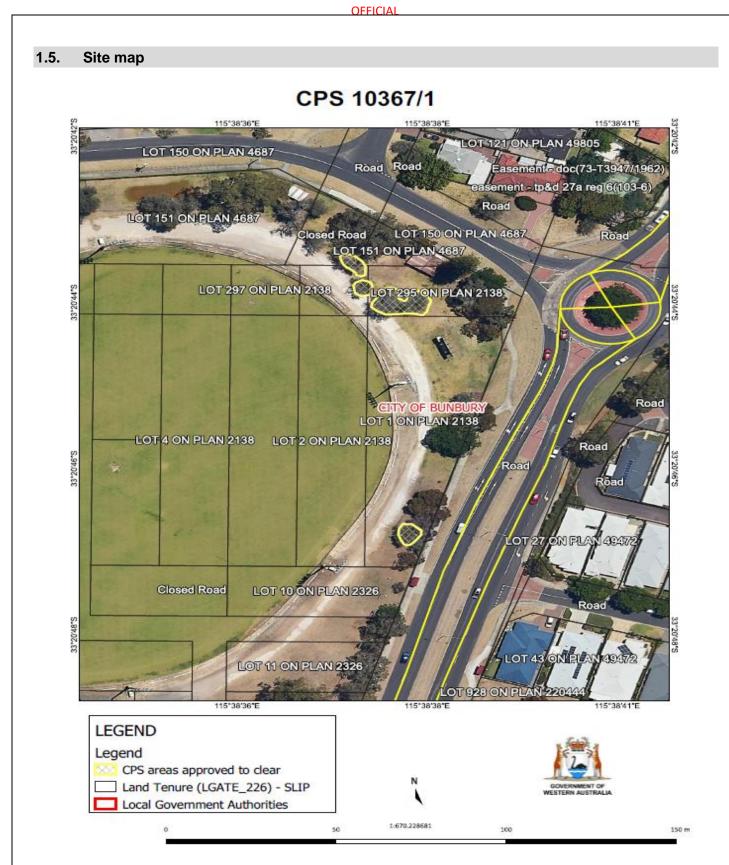


Figure 1. The areas crosshatched yellow indicate the areas authorised to be cleared under the granted clearing permit.

#### 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)

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)
- Technical guidance Flora and Vegetation Surveys for Environmental Impact Assessment (EPA, 2016)
- Technical guidance Terrestrial Fauna Surveys for Environmental Impact Assessment (EPA, 2016)

#### 3 Detailed assessment of application

#### 3.1. Avoidance and mitigation measures

The applicant has advised that the following avoidance and mitigation measures have been undertaken (City of Bunbury, 2023a).

• The re-design of the development footprint has aimed to minimise the clearing of vegetation and avoid impacts to trees, notably a large peppermint tree (Habitat Tree #40) in the northern portion of the site, and the large tuart (*Eucalyptus gomphocephala*) (Habitat Tree #17) at the entrance point off Halsey Street. Impacts to Habitat Tree #40 were avoided through reducing the local road width and adjusting the design levels to avoid impacts on the root zone. Impacts to Habitat Tree #17 were avoided through re-design of the entry way.

DWER have identified that the planting and maintaining of 16 peppermint trees, would be required to ensure a significant residual impact to fauna habitat does not remain after the proposed clearing (see Section 3.2.1). The City have agreed to the planting of 16 trees within the eastern portion of the Hands Oval site, South Bunbury.

Considering the above, the Delegated Officer was satisfied that the applicant has made a reasonable effort 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 **Error! Reference source not found.**) identified that the impacts of the proposed clearing present a risk to biological values (fauna) and land and water values (wind erosion). 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 Principles (a) and (b)

#### Assessment

According to available databases, 56 conservation significant fauna species have been recorded within the local area, which includes 19 migratory species and nine marine species. The closest record to the application area is a WRP. This species has been recorded 2557 times within the local area.

One conservation significant species, WRP, was considered likely to occur within the application area based on its known habitat preferences and the habitat available within the application areas. The WRP is listed as Critically Endangered under the BC Act and EPBC Act.

