



## CLEARING PERMIT

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

### PERMIT DETAILS

Area Permit Number: CPS 9960/2  
File Number: DWERVT11431  
Duration of Permit: From 13 April 2023 to 13 April 2025

### PERMIT HOLDER

City of Wanneroo

### LAND ON WHICH CLEARING IS TO BE DONE

Two Rocks Road Reserve (PIN 12225492), Yanchep and Two Rocks

### AUTHORISED ACTIVITY

The permit holder must not clear more than 0.9 hectares of *native vegetation* within the area cross-hatched yellow in Figure 1 and 2 of Schedule 1.

### CONDITIONS

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

The permit holder must not clear any *native vegetation* after 13 April 2025.

#### 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 conduct clearing activities in a slow, progressive manner towards adjacent *native vegetation* to allow fauna to move into adjacent *native vegetation* ahead of the clearing activity.

**5. Wind erosion management**

The permit holder must commence unexploded ordinance search no later than two months after undertaking the authorised clearing activities to reduce the potential for wind erosion.

**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 species composition, structure, and density of the cleared area;</li> <li>(b) 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>(c) the date that the area was cleared;</li> <li>(d) the direction of clearing;</li> <li>(e) the date unexploded ordinance search commenced;</li> <li>(f) the size of the area cleared (in hectares);</li> <li>(g) actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 2; and</li> <li>(h) actions taken to minimise the risk of the introduction and spread of <i>weeds</i> and <i>dieback</i> in accordance with condition 3.</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 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.
dieback	means the effect of <i>Phytophthora</i> species on native vegetation.
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.
EP Act	<i>Environmental Protection Act 1986</i> (WA)
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 – (a) that is a declared pest under section 22 of the <i>Biosecurity and Agriculture Management Act 2007</i> ; or (b) published in a Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or (c) not indigenous to the area concerned.

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**END OF CONDITIONS**



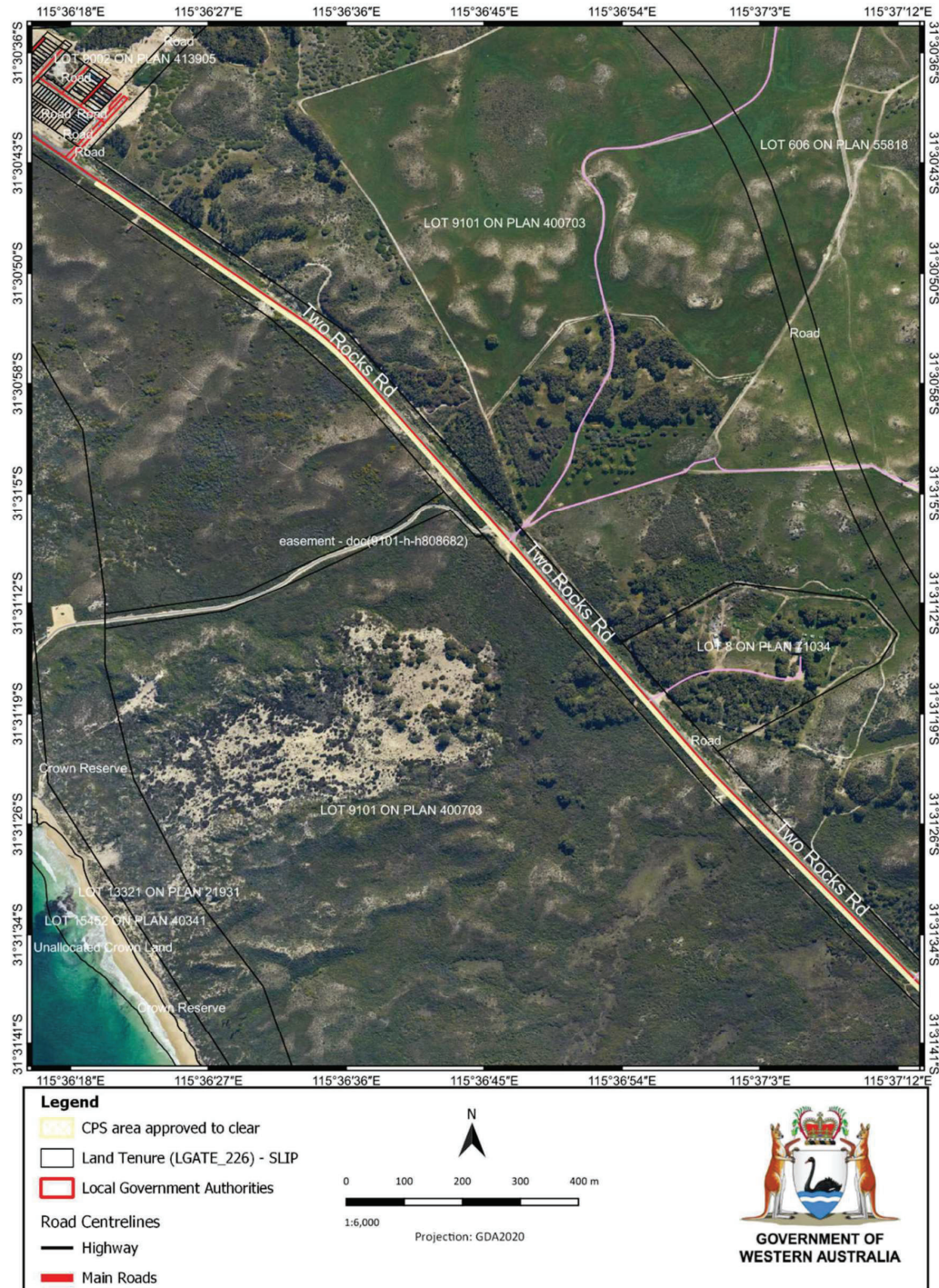
Meenu Vitarana  
MANAGER  
NATIVE VEGETATION REGULATION

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

7 July 2023

# SCHEDULE 1

The boundary of the area authorised to be cleared is shown in the maps below (Figures 1 and 2).



