



COTERRA  
ENVIRONMENT



**Native Vegetation Clearing Referral  
Supporting Information**

**26 Central Avenue, Hazelmere**

Rev 0 December 2022

CALIBRE | COMMITMENT | COLLABORATION

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# 1 Introduction

## 1.1 Background

Metallica Property Group/SDK Management needs to install a power supply connection on a property at 26 Central Avenue, Hazelmere (the site; Figure 1), in accordance with a Development Approval (DA 555-22; Appendix 1) for the site which approves development of a 'storage' facility as defined in the City of Swan Local Planning Scheme No. 17 (DPLH, 2008). The site will be used as a storage warehouse, laydown area and ancillary car park for industrial purposes (Figure 2).

The site covers an area of 4.85 hectares (ha; Figure 1).

## 1.2 Proposal Details

For Western Power to relocate existing power infrastructure to connect the property to power, some vegetation requires removal within the road reserve adjacent to this site (Land ID 4399969; Figure 3). This road reserve covers 893 m<sup>2</sup> and is vested in the City of Swan for care, control and management in accordance with the *Land Administration Act 1997* (Figure 1; Appendix 2).

Western Power has advised the clearing of native vegetation in this instance, does not fall within the limits of their state-wide clearing permit.

## 1.3 Proposed Clearing Extent

Within the road reserve, two (2) trees have been identified as requiring removal to facilitate power infrastructure relocation works (Figure 3). The City of Swan provide consent for these trees to be removed in association with the Development Approval (Appendix 2).

## 1.4 Proposed Clearing Approval Process

The clearing proposed has been identified as potentially suitable to be approved through the Native Vegetation Clearing Referral (NVCR) process based on the very limited clearing (two (2) trees) and the very low environmental impact associated with the clearing. Assessment against the NVCR criteria is provided in Section 3.

## 1.5 Alternatives Considered/Actions to Minimise Clearing Actions

The option of an off-grid power arrangement which would therefore not need connection to the Western Power network is not considered feasible for the site.

The power connection location was determined by Western Power, with alternative locations not supported by Western Power.

It is noted that the relocation of services are required to connect to existing Western Power services running along Central Avenue, Hazelmere.

## 1.6 Proposed Development Timeframes

Overall project development is proposed in Quarter 1 (January – March) 2023. Clearing to facilitate the Western Power connection is proposed to occur between the 9 and 13 January 2023.

## 2 Site Description

### 2.1 Topography, Landform and Soils

The site's topography ranges from 14 – 16 m AHD (Plate 1). Elevation at the proposed clearing location is approximately 14 m AHD (Plate 1). Elevation at the proposed clearing location is approximately 14 m AHD (Plate 1).

Geologically, soils at the site are regionally representative of Bassendean Sands over Guildford Formation (unit S10), which are generally 'very light grey at surface, yellow at depth, fine to medium-grained, sub-rounded quartz, moderately well sorted of eolian origin' (Gozzard, 1986). No site-specific assessment has been undertaken.

Soils at the site and within the proposed clearing area have a moderate to low risk of containing acid sulfate soils (Landgate, 2022; Plate 1).



**Plate 1: Topography and acid sulfate soils mapping**

*Landgate (2022)*

## 2.2 Hydrology

### 2.2.1 Surface Water

A portion of the site and the proposed clearing area is identified as multiple use wetland (Landgate, 2022; Plate 2). Multiple use wetlands are the least significant wetlands, and support development in many cases (Table 1).

**Table 1: Wetland management categories**

Management Category	General Description	Management Objective
Conservation	Wetlands which support a high level of attributes and functions	<p>Highest priority wetlands. Objective is to preserve and protect the existing conservation values of the wetlands through various mechanisms including:</p> <ul style="list-style-type: none"> <li>• reservation in national parks, crown reserves and State-owned land,</li> <li>• protection under Environmental Protection Policies, and</li> <li>• wetland covenanting by landowners.</li> </ul> <p>No development or clearing is considered appropriate. These are the most valuable wetlands and any activity that may lead to further loss or degradation is inappropriate.</p>
Resource Enhancement	Wetlands which may have been partially modified but still support substantial ecological attributes and functions	<p>Priority wetlands. Ultimate objective is to manage, restore and protect towards improving their conservation value. These wetlands have the potential to be restored to Conservation category. This can be achieved by restoring wetland function, structure and biodiversity.</p> <p>Protection is recommended through a number of mechanisms.</p>
Multiple Use	Wetlands with few remaining important attributes and functions	Use, development and management should be considered in the context of ecologically sustainable development and best management practice catchment planning through landcare.

Source: EPA (2008)

The Helena River is located approximately 500 m to the northeast of the site and approximately 650 m northeast of the proposed clearing area. (Plate 3).





**Plate 2: Wetland mapping**

Source: Landgate (2022)



**Plate 3: Hydrography and FPM 1 in 100 (1%) mapping**

Source: Landgate (2022)



## 2.2.2 Groundwater

Groundwater is estimated at 8 metres below ground level (mBGL) (DWER, 2022a). Groundwater has historically been analysed and contains high levels of metals associated with former land uses (Section 2.6).

The site is not located in a Public Drinking Water Source Area (DWER, 2022a).

## 2.3 Vegetation and Flora

### 2.3.1 Regional Vegetation

Vegetation at the site is historically representative of the Guildford Complex and the Southern River Complex (Heddle et al., 1980, Table 2). The two (2) trees that require removal as part of this proposal are in the area defined as the Guildford Complex.

**Table 2: Vegetation Complex Descriptions**

Vegetation Complex	Description
Guildford Complex	A mixture of open forest to tall open forest of marri ( <i>Corymbia calophylla</i> ), Wandoo ( <i>Eucalyptus wandoo</i> ) and Jarrah ( <i>Eucalyptus marginata</i> ) with a small number of locations fringed by <i>Eucalyptus rudis</i> - <i>Melaleuca raphiophylla</i> woodlands along streams. Occasional areas of <i>Eucalyptus lane-poolei</i> are also found within the Guildford Complex, now restricted to an area between Cardup and Keysbrook in the Darling System. Other species in this complex include <i>Banksia grandis</i> , <i>Kingia australis</i> , <i>Xanthorrhoea preissii</i> and species of <i>Hardenbergia</i> and <i>Hibbertia</i> .
Southern River Complex	Open woodland of Marri ( <i>Eucalyptus calophylla</i> ), Jarrah ( <i>E. marginata</i> ) and <i>Banksia</i> species with fringing woodland of flooded gum ( <i>E. rudis</i> ) and <i>Melaleuca raphiophylla</i> along creek beds.

Source: Heddle et al (1980)

The extent remaining of the Guildford Complex is summarised in Table 3.

**Table 3: Guildford Complex Vegetation Statistics**

Region	Pre-European Extent (ha)	Current Extent (ha)	% Remaining
Swan Coastal Plain	90,513.13	4,607.91	5.09
City of Swan	6,333.29	440.26	6.95

Source: Government of WA (2019)

### 2.3.2 Flora and Vegetation Assessment

Focused Vision Consulting Pty Ltd undertook a tree assessment to identify the vegetation to be removed as part of this proposal.

Both trees were identified as *Eucalyptus rudis* (Flooded Gum; Plate 4 and Plate 5; Figure 3). Both trees have been identified as endemic to the area and are likely remnant (K. Bauer-Simpson, personal communications, 11 November 2022).

Generally, an understorey is absent within the area (Plate 6). Weeds (grasses) are present beneath trees as current (Plate 7). Based on the lack of remnant species in the understorey, the defining characteristics of the Guildford vegetation complex are not present in this location.





**Plate 4:** *Eucalyptus rudis* trees requiring clearing



**Plate 5:** *Eucalyptus rudis* trees



**Plate 6:** Limited understorey



**Plate 7:** Grasses/weeds beneath trees

Source: Coterra Environment (30 November 2022)



### 2.3.2.1 Vegetation Communities

Two threatened ecological communities may occur in the vicinity of the site (Table 4).

**Table 4: Possible vegetation communities in vicinity of site**

Community Name	Threatened Category	Presence	Likelihood of Occurrence
Tuart ( <i>Eucalyptus gomphocephala</i> ) Woodlands and Forest of the Swan Coastal Plain	Critically Endangered	Community may occur within area	Unlikely
Banksia Woodlands of the Swan Coastal Plain	Endangered	Community likely to occur within area	Unlikely

Source: DCCEEW (2022)

*Eucalyptus rudis* is not considered a representative species within with the Tuart Woodlands TEC (DoEE, 2019) or the Banksia Woodlands TEC (DoEE, 2016), and as such, not considered representative of either TECs.

### 2.3.2.2 Threatened and Priority Flora

A significant flora survey was not undertaken in the context of this proposal.

Whilst some species protected under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) or *Wildlife Conservation Act 1950* (WC Act) may occur in the area, it is unlikely that they would occur on site based on the limited area and condition of vegetation (Table 5, Plate 4 – Plate 7).

