Appendix D Offset management plans

Annual Compliance Report

Lot 131 Jandakot Road, Treeby WA EPBC Approval No. 2018/8025

SLR Project No.: 675.073237.00001

1 May 2026

Offset Management Plan

Lot 705 Jandakot Road, Treeby

Perron Developments

4 Plain Street, East Perth WA 6004

Prepared by:

SLR Consulting Australia

Level 1, 500 Hay Street, Subiaco WA 6008,
Australia

SLR Project No.: 675. 073237.00001

1 July 2025

Revision: 1

EPBC ref: 2018/8205

Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
1	1 July 2025	M. Ong M. Bell N. Whittington	N. Whittington	S. Bird

Basis of Report

This report has been prepared by SLR Consulting Australia (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Perron Developments (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

Declaration of accuracy

In making this declaration, I am aware that section 491 of the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC, 1999) makes it an offence in certain circumstances to knowingly provide false or misleading information or documents to specified persons who are known to be performing a duty or carrying out a function under the EPBC Act or the Environment Protection and Biodiversity Conservation Regulations 2000 (Cth). The offence is punishable on conviction by imprisonment or a fine, or both. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration.

Signed:

Date: 30/06/2025

Scott Bird

SLR Consulting Pty Ltd

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Acronyms and Abbreviations

BAM Act	Biosecurity and Agriculture Management Act 2007
BC Act	Biodiversity Conservation Act 2016
CR	Critically Endangered
DBCA	Department of Biodiversity, Conservation and Attractions
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DP	Declared Pest
DWER	Department of Water and Environmental Regulation
EN	Endangered
EP Act	Environmental Protection Act 1986
EPA	Environmental Protection Authority
EPBC Act	Environment Protection Biodiversity and Conservation Act 1999
ESA	Environmentally Sensitive Area
ha	Hectare
IBRA	Interim Biogeographic Regionalisation for Australia
IBSA	Index of Biodiversity Surveys for Assessments
MNES	Matters of National Environmental Significance
NVIS	National Vegetation Information System
P	Priority
PEC	Priority Ecological Community
PMST	Protected Matters Search Tool
SLR Consulting	SLR Consulting Australia Pty Ltd
T	Threatened
TEC	Threatened Ecological Community
TPFL	Threatened and Priority Flora Database
TPFRF	Threatened and Priority Flora Report Forms
VU	Vulnerable
WA	Western Australia
WAH	Western Australian Herbarium
WoNS	Weeds of National Significance

1.0 Introduction

1.1 Project Overview

Perron Developments Pty Ltd (Perron Developments) is proposing to develop Lot 131 Jandakot Road, Treeby for residential purposes (the Proposed Action). Lot 131 is approximately 65 ha and is located 18 km south of Perth's Central Business District within the City of Cockburn local government area (Figure 1). The development will result in the creation of over 400 housing lots that will accommodate a population of over 1000 people in a location well serviced by existing public infrastructure.

Currently Lot 131 is vacant. The proposed development footprint within Lot 131 is shown in Figure 2. Since referral Lot 131 has been renamed Lot 5131 but for ease of reference it will continue to be referred to as Lot 131.

The proposed action to clear 6.21 ha of native vegetation to facilitate partial development of Lot 131 Jandakot Road, Treeby ('the site') for residential purposes was identified as a controlled action under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC, 1999) for its potential impact on Matters of National Environmental Significance (MNES) including:

- 'Banksia Woodlands of the Swan Coastal Plain' Threatened Ecological Community (TEC) – endangered
  The referred proposal involved the clearing of 6.21 ha of the Banksia Woodlands of the Swan Coastal Threatened Ecological Community. With 5.42 ha in Excellent condition, 0.16 ha in Very Good condition and 0.63 ha in Good condition.
- King Spider-orchid (*Caladenia huegelii*) - endangered
  The clearing of vegetation within the proposal site was also considered likely to have indirect impacts on the King Spider-orchid (*Caladenia huegelii*).

Offsets are required to compensate for the significant residual direct impact on Banksia Woodlands of the Swan Coastal Plain ecological community and Black Cockatoos posed by the proposed development. This Offset Management Plan has been developed to guide management of the Offset Area.

The offset land consists of two parcels (Figure 1). The first parcel is 34.11 ha of vegetated land within Lot 131. It is immediately adjacent to the impact area to be cleared and is owned by Perron Developments. The second parcel is 12.14 ha of vegetated land within Lot 705 Armadale Road, Treeby which is immediately to the south of Lot 131. This Offset Management Plan is for the Offset Area in Lot 705 only.

1.2 Purpose

The purpose of the Offset Management Plan is to set out methodologies and standards for the vegetation improvement of the Offset Area as per the EPBC 2018/8205 approval conditions. It details management and monitoring actions, performance targets, and completion criteria and outlines the implementation of the plan to achieve the specified completion criteria. Within 5 business days of commencing implementation of each Offset Management Plan (this document), the Department will be notified in writing of the date on which implementation of this OMP commenced. The above provides management and contingency measures and diminishes the risk of failure.

The Offset includes:

- Conservation of an Offset Area of 12.16 ha containing 9.64 ha of Banksia Woodland TEC which is Black Cockatoo foraging habitat.
- Rehabilitation and revegetation work to improve the condition of the Offset Area.
- Monitoring and reporting to ensure that the offset area achieve and maintain the completion criteria.
- Adaptive management is applied to mitigate risks and incorporate new information as it becomes available.

1.3 Objectives

1.3.1 Securing long term protection of the Offset Area

The Offset Area will be managed in perpetuity for conservation purposes. Perron Developments Pty Ltd is the Approval Holder and will be ultimately responsible for management of the Offset Area and eventually, Perron Developments intends to transfer ownership to the Department of Biodiversity, Conservation and Attractions (DBCA) and or the City of Cockburn.

1.3.2 Improve the condition of Banksia Woodland of the Swan Coastal Plain TEC and hence the Black Cockatoo foraging habitat

Key objectives at the Offset Area have been identified and actions have been developed to manage them (SLR, 2024b), these include:

- General Management of the Banksia Woodland of the SCP TEC in the Offset Area using the below rehabilitation strategies:
  - Access control
  - Rubbish removal
  - Weed removal and management
  - *Phytopthora* (Dieback) mapping and management
- Revegetation of Banksia Woodland of the SCP TEC in Very Good and Good condition through:
  - Planting regime
  - Direct seeding

- Revegetation of Banksia Woodland of the SCP TEC in Degraded and Completed Degraded condition through:
  - Soil improvement through topsoil spreading
  - Planting regime
- Monitoring and reporting to ensure the offset area achieve performance targets and completion criteria; and
- Application of adaptive management and contingency actions to mitigate unforeseen risks and incorporation of new information as it becomes available.

1.4 Conditions of Approval

Table 1 shows how the OMP links to the conditions of approval.

Table 1: Conditions of approval reference table

Condition	Condition Requirement	OMP reference	Description
4	Prior to commencing any clearing or construction, the approval holder must: a) erect a fence along the perimeter of each discrete portion of the offset site. This fence must: i. meet the design specification shown in Diagram 1, Diagram 2 and Diagram 3 to prevent unauthorised access while enabling small animals to pass under the fence, ii. completely enclose each discrete portion of the offset site, iii. include locked security gates at points where access to the portions of the offset site is required for maintenance and management purposes, iv. include outward facing signs at 50 metre intervals that clearly state the conservation purpose of the enclosed offset site the restrictions on access to the offset sites and current contact details for the offset site manager, v. be maintained, including updating any change to the contact details for the offset site manager, at least until the expiry date of this approval	Section 6.2.1	This section describes the fence and lockable gates that will be erected around the offset site prior to clearing and construction.

Condition	Condition Requirement	OMP reference	Description
	vi. ensure that any keys for locks on the security gates are: a. allocated only to parties that require access for maintenance and management in accordance with the approved Offset Management Plan, and b. logged on a key register that denotes the key holders name and contact details and the purpose of the key allocation.		
18	Offset Baseline Surveys and progress Surveys Prior to the commencement of the Action, the approval holder must have a suitably qualified field ecologist conduct a baseline survey of the offset sites to accurately describe the HQS characteristics of the preexisting Banksia TEC and Black Cockatoo foraging habitat. Required survey actions comprise: a) representative transects to provide a rapid appraisal of vegetation density, projected canopy cover and key species present, and b) representative quadrats for the measurement of the HQS criteria for Banksia TEC and Black Cockatoo foraging habitat.	Section 7.1.1.1	Due to the timing of the Commencement of the Action (Autumn) being an inappropriate time to initiate a baseline for a monitoring program, the quadrats that have been established previously will be used. This is justified given that these quadrats were the ones used to determine the Habitat Quality Score (HQS) for the offset sites for the EPBC REF:2018/8205 Preliminary Documentation(SLR, 2024a).
21	The approval holder must, prior to the commencement of the Action, prepare an Offset Management Plan for each of the offset sites specified in the Offset Strategy.	This document	This OMP covers the offset site within Lot 705 specified in the Offset Strategy provided within the Preliminary Documentation.
22	Each OMP must: a) meet the requirements of the Environmental Offsets Policy and the Environmental Management Plan Guidelines b) be provided to the department upon request at any time during the life of the approval.	Section 2	a) The OMP is prepared in accordance with the Environmental Offsets Policy and the Environmental Management Plan Guidelines b) The OMP will be made available to the department upon request at any time during the life of the approval

Condition	Condition Requirement	OMP reference	Description
23	All commitments, including environmental outcomes, management measures, corrective actions, trigger values and performance indicators in the OMP must be SMART and based on referenced or included evidence of effectiveness. The OMP must be prepared by a suitably qualified ecologist and must include:	This document	The completion criteria and environmental management measures are specific, measurable, achievable, relevant and time bound (SMART) and references, where available, are made throughout the document. This OMP was prepared by a prepared by a suitably qualified ecologist with 23 years of experience writing, implementing, and reporting on management plans and can give authoritative assessment and advice on offset management to improve habitat quality of protected matters.
	a) a summary of the residual adverse impacts to protected matters that will be compensated for by the offset. This summary must include the area(s) of habitat for protected matters and its condition and quality at all impacted sites which the offset is to address,	Section 1.1	This section summarises the residual adverse impact to the protected matters that the offset will compensate for.
	b) the relevant protected matters and a reference to the EPBC Act approval conditions to which the OMP refers,	Section 1.4 Table 1	This table identifies the sections which address the approval conditions
	c) management actions, and the timing of those actions, that will be implemented to achieve the offset outcomes for relevant protected matters,	Section 7	This section describes the management actions and Table summarises the timings of those actions.
	d) a table of commitments to achieve the offset outcomes for relevant protected matters,	Table 12	This table summarises the commitments to achieve the offset outcomes
	e) reporting and review mechanisms, and documentation standards that will be implemented to inform others regarding compliance with management and environmental commitments, and attainment and maintenance of the offset outcomes as specified in the OMP,	Section 8	This section includes the reporting and reviewing of this OMP
	f) an assessment of risks to achieving the offset outcomes and what risk management strategies will be applied to address these,	Section 5	An environmental risk assessment was undertaken in this section to identify risks and management strategies to address them.

Condition	Condition Requirement	OMP reference	Description
	g) A monitoring program, which must include: i. evidence that effectively determines progress towards, attainment of and maintenance of the offset outcomes for the protected matters, ii. measurable performance indicators to monitor attainment of the offset outcomes for the protected matters, iii. trigger values for corrective actions, iv. the timing and frequency of monitoring to detect trigger values and changes in the performance indicators, and v. milestones for progress towards the offset outcomes,	Section 7	This section describes the monitoring that will take place over the duration of the OMP implementation
	h) proposed corrective actions to ensure offset outcomes for the protected matters are attained or maintained, if trigger values are reached or performance indicators not attained, and	Section 6.5	Dependent on the monitoring outcomes, contingency measures may need to be implemented in the event the completion criteria have not been achieved. Revegetation and rehabilitation areas will need to be monitored and managed after initial planting/seeding as initial success if often compromised by weeds, feral animals, human activity and fire.
	i) links to referenced plans and applicable conditions of approval (including State approval conditions) if any.	Appendix B	EPBC 2018/8205 approval conditions to which this OMP is in reference to is in Appendix B
24	The approval holder must implement each approved OMP until the expiry date of this approval.	Section 4.1	The implementation of the OMP will be the responsibility of the Approval Holder, Perron Developments until 13 March 2052. On-ground activities will be carried out by the Approval Holder.
25	The approval holder must, within 5 business days of commencing implementation of each Offset Management Plan, notify the department in writing of the date on which implementation of that OMP commenced.	Section 1.2	Within 5 business days of commencing implementation of each Offset Management Plan (this document), the Department will be notified in writing of the date on which implementation of this OMP commenced.

Condition	Condition Requirement	OMP reference	Description
26	The approval holder must, within 40 business days of 2nd, 5th, 10th, 15th and 20th anniversary of the commencement of the Action: a) have the Offset sites assessed by an independent suitably qualified field ecologist to determine if the offset outcomes have been achieved, and b) submit to the department, within 80 business days of the 20th anniversary of the commencement of the Action, a report prepared by the independent suitably qualified ecologist detailing: i. the presence of protected matters, ii. habitat quality, and iii. evidence that each offset outcome specified in condition 15, 16 and 17 has been achieved.	Section 8.0 Table 18	An annual audit report will be sent to DCCEEW in accordance with the Annual Compliance Reporting conditions in EPBC 2018/8205. A biological monitoring report will be collated from previous years monitoring events in the case that DCCEEW requests to receive it in years 2, 5, 10, 15 and 20.

2.0 Policies and Guidelines

2.1 Legal requirements

This Offset Management Plan (OMP) has been developed to satisfy Conditions of Approval EPBC 2018/8205.

2.2 Policies and Guidelines

This OMP has been prepared in accordance with the following policies and guidelines:

- Environmental Offsets Policy, DCCEEW 2012
- Offsets Assessment Guide (the Offset Guide), DCCEEW 2012
- Environmental management plan guidelines, DCCEEW 2024
- Species specific plans and guidelines.

2.2.1 Environmental Offsets Policy

The Environmental Offsets Policy outlines the Australia's Government's approach to the use of environmental offsets under the EPBC Act (DSEWPaC, 2012). It replaces the draft policy statement *Use of environmental offsets under the EPBC Act (Department of the Environment and Water Resources, 2007)*.

Offsets are defined as measures that compensate for the residual adverse impacts of an action on the environment. Where appropriate, offsets are considered during the assessment phase of an environmental impact assessment under the EPBC Act, as outlined in Section 5 of this document. This policy provides transparency around how the suitability of offsets is determined. The suitability of a proposed offset is considered as part of the decision as to whether or not to approve a proposed action under the EPBC Act.

2.2.2 Environmental Management Plan Guidelines

The Environmental Management Plan Guidelines provides guidance on the preparation of environmental management plans for environmental impact assessments and approvals under Chapter 4 of the EPBC Act.

Environmental management plans are often submitted during the environmental impact assessment process and may be part of the documentation considered by the Minister, or their delegate, when deciding whether to approve a proposed action. If the proposed action is approved, environmental management plans are often referenced in the conditions of approval. In addition, approval conditions sometimes require revised or additional environmental management plans to be approved before the approved action can begin.

This OMP has been developed to satisfy Conditions of EPBC 2018/8205.

2.2.3 Species Specific Plans and Guidelines

Table 2 outlines the species-specific plans and guidelines for relevant MNES.

Table 2: Guidelines for MNES Relevant to the Offset Area

MNES	Relevant Guideline
Carnaby's Cockatoo (*Calyptorhynchus latirostris*)	Department of Parks and Wildlife (2013) Carnaby's Cockatoo (*Calyptorhynchus latirostris*) Recovery Plan, Department of Parks and Wildlife, Perth, Western Australia. Environmental Protection Authority (2019) Carnaby's Cockatoo in Environmental Impact Assessment in the Perth and Peel Region, EPA, Perth, Western Australia.
Banksia Woodland ecological community	*Environment Protection and Biodiversity Conservation Act (1999)* (EPBC Act) (s 266B) Approved Conservation Advice (incorporating listing advice) for the Banksia Woodlands of the Swan Coastal Plain ecological community. Department of the Environment and Energy (2018). Threat abatement plan for disease in natural ecosystems caused by *Phytophthora cinnamomi*. Canberra: Commonwealth of Australia. (DEE, 2018)

3.0 Offset Site

Perron Developments has agreed to provide approximately 46 ha of land to the State as an offset, as part of its proposal to develop land within Lot 705. This land is to be managed for conservation purposes in perpetuity.

3.1 Location and Description

The offset land consists of two parcels (Figure 1). The first parcel is 34.11 ha of vegetated land within Lot 131. It is immediately adjacent to the impact area to be cleared and is owned by Perron Developments. The second parcel is 12.14 ha of vegetated land within Lot 705 Armadale Road, Treeby which is immediately to the south of Lot 131. This Offset Management Plan is for the Offset Area in Lot 705 only.

Lot 705 is located 18 km south of Perth's Central Business District within the City of Cockburn local government area. Land immediately adjacent to the north, east, and south are zoned 'Rural - Water Protection' under the Metropolitan Region Scheme.

3.1.1 Land Use

The adjacent impact area has been historically cleared and mined for sand. The remainder of the site contains rehabilitation, pockets of remnant vegetation and cleared areas including numerous tracks.

Areas surrounding the site to the north, south and east include several Bush Forever sites, Regional Parks, DBCA Managed Lands and geomorphic wetlands (Figure 3). Land uses in the surrounding area include highly urbanised residential development to the east and rural residential properties to the north, west and south of the site.

The area abutting the site to the west is zoned 'Urban' and has been developed for residential purposes. Land uses in the surrounding area include rural residential properties to the north, and south of the site, though those to the north are in the initial planning approval stages of being developed for residential purposes.

Access within the Offset Area is not currently controlled which is evident by unauthorised tracks throughout the site, vandalism and illegal dumping of rubbish, car bodies and deliberately lit fires.

3.1.2 Proximity to Conservation Areas

The Offset Area is not identified within a managed conservation area (Department of Water and Environmental Regulation, 2020). The closest DBCA managed land to the Offset Area is Jandakot Regional Park (580 m north of the Offset Area), which comprises a mosaic of land from the southern end of Jandakot Airport to south of Casuarina Prison.

Several areas surrounding the site to the north, south, and east include Bush Forever sites, Regional Parks, Department of Biodiversity Conservation and Attractions (DBCA) Managed Lands and wetlands.

3.2 Existing Environment

3.2.1 Geomorphic Wetlands

The Geomorphic Wetlands dataset is identified and utilised by the EPA, Department of Water and Environment Regulations (DWER) and the Department of Lands and Heritage (DPLH) as a basis for planning and decision making (DWER, 2016).

The DBCA Geomorphic Wetlands Dataset identified one wetland occurring within the Offset Area, a Dampland (Feature ID 13328), assigned the Resource Enhancement management category. Wetlands in the Resource Enhancement category are wetlands which may have been partially modified but still support substantial ecological attributes and functions.

3.2.2 Environmentally Sensitive Areas

Environmentally Sensitive Areas (ESAs) are declared by the DWER to prevent the degradation of important environmental values such as Threatened flora, Threatened Ecological Communities (TECs) or significant wetlands.

3.2.2.1 Bush Forever

Bush Forever is a State Government Policy and program that identifies 51,200 ha of regionally significant vegetation for protection, covering 26 vegetation complexes. This amounts to approximately 18% of the original vegetation on the SCP portion of the Perth metropolitan area. Bush Forever sites are protected as ESAs in accordance with the EP Act.

Regionally significant vegetation has been identified based on criteria relating to its conservation value. Important criteria in the identification process include the achievement, where possible, of a comprehensive representation of all the ecological communities originally occurring in the region, principally through protecting a target of at least 10% of each vegetation complex in the Bush Forever project boundary (Government of Western Australia, 2000).

The Offset Area intersects the following Bush Forever site:

- 390 – Fraser Road Bushland, Banjup.

3.2.2.2 Threatened Ecological Community (TEC)

The Banksia Woodlands of the Swan Coastal Plain (Banksia WL SCP) ecological community Federal TEC is confirmed to occur within the Offset Area (SLR, 2024a), which also represents an ESA. Banksia WL SCP cover 9.64 ha of the Offset Area, representing 79% of the total Offset Area.