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



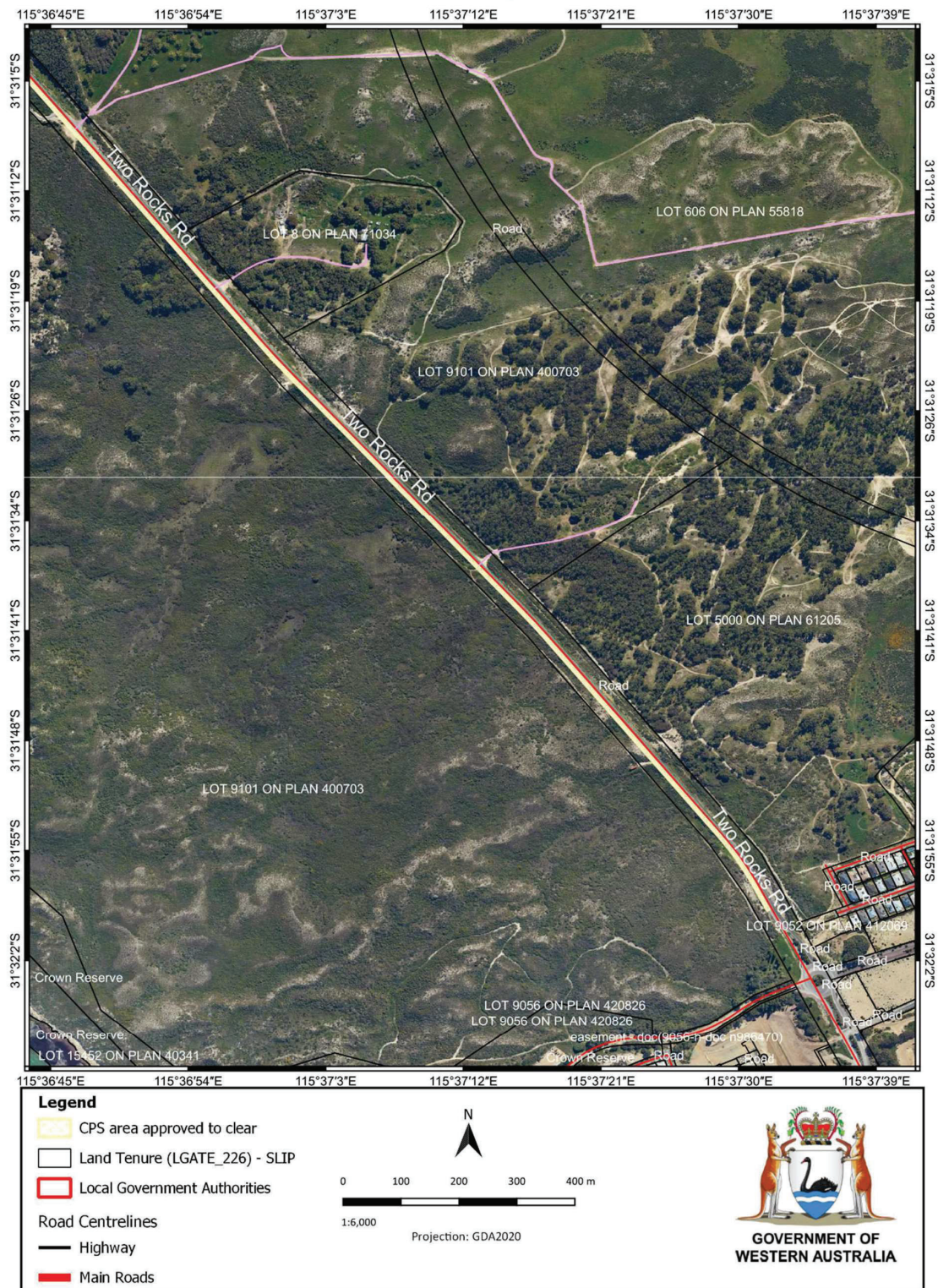


Figure 2: Map of the boundary of the area within which clearing may occur.



# Clearing Permit Decision Report

## 1 Application details and outcome

### 1.1. Permit application details

<b>Permit number:</b>	CPS 9960/2
<b>Permit type:</b>	Area permit
<b>Applicant name:</b>	City of Wanneroo
<b>Application received:</b>	17 November 2022
<b>Application area:</b>	0.9 hectares of native vegetation
<b>Purpose of clearing:</b>	Facilitate the completion of an Unexploded Ordnance (UXO) remediation search and the installation of street lighting
<b>Method of clearing:</b>	Mechanical removal
<b>Property:</b>	Two Rocks Road Reserve (PIN 12225492)
<b>Location (LGA area/s):</b>	City of Wanneroo
<b>Localities (suburb/s):</b>	Yanchep and Two Rocks

### 1.2. Description of clearing activities

The administrative amendment to CPS 9960/1 is to correct an administrative error in condition 7 of the Permit.