**Table 5: Possible threatened flora species in vicinity of site**

Species	Threatened Category	Presence	Likelihood of Occurrence
<i>Synaphea</i> sp. Fairbridge Farm ( <i>D. Papenfus 696</i> ) (Selena's Synaphea)	Critically Endangered <sup>1, 2</sup>	Species or species habitat likely to occur within area	Unlikely
<i>Diuris purdiei</i> (Purdie's Donkey-orchid)	Endangered <sup>1, 2</sup>	Species or species habitat may occur within area	Unlikely
<i>Drakaea elastica</i> (Glossy-leafed Hammer Orchid, Glossy-leafed Hammer Orchid, Warty Hammer Orchid)	Endangered <sup>1</sup> Critically Endangered <sup>2</sup>	Species or species habitat may occur within area	Unlikely
<i>Macarthuria keigheryi</i> (Keighery's Macarthuria)	Endangered <sup>1, 2</sup>	Species or species habitat may occur within area	Unlikely
<i>Andersonia gracilis</i> (Slender Andersonia)	Endangered <sup>1</sup> Vulnerable <sup>2</sup>	Species or species habitat likely to occur within area	Unlikely
<i>Eucalyptus x balanites</i> (Cadda Road Mallee, Cadda Mallee)	Endangered <sup>1</sup> Critically Endangered <sup>2</sup>	Species or species habitat may occur within area	Unlikely
<i>Thelymitra stellata</i> (Star Sun-orchid)	Endangered <sup>1, 2</sup>	Species or species habitat likely to occur within area	Unlikely
<i>Grevillea curviloba</i> subsp. <i>incurva</i> (Narrow curved-leaf Grevillea)	Endangered <sup>1, 2</sup>	Species or species habitat may occur within area	Unlikely

Species	Threatened Category	Presence	Likelihood of Occurrence
<i>Diplolaena andrewsii</i>	Endangered <sup>1, 2</sup>	Species or species habitat likely to occur within area	Unlikely
<i>Conospermum undulatum</i> (Wavy-leaved Smokebush)	Vulnerable <sup>1, 2</sup>	Species or species habitat likely to occur within area	Unlikely
<i>Eleocharis keigheryi</i> (Keighery's Eleocharis)	Vulnerable <sup>1, 2</sup>	Species or species habitat likely to occur within area	Unlikely
<i>Drakaea micrantha</i> (Dwarf Hammer-orchid)	Vulnerable <sup>1</sup> Endangered <sup>2</sup>	Species or species habitat may occur within area	Unlikely
<i>Diuris micrantha</i> (Dwarf Bee-orchid)	Vulnerable <sup>1, 2</sup>	Species or species habitat may occur within area	Unlikely
<i>Diuris drummondii</i> (Tall Donkey Orchid)	Vulnerable <sup>1, 2</sup>	Species or species habitat may occur within area	Unlikely

Source: DCCEEW (2022), DBCA (2022a)

## 2.4 Fauna and Habitat

### 2.4.1 Conservation Significant Species

It is considered unlikely that any conservation-significant fauna species would be dependent on the two (2) trees involved in this proposal (Table 6).

**Table 6: Potentially occurring fauna species**

Species	Protection Status <sup>1</sup> EPBC Act, <sup>2</sup> WC Act	Presence Status
<b>Birds</b>		
<i>Numenius madagascariensis</i> (Eastern Curlew, Far Eastern Curlew)	Critically Endangered <sup>1</sup> Migratory Wetlands Species <sup>1</sup> Priority 4 <sup>2</sup>	Unlikely
<i>Calidris ferruginea</i> (Curlew Sandpiper)	Critically Endangered <sup>1, 2</sup> Migratory Wetlands Species <sup>1</sup>	Unlikely
<i>Rostratula australis</i> (Australian Painted Snipe)	Endangered <sup>1, 2</sup>	Unlikely
<i>Botaurus poiciloptilus</i> (Australasian Bittern)	Endangered <sup>1</sup>	Unlikely
<i>Zanda baudinii</i> (Baudin's Black-Cockatoo, Long-billed Black-cockatoo)	Endangered <sup>1, 2</sup>	Unlikely
<i>Zanda latirostris</i> (Carnaby's Black Cockatoo, Short-billed Black-cockatoo)	Endangered <sup>1, 2</sup>	Unlikely
<i>Calyptorhynchus banksii naso</i> (Forest Red-tailed Black-Cockatoo, Karrak)	Vulnerable <sup>1, 2</sup>	Unlikely
<i>Leipoa ocellata</i> (Malleefowl)	Vulnerable <sup>1, 2</sup>	Unlikely
<b>Mammals</b>		
<i>Dasyurus geoffroyi</i> (Chuditch, Western Quoll)	Vulnerable <sup>1, 2</sup>	Unlikely

Species	Protection Status <sup>1</sup> EPBC Act, <sup>2</sup> WC Act	Presence Status
<b>Other</b>		
<i>Westralunio carteri</i> (Carter's Freshwater Mussel, Freshwater Mussel)	Vulnerable <sup>1,2</sup>	Unlikely

Source: DCCEEW (2022), DBCA (2022b)

### 2.4.2 Fauna Habitat

Fauna Services Pty Ltd (formerly Whistling Reds Pty Ltd) undertook a fauna habitat assessment of the two (2) trees, to determine the value of the specimens for three species of Black Cockatoos, including *Zanda baudinii* (Baudin's Black-Cockatoo), *Zanda latirostris* (Carnaby's Black Cockatoo) and *Calyptorhynchus banksii naso* (Forest Red-tailed Black-Cockatoo) (Appendix 4).

Fauna Services determined that the tree condition was deemed 'Good' despite pruning (Table 7). Both trees had a sparse canopy with dense midstory at approximately 3 m (Fauna Services, 2022). No hollows potentially suitable for black cockatoos were observed in either of the trees (Table 7). The trees are located approximately 5.4 kilometres from a confirmed Carnaby's Black Cockatoo roost site (Fauna Services, 2022).

**Table 7: Tree details**

Tree ID	Species	Location (GPS coordinates) GDA '94 MGA '50	Diameter at breast height (DBH)	Potential Nesting Tree/Breeding Habitat	Visible Hollows
1	<i>Eucalyptus rudis</i>	405646.988964, 6469839.39588	1175 mm	Yes (current)	No
2	<i>Eucalyptus rudis</i>	405653.310451, 6469833.88226	465 mm	Yes (future)	No

Source: Fauna Services (2022)

No Black Cockatoo foraging activity was recorded at the site, so it is assumed that trees are not currently used by the species.

## 2.5 Environmentally Significant Areas

No Bush Forever areas are in the vicinity of the site.

The site is in an area defined as a Schedule 1 Area under the Clearing Regulations.

## 2.6 Contamination

26 Central Avenue is classified under the *Contaminated Sites Act 2003* as 'Remediated for Restricted Use' (Appendix 5). The site's land uses are restricted to commercial or industrial land use, which excludes sensitive land uses with soil access such as childcare centres, kindergartens, pre-school and primary schools (DWER, 2022).

The site was classified on the basis of historical land uses at the site, which included it being used for:

- Wastewater treatment plant
- Intensive agriculture
- Burial of animal carcasses (associated with agricultural activity).

Groundwater at the site contained elevated levels of metals (arsenic, copper, lead and zinc) (DWER, 2022b). During remedial works, asbestos and animal carcasses were identified in soils (DWER, 2022b).



The site was remediated to allow it to be developed for commercial or industrial land uses (DWER, 2022b).  
The road reserve not identified as a contaminated site.

## 2.7 Heritage

A search of the Department of Planning, Lands and Heritage (DPLH) Aboriginal Heritage Enquiry System identifies that the site is contained within the boundaries for the Helena River aboriginal site (DPLH, 2022; Table 8).

**Table 8: Aboriginal heritage site 3758 details**

Site name	ID	Status	Type	Restrictions
Helena River	3758	Registered	Ceremonial, Mythological, Repository/Cache	No gender restrictions

Source: DPLH (2022)

A search of the Heritage council InHerit database (State Heritage Council, 2022) and the City of Swan Heritage List (City of Swan, 2017) did not identify any sites as European heritage significance within the site.

### 3 Native Vegetation Clearing Referral Assessment Criteria

The NVCR criteria and applicability to the clearing proposed at the site is summarised in Table 9 – Table 12.