3.2.3 Vegetation Type

A detailed Flora and Vegetation survey described and mapped two natural vegetation types, and one cleared area in the Offset Area (SLR, 2024a). A description of these vegetation types is provided in Table 3.

Table 3: Vegetation Association Descriptions and Extent

Vegetation Type	Description	Extent (ha)	Proportion (%)
Vegetation Types			
BaBm (Q6, Q7)	Low open woodland of *Banksia menziesii* and *B. attenuata* over *Eremaea pauciflora* var. *pauciflora*, *Scholtzia involucrata*, *Stirlingia latifolia* and *Styphelia discolor*	9.64	79.3
MpBi (Q1, Q2)	Low open forest of *Melaleuca preissiana* and *Banksia ilicifolia* over *Dasypogon bromeliifolius*, *Astartea scoparia*, *Lepidosperma squamatum*, *Xanthorrhoea preissii* and *Phlebocarya ciliata*	1.32	10.8
Cleared Areas			
Cleared	Bare areas of ground devoid of native flora at the time of survey, as a result of historical clearing and/or maintenance of firebreaks	1.20	9.9
	Totals	**12.16**	**100**

3.2.4 Vegetation Condition

Vegetation condition mapping was undertaken in 2023 as part of a flora and vegetation survey (SLR, 2024a). Vegetation condition was based on the Keighery (1994) rating scale, which is equivalent to the scale utilised by the EPA (2016)

Vegetation condition ranged from Completely Degraded to Excellent, with most of the vegetation considered to be in Excellent condition (Table 4).

Disturbance included tracks and clearing related to historical activities, rubbish and invasive weed species, including Declared Pests **Gomphocarpus fruticosus* and **Zantedeschia aethiopica*.

Table 4: Vegetation Condition of Offset Area

Vegetation Condition	Offset Area (ha)	Percentage (%)
Excellent	8.18	67.3
Very Good	2.33	19.2
Good	0.41	3.4
Degraded	0.03	0.2
Completely Degraded	1.21	10.0
Total	**12.16**	**100**

3.2.5 Significant Flora

Database and literature review searches identified 49 significant flora species occurring within 5 km of the Offset Area. The detailed Flora and Vegetation survey conducted by SLR (SLR, 2024a) recorded one significant flora taxon, the King Spider Orchid (*Caladenia huegelii*) on the Offset Area. *Caladenia huegelii* is listed as Threatened at a State level pursuant to the *Biodiversity Conservation Act (2016) (BC Act)* (Government of Western Australia, 2016) and Endangered at a Federal level under the EPBC Act. A total of five individuals were recorded within the Offset Area.

Photo 1: *Caladenia huegelii*

3.2.6 Introduced Flora

The recovery plans for Black Cockatoos (DPAW, 2013; DEC, 2008) and conservation advice for the Banksia Woodlands of the SCP TEC (Threatened Species Scientific Committee, 2016) identify weed invasion as a factor which contribute to the degradation and loss of this ecological community and foraging habitat.

The detailed survey identified two introduced species on the Offset Area (SLR, 2024a). *Asparagus asparagoides* and *Zantedeschia aethiopica* are listed as Declared Pests under the BAM Act. *Asparagus asparagoides* is also recognised as a WoNS.

Zantedeschia aethiopica (Arum Lily) is a rhizomatous (tuber-like), perennial herb that occurs on and near swamps and rarely uplands (DBCA, 2023). It is weed of concern as it can impede water flow in the wet swampy habitats it grows in, and all parts of the plant are toxic (Hussey *et al.*, 2007).

Asparagus asparagoides (Bridal Creeper), is considered to be a serious environmental weed that is rhizomatous and tuberous with the ability to climb and smother native vegetation. This taxon has the potential to cause acute disruption to ecological processes, dominate and/or significantly alter vegetation structure, composition and function of ecosystems (DPIRD, 2019).

3.2.7 Dieback

Dieback (*Phytophthora cinnamomi*) is caused by a water-borne pathogen and is responsible for the death of a vast and diverse range of plant species. Plants become visibly diseased when infection results in the impairment of the plants physiological and biochemical functions. Roots are the primary site of infection and therefore uptake of water is one of the first functions affected.

This pathogen is readily dispersed by the movement of infected soil, roots or water. It is also commonly linked to watercourses, tracks and roads where rainfall exceeds 400 mm per annum and where human activity is frequent (Podger, James and Mulcahy, 1996).

Dieback was recorded within the Offset Area across most vegetation types (SLR, 2024a)(SLR, 20234a). There are several pathways for dieback to be introduced or spread throughout the site such as unmanaged public access and future construction activities adjacent to the Offset Area. Dieback can lead to the increased death of susceptible species, including Eucalyptus species which can impact completion criteria targets.

3.2.8 Significant Fauna Habitat

The Offset Area is within the known distribution of the Carnaby's Black Cockatoo and the Forest Red-tailed Black Cockatoo, however, it is located on the northernmost extremity of the Baudin's Black Cockatoo's known distribution according to the distribution maps illustrated in the *Referral Guideline for 3 WA Threatened Black Cockatoo Species* (DAWE, 2022).

A survey for the extent and suitability of habitat at the Offset Area for Black Cockatoos was conducted by SLR Consulting (2018). Multiple observations of Carnaby's Black Cockatoo were observed by sighting and call inside the Offset Area during the survey.

A total of approximately 46 ha of high-quality foraging habitat for Carnaby's and Forest Red-tailed Black Cockatoo's was recorded, made up of primarily Banksia woodland containing Banksia species (*Banksia attenuata*, *B. menziesii*, and *B. ilicifolia*), Sheoak (*Allocasuarina fraseriana*), Jarrah (*Eucalyptus marginata*) and Coastal Blackbutt (*E. todtiana*).

3.3 Environmental Values and Suitability

The Offset Area was selected for containing listed MNES Banksia Woodlands TEC, and Carnaby's Black Cockatoo and Forest Red-tailed Black Cockatoo foraging habitat.

The Offset Area is adjacent (south) to the area within Lot 131 to be impacted and is part of the same patch of Banksia Woodlands of the Swan Coastal Plain ecological community. This makes it suitably equivalent relative to the impacted Banksia Woodlands of the Swan Coastal Plain ecological community.

The Offset Area contains high value foraging habitat for the Carnaby's Black Cockatoo and Forest Red-tailed Black Cockatoo.

The Offset Area also contains the King Spider-orchid (*Caladenia huegelii*) which is listed as Threatened at a State level and Endangered at a Federal level. As the impact area does not contain the significant species, this results in a significantly positive outcome for the conservation of the King Spider-orchid.

The Offset Area ensures that the greatest environmental values within the Project Area are maintained, including the highest quality vegetation as well as the presence of the highest quality Black Cockatoo foraging habitat within the proposed action area. If this vegetation is not afforded formal protection and the threatening processes from activities such as four-wheel driving, off-road motorcycling, rubbish dumping, and the lighting of fires, are not adequately managed, further degradation to the Banksia Woodlands TEC and habitat available for Black Cockatoo at the site is likely to occur.

4.0 Environmental Framework

4.1 Roles and Responsibilities

The implementation of the OMP will be the responsibility of the Approval Holder, Perron Developments until 13 March 2052. On-ground activities will be carried out by the Approval Holder and may over time be carried out by the City of Cockburn and DBCA.

Roles and responsibilities associated with the implementation of the OMP are summarised in Table 5.

Table 5: Roles and responsibilities

Role	Key Environmental Responsibilities
Project Manager	Ensuring the Project complies with all applicable requirements set out in this OMP Run site inductions to ensure all personnel understand their responsibilities required by this OMP Reporting significant incidents and emergency events to Environmental Manager
Environmental Manager	Ensure environmental requirements are planned into works Report environmental incidents into Incident Reports Register and notify the relevant Departments if required Request any required environmental documentation from contractors prior to site mobilisations
All personnel	All site personnel, including contractors and subcontractors, have responsibility to comply with the requirements of this management plan Information about compliance to these requirements will be provided during inductions and toolbox talks All personnel have responsibility to report any environmental incidents immediately to the Project Manager and/or the Environmental Manager All personnel have responsibility to ensure that nothing is done to make environmental performance and provisions less effective.

4.2 Environmental Training

All personnel involved with the project will receive relevant environmental training to ensure they understand their responsibilities when implementing the OMP. People to be trained include all personnel working on the site (including contractors, subcontractors and visitors) with training tailored to the role of the individual where required.

4.2.1 Inductions

Environmental training and awareness will include site inductions of all personnel prior to commencing on-site. This will cover key aspects of environmental management required on-site including an overview of:

- Environmental code of conduct
- Applicable legislative responsibilities and requirements and the risks associated with non-compliance
- Requirements of relevant environmental management plans

- Significant environmental values to be protected
- Control strategies for the management of environmental risk in daily activities
- Roles and responsibilities for implementing management, monitoring and reporting associated with the environment.

4.2.2 Records

Records of all training conducted will be maintained in a training register, records will include:

- The person receiving the training
- The date the training was received
- The name of the person conducting the training
- A summary of the training.

4.3 Emergency Response

The below contact information in Table 6 will be located in a prominent location and made available and accessible to all personnel.

Table 6: Emergency Contact Details

Contacts	Phone Number
Project Manager - Ben Martin	0417012023
Offset Manager - Scott Bird	0419405341
Emergency services -	000
Kaarakin Black Cockatoo Conservation Centre	(08) 9390 2288
Kanyana Wildlife	(08) 9291 3900

5.0 Risk Evaluation

Each potential environmental risk was given a rating in terms of likelihood and consequence using the criteria's set out in Table 7 and Table 8.

Assessment of likelihood involves evaluating how likely is it that the risk will occur after management actions have been put in place/are being implemented. The likelihood definitions are outlined in Table 7.

Table 7: Likelihood Risk

Measure	Definition after Control Strategies have been put in place
Highly likely	Is expected to occur in most circumstances
Likely	Will probably occur during the life of the project
Possible	Might occur during the life of the project
Unlikely	Could occur but considered unlikely or doubtful
Rare	May occur in exceptional circumstances

Consequences are also determined based if the impact does occur. The definitions of the levels of consequence are in Table 8.

Table 8: Consequence Risk

Consequence	
Minor	Minor risk of failure to achieve the plan's objectives. Results in short term delays to achieving plan objectives, implementing low cost, well characterised corrective actions.
Moderate	Moderate risk of failure to achieve the plan's objectives. Results in short term delays to achieving plan objectives, implementing well characterised, high cost/effort corrective actions.
High	High risk of failure to achieve the plan's objectives. Results in medium-long term delays to achieving plan objectives, implementing uncertain, high cost/effort corrective actions.
Major	The plan's objectives are unlikely to be achieved, with significant legislative, technical, ecological and/or administrative barriers to attainment that have no evidenced mitigation strategies.
Critical	The plan's objectives are unable to be achieved, with no evidenced mitigation strategies.

5.1 Risk Rating

A risk rating matrix (Table 9) was then used to determine each of the potential risks involved in the project using the above tables as a guide. This can indicate the amount of time and resources that will be required to manage each risk. Risks with 'low' risk ratings will usually require significantly less management than 'medium', 'high' and 'severe' risks.

Table 9: Risk Assessment Matrix

		Consequence				
		Minor	**Moderate**	**High**	**Major**	**Critical**
Likelihood	**High Likely**	Medium	High	High	Severe	Severe
	Likely	Low	Medium	High	High	Severe
	Possible	Low	Medium	Medium	High	Severe
	Unlikely	Low	Low	Medium	High	High
	Rare	Low	Low	Low	Medium	High

5.2 Risk Assessment

The results of the risk assessment using the matrix from Section 5.0 are shown in Table 10. The risks identified will be managed by management actions, with higher risk ratings requiring more management actions and controls.

Table 10: Risk Assessment Table

Management Objectives	Potential Risk Event	Likelihood	Consequence	Risk Rating	Trigger detection and monitoring activity	Management actions/measures
Achieve performance targets and completion criteria	· Insufficient funds provided by approval holder. · Some of these locations may not be available for rehabilitation	Unlikely Possible	High High	Med Med	Insufficient funds realised after commencement of clearing. Requests from DBCA or the City to retain access tracks, firebreaks etc that have been earmarked for rehabilitation	· Calculate financial provisions beforehand · Seek rubbish removal quotes · Seek installation of fencing quotes · Seek rehabilitation quotes · Approval Holder will rehabilitate other Banksia Woodland within the greater patch that occurs outside the cadastral boundaries of Lot 705 and Lot 131, that are being managed for conservation
Weed hygiene	Further spread of weeds during rehabilitation works	Unlikely	Mod	Low	Weed cover is greater than baseline levels observed during monitoring events.	· All equipment used in known areas of weed infestation shall be cleaned of weed propagules by manual brush down. · Personnel entering the site for rehabilitation works will ensure footwear is free of soil and weed seed prior to access. · Offset site monitoring will identify weed density changes and treat as soon as practicable.

Management Objectives	Potential Risk Event	Likelihood	Consequence	Risk Rating	Trigger detection and monitoring activity	Management actions/measures
Improvement of overall vegetation condition	Insufficient weed control resulting in infestations	Possible	Mod	Med	Weed cover is greater than baseline levels observed during monitoring events.	· Offset site monitoring will identify weed density changes and treat as soon as practicable. · Weed control applied across several seasons where required.
	Rubbish continues to be dumped on Offset Area	Possible	Mod	Med	Rubbish in the offset area and inspect the condition of fencing and signage.	· Fence to be installed around the Offset Area to protect TEC and discourage unauthorised vehicle and pedestrians. · Installation of 'No dumping of rubbish' signage to discourage illegal dumping. · If any damage observed during monitoring, fencing and signage will be repaired or replaced to ensure it is still in good working order.
	Poor establishment of initial revegetation	Possible	Mod	Med	Plant deaths of tube stock and seedlings noted during the first round of monitoring.	· Offset site monitoring to take place to monitor levels of plant establishment · Maintenance measures will be undertaken in areas of revegetation that include infill planting
	Bushfire/arson	Possible	High	Med	Plant death from fire damage observed during monitoring or site inspection	· Offset site monitoring to monitor loss of plants · Maintenance of firebreaks to reduce severity of fire · Seeding and planting to repopulate affected areas.

Management Objectives	Potential Risk Event	Likelihood	Consequence	Risk Rating	Trigger detection and monitoring activity	Management actions/measures
Revegetation of Very Good, Good, Degraded and Completely Degraded Condition vegetation.	Poor revegetation outcomes due to herbivores damaging or destroying plants	Possible	Mod	Med	Plant deaths from fauna disturbance (i.e. evidence of grazing, complete uproot of seedlings) noted during monitoring	· If there is evidence of plant deaths due to fauna disturbance, tree guards will be used to protect the plants.
	Poor revegetation outcomes due to lack of rain	Possible	Mod	Low	Plant deaths from lack of water noted during monitoring	· Seeding will take place from April to June · Planting will take place from May to June
	Poor revegetation outcomes from new weed outbreak	Unlikely	Mod	Low	Weed cover comprised of new weed species observed during monitoring	· Revise weed management actions to tackle new species · Implement additional / contingency weed management actions
Dieback management	Further spread of dieback during rehabilitation works	Unlikely	Minor	Low	Death of dieback susceptible plants observed during monitoring	· Vehicles must be clean when entering a dieback free site · Personnel entering the site for rehabilitation works will ensure footwear is free of soil prior to access.

Management Objectives	Potential Risk Event	Likelihood	Consequence	Risk Rating	Trigger detection and monitoring activity	Management actions/measures
Flora of conservation significance are maintained	Orchids are damaged during site rehabilitation works (i.e. site preparation, planting, and weed management)	Possible	Mod	Med	Observation of disturbance	· Identify location of conservation significant orchid prior to commencement of rehabilitation works · Communicate locations and avoidance requirements of the orchids to personnel accessing the site · Report and record new sightings of the orchids, noting they can only be verified while in flower · Report and record environmental incidents

6.0 Environmental Management Measures

6.1 Improvements to the Offset Area

The objective of the Offset Area is to protect and improve the Banksia Woodlands of the Swan Coastal Plain ecological community and hence Black Cockatoo foraging habitat within the Offset Area to Excellent condition or better. The management strategies undertaken to increase the vegetation condition will be dependent on the native vegetation's initial condition.

General management to all vegetation conditions within the Offset Area will include; fencing, rubbish removal, weeding, and dieback assessment and control. These actions will prevent the decline or deterioration of the protected matters within the Offset Area. To improve the quality of vegetation in less than Excellent condition, revegetation works will be undertaken to expand the overall vegetation and increase habitat diversity. Works will include a planting regime and topsoil spreading to areas in degraded and completely degraded conditions.

Table 11 lists the management actions to be undertaken for each vegetation condition and Figure 5 shows the areas where restoration actions will occur for each vegetation condition.

Table 11: Banksia Woodland TEC Vegetation Condition Subject to Restoration

Management action to be undertaken	Area (ha)	Start condition		Time to improvement (yrs)
		Keighery	HQS	
Fencing Rubbish removal Weed control Dieback assessment	7.47	Excellent	8/10	10
Fencing Rubbish removal Weed control Dieback assessment Planting regime	1.75	Very Good	6/10	20
Fencing Rubbish removal Weed control Dieback assessment Planting regime	0.39	Good	4/10	20
Fencing Rubbish removal Weed control Dieback assessment Planting regime Topsoil spreading	0.03	Degraded	2/10	20

Management action to be undertaken	Area (ha)	Start condition		Time to improvement (yrs)
		Keighery	HQS	
Fencing Rubbish removal Weed control Dieback assessment Planting regime Topsoil spreading	1.21	Completely Degraded	0/10	20

6.2 General Management of the Offset Area

6.2.1 Access control through fencing

Unauthorised access to the Offset Area results in illegal activities such as dumping of rubbish, off-road activities, and unmanaged pedestrian access. If the Offset Area is not effectively delineated, then these threatening processes will become more prevalent, increasing the risk of direct loss of vegetation and weed and dieback proliferation within the Offset Area.

A fence will be installed to separate the Offset Area with the development area preventing pedestrian, vehicle access, and to prevent civil construction machinery from entering during development. Figure 6 shows the location of the fence line and Diagram 1, Diagram 2 and Diagram 3 shows the fence and gate specifications requirements by the City of Cockburn.

The fence will protect native vegetation and be constructed to the Specifications of the City of Cockburn in consultation with the DBCA. Lockable gates will be installed at strategic locations to allow vehicle access for maintenance activities and management purposes. Keys for the security gate locks will be allocated to parties undertaking the works and logged on a key register that denotes the key holders' name and contact details and the purpose of the key allocation.

Signage will be installed around the fenced area at 50 m intervals to convey the works that are being undertaken. The signage will identify that the area is being managed for conservation purposes and no unauthorised access is permitted.