The City of Wanneroo is proposing to undertake the clearing of remnant vegetation on the western verge of Two Rocks Road, from Capricorn Esplanade to Reef Break Drive, in Yanchep and Two Rocks. The proposed clearing will facilitate the completion of an Unexploded Ordnance (UXO) remediation search and the installation of street lighting along Two Rocks Road. The vegetation proposed to be cleared is contained within a single contiguous area approximately three kilometres long and four meters wide (See Figure 1 and 2, Section 1.5). Clearing will be undertaken by mechanical means and removal of remaining vegetation by an excavator.

### 1.3. Decision on application

<b>Decision:</b>	Granted
<b>Decision date:</b>	7 July 2023
<b>Decision area:</b>	0.9 hectares of native vegetation, as depicted in Section 1.5, below.

### 1.4. Reasons for decision

This administrative amendment was determined in accordance with sections 51K and 51M of the *Environmental Protection Act 1986* (EP Act). The amendment relates only to updating the permit conditions to revise condition 7 to correct a clerical mistake that referenced an incorrect condition number.

In considering the above, the Delegated Officer considered that the extent to which the impacts of the proposed clearing present a risk to biological, conservation, or land and water resource values remains unchanged from the previous assessments of the permit and can be found in the Decision Report prepared for Clearing Permit CPS 9960/1.

The Delegated Officer considered that, given the administrative nature of the proposed amendment relating to condition 7, the remaining conditions under Clearing Permit CPS 9960/1 are unchanged and are sufficient to limit the impacts of the proposed clearing.

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 and dieback
- Works to commence within two months to minimise wind erosion
- Undertake slow, progressive one direction clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity.



## 1.5. Site maps



Figure 1: Map of the application area CPS 9960/2. The cross-hatched yellow indicates the area authorised to be cleared under the granted clearing permit





Figure 2: Map of the application area CPS 9960/2. The cross-hatched yellow indicates the area 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 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)
- *Soil and Land Conservation Act 1945* (WA)

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

As this amendment is administrative in nature and relates to updating the permit conditions, specifically condition 7, the avoidance and mitigation measures implemented by the Permit Holder are unchanged and can be found in the decision report prepared for the Clearing Permit CPS 9960/1.

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

This amendment is the result of an administrative error on Clearing Permit CPS 9960/1 and relates to updating condition 7 of the permit. Condition 7 under Clearing Permit CPS 9960/1 referred to record keeping requirements under condition 9, which was a clerical mistake and has now been amended to refer to the correct record keeping condition (condition 6).

Given the nature of the proposed amendment, the Delegate Officer determined that the extent to which the impacts of the proposed clearing present a risk to biological, conservation, or land and water resource values remains unchanged from the previous assessment of the permit and can be found in the Decision Report prepared for Clearing Permit CPS 9960/1.

### 3.3. Relevant planning instruments and other matters

Given the administrative nature of the amendment, the assessment against planning instruments and other matters is also unchanged and can be found in the Decision Report prepared for Clearing Permit CPS 9960/1.

**End**

## Appendix A. 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 B.

### A.1. 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					
Quindalup complex 55**	54,573.87	33,011.64	60.49	5994.64	10.98
Local area					
10 km radius	20,358.95	14,804.309	72.72	-	-

\*Government of Western Australia (2019a)

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

### A.2. Site characteristics

Characteristic	Details
Local context	<p>The proposed clearing area comprises 0.9 hectares of native vegetation and is situated parallel to the western side of Two Rocks Road within the Swan Coastal Plain. The application area is surrounded by native vegetation and a foreshore reserve and Yanchep National Park reserve to the east. This application is in the intensive land use zone of Western Australia.</p> <p>Spatial data indicates that the local area (10 Kilometre radius from the centre of the area proposed area) retains approximately 72.72 per cent of the original native vegetation cover.</p>
Ecological linkage	<p>The application area is part of a larger area of vegetation that may act as an ecological linkage. However, the application area is not an integral part of this linkage, The bushland Forever areas mapped as the conceptual linkages within the Gnangara Mound ecological linkages framework are located approximately 230 metres southwest, 2.15 kilometres to the east, and 3.06 kilometres southeast.</p>
Conservation areas	<p>The closest bushland forever area to the application area (Site 397, Two Rocks/ Yanchep.) is located approximately 297 meters at its closest point.</p> <p>The closest area of land managed by DBCA is approximately 28.16 kilometres northeast of the application area. The closest DBCA regional park is Yellagonga regional park, approximately 25.5 kilometres south of the application area.</p>
Vegetation description	<p>The environmental impact assessment (City of Wanneroo, 2022a) indicates the vegetation within the proposed clearing area consists of several weed species: <i>Ehrharta longiflora</i>, <i>Eragrostis curvula</i>, <i>Leontodon rhagadioloides</i> and <i>Trifolium campestre</i>; and native species: <i>Acacia rostellifera</i>, <i>Callitris preissii</i>, <i>Melaleuca cardiophylla</i>, and <i>Spyridium globulosum</i>.</p>