**Table 9: NVCR Assessment Criteria Review – Criteria 1**

Factor	DWER Threshold and criteria used to determine if a clearing permit is required for 'Remaining areas in WA'	Assessment Against Clearing Proposed
Extent of proposed clearing for each referral	If more than 5 ha is proposed to be cleared (or more than 10 ha if north of the 26° South latitude line), a permit is required.	The proposed clearing involves removal of two (2) trees within a road reserve area of 893 m <sup>2</sup> .
Threshold for remaining extent of that native vegetation association or complex in the relevant IBRA bioregion	If less than 30% of that native vegetation association or complex is remaining within the relevant IBRA bioregion, a permit is required	The Guildford Vegetation Complex remains at 5.09% within the Swan Coastal Plain and at 6.95% within the City of Swan (Table 3). Based on the lack of understorey vegetation at the site which reflect the natural state of the Guildford vegetation complex and the limited extent of clearing, it is unlikely that the clearing will reduce the remaining proportion of Guild Complex vegetation overall.
Threshold for remaining native vegetation surrounding the boundary of the proposed clearing	If less than 30% native vegetation is remaining within a 10 km buffer of the proposed clearing, a permit is required.	Large extents of native vegetation are present within a 10 km radius of the site (Figure 4).

**Table 10: NVCR Assessment Criteria Review – Criteria 2**

Factor	DWER Considerations used to determine if a permit is required	Assessment Against Clearing Proposed
Vegetation condition	The quality of the existing remnant vegetation within and nearby the area to be cleared, based on the Keighery (1994) and/or Trudgen (1988) vegetation condition scales.	Condition of two (2) trees was deemed as 'Good' (Fauna Services, 2022). Vegetation condition in this location was reduced due to lack of native understorey species.
Significant fauna	Whether the proposed clearing area provides habitat for any threatened, priority, or specially protected fauna.	No conservation significant fauna species are expected to utilise the site (Section 2.4.1).
Fauna habitat	Whether the proposed clearing area provides critical habitat for fauna.	The clearing extent has not been identified as critical habitat for any fauna species (Section 2.4.2).
Significant ecological linkage	Whether the proposed clearing is part of a significant ecological linkage.	The site is not mapped as a known ecological linkage.

Factor	DWER Considerations used to determine if a permit is required	Assessment Against Clearing Proposed
Mapped ecological community	The proximity of the proposed clearing to any threatened ecological communities or priority ecological communities.	No TEC or PEC vegetation is likely to be present at the site (Section 0).
Significant flora	The proximity of the proposed clearing to any records of threatened or priority flora.	No threatened or priority species are expected within the area to be cleared (Section 2.3.2.2).
Mapped wetland	The proximity of the proposed clearing to any wetlands listed under the Convention on Wetlands of International Importance (Ramsar Convention) or the Directory of Important Wetlands in Australia, or wetlands classified as 'conservation category' or 'resource enhancement'.	No Wetlands of International Importance (Ramsar Convention) are located in proximity to the site. A portion of the site is mapped as a multiple use wetland (Plate 2). Multiple use wetlands do not preclude development.
Mapped watercourse	Whether the proposed clearing may impact on a watercourse (e.g. the structural stability of a watercourse or deterioration of water quality).	No watercourses are located within the proposal area. The Helena River is located approximately 650 m northeast of the proposed clearing area (Section 2.2.1).
Water resources (e.g. public drinking water supply areas)	Whether the clearing is in an area with high risk of decreasing water quality, rising groundwater levels, or increasing salinity.	The site is not located in a Public Drinking Water Source Area. Depth to groundwater is estimated at 8 below ground level (Section 2.2.2). The proposal is not expected to encounter groundwater throughout construction.
Conservation reserve	Whether the proposed clearing is within a 'conservation reserve' (e.g. Bush Forever; Environmental Protection Policy areas; land managed by the Department of Biodiversity, Conservation and Attractions; Regional Open Spaces; crown reserves vested for conservation purposes).	The proposed clearing is not within a conservation reserve.
Land and soil quality	Whether the clearing is in an area with high risk of land and/or soil degradation. Factors to determine this may include (among other matters) contaminated sites records, risk of dieback disease or acid sulfate soils, and susceptibility to erosion.	The proposed clearing does not appear to present a high risk of land degradation.
Heritage-related values and native title matters	Proximity to heritage-related values, including sites of Aboriginal significance, and native title matters.	The site is located within the boundaries of Aboriginal Heritage Site 3758 (Section 2.7). No sites of European heritage are recorded within the site (Section 2.6).

**Table 11: NVCR Assessment Criteria Review – Criteria 3**

Factor	Comments Provided
The state of scientific knowledge of native vegetation within the region is adequate	Adequate information has been provided within this report as to the state of vegetation within the proposal area.

**Table 12: NVCR Assessment Criteria Review – Criteria 4**

Factor	Comments Provided
Conditions will not be required to manage environmental impacts	Conditions will not be required to manage environmental impacts associated with this proposal.



## **4 Conclusions**

Based on the limited extent of clearing (two (2) trees) associated with this proposal, it is considered that a Native Vegetation Clearing Permit is not required, and that this assessment for a Native Vegetation Clearing Referral be adequate in satisfying DWER that clearing can proceed to facilitate a power services relocation to allow power connection to the development of 26 Central Avenue, Hazelmere for industrial purposes, as per the Development Approval (DA 555-22; Appendix 1).



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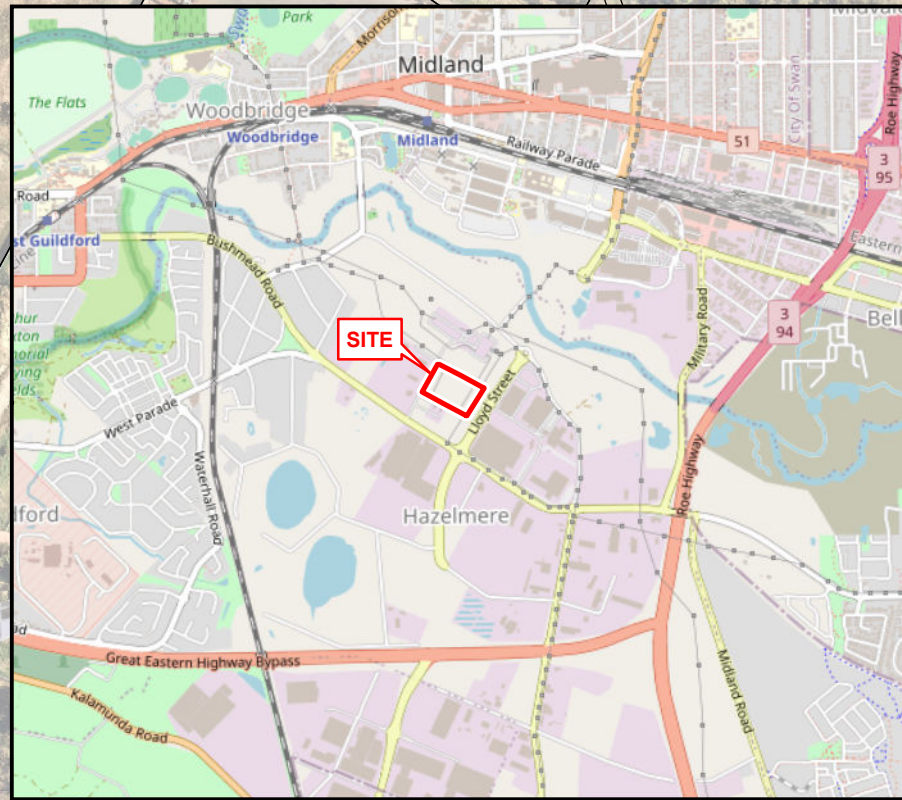


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## Figures

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**LEGEND**

- Site Boundary
- Cadastre
- Road Reserve (Land ID 4399969)

