Annual Compliance Report EPBC 2017/8090

3 March 2022 – 2 March 2023

Park Ridge residential, mixed use and medium impact industry precinct, Park Ridge Queensland

Year 2

26 May 2023

SHG Ref: 8392

saunders havill group

Document Control

Document: 3 March 2022 – 2 March 2023 Annual Compliance Report: Park Ridge residential, mixed use and medium impact precinct - Year 2 (EPBC 2017/8090), prepared by Saunders Havill Group Pty Ltd for Pointcorp Heritage Park Pty Ltd

Document Issue

Issue	Date	Prepared By	Checked By
Issue A	26.05.2023	AR	AR

Prepared by

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Reports and plans by others may be included in this document.

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Acronyms and Abbreviations

ACR	Annual Compliance Report
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (Cth)
ha	hectares
kilometres	km
m	metres
PMAV	Property Map of Assessable Vegetation
SHG	Saunders Havill Group
square metres	sqm
VMA	*Vegetation Management Act 1999* (Qld)

1. Introduction

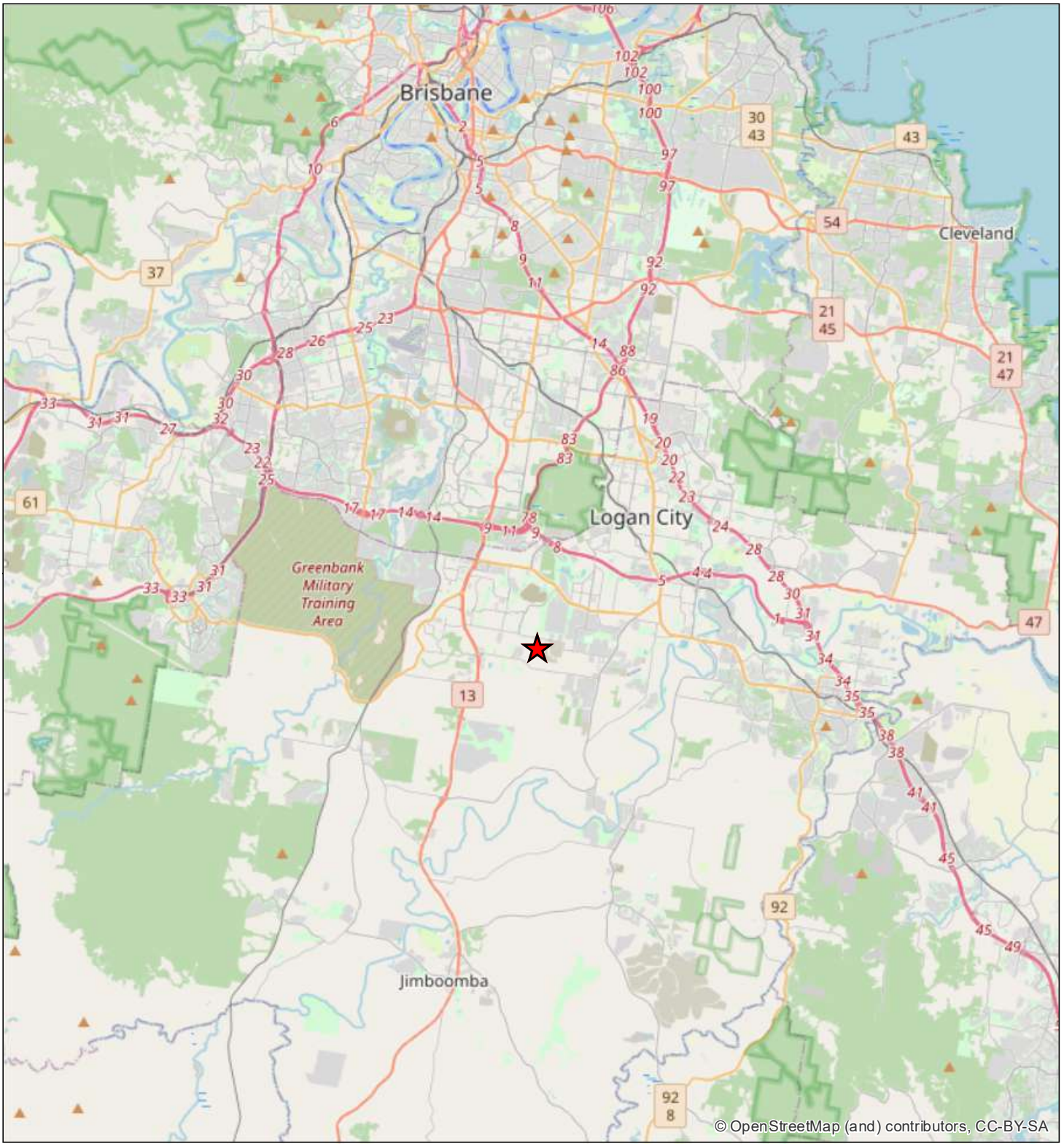
Saunders Havill Group were engaged by the approval holder, Pointcorp Heritage Park Pty Ltd, prepare an Annual Compliance Report (ACR) for the Park Ridge residential, mixed use and medium impact precinct, Park Ridge Queensland (ref. EPBC 2017/8090). In accordance with the approval granted 23 November 2020 under the *Environmental Protection and Biodiversity Act 1999* (EPBC Act), this ACR has been prepared in response to Condition 18 to prepare a compliance report for each 12-month period following the date of commencement of the action.

The site is located in South East Queensland within Logan City Council (LCC) Local Government Area, approximately 25 km south of Brisbane and 30 km east of Ipswich (**Figure 1)**. The Project area covers 116.35 ha of land. Within this area, a direct impact to 89.83 ha and functional loss of 28.01 ha of Koala and Grey-headed Flying-fox (GHFF) habitat was permitted under the approval conditions. The proposal includes the retention and restoration of an on-site conservation corridor approximately 12.96 ha located within the north-west corner of the development area.

This report delivers the first annual overview of the project's progression and compliance with approval conditions under the EPBC Act. The project's progress and notable events during the reporting period are detailed in **Section 3**. The assessment of compliance with the approval conditions is presented in **Section 4**. This report is the second Annual Compliance Report for the approved action.

1.1. Approval Summary

Commonwealth Reference	EPBC 2017/8090
Approval Holder	Pointcorp Heritage Park Pty Ltd
ABN	12 631 998 377
Approval Date	23 November 2020
Expiry Date of the Approval	30 June 2045
Approved Action	To develop a residential, mixed use and medium impact industry precinct in Park Ridge, Queensland. [See EPBC Act referral 2017/8090 on 19 March 2018, variation of the action decision made under section 1568 of the EPBC Act on 30 January 2020, and change of designation of proponent made under s78(5) of the EPBC Act on 23 September 2020. A variation of conditions attached to the approval was made on the 25 May 2022].
Controlling Provision(s)	Listed threated species and communities (sections 18 & 18A)
Date of Commencement of the Action	3 March 2021
Reporting Period	3 March 2022 – 2 March 2023
Address	Clarke Road and Green Road, Park Ridge, Queensland
Local Government Area	Logan City Council



Legend

★ Referral Area Location

Figure 1

Site Context

Pointcorp
Heritage
Park Pty Ltd

File ref. 8392 E Figure 1 ACR YR2 Site Context A
Date 16/05/2023
Project Clarke Road, Park Ridge

0 2 4 6 8 10 km

N

Scale (A4): 1:250,000 [GDA 1994 MGA Z56]

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Layer Source: © State of Queensland 2023

Legend

Referral Area

Qld DCDB

Figure 2

Site Aerial

Pointcorp Heritage Park Pty Ltd

File ref. 8392 E Figure 2 ACR YR2 Site Aerial A
Date 16/05/2023
Project Clarke Road, Park Ridge

0 100 200 300 400 500 m

N

Scale (A4): 1:12,000 [GDA 1994 MGA Z56]

saunders havill group

Layer Source: © State of Queensland 2023, Nearmap 2023

2. Declaration of Accuracy

This declaration has been signed by the approval holder.

In making this declaration, I am aware that sections 490 and 491 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) make it an offence in certain circumstances to knowingly provide false or misleading information or documents. The offence is punishable on conviction by imprisonment or a fine, or both. I declare that all the information and documentation supporting this compliance report is true and correct in every particular. 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	
Full name (please print)	Andrew Ridley
Position (please print)	Principle Environmental Scientist
Organisation	Saunders Havill Group
ABN	24 144 972 949
Date	26/05/2023

3. Project Status

3.1. The Development Area

The action formally commenced on the 3 March 2021. In accordance with Condition 15, the Department of Agriculture, Water and the Environment was formally notified in writing of the date of commencement on the 4 of March 2021.

The proponent has continued clearing vegetation within stages 1 and 2 within this reporting period (3 March 2022 to 2 March 2023). **Plan 1** illustrates the development which occurred within this reporting period. No clearing has taking place within Stage 3 outlined in the proposed Land Use Masterplan (Attachment A of the varied conditions approved on the 25 May 2022). Less than 6 ha of vegetation was cleared on the site. The majority of clearing was to establish a regional stormwater detention basin for the Logan City Council. **Table 1** summarises the current status of the project and compliance with Conditions 1a and 1d.

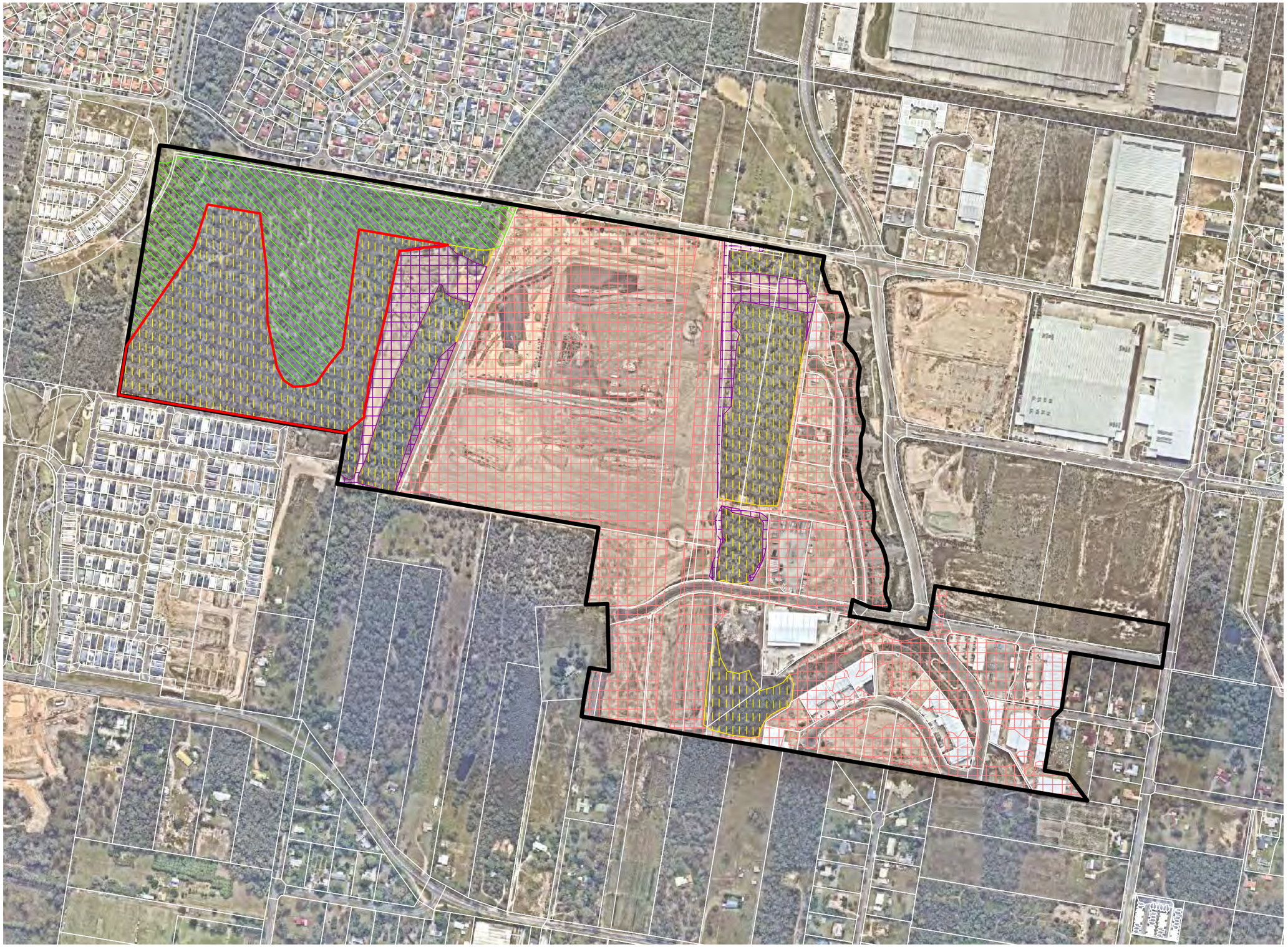
Table 1: Development Summary

Approved total clearing of Koala & Grey-headed Flying-fox habitat	89.83 ha
Area of clearing of Koala & Grey-headed Flying-fox habitat within previous reporting periods	58.46 ha
Area of clearing of Koala & Grey-headed Flying-fox habitat within current reporting period (Year 2)	5.68 ha
Total current clearing of Koala & Grey-headed Flying-fox habitat	64.14 ha
Balance of approved clearing not yet undertaken	24.74 ha
Area retained within the on-site conservation corridor	13.39 ha

Additionally, within this reporting period waterway rehabilitation works and basin construction and planting were continued along the eastern boundary of Stage 1 that commenced within the previous reporting period (**Photo Set 1**). These works provide visual amenity and water quality management. Following completion of construction works, these areas will also provide foraging habitat for highly mobile fauna species.

Photo Set 1: Construction and continued planting of northern Stage 1 basin and rehabilitation of waterway.

1. Year 2 Development Summary



Notes:
This plan was prepared as a desktop assessment tool. The information on this plan is not suitable for any other purpose. Property dimensions, areas, numbers of lots and contours and other physical features shown have been compiled from existing information and may not have been verified by field survey. These may need verification if the development application is approved and development proceeds, and may change when a full survey is undertaken or in order to comply with development approval conditions. No reliance should be placed on the information on this plan for detailed design or for any financial dealings involving the land. Saunders Havill Group therefore disclaims any liability for any loss or damage whatsoever or howsoever incurred, arising from any party using or relying upon this plan for any purpose other than as a document prepared for the sole purpose of accompanying a development application and which may be subject to alteration beyond the control of the Saunders Havill Group. Unless a development approval states otherwise, this is not an approved plan.

Layer Sources
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Updated data available at
http://qldspatialinformation.qld.gov.au/catalogue/
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Legend

- Referral Area
- Qld DCDB
- Stage 3 area

Year 2 Development Summary

- Grey-headed Flying Fox/ Koala Critical Habitat Retained [13.39 ha]
- Grey-headed Flying Fox/ Koala Critical Habitat Impacted [24.74 ha]
- Grey-headed Flying Fox/ Koala Critical Habitat Cleared in year 2 [5.68 ha]
- Grey-headed Flying Fox/ Koala Critical Habitat Cleared in previous reporting periods [58.46 ha]

Issue	Date	Description	Drawn	Checked
A	17/05/2023	Preliminary	TC	AR

0 50 100 150 200 m

Transverse Mercator | GDA 1994 | Zone 56 | 1:7,500 @ A3

saunders havill group

Pointcorp Heritage Park Pty Ltd

Heritage Park

Address / RPD: Clarke Road, Park Ridge

17/05/2023 | 8392 E 01 ACR YR2 Development Summary A

3.2. Management of Impacts

3.2.1 Pre and Post-clearing Reporting

As discussed in Section 3.1 above, clearing within this reporting period (3 March 2022 – 2 March 2023) was predominately associated with the construction of the regional stormwater detention basin to the east of the proposed residential area. Both pre and post-clearing surveys and reporting were undertaken by a qualified and experienced fauna spotter catcher to mitigate the potential for adverse impacts.

As discussed above, clearing was contained within Stage 1 and 2 illustrated in Attachment A of the Varied Approval Conditions (EPBC 2017/8090).

SHG have reviewed all fauna spotter catcher pre-clearance and post works reports for the reporting period. Reporting indicates that no Koalas or Grey-headed Flying-foxes were located within the construction stages.

Three (3) Koalas were identified during the pre-clearance survey for construction of the regional stormwater detention basin. The trees were marked with flagging and communicated to machine operators. An exclusion zone was established providing a corridor for the Koala to navigate to adjacent bushland. No works occurred within proximity of the Koalas, and they voluntarily dispersed overnight. All other fauna identified during the clearing works by the fauna spotter catcher were managed as per standard protocols.

The pre- and post-clearance reporting for the regional stormwater detention basin has been provided to demonstrate compliance with EPBC Act Approval Conditions, the *Nature Conservation (Koala) Conservation Plan 2017* and standard protocols (**Appendix A**). Note that the clearing extent within the reports is inaccurate. The reports show the clearing extent extending into the conservation corridor in error. No clearing occurred withing the conservation corridor.

3.2.2 Annual Reporting Site Audit

In addition to regular communications with the proponent, an inspection of the impact area was undertaken by a SHG ecologist on 7 March 2023 to review compliance with the approval conditions.

To confirm the extent of works, the ecologist traversed the entirety of the impact site, concentrating on construction area boundaries. and the on-site conservation corridor. The inspection confirmed the extent of works was within the approved development area and construction area boundaries contained maintained tree protection fencing (**Photo Set 2)**. Temporary koala exclusion fencing had been installed in areas where earthworks were still being undertaken in accordance with Condition 2c (**Photo Set 3**).

Photo Set 2: Tree protection fencing installed on construction area boundaries.

Photo Set 3: Temporary koala exclusion fencing.

Additionally, the on-site conservation corridor was inspected to confirm retention and progress of restoration and revegetation works. This is discussed further in **Section 3.3.1** of the report.

3.2.3 Reduction in speed limits

To prevent deaths and injury to koalas within or immediately adjacent the development area during clearing and construction, the speed limit is a maximum of 20km/hr and only authorised vehicles are to be driven on site. The Vehicle Management Plan and maximum speed limits are detailed within the site induction, which every individual attending the site is required to undertake.

3.3. Conservation and Offsets

This section of the report provides progress on the works within the on-site conservation corridor and offset sites.

3.3.1 On-site Conservation Corridor

As part of the action, an on-site conservation corridor of 12.96 ha was retained, comprising of a mix of remnant and non-remnant vegetation considered potential foraging habitat for the Grey-headed Flying-fox. This corridor forms part of Logan City Council's Biodiversity Corridor network.

As discussed within **Section 3.2.2**, the annual audit identified that no clearing has occurred outside of the approved development area ensuring the retention of the on-site conservation corridor for the protection of Koala and Grey-headed Flying-fox foraging habitat in accordance with Condition 1a – 1c.

To minimise the risk to Koalas of predation by domestic and feral animals, access to the on-site conservation corridor has been restricted by the installation of temporary fencing and signage (**Photo Set 4**). Additionally, domestic animals have been prohibited from entering the development area during vegetation clearing and construction activities.

Photo Set 4: On-site conservation corridor prohibition measures.

Restoration works were completed within the on-site conservation area during this reporting period. Works included removal of domestic waste and the preparation and revegetation of historical vehicle access tracks (**Photo Set 5**).

Photo Set 5: On-site conservation corridor revegetated vehicle access tracks.

3.3.2 Offset Actions

To compensate the loss of clearing 89.83 ha and functional loss of 28.01 ha of Koala and Grey-headed Flying-fox habitat on the development area, the approval holder was required to legally secure 151.3 ha of land at the Burnett Creek and 250.4 ha of land at the Lyons offset sites. The offset sites were secured via a voluntary declaration under the *Vegetation Management Act 1999* (VMA) in separate applications (**Table 2**). An Offset Area Compliance Memo has been produced to detail activities at the two offset sites (**Appendix B**).