Characteristic	Details																		
	<p>This is mostly consistent with the mapped vegetation complex:</p> <ul style="list-style-type: none"> <li>Quindallup vegetation complex (system 6 ID 55) described as coastal dune complex consisting mainly of two alliances – the strand and fore-dune alliance and the mobile and stable dune alliance. Local variations include the low closed forest of <i>Melaleuca lanceolata</i> (Rottnest Teatree) – <i>Callitris preissii</i> (Rottnest Island Pine), the closed scrub of <i>Acacia rostellifera</i> (Summer-scented Wattle) and the low closed <i>Agonis flexuosa</i> (Peppermint) forest of Geographe Bay (Hodges et. al, 1980).</li> </ul> <p>The mapped vegetation complex retains approximately 72.72 per cent of the original native vegetation cover within a 10 kilometre buffer of the application area (Government of Western Australia, 2019).</p>																		
Vegetation condition From the impact assessment	<p>The environmental impact assessment (City of Wanneroo, 2022a) indicates the Native vegetation within the proposed clearing area is sparse throughout the proposed clearing area, with vegetation in a Good to Completely Degraded condition. It is estimated that approximately 30-40 per cent of the total clearing area consists of native vegetation, the remainder consists of cleared ground and weed species.</p> <p>The full Keighery (relates to the south west) (1994) condition rating scale is provided in Appendix C. Representative photos are available in Appendix D.</p>																		
Climate and landform	<p>The climate experienced in the area is a Mediterranean climate, with dry, hot summers and cool, wet winters. Average rainfall is 816 millimetres per annum with the majority falling between June and August (BOM, 2021).</p> <p>Environmental impact assessment (City of Wanneroo, 2022a) describes that the annual mean rainfall is 729 millimetres per annum and a mean annual of 1800 millilitres of evapotranspiration.</p>																		
Soil description (Schoknecht, et al., 2004)	<p>The soil is mapped as:</p> <p><b>Majority portion 52 per cent</b></p> <table border="1"> <tr> <td>Name</td> <td>Quindalup South deep sand flat Phase</td> </tr> <tr> <td>Soils</td> <td>211Qu__Qp</td> </tr> <tr> <td>Description</td> <td>Undulating landscapes with deep calcareous sands overlying limestone. Soils have dark grey-brown sand to about 50 cm and then pale brown sand. Remnants of hummocks are often present.</td> </tr> </table> <p><b>Minor portion</b></p> <table border="1"> <tr> <td>Name</td> <td>Quindalup South oldest dune Phase</td> </tr> <tr> <td>Soils</td> <td>211Qu__Q1</td> </tr> <tr> <td>Description</td> <td>Dunes or remnants with low relief. Calcareous sands have organic staining to about 30 cm, overlying pale brown sand with definite cementation below 1 m.</td> </tr> </table> <p><b>Minor portion</b></p> <table border="1"> <tr> <td>Name</td> <td>Quindalup South second dune Phase</td> </tr> <tr> <td>Soils</td> <td>211Qu__Q2</td> </tr> <tr> <td>Description</td> <td>A complex pattern of dunes with moderate relief. Calcareous sands have organic staining to about 20 cm, passing into pale brown sand: some cementation below 1 m.</td> </tr> </table>	Name	Quindalup South deep sand flat Phase	Soils	211Qu__Qp	Description	Undulating landscapes with deep calcareous sands overlying limestone. Soils have dark grey-brown sand to about 50 cm and then pale brown sand. Remnants of hummocks are often present.	Name	Quindalup South oldest dune Phase	Soils	211Qu__Q1	Description	Dunes or remnants with low relief. Calcareous sands have organic staining to about 30 cm, overlying pale brown sand with definite cementation below 1 m.	Name	Quindalup South second dune Phase	Soils	211Qu__Q2	Description	A complex pattern of dunes with moderate relief. Calcareous sands have organic staining to about 20 cm, passing into pale brown sand: some cementation below 1 m.
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Land degradation risk	<p>The degradation risk factors mapped over the application area are detailed below:</p> <table border="1"> <tr> <td></td> <td><b>Quindalup 211Qu__Qp</b></td> <td><b>Quindalup 211Qu__Q1</b></td> <td><b>Quindalup 211Qu__Q2</b></td> </tr> </table>		<b>Quindalup 211Qu__Qp</b>	<b>Quindalup 211Qu__Q1</b>	<b>Quindalup 211Qu__Q2</b>														
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Characteristic	Details																																				
	Wind erosion	L2 3-10% extreme risk	M2 30-50% extreme risk	H1 50-70% extreme risk																																	
	Water erosion	L2 3-10% high to extreme risk	M2 30-50% high to extreme risk	L2 3-10% high to extreme risk																																	
	Salinity risk	L1 <3%	L1	L1																																	
	Phosphorous export	M1 10-30%	M2 30-50%	M1																																	
	Waterlogging	L1	L1	L1																																	
	Subsurface acidification	L1 <3%	L1	L1																																	
	Acid sulphate soils	L1	L1	L1																																	
	Flooding	L1 <3%	L1	L1																																	
	Floodplains	No	No	No																																	
	Waterbodies	The desktop assessment and aerial imagery indicated that the closest mapped wetland to the application area is Loch Mcness, a conservation category wetland swamp, approximately four kilometres northeast. The Indian Ocean is located directly west from the application area.																																			
Hydrogeography	<table border="1"> <tr> <td>Hydrological Zone</td> <td colspan="3">Coastal Plain</td> </tr> <tr> <td>Basin</td> <td colspan="3">Sawn Costal (UFI 616)</td> </tr> <tr> <td>Hydrographic Catchment</td> <td colspan="3">_Coastal</td> </tr> </table> <table border="1"> <tr> <td>RIWI Act Surface Water and Irrigation District</td> <td>No</td> <td></td> </tr> <tr> <td>RIWI Act Rivers</td> <td>No</td> <td></td> </tr> <tr> <td>RIWI Act Groundwater Areas</td> <td>Yes</td> <td>Yanchep Groundwater Area (UFI 34)</td> </tr> <tr> <td>CAWS Act Clearing Control Catchment</td> <td>No</td> <td></td> </tr> <tr> <td>Public Drinking Water Source Areas</td> <td>Yes</td> <td>Perth Coastal and Gwelup underground water pollution control area.</td> </tr> <tr> <td>Wellhead Protection Zone</td> <td>No</td> <td></td> </tr> <tr> <td>Reservoir Protection Zone</td> <td>No</td> <td></td> </tr> </table> <p>The application area is mapped within Yanchep Groundwater Area proclaimed under the <i>Rights in Water and Irrigation Act 1914</i>.</p>				Hydrological Zone	Coastal Plain			Basin	Sawn Costal (UFI 616)			Hydrographic Catchment	_Coastal			RIWI Act Surface Water and Irrigation District	No		RIWI Act Rivers	No		RIWI Act Groundwater Areas	Yes	Yanchep Groundwater Area (UFI 34)	CAWS Act Clearing Control Catchment	No		Public Drinking Water Source Areas	Yes	Perth Coastal and Gwelup underground water pollution control area.	Wellhead Protection Zone	No		Reservoir Protection Zone	No	
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Flora	<p>According to available database, 23 conservation significant flora species have been recorded within the local area (10-kilometre buffer). Comprising one Threatened, three Priority 1, five Priority 2, 10 Priority 3 and four Priority 4 flora taxa. None of these records occur within the application area.</p> <p>The vegetation is dominated by several weed species: <i>*Ehrharta longiflora</i>, <i>*Eragrostis curvula</i>, <i>*Leontodon rhagadioloides</i> and <i>*Trifolium campestre</i>; and two native species: <i>Acacia rostellifera</i> and <i>Spyridium globulosum</i> (City of Wanneroo, 2022a).</p>																																				
Ecological communities	According to available databases, five conservation significant ecological communities have been mapped within the local area (10-kilometre buffer). None of these records occur over the application area.																																				
Fauna	According to available database, 37 conservation significant fauna species have been recovered within the local area comprising one Priority 1, one Priority 2, three Priority 3, four priority 4, 10 specially protected Migratory species, six Vulnerable species, four Endangered species, one Critically endangered species, one specially protected species (OS) and one specially protected species (conservation dependent; CD), fauna taxa. Of these, 25 fauna are associated with marine, estuarine or freshwater habitats that do not occur within the application area.																																				