Noting the proximity of records of black cockatoos to the application area and that it occurs within the known range of Baudin's cockatoo, Carnaby's cockatoo and the forest red-tailed black cockatoo (collectively known as black cockatoo species), the application area may also provide a habitat for black cockatoo species. However, noting the proposed clearing relates only to four peppermint trees which are not a preferred foraging, roosting, or breeding resource and given the availability of other food sources, including Tuart and Eucalypt trees nearby, the proposed clearing is unlikely to have a significant impact on threatened black cockatoo species.

#### Western Ringtail Possum (WRP)

The 'Western Ringtail Possum (Pseudocheirus occidentalis) Recovery Plan' outlines strategies to slow the decline in population size, extent, and area of occupancy through managing major threatening processes affecting the subpopulations and their habitats and allowing the persistence of the species in each of the identified key management zones: Swan Coastal Plain, southern forests and south coast (DPaW, 2017). The application area is located within the Swan Coastal Plain management zone.

Noting the proposed trees to be cleared are peppermint and local records of the species, it is considered likely that WRP occur within the application area. However, Natural Area (2023) recorded no western ringtail possums or dreys within the clearing area during the survey. The survey did note two peppermint (*Agonis flexuosa*) trees in the northern section of the site showed signs of scratch marks on the trunk indicating the presence of possums. Due to the highly disturbed and modified nature of the parkland, it is more likely that WRP may utilise the site transiently for foraging or movement rather than having a resident population (Natural Area, 2023).

To mitigate the loss of four trees that provide foraging and dispersal habitat for WRP, the City has proposed to plant and maintain 16 peppermint trees within the greater Hands Oval site to ensure the clearing will not result in a decline in WRP habitat in the local area. The proposed planting was input into the WA Environmental Offsets Metric Calculator to determine the ratio required to mitigate the loss of four trees and it was determined that the planting of 16 peppermint trees was a suitable mitigation measure. A significant residual impact does not remain following the mitigation planting. DWER considers the mitigation planting aligns with the WA Environmental Offsets Policy (2011) and WA Environmental Offsets Guideline (2014).

#### **Conclusion**

Based on the above assessment, the proposed clearing will result in the loss of four trees that provide significant habitat for WRP and may result in direct impacts to individual fauna if present during the clearing. However, this is not likely to impact on the conservation status of any species that have the potential to occur within the application area.

For the reasons set out above, it is considered that the impacts of the proposed clearing on fauna habitat can be managed through the avoidance, minimisation, and mitigation measures committed to by the applicant and does not constitute a significant residual impact after the implementation of management conditions as specified on the permit.

#### Conditions

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

- slow, directional clearing to allow fauna to move into adjacent vegetation ahead of the clearing activity will
  minimise impact to individuals,
- fauna management conditions requiring a pre-clearing inspection of the application area for presence of WRP and for clearing to cease where any individuals are identified until the individual has dispersed or been relocated,
- undertake planting of 16 native peppermint trees within the Hands Oval site, and
- weed and dieback management measures to assist in mitigating impacts to surrounding vegetation that provides fauna habitat.

#### 3.2.2. Significant remnant 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 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001). Noting that the current vegetation extent within the local area fall below the 30 per cent threshold (see Appendix B.2), the application area is considered to be a remnant within an extensively cleared landscape.

However, the Environmental Protection Authority (EPA) recognises the Greater Bunbury Region Scheme area to be a constrained area, within which a minimum 10 per cent representation threshold for ecological communities is recommended (EPA, 2008). The current vegetation extent for the Swan Coastal Plain IBRA Bioregion, the mapped vegetation complexes, and the local area are all above the 10 per cent threshold for constrained areas (see Appendix B.2).

Given the above and that the proposed clearing relates to the remove of four individual trees over maintained turf, the proposed clearing is not considered to impact extensively cleared vegetation within the Greater Bunbury Region Scheme constrained area.