Table 2: Offset site details

Offset Site	Lot/Plan	Area	Declaration Date	Declared Area Map Reference
Burnett Creek	Part 100 WD682	150.497 ha	11 March 2021	DAM2020/014072
Lyons	Part 7 S312785	250.843 ha	15 March 2021	DAM2021/000101
		2.163 ha	29 July 2021	DAM2021/002344

Rehabilitation Activities

Site assessments of rehabilitation activities were conducted by two (2) Ecologists on the 6th March 2023 at Burnett Creek and 14th April 2023 at Lyons Offset Site. Both offset sites were traversed with photos and notes taken assessing the progress of rehabilitation plantings, natural regeneration, and any significant notable changes to vegetation. No habitat quality transects or GHFF foraging habitat assessments were not conducted during this reporting period as it is not required to be conducted until the 5th assessment year.

As mentioned previously, natural regeneration of native species was observed throughout both properties, including areas previously impacted by bushfires (**Photo Set 6**). Weed presence is still prevalent in some areas however not observed to be impeding the growth of natural regeneration noted. Several areas across the wider Burnett Offset site were observed to contain recent rehabilitation plantings, largely in-fill within remnant and regrowth vegetation (**Photo Set 7**). Observations of rehabilitation stock found them to be growing steadily with the majority remaining healthy and in good condition.

Direct and indirect surveys to detect Koala density and GHFF presence surveys will be repeated throughout the management period. The current monitoring period conducted indirect surveys with neither Koala nor GHFF observed during the March or April 2023 surveys on-site.

Photo Set 6: Natural regeneration of native species throughout the offset sites; Lyons (*Left*) and Burnet Creek (*Right*)

Photo Set 7: Rehabilitation plantings across the wider Burnett Creek Offset Site

4. EPBC Conditions and Compliance

Table 3 documents the compliance with EPBC Act conditions for the Project for the first reporting period, being the 3 March 2022 to the 2 March 2023. The compliance assessment relates to the approval conditions in force at the time of the one-year anniversary.

Table 3: Compliance Audit of EPBC 2017/8090

Condition		Is the Project compliant with this condition?	Evidence/ Comments
Part A – Conditions Specific to the action			
1	For the protection of the Koala and Grey-headed Flying-fox, the approval holder must: a. not undertake any clearing which would result in: i. the on-site conservation corridor having retained Koala habitat and Grey-headed Flying--fox foraging habitat less than 100 metres wide (perpendicular to its longer dimension) at any point other than at the tapered tip of the arm of the on-site which is marked in Attachment D as being 160 m wide; conservation corridor	**Compliant**	No clearing occurred within the on-site conservation area during this reporting period. Refer to **Plan 1** which shows the development summary within the first and second reporting period.
	ii. the total area of retained Koala habitat and Grey-headed Flying-fox foraging habitat in the on-site conservation corridor being less than 12.96 ha; or	**Compliant**	No clearing occurred within the on-site conservation area during this reporting period. Refer to **Plan 1** which shows the development summary within first and second reporting period.
	iii. the dimensions of the on-site conservation corridor failing to meet the requirements of the Koala Referral Guidelines for the 'moderate' effectiveness of vegetation retention;	**Compliant**	No clearing occurred within the on-site conservation area during this reporting period. Refer to **Plan 1** which shows the development summary within first and second reporting period.
	b. not clear within the on-site conservation corridor other than approved minor clearing as provided for in condition 4;	**Compliant**	No clearing occurred within the on-site conservation area during this reporting period. Refer to **Plan 1** which shows

Condition		Is the Project compliant with this condition?	Evidence/ Comments
			the development summary within first and second reporting period.
	c. not construct medium impact industry adjacent to, or only separated by a road from, any edge of the on-site conservation corridor;	**Compliant**	Clearing has occurred adjacent to any edge of the on-site conservation corridor within clearing stage 2 during this reporting period (**Plan 1)**. No construction has occurred, and it is understood that a service station is planned for the location.
	d. clear less than 89.83 ha of Koala habitat and Grey-headed Flying-fox foraging habitat within the development area.	**Compliant**	A total of 64.14 ha was cleared within the approved development area by the end of this reporting period (2 March 2023). The areas cleared are comprised of Stage 1 and Stage 2 of the project. A further 24.74 ha remains to be cleared, predominantly associated with Stage 3 of the project. Refer to **Plan 1** which shows the development summary within first and second reporting period.
	e. not clear outside the development area.	**Compliant**	No clearing has occurred outside the development during this reporting period. Refer to **Plan 1** which shows the development summary within first and second reporting period.
2	For the protection of the Koala and the Grey-headed Flying-fox and to prevent deaths or injury to the Koala within, or immediately adjacent to the development area during clearing and construction, the approval holder must: a. Ensure that a fauna spotter/catcher is present during all stages of clearing and given sufficient authority to ensure that such activities do not cause injury or death of Koalas or Grey-headed Flying-foxes;	**Compliant**	A fauna spotter/catcher has been present during all stages of clearing. A review of the pre- and post-clearance reports provided for each stage of clearing identified no koalas and/or Grey-headed Flying-foxes were injured/killed during the reporting period (refer **Appendix B**).
	b. Clear in accordance with the *Nature Conservation (Koala) Conservation Plan 2017* approved under the *Nature Conservation Act 1992 (Qld)* so as to allow Koalas to safely move out of clearing areas and into connected areas of Koala	**Compliant**	All clearing has been undertaken in accordance with the *Nature Conservation (Koala) Conservation Plan 2017* to allow Koalas to safely move out of clearing areas and into connected areas of Koala habitat, including the on-site

Condition		Is the Project compliant with this condition?	Evidence/ Comments
	habitat, including but not limited to the on- site conservation corridor, and implement all provisions for sequential clearing;		conservation corridor. Additionally, sequential clearing was implemented to allow adequate time for koalas to safely move into connected areas of Koala habitat.
	c. Install temporary Koala exclusion fencing around any area of construction work, immediately after clearing and prior to the commencement of construction in that area, so as to prevent Koalas entering any area where construction is taking place. Temporary Koala exclusion fencing around any construction area must remain in place until construction activities within that fenced construction area are completed;	**Compliant**	Temporary koala exclusion fencing has been installed in each of the new vegetation clearing areas immediately following works in accordance with the Koala Fencing Strategy and will remain in place until all construction activities are completed.
	d. Implement measures to prevent domestic and feral animals from entering the development area and on-site conservation corridor during clearing and construction to minimise the risk to Koalas of predation by domestic and feral animals. Such measures must include (but are not limited to) prohibition of anyone bringing domestic animals into the development area and on-site conservation corridor;	**Compliant**	To minimise the risk to Koalas of predation by domestic and feral animals, access to the on-site conservation corridor has been restricted by the installation of temporary fencing and signage (**Photo Set 4**). Additionally, domestic animals have been prohibited from entering the development area during vegetation clearing and construction activities.
	e. Implement Local traffic management measures and ensure that the speed of all vehicles on construction roads in the development area is no greater than 40 km/h at any time (except an emergency).	**Compliant**	Speed limits within the construction areas are limited to 20 km/hr and only authorised vehicles are to be driven on site. The Vehicle Management Plan and maximum speed limits are detailed within the site induction, which every individual attending the site is required to undertake.
3	For the protection of the Koala and the Grey-headed Flying-fox and to prevent deaths or injury to the Koala within, or immediately adjacent to the development area during operation, the approval holder must: a. Prior to any clearing within the development area, submit to the Department and publish a Koala fencing strategy prepared by an independent expert to be implemented for the duration of the approval to	**Compliant**	On 25 February 2021, a Koala Fencing Strategy prepared by an independent expert to be implemented for the duration of the approval was submitted to the Department and published on the project website on 1 March 2021. The Koala Fencing Strategy was completed prior to the commencement of the action date (3 March 2021). In association with the approved variation to the clearing stage boundaries and amended Koala Fencing

Condition		Is the Project compliant with this condition?	Evidence/ Comments
	guide the approval holder in achieving the outcomes required under condition 3b.		Strategy was prepared to align the fencing to the new stage boundaries. The amended strategy was published on project website.
	b. Achieve the following outcomes: i. Within 6 months of the date of this approval decision, prohibit any vehicles or unleashed domestic pets entering the onsite conservation corridor;	**Compliant**	Access to the on-site conservation corridor has been restricted by the installation of temporary fencing and signage (**Photo Set 5**). Additionally, domestic animals have been prohibited from entering the development area during vegetation clearing and construction activities.
	ii. Prior to commencing clearing in the third stage of development, enable safe movement of Koala between adjacent Koala habitat and the on-site conservation corridor;	**Not Applicable**	No clearing occurred within the third stage of the development within this reporting period.
	iii. Prior to the installation of safe fauna movement solutions, no Koalas killed or injured while crossing or attempting to cross Green Road from the development area; and	**Compliant**	No records of koala mortality or injury crossing Green Road from the development area were recorded during the reporting period.
	iv. Following the installation of safe fauna movement solutions, any wildlife attempting to cross Green Road from the development area are prevented from crossing except by use of a safe fauna movement solution located where shown on Attachment D.	**Not Applicable**	Safe fauna movement solution on Green Road have not been installed.
	v. Within 3 months of completion of all clearing, prohibit feral animal access into the onsite conservation corridor.	**Not Applicable**	Clearing within the development area is not complete.
	vi. Within 3 months of completion of all clearing, prevent access of Koalas into the development area from the onsite conservation corridor.	**Not Applicable**	Clearing within the development area is not complete.

Condition		Is the Project compliant with this condition?	Evidence/ Comments
	c. Prior to commencing the third stage of clearing, submit for approval by the Minister a Koala sensitive road design plan. The Koala sensitive road design plan must detail the type and location of safe fauna movement solutions, traffic calming features and Koala awareness signage along roads adjacent to the onsite conservation corridor, along with justification for why this is sufficient to prevent koala death or injury from vehicle strike and to maintain habitat connectivity and wildlife movement opportunities along the Logan Council Biodiversity Corridor. The Koala sensitive road design plan must provide measures sufficient to prevent any Koala death or injury within the development area and along Green Road. The approval holder must not commence the third stage of clearing until the Koala sensitive road design plan has been approved by the Minister in writing. The approval holder must implement the approved Koala sensitive road design plan.	**Not Applicable**	No clearing occurred within the third stage of the development within this reporting period.
On-site conservation corridor			
4	For the protection and safe movement of the Koala within and around the on-site conservation corridor the approval holder must: a. Construct roads flanking the on-site conservation corridor consistent with road design guidelines, and,	**Not Applicable**	Roads flanking the on-site conservation corridor have not been constructed.
	b. Limit vehicle speeds of any road in the development area which is adjacent to an on-site conservation corridor or safe fauna movement solution to 40 km/h for the duration of the approval;	**Not Applicable**	Roads adjacent the on-site conservation corridor have not been constructed.
	c. Only undertake approved minor clearing within the on-site conservation corridor;	**Not Applicable**	No clearing was undertaken in the on-site conservation corridor during this reporting period.

Condition		Is the Project compliant with this condition?	Evidence/ Comments
	d. By the end of year 1, complete restoration works within the on-site conservation corridor;	**Non-compliant (resolved 20 May 2022)**	Restoration works commencement within the on-site conservation area during this reporting period, including removal of domestic waste and the preparation of historical vehicle access tracks for revegetation (**Photo Set 5**). The proponent engaged a landscape and bush regeneration consultant and restoration was completed on 20 May 2022
	e. Within 3 months of completing clearing within the third stage of development, complete rehabilitation works within the on-site conservation corridor; and	**Not Applicable**	No clearing occurred within the third stage of the development within this reporting period.
	f. Manage the on-site conservation corridor to ensure the outcomes required under condition 4d and 4e are maintained for the period of effect of the approval.	**Not Applicable**	Outcomes required under Conditions 4d and 4e have not be achieved.
Environmental Offset Requirements			
5	To compensate for the clearing of up to 89.83 ha and the functional loss of 28.01 ha of Koala habitat and Grey-headed Flying-fox foraging habitat, the approval holder must: a. Legally secure at least 151.3 ha of land at the Burnett Creek Offset site and at least 250.4 ha of land at the Lyons Offset site and commence Offset site management activities prior to undertaking any clearing at the development area.	**Previous reporting period** **Non-compliant (resolved 29 July 2021)**	The offset sites were legally secured via voluntary declaration under the *Nature Conservation Act 1992* (Qld). The offset area legally secured at the Burnett Creek offset site is 150.497 ha and was formally declared on 11 March 2021 (DAM2020/014072). The shortfall at Burnett Creek Offset Site was gained at the Lyons Offset Site through two applications. One comprising of 250.843 ha which was declared on 15 March 2021 (DAM/000101) and another application of 2.163 ha declared on the 29 July 2021 (DAM2021/002344). The process to legally secure the offset sites via voluntary declarations commenced prior to the commencement of

Condition	Is the Project compliant with this condition?	Evidence/ Comments
		the action, however the offset sites had not been formally legally secured prior to the official commencement of the action. The impact on MNES as a result of this non-compliance is minimal as the delay from commencement of the action to declaration date was only 5 and 7 business days, respectively. No activities were undertaken at either offset site that reduced the quality of the offset for Koala or Grey-headed Flying-fox during the period between the commencement of the action and the declaration of the offset sites. This administrative non-compliance is considered to be resolved with the declaration of the offset sites.
b. Within 20 business days of legally securing at least 151.3 ha of land at the Burnett Creek Offset site, and at least 250.4 ha of land at the Lyons Offset site, provide the Department with written evidence demonstrating that the Burnett Creek Offset site and Lyons Offset site have been legally secured (e.g. legal security documentation), shapefiles and the offset attributes.	**Previous reporting period** **Non-compliant (resolved 1 April 2022)**	Evidence of the two (2) original declarations (DAM2020/014072 and DAM/000101) were provided to the Department on 24 March 2021 within 20 business days of legally securing the land at both Burnett Creek and Lyons offset sites in accordance with Condition 5b. The declaration of each offset site area provided in in the ACR for year 1. Shapefiles confirming the offset site areas were issued with the Offset Management Framework on 1 April 2022, in accordance with Condition 8b. The Offset Management Framework was approved by the Department on the 2 May 2022.
c. Legally limit uses and permissible activities at Burnett Creek Offset site and Lyons Offset site such that the quality of Koala habitat and Grey-Headed Flying-fox foraging habitat at the Burnett Creek Offset site and Lyons Offset site cannot lawfully be reduced.	**Compliant**	Uses and permissible activities at Burnett Creek Offset Site and Lyons Offset Site have been legally limited through voluntary declaration under the *Nature Conservation Act 1992* (Qld).
Baseline Survey information		

Condition		Is the Project compliant with this condition?	Evidence/ Comments
6	Within 6 months from the date of this approval, the approval holder must complete baseline surveys of the Burnett Creek Offset site and the Lyons Offset site. The baseline surveys must be conducted by a Suitably qualified field ecologist in accordance with a scientifically valid, robust, and repeatable methodology, and include the following: a. The vegetation condition attributes for each Regional Ecosystem, specifying the baseline habitat quality assessment data for each operational management unit, as applied in the preliminary documentation; b. The number and condition of winter or spring flowering Grey-headed Flying-fox foraging species across the Burnett Creek Offset site and Lyons Offset site; c. The Species Stocking Rate for the Koala and the Grey-headed Flying-fox; d. The extent of weed cover; e. The number of non-native predators in each season, including in areas adjacent to the Burnett Creek Offset site and Lyons Offset site; f. The number of Koala mortalities attributable to non-native predators; and g. The baseline conditions in respect of each of the outcomes specified in conditions 9-11.	**Compliant**	Baseline Surveys were conducted between April and May 2021, within 6 months of the Approval and addressed each of the items outlined in Condition 6 and specified in Conditions 9-11.
7	For the protection of the Koala and the Grey-headed Flying-fox, the approval holder must exclude all livestock from both the Burnett Creek Offset site and Lyons Offset site prior to any clearing in the development area, and maintain this for the period of effect of the approval.	**Compliant**	The Burnett Creek offset site and Lyons offset site are not used for grazing or agricultural activities. The Offset provider, EnviroCaptial, has commenced maintenance of fences to ensure cattle cannot access the offset sites.
8	Within one month of the completion of baseline surveys at Burnett Creek Offset site and Lyons Offset site, the approval holder must: a. Publish all survey data (including survey methodology and dates) from the baseline surveys required under condition 6	**Previous reporting period** **Non-compliant (resolved 2 February 2022)**	The last survey conducted for the Burnett Creek and Lyons Offset Sites was conducted on the 27 May 2021. A separate report was completed for each of the offset sites, and both were published on the website. The Burnett Creek Baseline Survey Report was published on the

Condition		Is the Project compliant with this condition?	Evidence/ Comments
			website on 6 August 2021 and the Lyons Baseline Survey Report was published on the website on 2 February 2022. Neither of the reports were published within one (1) month of completing the baseline surveys. However, a significant amount of data and information was provided in the reports. The one (1) month timeframe is a very short period to provide such a comprehensive technical report, especially for two (2) large offset areas. These reports will remain on the website for the duration of the project. This non-compliance has been resolved and the condition is considered to be satisfied.
	b. Submit an Offset Monitoring and Reporting framework prepared by a Suitably qualified field ecologist for approval by the Minister. The Offset Monitoring and Reporting framework must include (but is not limited to):	**Previous reporting period** **Non-compliant (resolved 1 April 2022)**	Preparation of the Offset Management Framework (OMF) commenced during this reporting period following publication of the two (2) Baseline Survey Reports. The OMF was submitted to the Department for approval on 1 April 2022 and approved by the Department on 2 May 2022 (outside of this reporting period). The OMF was also required to be completed within one (1) month of completing the baseline surveys. The OMF could not be completed prior to the completion of the Baseline Survey Reports. As noted above within condition 8a, a significant amount of data and information had to be provided in the Baseline Survey Reports delaying publication. Preparation of the OMF commenced following the publication of the Baseline Survey Reports. One (1) month to prepare Baseline Survey Reports and an

Condition		Is the Project compliant with this condition?	Evidence/ Comments
			OMF for two (2) large offset areas is not considered sufficient time to prepare adequate documents. This non-compliance has been resolved and the condition is considered to be satisfied.
	i. the ecological outcomes specified in conditions 9-11 (including key milestones and baseline survey results);	**Compliant**	The OMF version B, dated 22 April 2022, was approved by the Department on 2 May 2022 (outside of this reporting period) after achieving all requirements specified under condition 8b
	ii. management measures proposed to achieve the ecological outcomes specified in conditions 9-11.	**Compliant**	
	iii. for each management action and monitoring outcome, detail how and when performance will be quantified, measured and monitored;	**Compliant**	
	iv. detail contingency measures to be implemented if some or all of the specified milestones in conditions 9-11 are not achieved.	**Compliant**	
	c. The approval holder must publish the approved Offset Monitoring and Reporting framework on the website within 20 business days of approval by the Minister.	**Compliant**	The OMF was published on the project website on 5 May 2022, 3 business days following approval by the Department.
Offset site pest and weed management			
9	The approval holder must apply relevant Offset site management activities at both the Burnett Creek Offset site and Lyons Offset site to: a. Relative to baseline survey results, achieve a 95% reduction in the numbers of non-native predators by the end of year 5; and	**Not Applicable**	An Offset Areas Compliance Report is attached as **Appendix B** to this ACR. The Offset Areas Compliance Report provides details of the offset site and management activities. No large scale management activities have

Condition		Is the Project compliant with this condition?	Evidence/ Comments
	b. Reduce the extent of weed cover to less than 20% of baseline survey results by the end of year 5; and to less than 5% of baseline survey results by the end of year 10.	**Not Applicable**	taken place on the offset sites but natural regeneration of Eucalypt trees was observed and no deterioration of the habitat in general terms was recorded.
Burnett Creek Offset Site			
10	The approval holder must apply assisted natural regeneration to achieve the following outcomes in all operational management units at the Burnett Creek Offset site: a. Average recruitment of woody perennial species in the ecologically dominant layer greater than 50% of the benchmark for relevant Regional Ecosystems present by the end of year 5 and to an average greater than 75% of the benchmark for relevant Regional Ecosystems present by the end of year 15.	**Not Applicable**	An Offset Areas Compliance Report is attached as **Appendix B** to this ACR. The Offset Areas Compliance Report provides details of the offset site and management activities. No large scale management activities have taken place on the offset sites but natural regeneration of Eucalypt trees was observed and no deterioration of the habitat in general terms was recorded.
	b. Average native tree species richness must be >50% of the benchmark for relevant Regional Ecosystems present by the end of year 5 and be >90% of the benchmark for relevant Regional Ecosystems present by the end of year 15.	**Not Applicable**	
	c. Average tree canopy cover must be greater than 30% of the benchmark for relevant Regional Ecosystems present by the end of year 5 and increase to between 50% and 200% of the benchmark for relevant Regional Ecosystems by the end of year 15.	**Not Applicable**	
	d. The number of large trees must be greater than 30% of the benchmark for relevant Regional Ecosystems present by the end of year 5, and between 50% and 100% of the benchmark for relevant Regional Ecosystems present by the end of year 15.	**Not Applicable**	