Characteristic	Details
	<p>Of the 12 terrestrial fauna species, the nearest records are <i>Isoodon fusciventer</i> (quenda; Priority 4) and <i>Calyptorhynchus latirostris</i> (Carnaby's cockatoo; endangered) located approximately 0.02 kilometres and 0.8 kilometres from the application area, respectively. The nearest confirmed black cockatoo roost site is located approximately 1.85 kilometres from the application area. There are nine in total black cockatoo roosting sights within a 12 kilometre buffer of the application area (Figure a).</p> <p>Noting the habitat requirements, distribution of the recorded species, the mapped vegetation type, the condition of the vegetation within the application area, the application area is likely to comprise suitable habitat for the following fauna species:</p> <ul style="list-style-type: none"> <li>• Quenda</li> <li>• Carnaby's cockatoo</li> <li>• Graceful sun moth</li> <li>• Black-striped snake, black-striped burrowing snake</li> </ul> <p>The City's Environmental Planning Considerations Report (EPCR) City of Wanneroo, 2022c) and the City's 'Desktop Assessment Report for Native Vegetation Clearing (NVC) (City of Wanneroo, 2022b) Application' did not identify any instances of threatened or priority fauna species within the selected footprint. Protected fauna species were however identified within a 5 kilometres radius of the selected area.</p>

### A.3. Flora analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix A), and biological survey information, impacts to the following conservation significant flora required further consideration.

Species name	Conservation status	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]
<i>Acacia benthamii</i>	P2	N	N	Y	5.4	5	Y
<i>Amanita wadlawitu</i>	P2	N	N	Y	9.7	2	N
<i>Baeckea</i> sp. Limestone (N. Gibson & M.N. Lyons 1425)	P1	N	N	Y	8.1	1	N
<i>Calandrinia oraria</i>	P3	Y	Y	Y	3.6	1	N
<i>Conostylis bracteata</i>	P3	Y	N	Y	5.6	1	Y
<i>Conostylis pauciflora</i> subsp. <i>euryrhipis</i>	P4	Y	Y	Y	3.0	16	Y
<i>Conostylis pauciflora</i> subsp. <i>pauciflora</i>	P4	Y	Y	N	7.3	4	Y
<i>Eucalyptus argutifolia</i>	T	Y	Y	Y	2.0	13	Y
<i>Eucalyptus foecunda</i> subsp. <i>foecunda</i>	P4	Y	Y	Y	3.4	6	Y
<i>Haloragis luminosa</i>	P1	N	N	N	9.0	3	Y
<i>Hibbertia leptotheca</i>	P3	Y	Y	Y	3.0	7	Y
<i>Lasiopetalum membranaceum</i>	P3	N	N	Y	5.8	2	Y
<i>Lecania sylvestris</i>	P2	Unknown	Unknown	Y	5.6	1	Y
<i>Lecania turicensis</i> var. <i>turicensis</i>	P2	N	N	N	2.0	1	Y
<i>Lepidium pseudotasmanicum</i>	P4	N	N	Y	7.1	3	Y
<i>Leucopogon maritimus</i>	P1	Y	Y	Y	4.8	15	Y