N

0 12.5 25 50 75 100m

Scale: 1:2,500 @ A3  
GDA 1994 MGA Zone 50

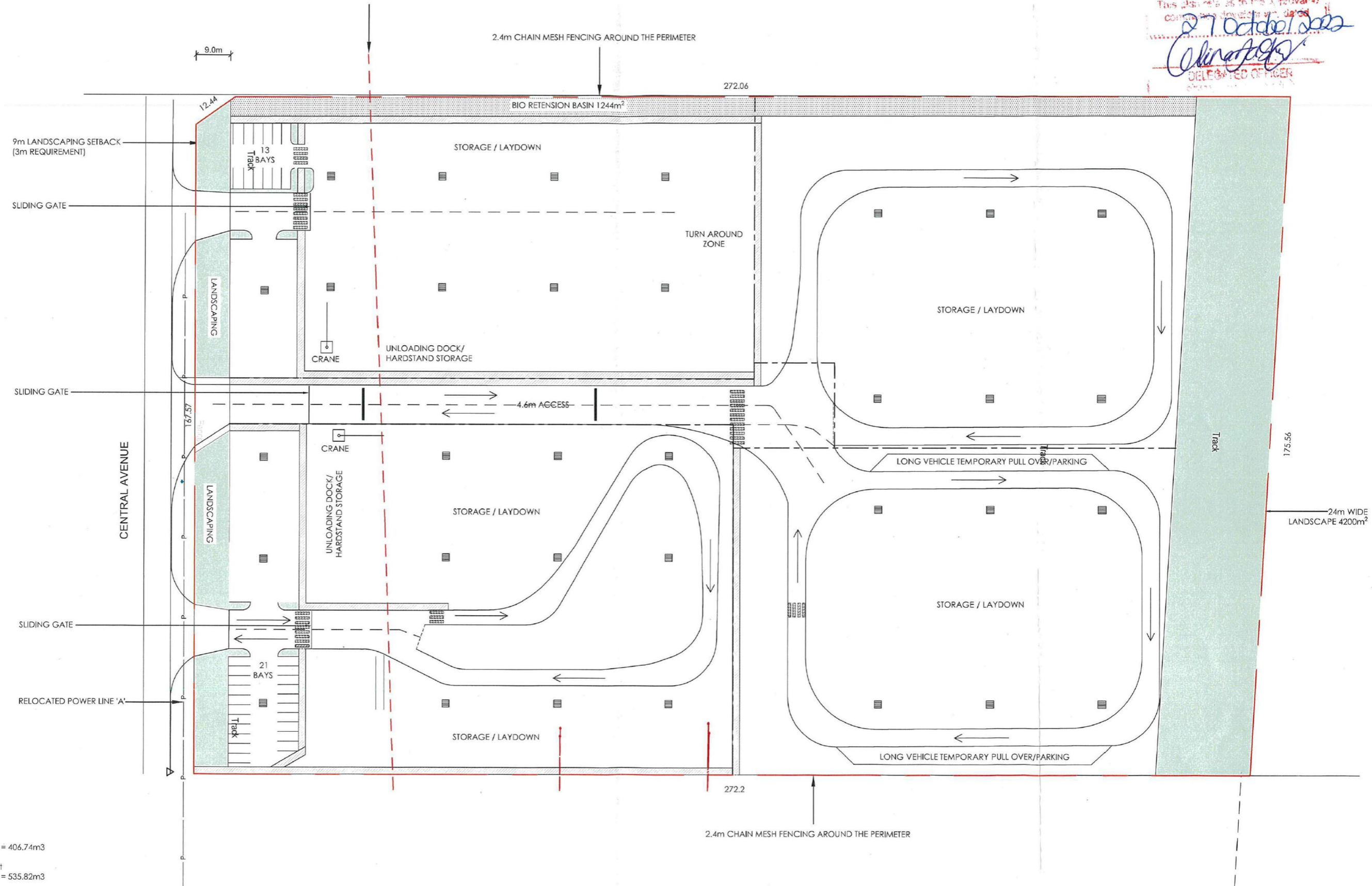


**26 CENTRAL AVENUE  
HAZELMERE**



**CITY of SWAN  
APPROVED PLAN**  
No. 1 of 1  
File Ref: DA-555/2022  
This also refers to the approval to construct the development as shown on the plan dated 27 October 2022  
*Colin Atkinson*  
DELEGATED OFFICER

EXISTING POWERLINE "A" TO BE RELOCATED INTO CENTRAL AVE ROAD RESERVE ALLOWING DRIVEWAY ACCESS AND HEIGHTS AS PER THIS PLAN AND NOTES - REMOVING EASEMENT FROM TITLE AS RELEVANT



- BIO-RETENSION BASIN
- PEDESTRIAN WALKWAY
- LANDSCAPING TOTAL 5,920sqm (12%)
- PEDESTRIAN ZEBRA CROSSING
- POSSIBLE SUMP LOCATIONS
- EXIST. LEVELS

Site Area = 49 242m<sup>2</sup>  
Landscape Area = 5912m<sup>2</sup>  
Total Hardstand Area = 43 330m<sup>2</sup>

**Stormwater Calculations**  
70% of hardstand = 30 331m<sup>2</sup>  
30% of hardstand = 12 999m<sup>2</sup>

Therefore:  
70% at 1 in 1year 1hr stormwater event  
0.9c x 14.9mm/h x 30 331m<sup>2</sup> x 1hr/1000 = 406.74m<sup>3</sup>

30% at 1 in 100year 1hr stormwater event  
0.9c x 45.8mm/h x 12 999m<sup>2</sup> x 1hr/1000 = 535.82m<sup>3</sup>

**Total Volume Storage Required = 942.56m<sup>3</sup>**

**COTERRA**  
ENVIRONMENT

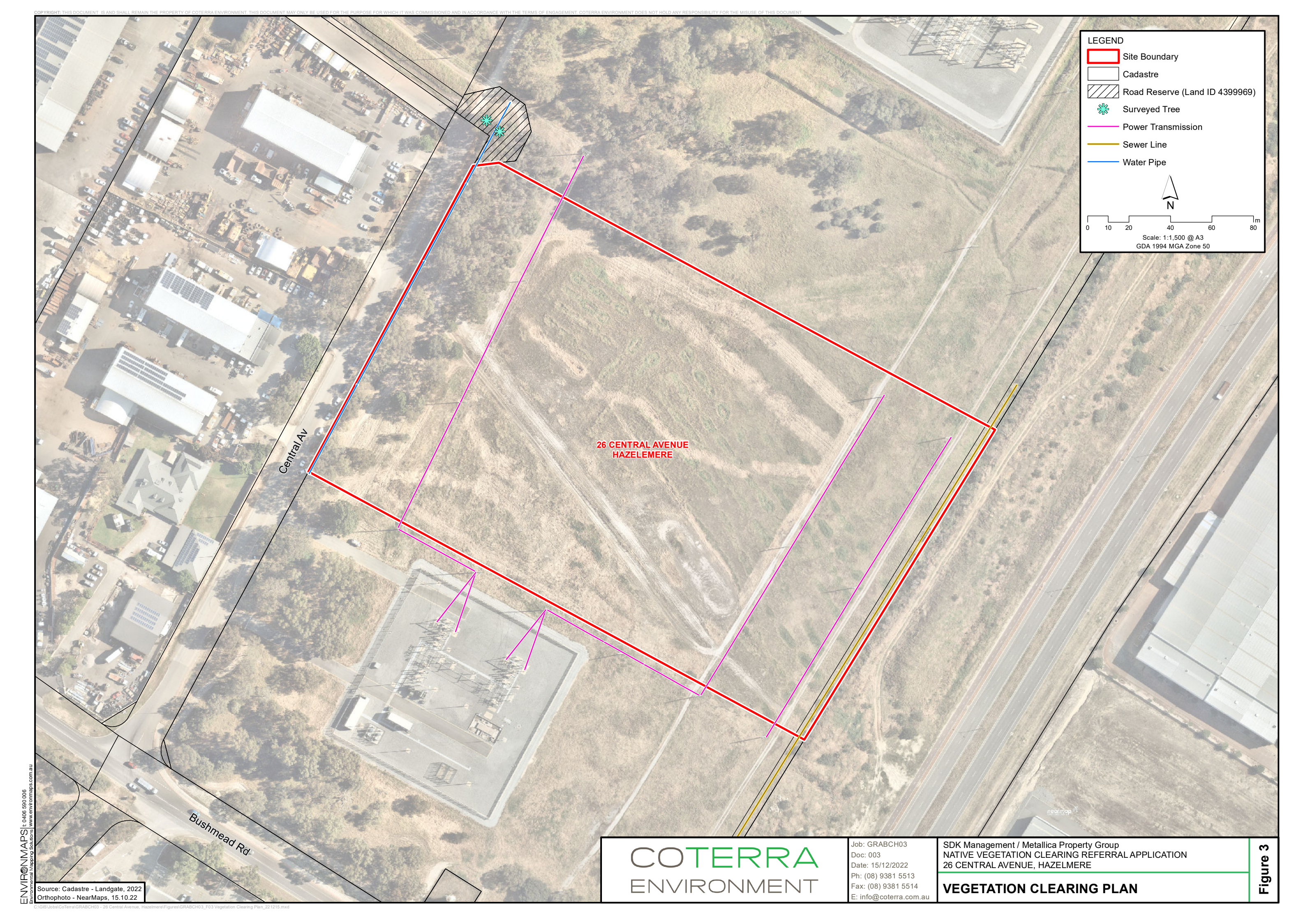
Job: GRABCH03  
Doc: 002  
Date: 15.12.22  
Ph: (08) 9381 5513  
Fax: (08) 9381 5514  
E: info@coterra.com.au

SDK Management / Metallica Property Group  
NATIVE VEGETATION CLEARING REFERRAL APPLICATION  
26 CENTRAL AVENUE, HAZELMERE