Condition		Is the Project compliant with this condition?	Evidence/ Comments
	e. An increase in Koala density above average Koala density by the end of year 15.	**Not Applicable**	
	f. An average of at least 6 different winter or spring flowering Grey-headed Flying-fox foraging species present in each assessment plot by the end of year 15.	**Not Applicable**	
Lyons Offset Site			
11	The approval holder must apply assisted natural regeneration to achieve the following outcomes in all operational management units at the Lyons Offset site: a. Average recruitment of woody perennial species in the ecologically dominant layer greater than 50% of the benchmark for relevant Regional Ecosystems present by the end of year 5 and to an average greater than 75% of the benchmark for relevant Regional Ecosystems present by the end of year 15.	**Not Applicable**	An Offset Areas Compliance Report is attached as **Appendix B** to this ACR. The Offset Areas Compliance Report provides details of the offset site and management activities. No large scale management activities have taken place on the offset sites but natural regeneration of Eucalypt trees was observed and no deterioration of the habitat in general terms was recorded.
	b. Average native tree species richness must be greater than 90% of the benchmark for relevant Regional Ecosystems by the end of year 10.	**Not Applicable**	
	c. Average tree canopy cover must be between 50% and 200% of the benchmark for relevant Regional Ecosystems by year 10.	**Not Applicable**	
	d. The number of large trees must be greater than 25% of the benchmark for relevant Regional Ecosystems present by the end of year 10, and between 50% and 100% of the benchmark for relevant Regional Ecosystems present by the end of year 15.	**Not Applicable**	

Condition		Is the Project compliant with this condition?	Evidence/ Comments
	e. An increase in Koala density above in average Koala density by the end of year 15.	**Not Applicable**	
	f. An average of at least 6 different winter or spring flowering Grey-headed Flying-fox foraging species present in each assessment plot by the end of year 15.	**Not Applicable**	
12	The approval holder must maintain each environmental outcome specified under conditions 9, 10 and 11 from the time that it is first achieved, for the remainder of the period of effect of the approval.	**Not Applicable**	Environmental outcomes and key milestones have not been achieved.
13	For each of the Burnett Creek Offset site and Lyons Offset site, the approval holder must engage a Suitably qualified independent expert to undertake an assessment at the end of each of year 5, year 10, year 15, and year 20 as to whether each outcome required under conditions 9, 10 and 11 has been, or is likely to be, achieved in accordance with the condition requirements, and provide advice of any circumstance/s which they consider is/are affecting the achievement of each outcome. The findings of each assessment must be documented and published within 3 months of the end of the particular period in which the assessment is undertaken and be provided to the Department within 5 business days of being published.	**Not Applicable**	The reporting period covers the second 12 month anniversary of commencement of the action. A Suitably qualified independent expert will be engaged to undertake an assessment at the end of each of year 5, year 10, year 15, and year 20
14	If, at any time during the period of effect of the approval, the Minister is not satisfied that any of the requirements and/or outcomes under the conditions of approval, including (but not limited to) conditions 9, 10 and 11, have been or are likely to be achieved or maintained, the Minister may require the approval holder to submit a corrective action plan for the Burnett Creek Offset site and/or Lyons Offset site for the Minister's approval, or to monitor, manage, avoid, mitigate, offset, record and/or report on, impacts to the Koala and/or the Grey-headed Flying-fox. a. The Minister may set a timeframe in which the corrective action plan must be submitted and suitable for approval, may require that the corrective action plan be prepared and/or reviewed by a suitably qualified independent expert and may specify consequences for the approval holder	**Not applicable**	A request for a corrective action plan was not made by the Minister during this reporting period.

Condition		Is the Project compliant with this condition?	Evidence/ Comments
	if the corrective action plan is not suitable for approval within the specified timeframe.		
	a. The approval holder must implement the corrective action plan approved by the Minister in writing.	**Not applicable**	
Part B – Standard administrative conditions			
Notification of date of commencement of the action			
15	The approval holder must notify the Department in writing of the date of the commencement of the action within 10 business days after the date of the commencement of the action.	**Previous reporting period** **Non-compliant (resolved 2021)**	Notification of the commencement of the action was provided to the department on the 3 March 2021. It is apparent that prior to this date clearing had occurred in the referral area. A clearing contractor from a neighbouring development mistakenly cleared a portion of vegetation in the southeast of the site. This clearing, although not authorised by the proponent, technically, commenced the action. No other works or clearing occurred within the referral area until after the 3rd of March. We understand that the department has discussed this matter with the proponent, and it has been resolved. Details of this non-compliance ae provided in **Section 5**.
16	If the commencement of the action does not occur within 5 years from the date of this approval, then the approval holder must not commence the action within the prior written agreement of the Minister.	**Not Applicable**	The approval was granted on the 23 November 2020 and the action commenced on the 3 March 2021.
Compliance records			
17	The approval holder must maintain accordance and complete compliance records.	**Compliant**	All records substantiating all activities associated with or relevant to the conditions of approval are maintained by the Proponent. If required by the Minister, these records

Condition		Is the Project compliant with this condition?	Evidence/ Comments
			can be made available to allow a third-party audit of the Project.
18	If the Department makes a request in writing, the approval holder must be provided 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 an independent auditor in accordance with section 485 of the EPBC Act, and or used to verify compliance with the conditions. Summaries of the results of an audit may be published on the Department's website or through general media.	**Not applicable**	A request for an independent audit of the Project was not made by the Minister during the reporting period.
Annual compliance reporting			
19	The approval holder must prepare a compliance report for each 12 month period following the date of commencement of the action, or as otherwise agreed to in writing by the Minister. The approval holder must: a. Publish each compliance report on the website within 60 business days following the relevant 12 month period; b. Notify the Department by email that a compliance report has been published on the website within five business days of the date of publication.; c. Keep all compliance reports publicly available on the website until this approval expires; d. Exclude or redact sensitive ecological data from compliance reports published on the website; and e. Where any sensitive ecological data has been excluded from the version published, submit the full compliance report to the Department within 5 business days of publication. Note: Compliance reports may be published on the Department's website.	**Compliant (ongoing)**	This ACR demonstrates compliance with Condition 19. The ACR will be published on the Project website within 60 business days of 24 months following commencement of the action (i.e. no later than 31 May 2023) and remain on the project website for the life of the approval.
Reporting non-compliance			

Condition		Is the Project compliant with this condition?	Evidence/ Comments
20	The approval holder must notify the Department in writing of any: incident, non-compliance with the conditions; or non-compliance with the commitments made in plans. The notification must be given as soon as practicable, and no later than two business days after becoming aware of the incident or non-compliance. The notification must specify: a. the condition which is or may be in breach; and b. a short description of the incident and / or non-compliance; and c. The location (including co-ordinates), date, and time of the incident and/or non-compliance. In the event the exact information cannot be provided, provide the best information available.	**Previous reporting period** **Non-Compliant (resolved)**	Non-compliances have occurred with the following conditions: - Condition 2c (installation of temporary koala exclusion fencing) - Condition 4d (complete restoration works within on-site conservation corridor) - Condition 5a & 5b (secure offset sites prior to commencing the action) - Condition 8a & 8b (publication of baseline survey results & offset management framework) - Condition 15 (notification of commencement) SHG became aware of aforementioned non-compliances on the 23 March 2022 and while preparing this ACR. In accordance with Condition 20, the Department was notified in writing of the non-compliant conditions within two business days, in an email sent by SHG on the 23 March 2022. The non-compliance of the notification of the commencement of the action was not reported to the department in the timeframes set out in condition 20. Details of non-compliances are included in the previous ACR.
21	The approval holder must provide to the Department of the details of any incident or non-compliance with the conditions or commitments made in plans as soon as practical and no later than 10 business days after becoming aware of the incident or noncompliance, specifying:	**Previous reporting period**	As stated in Condition 20, non-compliances occurred in relation to Condition 2c, Condition 4d, Condition 5a & 5b, Condition 8a & 8b and Condition 15.

Condition		Is the Project compliant with this condition?	Evidence/ Comments
	a. Any corrective action or investigation which the approval holder has already taken or intends to take in the immediate future; b. The potential impacts of the incident or non-compliance; and c. The method and timing of any remedial action that will be undertaken by the approval holder.	**Non-compliant**	SHG became aware of these non-compliances as part of preparing this ACR on 23 March 2022. In accordance with Condition 20, the Department was notified in writing of the non-compliant conditions within two business days, in an email sent by SHG on the 23 March 2022. On 4 April 2022, SHG provided further details of non-compliances and corrective actions undertaken or to be undertaken to resolve the non-compliances. This was 8 business days. Details of non-compliances are included in **Section 5** of the Year 1 ACR for this project.
Independent audit			
22	The approval holder must ensure that independent audits of compliance with the conditions are conducted as requested in writing by the Minister.	**Not applicable**	A request for an independent audit of the Project was not made by the Minister during the reporting period.
23	For each independent audit, the approval holder must: a. Provide the name and qualifications of the independent auditor and draft audit criteria to the Department; b. Only commence the independent audit once the audit criteria have been approved in writing by the Department; and c. Submit and audit report to the Department within the timeframe specified in the approved audit criteria.	**Not applicable**	
24	The approval holder must publish the audit report on the website within 10 business days of receiving the Department's approval for the audit report and keep the audit report published on the website until the end date of this approval.	**Not applicable**	
Submission and publication of plans			
25	The approval holder must: a. submit plans electronically to the Department;	**Compliant**	The Koala Fencing Strategy and Offset Management Framework have been published on the project website

Condition		Is the Project compliant with this condition?	Evidence/ Comments
	b. unless otherwise agreed to in writing by the Minister, publish each plan within 20 business days of the date: i. of this approval, if the version of the plan to be implemented is specified in these conditions; or ii. that the plan is submitted to the Minister or the Department if the plan does not require the approval of the Minister but was not finalised before the date of this approval; or iii. that the plan was approved by the Minister in writing, if the plan requires the approval of the Minister; c. exclude or redact sensitive ecological data from plans that are to be published or provided to a member of the public; and d. keep plans published for the period for which this approval has effect.		in accordance with relevant approval conditions. These plans will remain published for the duration of the project.
Completion of the action			
30	Within 30 days after the completion of the action, the approval holder must notify the Department in writing and provide a completion date.	**Not applicable**	Noted. The action is ongoing and this condition is not applicable at this time.

5. Appendices

Appendix A

Fauna Spotter Report Regional Stormwater Detention Basin

Appendix B

Offset Area Compliance Memo

Appendix A

Fauna Spotter Report: Regional Stormwater Detention Basin

182-SCC2209-D

FAUNA PRE-CLEARANCE REPORT

GREEN RD HERITAGE PARK QUEENSLAND

Prepared for client:

SHADFORTH CIVIL CONTRACTORS

Dates on site:

SEPTEMBER 2022

AWEC ENVIRONMENTAL CONSULTANTS

Document Prepared by:

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Revision History

Rev. #	Issue Date	Revision Details	Prepared By	Reviewed By	Approved By
0	SEP 22	For Use	Erin Monaghan	Yolande Venter	Yolande Venter
1					
2					

Document Approval

Approved:	Name:	Signature:	Date:
Company Director	Yolande Venter		SEP 22

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1 INTRODUCTION

1.1 Background

Australia Wide Environmental Consultants (AWEC) were commissioned by Shadforth Civil Contractors to conduct a fauna pre-clearance survey for the continued development at Green Rd, Heritage Park.

1.2 Ecologist and Qualifications

The AWEC nominated Ecologist is Yolande Venter who is a degree qualified ecologist/environmental coordinator with over 15 years of field experience within the ecology and environmental sectors.

1.3 Scope

A. See TABLE 1 for a non-exhaustive list of the statutory requirements and guidelines this project adheres to.
B. A desktop review of the site's potential ecological value and any planning constraints.
C. A site inspection which included ground truthing the desktop review findings and a fauna survey.
D. Management measures to control the risk to native fauna during these works.

2 STATUTORY REQUIREMENTS AND GUIDELINES

See TABLE 1 below for the relevant statutory requirements and guidelines.

TABLE 1– STATUTORY REQUIREMENTS AND GUIDELINES

Legislation	Purpose of Legislation	Impact on Project personnel
Environmental Protection Regulation 2019	Gives legislative support to various national guidelines, plans and Australian Standards. This regulation also outlines requirements for the management of fauna and flora.	To abide by the regulations within the DES.
Environmental Protection and Biodiversity Conservation Act 1999	The EPBC Act 1999 focuses Australian Government interests on the protection of matters of national environmental significance, with the states and territories having responsibility for matters of state and local significance.	To comply with the relevant sections of the Act that relate to matters of national significance which are present in the vicinity of the project works.
Nature Conservation and Other Legislation Amendment Act 2016	The Act provides for the legislative protection of Queensland's threatended biota. It is aligned with the IUCN redlist which categorises biota into their current status in the wild.	To comply with the relevant sections of the Act and regulations and the Environmental Authority administered by the DES.
Nature Conservation (Wildlife) Regulation 2006	This Regulation lists the plants and animals considered presumed extinct, endangered, vulnerable, rare, common, international, and prohibited. It discusses their significance and states the declared management intent and the principles to be observed in any taking and use for each group.	List those animals that may be potentially found on sites being developed as part of the project and limitations for management.
Nature Conservation (Wildlife Management) Regulation 2006	This Regulation provides for the management of wildlife (including taking, keeping and using wildlife including protected plants).	Provides guidance for the management of wildlife on site, particularly in relation to the interference with native wildlife during the clearing process.
Nature Conservation and Other Legislation (Koala Protection) Amendment Regulation 2020	Guideline for identifying and managing Koala habitat	Provides guidance on where Koala spotter/ Endorsed FSC are legally required and how they are to manage Koala habitat.

Legislation	Purpose of Legislation	Impact on Project personnel
Animal Care and Protection Act 2001	Animal Welfare	Outlines that animal ethics approval is needed for research, survey and/or monitoring involving vertebrates, where activities such as trapping, census leading to disturbance of animals (such as spotlighting or call play-back), abnormal interruption of behaviour or marking/tagging are involved.
Australian code for the care and use of animals for scientific purposes 8th edition (2013)	Ethical framwork for animals used for scientific purposes	Governing principles set out in the Code provide guidance for investigators, teachers, institiutions, animal ethics committees and all the people involved in the care and use of animals for scientific purposes.
Terrestrial Vertebrate Fauna Survey Guidelines for Queensland (2018)	Guidelines for Fauna Surveys	Detailed guidelines on designing a survey, the different survey methadologies and the ethical considerations that need to be made for each methadology.
Queensland Hygiene protocol for handling amphibians	Protocol for handling amphibian species	Outlines how to handle and manage amphibian species to prevent the spread of diseases among specimens and colonies.
Code of Practice- Care and rehabilitation of orphaned, sick or injured protected animals by wildlife carers(2013)	Provides guidelines on the rehabilitation and care of wildlife	Detailed guidelines, in regards to hygiene, housing, capture and release, euthanasia and relevant legistation
Seqwater- Guideline- Fish Stranding and Salvage	The purpose of this guidance document is to ensure native fish recovery operations are conducted in a timely and safe manner to minimise or eliminate loss of fish from stranding.	Guideline on managing aquatic fauna during dewatering works.

Legislation	Purpose of Legislation	Impact on Project personnel
Fisheries Act 1994	The main purpose of the *Fisheries Act 1994* is to provide for the use, conservation and enhancement of the community's fisheries resources and fish habitats in a way that seeks to apply the principles of ecologically sustainable development.	Outlines fish habitats and fish movement and migration (regulation of waterway barriers). Guidelines on commercial, recreational and indigenous fishing.
Biosecurity Act 2014	The *Biosecurity Act 2014* provides a framework for an effective biosecurity system for Queensland, to ensure the safety and quality of agricultural inputs, and to align responses to biosecurity risks in the state with national and international obligations.	Under the *Biosecurity Act 2014*, pest species must not be kept, fed, given away, sold, or released into the environment without a permit. Under the *Biosecurity Act 2014*, everyone has a general biosecurity obligation (GBO) to take reasonable and practical steps to minimise the risks associated with restricted plants and animals.
DAF Guidelines for Fish Salvage, 2018	Purpose of these guidelines is to minimise the risk to aquatic fauna during dewatering works.	These guidelines provide detailed instructions for dewatering waterbodies and slavaging aquatic fauna.

Australia Wide Environmental Consultants (AWEC) holds a current DES rehabilitation permit (**Permit #WA0027769**), with an extended authority issued by the Department of Environment and Science specifying that the holder may take, keep, or use an animal whose habitat is about to be destroyed by human activity.

3 METHODOLOGY

3.1 Desktop Review

Prior to commencing the survey, all previous surveys and management plans related to the site were reviewed, as well as extensive desktop research of the intended site.

The results of the desktop review allow the survey to be designed to target the significant species most likely to be encountered within the proposed survey location. Benefits of the desktop review prior to commencing the survey included: Increased knowledge of the site by understanding;

- The overall habitat value,
- Range of habitat features,
- Floral structural complexity,
- Available water and food sources.

3.1.1 Regulated Vegetation Management

Land clearing in Queensland is regulated under the *Land Act 1994* and the vegetation management framework. To ensure this site will not have detrimental environmental impacts to the local biodiversity appropriate vegetation mapping was downloaded from Queensland Spatial Catalogue (The State of Queensland (Department of Resources) 2021) for viewing in ArcGIS. Vegetation management regional ecosystem map – version 12 (The State of Queensland (Department of Resources) 2021) was used to establish the Regional Ecosystems (RE's) on site.

3.1.2 Koala Habitat Planning and Management

Nature Conservation and Other Legislation (Koala Protection) Amendment Regulation 2020 is an overarching state planning instrument that regulates new development at the development assessment stage. The new Koala planning framework is based upon scientifically based, consistent Koala habitat mapping. The framework applies consistently across SEQ and establishes where clearing may be prohibited, where it is assessable by the State, where Koala conservation outcomes will be considered by local governments and what exemptions may apply.

Southeast Queensland Koala Conservation Strategy 2019-2024 data package (Department of Environment and Science 2021) was utilised to discover the vegetation status relevant to Koala's on site.

3.1.3 Significant Fauna Species List

A species list was collated by a suitably qualified ecologist, sourced from the Queensland Government WildNet Database (2021). This established the significant species with confirmed sighting records since 1980, within a 2 km radius of the central coordinates of the site.

3.2 Survey Planning

The survey methodology considered the following aspects:

- Size of the survey site
- Timeframes
- Access
- Workplace Health & Safety
- EVNT Native species confirmed- terrestrial/ arboreal
- Feral species
- Complexity of potential breeding places
- Marking of potential habitat features.

The methodology used for this survey was the active diurnal search methodology incorporating a meandered pattern. This method was suitable for the large survey area with complex habitat and time constraints.

The main objective of this survey was to locate any active or potential native fauna breeding places and high value habitat features. The extent was surveyed by a suitably qualified person.

The number of meanders completed depended on the vegetation community and the number of habitat features present within the site. During the survey, photographs of unidentified scat, tracks and signs were taken, researched, peer reviewed, and identified using the appropriate reference materials.

3.3 Pre-Clearance Survey

Site was surveyed by a suitably qualified ecologist on the 14th September 2022 which included ground-truthing via meandering transects.

The purpose of the survey is to record the sites overall habitat value, significant habitat features, vegetation connectivity within the site and surrounding lots, fauna signs and opportunistic fauna sightings and the site's suitability for the significant species likely to occur in the area.

A thorough aural/visual fauna survey was conducted including a systematic traverse throughout the site searching for fauna individuals and habitat features.