Species name	Conservation status	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]
<i>Leucopogon</i> sp. Yanchep (M. Hislop 1986)	P3	Y	Y	Y	7.1	13	Y
<i>Pimelea calcicola</i>	P3	Y	Y	Y	5.6	4	Y
<i>Placynthium nigrum</i>	P3	N	N	N	5.6	1	Y
<i>Rinodina bischoffii</i>	P2	Poorly known	Poorly known	Y	5.6	1	Y
<i>Sphaerolobium calcicola</i>	P3	N	N	N	5.6	2	Y
<i>Stylidium maritimum</i>	P3	Y	Y	Y	3.0	11	Y
<i>Styphelia filifolia</i>	P3	N	N	N	4.8	1	Y

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

#### A.4. Fauna analysis table

1	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]
<b>Birds</b>						
<i>Anous tenuirostris melanops</i> (Australian lesser noddy)	EN	N	N	5.7	1	Y
<i>Apus pacificus</i> (Fork-tailed swift)	MI	Y	Y	6.6	1	Y
<i>Zanda latirostris</i> (Carnaby's cockatoo)	EN	Y	N	0.8	465	Y
<i>Calyptorhynchus</i> sp. 'white-tailed black cockatoo'	EN	Y	N	3.4	4	Y
<i>Tyto novaehollandiae novaehollandiae</i> (masked owl (southwest))	P3	N	Y degraded	5.8	1	Y
<b>Mammals</b>						
<i>Bettongia penicillata ogilbyi</i> (woylie, brush-tailed bettong)	CR	N	Y degraded	6.4	1	Y
<i>Dasyurus geoffroyi</i> (Chuditch, western quoll)	VU	N	N	5.8	2	Y
<i>Isodon fusciventer</i> (Quenda, southwestern brown bandicoot)	P4	N	Y degraded	0.02	10	Y
<b>Reptiles</b>						
<i>Delma concinna major</i> (Javelin legless lizard (Shark Bay))	P1	Y	Y	7.5	1	Y
<i>Neelaps calonotos</i> (Black-striped snake, black-striped burrowing snake)	P3	Y	Y degraded	2.1	3	Y
<b>Invertebrates</b>						
<i>Idiosoma sigillatum</i> (Swan Coastal Plain shield-backed trapdoor spider)	P3	Y	Y	5.8	1	N
<i>Synemon gratiosa</i> (Graceful sunmoth)	P4	Y	Y	1.6	167	Y



1	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]
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T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

Note: According to available database, 37 conservation significant fauna species have been recovered within the local area comprising one Priority 1, one Priority 2, three Priority 3, four priority 4, 10 specially protected Migratory species, six Vulnerable species, four Endangered species, one Critically endangered species, one specially protected species (OS) and one specially protected species (conservation dependent; CD), fauna taxa. Of these, 25 fauna are associated with marine, estuarine or freshwater habitats that do not occur within the application area, and have been excluded from table.

#### A.5. Ecological community analysis table

Community name	Conservation status	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]
Aquatic Root Mat Community Number 1 of Caves of the Swan Coastal Plain	CR	N	N	5.8 km	7	N/A
Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	P3	N	N	2.8 km	188	Y
Melaleuca huegelii - Melaleuca systena shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al., (1994))	EN	N	Y	3.2 km	23	Y
Tuart ( <i>Eucalyptus gomphocephala</i> ) woodlands and forests of the Swan Coastal Plain	P3	N	N	2.1 km	93	Y
Woodlands over sedgeland in Holocene dune swales of the southern Swan Coastal Plain (original description; Gibson et al., (1994).	CR	N	N	7.3 km	1	N/A

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

## Appendix B. 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> “Native vegetation should not be cleared if it comprises a high level of biodiversity.”</p> <p><u>Assessment:</u> The environmental impact assessment identified no conservation significant flora or communities. A total of 40 flora species were identified during the survey, including 16 native flora and 24 weed species (City of Wanneroo, 2022a). The application area is not deemed to comprise a high area of biodiversity.</p>	Not likely to be at variance	Yes As per CPS 9960/1
<p><u>Principle (b):</u> “Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna.”</p> <p><u>Assessment:</u> The application area includes suitable habitat for conservation significant fauna and may be used by fauna traversing the landscape.</p>	Not likely to be at variance	Yes As per CPS 9960/1
<p><u>Principle (c):</u> “Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.”</p> <p><u>Assessment:</u> The area proposed to be cleared is unlikely to contain <i>Threatened flora</i>. environmental impact assessment identified no Threatened flora (City of Wanneroo, 2022a).</p>	Not likely to be at variance	Yes As per CPS 9960/1
<p><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.”</p> <p><u>Assessment:</u> The area proposed to be cleared does not contain species that can indicate a threatened ecological community (TEC). The environmental impact assessment did not record any TECs within the application area (City of Wanneroo, 2022a). The vegetation within the application area is not likely to comprise the whole or a part of, or be necessary for the maintenance of, a TEC.</p>	Not likely to be at variance	No As per CPS 9960/1
<b>Environmental value: significant remnant vegetation and conservation areas</b>		
<p><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.”</p> <p><u>Assessment:</u> The extent of the mapped vegetation type is consistent with the national objectives and targets for biodiversity conservation in Australia. The vegetation proposed to be cleared is not considered to be part of a significant ecological linkage in the local area.</p> <p>Utilising remnant native vegetation mapping data approximately 14,000 hectares of native vegetation is retained within the local area of a 10-kilometre radius of the application area, representing approximately 72 per cent of the original occurrence (Government of Western Australia, 2019a) (Appendix F, figure (b)). The proposed clearing is not considered significant as a remnant of native vegetation in an area that has been extensively cleared.</p>	Not likely to be at variance	No As per CPS 9960/1
<p><u>Principle (h):</u> “Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.”</p> <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 adjacent and/or nearby conservation areas. The closest DBCA land of</p>	Not likely to be at variance	No As per CPS 9960/1