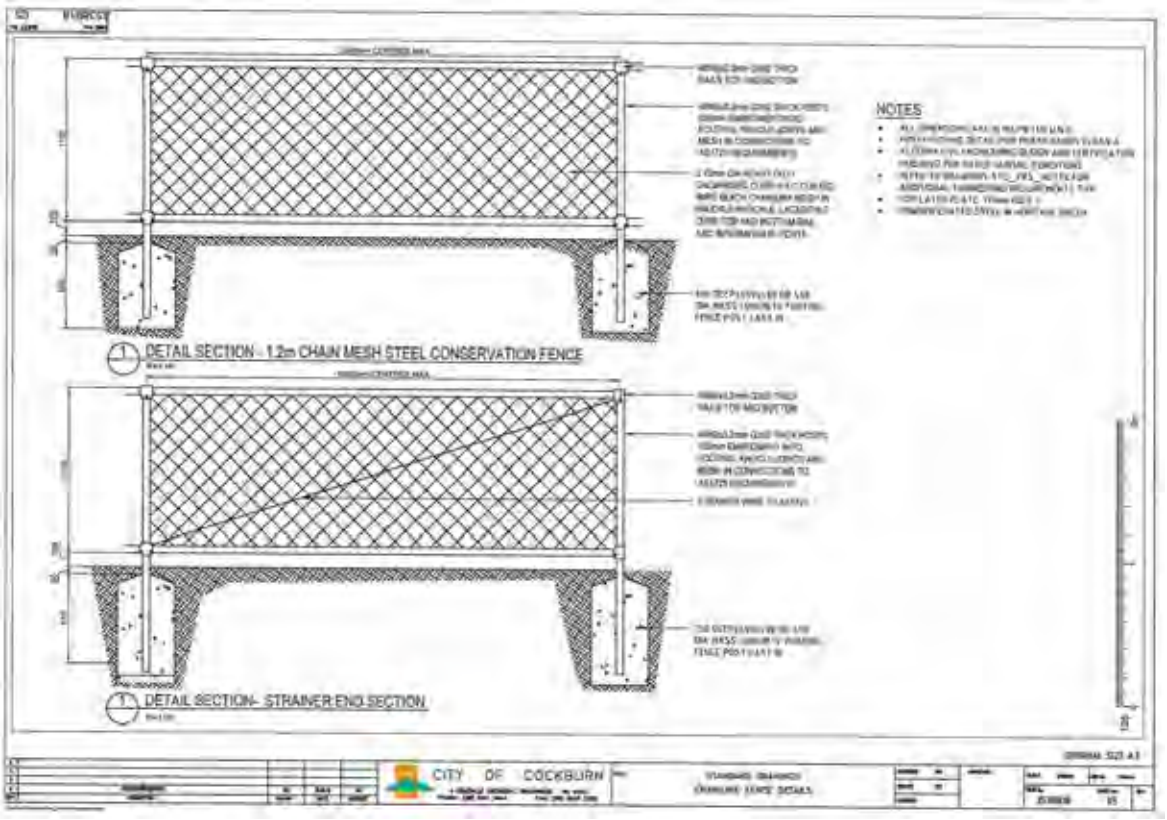

Diagram 1: Conservation fence specifications

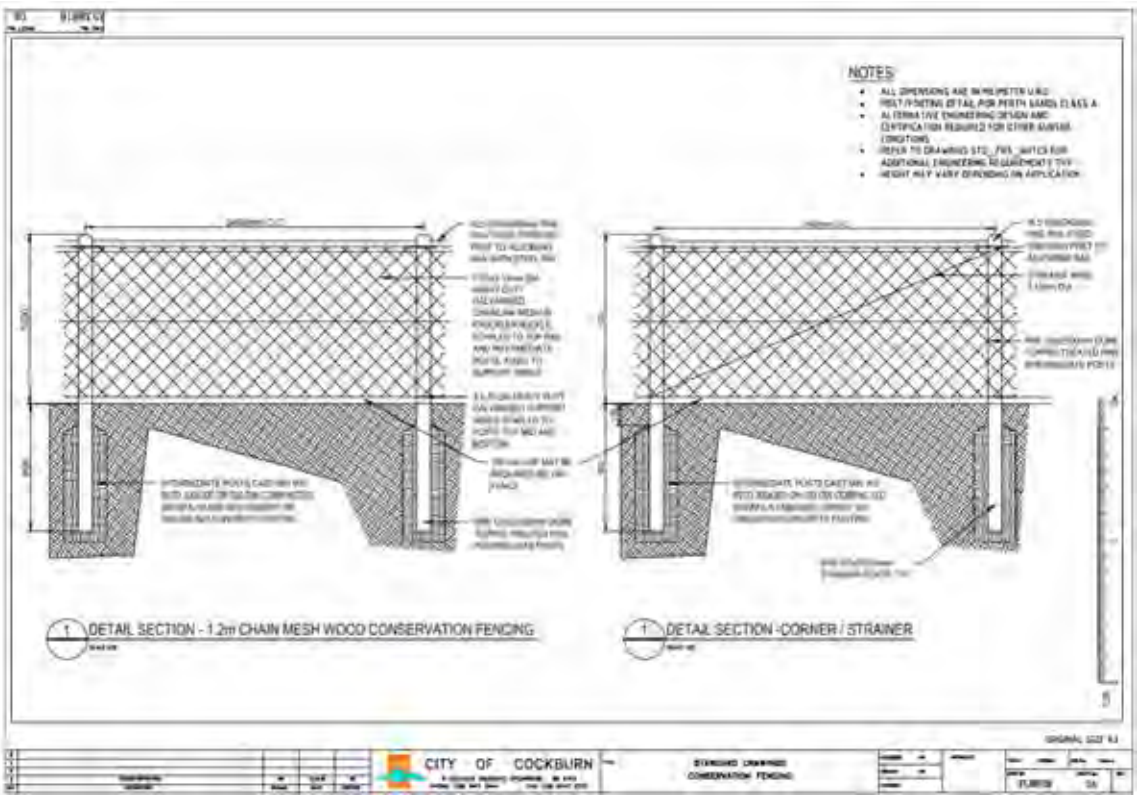

Diagram 2: Type 2 Conservation fence specifications

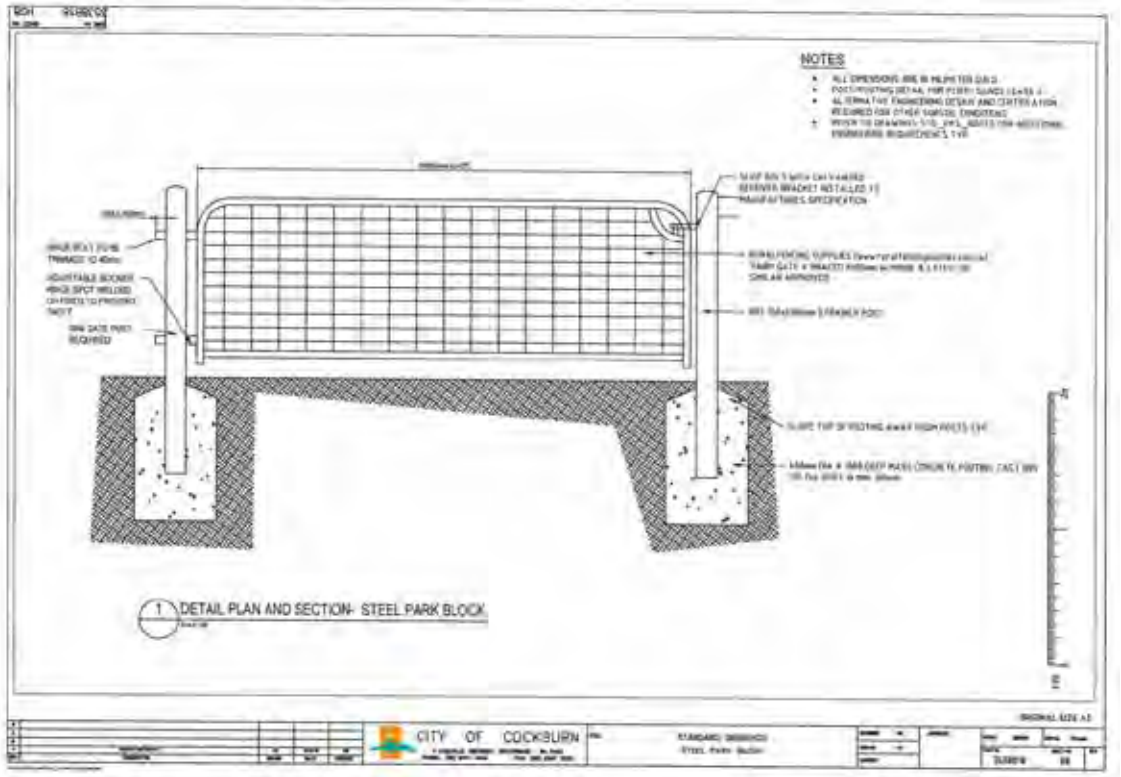

Diagram 3: Gate specifications

6.2.2 Weeding

Removal of existing weeds and management of new weed infestations at the Offset Area is fundamental to improving the habitat function. Weed control will prevent long-term weed seed set and reduce competition for water and nutrients between weeds and the emerging and planted seedlings. The control of weeds will improve the biodiversity and the ecological conditions of the Banksia Woodlands TEC and the Black Cockatoo foraging habitat.

Weed control among native vegetation will be through herbicide application using hand-held equipment to reduce the likelihood of herbicides contacting the non-target native species. Herbicides will either be non-selective, controlling a wide range of weed species, or selective, controlling a small group of weeds. These weed control options will be selected by a licenced pesticide technician.

The following management strategies will be in place:

- Mapping of the extent of weeds across the Offset Area by a qualified ecologist.
- Ensuring all material imported to the site is weed free. Imported sands, soils and fill shall be confirmed (certified) as weed free. Records to be kept of the certification.
- A licenced pesticide technician experienced in natural area management will be consulted as to the most appropriate weed control options.
- Herbicide will only be applied by licenced pest management technicians according to the manufacturer's instructions as provided on product label and the conditions of any permit by the Australian Pesticides and Veterinary Medicines Authority (APVMA).
- Weed control should prioritise WoNS to ensure their eradication from the Offset Area.

- Weed control should prioritise aggressive weeds as they have the capacity to invade and dominate the native vegetation, preventing vegetation condition from improving.
- Weed control methods involves spraying of herbicides and slashing for particular weed types. The recommended time to spray is from June to September (DPIRD, 2021).
- Care will be taken during weed control to avoid natural regeneration of native species.
- Weed monitoring will be undertaken in the Offset Area to determine whether changes to weed control management will be required.

6.2.3 Rubbish

All rubbish and debris will be removed from the site and disposed of appropriately.

The following management strategies will be in place:

- Personnel to methodically go through the offset until all rubbish removed
- All waste will be stored in waste receptables
- Wastes stored on site will be stored in a manner to prevent the attraction of any fauna
- All wastes will be removed off site by a licenced contractor.

A fence and lockable gates will be installed around the Offset Area to inhibit access to the public to prevent illegal dumping of rubbish. Signage will be installed around the fenced area and will identify that the area is being managed for conservation purposes and no unauthorised access is permitted.

6.2.4 Dieback

Dieback is caused by a water-borne pathogen and is responsible for the death of a vast and diverse range of plant species. This pathogen is readily dispersed by the movement of infected soil, roots or water. It is also commonly linked to watercourses, tracks and roads where rainfall exceeds 400 mm per annum and where human activity is frequent (Podger, James and Mulcahy, 1996).

There are various management methods to minimise the spread or mitigate the impact of dieback. Strategic planning and understanding the extent of dieback in an area is important to determine prioritisation of management funds and the appropriate management method. Humans can spread dieback further and faster than any other infestation vector. Any activity that moves soil, organic material or water into susceptible native vegetation areas had the potential to introduce and spread soil pathogens (DEE, 2018). The (then) Department of the Environment and Energy (2018) developed a Threat abatement plan for disease in natural ecosystems caused by *Phytophthora cinnamomi*. Dieback management actions will be consistent with this conservation advice.

Dieback management focuses on hygiene practices that are critical for controlling the introduction or the spread of dieback. There are several pathways for dieback to be introduced or spread throughout the site such as unmanaged public access and future construction activities adjacent to the Offset Area. Dieback can lead to the increased death of susceptible species, including Eucalyptus species which can impact completion criteria targets.

To minimise the potential for the spread of dieback on site, the following management strategies will be in place:

- Mapping of the extent of *Phytophthora* dieback present across the site by a DBCA certified assessor.
- Areas that identified as infested will be marked out to ensure personnel do not enter infested areas and spread dieback further.
- The offset area will be fenced off to prevent further spread of dieback from public access.
- Ensuring all material imported to site is dieback free. Imported sands, soils and fill shall be confirmed (certified) as dieback free. Records to be kept of the certification.
- Signposting or other form of demarcation to identify dieback status where known.
- Clean down of equipment and machinery will be essential when moving from a known infested site into an area of bushland known to be uninfected, or where the status is unknown.
- All vehicles must be clean when entering a dieback free site.
- The minimum clean down standard will be the removal of all soil and plant material. This shall be carried out by either brushing or water wash down.
- Carpark and access road will be sealed to reduce the risk of propagating dieback.

6.2.5 Maintenance

Fences, gates, access tracks and information signage will be maintained in functional order with no additional repairs or replacements outstanding at the time of completion.

Weed control will be undertaken on a regular basis with weed management occurring in the peak growing season of spring.

6.3 Restoration Activities

The native vegetation within the Offset Area will be revegetated to increase the overall vegetation condition to Excellent condition. Revegetation works will target vegetation in less than Excellent condition, this includes vegetation in Very Good (2), Good (3), Degraded (4) and Completely Degraded (5) (Figure 4).

6.3.1 Site Preparation

Rubbish, if present, will be removed prior to revegetation works commencing. Rubbish removal will be ongoing and will be undertaken as part of the regular maintenance activities. This will be undertaken across all condition types with focus on the Degraded and Completely Degraded areas.

6.3.2 Weed Management

Weed control during the maintenance period will used a combination of selective and non-selective herbicides, mechanical and manual control techniques. Selective herbicides will be applied using either backpack or car mounted sprayers, non-selective herbicides will be applied using either car mounted or backpack sprayers. Mechanical and manual weed control will use brush cutters, hedge trimmers, chainsaws or hand pulling, and will be used where chemical application is not practical or in dense native vegetation.

Weed control will be undertaken on a regular basis with weed management occurring in the peak growing season (spring).

The management of weeds will be conducted based on Condition rating and monitoring outcomes, below are the management plans for each condition type:

6.3.2.1 Excellent

Weeds will be spot treated with selective and non-selective herbicide using backpack sprayers where applicable and manually treated in areas of dense vegetation or where required for specific weeds.

6.3.2.2 Very Good

Weeds will be spot treated with selective and non-selective herbicide using backpack sprayers where applicable and manually treated in areas of dense vegetation or where required for specific weeds.

6.3.2.3 Good

Weeds will be spot treated with selective and non-selective herbicide using backpack sprayers where applicable and manually treated in areas of dense vegetation or where required for specific weeds and slashing with brush cutters used to reduce impact of grasses.

6.3.2.4 Degraded

Weeds will be blanket sprayed with selective and non-selective herbicide using car mounted spray units in areas of moderate to heavy infestation and spot sprayed where isolated pockets are present within vegetation. Manual treatment will be used for specific weeds and slashing with brush cutters used to reduce impact of grasses. Areas devoid of native vegetation will be blanket sprayed to prepare for topsoil and replanting efforts.

6.3.2.5 Completely degraded

Weeds will be blanket sprayed using car mounted spray units in areas of moderate to heavy infestation and spot sprayed where isolated pockets are present within vegetation. Manual treatment will be used for specific weeds and slashing with brush cutters used to reduce impact of grasses. Areas devoid of native vegetation will be blanket sprayed to prepare for topsoil and replanting efforts.

6.3.3 Topsoil Management

Where possible, topsoil from areas of the adjacent Impact Site with native vegetation in Good condition and better, will be translocated from the cleared site to the restoration areas that are in Degraded and Completely Degraded Condition. This topsoil is a valuable source of seed and vegetative material to assist in rehabilitation.

Salvage of topsoil can result in establishment of flora species and other ecosystem components that otherwise not achieved from planting and seeding alone (Rodgers et al., 2011 and Brundrett and Tedersoo, 2018). A specialist revegetation contractor will be appointed to select suitable soil material from Banksia Woodland vegetation types for transfer, including suitable logs/branches for fauna microhabitat creation and vegetation for translocation, where appropriate.

The harvested topsoil will be used to improve the soil condition of the Offset Area in Degraded and Completely Degraded condition. It will be respread to a depth of 100 – 200 mm.

6.3.3.1 Degraded

Areas of bare ground will be improved using topsoil salvaged from the impact site to increase success chances for direct seeding and revegetation efforts.

6.3.3.2 Completely Degraded

Areas of bare ground will be improved using topsoil salvaged from the impact site to increase success chances for direct seeding and revegetation efforts.

6.3.4 Revegetation

6.3.4.1 Species Selection

Species selection has been compiled based on Excellent condition remnant native vegetation in the area from previous flora and vegetation surveys of the Offset Area and based on suitability for replanting purposes (Table 12).

Table 12: Revegetation Species

Restoration Suitable Species		
Trees	**Shrubs**	**Herbs/Sedges/Rushes**
Allocasuarina fraseriana	*Acacia pulchella*	*Anigozanthos humilis*
Allocasuarina humilis	*Adenanthos cygnorum*	*Conostylis aculeata*
Acacia rostellifera	*Adenanthos obovatus*	*Conostylis juncea*
Banksia attenuata	*Bossiaea eriocarpa*	*Dasypogon bromeliifolius*
Banksia ilicifolia	*Calothamnus quadrifidus*	*Dianella revoluta*
Banksia menziesii	*Conostephium pendulum*	*Hemiandra pungens*
Eucalyptus todtiana	*Davesia triflora*	*Hypolaena exsulca*
Melaleuca preissiana	*Euchilopsis linearis*	*Lepidosperma longitudinale*
	Gastrolobium capitatum	*Lepidosperma squamatum*
	Gompholobium tomentosum	*Lomandra caespitosa*
	Hibbertia huegellii	*Lomandra hermaphrodita*
	Hibbertia hypericoides	*Lomandra nigricans*
	Hibbertia racemosa	*Lyginia barbata*
	Hibbertia subvaginata	*Lyginia imberbis*
	Hovea trisperma	*Patersonia occidentalis*
	Hypocalymma angustifolium	
	Jacksonia furcellata	
	Kunzea glabrescens	
	Macrozamia riedlei	
	Melaleuca thymoides	
	Petrophile linearis	
	Styphelia conostephioides	
	Xanthorrhoea preissii	

6.3.4.2 Planting

Direct seeding and planting will be used to re-establish native vegetation as both have different benefits and limitations and in combination provide a good balance of risk and opportunities.

Both methods of planting and seeding are used to guarantee that tree overstorey species are sufficiently represented in the revegetation. Planting will be used to ensure that the key Banksia Woodlands of the Swan Coastal Plain TEC species; *Banksia attenuata* and *Banksia menziesii*, are adequately represented in the revegetation. Planting will also be used to establish other key species in the TEC. Planting enables greater control over the ratio of species and placement of individual species (i.e. groupings, tree separation, etc.). This can be important where resources such as seed and parent plants are limited. The costs are higher with this technique compared to seeding as plants need to first be propagated, and then individually installed. However, establishment rates are generally more predictable and therefore reliable with this technique.

Planting of tube stock will be undertaken between May and July after the season's first major rain occur, to ensure sufficient soil moisture is present to adequately support the establishment of plants. All planting should be completed before the end of the wet season to take maximum advantage of the seasonal rainfall.

Tree guards will be used if grazing within the site is suspected to be a problem even with the installation of fencing. Tree guards will be left on the plant until the end of the first summer after planting.

6.3.4.3 Infill Planting

Infill planting is performed to ensure the revegetation is achieving the targets for cover, species diversity, vegetation structure, and key priority species. The design of the infill planting for a given year will be based on the outcomes of the monitoring in the previous year which will provide the details on the required species, locations and densities.

Infill planting will occur in areas where plants have not established as expected. It is expected that after 1 year, maintenance will undertake 30% infill planting, and an additional 15% the following year. Monitoring during the maintenance period will help inform the area and type of infill planting required.

6.3.4.4 Seeding

Direct seeding allows for the inclusion of species that are difficult to propagate in a nursery and can result in high densities of plants being established, while planting of tube stock are more likely to deliver a known quantity.

Seeding will be undertaken between May and July after the season's first major rain occur, to ensure sufficient soil moisture is present to adequately support the establishment of seedlings. All seeding should be completed before the end of the wet season to take maximum advantage of the seasonal rainfall.

6.3.5 Maintenance

An intensive maintenance period will follow the establishment year. The intensity and frequency of the maintenance will reduce as vegetation establishes. Monitoring after completion of revegetation works will help determine the additional maintenance required to aid vegetation establishment. Initial success of revegetation areas can be compromised by weeds, feral animals, human activities, fire, and drought. Additional measures may include further weed control and infill planting.

6.4 Summary of Measures and Implementation Schedule

The offset area will be managed over a period of 20 years. A summary of the progress targets and completion criteria relevant to these objectives and management actions identified above are provided in Table 13. An indicative implementation schedule has been provided in Table 14.