The following habitat features are considered significant and were recorded if observed:

- Tree hollows (branch and crown)
- Native wildlife nests (stick nests)
- Burrows (feeding burrows)
- Fallen/felled timber
- Thick groundcover
- Fissured bark
- Rocky outcrops
- Aquatic habitat

- And flora species considered Koala habitat trees under the Nature Conservation and Other Legislation (Koala Protection) Amendment Regulation 2020.

3.4 Fauna Survey Methods

The methods presented below were as part of the fauna field survey:

3.4.1 Animal Signs

Some native wildlife leave scat, tracks and scratches that can be identified and are described by Barbara Triggs (2004). These indicators should be used to provide evidence for identification without an actual physical sighting.

3.4.2 Diurnal Avian Survey

This non-intrusive active area search provides a census of the avian biodiversity and abundance within the survey site. This survey technique requires a skilled observer with relevant experience in local bird species and bird calls. Site transects are traversed slowly shortly after dawn when birds are most active. Avoid disturbing nesting birds during the survey.

3.4.3 Koala Survey

The Spot Assessment Technique was undertaken, as recommended in the EPBC Act 1999 Referral Guidelines for the Endangered Koala (DoE 2013). This technique involved faecal pellet searches of a 100 cm radius around selected trees at each Spot Assessment Technique site. The method applied was varied from that described in Phillips and Callaghan (2011), by randomly selecting the centre tree (from a randomly generated location) and searching under both potential food and shelter trees (i.e., not limited to trees of the *Eucalyptus*, *Corymbia*, *Angophora* or *Lophostemon* genera), based on evidence presented in Woosnam-Merchez *et al.* (2012).

Note: During the fauna pre-clearance survey smooth bark trees were examined for scratch marks, in the event Koala scratch marks were evident this assessment technique was conducted and data logged.

3.5 Emergency Procedures

During the trapping and construction phases it is likely that injured or sick wildlife will be encountered onsite. Local carers and veterinarians contact details should be always available. Moreover, all staff conducting trapping should be trained in the emergency first aid of native wildlife and carry the required first aid equipment to stabilise native fauna for transport and correct transportation cages. All sick and orphaned wildlife will be taken to the Australia Zoo Wildlife Hospital, 1638 Steve Irwin Way, Beerwah, (07) 5436 2097 or RSPCA Wildlife Hospital, 139 Wacol Station Road, Wacol, (07) 3426 9999.

4 RESULTS

4.1 Desktop Review

4.1.1 Regulated Vegetation Management

The extent of this site includes two REs (both remnant) Least Concern RE 12.9-10.4 and Of Concern 12.3.11 (FIGURE 1). These ecosystems are suitable habitat for koalas and may provide habitat for other threatened flora and fauna species.

TABLE 2 – REGIONAL ECOSYSTEMS

RE	VM Act Status	Short Description
12.9-10.4	Least Concern	*Eucalyptus racemosa subsp. racemosa* woodland on sedimentary rocks. Habitat for threatened plant species including *Macrozamia pauli-guilielmi* and *Acacia attenuata*. This ecosystem is known to provide suitable habitat for koalas.
12.3.11	Of Concern	*Eucalyptus tereticornis +/- Eucalyptus siderophloia, Corymbia intermedia* open forest on alluvial plains usually near coast. Potential habitat for NCA listed species: *Acronychia littoralis, Alectryon ramiflorus, Arthraxon hispidus, Cupaniopsis shirleyana, Eulophia bicallosa, Gossia gonoclada, Macrozamia lomandroides, Macrozamia pauli-guilielmi, Marsdenia coronata, Maundia triglochinoides*. This ecosystem is known to provide suitable habitat for koalas.

4.1.2 Koala Habitat Planning and Management

This area is mapped as Core Koala Habitat and is located within koala district A (FIGURE 1).

FIGURE 1 – SITE CONTEXT

4.1.3 WildNet Database

This database provided a list of only two fauna species previously recorded in the area, of which included only one threatened species, the Endangered koala (**TABLE 3**).

The likelihood of encountering this species on site is high, the area is mapped as Core Koala Habitat, multiple trees with scratch marks were observed during the field survey and a koala individual was sighted.

TABLE 3 – SIGNIFICANT SPECIES TABLE

Koala **(*Phascolarctos cinereus*)** 	NC Act 1992: ENDANGERED EPBC Act 1999: ENDANGERED Likelihood: HIGH Size: 60 – 85 cm Habitat: Open and closed forest generally dominated by *Eucalyptus*, *Corymbia*, *Angophora* or *Lophostemon* trees, usually near a watercourse. Breeding: Do not require specific location for breeding, but as they are solitary animals, they require large, connected habitat that overlaps other individuals home ranges, to encounter other sex for mating.

4.2 Survey Results

This site is dense woodland scrub, adjacent to a current job site that has been cleared, the footprint is approximately 4.12 Ha total area. Trees species included Spotted Gum, Blue Gum, Soap Tree, Tallowwood, Ironbark, Stringy Bark Melaleuca and various native shrubs and grasses (FIGURE 2). Ground cover is a mix of open dirt grass tussocks and shin high dried grass (FIGURE 3).

FIGURE 2 – TYPICAL VEGETATION

FIGURE 3 – GROUND COVER VEGETATION

Survey provided evidence of fauna breeding with a stick nest and five trees featured koala scratch marks. Other features included hollowed out arboreal termite mounds, two hollows and a creek, lined with Melaleuca and sedge (FIGURE 4).

These habitat features and fauna signs are displayed in TABLE 4 and FIGURE 6, and the ID numbers in the table correspond with the figure.

TABLE 4 – HABITAT FEATURES & FAUNA SIGNS

ID#	Feature	Longitude	Latitude
Fauna Signs			
1	Stick nest 	-27.6962681	153.0613711
3	Scratch marks	-27.6953356	153.0609515
4	Scratch marks	-27.6951423	153.0608371
5	Scratch marks 	-27.6951576	153.0608946
7	Scratch marks	-27.693078	153.0623182
8	Scratch marks	-27.6933485	153.0626424
Habitat Features			
2	Arboreal termite mound	-27.6964421	153.06057
6	Arboreal termite mound	-27.6941145	153.0611687
9	Water body	-27.6926628	153.0627896
10	Hollow-bearing tree	-27.6943189	153.0624077
11	Hollow-bearing tree	-27.6945906	153.0611308

FIGURE 4 – CREEK WITH RIPARIAN MELALEUCA AND SEDGE

Two trees with a hollow each were observed during the survey (TABLE 5). Both were medium sized hollows and neither were identified as occupied.

The fauna assemblage recorded during the survey consisted mainly of Least Concern avian species, however two snake species were observed as well as an Endangered koala (TABLE 6). The koala was sitting approximately 20 m off the ground (FIGURE 5), at the edge of the existing work site, within 50 m of heavy machinery (location can be seen on FIGURE 6).

TABLE 5 – SIGHTED FAUNA BIODIVERSITY

Common name	Scientific name	Conservation Status
Bird species		
Australian white ibis	*Threskiornis molucca*	Least Concern
Grey fantail	*Rhipidura albiscapa*	Least Concern
Laughing kookaburra	*Dacelo novaeguineae*	Least Concern
Pheasant coucal	*Centropus phasianinus*	Least Concern

Common name	Scientific name	Conservation Status
Red-backed fairy-wren	*Malurus melanocephalus*	Least Concern
Tawny frogmouth	*Podargus strigoides*	Least Concern
Torresian crow	*Corvus orru*	Least Concern
White-browed scrubwren	*Sericornis frontalis*	Least Concern
Mammal species		
Koala	*Phascolarctos cinereus*	Endangered
Reptile species		
Eastern brown snake	*Pseudonaja textilis*	Least Concern
Green tree snake	*Dendrelaphis punctulatus*	Least Concern

FIGURE 5 – KOALA ON SITE

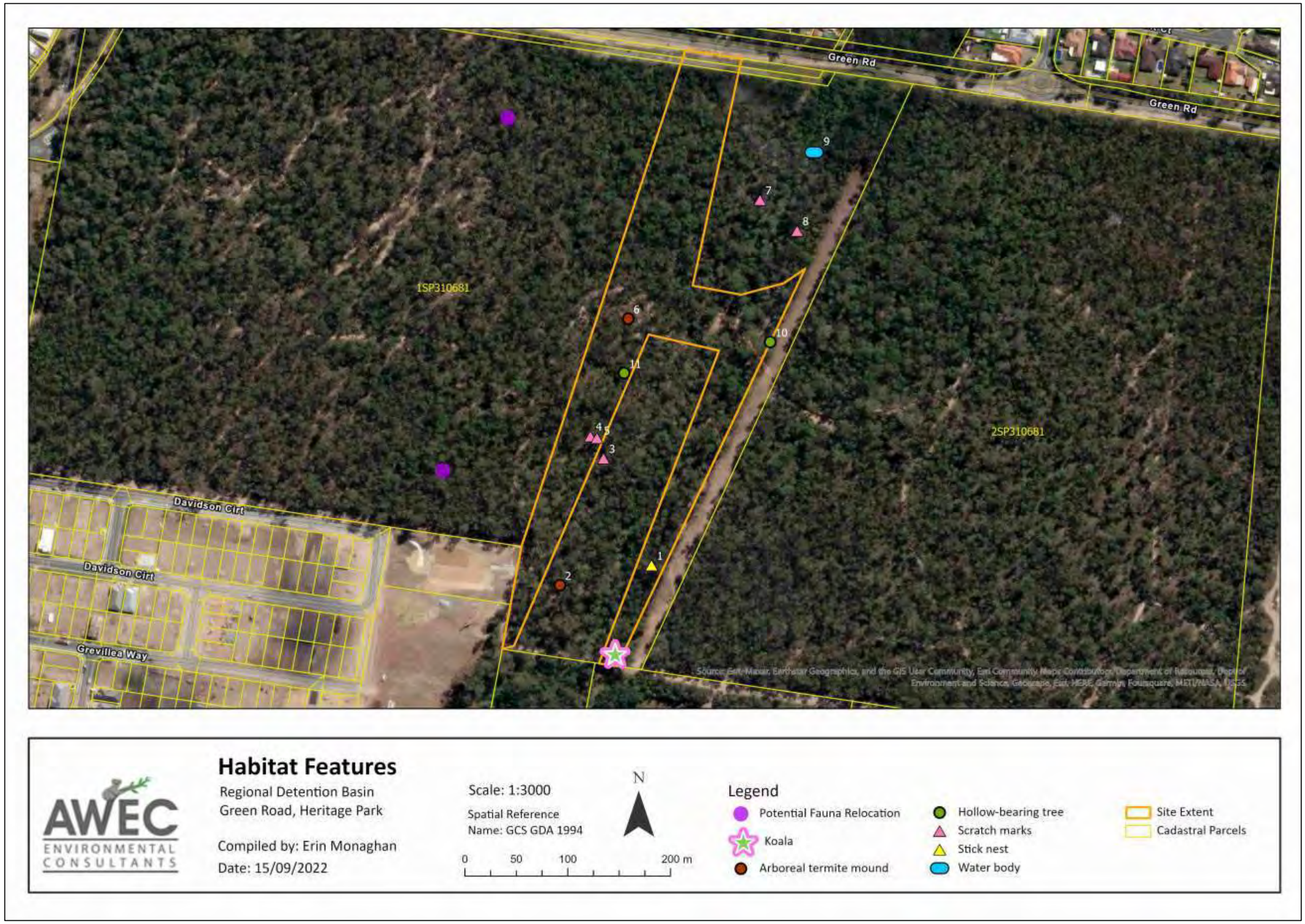

FIGURE 6– HABITAT FEATURES & FAUNA RELOCATION

5 FAUNA MANAGEMENT

The following pages are designed to be printed and taken into the field. They aim to inform on-site crew of requirements they must adhere to in order to minimise impact to fauna during this project.

Due to the presence of an Endangered koala on site, particular attention should be paid to Section 5.1.6.

5.1 Fauna Clearing Management Measures

5.1.1 Pre-clearing

Objective: Mitigate the risk to native fauna
Responsibility: Fauna Spotter Catcher (FSC)
Timing: Pre-construction

Prior to Work Commencing	✓
Ground inspection morning prior to clearing	
Mark habitat features and trees	
Inform clearing crew at pre-start meeting of marked trees, clearing process and approved requirements of FMP	
Any fauna sighted prior to clearing should be relocated	
Where koalas may be present, specific inspection should be conducted the day before, by foot and/or drone	

5.1.2 Clearing and Grubbing

Objective: Reduce risk to fauna during clearing
Responsibility: FSC & construction/clearing crew
Timing: Earthworks

During Disturbance Works	✓
FSC must be present for all clearing and grubbing to supervise and respond to fauna encounters	
FSC must hold appropriate rehabilitation permit	
FSC must conduct visual inspection of clearing area daily	
Clearing sequentially towards vegetation in two stages	
First clearing stage: non-habitat trees, cleared and stockpiled for mulching.	
Second clearing stage: habitat trees, min. 24 hours later, preferably afternoon, assessed for best method (camera, climber, EWP, drone).	
Habitat trees are to be inspected for animal inhabitants	
Occupied trees must be blocked off and fauna relocated	
Trees with unconfirmed occupancy must be soft felled to reduce fauna injury and habitat damage	
Injured animals should be either humanely euthanised or taken to local wildlife hospital or carer (See **SECTION X**).	

Clearing must occur towards vegetated areas to allow for wildlife to self-relocate into surrounding vegetation and prevent isolating fauna.

5.1.3 Fauna Capture and Release

Objective: Mitigate the risk to native fauna
Responsibility: FSC
Timing: All Phases

Where possible, sighted fauna must be captured, responsibly stored, and relocated. However, Koala's cannot be captured, handled, stored, or removed from site and must be managed in accordance with legislation (SECTION X).

Storing Fauna

1. Secure in a:
   1. Calico bag, knotted and zip tied; or,
   2. Snake bag, knotted and zip tied; or
   3. Pet carrier.
2. Place in a quiet, dark area, in an appropriate temperature for the species until able to be safely released.
3. If animal is orphaned or injured, store in a secure manner to prevent unnecessary stress or further injury.

Releasing and Relocating

Recommended relocation sites can be seen in **FIGURE 6**.

Relocation and release must consider the following:

- Suitable habitat with an adequate food and water supply.
- Appropriate weather, season, and time of day for species.
- Appropriate social group. Some animals fare better if released into social groups.
- Within 1km of the site, as per DES guidelines, in a protected location.
- If animals can be re-released on the clearing site once clearing is complete the following criteria must be followed:
  - Sufficient habitat retained to support animal's niche, considering factors such as: vulnerability to predation; availability of nesting sites, hollows or microhabitats and the availability of water and sufficient food sources.
  - Sufficient connectivity between habitat allowing for normal ecological processes such as immigration, emigration, recruitment, and dispersal.
  - Habitat blocks and corridors are of sufficient size to maintain ecological integrity and effectiveness, considering likely edge effects.
  - Long-term risk factors assessed and mitigated (E.g., risk from domestic animals, vehicles, swimming pools).

5.1.4 Injuries & Euthanasia

Sometimes euthanasia is required to end suffering of an injured animal. If this is required, it should be done promptly and humanely.

If injured animals have a reasonable chance of recovery, they should be taken to the closest vet for treatment. Any orphaned young or fauna with minor injuries (e.g., concussion) should be taken to the closest carer. Some animals for example koalas will require specialist care and the closest suitable care facility should be contacted.

Recommended Wildlife Surgery-

- RSPCA Wildlife Hospital, Wacol **1300 ANIMAL**
- Wildcare Australia Inc **(07) 5527 2444**

5.1.5 Reporting

Objective: Adhere to DES requirements
Responsibility: FSC
Timing: All Phases

Record these details for each captured animal	✓
Species	
Sex (M, F or Unknown)	
Approximate Age or Age Class (neonate, juvenile, sub-adult, adult)	
Time and date of capture	
Method of capture	
Exact point of capture (GPS coordinates)	
State of health	
Incidents associated with capture likely to affect health	
Veterinary intervention or treatments	
Time held in captivity	
Disposal method (euthanasia, translocation, re-release)	
Date and time of disposal	
Details of disposal (GPS points of release)	
For released animals, location relative to point of capture	

5.1.6 Koala Management

Objective: To protect local koala populations
Responsibility: Koala Spotter, Endorsed FSC & clearing crew
Timing: All Phases

If a Koala is observed within the site, a DES approved Koala spotter must be on site to monitor the animal until it has self-relocated off site. A DES approved Koala spotter is a person who holds a relevant tertiary qualification, and/or who is experienced (Endorsed FSC) in identification and location of Koala's in their natural habitat and has authorisation from DES.

DES approved Koala FSC must	✓
Be present at site of felling	
Identify Koala occupied trees/overlapping trees	
Advise crew of precise locations of these trees	

The *Nature Conservation and Other Legislation (Koala protection) Amendment Regulation 2020* outlines that the following measures must be undertaken to minimise, reduce or mitigate impacts to Koala's in potential koala habitat areas:

- Sequential clearing to assist fauna in relocating to nearby habitat on their own accord.
- No tree in which a Koala is present and no tree with a crown overlapping a tree with a Koala present will be disturbed.
- 50m buffer created around such tree - where works are seized until Koala has moved off on its own accord.
- Where practical, a vegetation corridor is to be left, to allow koalas to self-relocate to a suitable area not in clearing zone.
- In areas containing a dominance of koala food trees and positively identified Koala sightings and/or identified scat or scratch marks, a Koala spotter is to be present during clearing activities.
- If a Koala is not injured but refuses to move from the clearance area on its own accord after two days, the Koala spotter will liaise with DES and negotiate appropriate methods for removal and relocation.

Clearing that occurs within koala district A must follow these conditions:

- Clearing of koala habitat trees happens sequentially, and in a way to allow koalas to move on without human intervention, by:
  - Carrying out clearing in stages;
  - Ensuring not more than the following is cleared each stage:
    a) 50% of the area for clearing a site less than 6 Ha, or
    b) 3 Ha or 3% of the site (whichever is greater) for clearing a site greater than 6 Ha,
  - Ensuring between stages there is a period of **12 hours starting at 6pm ending at 6 am** where no clearing occurs.
- Clearing of koala habitat trees occurs in a way that maintains habitat links between clearing area and refuge area for koala to move to.

5.1.7 Native Beehive Relocation

Objective: To reduce project impact on local fauna
Responsibility: FSC & clearing crew
Timing: Clearing works

All native beehives of the genera *Tetragonula* (*syn Trigona*) and/or *Austroplebelia* are to be recovered during vegetation clearing works for relocation into the retained vegetation and/or recovered and "boxed up" (if damaged).

If a native beehive is located on site, its entrance is to be blocked off prior to sunrise. The extent of the beehive within the hollow is to be established using a fibre optic camera. The beehive is then to be cut out and both ends of the hive sealed off using treated wood. The beehive is then to be relocated to a suitable location and left-over night. The next morning at sunrise the entrance is to be opened.

5.1.8 Mulching Works

Objective: To reduce project impact on local fauna
Responsibility: FSC & clearing crew
Timing: Clearing works

During mulching works	✓
Identified hollows should be salvaged from trees and preserved	
Stockpiled vegetation should be inspected by FSC for fauna prior to removal.	

Stockpiled vegetation, topsoil and other materials can quickly become temporary habitat for animals displaced during the actual clearing and earthworks.