**DEVELOPMENT PLAN**

**Figure 2**








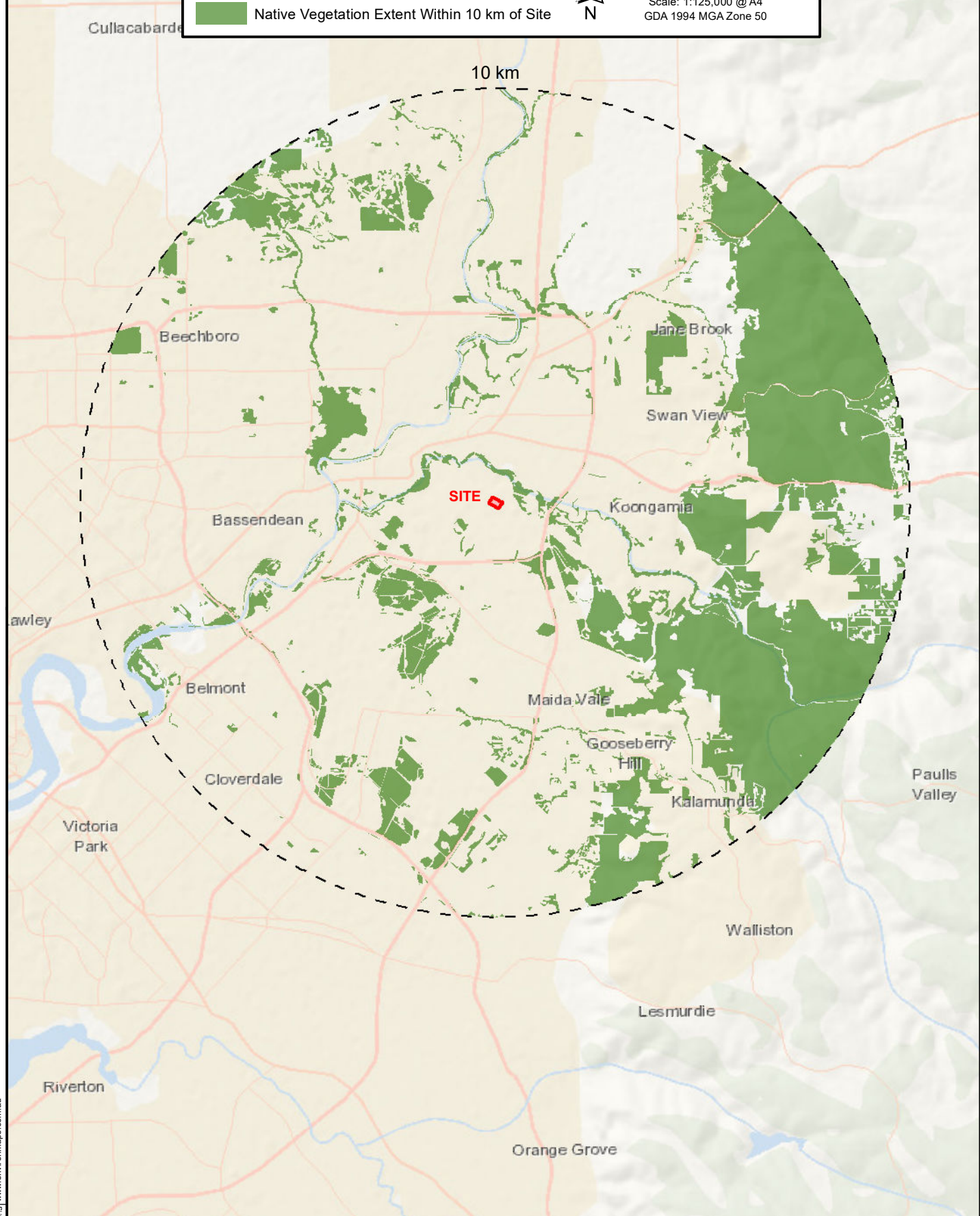
**LEGEND**

- Site Boundary
- 10 km Site Buffer
- Native Vegetation Extent Within 10 km of Site



0 0.5 1 2 3 4 km

Scale: 1:125,000 @ A4  
GDA 1994 MGA Zone 50





## **Appendix 1      Planning Approval**

---

Our Ref: DA-555/2022

27 October 2022

Rowe Group  
Level 3, 369 Newcastle St  
NORTHBRIDGE WA 6003

Dear Sir/Madam

**DEVELOPMENT APPLICATION: LAYDOWN/STORAGE & ANCILLARY  
CAR PARK - LOT 1102 (NO.26) CENTRAL AVENUE, HAZELMERE**

I refer to your Application for Planning Approval on the above lot received on 29 July 2022.

In accordance with the provisions of the City's *Local Planning Scheme No.17* and the *Planning and Development (Local Planning Schemes) Regulations 2015 (Regulations)* **approval to commence development has been granted**, subject to conditions. This application has been determined by delegated authority of Council in accordance with cl.83 of the *Regulations*. Attached is the form of approval stating the conditions that must be complied with.

In addition, acting under the authority delegated by the Western Australian Planning Commission (WAPC), the City has determined the application under the Metropolitan Region Scheme (MRS) on behalf of the WAPC.

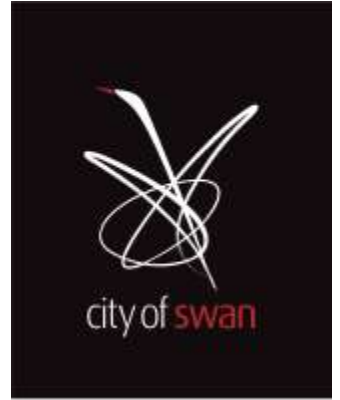
If an applicant is aggrieved by this Determination, there is a right of review under Part 14 of the *Planning and Development Act 2005*. An application for review should be lodged with the State Administrative Tribunal within twenty eight (28) days of the date of this determination (application may be made to the Tribunal to extend this time period). The necessary "Application for Review" forms are available from the State Administrative Tribunal.

**It should be noted that this approval does not constitute a building permit.**

Should you have any queries regarding this matter, please do not hesitate to contact Dawie Jansen van Rensburg on 08 9267 9495.



**Celina Da Costa**  
**Coordinator, Development Assessment & Appeals - Area B**  
**STATUTORY PLANNING**



**Enquiries (08) 9267 9267**  
2 Midland Square, Midland  
PO Box 196, Midland WA 6936

 cityofswan  
 cityofswanwa  
[www.swan.wa.gov.au](http://www.swan.wa.gov.au)





*Planning and Development Act 2005*

**CITY OF SWAN**

**Notice of Determination on Application for Planning Approval**

**Ref. No:** DA-555/2022  
**Determination Date:** 27-Oct-2022  
**Est. Value:** \$640000

<b>Location:</b>	LOT 1102 (NO.26) CENTRAL AVENUE, HAZELMERE		
<b>Title (Vol/Folio):</b>	CT-2979/216	<b>Plan/Diagram:</b>	415522
<b>Application date:</b>	<b>29 JULY 2022</b>	<b>Received on:</b>	<b>04-AUG-2022</b>
<b>Description of proposed development:</b>	LAYDOWN/STORAGE & ANCILLARY CAR PARK		

**The application for development approval is:**

**Approved subject to the following conditions**

**CONDITIONS**

1. This approval is for a 'Storage' as defined in the City of Swan Local Planning Scheme No. 17, and associated works as shown on the approved plans.
2. The approved development is to comply in all respects with the attached approved plans, as dated, marked and stamped, together with any requirements and annotations detailed thereon by the City of Swan. The plans approved as part of this application form part of the development approval issued.
3. All building works to be carried out under this development approval are required to be contained within the boundaries of the subject lot.
4. The parking of vehicles, including idling vehicles, associated with the approved development must be contained within the subject lot.
5. Vehicle parking, access and circulation areas must be sealed, drained and maintained to the satisfaction of the City of Swan.
6. Car parking bays and areas designated for landscaping, shall not be used for the storage display or selling of any goods or vehicles whatsoever.
7. Prior to any earthworks, a detailed landscaping plan for the subject site and/or the road verge(s) must be submitted to and approved by the City of Swan, and must include the following:
  - a) the location, number, size and species type of existing ground covers, shrubs and trees;



- a) any existing landscape areas to be retained;
  - b) those areas to be updated, reticulated or irrigated; and
  - c) verge treatments.
8. Prior to any earthworks, an updated site plan is to be submitted illustrating updated crossover radii curves to the satisfaction of the City of Swan.
9. Prior to any earthworks, the landowner/applicant shall obtain all necessary approvals for the relocation of power infrastructure as shown on the approved site plan from Western Power.
10. Prior to any earthworks, an updated site plan is to be submitted illustrating updated crossover radii curves to the satisfaction of the City of Swan.
11. Prior to any earthworks, detailed stormwater drainage plans, details and calculations (including culvert locations) must be submitted for approval by the City of Swan and thereafter implemented, constructed and maintained on-site to the satisfaction of the City of Swan.