Table 13: Summary, objectives, progress targets and completion criteria

Summary	Objectives	Progress Targets	Completion Criteria
Protection of the Offset Area for the purpose of conservation	Implement a legally secure conservation mechanism to ensure the ongoing protection and conservation of Banksia Woodlands of the Swan Coastal Plain ecological community and the Black Cockatoo foraging habitat.	Year 1: A legally conservation mechanism is executed which protects the Offset Area in perpetuity for conservation purposes. Year 20: Completion criteria within revegetation area potion of the Offset Area has been achieved	Mechanism is executed. Ownership of the Offset Area to State Government (Conservation Commission). Property to become part of the conservation estate.
Delineation and access to the Offset Area	Prevent unauthorised access into the Offset Area	Year 1: · Conservation style fencing and lockable gates will be installed along the perimeter of the Offset Area boundary. Gate keys to be allocated to relevant personnel and logged on a key register. Year 2 to 20: · Fences, gates and access tracks maintained in functional order.	Conservation style fencing and gates will be installed along the perimeter of the Offset Area boundary before any the Action commences
Weed reduction in existing vegetation	Ensure there is no loss or degradation of native vegetation through the spread and or introduction of weeds.	Years 1 to 2: · Baseline weed mapping undertaken by the end of Year 1 · Initial weed management measures undertaken by the end of Year 1 Extent of weed cover/density has decreased by 10% when compared to baseline levels of Banksia Woodland in Excellent condition by the end of Year 2	There has been a 50% decrease in weed density/cover within the Offset Area when compared to baseline levels of Banksia Woodland in Excellent condition by the end of Year 20.

Summary	Objectives	Progress Targets	Completion Criteria
		Years 3 to 5: Extent of weed cover/density has decreased by 20% when compared to baseline levels of Banksia Woodland in Excellent condition by then end of Year 5 Years 5 to 20: Extent of weed cover/density has decreased by 50% when compared to baseline levels of Banksia Woodland in Excellent condition by then end of Year 15. Maintained or reduction of weed cover/density of 50% when compared to baseline levels of Banksia Woodland in Excellent condition until Year 20.	
Dieback management in existing vegetation	Ensure there is no loss or degradation of native vegetation through the manual spread and or introduction of pathogens.	Years 1 to 2: · Baseline dieback mapping undertaken by the end of Year 1 · Dieback management measures undertaken by the end of Year 1 Years 3 to 5: · Extent of dieback mapping undertaken Years 5 to 20: · Extent of dieback mapping undertaken	The extent of Dieback (*Phytophthora cinnamomi)* will not further spread across the Offset Area as a result of human activities.
Improvement of native vegetation through revegetation	Establish a vegetation community with similar structure and composition within the revegetation area to that of the surrounding Banksia Woodlands of the Swan Coastal Plain TEC	Year 1 to 2: · Fencing and signage installed along the perimeter of the Offset Area by the end of Year 1 · Baseline weed mapping undertaken by the end of Year 1 · Initial weed management measures undertaken by the end of Year 1 · Weed control to target WoNS Extent of weed cover in vegetation in less than Excellent condition to reduce to <10% of baseline levels of Banksia Woodland in Excellent condition by the end of Year 2.	At the end of Year 20: Fencing and signage is present and functional, with no additional repairs or replacements outstanding at the time of handover Weed levels maintained at <50% of baseline levels of Banksia Woodland in Excellent condition. No WoNS are present with the Offset Area.

Summary	Objectives	Progress Targets	Completion Criteria
		· Tubestock planting commences by the end of Year 2. Year 3 to 5: · Fencing and signage is maintained in functional order Extent of weed cover in vegetation in less than Excellent condition to reduce to 20% of baseline levels of Banksia Woodland in Excellent condition by the end of Year 5 · Native vegetation coverage within the Offset Area increased by >20% by the end of Year 5 with dominant tree species planted associated with Banksia Woodlands such as *Banksia attenuata* (candlestick banksia), and *Banksia menziesii* (firewood banksia). · If additional planting is required due to low success rates, replacement tubestock planting to take place by the end of Year 5. Years 6 to 20: · Fencing and signage is maintained in functional order Extent of weed cover in vegetation in less than Excellent condition to reduce to 50% of baseline levels of Banksia Woodland in Excellent condition by the end of Year 15 and no WoNS recorded and then maintained for the remaining period. · Native vegetation coverage within revegetation area has increased by 20% by the end of Year 10 and is maintained. · Native vegetation within Offset Area represents at least Excellent Condition by the end of Year 20	Survival rate of plantings <75% Vegetation condition in Excellent Condition throughout the Offset Area.

Table 14: Implementation Schedule

Treatment	Years 1 - 2				Years 3 - 5				Years 6 - 10				Years 10 - 15				Years 15 - 19			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Civil works																				
Install construction fencing and access gates																				
Install information signage																				
Revegetation																				
Seed collection, cleaning, storage																				
Site preparation																				
Tubestock planting																				
Replacement tubestock planting																				
Topsoil spreading																				
Maintenance																				
Weed Control																				
Rubbish removal																				
Associated works																				
Monitoring																				
OMP Review																				

6.5 Contingency Actions

Dependent on the monitoring outcomes, contingency measures may need to be implemented in the event the completion criteria are not being achieved (Table 15)

Revegetation and rehabilitation areas will need to be monitored and managed after initial planting/seeding as initial success if often compromised by weeds, feral animals, human activity and fire.

Table 15: Contingency Actions

Completion Criteria	Trigger Value	Timing	Actions
Abundance of conservation significant flora will remain or increase in number.	Disturbance to conservation significant species *Caladenia hueglii* (King Spider Orchid)	At any time	· Stop all work in the immediate vicinity of the orchid and notify the relevant environmental staff and site supervisor · Investigate the cause of the incident · Initiate management controls
Access to the Offset Area will be restricted to essential personnel.	Unauthorised access observed within the Offset Area	At any time	· Assess the condition of the conservation fencing around the whole perimeter of the Offset Area · Ensure gates are locked and keys are allocated to the appropriate persons · Fix or replace fencing or gates if required
Overall weed cover will decrease to 50% of current levels in Banksia Woodland of Excellent condition.	Increase in weed cover compared to baseline levels recorded during any monitoring event.	Post weed control	· Investigate the cause of the increase in weed cover · Review the weed control management measures and schedule · Implement the revised weed control
WoNS and all aggressive weed species will be removed.	WoNS and/or aggressive weed species recorded during monitoring event.	Year 15	· Identify the location of the WoNS and/or aggressive weed · Implement targeted weed control for the WoNS or aggressive weed species

Completion Criteria	Trigger Value	Timing	Actions
Average native species richness within the top half of the recorded range for Banksia Woodlands TEC.	Average species richness within the bottom half of recorded range for Banksia Woodlands TEC recorded during monitoring event.	After year 15	· Investigate the cause of the decreased species richness · Source more seedlings required to increase the species richness · Additional infill planting of the required species
Dieback (*Phytophthora cinnamomi*) will not further spread across the Offset Area as a result of human activities.	The effects of dieback spreading outside initially mapped areas observed during monitoring events.	At any time	· Investigate the cause of the spread of dieback · Review the dieback control management measures and seek · Implement the revised dieback management
All rubbish will be removed.	Continued illegal rubbish dumping observed during inspections and/or monitoring events.	At any time	· Assess the condition of the conservation fencing around the whole perimeter of the Offset Area · Ensure gates are locked and keys are allocated to the appropriate persons · Fix or replace fencing or gates if required
Survival rate of plantings will be above 50%.	Death percentage exceeds 50%	following monitoring event	· Infill planting

7.0 Offset Monitoring and Reporting

7.1 Monitoring Program

Monitoring is required to assess the outcomes of management and rehabilitation against the completion criteria and, if necessary, to trigger contingency actions. Monitoring of the Banksia Woodlands of the Swan Coastal Plain TEC is focussed on measuring the progress of the rehabilitation and revegetation activities.

7.1.1 Monitoring Methodology

Monitoring will be conducted by suitably qualified scientist with academic qualifications in ecology who will undertake site inspections until the completion criteria have been achieved.

The frequency these methods will occur are outlined in the Monitoring Schedule in Table 18.

7.1.1.1 Quadrats

The aim of quadrat monitoring is to collect data in a consistent way to enable changes in vegetation over time, in order to determine if rehabilitation is progressing towards meeting the completion criteria.

Monitoring plots will be permanently marked with galvanised fence droppers and their location recorded with a GPS to ensure subsequent monitoring events are replicable. The monitoring quadrats have been established in previous years (Figure 7). Due to the timing of the Commencement of the Action (Autumn) being an inappropriate time to initiate a baseline for a monitoring program, the quadrats that have been established previously will be used. This is justified given that these quadrats were the ones used to determine the Habitat Quality Score (HQS) for the offset sites for the EPBC REF:2018/8205 Preliminary Documentation (SLR, 2024a) Click or tap here to enter text.Click or tap here to enter text.

Seven quadrats will be established within patches of vegetation that ranges from Very Good to Completely Degraded condition for purposes of monitoring the success of the restoration work.

Quadrats will be monitored once a year in Spring and the results from each monitoring round will be compared against previous assessments and the completion targets to show the progress and direct the focus of future works.

Table 16: Quadrat Details and Monitoring Parameters

Number of Quadrats	Size	Monitoring Criteria
7	10 m x 10 m	Species richness (native and weeds) Foliage cover per species Number of dead plants Condition rating Photo from northwest corner

7.1.1.2 Transects

Two monitoring transects will be monitored yearly in Spring. Each transect dissects vegetation of different condition categories and metal stakes indicate start and end points of each transect.

The transect monitoring will be undertaken as per the following:

- Monitoring of 50m transect length with 10 (2m x 2m) quadrats at 5m intervals along the transect (Diagram 4).
- Photograph and GPS waypoint from the start and end of each transect.
- GPS coordinates recorded at the start and end of each transect.
- Floristic parameters monitored within each 2 × 2 m quadrat included percentage of alive and dead foliage (vegetation) cover of each taxa and the number of alive and dead plants of each taxa.

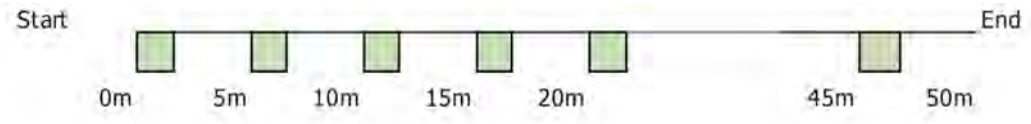

Diagram 4: **Layout of monitoring transects**

7.1.1.3 Orchid Counts at Known Locations

Known locations of *Caladenia huegelii* will be searched and the number and locations of the species will be recorded each spring.

7.1.1.4 Site inspections

Site inspections will take place while clearing and construction works are occurring.

Notes will be taken during site inspections on maintenance issues such as rubbish, fire, erosion, fencing condition, as well as occurrence of weeds. These notes will be used to inform whether additional management measures / contingency actions will need to be utilised.

7.1.1.5 Habitat Quality Score

Approved Conservation Advice for Banksia woodland TEC outlines that offsets must compensate for residual adverse impacts on the ecological community that is deemed unavoidable. The associated offset guide references a quality score (HQS) for the area of habitat or community that measures how well these sites support particular threatened species or ecological communities and contributes to ongoing viability.

A HQS is calculated using two components as per the requirements of the Offset guide, site condition, which accounts for 70% of the HQS and site context which accounts for 30%. Site condition refers to the quality of the site in relation to ecological requirements of a threatened species or ecological community and includes parameters such as vegetation condition, structure, diversity of habitat species present and number of relevant habitat features. Site context is based on how the site relates to the surrounding landscape, the connectivity needs for threatened species and ecological communities.

Assessment of the vegetation will be undertaken in accordance with the DCCEEW Habitat Quality Score for Banksia woodland TEC. Table 17 shows the initial HQS condition for the patch and the required outcomes at the end of the 20-year program.

Table 17: Banksia Woodland TEC Vegetation Condition Subject to Restoration

Management action to be undertaken	Area (ha)	Start condition		End Condition HQS
		Keighery	HQS	
Fencing Rubbish removal Weed control Dieback assessment	7.47	Excellent	8/10	9/10
Fencing Rubbish removal Weed control Dieback assessment Planting regime	1.75	Very Good	6/10	9/10
Fencing Rubbish removal Weed control Dieback assessment Planting regime	0.39	Good	4/10	9/10
Fencing Rubbish removal Weed control Dieback assessment Planting regime Topsoil spreading	0.03	Degraded	2/10	9/10
Fencing Rubbish removal Weed control Dieback assessment Planting regime Topsoil spreading	1.21	Completely Degraded	0/10	9/10

7.1.2 Monitoring Schedule

The frequency and duration of monitoring of changes over time are outlined below in Table 18.

Table 18: Monitoring Schedule

Monitoring type	Output	Frequency	Duration
Site inspections	Completed environmental site inspection form	3 monthly	Years 1 - 2
Avoidance and Mitigation Monitoring	Audit report for Conditions 5 -11	Yearly	Years 1 - 27
Offset biological Monitoring	Offset Rehabilitation and Revegetation Floristic Monitoring Report	Years 2, 5, 10, 15 and 20	Years 1 - 20

8.0 Completion Criteria

Completion criteria are defined as “qualitative or quantitative standards of performance used to measure the success or otherwise of rehabilitation actions.” (EPA,2006) Completion criteria need to be sufficiently stringent to ensure the overall objectives of the rehabilitation have been met. These criteria have also been designed to allow effective monitoring and reporting to define an endpoint for rehabilitation and revegetation activities, ensuring that the Offset Outcomes have been met.

Completion criteria for the Offset Area are as follows:

1 Abundance of conservation significant flora will remain or increase in number.

2 Access to the Offset Area will be restricted to essential personnel.

3 WoNS and Declared weed species will be removed.

4 Overall weed cover will decrease to 50% of current levels.

5 Dieback (*Phytophthora cinnamomi)* will not be spread across the Offset Area through on ground activities.

6 All rubbish will be removed.

7 Average native species richness within the top half of the diversity range for Banksia Woodlands TEC (FCT SCP 23a, which has average species diversity of 62.8)

8 Increase of HQS scores after a 20 year period.

8.1 Reporting

An annual audit report will be sent to DCCEEW in accordance with the Annual Compliance Reporting conditions in EPBC 2018/8205. A biological monitoring report will be collated from previous years monitoring events in the case that DCCEEW requests to receive it in years 2, 5, 10, 15 and 20.

The reporting schedule is outlined in Table 19 below.

Table 19: Reporting Schedule

Report	To Whom	Timing	Frequency	Duration
Site inspection	Project manager Environmental manager	3 months following the commencement of clearing	3 monthly	While clearing and Construction is taking place
Annual Audit Report	DCCEEW	Date of EPBC 2018/8205 Approval	Annual	Years 1 - 20
Offset biological Report	DCCEEW (if requested)	Following Spring monitoring	Years 2, 5, 10, 15 and 20	Years 1 - 20

8.2 Review

A review of this OMP will be completed as required but no later than after two years of the conclusion of site works, then every five years after commencement.

The intent of this review is to facilitate adaptive management and ensure areas of focus are consistent with the offset outcomes. This could include, but is not limited to, a change in status of threatened ecological communities or conservation significant species, outcomes of different research and realignment/collaborative focus with any updated government and industry standards and guidelines.

Should the OMP be revised, the revised OMP will be provided to the DCCEEW for approval before being implemented.

9.0 References

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Appendix A Figures

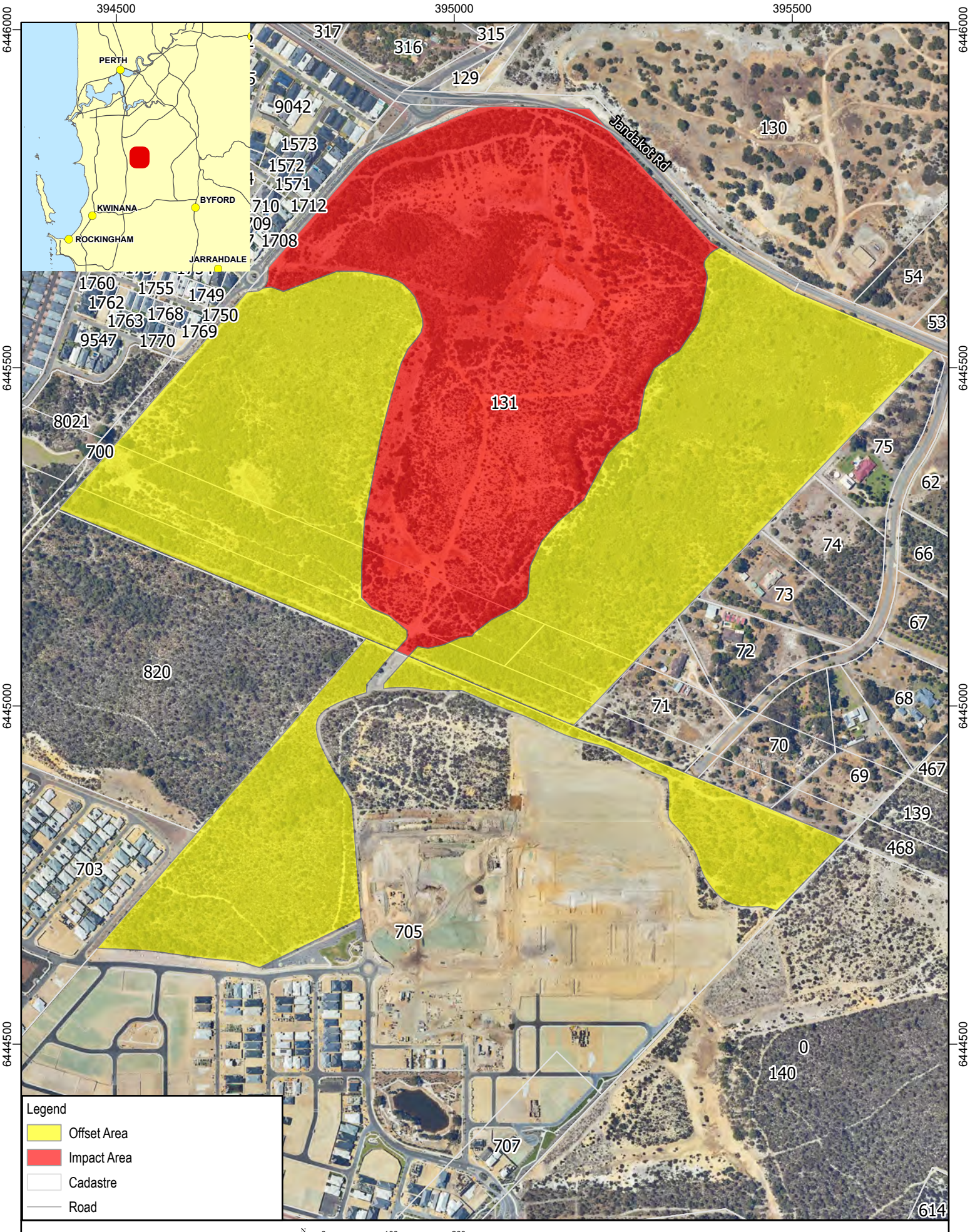
Offset Management Plan

Lot 705 Jandakot Road, Banjup

Perron Developments

SLR Project No.: 675. 073237.00001

1 July 2025



SLR

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Coordinate System:	GDA 1994 MGA Zone 50
Scale:	1:7,000 at A4
Project Number:	675.073237.00001
Date Drawn:	5/12/2024
Drawn by:	JH
Reviewed by:	MO

Service Layer Credits: Landgate / SLIP

Perron Developments

Offset Management Plan

Site Location

FIGURE 1

Path: K:\Projects\9.0 APP\2400 Lot 131 Jandakot Rd Federal Referral\Treeby North Offset Management Plan\Treeby North OMP mapping\Treeby North OMP mapping.aprx

SLR

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Scale:	1:18,000 at A4
Project Number:	675.073237.00001
Date Drawn:	3/12/2024
Drawn by:	JH
Reviewed by:	MO