5.1.9 Earthworks and Construction Phase

Objective: To reduce project impact on local fauna
Responsibility: Construction crew
Timing: Clearing works

Construction Phase Crew Responsibilities	✓
The Contractor shall ensure that, to the extent possible, project infrastructure and auxiliary works (laydown areas, stockpile sites, site office) are constructed in a manner that does not create additional hazards for wildlife.	
A FSC is present on site for all clearing works and has informed crew of marked trees prior to clearing.	
Clearing is undertaken sequentially in 2 stages (1st stage clear non-habitat trees, 2nd stage, at least 24 hours later, clear habitat trees) in the clearing direction advised.	
Clearing of koala habitat trees follows the Koala Management Section requirements.	
To minimise impacts and conflicts between native animals, vehicular movement and access during construction, site access should be controlled via a single entry and exit point.	
Inspect open trenches, culverts and other structures prior to works being undertaken within an area to determine whether there are any trapped or injured native fauna species present and act as appropriate.	
Trenches, manholes, excavations for footings, etc. while open pose threats to native animal entrapment and should be backfilled as soon as possible. In some location's barriers may be required overnight to eliminate the accidental capture of animals moving through the site.	
Educate staff, including sub-contractors, in relation to the risk of fauna injury and deaths and how to manage animals which are displaced, including threatened species.	
All native wildlife is protected (including snakes) and shall not be intentionally harmed as a result of work or workers actions.	
All native animal fatalities must be reported immediately to the Environmental Coordinator.	
Where any site staff (contractors or subcontractors) witness or locates distressed, injured, or orphaned animals they should immediately contact the FSC and Environmental Coordinator. Works within the area of the animal must cease until further instruction is provided by one of the above authorities.	
Signed:	
Date:	

5.2 Dewatering Management Measures

5.2.1 Pre-dewatering Phase

1. At a minimum, works will be conducted under the following:
   - Rehabilitation Permit by appropriately qualified ecologists.
2. Where significant waterbodies contain a high density of aquatic fauna, load reduction trapping will be conducted. A two day long trapping program will start once the dam is 40% dewatered. With a focus particularly on crustaceans and turtles, due to burrowing nature, making them difficult to find. Traps will also be used to reduce load of small fish and eels from the waterbody.
3. The morning prior to dewatering commencing; fish load will be further reduced using scoop, dip nets and seine nets.
4. Suitable release locations will be selected according to what species are caught. These locations should be selected due to their:
   - Proximity to site,
   - Access,
   - Similar aquatic values; and
   - Size.
5. It is the responsibility of the site supervisor to ensure the required erosion and sediment control measures are installed prior to dewatering works commencing.

5.2.2 Water Quality during Dewatering

1. Water quality testing will be done twice daily throughout the dewatering process, to monitor the water quality for things such as: declines in oxygen saturation levels that may have a detrimental impact on the aquatic occupants of the waterbody.
2. Acid sulphate soils may be exposed during the dewatering process and could have a significant impact on the water quality of the waterbody.
3. If the water does not meet the required standard to be released, dewatering works should be suspended until the water has been treated and meet the standard for release.
4. Acid Sulphate soils should be managed according to the State Planning Policy 2/02, Planning and Managing Development Involving Acid Sulphate Soils, State Planning Policy 2/02 Guideline, Acid Sulphate Soils and Queensland Acid Sulphate Soil Technical Manual, Soil Management Guidelines.

5.2.3 Water Removal

Responsibility: Site Supervisor

	✓
To remove the last of the water out of the dam a few sumps will be dug out within the waterbody and the pumps (**with fish shields**) will be placed into these sumps. This will reduce the risk of fish being left in isolated ponds that are hard to reach and it will also make it easier to relocate the last few fish when all the water is almost drained.	
The water level will then be reduced by increments of 25%, this will allow as many fish as possible to be removed. If the water level drops too fast there will not be enough water or oxygen to support all the fauna within the waterbody.	

5.2.4 Aquatic Fauna Management Measures

Responsibility: Environmental Contractor

	✓
All fish are to be removed, stored, and released as quickly as possible. Animals will be transported within large, aerated tubs. Storage containers are to be filled with water from the waterbody that the fish were captured out of and are to be sized appropriately to allow for fish to swim comfortably in an upright position. Containers are also to be soft with rounded edges and have a lid to provide a darkened environment for captured fauna. Overcrowding is to be avoided, with approximately 0.2kg of fish per litre of water is considered appropriate. Water conditions within the containers are to be monitored continuously and the water should be changed hourly to ensure appropriate levels of oxygen are maintained.	
Fish are to be released carefully, with the container placed in the water to allow fish to swim away. All fish are to be handled using wet hands or a wet towel and Shimano enviro nets will be used which minimises the risk of removing any of the fish's protective mucus coating and reduces the possibility of split fins or any damage to their eyes. See for potential release sites of aquatic fauna.	
Only native species are to be relocated, any pest or exotic species captured will be humanely euthanised. Where prohibited or restricted invasive animals or noxious fish listed under the Biosecurity Act 2014 are captured, these will be euthanised. Methods used will be in accordance with relevant authority guidelines and the ANZCCART's Euthanasia of Animals Used for Scientific Purposes (2001).	
Exotic or pest plant species will be disposed of appropriately to avoid the spread of weeds into waterways.	
To further reduce the risk of fatalities in the final dewatering stage due to low levels of dissolved oxygen, there will be several suitably qualified staff on site to ensure that the fish are relocated as fast as practical.	
Tadpoles will be collected with soft handheld dip-nets. Any handling of amphibians will follow the DES Interim Hygiene Protocol for Handling Amphibians.	

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FAUNA MANAGEMENT PLAN – WRITTEN INFORMATION

(PAGE 4 OF 4)

CLIENT: SHADFORTH

PROJECT CODE: 167-SCC2209-D

CREATED BY: EM

APPROVED BY: YV

DRAWING NO: 167-SCC2209_PreCR_5

ISSUE	DESCRIPTION	DATE
REV.0	FOR USE	SEP 2022

5.3 Nest Box Management Measures

The aim of nest box installation is to compensate for the loss of habitat features caused by the development of the site. The types of nest boxes to be installed will be influenced by the desktop research results within the Fauna Pre-clearance Survey and fauna relocated during clearing works, and if there is a nest box management plan available.

This site is located within the Logan City Council, which does not advise the protocol for calculating nest boxes for installation. Therefore, we will use the Sunshine Coast Council's conditions as a guide, which is as follows:

- When a hollow is removed and it is *occupied*, a nest box must be installed at a 1:1 ratio, when a hollow is *not occupied*, nest boxes must be installed at a 3:1 ratio (three unoccupied hollows to one nest box; round up where number is not a factor of 3).

5.3.1 Nest Box Calculation

The following calculations are made according to the hollows recorded during the pre-clearance survey.

This site features a total of two hollows, of these neither were identified as occupied. Therefore, the following calculations are made

TABLE 6 – NEST BOX CALCULATIONS

	Occupied hollows	Not-occupied hollows
No. of hollows	0	2
Calculations		2/3 = 0.67
No. of nest box required	0	1
Total	**1**	

AWEC recommends the installation of **one small nest box** at this site. Where possible habitat features should be preserved and placed in retained vegetation in place of a nest box.

The amount of nest boxes to be used is subject to change according to clearing works and post-clearance survey.

6 CONCLUSION

AWEC were commissioned by Shadforth Civil Contractors to conduct a fauna pre-clearance survey for continued development at Green Rd, Heritage Park.

This clearing extent consists of high value regrowth and remnant ecosystems (Least Concern and Of Concern), both suitable for koalas. The koala was identified as the only significant species within the area likely to be encountered. This survey provided evidence that this area is used by koalas, via the presence of not only scratch marks, but an individual sighted. Therefore, specific attention must be paid for the fauna management measures and clearing process pertaining to this species. Other significant habitat features recorded included hollows, which will require the installation of one nest box.

7 RECOMMENDATIONS

To manage the risk to native fauna the following measures are recommended:

- A thermal drone is used to survey the site prior to clearing, looking out for koalas in particular.
- Suitably qualified FSC to supervise all clearing works.
- Any woody debris or felled hollows to be relocated into retained vegetation.
- Recommended that nest boxes are installed to replace the loss of hollows.
- Where possible, cleared koala fodder is donated to local wildlife rescue or hospital.
- Koala management techniques are specifically adhered to, and attention is paid to these measures outlined in section 5.
- Wildlife friendly fencing, lighting and crossings should be installed in the future development of this site.

8 REFERENCES

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182-SCC2209-D

FAUNA POST-CLEARANCE REPORT

GREEN ROAD HERITAGE PARK QUEENSLAND

Prepared for client:

SHADFORTH CIVIL CONTRACTORS

Dates on site:

SEPTEMBER, OCTOBER, AND NOVEMBER 2022

AWEC ENVIRONMENTAL CONSULTANTS

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1					
2					

Document Approval

Approved:	Name:	Signature:	Date:
Company Director	Yolande Venter		DEC 22

AWEC ENVIRONMENTAL CONSULTANTS

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1 INTRODUCTION

1.1 Background

Australia Wide Environmental Consultants (AWEC) were commissioned by Shadforth Civil Contractors to manage fauna and provide a post-clearance survey report for the continued development at Green Road, Heritage Park, Queensland.

This site is located within Logan City Council on Lot 1 SP310681 and consists of high value regrowth and remnant ecosystems (Least Concern and Of Concern), both suitable for koalas (FIGURE 1).

1.2 Qualifications, permits and statutory guidelines

The AWEC nominated Ecologist is Yolande Venter who is a degree qualified ecologist/environmental scientist with over 15 years of field experience within the ecology and environmental sectors.

Australia Wide Environmental Consultants (AWEC) holds a current DES rehabilitation permit (Permit #WA0027769), with an extended authority issued by the Department of Environment and Science specifying that the holder may take, keep, or use an animal whose habitat is about to be destroyed by human activity.

Refer to APPENDIX 1 for a full list of relevant statutory requirements and guidelines that this project, works and report complies with.

1.3 Scope

AWEC were commissioned to undertake a survey prior to any works commencing, which included ground truthing the desktop findings. AWEC were onsite during all clear and grub earth works (topsoil stripping & tree felling) and dewatering works to manage fauna spotter operations during any ground disturbance works as needed. This report details those findings and any outcomes related to fauna spotter operations and management measures used to control the risk to native fauna during these works onsite (APPENDIX 5.2 and 5.3).

FIGURE 1- SITE CONTEXT

2 METHODOLOGY

A suitably qualified and licenced fauna spotter catcher (FSC) was on site 27th, 29th of September, 10th, 11th, 12th, 13th of October, and 17th of November 2022.

The FSC's primary role was to manage the fauna operations during clearing works, clearing and grub activities associated with bulk earth works. To minimise impacts upon local fauna the following methods were adhered to:

2.1 Managing Disturbance Activities

Prior to Work Commencing

The FSC conducted a ground truth inspection of the site every morning prior to any disturbance activities occurring. All habitat features and nesting sites were clearly marked with flagging tape and their planned mitigation measures were discussed with the clearing crew to avoid any unauthorised clearing.

During Disturbance Works

During clearing works a FSC was present to manage the risk to native fauna on site. The FSC ensured that significant habitat features, and breeding sites were cleared in a manner that best mitigated the risk to any fauna potentially in-habiting them.

The FSC managed the direction of clearing to ensure that fauna was directed to a suitable location away from clearing with habitat connectivity to ensure safe self-relocation opportunities for any animals impacted by the clearing works.

2.2 Fauna Capture

The primary role of the FSC on site was to remove any fauna within the disturbance site. Where practical animals were moved out of the proposed disturbance area before clearing/stripping works commenced during the pre-works ground truth inspection.

Where there was a risk to native fauna a FSC was present during clearing works to observe for any potential displaced fauna, fauna signs or significant habitat features. When an animal was sighted and deemed safe to approach the animal and enter the clearing boundary, the capture procedure listed below was adhered to.

The following does not apply to the Endangered Koala which cannot be captured, handled, stored or removed from site and must be managed in accordance with the *Nature Conservation and Other Legislation (Koala Protection) Amendment Regulation 2020.*

During clearing works if an animal was observed by the FSC that needed capture, relocation or medical treatment the FSC undertook the following measures;

- Establish positive radio and visual contact with machine operator to alert them to animal sighting and ask them to cease works immediately and place machine buckets or grabs on the ground.
- When positive comms has been established with operator and works ceased enter clearing limits and capture animal.

- Once animal was safely captured, exit the worksite and re-establish pos coms with operator prior to exiting the clearing limits.
- where possible animal was released into suitable adjacent habitat immediately.
- Animal is secure in bag and was relocated to adjacent habitat where possible or relocated to suitable habitat offsite.
- Machine operator cannot recommence until FSC is back onsite and supervising works.
- No clearing works were undertaken without a FSC present.

2.3 Storing Captured Fauna

Captured fauna was secured in a calico bag, snake bag or pet carrier after being captured. all animals placed into a bag had the end securely knotted closed and then tied using a bag tie or zip-tie.

These bags were placed in a quiet dark location with appropriate temperature control for the species that has been captured. Captured fauna were released into suitable adjacent habitat as soon as possible. Any encountered nocturnal species were relocated later at dusk.

Any animal found injured or orphaned, was safely secured in a manner that prevented unnecessary further stress or increased the severity of its injuries. Any injured animals requiring medical treatment were transported to a wildlife carer or vet clinic.

2.4 Fauna Identification

All fauna observed, relocated, euthanised or taken to a carer was identified onsite by the FSC. If a sighted or captured/collected flora or fauna specimen cannot be identified on site an ecologist was consulted who assisted the FSC with correct identification of the species. (All species must be correctly identified for reporting purposes also).

2.5 Releasing Captured Fauna

See FIGURE 6 for release locations for any fauna found during clearing works. These sites were inspected prior and contained a wide range of vegetation types and suitable habitat for the fauna species which required relocation. The locations adhered to the DES guidelines below:

When releasing animals away from disturbed habitat, attention must be paid to several factors, including weather conditions, seasonal conditions and the animal's ecology. Native Fauna should be released:

- Into suitable habitat with an adequate food supply
- In appropriate weather, season, and time of day. This is particularly important for migratory species.
- Under circumstances which will not cause additional stress, such as extreme weather conditions, the wrong time of day (i.e., nocturnal species)
- In the appropriate social group. Some animals fare better if released into social groups.
- Within 1km of the site as per DES guidelines.

Fauna should be released at a suitable time of day, in a protected location close to the site. Data should be recorded and kept on all fauna species trapped and relocated in accordance with DES guidelines under the Rehabilitation Permit issued to AWEC.

If situations occur where animals can be re-released on the clearing site once clearing is complete the following criteria must be followed:

- Sufficient habitat is retained on site to support the animal's required niche, considering factors such as: vulnerability to predation; availability of nesting sites, hollows or microhabitats and the availability of water and sufficient food sources.
- Habitat corridors retained are of a suitable size, topography, and vegetation cover to provide effective routes for normal ecological processes such as immigration, emigration, recruitment and dispersal.
- Habitat blocks and corridors are of sufficient size to maintain ecological integrity and effectiveness, considering likely edge effects.
- Long term risk factors to individual and population survival associated with the development have been (or will be) adequately managed or mitigated. For example: domestic animal control, motor vehicle/road impacts, swimming pool risk.

2.6 Injuries & Euthanasia

Due to the nature of the works with heavy machinery some animal species are injured during clear and grub or tree felling operations. FSC assesses the animal health and suitability for making a recovery and being released back into its natural habitat before deciding on Euthanasia as an option.

Any injured animals that have a reasonable chance of being rehabilitated and released back into their natural habitat were immediately taken to a suitable animal medical facility. Any orphaned young or fauna with minor injuries (e.g., concussion) will be taken to the closest carer. Some animals, such as Koala's require specialist care and the closest suitable care facility will be contacted.

Any euthanasia required was done promptly and, in a manner, most humane to that species.

Recommended Wildlife Surgery-

i. Australia Zoo Wildlife Hospital (07) 5436 2097
ii. Wildcare Australia Inc (07) 5527 2444

2.7 Process of Clearing (Two stage clearing process)

The first stage of clearing was removing all the non-habitat trees. Non-habitat trees (i.e., trees other than those identified as habitat trees) were cleared and stockpiled for mulching. Clearing of non-habitat trees only occurred where their removal did not impact on identified habitat trees (e.g., canopies did not interconnect with habitat trees).

The second stage of clearing was removing the habitat trees (a minimum of 24 hours after the first stage of clearing and where conditions allowed habitat trees to be cleared in the afternoon).

Once the vegetation surrounding each habitat tree was removed allowing better access, the site and the habitat tree were assessed to determine whether the tree was actively in-habited. This was done by one of the following methods: drones, cameras, climbers, or an elevated work platform. Trees found not to be actively inhabited were soft felled to avoid damage to any of the habitat features which were retained. Actively in-habited trees were pieced down using an elevated work platform (EWP) or climbers to minimise the risk of injury to any potential animals inhabiting them.

2.8 Nest box requirements

The aim of nest boxes is to compensate for the loss of habitat features through the development of the site. The types of nest boxes to be installed will be influenced by the desktop research results, Fauna Pre-clearance Survey, fauna sighted or relocated during clearing works and if there is a nest box management plan available. Detailed nest box management measures can be found in APPENDIX 5.4.

This site is located within the Logan City Council, which does not advise the protocol for calculating nest boxes for installation. Therefore, we will use the Sunshine Coast Council's conditions as a guide, which is as follows:

- When a hollow is removed and it is occupied, a nest box must be installed at a 1:1 ratio, when a hollow is not occupied, nest boxes must be installed at a 3:1 ratio (three unoccupied hollows to one nest box; round up where number is not a factor of 3).

3 RESULTS

3.1 Survey Results

3.1.1 Site overview

Main site is dense woodland scrub, species include Melaleuca, Bloodwood, Blue Gum, Scribbly Gum, Casurina, Swamp Mahogany, Stringy Bark (FIGURE 2 and FIGURE 3). Ground cover is a mix of dense leaf litter and shin high grass, there are also patches of open dirt. The roadside clearing along Green road included large eucalypts, Silky Oak, Wattle and Leopard Tree.

FIGURE 2- SITE VEGETATION OVERVIEW

FIGURE 3- SITE DURING CLEARING

3.1.2 Habitat features and fauna signs

This site contained an abundance of habitat features (43) and fauna signs (36), including eleven hollows and 23 trees which displayed scratch marks – a large number which could be attributed to koala.

See **TABLE 1** and **FIGURE 6** for contextualisation of these results. See APPENDIX 5.2 for details of the features.

TABLE 1 – RESULTS SUMMARY TABLE

		Count
Habitat features		
Arboreal termite mound		12
Dense vegetation		4
Hollow log		4
Hollow-bearing tree		11
(Medium hollows		*2)*
(Large hollows		*9)*
Large tree >80cm DBH		6
Loose bark		1
Water body		1
Woody debris		4
	Total	**43**
Fauna signs		
Diggings		3
Possum drey		1
Scat		2
Scratch marks		23
Stick nest		4
Tracks		3
	Total	**36**
Grand Total		**79**

3.1.3 Nest box calculations

This site contained eleven hollows, these were not identified as occupied - therefore the following calculations for nest boxes are made (**TABLE 2**).

TABLE 2 – NEST BOX CALCULATIONS

	Count	Calculations	Required nestboxes
Unoccupied hollows	11	11/3	3.67
		Total	**4**

AWEC recommends the installation of **four nest boxes** to replace the loss of hollows at this site (three large, two medium).

3.1.4 Fauna assemblage

Thermal drone inspection was carried out before clearing commenced; three koalas were located (Locations appear on **FIGURE 6**; Images **FIGURE 4-5**). Remaining fauna assemblage was dominated by Least Concern bird species (**TABLE 3**).