Assessment against the clearing principles	Variance level	Is further consideration required?
interest area is located approximately 2.16 kilometres east this the northern extension of Yanchep National Park.		
<b>Environmental value: land and water resources</b>		
<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> No water courses, wetlands or vegetation is growing in association with a watercourse or wetland in the application area. The native vegetation proposed for clearing is not growing in, or in association with, an environment associated with a watercourse or wetland.</p>	Not likely to be at variance	No As per CPS 9960/1
<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 sandy soils present mapped within the application area, it is considered that the proposed clearing may cause land degradation in the form of wind erosion.</p>	May be at variance	Yes As per CPS 9960/1
<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> No water courses or wetlands are recorded within the application area. Soils will not be excavated at depth and risks to groundwater are low. The proposed clearing therefore is unlikely to impact surface or ground water quality.</p>	Not likely to be at variance	No As per CPS 9960/1
<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 As per CPS 9960/1

## Appendix C. 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 Southwest 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.

Condition	Description
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.
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 D. Biological survey information excerpts

Table 1. list of Native and non-native species identified during the vegetation assessment on 02/09/2022 (City of Wanneroo, 2022a). Note: some species names are incorrect within the table, the corrected spellings are (*Dodonaea aptera*, *Exocarpos sparteus*, *Spyridium globulosum*, *Lagurus ovatus*, *Moraea flaccida*). \*Opp – Opportunistic sighting



NATIVE SPECIES	WEED/PLANTED SPECIES
<i>Acacia lasiocarpa</i> (opp)	<i>Arctotheca calendula</i>
<i>Acacia rostellifera</i>	<i>Brassica tournefortii</i>
<i>Acacia cochlearis</i>	<i>Bromus diandrus</i>
<i>Acanthocarpus preissii</i>	<i>Ehrharta calycina</i>
<i>Allocasuarina lehmanniana</i> (opp)	<i>Ehrharta longiflora</i>
<i>Callitris preissii</i>	<i>Eragrostis curvula</i>
<i>Clematis linearifolia</i>	<i>Erodium moschatum</i>
<i>Dodonea aptera</i> (opp)	<i>Euphorbia peplus</i>
<i>Exocarpus sparteus</i>	<i>Euphorbia terracina</i>
<i>Hardenbergia comptoniana</i>	<i>Foeniculum vulgare</i>
<i>Lepidosperma gladiatum</i>	<i>Fumaria capreolata</i>
<i>Melaleuca cardiophylla</i>	<i>Gazania linearis</i>
<i>Olearia axillaris</i>	<i>Lagarus ovatus</i>
<i>Rhagodia baccata</i>	<i>Leontodon rhagadioloides</i>
<i>Scaevola crassifolia</i>	<i>Lolium perenne</i>
<i>Spyridium globulosom</i>	<i>Medicago littoralis</i>
	<i>Morea flaccida</i>
	<i>Oxalis pes-caprae</i>
	<i>Pelargonium capitatum</i>
	<i>Plantago lanceolata</i>
	<i>Poa annua</i>
	<i>Sonchus oleraceus</i>
	<i>Trachyandra divaricata</i>
	<i>Trifolium campestre</i>