Service Layer Credits: Landgate / SLIP

Perron Developments

Offset Management Plan

Regional location

FIGURE 2

Path: K:\Projects\9.0 APP\2400 Lot 131 Jandakot Rd Federal Referral\Treeby North Offset Management Plan\Treeby North OMP mapping\Treeby North OMP mapping.aprx

SLR

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Coordinate System:	GDA 1994 MGA Zone 50
Scale:	1:12,000 at A4
Project Number:	675.073237.00001
Date Drawn:	3/12/2024
Drawn by:	JH
Reviewed by:	MO

Service Layer Credits: Landgate / SLIP

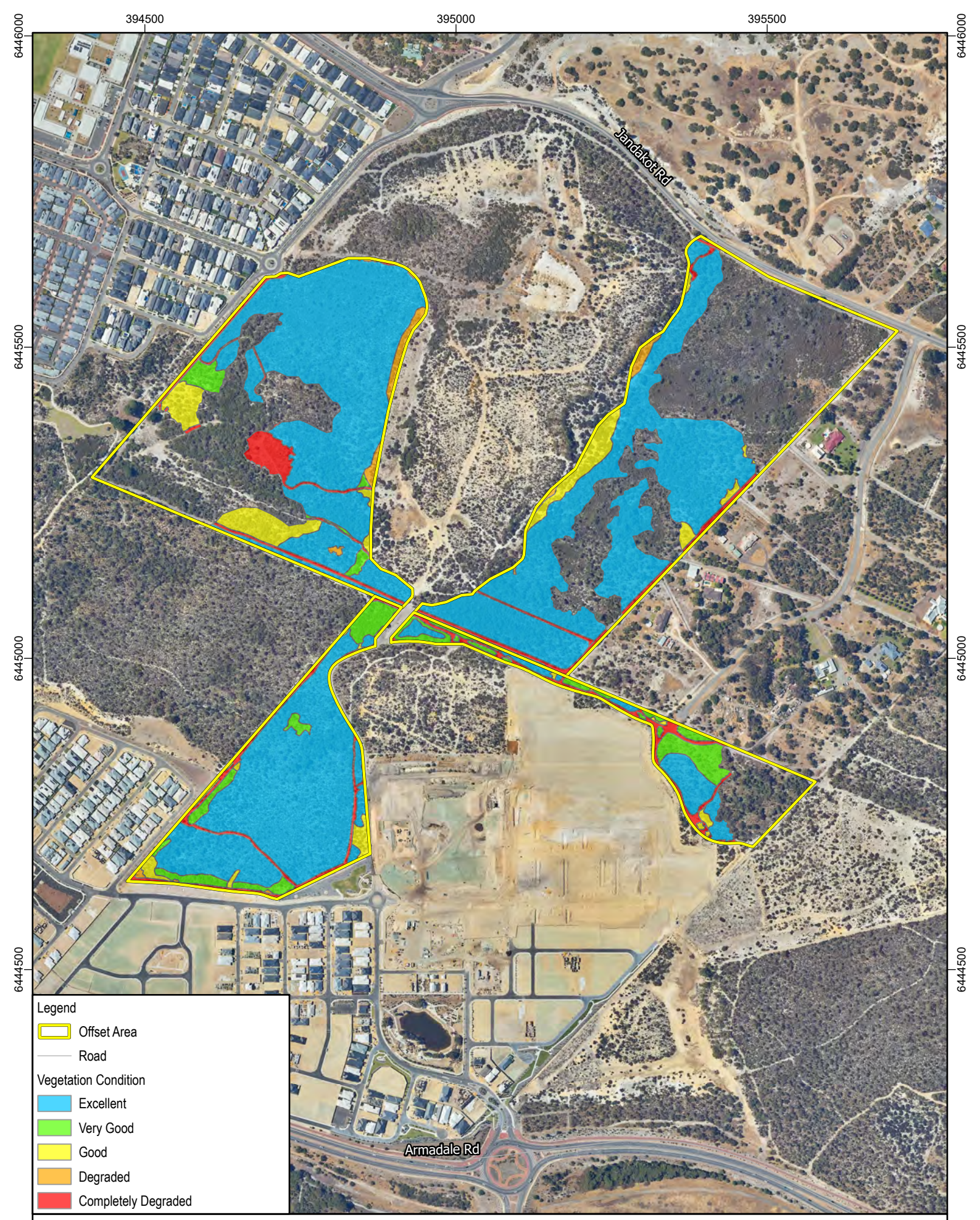
Perron Developments

Offset Management Plan

Surrounding land use

FIGURE 3

Path: K:\Projects\9.0 APP\2400 Lot 131 Jandakot Rd Federal Referral\Treeby North Offset Management Plan\Treeby North OMP mapping\Treeby North OMP mapping.aprx



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Scale:	1:7,500 at A4
Project Number:	675.073237.00001
Date Drawn:	5/12/2024
Drawn by:	JH
Reviewed by:	MO

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Offset Management Plan

Vegetation condition

FIGURE 4

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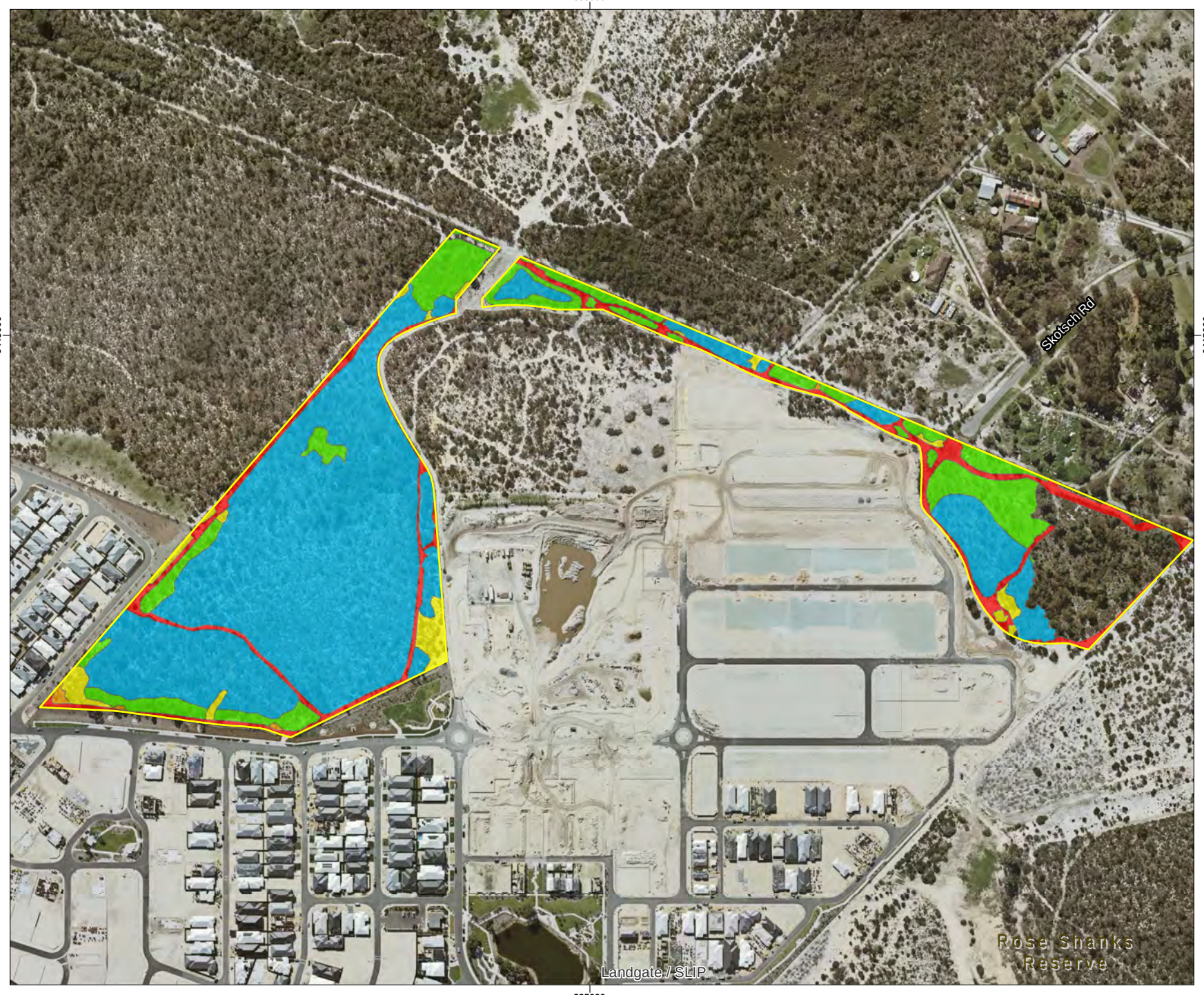

Legend

Offset within Lot 705

Restoration Actions

1- Excellent start condition, 8/10 HQS - Fencing, rubbish removal, weed control, dieback assessment (7.47 ha)

2- Very Good start condition, 6/10 HQS - Fencing, rubbish removal, weed control, dieback assessment, planting regime (1.75 ha)

3- Good start condition, 4/10 HQS - Fencing, rubbish removal, weed control, dieback assessment, planting regime (0.39 ha)

4- Degraded start condition, 2/10 HQS - Fencing, rubbish removal, weed control, dieback assessment, planting regime, topsoil spreading (0.03 ha)

5- Completely Degraded start condition, 0/10 HQS - Fencing, rubbish removal, weed control, dieback assessment, planting regime, topsoil spreading (1.21 ha)

- NOTE THAT POSITION ERRORS CAN BE >5M IN SOME AREAS
- LOCALITY MAP SOURCED LANDGATE 2020
- OTHER DATA SOURCED LANDGATE 2020
- AERIAL PHOTOGRAPHY SOURCED LANDGATE 2020 (© Western Australian Land Information Authority 2020)

SLIP ENABLER

360 environmental
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t (08) 9388 8360
f (08) 9381 2360
w www.360environmental.com.au

0 50 100 150 Meters

1:5,000 @ A4

N

LOCALITY MAP

PROJECT ID	DATE
2400	11/12/2024

HORIZONTAL DATUM AND PROJECTION
GDA2020 MGA Zone 50

CREATED	CHECKED	APPROVED	REVISION
JH	MO	SB	1

Perron Development Pty Ltd
Lot 131 Jandakot Road Treeby

Offset Management Plan

Figure 5
Restoration Activities within the Offset Area

SLR

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Service Layer Credits: Landgate / SLIP

Coordinate System:	GDA 1994 MGA Zone 50
Scale:	1:7,500 at A4
Project Number:	675.V62400.00000
Date Drawn:	3/12/2024
Drawn by:	JH
Reviewed by:	MO

Perron Developments

Offset Management Plan

Fencing boundary

FIGURE 6

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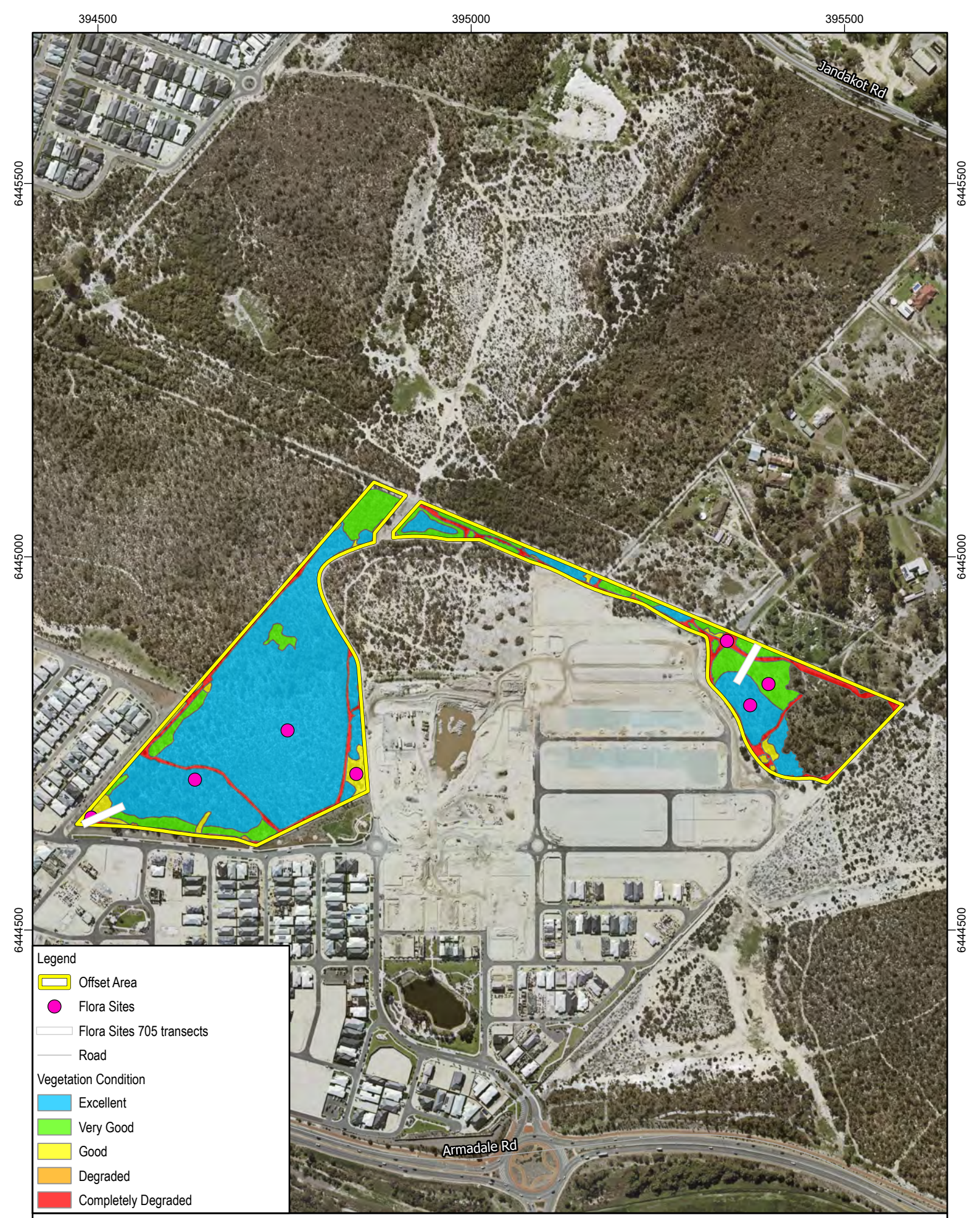

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Scale:	1:6,250 at A4
Project Number:	675.V62400.00000
Date Drawn:	9/05/2025
Drawn by:	JH
Reviewed by:	MB

Perron Developments

Offset Management Plan

Monitoring Plots

FIGURE 7

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Appendix B 2018-8205 Final Decision- Notice and Conditions

Offset Management Plan

Lot 705 Jandakot Road, Banjup

Perron Developments

SLR Project No.: 675.073237.00001

1 July 2025

Australian Government
Department of Climate Change, Energy, the Environment and Water

Notification of approval decision

Residential Development, Lot 131 Jandakot Road, Treeby, WA (EPBC 2018/8205)

This decision is made under section 130(1) and 133(1) of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Note that section 134(1A) of the EPBC Act also applies to this approval. That provision provides, in general terms, that if the approval holder authorises another person to undertake any part of the Action, the approval holder must take all reasonable steps to ensure that the other person is informed of any conditions attached to this approval, and that the other person complies with any such conditions.

Approved Action

person to whom the approval is granted (approval holder)	Perron Developments Pty Ltd ABN: 73 000 230 446
Action	To develop part of Lot 131, Jandakot Road, Treeby, WA, for residential purposes, and to realign a portion of Jandakot Road [See EPBC Act referral 2018/8205] subject to the variation of the Action accepted by the Minister under section 156B on 4 March 2021.

Approval decision

decision	My decision on whether or not to approve the taking of the Action for the purposes of each controlling provision for the Action are as follows.	
	Controlling Provision	**Decision**
	Listed threatened species and communities (section 18 and section 18A)	Approved
period for which the approval has effect	This approval has effect until 13 March 2052.	
conditions of approval	The approval is subject to conditions under the EPBC Act as set out in Annexure A.	

Person authorised to make decision

name and position	Kylie Calhoun Branch Head Environment Assessments West
signature	
date of decision	7 April 2025

Annexure A

Note: Words and terms appearing in **bold** (excluding headings) have the meaning assigned to them at **Part C – Definitions**.

Part A – Avoidance, mitigation, and compensation conditions

CLEARING LIMITS

1) To avoid and mitigate **harm** to **protected matters**, the approval holder must not:

   a) **clear** outside of the **Action area**

   b) **construct** outside of the **Action area**

   c) **clear** any occurrence of **King Spider-orchid**.

2) The approval holder must not **clear** more than:

   a) 6.21 hectares (ha) of **Banksia TEC**

   b) 6.21 ha of **foraging habitat** for **Carnaby's Black Cockatoo**

   c) 3 **potential breeding trees** for **Carnaby's Black Cockatoo**.

3) Prior to **clearing** any area, the approval holder must:

   a) have at least one pre-**clearance** survey of that area undertaken by a **suitably qualified field ecologist** within 7 days prior to that **clearing**,

   b) if any **black cockatoo** is found to be using a **suitable nest hollow** during the pre-**clearance** survey, provide the **department** with written evidence of the number and location of **black cockatoo** found to be using a **suitable nest hollow**, and

   c) not **clear** any trees identified to have a **black cockatoo** using a **suitable nest hollow** unless the **department** has provided written confirmation that the **clearing** is permitted.

4) Prior to commencing any **clearing** or **construction** in the **Action Area,** the approval holder must first:

   a) erect a fence along the perimeter of each discrete portion of the **offset site**. This fence must:

      i) meet the design specification shown in Attachment 1a to prevent unauthorised access,

      ii) completely enclose each discrete portion of the **offset site** with the exception of **offset site** boundaries that are shared with existing conservation reserves, in which case a fully enclosed area must be created that contains the **offset site** and the adjoining conservation reserve, as denoted by the green, orange, purple lines shown on the map

of Lot 131 at Attachment 3d and by the green line shown on the map of Lot 705 at Attachment 3e,

iii) include locked security gates at points where access to the portions of the **offset site** is required for maintenance and management purposes,

iv) include outward facing signs at 50 metre intervals that clearly state the conservation purpose of the enclosed **offset site** the restrictions on access to the **offset sites** and current contact details for the **offset site** manager, and

v) be maintained, including updating any change to the contact details for the **offset site** manager, at least until the expiry date of this approval.

b) implement **weed** and **dieback** hygiene measures to ensure **weeds** and/or **dieback** are not introduced to the **offset site** during **construction** of the fence.

c) ensure that any keys for locks on all security gates are:

i) allocated only to parties that require access for maintenance and management as required to ensure delivery of the **offset** outcomes, and

ii) logged on a key register that denotes the key holders name and contact details and the purpose of the key allocation.

AVOIDANCE AND MITIGATION OUTCOMES

5) During **clearing** and **construction** the approval holder must:

a) Ensure that no **vehicle** travels faster than 40km/hr in the **Action area** until the roads created as part of the Action become public roads.

b) Ensure that no **vehicle** travels faster than 40km/hr in any **offset site**.

c) Prevent any **dieback** and/or **weeds** being transported into the **Action area.**

d) Prevent any **dieback** and/or **weeds** spreading from the **Action area** into any **offset site,** and

e) Prevent dust, sediment, solid or liquid waste, including hazardous materials and contaminants, or polluted surface runoff entering the **offset sites**.

f) Undertake management, monitoring and auditing of works to ensure that any breach of these requirements is unlikely, promptly detected and immediately rectified.