TABLE 3 – SIGHTED FAUNA BIODIVERSITY

Common name	Scientific name	Conservation Status
Amphibian species		
Eastern sedgefrog	*Litoria fallax*	Least Concern
Bird species		Least Concern
Australian magpie	*Gymnorhina tibicen*	Least Concern
Black-faced cuckoo-shrike	*Coracina novaehollandiae*	Least Concern
Blue-faced honeyeater	*Entomyzon cyanotis*	Least Concern
Cattle egret	*Bubulcus ibis*	Least Concern
Channel-billed cuckoo	*Scythrops novaehollandiae*	Least Concern
Crested pigeon	*Ocyphaps lophotes*	Least Concern
Galah	*Eolophus roseicapilla*	Least Concern
Magpie-lark	*Grallina cyanoleuca*	Least Concern
Noisy miner	*Manorina melanocephala*	Least Concern
Pied butcherbird	*Cracticus nigrogularis*	Least Concern
Pied currawong	*Strepera graculina*	Least Concern
Rainbow bee-eater	*Merops ornatus*	Least Concern
Rainbow lorikeet	*Trichoglossus moluccanus*	Least Concern
Sacred kingfisher	*Todiramphus sanctus*	Least concern
Sulphur-crested cockatoo	*Cacatua galerita*	Least concern
Tawny frogmouth	*Podargus strigoides*	Least concern
Torresian crow	*Corvus orru*	Least concern
Welcome swallow	*Hirundo neoxena*	Least concern
Mammal species		
Eastern grey kangaroo	*Macropus giganteus*	Least concern
Koala	*Phascolarctos cinereus*	Endangered

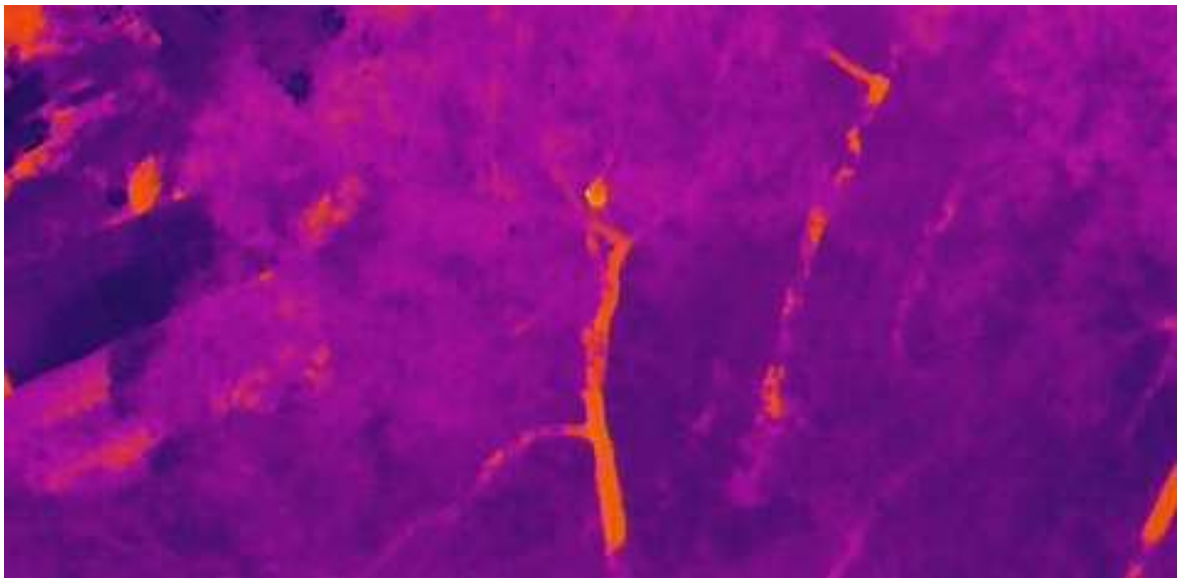


FIGURE 4- THERMAL IMAGE OF KOALA

FIGURE 5- KOALA ON SITE

3.1.5 Fauna Capture & Relocation

No animals were relocated during clearing works. No injuries or fatalities occurred.

FIGURE 6- CLEARING RESULTS

4 CONCLUSION

by Shadforth Civil Contractors to manage fauna and provide a post-clearance survey report for the continued development at Green Road, Heritage Park, Queensland.

A suitably qualified and licenced FSC was on site for the duration of clearing works to ensure all fauna management measure were adhered to.

An AWEC FSC was onsite for a total of six days during works.

No active nests, breeding sites were encountered. Three Endangered koalas were observed within the vicinity of clearing works, and appropriate measures were taken by field staff on site to manage these animals. Large buffers, movement corridors and close monitoring of each animal was done to ensure that no unnecessary stress occurred and that they could safely move out of the clearing site.

Eleven hollows were observed (not occupied), so four nest boxes are recommended to replace this lost habitat.

No animals were relocated during clearing works, no injuries or fatalities of occurred.

AWEC can confirm the site clearing works were conducted in a manner that complied with the statutory requirements and guidelines in relation to flora and fauna management, including aquatic animals.

5 APPENDICES

5.1 Statutory requirements and guidelines

TABLE 6.1 - STATUTORY REQUIREMENTS AND GUIDELINES

Legislation	Purpose of Legislation	Impact on project personnel
Environmental Protection Regulation 2019	Gives legislative support to various national guidelines, plans and Australian Standards. This regulation also outlines requirements for the management of fauna and flora.	To abide by the regulations within the DES.
Environmental Protection and Biodiversity Conservation Act 1999	The EPBC Act 1999 focuses Australian Government interests on the protection of matters of national environmental significance, with the states and territories having responsibility for matters of state and local significance.	To comply with the relevant sections of the Act that relate to matters of national significance which are present in the vicinity of the project works.
Nature Conservation and Other Legislation Amendment Act 2016	The Act provides for the legislative protection of Queensland's threatended biota. It is aligned with the IUCN redlist which categorises biota into their current status in the wild.	To comply with the relevant sections of the Act and regulations and the Environmental Authority administered by the DES.
Nature Conservation (Wildlife) Regulation 2006	This Regulation lists the plants and animals considered presumed extinct, endangered, vulnerable, rare, common, international, and prohibited. It discusses their significance and states the declared management intent and the principles to be observed in any taking and use for each group.	List those animals that may be potentially found on sites being developed as part of the project and limitations for management.
Nature Conservation (Wildlife Management) Regulation 2006	This Regulation provides for the management of wildlife (including taking, keeping and using wildlife including protected plants).	Provides guidance for the management of wildlife on site, particularly in relation to the interference with native wildlife during the clearing process.
Nature Conservation and Other Legislation (Koala Protection) Amendment Regulation 2020	Guideline for identifying and managing Koala habitat	Provides guidance on where Koala spotter's and Endorsed FSC are legally required and how they are to manage Koala habitat
Animal Care and Protection Act 2001	Animal Welfare	Outlines that animal ethics approval is needed for research, survey and/or monitoring involving vertebrates, where activities such as trapping, census leading to disturbance of animals (such as spotlighting or call play-back), abnormal interruption of behaviour or marking/tagging are involved.
Australian code for the care and use of	Ethical framwork for animals used for scientific purposes	Governing principles set out in the Code provide guidance for

Legislation	Purpose of Legislation	Impact on project personnel
animals for scientific purposes 8th edition (2013)		investigators, teachers, institiutions, animal ethics committees and all the people involved in the care and use of animals for scientific purposes.
Terrestrial Vertebrate Fauna Survey Guidelines for Queensland (2018)	Guidelines for Fauna Surveys	Detailed guidelines on designing a survey, the different survey methadologies and the ethical considerations that need to be made for each methadology.
Queensland Hygiene protocol for handling amphibians	Protocol for handling amphibian species	Outlines how to handle and manage amphibian species to prevent the spread of diseases among specimens and colonies.
Code of Practice- Care and rehabilitation of orphaned, sick or injured protected animals by wildlife carers(2013)	Provides guidelines on the rehabilitation and care of wildlife	Detailed guidelines, in regards to hygiene, housing, capture and release, euthanasia and relevant legistation
Seqwater-Guideline-Fish Stranding and Salvage	The purpose of this guidance document is to ensure native fish recovery operations are conducted in a timely and safe manner to minimise or eliminate loss of fish from stranding.	Guideline on managing aquatic fauna during dewatering works.
Fisheries Act 1994	The main purpose of the *Fisheries* Act 1994 is to provide for the use, conservation and enhancement of the community's fisheries resources and fish habitats in a way that seeks to apply the principles of ecologically sustainable development.	Outlines fish habitats and fish movement and migration (regulation of waterway barriers). Guidelines on commercial, recreational and indigenous fishing.
Biosecurity Act 2014	The *Biosecurity Act 2014* provides a framework for an effective biosecurity system for Queensland, to ensure the safety and quality of agricultural inputs, and to align responses to biosecurity risks in the state with national and international obligations.	Under the *Biosecurity Act 2014*, pest species must not be kept, fed, given away, sold, or released into the environment without a permit. Under the *Biosecurity Act 2014*, everyone has a general biosecurity obligation (GBO) to take reasonable and practical steps to minimise the risks associated with restricted plants and animals.
DAF Guidelines for Fish Salvage, 2018	Purpose of these guidelines is to minimise the risk to aquatic fauna during dewatering works.	These guidelines provide detailed instructions for dewatering waterbodies and slavaging aquatic fauna.

5.2 Entire list of habitat features & fauna signs

#	Description	Latitude	Longitude
1	Hollow-bearing tree (1 large hollow)	-27.69319153	153.0620883
2	Hollow-bearing tree (1 large hollow)	-27.69377497	153.0612243
3	Hollow-bearing tree (1 medium hollow)	-27.69363403	153.0610652
4	Hollow-bearing tree (1 large hollow)	-27.69459534	153.0610915
5	Hollow-bearing tree (1 large hollow)	-27.69367522	153.0615201
6	Hollow-bearing tree (1 large hollow)	-27.6941005	153.0615275
7	Hollow-bearing tree (1 large hollow)	-27.69483948	153.0611162
8	Hollow-bearing tree (1 medium hollow)	-27.69480896	153.0611039
9	Hollow-bearing tree (1 large hollow)	-27.69480896	153.060858
10	Hollow-bearing tree (1 large hollow)	-27.69500732	153.0608925
11	Hollow-bearing tree (1 large hollow)	-27.69502258	153.0608256
12	Woody debris	-27.69319153	153.0628805
13	Scratch marks	-27.69311523	153.0627518
14	Scratch marks	-27.69308472	153.0626618
15	Scratch marks	-27.69326281	153.0626607
16	Large tree >80cm DBH	-27.69326281	153.0626607
17	Dense vegetation	-27.69314575	153.062509
18	Scat	-27.6930542	153.0625425
19	Scratch marks	-27.6930542	153.0625425
20	Scratch marks	-27.69308472	153.0624705
21	Large tree >80cm DBH	-27.69308472	153.0624705
22	Tracks	-27.69296797	153.0623987
23	Scratch marks	-27.6930172	153.0623644
24	Diggings	-27.69290161	153.0623239
25	Hollow log	-27.69294739	153.06211
26	Hollow log	-27.69292827	153.0620653
27	Possum drey	-27.69317627	153.0620589
28	Scratch marks	-27.6933136	153.0621333
29	Large tree >80cm DBH	-27.6933136	153.0621333

#	Description	Latitude	Longitude
30	Scratch marks	-27.69346619	153.0621081
31	Arboreal termite mound	-27.69284058	153.0619786
32	Scratch marks	-27.69284058	153.0619786
33	Large tree >80cm DBH	-27.69284058	153.0619786
34	Stick nest	-27.6934967	153.0612459
35	Hollow log	-27.69377136	153.0611338
36	Arboreal termite mound	-27.69404834	153.0612416
37	Stick nest	-27.69418335	153.0613038
38	Arboreal termite mound	-27.69355774	153.0615449
39	Scratch marks	-27.6937561	153.0615044
40	Arboreal termite mound	-27.69412231	153.0615008
41	Arboreal termite mound	-27.69413866	153.061683
42	Arboreal termite mound	-27.69470215	153.0611065
43	Stick nest	-27.69508822	153.0607807
44	Arboreal termite mound	-27.69587708	153.060783
45	Arboreal termite mound	-27.69644165	153.0606148
46	Woody debris	-27.69361877	153.0618652
47	Large tree >80cm DBH	-27.69346585	153.0625039
48	Large tree >80cm DBH	-27.69343567	153.0623997
49	Diggings	-27.69374848	153.0628388
50	Scratch marks	-27.6934116	153.0619901
51	Scratch marks	-27.6934144	153.0617798
52	Tracks	-27.6936456	153.0615405
53	Scratch marks	-27.69186401	153.0641164
54	Scratch marks	-27.69186401	153.0641647
55	Scratch marks	-27.69184301	153.064249
56	Woody debris	-27.69189453	153.0639108
57	Arboreal termite mound	-27.6920929	153.0655448
58	Scratch marks	-27.69223022	153.0660151
59	Dense vegetation	-27.69223022	153.0660151

#	Description	Latitude	Longitude
60	Loose bark	-27.69223022	153.06643
61	Arboreal termite mound	-27.692276	153.0667244
62	Scratch marks	-27.692276	153.0667692
63	Scratch marks	-27.6920166	153.0654652
64	Scratch marks	-27.69218445	153.0661259
65	Stick nest	-27.69221497	153.0661538
66	Scratch marks	-27.69256592	153.0684428
67	Arboreal termite mound	-27.69266196	153.0689548
68	Scratch marks	-27.69267634	153.0692008
69	Arboreal termite mound	-27.69271604	153.0692774
70	Dense vegetation	-27.69351196	153.0623978
71	Scratch marks	-27.69355774	153.0623156
72	Water body	-27.69352771	153.0622747
73	Woody debris	-27.69336103	153.06245
74	Dense vegetation	-27.6933136	153.0622467
75	Hollow log	-27.69338842	153.0621935
76	Scat	-27.69338069	153.062174
77	Scratch marks	-27.69359097	153.0621149
78	Tracks	-27.69328308	153.062378
79	Diggings	-27.69363403	153.062586

5.4 Fauna Clearing Management Measures

Pre-Clearing

Objective:	Mitigate the risk to native fauna
Responsibility:	FSC
Timing:	Pre-construction

1. At the pre-start meeting, the FSC is to outline the clearing process and the requirements of the approved Fauna Management Plan.
2. A quick active fauna inspection is to be conducted the morning prior to clearing works commencing, active search over micro-habitats for any fauna, locate any potential nesting sites, ensure all habitat trees are marked and tree fellers are informed of these.
3. A specific inspection of trees for the presence of Koala's must be conducted the night before and morning of clearing.
4. Any fauna sighted should be relocated to a nearby suitable habitat.

Clearing and Grubbing

Objective:	Reduce risk to native fauna during disturbance activities
Responsibility:	FSC, Construction/Clearing crew
Timing:	Earthworks

1. Immediately prior to the commencement of clearing of native vegetation a daily visual inspection of the area must be carried out by the FSC. Furthermore, the FSC is to be present on site during all clearing operations to supervise and direct clearing works, and to respond to any situations that may arise in relation to fauna.
2. Suitably qualified FSC are to be present for all clearing and grubbing activities where there is a risk to native fauna. FSC are to implement and check that all practical measures to minimise the risk to fauna during construction are adhered to. FSC must hold or be approved to work under DES a Rehabilitation FSC endorsed permit and damage mitigation permit.
3. Clearing direction will occur towards the vegetated areas of the site and be managed by the project FSC to allow all fauna unimpeded movement towards remaining vegetated areas that have been designated during the staged clearing process.
4. Vegetation must be cleared sequentially to direct wildlife into surrounding retained vegetation and prevents isolates patches of vegetation where wildlife may seek refuge
5. All habitat trees and hollow bearing trees will be inspected using a thermal drone when conditions allow. Any occupied trees will be blocked off and relocated using an EWP or tree climber where practical and site conditions allow.
6. Any habitat or hollow bearing trees with un-confirmed occupancy are to be soft-felled in order to reduce the risk of injury to any fauna in-habiting the tree and to reduce the risk of damaging the hollows.

7. Any injured wildlife will be taken to receive veterinary attention within 24 hours if required. If veterinary attention is not required any injured or orphaned wildlife is to be transferred to a suitably qualified Wildlife Carer.

Koala Management

Objective:	To protect the local population of Koala's
Responsibility:	Koala Spotter, Endorsed FSC, Clearing crew
Timing:	Earthworks

1. If a Koala is sighted within the site a Koala spotter will be on site to manage and monitor the animal until it has self-relocated out of the site. A Koala spotter is to be present on the first day of clearing works with the sole responsibility to inspect all the vegetation proposed for disturbance for the presence of Koala's.
2. *Nature Conservation and Other Legislation (Koala protection) Amendment Regulation 2020*, the following measures will be undertaken to minimise, reduce or mitigate impacts to Koala's in potential Koala habitat areas:
    i) Sequential clearing will be utilised to assist fauna in relocating to nearby habitat on their own accord.
    ii) No tree in which a Koala is present and no tree with a crown overlapping a tree with a Koala present will be disturbed. A 50m buffer around any tree containing a Koala is to be established and works to seize within this buffer until the has moved off on its own accord.
    iii) A vegetation corridor is to be left where practical to allow the Koala to self-relocate to a suitable area that is not a proposed disturbance site.
    iv) In areas containing a dominance of Koala food trees and positively identified Koala sightings and/or identified scat or scratch marks a Koala spotter is to be present during clearing activities.
    v) If a Koala is not injured but refuses to move from the clearance area on its own accord after two days, the Koala spotter will liaise with DES and negotiate appropriate methods for removal and relocation.
3. A DES approved Koala spotter is a person who holds a tertiary qualification in Biology or Zoology, or who is demonstrably experienced (Endorsed FSC) in the identification and location of Koala's in their natural habitat and has authorisation from DES to conduct such activities.
    i) Be present at the site of felling operations
    ii) Identify any tree at the site within which a Koala is present, as well as any tree that has a crown which is intermeshed or overlapping with such a tree; and
    iii) Advise the person who is authorised to conduct the felling operation, or that person's representative, of the precise location of each such tree.

Releasing Fauna

Objective:	To reduce the project impact on native fauna

Responsibility: FSC
Timing: Project Duration

1. The animal must be released as near as practical to the point of capture.
2. Where practical animals should be relocated with the hollow in which they were found or a suitable nest box.
3. When releasing wildlife attention must be paid to several factors, including weather conditions, seasonal conditions, and the animal's ecology.
4. Fauna should be released at a suitable time of day in a suitable location.

Mulching Works

Objective: To reduce the project impact on native fauna
Responsibility: FSC, Construction/Clearing crew
Timing: Clearing Works

1. Trees identified by the project FSC with hollows should have the hollow section salvaged and preserved.
2. Stockpiled vegetation, topsoil and other materials can quickly become temporary habitat for animals displaced during the actual clearing and earthworks. Prior to removal of any stockpiled vegetation, the FSC must inspect for any fauna using the stockpile as temporary shelter.

Reporting

Objective: To reduce the project impact on native fauna
Responsibility: FSC
Timing: Post-Clearing Works

1. Post-clearance – Should contain the following details for each captured animal:
    a) Species
    b) Identification name or number
    c) Sex (M, F or unknown)
    d) Approximate Age or Age Class (neonate, juvenile, sub-adult, adult)
    e) Time and date of capture
    f) Method of capture
    g) Exact point of capture (GPS coordinates)
    h) State of health
    i) Incidents associated with capture likely to affect health
    j) Veterinary intervention or treatments
    k) Time held in captivity
    l) Disposal method (euthanasia, translocation, re-release)
    m) Date and time of disposal
    n) Detailed of disposal (GPS points of release)
    o) For released animals, location relative to point of capture

Earthworks and Construction Phase

Objective:	To reduce the project impact on native fauna
Responsibility:	Construction crew
Timing:	Clearing Works

1. The Contractor shall ensure that to the extent possible project infrastructure and auxiliary works (laydown areas, stockpile sites, site office) are constructed in a manner that does not create additional hazards for wildlife.
2. To minimise impacts and conflicts between native animals, vehicular movement and access during construction, site access should be controlled via a single entry and exit point.
3. Inspect open trenches, culverts and other structures prior to works being undertaken within an area to determine whether there are any trapped or injured native fauna species present and act as appropriate.
4. Trenches, manholes, excavations for footings, etc. while open pose threats to native animal entrapment and should be backfilled as soon as possible. In some location's barriers may be required overnight to eliminate the accidental capture of animals moving through the site.
5. Educate staff, including sub-contractors, in relation to the risk of fauna injury and deaths and how to manage animals which are displaced, including threatened species.
6. All native wildlife is protected (including snakes) and shall not be intentionally harmed as a result of work or workers actions.
7. All native animal fatalities must be reported immediately to the Environmental Coordinator.
8. Where any site staff (contractors or subcontractors) witness or locates distressed, injured, or orphaned animals they should immediately contact the FSC and Environmental Coordinator. Works within the area of the animal must cease until further instruction is provided by one of the above authorities.