#### **ADVICE TO APPLICANT**

- a) This is a Development Approval issued by the City of Swan under its Local Planning Scheme No. 17 and under the Metropolitan Region Scheme in accordance with the delegation provided by Instrument of Delegation DEL2022/02. It is not a building permit or an approval to commence or carry out development under any other law. It is the responsibility of the applicant to obtain any other necessary approvals, consents or licenses required under any other law, and to commence and carry out development in accordance with all relevant laws.
- a) This approval is not an authority to ignore any constraint to development on the land, which may exist through contract or on title, such as an easement or restrictive covenant. It is the responsibility of the applicant and not the City to investigate any such constraints before commencing development. This approval will not necessarily have regard to any such constraint to development, regardless of whether or not it has been drawn to the City's attention.
- b) This approval does not constitute an approval for the relocation of any power infrastructure; the landowner/applicant is to liaise directly with Western Power to obtain the necessary approvals for any such works.

**Note 1:** If the development the subject of this approval is not substantially commenced within a period of 2 years, or another period specified in the approval after the date of the determination, the approval will lapse and be of no further effect.

Notwithstanding the above, depending on the circumstances of this development approval, *Clause 78H Notice of Exemptions from Planning Requirements During State of Emergency Clause 78H(6)(a) Amended Notice*, may extend the substantial commencement deadline by an additional 2 years.

**Note 2:** Where an approval has so lapsed, no development must be carried out without the further approval of the local government having first been sought and obtained.

**Note 3:** If an applicant or owner is aggrieved by this determination there is a right of review by the State Administrative Tribunal in accordance with the *Planning and Development Act 2005* Part 14. An application must be made within 28 days of the determination.

A handwritten signature in black ink, appearing to read 'Celina Da Costa', with a stylized flourish at the end.

**Celina Da Costa**  
**Coordinator, Development Assessment & Appeals - Area B**  
**STATUTORY PLANNING**

CITY OF SWAN  
APPROVED PLAN

No. 1 of 1

File Ref: PA-555/2022

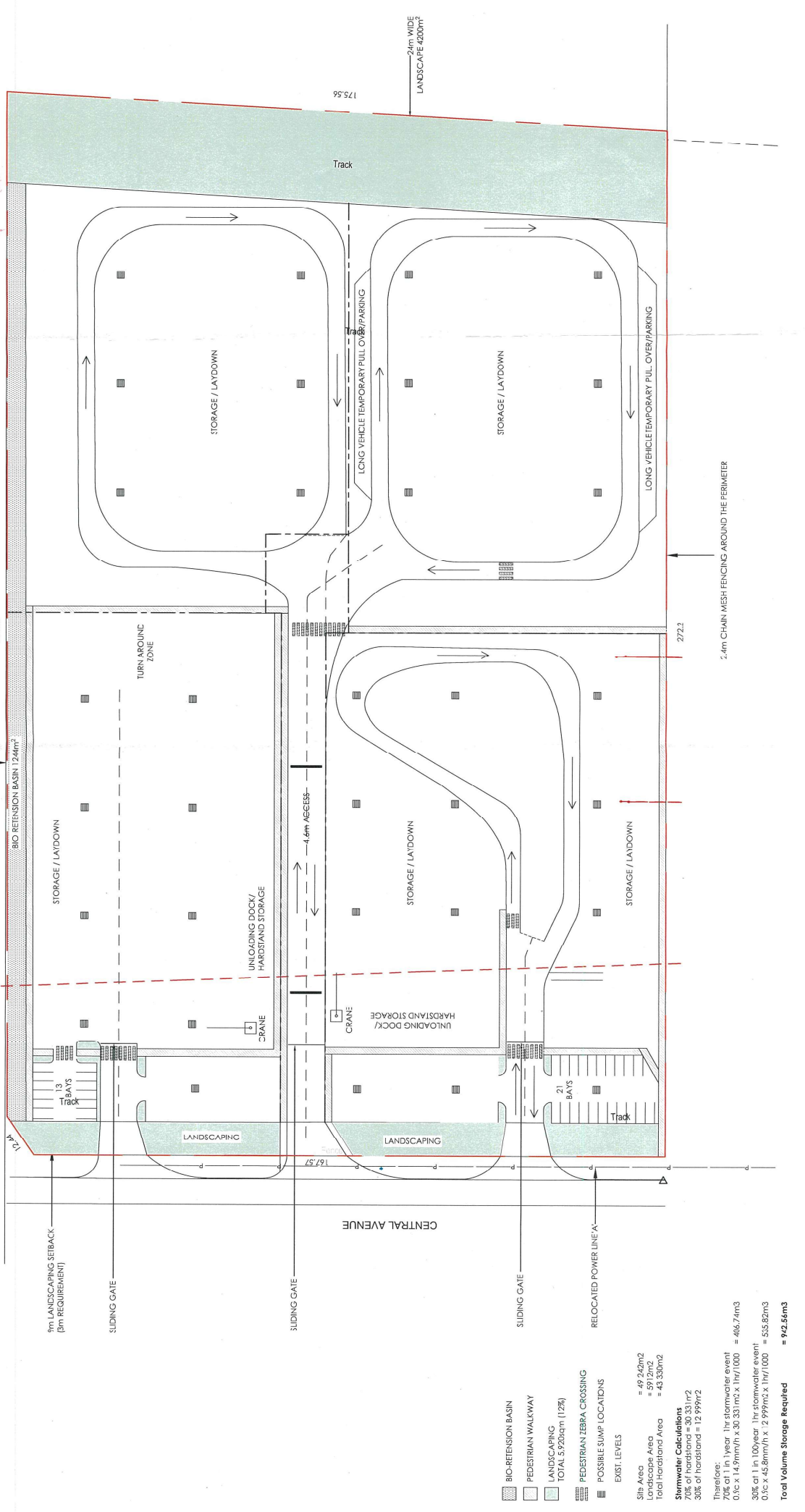
This plan was prepared by the City of Swan on 27 October 2022

City of Swan Planning Officer

27 October 2022

Colin Taylor

27 October 2022



EXISTING POWERLINE 'A' TO BE RELOCATED INTO CENTRAL AV ROAD RESERVE ALLOWING DRIVEWAY ACCESS TO BE RELOCATED INTO ROAD RESERVE - REMOVING EASEMENT FROM TITLE AS RELEVANT

2.4m CHAIN MESH FENCING AROUND THE PERIMETER

BIO RETENTION BASIN 1244m<sup>2</sup>

272.06

9.6m

5m LANDSCAPING SETBACK (5m REQUIREMENT)

SLIDING GATE

SLIDING GATE

SLIDING GATE

SLIDING GATE

RELOCATED POWER LINE 'A'

17.57

175.56

CENTRAL AVENUE

Track

24m WIDE LANDSCAPE 4200m<sup>2</sup>

272.2

2.4m CHAIN MESH FENCING AROUND THE PERIMETER

- BIO-RETENTION BASIN
  - PEDESTRIAN WALKWAY
  - LANDSCAPING
  - TOTAL 5,920sqm (12%)
  - PEDESTRIAN ZEBRA CROSSING
  - POSSIBLE SUMP LOCATIONS
  - EXIST LEVELS
- Site Area = 49,242m<sup>2</sup>  
 Landscape Area = 5912m<sup>2</sup>  
 Total Hardstand Area = 43,330m<sup>2</sup>
- Stormwater Calculations:**  
 70% of hardstand = 30,331m<sup>2</sup>  
 30% of hardstand = 12,999m<sup>2</sup>
- Therefore:  
 70% at 1 in 1 year 1hr stormwater event  
 0.5c x 14.2mm/h x 30,331m<sup>2</sup> x 1hr/1000 = 466.7m<sup>3</sup>  
 30% at 1 in 100 year 1hr stormwater event  
 0.5c x 45.8mm/h x 12,999m<sup>2</sup> x 1hr/1000 = 535.82m<sup>3</sup>  
**Total Volume Storage Required = 942.56m<sup>3</sup>**



## Appendix 2      City of Swan Consent

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16 November 2022

Catherine Rea  
Coterra Environment  
Level 1, 98 Colin Street  
West Perth, WA 6005

Dear Catherine,

**RE: City authority to access Central Avenue road reserve in Hazelmere**

It is hereby confirmed that Central Avenue, Hazelmere, is a local road reserve under the care, control, and management of the City of Swan, being the local government of the district in which the aforementioned road is situated. The road reserve land is owned by the State of WA but responsibility for the road lies with the City by virtue of section 55(2) of the *Land Administration Act 1997*:

- 55(2) - Subject to the *Main Roads Act 1930* and the *Public Works Act 1902*, the local government within the district of which a road is situated has the care, control, and management of the road.

As such, the City confirms that SDK Management has permission to access the road reserve known as Central Avenue, Hazelmere, for the purposes of clearing native vegetation. This is subject to clearing permit approval in accordance with the DWER approvals process under part V of the *Environmental Protection Act 1986*. It is understood that the clearing is required with regard to the provision of power services to the site in accordance with the Development Approval (DA 555-22).