Weed and Dieback Hygiene

6) The approval holder must:

a) Establish and signpost at least one **clean on entry point** to the **Action Area** for the full **clearing** and **construction** period,

b) once the **clean on entry point** is established and until all **clearing**, and **construction** activities involving the movement of earth moving machinery, soil and organic materials have been completed, ensure that any **carrier** entering and/or exiting the **Action area** is **clean on entry** and **clean on exit**,

c) if a **carrier** is unable to meet the **hygiene standard** in the field, ensure the **carrier** proceeds directly to a designated **clean down point** and meets the **hygiene standard** prior to entering or exiting the **Action area**,

d) ensure any **clean down** of a **carrier** is supervised by persons who have completed **Green Card training**,

e) ensure that all imported soil and organic materials are certified as **dieback**-free and **weed**-free prior to transport to the **Action area** or any **offset site**,

f) ensure that any stockpile of soil or organic material is located down gradient of, and at least 50m from, any **offset site**,

g) ensure that any **weed** or **dieback** contaminated soil or organic material generated on site is stockpiled in a separate signposted location within the **Action area** until it can be removed to an approved disposal site away from the **Action area** and any **offset site**, and

h) undertake sufficient management, **monitoring** and **independent auditing** of works to ensure that any breach of these requirements is unlikely, promptly detected and immediately rectified.

Black Cockatoos

7) The approval holder must ensure measures are implemented to mitigate risk of injury or death to **black cockatoos** as a result of taking the Action.

8) The approval holder must immediately arrange for assistance from an experienced **wildlife expert** if any **Carnaby' Black Cockatoo** individual is found injured within or adjacent to the **Action area** during **clearing** or **construction**.

Orchids

9) The approval holder must ensure a buffer with a minimum width of 50 m is maintained between any **orchids** and any **clearing** or **construction** activity other than the **construction** of the **offset site** perimeter fence as defined in Attachment 1a and mapped in Attachments 3d and 3e being undertaken in the **Action area** prior to the **construction** of the **offset site** perimeter fence itself.

Urban Water

10) The approval holder must implement the measures specified in the **Local Water Management Strategy (LWMS)** to control surface and subsurface runoff from the **Action area**.

11) The approval holder must:

a) maintain **acceptable water table heights** in the action area,

b) maintain **acceptable water quality standards** in the action area, and

c) undertake management and monitoring to ensure any failure to deliver the **acceptable water table heights**, and/or **acceptable water quality standards** as specified in condition 10 and relating to the sub-standard functioning of water management infrastructure in the action area are promptly detected and rectified.

AVOIDANCE AND MITIGATION MONITORING

12) The approval holder must, within 40 **business days** of the end of each 12 month period following the date of this approval of the Action until the completion of all **clearing** and **construction**, make available to the **department** upon request an **audit report** detailing performance relative to the requirements of conditions 5 to 11.

This requirement is in addition to the general auditing requirements of conditions 45 to 53.

OFFSETS

Offset site securement

13) To compensate for the **residual adverse impacts** of the **Action** to **protected matters**, the approval holder must **secure** the offset sites within 12 months of the date of this approval.

14) The approval holder must notify and provide evidence to the **department** in writing within 5 **business days** of each of the **offset sites** being **secured.**

Offset Outcomes

15) The approval holder must ensure that there is no decline in the **habitat quality** of **Banksia TEC**, **Black Cockatoo foraging habitat** or habitat suitable for **King Spider-orchid** within the **offset sites** relative to their **habitat quality** in the **offset sites** on the date of this approval decision**.**

16) The approval holder must achieve the following offset outcome at the **offset sites** within 25 years from the **commencement of the Action:** improve the **Habitat Quality Score** (**HQS**) of all **Banksia TEC** to 9/10. Once the offset outcomes have been achieved, the approval holder must maintain or exceed it at least until the expiry date of this approval.

a) Across the entire 24.05 ha area represented in Attachments 3b and 3c by the blue shaded zones designated '1 - Rubbish removal, weed control, Dieback assessment', improve the **HQS** of **Banksia TEC** to 9/10

b) Across the entire 2.08 ha area represented in Attachments 3b and 3c by the green shaded zones designated '2 - Rubbish removal, weed control, Dieback assessment, planting regime', improve the **HQS** of **Banksia TEC** to 9/10

c) Across the entire 1.42 ha area represented in Attachments 3b and 3c by the yellow shaded zones designated '2 - Rubbish removal, weed control, Dieback assessment, planting regime', improve the **HQS** of **Banksia TEC** to 9/10

d) Across the entire 0.08 ha area represented in Attachments 3b and 3c by the orange shaded zones designated '3 - Rubbish removal, weed control, Dieback assessment, planting regime, topsoil spreading', improve the **HQS** of **Banksia TEC** to 9/10

e) Across the entire 2.45 ha area represented in Attachments 3b and 3c by the red shaded zones designated '3 - Rubbish removal, weed control, Dieback assessment, planting regime, topsoil spreading', improve the **HQS** of **Banksia TEC** to 9/10

17) The approval holder must ensure that:

a) from the **commencement of the Action**, no **vehicle** enters the **offset sites** except where required to ensure delivery of the **offset** outcomes, and

b) no **construction** excepting the **offset site** perimeter fence occurs within 50m of any **King Spider-orchid** within the **offset sites**.

Offset Baseline Surveys and Progress Surveys

18) Prior to the **commencement of the Action,** the approval holder must have a **suitably qualified field ecologist** conduct a baseline survey of the **offset sites** to accurately describe the **HQS** characteristics of the preexisting **Banksia TEC** and **Black Cockatoo foraging habitat**. Required survey actions comprise:

a) representative **transects** to provide a rapid appraisal of **vegetation density**, **projected canopy cover** and **key species** present, and

b) representative **quadrats** for the measurement of the **HQS** criteria for **Banksia TEC** and **Black Cockatoo foraging habitat**.

19) The resulting baseline survey report must include:

a) a written methodology,

b) a written justification for the number of **transects** and **quadrats** used and for their path or location within the vegetation unit being reported, and

c) records in the form of GPS coordinates, maps and physical markers that denote the location of each **transect** and **quadrat** utilised for the collection of baseline data.

20) Progress surveys used to inform the changes to **Banksia TEC** and **Black Cockatoo** Habitat during the implementation of the **offset** program, and to denote milestones for progress towards **offset** outcomes and trigger values for corrective actions must include the measurement of the same **HQS** attributes for **Banksia TEC** and **Black Cockatoo** Habitat following the same methodology, at the same locations as those used to determine the baseline condition of the **offset sites**.

Offset Management Plan(s)

21) The approval holder must, prior to the **commencement of the Action**, prepare an Offset Management Plan for each of the **offset sites** specified in the **Offset Strategy**.

22) Each OMP must:

a) meet the requirements of the **Environmental Offsets Policy** and the **Environmental Management Plan Guidelines**

b) be provided to the **department** upon request at any time during the life of the approval.

23) All commitments, including environmental outcomes, management measures, corrective actions, trigger values and performance indicators in the OMP must be **SMART** and based on referenced or included evidence of effectiveness. The OMP must be prepared by a **suitably qualified ecologist** and must include:

a) a summary of the **residual adverse impacts** to **protected matters** that will be compensated for by the offset. This summary must include the area(s) of habitat for **protected matters** and its condition and quality at all impacted sites which the particular offset is to address,

b) the relevant **protected matters** and a reference to the **EPBC Act** approval conditions to which the OMP refers,

c) management actions, and the timing of those actions, which will be implemented to achieve the offset outcomes for relevant **protected matters**,

d) a table of commitments to achieve the offset outcomes for relevant **protected matters**,

e) reporting and review mechanisms, and documentation standards that will be implemented to inform others annually regarding compliance with management and environmental commitments, and attainment and maintenance of the offset outcomes as specified in the OMP,

f) an assessment of risks to achieving the offset outcomes and what risk management strategies will be applied to address these,

g) A monitoring program, which must include:

i) evidence that effectively determines progress towards, attainment of and maintenance of the offset outcomes for the **protected matters**,

ii) measurable performance indicators to monitor attainment of the offset outcomes for the **protected matters**,

iii) trigger values for corrective actions,

iv) the timing and frequency of monitoring to detect trigger values and changes in the performance indicators, and

v) milestones for progress towards the offset outcomes,

h) proposed corrective actions to ensure offset outcomes for the **protected matters** are attained or maintained, if trigger values are reached or performance indicators not attained, and

i) links to referenced **plans** and applicable conditions of approval (including State approval conditions) if any.

Offset Implementation

24) The approval holder must implement each approved OMP until the expiry date of this approval.

25) The approval holder must, within 5 **business days** of commencing implementation of each Offset Management Plan, notify the **department** in writing of the date on which implementation of that OMP commenced.

26) The approval holder must, within 40 **business days** of 2nd, 5th, 10th, 15th and 20th anniversary of the **commencement of the Action**:

a) have the **Offset sites** assessed by an **independent suitably qualified field ecologist** to determine if the offset outcomes have been achieved, and

b) submit to the **department**, within 80 **business days** of the 20th anniversary of the **commencement of the Action**, a report prepared by the **independent suitably qualified ecologist** detailing:

i) the presence of **protected matters**,

ii) **habitat quality**, and

iii) evidence that each offset outcome specified in condition 15, 16 and 17 has been achieved.

Part B – Administrative conditions

COMMENCEMENT OF THE ACTION

27) The approval holder must notify the **department** electronically of the date of **commencement of the Action**, within 5 **business days** following **commencement of the Action**.

28) The approval holder must not **commence the Action** later than 5 years after the date of this approval decision.

COMPLIANCE RECORDS

29) The approval holder must maintain accurate and complete **compliance records** and document the procedure for recording and storing **compliance records**.

30) If the **department** makes a request in writing, the approval holder must provide electronic copies of **compliance records** to the **department** within the timeframe specified in the request.

Note: Compliance records may be subject to audit by the **department**, or by an **independent auditor** in accordance with section 458 of the **EPBC Act**, and/or be used to verify compliance with the conditions. Summaries of the results of an audit may be published on the **department's website** or through the general media.

31) The approval holder must ensure that any **monitoring data**, surveys, maps, and other spatial and metadata required under the conditions of this approval are prepared in accordance with the *Guidelines for biological survey and mapped data*, Commonwealth of Australia 2018, or as otherwise specified by the **Minister** in writing.

32) The approval holder must ensure that any **monitoring data**, surveys, maps, and other spatial and metadata required under the conditions of this approval are prepared in accordance with the *Guide to providing maps and boundary data for EPBC Act projects*, Commonwealth of Australia 2021, or as otherwise specified by the **Minister** in writing.

33) The approval holder must submit all **monitoring data**, surveys, maps, other spatial and metadata and all species occurrence record data (sightings and evidence of presence) electronically to the **department** within 20 **business days** of the next anniversary of the date of this approval decision except where otherwise specified in a **plan**.

ANNUAL COMPLIANCE REPORTING

34) The approval holder must prepare a **compliance report** for each **Annual Compliance Report period** (**ACR period**).

35) The approval holder must ensure each **compliance report** includes:

    a) accurate and complete details of compliance and any non-compliance with:

        i) each condition attached to this approval decision, and

        ii) all commitments made in each **plan**,

    b) a schedule of all **plans** in effect in relation to these conditions during the **ACR period**,

    c) accurate and complete details of how each **plan** was implemented during the **ACR period**, and

    d) if any **incident** occurred, accurate and complete details of each **incident**.

36) The approval holder must ensure each **compliance report** is completed to the satisfaction of the **Minister** and is consistent with the *Annual Compliance Report Guidelines*, Commonwealth of Australia 2023 to the extent that the Guidelines are consistent with these conditions.

37) The approval holder must, within 20 **business days** following the end of each **ACR period**, in a format that is easily accessible and downloadable, publish on the **website**:

    a) each **compliance report**, and

    b) a **shapefile** showing all **clearing** of **protected matters**, and their habitat, undertaken within the **ACR period**.

38) The approval holder must:

a) Exclude or redact **sensitive biodiversity data** from each **compliance report** and **shapefile** published on the **website** or otherwise provided to a member of the public.

b) If **sensitive biodiversity data** is excluded or redacted from a version of a **compliance report** published or otherwise provided to a member of the public, submit the full **compliance report** to the **department** within 5 **business days** of its publication on the **website** and notify the **department** in writing what exclusions and redactions have been made in the version published on the **website** or otherwise provided to a member of the public.

c) If **sensitive biodiversity data** is excluded or redacted from a version of a **shapefile** published or otherwise provided to a member of the public, submit the full **shapefile** to the **department** within 5 **business days** of its publication on the **website** and notify the **department** in writing what exclusions and redactions have been made in the version published on the **website** or otherwise provided to a member of the public.

39) The approval holder must notify the **department** electronically, within 5 **business days** of each date of publication that the **compliance report** has been published on the **website**. In this notification, the approval holder must provide the **department** with the web address for where the **compliance report** and related **shapefile** are published on the **website**.

40) The approval holder must keep each **compliance report** and related **shapefile** published on the **website** from the first date which that **compliance report** must be published and until the expiry date of this approval.

Note: Compliance reports may be published on the **department's website**.

REPORTING NON-COMPLIANCE

41) The approval holder must notify the **department** electronically, within 2 **business days** of becoming aware of any **incident**. The approval holder must specify in each notification:

a) any condition or commitment made in a **plan** which has not been, or may have not been, complied with,

b) a short description of the **incident**, and

c) the location (if applicable, including co-ordinates), date and time of the **incident**.

42) The approval holder must provide to the **department** in writing, within 12 **business days** of becoming aware of an **incident**, the details of that **incident**. The approval holder must specify:

a) all corrective measures and investigations which the approval holder has already taken in respect of the **incident**,

b) the potential impacts of the **incident**,

c) the method and timing of any corrective measures that the approval holder proposes to undertake to address the **incident**, and

d) any variation of these conditions or revision of a **plan** that will be required to prevent recurrence of the **incident** and/or to address its consequences.

INDEPENDENT AUDIT

43) The approval holder must ensure that an **independent audit** of compliance with the conditions is conducted for every **audit period**.

44) The approval holder must submit details of the proposed **independent auditor** and their qualifications to the **department** within 10 **business days** following the end of each **audit period**.

45) The approval holder must ensure the scope of each **independent audit** is sufficient to determine the compliance status for each condition of approval, and each commitment made in each **plan**.

46) The approval holder must ensure the criteria for each **independent audit** and the undertaking of each **independent audit** are consistent with the **Independent Audit and Audit Report Guidelines**

47) The approval holder must submit an **audit report** to the **department** for written agreement from the **department** within 3 months following the end of each **audit period**, or as otherwise directed by the **Minister** in writing.

48) The approval holder must ensure each **audit report** is completed to the satisfaction of the **Minister** and is consistent with the **Independent Audit and Audit Report Guidelines** to the extent that the Guidelines are consistent with these conditions.

49) The approval holder must publish each **audit report** on the **website**, in a format that is easily accessible and downloadable, within 10 **business days** of the date the **department** agrees to that **audit report** in writing.

50) The approval holder must notify the **department** within 5 **business days** of the date the **audit report** is published on the **website**. In this notification, the approval holder must provide the **department** with the web address for where the **audit report** is published on the **website**.

51) The approval holder must keep each **audit report** published on the **website** from the first date which that **audit report** must be published and until the expiry date of this approval.

COMPLETION OF THE ACTION

52) Within 20 **business days** after the **completion of the Action**, and, in any event, at least 20 **business days** before this approval expires, the approval holder must notify the **department** electronically of the date of **completion of the Action** and provide **completion data**. The approval holder must submit any spatial data that comprises **completion data** as a **shapefile**.

53) The approval holder must notify the **department** electronically 60 **business days** prior to the expiry date of this approval, that the approval is due to expire.

Note: Section 145C of the **EPBC Act** entitles the approval holder to request an extension to the period of effect of this approval.

Part C – Definitions

Words and terms appearing in **bold** (excluding headings) have the meaning assigned to them in the list below:

Acceptable water quality standards means water quality values that are set at the 80th percentile of the water quality trigger values specified in the **Local Water Management Strategy** for the same parameters.

Acceptable water table height means the mean annual height of the water table will remain unchanged relative to pre-development levels.

Action area means the location of the Action, represented in Attachment 2 by the area enclosed by red lines and labelled 'Action Area' on the map. This area includes the green shaded zone designated 'Impact Area' in the Legend.

Annual Compliance Report period or **ACR period** means each subsequent 12-month period following the date of this approval decision until the expiry date of this approval, unless otherwise specified in writing by the **Minister**.

Audit period means each subsequent three-year period following the **commencement of the Action** until the expiry date of this approval unless otherwise specified in writing by the **Minister**.

Audit report means a written report of an **independent audit**.

Banksia Habitat Quality Scoring Framework means the scoring system as specified in Attachment 4a.

Banksia TEC means the **EPBC Act** listed threatened ecological community Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community.

Biodiversity data means 'biodiversity data' as described in the *Policy on Accessing and Sharing Biodiversity Data*, Commonwealth of Australia 2024.

Black cockatoo/s means the **EPBC Act** listed threatened species of black cockatoo, **Carnaby's Black Cockatoo**.

Foraging Habitat means vegetation used to support feeding by **Black Cockatoos**.

Business day means a day that is not a Saturday, a Sunday, or a public holiday in Western Australia.

Carnaby's Black Cockatoo means the **EPBC Act** listed threatened species Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*).

Carrier means any **vehicle**, machinery or equipment associated with the taking of the Action.

Clean down means the practice of physically removing any material from a **carrier** that may harbour **dieback** and/or other contaminants, such as **weed** seeds and propagules, to meet the **hygiene standard**.

Clean down point means a designated area where wet or dry **clean down** is undertaken.

Clean on entry means the **carrier** is free of soil and vegetative material.

Clean on entry point means an access point or points along the boundary of the **Action area** which allows for **carriers** to undertake **clean down** and be inspected to determine if they meet the **hygiene standard** prior to entering the **Action area**.

Clean on exit means **carriers** that meet the **hygiene standard** before leaving known or potential infested areas, or areas with a high probability of being infested such as low-lying or water gaining sites.

Clear, **cleared, clearance** or **clearing** means the cutting down, felling, thinning, logging, removing, killing, destroying, poisoning, ringbarking, uprooting, or burning of vegetation, excluding **weeds**. **Clear**, **clearing** or **clearance** does not include authorised prescribed burns for bushfire management.

Commence the Action or **commences the Action** means the first instance of any on-site **clearing**, **construction** or other physical activity associated with the Action, but does not include minor physical disturbance necessary to:

- Undertake pre-clearance surveys or monitoring programs.
- Install signage and/or temporary fencing to prevent unapproved use of the **Action area**, so long as the signage and/or temporary fencing is located where it does not **harm** any **protected matter**.
- Protect environmental and property assets from fire, **weeds,** and feral animals, including use of existing surface access tracks.
- Install temporary site facilities for persons undertaking pre-commencement activities so long as these facilities are located where they do not **harm** any **protected matter**.

Commencement of the Action means the date on which the approval holder **commences the Action**.

Completion data means an environmental report and spatial data clearly detailing how the conditions of this approval have been met.

Completion of the Action means the date on which all activities associated with the approved Action, other than managing the **offset sites**, have permanently ceased and/or been completed.

Compliance records means all documentation or other material in whatever form required to demonstrate compliance with these conditions of approval (including compliance with

commitments made in **plans**) in the approval holder's possession, or that are within the approval holder's power to obtain lawfully.

Compliance report means a written report of compliance with, and fulfilment of, these conditions (including compliance with commitments made in **plans**).

Construct or **construction** means:

- the erection of a building or structure that is, or is to be, fixed to the ground and wholly or partially fabricated on-site,
- the alteration, maintenance, repair or demolition of any building or structure,
- any work which involves breaking of the ground (including pile driving) or bulk earthworks,
- the laying of pipes and other prefabricated materials in the ground, and
- any associated excavation work.

Construction does not include the installation of temporary fences or signage or pre-clearance surveys.

Department means the Australian Government agency responsible for administering the **EPBC Act.**

Dieback means the destructive plant disease caused by the pathogen *Phytopthora cinnamomi* and/or other *Phytopthora* species.

Environmental Management Plan Guidelines means the *Environmental Management Plan Guidelines*, Commonwealth of Australia 2024.

Environmental Offsets Policy means the *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy*, Commonwealth of Australia 2012.

EPBC Act means the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).

Green Card Training means Phytophthora Dieback Hygiene training recognised by the WA Government to provide the skills and knowledge needed to avoid risk of spreading **dieback**.