5.5 Nest box management measures

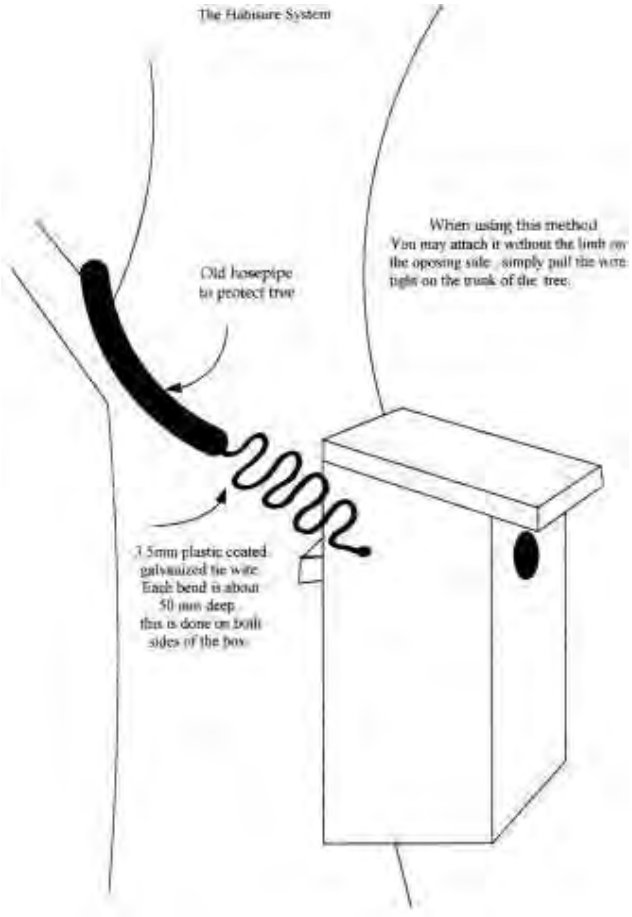
Nest boxes will be sourced from Hollow log homes and hollows suitable to the species sighted/signs of species sighted will be ordered.

Recommended dimensions should be guided by *Nestboxes for Wildlife A Practical Guide* (Franks A & Franks S), however these may slightly differ according to producer.

At least half of the required nest boxes are recommended to be installed either prior to commencement of clearing or within 7 days of the clearing having taken place. Remaining nest-boxes to be installed within 30 days of completing clearing works.

Types and sizes of nest boxes should reflect fauna on site, and/or a nest box management plan if available. The exact location awaits council approval, and a tree climber will select the safest, most appropriate trees on the day of installation. Exact types of next boxes appropriate for each tree will also be confirmed on the day of installation, and GPS coordinates will be updated for monitoring.

Nest boxes will be fixed to the tree using a method designed to ensure no damage is done to the tree as it matures (See DIAGRAM RIGHT). Possum and glider boxes will be placed in the foliage to protect them from hot afternoon sun and can be positioned facing any direction except for west. The nest boxes should be placed in an area that gives protection from direct sunlight and the entrance should face away from prevailing winds and rain. Nest boxes for possums should be attached approximately 2-4m off the ground and 3- 6m high for glider, microbat, and bird boxes. Nest boxes for significant species, the powerful owl, need to be installed 15 m above the ground. The nest boxes should be placed within an area that contains suitable species and quantities of food trees that are favoured by the species that the nest box was designed for.



Nest boxes to be maintained for a minimum of 12 months post installation. An annual survey is proposed to inspect all installed nest boxes. Each nest box, when installed is mapped using the most accurate and up to date technology. Data base information is collected such as tree species, DBH, height of tree, box height, species usage. A safe and nonintrusive form of auditing will be used using tailor made poles to check inside the boxes from the ground via a Wi-Fi enabled digital camera or climbers for the higher boxes. We record the interior of the box and analyse species present and/or recent species use. These findings are then entered into a comprehensive report. Any severely damaged boxes found during the annual survey will be replaced.

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Appendix B

Offset Areas Compliance Report

Offset Area Compliance Memo

Burnett Creek and Lyons Offset Sites
Prepared for EnviroCapital as the approved offset provider for
Pointcorp Heritage Park Pty Ltd
17 April 2023

11391 E

saunders havill group

Document Control

Document: Offset Area Compliance Memo for Burnett Creek and Lyons Offset Sites under EPBC 2017/8090 prepared by Saunders Havill Group for EnviroCapital as the approved offset provider for Pointcorp Heritage Park Pty Ltd.

Document Issue

Issue	Date	Prepared By	Checked By
A	17/04/2023	NT	AR

Prepared by

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Plans

Acronyms

AU	Assessment Unit
DAWE	Department of Agriculture, Water and the Environment
DES	Department of Environment and Science (Qld)
DoR	Department of Resources (Qld)
EDQ	Economic Development Queensland
EOP	EPBC Act Environmental Offset Policy (2012)
EPBC Act	*Environmental Protection and Biodiversity Conservation Act 1999*
GHFF	Grey-headed Flying-fox
ha	hectares
LGA	Local Government Area
MNES	Matters of National Environmental Significance
MSES	Matters of State Environmental Significance
OMF	Offset Management Framework
OMU	Operational Management Unit
PDA	Priority Development Area (herein referencing the Greater Flagstone PDA)
PMAV	Property Map of Assessable Vegetation
PR	*Planning Regulation 2017* (Qld)
RAI	Relative Abundance Index
RE	Regional Ecosystem
SEQ	South-east Queensland
SHG	Saunders Havill Group
VDEC	Voluntary Declaration
VMA	*Vegetation Management Act 1999*
WONS	Weeds of National Significance

1. Introduction

The *Environmental Management Division* of Saunders Havill Group (SHG) was engaged by EnviroCapital as the approved offset provider for Pointcorp Heritage Park Pty Ltd (the Proponent) to prepare an Offset Area Compliance Memo for the Lyons and Burnett Creek offset sites associated with the impact for the approved 'Park Ridge Residential Development' located at Clarke Road, Park Ridge (EPBC Act reference 2017/8090. The approval pertains to the construction of a residential development comprising of industrial, mixed use and residential development covering 116.35 hectare (ha) incorporating a 12.96 ha area for environmental management and conservation. Refer **Table 1** for details of Approval.

The Park Ridge Residential Development was referred under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and subsequently declared a "Controlled Action" requiring assessment by "Preliminary Documentation" pursuant to section 18 and 18A (listed threatened species and communities) (EPBC 2017/8090) on the 19th March 2017. The trigger for the controlling provision was due to potential impacts on the Koala (*Phascolarctos cinereus*) and the Grey-headed Flying-fox (GHFF) (*Pteropus poliocephalus*), which are both listed as 'vulnerable' under the EPBC Act.

As part of the Preliminary Documentation requirements, a proposal was developed to compensate for the impacts from clearing of up to 89.93 ha and functional loss of 28.01 ha of Koala habitat and GHFF foraging habitat. This offset was approved by a delegate of the Minister as part of the EPBC Act Approval for 2017/8090. The offset includes the dedication and rehabilitation of a total of 401.7 ha of land across two (2) offset sites referred to as the Burnett Creek Offset Site and Lyons Offset site. Notably, baseline survey reports for each offset area were finalised and published on the project website within 6 months of the Approval in accordance with Condition 8(a). This report documents the second annual progress review of restoration works on both offset sites against the EPBC approval conditions and Offset Management Plan (OMP) commitments.

The project was approved under the EPBC Act subject to conditions on 23 November 2020 with effect until 30 June 2045. Condition 19 of the approval requires that the approval holder must complete and provide a compliance report for each 12-month period following the date of commencement of the action, or otherwise in accordance with an annual date that has been agreed to in writing by the minister.

The assessment of the Offset Sites compliance with the approval conditions is presented in Section 3. This report has been prepared to satisfy the requirements of the conditions of approval accompanying the controlled action determination.

Table 1: Approval Details

Address	**EPBC 2017/8090**
Approval Holder	Pointcorp Heritage Park Pty Ltd
Project Name of the approval	Park Ridge Residential, mixed use and medium impact industry precinct, Park Ridge, Queensland

Approved Action	To develop a residential, mixed use and medium impact industry precinct in Park Ridge, Queensland. [See EPBC Act referral 2017/8090 on 19 March 2018, variation of the action decision made under section 1568 of the EPBC Act on 30 January 2020, and change of designation of proponent made under s78(5) of the EPBC Act on 23 September 2020. A variation of conditions attached to the approval was made on the 25 May 2022].
Controlling Provision(s)	Listed threated species and communities (sections 18 & 18A)
Approval Date	23 November 2020
Expiry Date of the Approval	30 June 2045
Date of Commencement of the Action	4 March 2021
Address	Clarke Road and Green Road, Park Ridge, Queensland
Local Government Area (LGA)	Scenic Rim Regional Council (SRRC)

1.1. Offset Site Summary

Two (2) offset sites were secured to deliver the offset required under the EPBC Act approval:

- Burnett Creek; and
- Lyons.

In accordance with Condition 5(a) of the EPBC Act approval conditions the approval holder must legally secure at least 151.3 ha of land at the Burnett Creek Offset Site and at least 250.4 ha of land at the Lyons Offset Site. During the Voluntary Declaration process to legally secure the offset sites under the Queensland *Vegetation Management Act 1999*, only 150.497 ha of suitable land was available at the Burnett Creek Offset Site. This shortfall was remedied through increasing the land secured across the Lyons Offset Site. This matter is discussed further in the Offset Management Plan, approved by the Department on the 2 May 2022.

Both the Burnett Creek and Lyons offset sites are located in the Logan City Council local government area (LGA), approximately 20 kilometres (km) south of the City of Ipswich. The Burnett Creek offset site is zoned as rural and located within the boundary of the Flinders Karawatha Corridor and South-east Queensland Regional Plan – Regional Biodiversity Corridor. Zoning across the Lyons Offset Site includes both Environmental Management and Conservation areas. Key details relating to the Burnett Creek and Lyons offset sites respectively are provided in **Table 2** and **Table 3**.

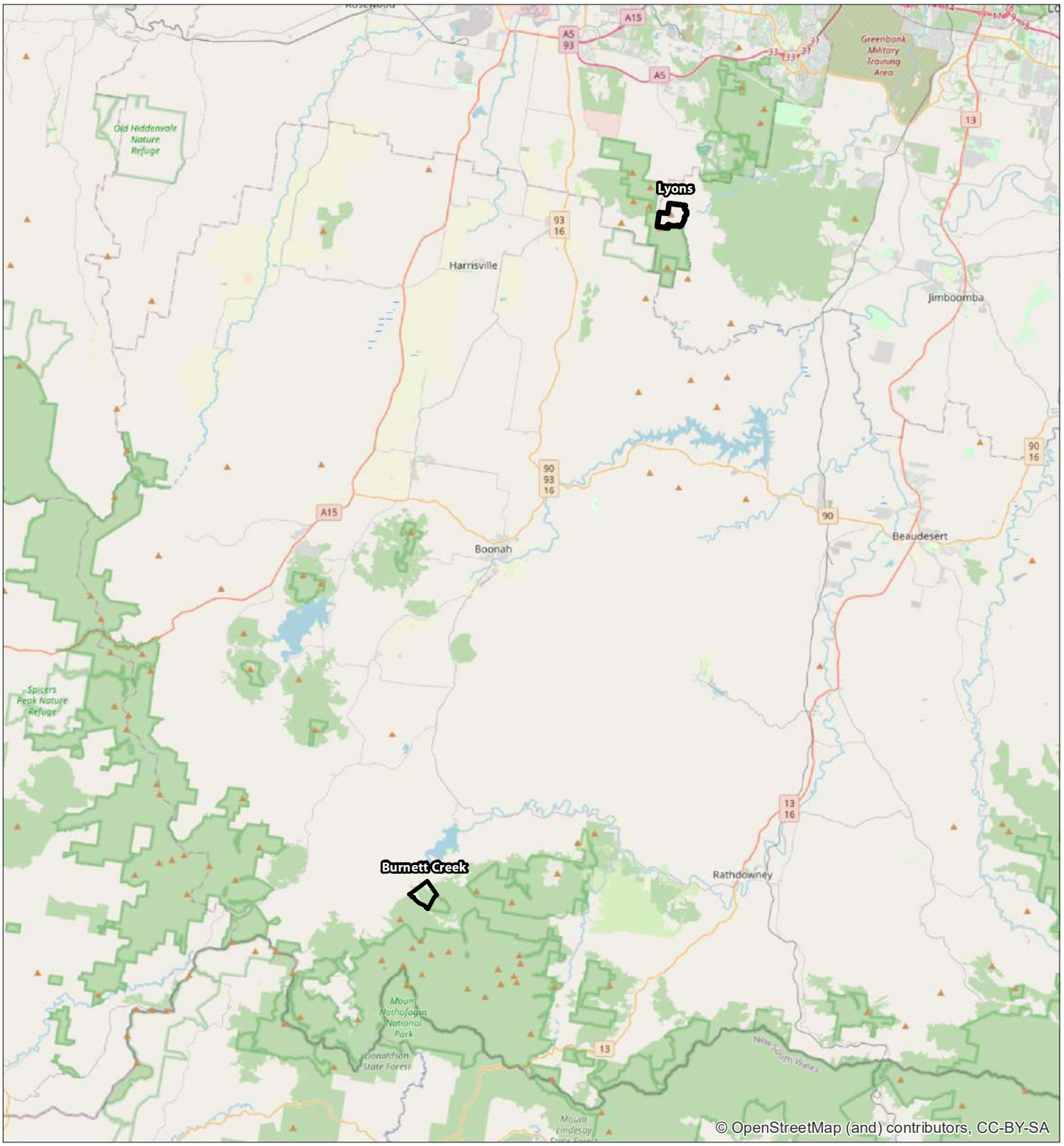
Table 2: Burnett Creek Offset Site Summary

Address	Burnett Creek Road, Burnett Creek
RPD	Part Lot 100 on WD682

Area	150.497 ha
Tenure	Freehold
Local Government Area (LGA)	Scenic Rim Regional Council (SRRC)
Declared	11 March 2021

Table 3: Lyons Offset Site Summary

Address	Mount Flinders Road, Lyons
RPD	Part Lot 7 on S312785
Area	250.843 ha
Tenure	Freehold
Local Government Area (LGA)	Scenic Rim Regional Council (SRRC)
Declared	15 March 2021 (248.68 ha) & 29 July 2021 (2.163 ha)



Legend

Lyons & Burnett Creek offset site

Figure 1

Site Context

ENVIRO CAPITAL

File ref. 11395 E Figure 1 OAM Site Context A
Date 24/04/2023
Project Pointcorp Heritage Park

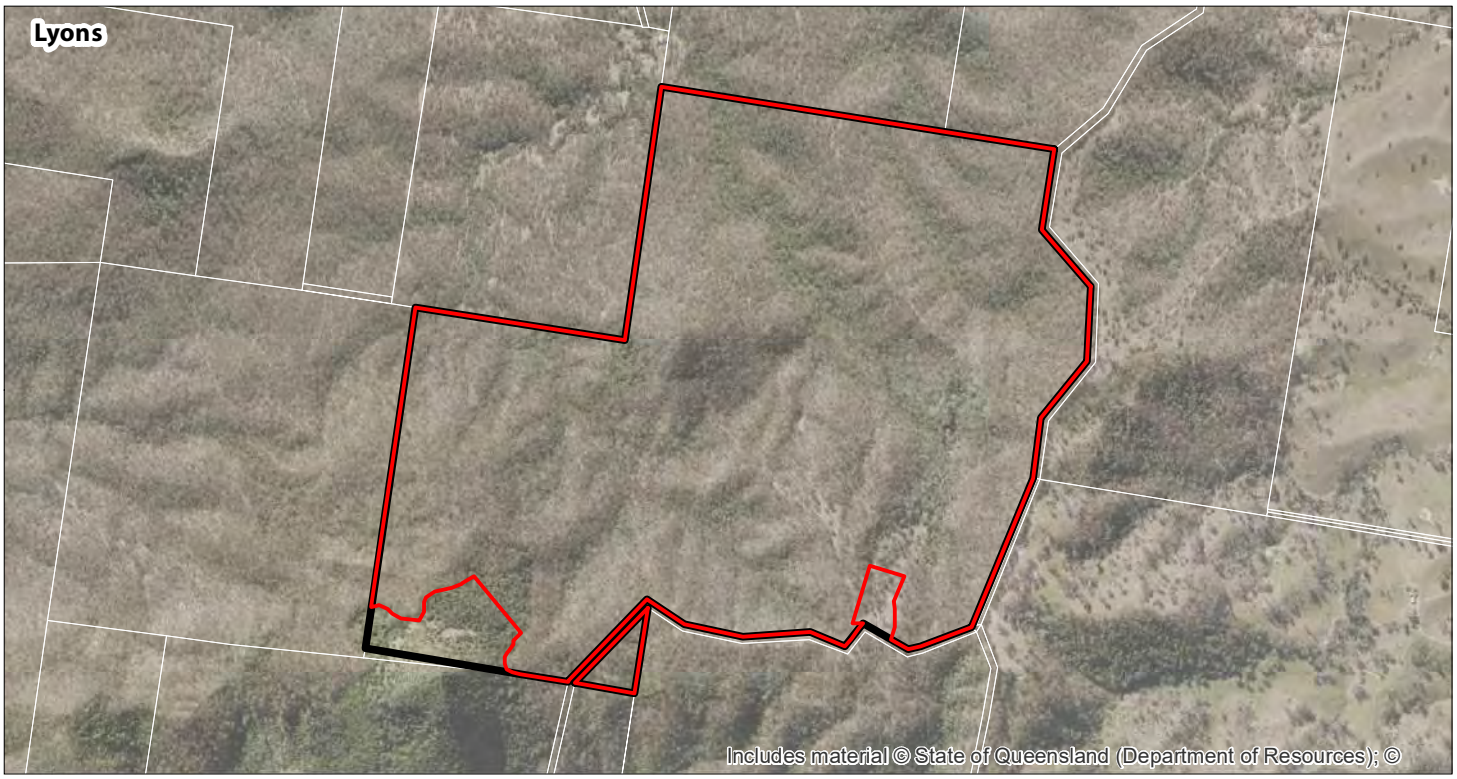
0 2 4 6 8 10 km

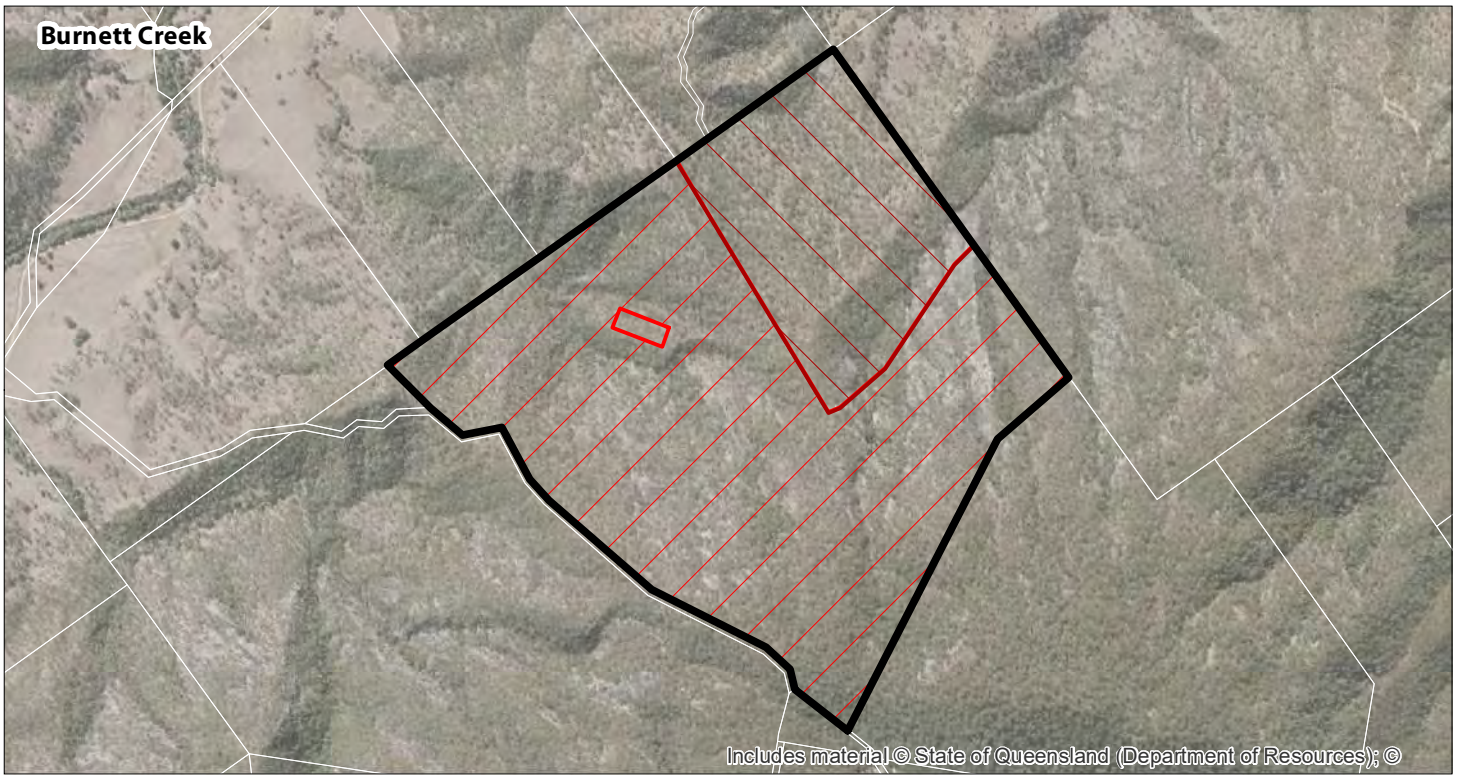
N

Scale (A4): 1:400,000 [GDA 2020 MGA Z56]

saunders havill group

Layer Source: © State of Queensland 2023





Legend

- Qld DCDB
- Site DCDB

Lyons

- Offset Area

Burnett Creek

- EPBC 2017/8095 Offset Area
- EPBC 2017/8090 Offset Area

Figure 2

Site Aerial

ENVIRO CAPITAL

File ref. 11395 E Figure 2 OAM Site Aerial A_
Date 24/04/2023
Project Pointcorp Heritage Park

0 200 400 600 800 m

N

Scale (A4): 1:22,500 [GDA 2020 MGA Z56]

saunders havill group

Layer Source: © State of Queensland 2023

2. Offset Site Inspection Summary

2.1. Baseline Surveys

Condition 6 of the approval required that the within 6 months from the date of the approval, the approval holder must complete baseline surveys of the Burnett Creek Offset site and the Lyons Offset site. The baseline surveys had to be conducted by a suitably qualified field ecologist in accordance with a scientifically valid, robust, and repeatable methodology, and include the following:

a. The vegetation condition attributes for each Regional Ecosystem (RE), specifying the baseline habitat quality assessment data for each operation management unit (OMU);
b. The number and condition of winter or spring flowering GHFF foraging species across the offset site;
c. The species stocking rate for the Koala and GHFF;
d. The extent of weed cover;
e. The number of non-native predators in each season, including in areas adjacent to the offset site;
f. The number of Koala mortalities attributable to non-native predators; and
g. The baseline conditions in respect of each of the outcomes specified in conditions 9-11.