However, it is acknowledged that the proposed clearing has the potential to facilitate the spread of weeds and dieback into remnants of native vegetation in the local area. A weed and dieback management condition is considered to minimise this risk, and it is not considered likely that the proposed clearing will have a significant impact on nearby significant remnant vegetation.

#### **Conclusion**

Based on the above assessment, the proposed clearing is unlikely to result in significant impacts to vegetation extent within an extensively cleared area but may facilitate the spread of weeds and dieback into nearby vegetation in the local area. For the reasons set out above, it is considered that the impacts of the proposed clearing can be managed to be environmentally acceptable by taking steps to minimise the risk of the introduction and spread of weeds and dieback and does not constitute a significant residual impact.

#### **Conditions**

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

• Dieback and weed control, which ensures protocols are put in place to limit the introduction and transportation of dieback- and weed-affected materials.

#### 3.2.3. Land and water resources (land degradation) - Clearing Principle (g)

#### <u>Assessment</u>

The mapped soil type within the application area (Spearwood S4a Phase) is described as flat to gently undulating sandplain with deep, pale and sometimes bleached sands with yellow-brown subsoils. The soil type has a high risk of wind erosion.

According to available databases, clearing of the proposed native vegetation is likely to have a high risk of wind erosion if bare ground is left exposed to weathering for an extended period after clearing, due to the sandy nature of the topsoil across the application area. Due to the small extent of the proposed clearing and that it is already surrounded by roads and buildings, it is unlikely that there will be any long-term adverse impacts from wind erosion. However, ensuring works commence within two months of clearing, will minimise the exposure of bare soils and minimise the risk of wind erosion.

#### **Conclusion**

Based on the above assessment, the proposed clearing may cause land degradation in the form of wind erosion. A wind erosion management condition, ensuring works commence within two months of the clearing, is considered sufficient to minimise this risk.

#### **Conditions**

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

• The permit holder must commence upgrades to the Hands Oval ring road no later than two (2) months after undertaking the authorised clearing activities to reduce the potential for wind erosion

### 3.3. Relevant planning instruments and other matters

The clearing permit application was advertised on DWER's website on 14 December 2023, inviting submissions from the public within a 21-day period. No submissions were received in relation to this application.

The City of Bunbury advised DWER that local government approvals are not required, and that the proposed clearing is consistent with the City's Local Planning Scheme No 8.

Several Aboriginal sites of significance have been mapped within the local area, with none mapped as occurring 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
Confirmation of total number of native trees being applied for under clearing permit 10367/1.	See Section 1.2 for native tree confirmation.
On the 4 January 2024, the applicant provided a response to the formal request for information issued by DWER. This included confirmation of mitigation planting inside the Hands Oval site.	See Section 3 for outline of mitigation planting. See Appendix B for species being impacted by the clearing.

### Appendix B. Site characteristics

#### B.1 Site characteristics

The information provided below describes the key characteristics of the area proposed to be cleared and is based on the best information available to the department at the time of this assessment. This information was used to inform the assessment of the clearing against the Clearing Principles, contained in Appendix C.