Yours sincerely,



**Stephen Cain**  
**CHIEF EXECUTIVE OFFICER**



## **Appendix 3      EPBC Protected Matters Search Results (DCCEEW, 2022)**

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Australian Government

Department of Climate Change, Energy,  
the Environment and Water

# EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 29-Nov-2022

[Summary](#)

[Details](#)

[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)

# Summary

## Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

<a href="#">World Heritage Properties:</a>	None
<a href="#">National Heritage Places:</a>	None
<a href="#">Wetlands of International Importance (Ramsar)</a>	None
<a href="#">Great Barrier Reef Marine Park:</a>	None
<a href="#">Commonwealth Marine Area:</a>	None
<a href="#">Listed Threatened Ecological Communities:</a>	2
<a href="#">Listed Threatened Species:</a>	24
<a href="#">Listed Migratory Species:</a>	8

## Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <https://www.dcceew.gov.au/parks-heritage/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

<a href="#">Commonwealth Lands:</a>	None
<a href="#">Commonwealth Heritage Places:</a>	None
<a href="#">Listed Marine Species:</a>	12
<a href="#">Whales and Other Cetaceans:</a>	None
<a href="#">Critical Habitats:</a>	None
<a href="#">Commonwealth Reserves Terrestrial:</a>	None
<a href="#">Australian Marine Parks:</a>	None
<a href="#">Habitat Critical to the Survival of Marine Turtles:</a>	None

## Extra Information

This part of the report provides information that may also be relevant to the area you have

<a href="#">State and Territory Reserves:</a>	None
<a href="#">Regional Forest Agreements:</a>	None
<a href="#">Nationally Important Wetlands:</a>	None
<a href="#">EPBC Act Referrals:</a>	1
<a href="#">Key Ecological Features (Marine):</a>	None
<a href="#">Biologically Important Areas:</a>	None
<a href="#">Bioregional Assessments:</a>	None
<a href="#">Geological and Bioregional Assessments:</a>	None

# Details

## Matters of National Environmental Significance

### Listed Threatened Ecological Communities

[\[ Resource Information \]](#)

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text
<a href="#">Banksia Woodlands of the Swan Coastal Plain ecological community</a>	Endangered	Community likely to occur within area
<a href="#">Tuart (<i>Eucalyptus gomphocephala</i>) Woodlands and Forests of the Swan Coastal Plain ecological community</a>	Critically Endangered	Community may occur within area

### Listed Threatened Species

[\[ Resource Information \]](#)

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.

Number is the current name ID.

Scientific Name	Threatened Category	Presence Text
<b>BIRD</b>		
<a href="#">Botaurus poiciloptilus</a> Australasian Bittern [1001]	Endangered	Species or species habitat likely to occur within area
<a href="#">Calidris ferruginea</a> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
<a href="#">Calyptorhynchus banksii naso</a> Forest Red-tailed Black-Cockatoo, Karrak [67034]	Vulnerable	Species or species habitat known to occur within area
<a href="#">Leipoa ocellata</a> Malleefowl [934]	Vulnerable	Species or species habitat may occur within area
<a href="#">Numenius madagascariensis</a> Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area

Scientific Name	Threatened Category	Presence Text
<a href="#">Rostratula australis</a> Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area
<a href="#">Zanda baudinii listed as Calyptorhynchus baudinii</a> Baudin's Black-Cockatoo, Long-billed Black-cockatoo [87736]	Endangered	Roosting known to occur within area
<a href="#">Zanda latirostris listed as Calyptorhynchus latirostris</a> Carnaby's Black Cockatoo, Short-billed Black-cockatoo [87737]	Endangered	Species or species habitat known to occur within area
<b>MAMMAL</b>		
<a href="#">Dasyurus geoffroi</a> Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat likely to occur within area
<b>OTHER</b>		
<a href="#">Westralunio carteri</a> Carter's Freshwater Mussel, Freshwater Mussel [86266]	Vulnerable	Species or species habitat known to occur within area
<b>PLANT</b>		
<a href="#">Andersonia gracilis</a> Slender Andersonia [14470]	Endangered	Species or species habitat likely to occur within area
<a href="#">Conospermum undulatum</a> Wavy-leaved Smokebush [24435]	Vulnerable	Species or species habitat likely to occur within area
<a href="#">Diplolaena andrewsii</a> [6601]	Endangered	Species or species habitat likely to occur within area
<a href="#">Diuris drummondii</a> Tall Donkey Orchid [4365]	Vulnerable	Species or species habitat may occur within area
<a href="#">Diuris micrantha</a> Dwarf Bee-orchid [55082]	Vulnerable	Species or species habitat may occur within area
<a href="#">Diuris purdiei</a> Purdie's Donkey-orchid [12950]	Endangered	Species or species habitat may occur within area



Scientific Name	Threatened Category	Presence Text
<a href="#">Drakaea elastica</a> Glossy-leafed Hammer Orchid, Glossy-leafed Hammer Orchid, Warty Hammer Orchid [16753]	Endangered	Species or species habitat may occur within area
<a href="#">Drakaea micrantha</a> Dwarf Hammer-orchid [56755]	Vulnerable	Species or species habitat may occur within area
<a href="#">Eleocharis keigheryi</a> Keighery's Eleocharis [64893]	Vulnerable	Species or species habitat likely to occur within area
<a href="#">Eucalyptus x balanites</a> Cadda Road Mallee, Cadda Mallee [87816]	Endangered	Species or species habitat may occur within area
<a href="#">Grevillea curviloba subsp. incurva</a> Narrow curved-leaf Grevillea [64909]	Endangered	Species or species habitat may occur within area
<a href="#">Macarthuria keigheryi</a> Keighery's Macarthuria [64930]	Endangered	Species or species habitat may occur within area
<a href="#">Synaphea sp. Fairbridge Farm (D. Papenfus 696)</a> Selena's Synaphea [82881]	Critically Endangered	Species or species habitat likely to occur within area
<a href="#">Thelymitra stellata</a> Star Sun-orchid [7060]	Endangered	Species or species habitat likely to occur within area

### Listed Migratory Species [ [Resource Information](#) ]

Scientific Name	Threatened Category	Presence Text
<b>Migratory Marine Birds</b>		
<a href="#">Apus pacificus</a> Fork-tailed Swift [678]		Species or species habitat likely to occur within area
<b>Migratory Terrestrial Species</b>		
<a href="#">Motacilla cinerea</a> Grey Wagtail [642]		Species or species habitat may occur within area
<b>Migratory Wetlands Species</b>		

Scientific Name	Threatened Category	Presence Text
<a href="#">Actitis hypoleucos</a> Common Sandpiper [59309]		Species or species habitat may occur within area
<a href="#">Calidris acuminata</a> Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
<a href="#">Calidris ferruginea</a> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
<a href="#">Calidris melanotos</a> Pectoral Sandpiper [858]		Species or species habitat may occur within area
<a href="#">Numenius madagascariensis</a> Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
<a href="#">Tringa nebularia</a> Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area

## Other Matters Protected by the EPBC Act

Listed Marine Species	[ Resource Information ]	
Scientific Name	Threatened Category	Presence Text
Bird		
<a href="#">Actitis hypoleucos</a> Common Sandpiper [59309]		Species or species habitat may occur within area
<a href="#">Apus pacificus</a> Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area
<a href="#">Bubulcus ibis as Ardea ibis</a> Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area

Scientific Name	Threatened Category	Presence Text
<a href="#">Calidris acuminata</a> Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
<a href="#">Calidris ferruginea</a> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area
<a href="#">Calidris melanotos</a> Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area
<a href="#">Haliaeetus leucogaster</a> White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area
<a href="#">Merops ornatus</a> Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area
<a href="#">Motacilla cinerea</a> Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area
<a href="#">Numenius madagascariensis</a> Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
<a href="#">Rostratula australis as Rostratula benghalensis (sensu lato)</a> Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area overfly marine area
<a href="#">Tringa nebularia</a> Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area overfly marine area



## Extra Information

EPBC Act Referrals			[ Resource Information ]
Title of referral	Reference	Referral Outcome	Assessment Status
Not controlled action			
<a href="#">Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia</a>	2015/7522	Not Controlled Action	Completed

# Caveat

## 1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

## 2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

## 3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

## 4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

# Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [-Office of Environment and Heritage, New South Wales](#)
- [-Department of Environment and Primary Industries, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment, Water and Natural Resources, South Australia](#)
- [-Department of Land and Resource Management, Northern Territory](#)
- [-Department of Environmental and Heritage Protection, Queensland](#)
- [-Department of Parks and Wildlife, Western Australia](#)
- [-Environment and Planning Directorate, ACT](#)
- [-Birdlife Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- Natural history museums of Australia
- [-Museum Victoria](#)
- [-Australian Museum](#)
- [-South Australian Museum](#)
- [-Queensland Museum](#)
- [-Online Zoological Collections of Australian Museums](#)
- [-Queensland Herbarium](#)
- [-National Herbarium of NSW](#)
- [-Royal Botanic Gardens and National Herbarium of Victoria](#)
- [-Tasmanian Herbarium](#)
- [-State Herbarium of South Australia](#)
- [-Northern Territory Herbarium](#)
- [-Western Australian Herbarium](#)
- [-Australian National Herbarium, Canberra](#)
- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence](#)
- [Forestry Corporation, NSW](#)
- [-Geoscience Australia](#)
- [-CSIRO](#)
- [-Australian Tropical Herbarium, Cairns](#)
- [-eBird Australia](#)
- [-Australian Government – Australian Antarctic Data Centre](#)
- [-Museum and Art Gallery of the Northern Territory](#)
- [-Australian Government National Environmental Science Program](#)
- [-Australian Institute of Marine Science](#)
- [-Reef Life Survey Australia](#)
- [-American Museum of Natural History](#)
- [-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [-Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.