Habitat quality means a measure of the overall viability of a site and its capacity to support **protected matters**, with respect to site condition, site context and species stocking rate and/or composition.

Habitat Quality Score or **HQS** means the score derived from the application of the **Banksia Habitat Quality Scoring Framework**.

Harm means to cause any measurable direct or indirect disturbance or deleterious change as a result of any activity associated with the Action.

Hygiene standard means completely free of soil, mud, and vegetation material.

Incident means any:

- event which has the potential to, or does, **harm** any **protected matter**,
- potential non-compliance with these conditions, including the administrative requirements,
- actual non-compliance with these conditions, including the administrative requirements,
- potential non-compliance with one or more commitment made in a **plan**, and/or
- actual non-compliance with one or more commitment made in a **plan**.

Independent means a person, or firm, who does not have any individual, financial*, employment* or family affiliation or any conflicting interests with the Action, the approval holder or the approval holder's staff, representatives, or associated persons.

Independent audit means an audit, conducted by an **independent auditor**, of compliance with and fulfilment of these conditions and the commitments made in **plans**, objectively evaluated against the audit criteria developed by the **independent auditor**, in accordance with the **Independent Audit and Audit Report Guidelines** to the extent that the Guidelines are consistent with these conditions.

Independent Audit and Audit Report Guidelines means the *Environment Protection and Biodiversity Conservation Act 1999 Independent Audit and Audit Report Guidelines*, Commonwealth of Australia 2019.

Independent auditor means a person, or firm, who:

- does not have any individual, financial*, employment* or family affiliation or any conflicting interests with the Action, the approval holder or the approval holder's staff, representatives, or associated persons,
- has demonstrated experience in undertaking government-regulated environmental compliance audits, and
- holds relevant professional qualifications and accreditations.

*Other than for the purpose of undertaking the role for which an independent person, or firm, is required.

Key species means plant species present that conform with the diagnostic description of **Banksia TEC** and **Black Cockatoo foraging habitat** respectively, and plant species present that degrade the quality of the **Banksia TEC** and **Black Cockatoo foraging habitat** respectively.

King Spider-orchid means the **EPBC Act** listed threatened species *Caledenia huegelii*.

Local Water Management Strategy (LWMS) means the document *Lot 5131 Local Water Management Strategy (Report ref. J6704c – March 2022)* (JDA Consultant Hydrologists, March 2022).

Minister means the Australian Government Minister administering the **EPBC Act**, including any delegate thereof.

Monitoring data means the data required to be recorded under the conditions of this approval, including **sensitive biodiversity data**.

Offset sites means the 34.11 ha area located at Lot 131 Jandakot Road, Treeby, and the 12.16 ha area located at Lot 705 Armadale Road, Treeby, selected to offset unavoidable impacts of the Action on **Banksia TEC** and **Carnaby's Black Cockatoo,** represented in Attachment 3a by the shaded zones designated 'Offset within Lot 131', and 'Offset within Lot 705', in the Legend.

Offset strategy means Section 5 of Preliminary Documentation Residential Development Lot 131 Jandakot Road, Treeby, WA (EPBC Ref: 2018/8205) Revision 2.1 dated 24 October 2024 Prepared by SLR Consulting (SLR Project No.: 675.V62400.00000)

Orchids means individuals or multiples of the EPBC listed orchid species *Caladenia huegelii* (the King Spider-orchid).

Plan means any action management plan or strategy that the approval holder is required by these conditions to implement.

Potential breeding tree means any native eucalypt to the Swan Coastal Plain region with a diameter at breast height of greater than 500 mm.

Projected canopy cover means the percentage of ground covered by a vertical projection of the tree canopy.

Protected matter/s means a matter protected under a controlling provision in Part 3 of the **EPBC Act** for which this approval has effect.

Residual adverse impacts means the impacts to **protected matters** remaining after all avoidance and mitigation measures have been applied.

Quadrat/s means a 15 x 15 metre square or multiple squares within each discrete area of offset (as represented by the maps at Attachments 3b and 3c) in which standardised observations and measurements can be made to determine the **HQS** score for **Banksia TEC** and **Black Cockatoo foraging habitat** respectively.

Secure or **secured** means to provide enduring conservation protection on the title of land under Western Australian legislation to protect the site against future development, **clearing** or infrastructure development, or another enduring protection mechanism agreed to in writing by the **department**, to provide protection for the site against development incompatible with conservation.

Sensitive biodiversity data means **biodiversity data** which, if released, published or otherwise exposed, may result in **harm** to the relevant **protected matter** as a result of the intentional or unintentional misuse of that **biodiversity data**.

Shapefile means location and attribute information about the Action provided in an Esri shapefile format containing:

- '.shp', '.shx', '.dbf' files,
- a '.prj' file which specifies the projection or geographic coordinate system used, and
- an '.xml' metadata file that describes the shapefile for discovery and identification purposes.

SMART means specific, measurable, achievable, relevant and time bound.

Suitable nest hollow means any tree hollow that appears to be deep enough and with an opening large enough (> 100 mm) to be used by **black cockatoos**, as determined by a **suitably qualified field ecologist**.

Suitably qualified ecologist (for the purpose of preparing and implementing environmental management plans) means a person who has relevant professional qualifications and:

- at least 3 years of work experience writing and implementing management plans for the habitat of **protected matters**, and
- can give authoritative assessment and advice on offset management to improve the **habitat quality** of the habitat of **protected matters** using relevant protocols, standards, methods and/or literature.

Suitably qualified field ecologist (for the purpose of undertaking environmental surveys) means a person who has relevant professional qualifications and at least 3 years of work experience designing and implementing surveys for **Banksia TEC** and **Carnaby's Black Cockatoo** habitat and can give an authoritative assessment and advice on the presence, abundance and **habitat quality** of **Banksia TEC** and **Carnaby's Black Cockatoo** habitat using relevant protocols, standards, methods and/or literature, and who has a proficient understanding of and experience using the Habitat Quality Framework (Attachments 4a and 4b).

Transect/s means a straight line or multiple lines through each discrete area of offset (as represented by the maps at Attachments 3b and 3c) along which standardised observations and measurements can be made.

Vegetation density means the number of individual trees per unit area and the number of individual shrubs per unit area.

Vehicle means a machine used for transporting people or goods.

Website means a set of related web pages located under a single domain name attributed to the approval holder and available to the public.

Weed means a 'weed' as described in the *Australian Weeds Strategy 2017-2027*, Commonwealth of Australia 2017 ('Weeds Strategy'), including the species listed as **Weeds of National Significance** in Table 1 of Appendix B to the Weeds Strategy.

Weeds of National Significance means the species listed as Weeds of National Significance in Table 1 of Appendix B to the *Australian Weeds Strategy 2017-2027*, Commonwealth of Australia 2017.

Wildlife expert means a person, such as a veterinarian, who practices in, and holds current qualifications for, caring for injured wildlife, and has access to adequate equipment to provide appropriate care.

Attachments

Attachment 1a: Offset sites conservation style fence

Attachment 2: Action Area - Map

Attachment 3a: Proposed Offset Sites - Map

Attachment 3b: Offset Area Habitat Quality and Restoration Actions - Map Lot 131

Attachment 3c: Offset Area Habitat Quality and Restoration Actions - Map Lot 705

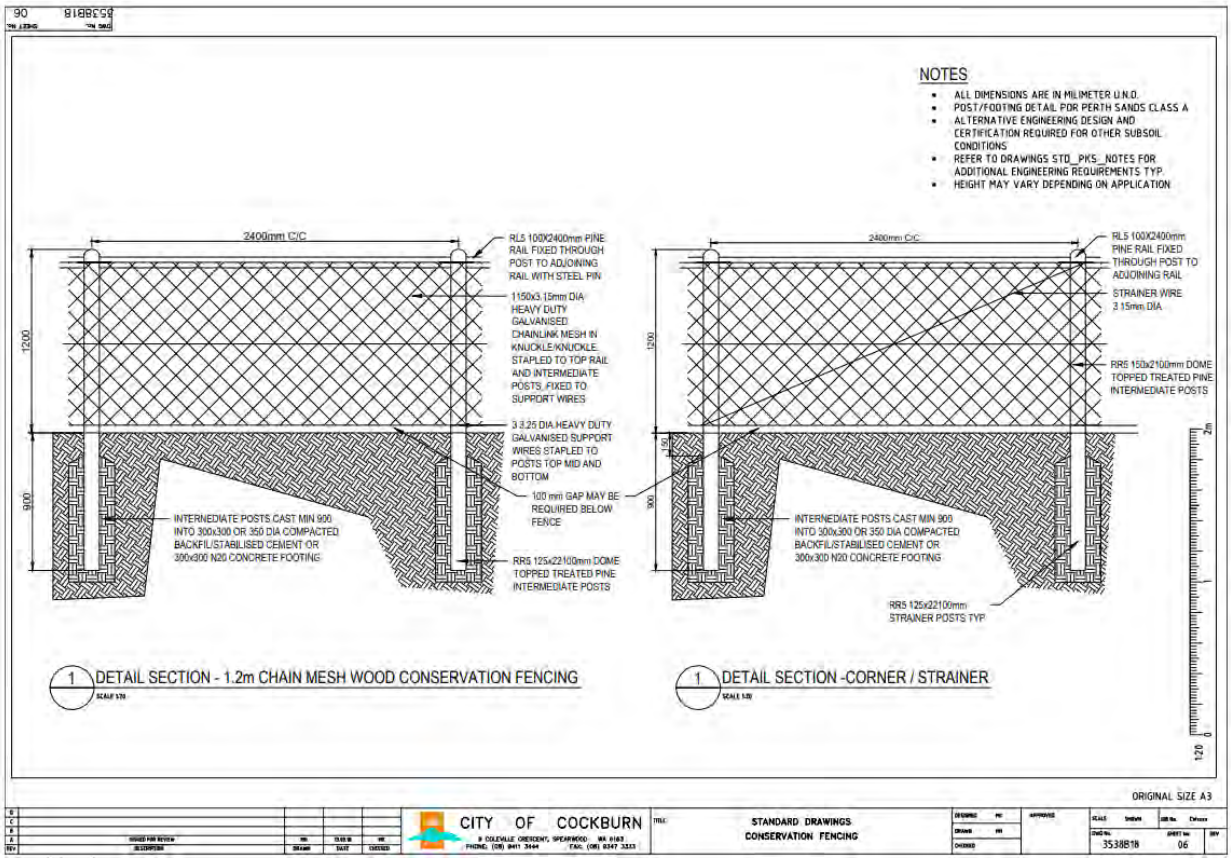
Attachment 3d: Location of Conservation Style Fence enclosing the Offset Site - Map Lot 131

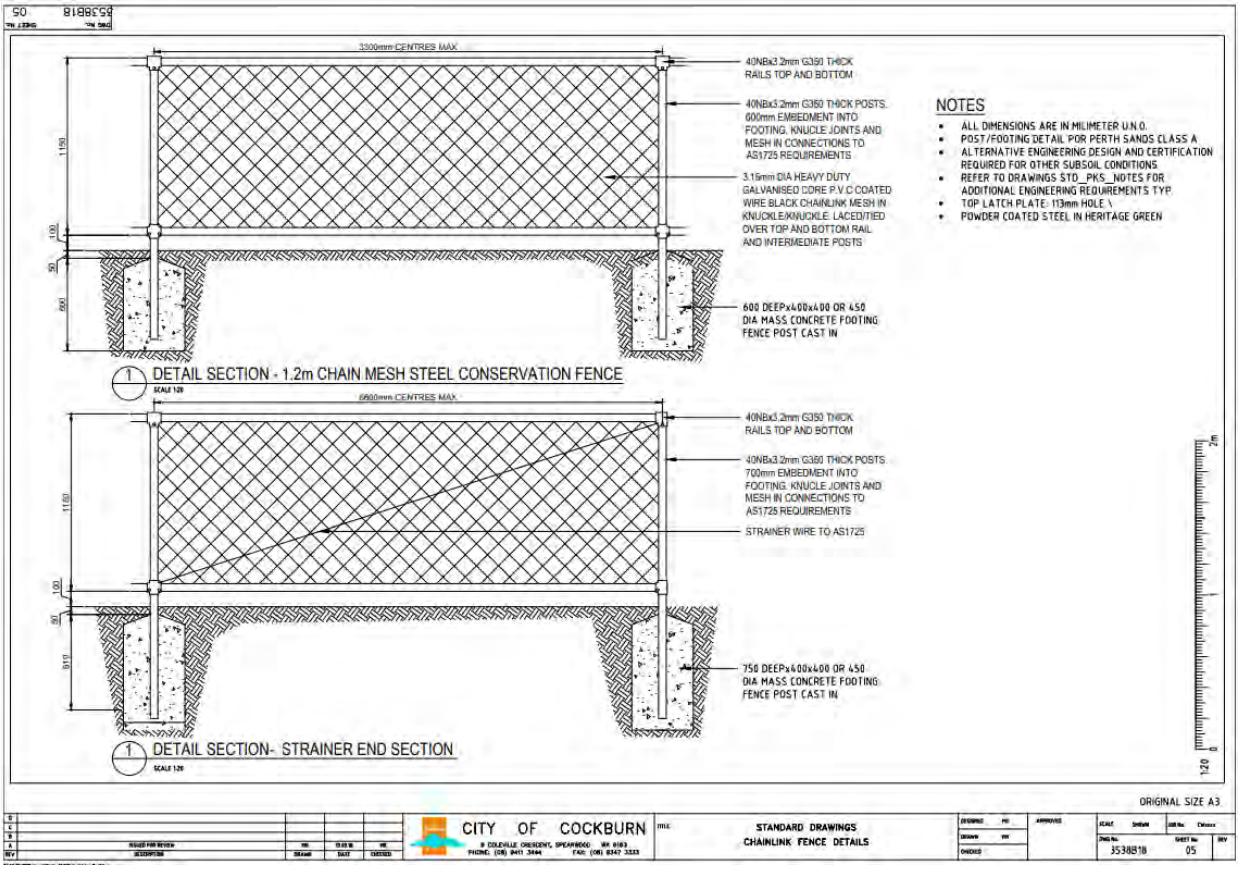
Attachment 3e: Location of Conservation Style Fence enclosing the Offset Site - Map Lot 705

Attachment 4a: Banksia Woodland TEC HQS Scoring Framework

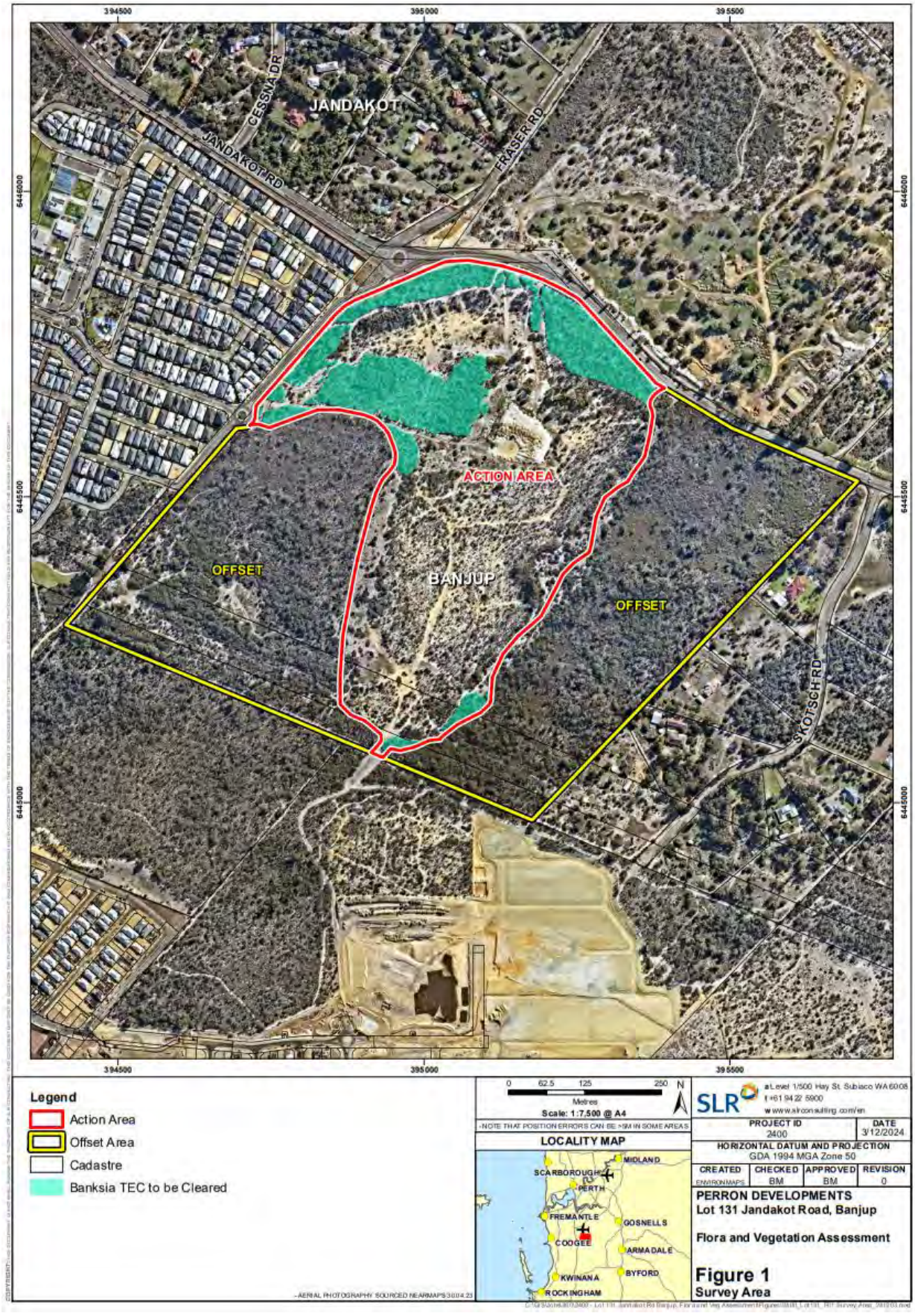
Attachment 4b: Black Cockatoo Foraging Habitat HQS Scoring Framework

Attachment 1a: Offset Sites Conservation Style Fence. Either specification is acceptable.