#### 1. Representative site photographs (City of Wanneroo, 2021a)

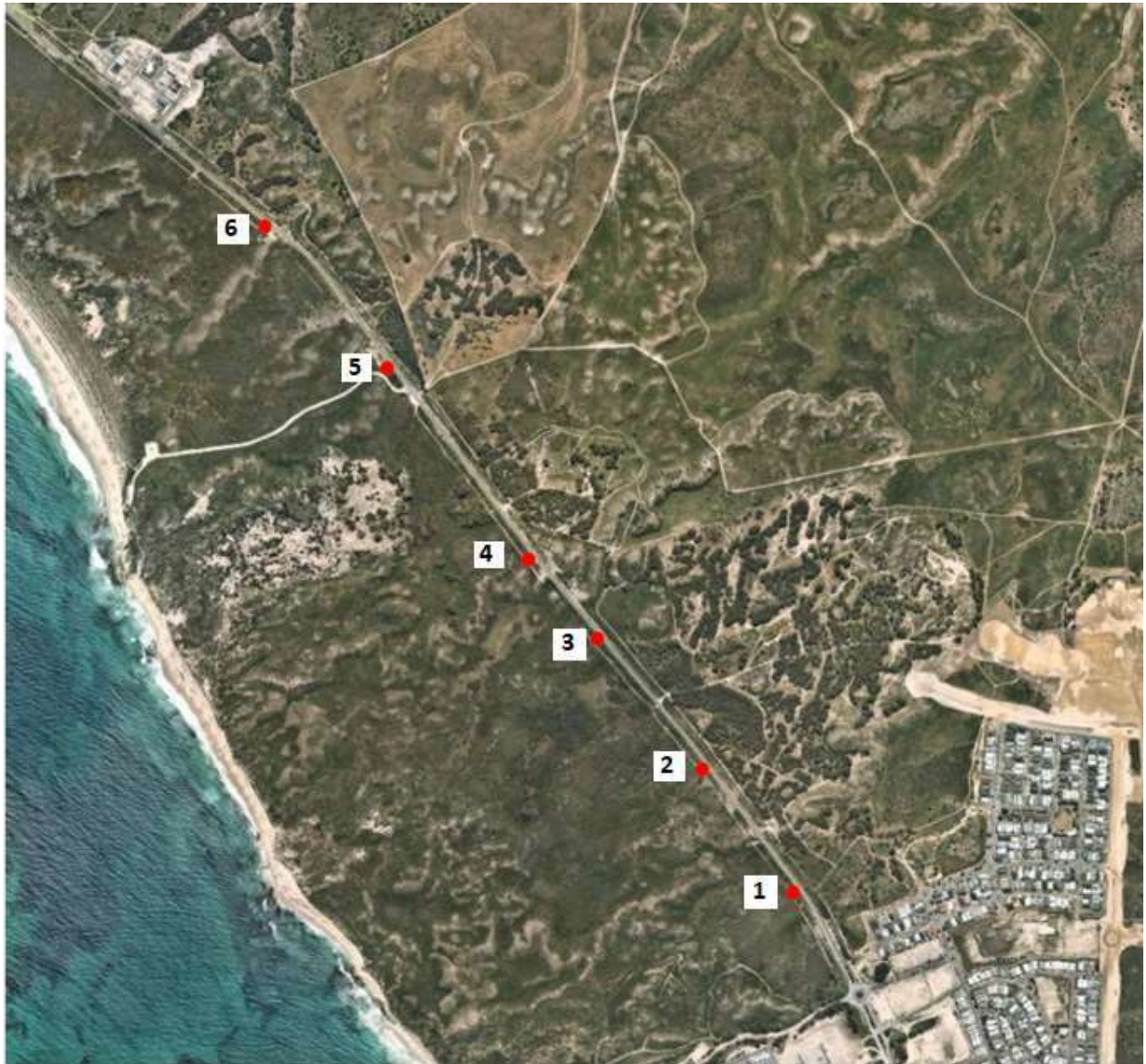


Figure C: Vegetation assessment locations (red points) along the proposed clearing area on the western verge of Two Rocks Road (Yanchep – Two Rocks) (City of Wanneroo, 2022a).





Figure D: Assessment point 1, Notable species, *Acacia rostellifera*, *Rhagodia baccata*, and *Spyridium globulosum* (City of Wanneroo, 2023).



Figure E: Assessment point 2, Notable species *Acacia rostellifera*, *Acanthocarpus preissii*, *Hardenbergia comptoniana*, *Melaleuca cardiophylla*, and *Spyridium globulosum* (City of Wanneroo, 2023).



Figure F: Assessment point 3, Notable species, *Acacia rostellifera*, *Callitris preissii*, *Melaleuca cardiophylla*, *Scaevola crassifolia*, and *Spyridium globulosum* (City of Wanneroo, 2023).



Figure G: Assessment point 4, Notable species, *Acacia rostellifera*, *Acanthocarpus preissii*, *Clematis linearifolia*, *Exocarpus sparteus*, *Scaevola crassifolia* and *Spyridium globulosum* (City of Wanneroo, 2023).



Figure H: Assessment point 5, Notable species, *Acacia rostellifera*, *Hardenbergia comptoniana*, *Melaleuca cardiophylla*, *Scaevola crassifolia* and *Spyridium globulosum* (City of Wanneroo, 2023)



Figure I: Assessment point 6, Notable species, *Acacia rostellifera*, *Acacia cochlearis*, *Lepidosperma gladiatum* and *Spyridium globulosum* (City of Wanneroo, 2023).

## Appendix E. Sources of information

### E.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)
- 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
- Wheatbelt Wetlands Stage 1 (DBCA-021)

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)

### E.2. References

City of Wanneroo (2022) *Clearing permit application CPS 9960/1*, received 17 November 2022 (DWER Ref: DWERDT687747).

City of Wanneroo (2022a) *Supporting information for clearing permit application CPS 9960/1 - Environmental impact assessment*. Received 17 November 2022 (DWER Ref: DWERDT687743).



- City of Wanneroo (2022b) *Supporting information for clearing permit application CPS 9960/1 – Desktop assessment report for native vegetation clearing NVC application*. Received 17 November 2022 (DWER Ref: DWERDT687733).
- City of Wanneroo (2022c) *Supporting information for clearing permit application CPS 9960/1 – Environmental planning considerations report (EPC)*. Received 17 November 2022 (DWER Ref: DWERDT687734).
- City of Wanneroo (2023) *Supporting information for clearing permit application CPS 9960/1*, Photographs. Received 13 January 2023 (DWER Ref: DWERDT710848).
- City of Wanneroo (2023) Request to correct clerical mistake in CPS 9960/1. Received 5 April 2023 (DWER Ref: DWERDT763676).
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