Characteristic	Details
Local context	The area proposed to be cleared is located within Hands Oval, South Bunbury, within the intensive land zone of the Swan Coastal Plain region of Western Australia. It is surrounded by recreational areas and residential dwellings.
	Spatial data indicates the local area (10-kilometre radius from the centre of the area proposed to be cleared) retains approximately 28.28 per cent of the original native vegetation cover.
Ecological linkage	The application area does not intersect any formally mapped linkages. South West Regional Ecological Linkage 202 is located approximately 4.24 kilometres south of the application area. Noting the extent of the vegetation being cleared, the proposed clearing is not considered likely to significantly impact this linkage.
Conservation areas	No conservation areas are mapped within the application area. The closest conservation area is Kalgulup Regional Park which is located 2.2 kilometres south east of the application area.
Vegetation description	Photographs supplied by the applicant and the findings of a vegetation survey (Natural Area, 2023) indicate the vegetation within the proposed clearing area consists of <i>Agonis flexuosa</i> trees over maintained turf.
	Representative photos and the full survey descriptions and maps are available in Appendix E.
	This is inconsistent with the mapped vegetation types:
	<ul> <li>Vasse 57, which is described as a mixture of the closed scrub of <i>Melaleuca</i> species fringing woodland of <i>Eucalyptus rudis</i> (Flooded Gum) - <i>Melaleuca</i> species and open forest of <i>Eucalyptus gomphocephala</i> (Tuart) - <i>Eucalyptus marginata</i> (Jarrah) - <i>Corymbia calophylla</i> (Marri) (Shepherd et al, 2001)</li> <li>Yoongarinnup 56, which is described as woodland to tall woodland of <i>Eucalyptus gomphocephala</i> (Tuart) with <i>Agonis flexuosa</i> in the second storey. Less consistently an open forest of <i>Eucalyptus gomphocephala</i> (Tuart) - <i>Eucalyptus marginata</i> (Jarrah) - <i>Corymbia calophylla</i> (Marri). South of Bunbury is characterised by <i>Eucalyptus rudis</i> (Flooded Gum)-<i>Melaleuca</i> species open forests (Shepherd et al, 2001)</li> </ul>
	The mapped vegetation types retain approximately 31.4 and 35.81 per cent respectively of the original extent (Government of Western Australia, 2019).

Characteristic	Details					
Vegetation condition	Photographs supplied by the applicant and a vegetation survey (Natural Area, 2023) indicate the vegetation within the proposed clearing area is in Degraded (Keighery, 1994 –) condition.					
	The full Keighery (1994) condition rating scale is provided in Appendix D. Representative photos and the full survey descriptions are available in Appendix EE.					
Climate and landform	The region experiences a Mediterranean climate with cool winters and hot summers with a mean annual rainfall of 760mm.					
Soil description	<ul> <li>The soil in the application area is mapped as:</li> <li>Spearwood S4a Phase (211Sp_S4a) which is described as flat to gently undulating sandplain with deep, pale and sometimes bleached sands with yellow-brown subsoils.</li> </ul>					
Land degradation risk	The mapped soils within the application area are mapped as having a high risk of wind erosion (DPIRD, 2023).					
Waterbodies and hydrogeography	The desktop assessment and aerial imagery indicated that no wetlands or waterbodies transect the application area. The closest waterbody to the application area is Punchbowl Wetland which is located 0.75 kilometres north- west of the application area.					
	The application area is mapped within the Bunbury Groundwater Area proclaimed under the <i>Rights in Water and Irrigation Act 1914</i> (RIWI Act).					
	Groundwater salinity within the application area is mapped at 500-1000 milligrams per total dissolved solids.					
Flora	The desktop assessment identified that a total of 28 conservation significant flora species have been recorded within the local area, comprising of four Threatened flora species and 18 Priority flora species (Western Australian Herbarium, 1998-). None of these existing records occur within the application area, with the closest record being an occurrence of <i>Acacia semitrullata</i> (P4) approximately 1.05 kilometres from the application area.					
	With consideration for the relevant datasets (see Appendix F.1), the habitat preferences and conservation statuses of the aforementioned species, the distribution and extent of existing records, the application area is unlikely to provide significant habitat for threatened or priority flora species.					
	No Threatened or Priority flora have been recorded within the application area (Natural Area, 2023).					
Ecological communities	The desktop assessment identified that there are no conservation significant ecological communities within the application area. The closest mapped ecological community is the Banksia Woodlands of the Swan Coastal Plain ecological community which is listed as an Endangered threatened ecological community (TEC) under the Commonwealth EPBC Act and is considered a Priority 3 ecological community (PEC) by DBCA in Western Australia, which is located 1.67 kilometres north of the application area.					
	With consideration for the site characteristics, relevant datasets (see Appendix F.1) and biological survey information (Natural Area, 2023), the application area is not considered likely to contain vegetation representative of a TEC or PEC.					
	No TEC's or PEC's have been recorded within the application area (Natural Area, 2023).					
Fauna	The desktop assessment identified that a total of 56 conservation significant fauna species have been recorded within the local area including 27 threatened fauna species, eight priority fauna species, two other specially protected fauna species, and 19 migratory fauna species (DBCA, 2007-). None of these existing records occur within the application area, with the closest record being an occurrence of <i>Pseudocheirus occidentalis</i> , approximately 0.2 kilometres from the application area.					