Please feel free to provide feedback via the [Contact us](#) page.

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## **Appendix 4      Fauna Habitat Assessment (Fauna Services, 2022)**

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## Memorandum

**To:** Catherine Rea, Cotterra Environment

**From:** Edward Swinhoe, Fauna Services.

**CC:** Kristen Watts, Cotterra Environment

**RE; Visual inspection of two Flooded Gum (*Eucalyptus rudis*) at 26 Central Avenue, Hazlemere.**

*Fauna Services* (formally trading as Whistling Reds) was requested by Coterra Environment to inspect and assess two Flooded Gums (*Eucalyptus rudis*) at 26 Central Avenue, Hazlemere for their value as Black Cockatoo Habitat. These two trees were identified by *Focused Vision Consulting* in a previous survey.

The two trees were inspected by Fauna Services Senior Zoologist, Edward Swinhoe, on 28/11/2022. The overall condition of the trees was good. Given their proximity to overhead powerlines, the trees showed a history of pruning on the northern side. They both had a sparse canopy with dense midstory at approximately 3m. There were no observable signs of Black Cockatoo foraging on the ground.

In terms of breeding habitat, only the larger of the two trees (Tree 1) could be classified as a Potential nesting tree, with a diameter at breast height (DBH) of 1175mm. The other tree (Tree 2) is suitable to develop a nest hollow in the future, with a 465mm DBH (DAWE 2002). Neither of the trees had any visible hollows.

The two trees are 5.4km from Confirmed CBC roost site (DBCA-050, site 81).

### Reference.

DAWE 2022, Referral guideline for 3 WA threatened black cockatoo species: Carnaby's Cockatoo, Baudin's Cockatoo and the Forest Red-tailed Black-cockatoo, Department of Agriculture, Water and the Environment, Canberra, February.





**Tree 1 & 2.**





**Tree 1 in front of 2, showing condition of canopy and powerlines to the north.**

## **Appendix 5      Basic Summary of Records (DWER, 2022b)**

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## Contaminated Sites Act 2003 Basic Summary of Records Search Response

Report generated at 11:56:48AM, 28/11/2022

Receipt No:

ID No: 80761

### Search Results

This response relates to a search request received for:

26 Central Av  
Hazelmere, WA, 6055

This parcel belongs to a site that contains 6 parcel(s).

According to Department of Water and Environmental Regulation records, this land has been reported as a known or suspected contaminated site.

<b>Address</b>	26 Central Av Hazelmere, WA, 6055
<b>Lot on Plan Address</b>	Lot 1102 On Deposited Plan 415522
<b>Parcel Status</b>	<p><b>Classification:</b> 31/05/2010 - <i>Remediated for restricted use</i></p> <p><b>Nature and Extent of Contamination:</b></p> <p>Groundwater beneath the site contains elevated levels of arsenic, copper, lead and zinc.</p> <p><b>Restrictions on Use:</b></p> <p>The land use of the site is restricted to commercial or industrial land use, which excludes sensitive land uses with soil access such as childcare centres, kindergartens, pre-schools and primary schools.</p> <p>Unexpected Finds Protocol</p> <p>In the event that any buried animal carcasses, soil with chemical contaminants above the site specific remediation acceptance criteria, asbestos, asbestos cement or other asbestos containing material are revealed works should stop in the area of the unexpected find. The affected area should be fenced off to minimize disturbance. A suitably qualified asbestos or contaminated site consultant shall be engaged to assess the degree of contamination and the remediation works required. A licensed asbestos contractor and/or experienced remediation contractor shall be engaged to remove all of the contaminated soils, in accordance with WA Occupational Health and Safety Regulations and DoH guidance. Affected soils are to be disposed of in accordance with the WA Landfill Waste Classification and Waste Definitions 1996 (as amended). A suitably qualified environmental consultant shall collect soil samples from the walls and base of excavation pits for NATA accredited laboratory identification to ensure that the contaminated materials have been successfully removed. In the event that validation samples are found to not comply with the relevant guidelines for commercial/industrial land use, the remedial cycle shall be repeated until it has been confirmed that all validation samples comply with relevant guideline values.</p> <p><b>Reason for Classification:</b></p> <p>This site was reported to the Department of Environment and Conservation (DEC) as per reporting obligations under section 11 of the 'Contaminated Sites Act 2003', which commenced on 1 December 2006. The site classification is based on information submitted to DEC by March, 2010.</p>

### Disclaimer

This Summary of Records has been prepared by Department of Water and Environmental Regulation (DWER) as a requirement of the Contaminated Sites Act 2003. DWER makes every effort to ensure the accuracy, currency and reliability of this information at the time it was prepared, however advises that due to the ability of contamination to potentially change in nature and extent over time, circumstances may have changed since the information was originally provided. Users must exercise their own skill and care when interpreting the information contained within this Summary of Records and, where applicable, obtain independent professional advice appropriate to their circumstances. In no event will DWER, its agents or employees be held responsible for any loss or damage arising from any use of or reliance on this information. Additionally, the Summary of Records must not be reproduced or supplied to third parties except in full and unabridged form.



## **Contaminated Sites Act 2003**

### **Basic Summary of Records Search Response**

Report generated at 11:56:48AM, 28/11/2022

A number of contamination assessments were carried out, and reviewed in a mandatory auditors report for the site, in order to comply with a condition that had been placed by the Western Australian Planning Condition as part of the planning approval process, to assess the site's suitability for a commercial and industrial land use.

The Site has historically been used as a wastewater treatment plant, for intensive agriculture and for the burial of animal carcasses, land uses that have the potential to cause contamination, as specified in the guideline 'Potentially Contaminating Activities, Industries and Landuses' (Department of Environment, 2004).

Abestos was identified on the site in 2008 during a soil investigation. The extent of asbestos was delineated laterally and vertically and asbestos fragments and impacted soil were disposed offsite at a suitable facility. Validation of the soils indicates that the asbestos content is below levels suitable for all site uses as published in 'Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia' (Department of Health, 2009).

During remedial works on the site, a number of animal carcasses were discovered and removed offsite. An unexpected finds protocol has been placed on the site should further animal carcasses be identified during excavation works (see restrictions on use at the Site). The soils on the site have been remediated to levels suitable for an industrial and commercial land use, as published in 'Assessment Levels for Soil, Sediment and Water' (Department of Environment, 2003).

Groundwater investigations found that metals (arsenic, copper, zinc and lead) and nitrate were present in groundwater at concentrations exceeding Freshwater Ecosystem Guidelines, as published in 'Assessment Levels for Soil, Sediment and Water' (Department of Environment, 2003). The metals (arsenic, copper, zinc and lead) and nitrate were present in groundwater at concentrations below guidelines for domestic non potable water use as published in 'Contaminated Sites Reporting Guideline for Chemicals in Groundwater' (Department of Health, 2006).

As the site is contaminated and has been remediated such that it is suitable for the proposed commercial or industrial landuse, but may not be suitable for a more sensitive landuse, the Site is classified as 'remediated for restricted use'.

A memorial stating the site's classification has been placed on the Certificate of Title, and will trigger the need for further investigations and risk assessment should the site be proposed for a more sensitive land use.

DEC, in consultation with Department of Health, has classified this site based on the information available to DEC at the time of classification. It is acknowledged that the contamination status of the site may have changed since the information was collated and/or submitted to DEC, and as such, the usefulness of this information may be limited.

In accordance with Department of Health advice, if groundwater is being or is proposed to be abstracted, DEC recommends that analytical testing should be carried out to determine whether the groundwater is suitable for its intended use.

#### **Certificate of Title Memorial**

Under the Contaminated Sites Act 2003, this Site has been classified as "Remediated for restricted use". For further information on the contamination status of this Site, please contact the Contaminated Sites section of the Department of Environment & Conservation.

#### **Disclaimer**

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## **Contaminated Sites Act 2003**

### **Basic Summary of Records Search Response**

Report generated at 11:56:48AM, 28/11/2022

<b>Current Regulatory Notice Issued</b>	<b>Type of Regulatory Notice:</b> <i>Nil</i> <b>Date Issued:</b> <i>Nil</i>
<b>General</b>	No other information relating to this parcel.

#### **Disclaimer**

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