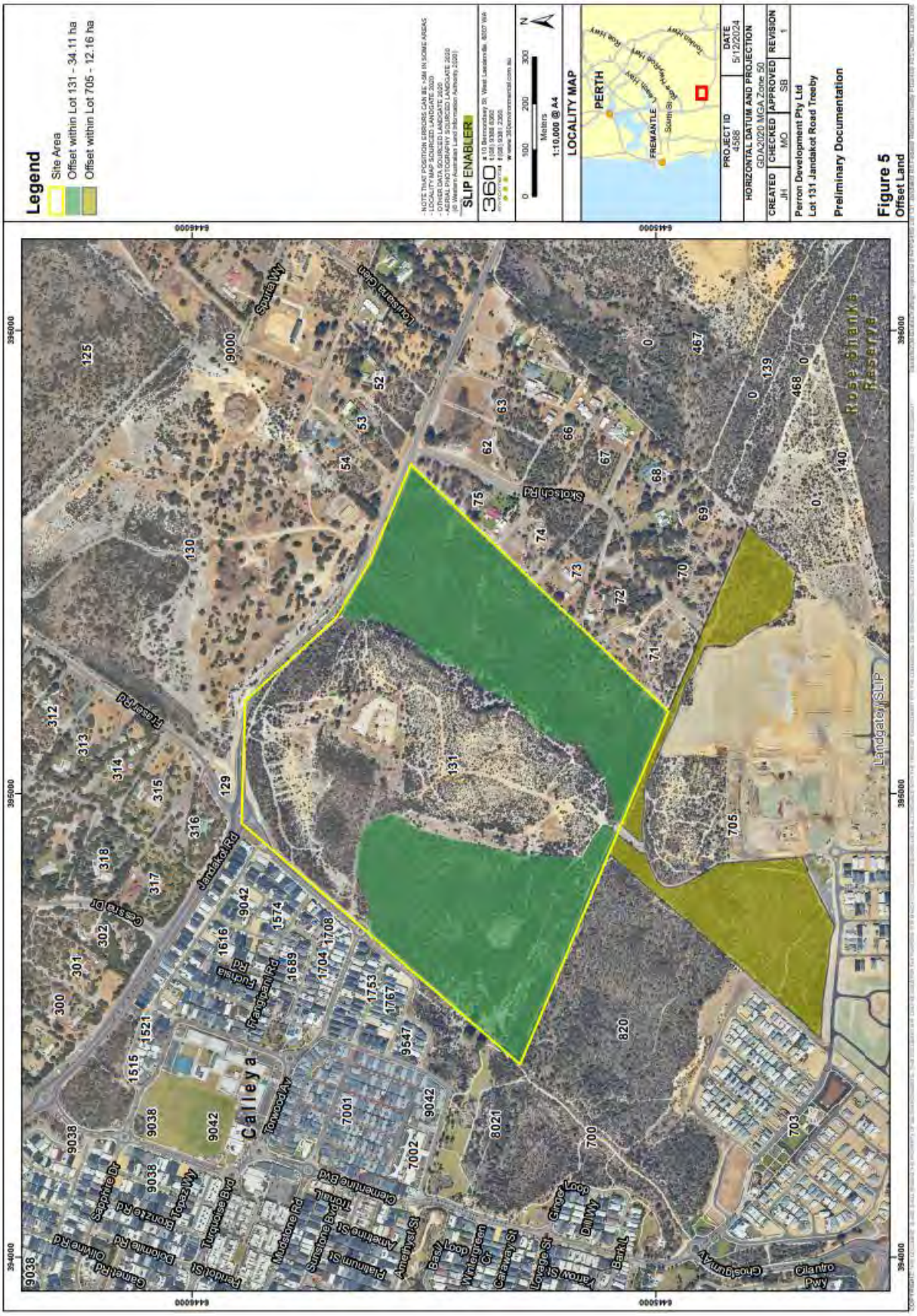




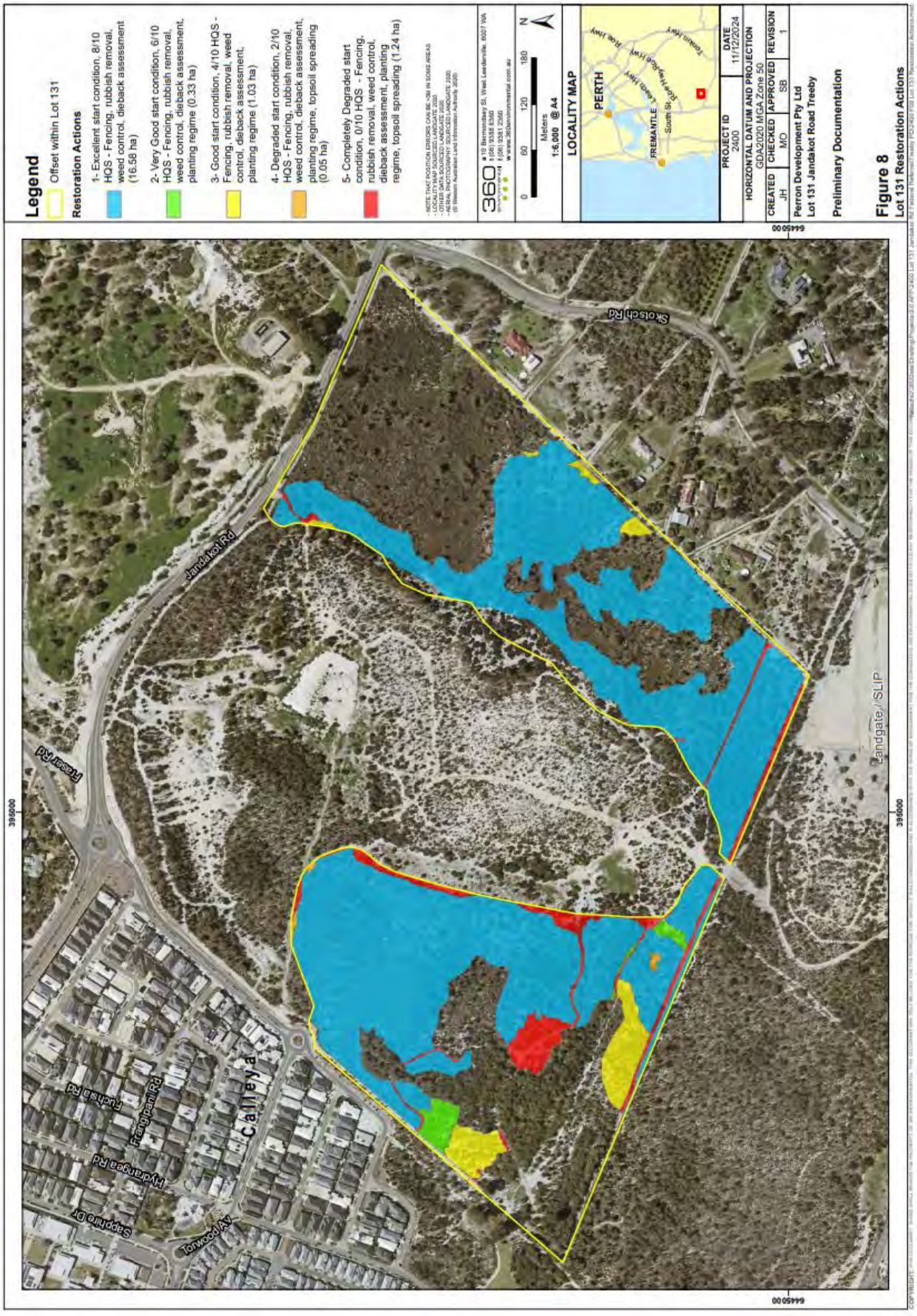
Attachment 2: Action Area Map



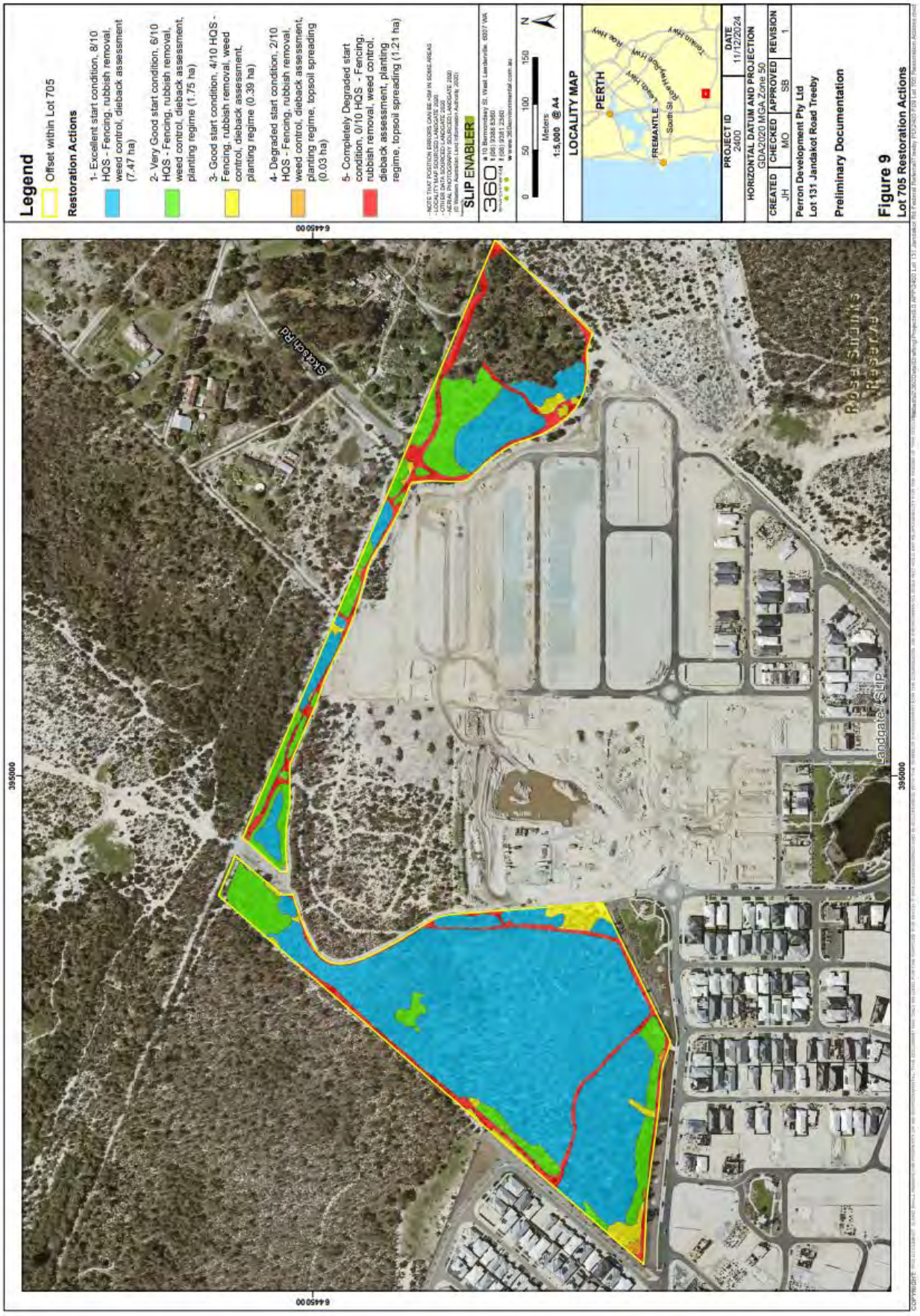
Attachment 3a: Proposed Offset Sites Map



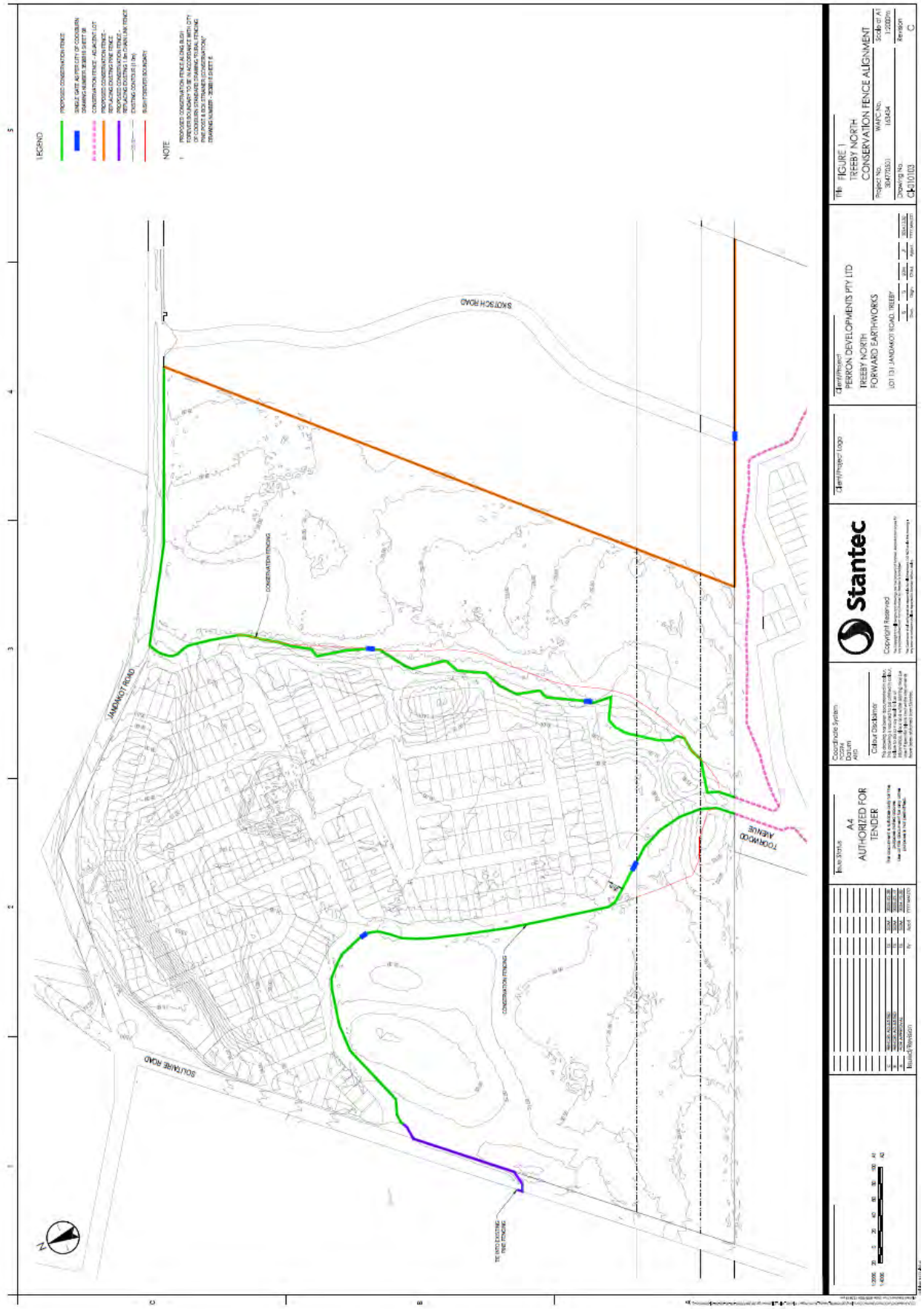
Attachment 3b: Offset Area Habitat Quality and Restoration Actions - Map Lot 131



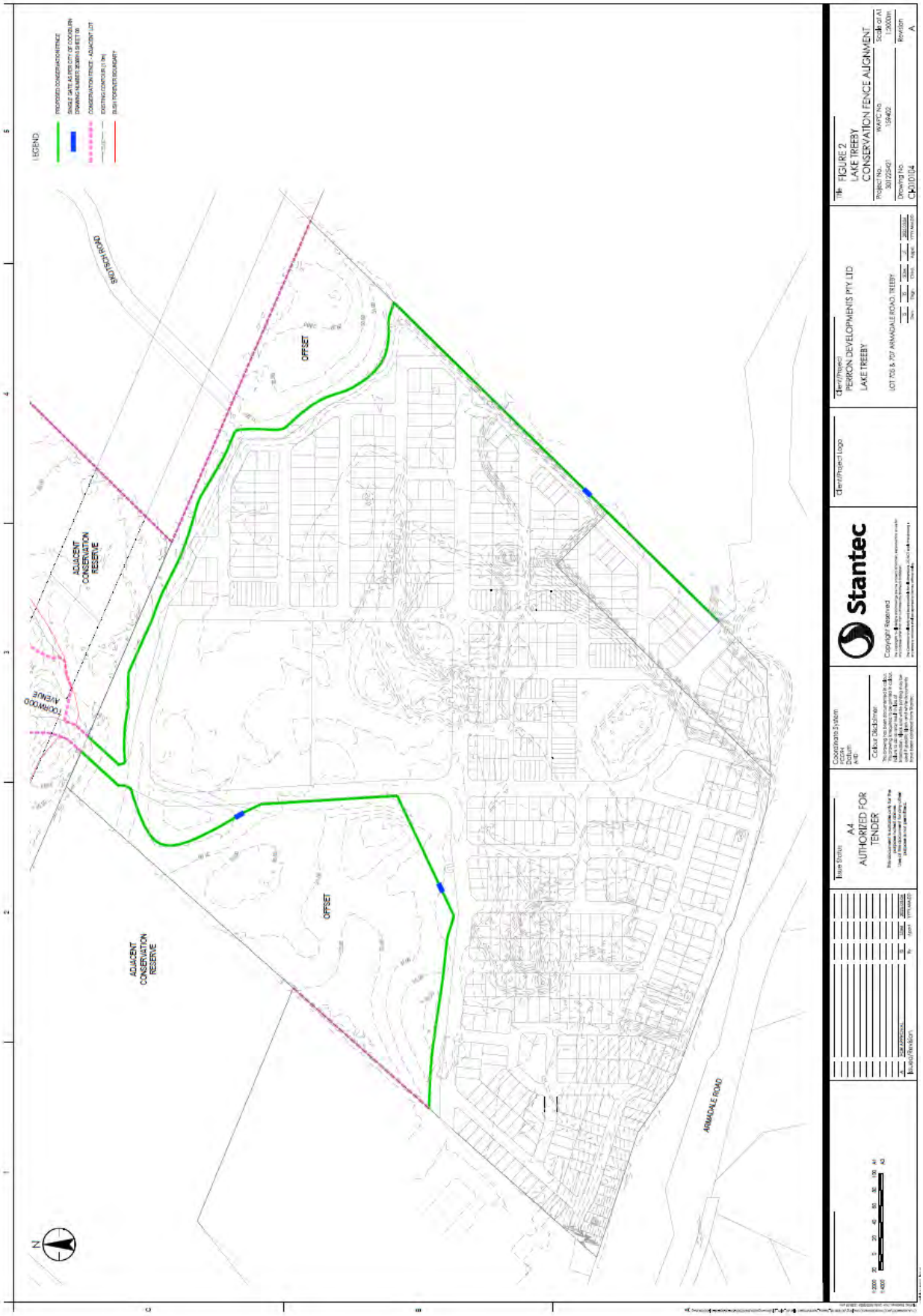
Attachment 3c: Offset Area Habitat Quality and Restoration Actions - Map Lot 705



Attachment 3d: Location of Conservation Style Fence enclosing the Offset Site - Map Lot 131



Attachment 3e: Location of Conservation Style Fence enclosing the Offset Site - Map Lot 705



Attachment 4a: Banksia Woodland TEC HQS Scoring Framework – Blank Form

Habitat Quality Scoring Framework		Score – Impact Site	Score – Offset site 1 - start	Score – Offset site 1 – without	Score – Offset site 1 - with
Site Condition (70%)	**Vegetation condition (Keighery 1994)** – Pristine (100) – Excellent (80) – Very good (60) – Good (40) – Degraded (20) – Completely Degraded (0)				
	Species Richness – Average native species richness within the top half of recorded range for the TEC (10) – Average native species richness within the bottom half of recorded range for the TEC (0)				
	Presence of Threatened taxa – Patch is critical habitat for, and hosts Threatened taxa (10) – Patch is critical habitat for Threatened taxa (5)				

	– Patch is not critical habitat for Threatened taxa (0)				
	Contains State listed TEC/PEC – Patch contains WA FCT listed as State TEC (20) – Patch contains WA FCT listed as State PEC (10) – Patch does not contain WA FCT listed as either TEC or PEC (0)				
	Presence of Dieback – Patch is dieback free (10) – Patch is partly dieback free (5) – Patch is dieback infested (0)				
	Condition total (out of 150)				
	Condition Score (Condition total / 150 * 70)				

Attachment 4b: Black Cockatoo Foraging Habitat HQS Scoring Framework – Blank Form

Habitat quality scoring framework		Score – Impact site	Score – Offset site 1 - start	Score – Offset site 1 – without	Score – Offset site 1 - with
Site Context (30%)	**Connectivity** – Patch is continuous with remnant vegetation and forms a corridor that links different landscape units (30) – Patch is continuous with remnant vegetation that forms a medium to large local remnant (20) – Patch is within 1km of other medium to large remnants (10) – Patch is within 12km of other significant remnants and contributes to support of significant avifauna (i.e. known Black Cockatoo Breeding sites are located within 12km) (5) – Patch does not meet any of the above criteria (0)				
	Patch size – 20 hectares or more (50)				

	– 10-20 hectares (40) – 5-10 hectares (30) – 2-5 hectares (20) – Less than 2 hectares (10)				
	Site location and risk – Patch is located in an area where the TEC has been extensively cleared (10)				
	Site location and risk **Patch is located at the geographical edge of the recorded range (10)**				
	Context total (out of 100)				
	Context Score (Context total / 100 * 30)				
Quality total (out of 100)	**Condition Score + Context Score**				
Final Patch Habitat Quality Score (out of 10)	**Quality total / 10**				
Weighted Patch Score	**Final Patch Habitat Quality Score * area of patch (hectares)**	**Not used, as have averaged across all patches**	**Not used, as have averaged across patches**		
Site Habitat Quality Score (out of 10)	**All Weighted Patch Scores / total impact area**	**As above**	**As above**		

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