Characteristic	Details
	With consideration for the site characteristics set out above, relevant datasets (see Appendix F.1) and the habitat preferences of the aforementioned species, and biological survey information (Natural Area, 2023), the application area is likely to provide significant habitat for one conservation significant fauna species and impacts to this species required further consideration (see Section 3.2.1).

### B.2. Vegetation extent

extent (ha)	extent (ha)	remaining (%)	all DBCA managed land (ha)	proportion (%) of pre- European extent in all DBCA managed land
1501221.93	579813.47	38.62	222916.97	14.85
15691.63	4926.97	31.4	2294.43	14.62
27977.93	10018.14	35.81	5151.57	18.41
16608.82	4697.94	28.28	-	-
	15691.63 27977.93	15691.63       4926.97         27977.93       10018.14         16608.82       4697.94	1501221.93       579813.47       38.62         15691.63       4926.97       31.4         27977.93       10018.14       35.81         16608.82       4697.94       28.28	(ha)       (ha)         1501221.93       579813.47       38.62       222916.97         15691.63       4926.97       31.4       2294.43         27977.93       10018.14       35.81       5151.57         16608.82       4697.94       28.28       -

\*Government of Western Australia (2019a)

### 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]
Calyptorhynchus banksii naso (forest red-tailed black cockatoo)	VU	N	N	0.53	14	N/A
Pseudocheirus occidentalis (western ringtail possum)	CR	Y	Y	0.21	2557	Y
Zanda baudinii (Baudin's cockatoo)	EN	N	N	1.66	17	Y
Zanda latirostris (Carnaby's cockatoo)	EN	N	N	0.5	74	Y

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

### B.4. Ecological community analysis table

Community name	Conservation status (WA)	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Suitable soil 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]
Banksia Woodlands of the Swan Coastal Plain ecological community	P3	Ν	Ν	Y	1.67	515	Y

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

Appendix C.	Assessment a	gainst the c	learing	principles
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Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
Principle (a):"Native vegetation should not be cleared if it comprises a high level of biodiversity."Assessment:The area proposed to be cleared contains habitat for conservation significant fauna including WRP.Noting the proposed clearing is restricted to trees over turf, no conservation significant flora or vegetation communities will likely occur within the application area.	May be at variance	Yes Refer to Section 3.2.1, above.
Principle (b): "Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna."         Assessment: The area proposed to be cleared contains significant habitat for WRP.	At variance	Yes Refer to Section 3.2.1, above.
Principle (c): "Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora." Assessment: The area proposed to be cleared is unlikely to contain habitat	Not at variance	No
for threatened flora species listed under the BC Act.		
<u>Principle (d):</u> "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 at variance	No
<u>Assessment:</u> The area proposed to be cleared does not contains species that can indicate a TEC.		
Environmental value: significant remnant vegetation and conservation are	eas	
<u>Principle (e):</u> "Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared."	May be at variance	Yes Refer to Section
<u>Assessment:</u> The extent of native vegetation in the local area is inconsistent with the national objectives and targets for biodiversity conservation in Australia, however is consistent with the 10 per cent threshold for constrained areas. The vegetation proposed to be cleared contributes to vegetation connectivity in the local area.		3.2.2, above.
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 likely to be at variance	No
<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.		
Environmental value: land and water resources	·	
<u>Principle (f):</u> "Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland."	Not at variance	No
Assessment: Given no water courses or wetlands are recorded within the application area, the proposed clearing is unlikely to impact on- or off-site hydrology and water quality.		

Assessment against the clearing principles	Variance level	Is further consideration required?
Principle (g): "Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."Assessment: extent and location of the application area, the proposed clearing is not likely to have an appreciable impact on land degradation.	Not likely to be at variance	Yes Refer to Section 3.2.3, above.
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."Assessment:Given no water courses or wetlands are recorded within the application area, the proposed clearing is unlikely to impact surface or ground water quality.	Not likely to be at variance	No
Principle (j):"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding."Assessment:The mapped soils and topographic contours in the surrounding area do not indicate the proposed clearing is likely to contribute to increased	Not at variance	No
incidence or intensity of flooding. Given no water courses or wetlands are recorded within the application area, the proposed clearing is unlikely to contribute to waterlogging.		

### 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

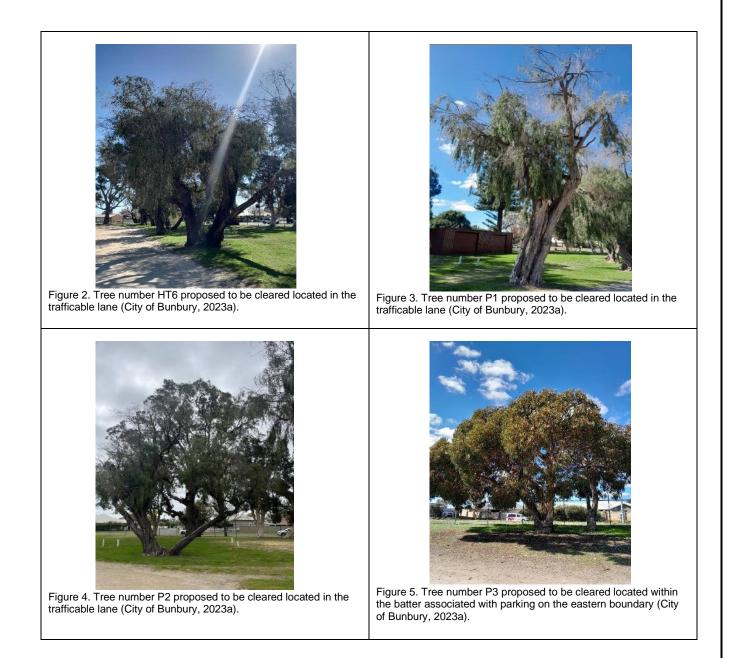
Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Measuring vegetation condition for the South West and Interzone Botanical Province	(Keigherv	1994)
measuring vegetation condition for the obtain west and interzone botainear rowinee	(Itelgilely,	, 1334/

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.
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.

Condition	Description
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. Biological survey information and photographs of the vegetation within Hands Oval, South Bunbury



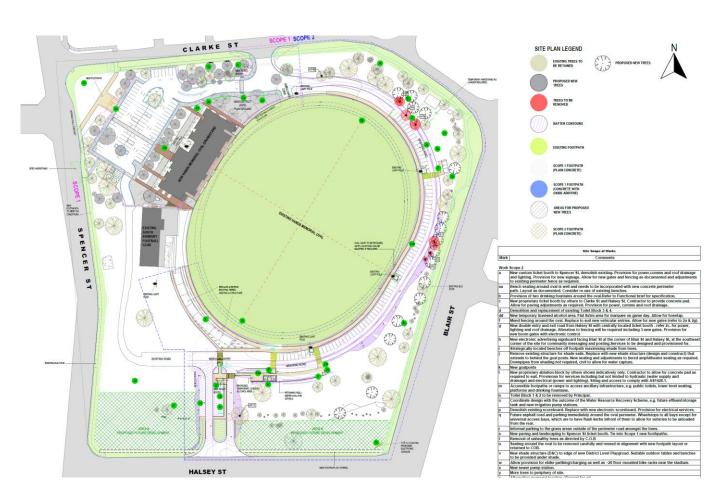


Figure 6. Map of Hands Oval site indicating proposed trees for clearing and proposed new trees for planting (City of Bunbury, 2023b).

### Appendix F. Sources of information

### F.1. GIS databases

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

- 10 Metre Contours (DPIRD-073)
- Aboriginal Heritage Places (DPLH-001)
- Cadastre (LGATE-218)
- Cadastre Address (LGATE-002)
- 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

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