Baseline Surveys were conducted between April and May 2021, within 6 months of the Approval and addressed each of the items outlines above and specified in Approval Conditions 9-11. Within one month of completing the baseline surveys they were required to be published on the project website in accordance with Condition 8a. The last survey conducted for the Burnett Creek and Lyons Offset Sites was conducted on the 27 May 2021. A separate report was completed for each of the offset sites, and both were published on the website. The Burnett Creek Baseline Survey Report was published on the website on 6 August 2021 and the Lyons Baseline Survey Report was published on the website on 2 February 2022. These reports will remain on the website for the duration of the project. The survey effort undertaken at the two offset sites is presented on Plan 1

2.2. Rehabilitation Progress Surveys

The vegetation across both offset sites is substantially the same, dominated by remnant vegetation with limited bare areas. As such, the key management actions across the sites will be the same. Key management actions will include assisted natural regeneration practises to expand patches of regrowth over weed areas. Following the approval of the Offset Management Framework (OMF), rehabilitation activities including assisted natural regeneration via weed management and infill planting were not observed, regardless areas of regrowth containing native species, including Koala food trees, were noted throughout both offset areas (**Photo Set 1**). Further management actions, including weed control and pest management are to commence within the subsequent reporting period.

Site assessments of rehabilitation activities were conducted by two (2) Ecologists on the 6th March 2023 at Burnett Creek and 14th April 2023 at Lyons Offset Site. Both offset sites were traversed with photos and notes taken assessing the progress of rehabilitation plantings, natural regeneration, and any significant notable

changes to vegetation. No habitat quality transects or GHFF foraging habitat assessments were not conducted during this reporting period as it is not required to be conducted until the 5th assessment year.

As mentioned previously, natural regeneration of native species was observed throughout both properties, including areas previously impacted by bushfires (**Photo Set 1**). Weed presence is still prevalent in some areas however not observed to be impeding the growth of natural regeneration noted. Several areas across the wider Burnett Offset site were observed to contain recent rehabilitation plantings, largely in-fill within remnant and regrowth vegetation (**Photo Set 2**). Observations of rehabilitation stock found them to be growing steadily with the majority remaining healthy and in good condition.

Direct and indirect surveys to detect Koala density and GHFF presence surveys will be repeated throughout the management period. The current monitoring period conducted indirect surveys with neither Koala nor GHFF observed during the March or April 2023 surveys on-site.

Photo Set 1: Natural regeneration of native species throughout the offset sites; Lyons (*Left*) and Burnet Creek (*Right*)

Photo Set 2: Rehabilitation plantings across the wider Burnett Creek Offset Site

2.2.1 On-going Maintenance

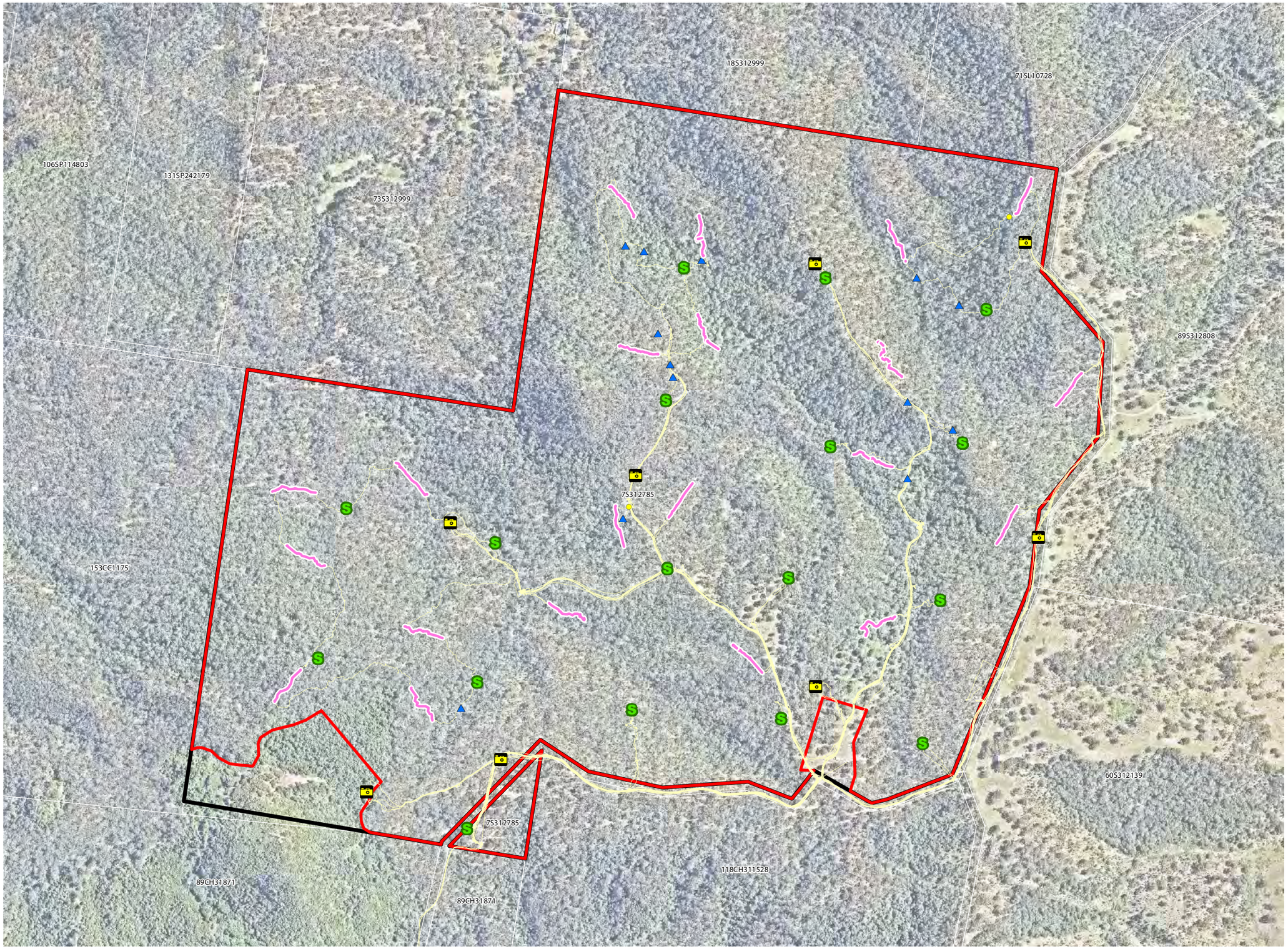
Weed management efforts are yet to occur across the site however EnviroCapital have intention to commence weed management efforts within 2023 (i.e. the subsequent reporting period). The following procedures will be implemented to ensure that the monitoring event aligns with the baseline monitoring methodology:

- On a field datasheet, detail the time of year of the monitoring event, list of observed weeds, photo location and direction and notes of any notable positive and/or negative changes in weed density and coverage.
- Carry the previous year's weed survey mapping, field datasheet and photos for noting changes in weed infestations and densities.
- Continue original baseline survey techniques (MHQA) (5 yearly) to assess positive or negative change in the coverage of weeds on the offset sites.
- Weeds to be monitored and treated annually, until performance criteria is achieved. Once performance criteria is achieved this is to be maintained for management period.

Natural regeneration and rehabilitation plantings are set to continue until establishment of agreed number of new Koala food trees. If natural regeneration should fail, infill planting is to be implemented. Following infill planting, monitoring will commence in the same manner outlined below:

- GPS coordinates of the photo point.
- Date, time and number of each photo.
- Direction in which the photo was taken (north, south, east and west).
- After each photo monitoring event, a GPS waypoint of the location of the rehabilitation and a GPS polyline of the extent will be recorded.

1. Lyons Offset Area Survey Effort



Legend

- Offset Site DCDB
- QLD DCDB
- Offset Area

Baseline Survey

- Weed Transect
- GPS Tracklog
- Camera
- Observation
- SAT
- Weed Observation

0 100 200 300 m

Transverse Mercator | GDA 1994 | Zone 56 | 1:9,000 @ A3

N

Issue	Date	Description	Drawn	Checked
A	24/04/2023	Preliminary	LS	LT

ENVIRO CAPITAL

on behalf of
Pointcorp Heritage
Park Pty Ltd

NOTES
This plan was prepared as a desktop assessment tool.
The information on this plan is not suitable for any other purpose.
Property dimensions, areas, numbers of lots and contours and other physical features shown have been compiled from existing information and may not have been verified by field survey.

Layer Sources
Qld State Cadastre and Mapping layers © State of Queensland (Department of Natural Resources and Mines) 2021. Updated data available at http://qldspatial.information.qld.gov.au/catalogue//

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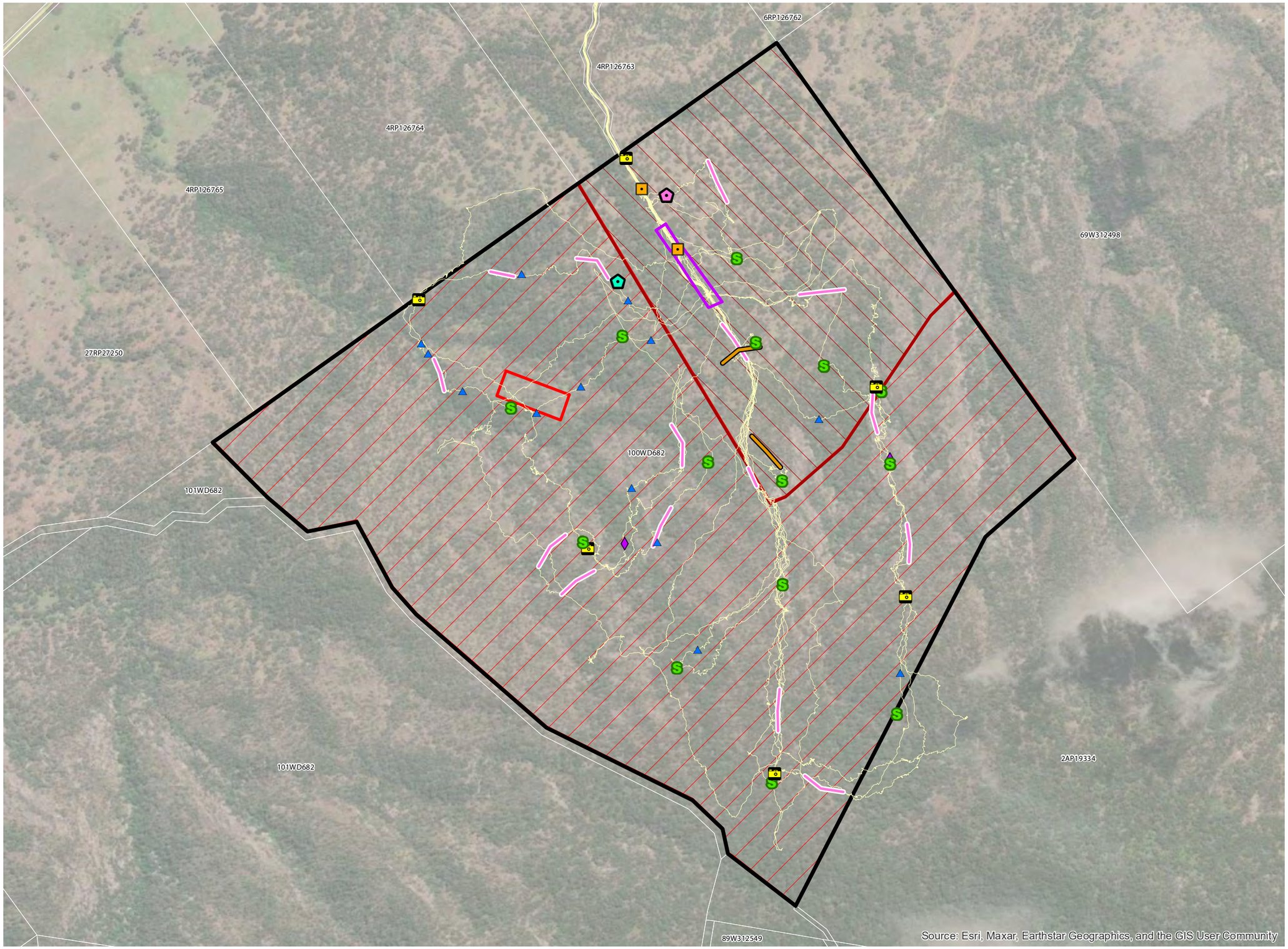
2. Burnett Creek Offset Area Survey Effort



Legend

- Offset Site DCDB
- QLD DCDB
- EPBC 2017/8095 Offset Area
- EPBC 2017/8090 Offset Area

Baseline Survey

- Koala Food Tree Planting
- MHQA Transect
- Weed Transect
- GPS Tracklog
- Camera
- GHFF Survey
- Koala (female)
- Koala (male)
- Koala scat
- SAT
- Weed observations

ENVIRO CAPITAL

on behalf of
Pointcorp Heritage
Park Pty Ltd

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0 100 200 300 m

Transverse Mercator | GDA 1994 | Zone 56 | 1:9,000 @ A3

N

Issue	Date	Description	Drawn	Checked
A	24/04/2023	Preliminary	LS	LT

3. EPBC Conditions and Compliance

Table 4 documents the compliance with EPBC Act conditions for the Project for the second reporting period, being the 27 May 2022 to the 27 May 2023. The compliance assessment relates to the approval conditions in force regarding the Offset Sites at the time of the two-year anniversary.

Table 4: Offset Sites Compliance Audit of EPBC 2017/8090

Condition		Is the Project compliant with this condition?	Evidence/ Comments
Environmental Offset Requirements			
5	To compensate for the clearing of up to 89.83 ha and the functional loss of 28.01 ha of Koala habitat and Grey-headed Flying-fox foraging habitat, the approval holder must: a. Legally secure at least 151.3 ha of land at the Burnett Creek Offset site and at least 250.4 ha of land at the Lyons Offset site and commence Offset site management activities prior to undertaking any clearing at the development area.	**Previous reporting period** **Non-compliant (resolved 29 July 2021)**	The offset sites were legally secured via voluntary declaration under the *Nature Conservation Act 1992* (Qld). The offset area legally secured at the Burnett Creek offset site is 150.497 ha and was formally declared on 11 March 2021 (DAM2020/014072). The shortfall at Burnett Creek Offset Site was gained at the Lyons Offset Site through two applications. One comprising of 250.843 ha which was declared on 15 March 2021 (DAM/000101) and another application of 2.163 ha declared on the 29 July 2021 (DAM2021/002344). The process to legally secure the offset sites via voluntary declarations commenced prior to the commencement of the action, however the offset sites had not been formally legally secured prior to the official commencement of the action. The impact on MNES as a result of this non-compliance was considered minimal as the delay from commencement of the action to declaration date was only 5 and 7 business days, respectively. No activities were undertaken at either offset site that reduced the quality of the offset for Koala or Grey-headed Flying-fox during the period between the commencement of the action and the declaration of the offset sites. This administrative non-compliance is considered to be resolved with the declaration of the offset sites.

Condition		Is the Project compliant with this condition?	Evidence/ Comments
	b. Within 20 business days of legally securing at least 151.3 ha of land at the Burnett Creek Offset site, and at least 250.4 ha of land at the Lyons Offset site, provide the Department with written evidence demonstrating that the Burnett Creek Offset site and Lyons Offset site have been legally secured (e.g. legal security documentation), shapefiles and the offset attributes.	**Non-compliant (resolved 1 April 2022)**	Evidence of the two (2) original declarations (DAM2020/014072 and DAM/000101) were provided to the Department on 24 March 2021 within 20 business days of legally securing the land at both Burnett Creek and Lyons offset sites in accordance with Condition 5b. Shapefiles confirming the offset site areas were issued with the Offset Management Framework on 1 April 2022, in accordance with Condition 8b. The Offset Management Framework was approved by the Department on the 2 May 2022. This non-compliance has been resolved and the condition is considered to be satisfied.
	c. Legally limit uses and permissible activities at Burnett Creek Offset site and Lyons Offset site such that the quality of Koala habitat and Grey-Headed Flying-fox foraging habitat at the Burnett Creek Offset site and Lyons Offset site cannot lawfully be reduced.	**Compliant**	Uses and permissible activities at Burnett Creek Offset Site and Lyons Offset Site have been legally limited through voluntary declaration under the *Nature Conservation Act 1992* (Qld).
Baseline Survey information			

Condition		Is the Project compliant with this condition?	Evidence/ Comments
6	Within 6 months from the date of this approval, the approval holder must complete baseline surveys of the Burnett Creek Offset site and the Lyons Offset site. The baseline surveys must be conducted by a Suitably qualified field ecologist in accordance with a scientifically valid, robust, and repeatable methodology, and include the following: a. The vegetation condition attributes for each Regional Ecosystem, specifying the baseline habitat quality assessment data for each operational management unit, as applied in the preliminary documentation; b. The number and condition of winter or spring flowering Grey-headed Flying-fox foraging species across the Burnett Creek Offset site and Lyons Offset site; c. The Species Stocking Rate for the Koala and the Grey-headed Flying-fox; d. The extent of weed cover; e. The number of non-native predators in each season, including in areas adjacent to the Burnett Creek Offset site and Lyons Offset site; f. The number of Koala mortalities attributable to non-native predators; and g. The baseline conditions in respect of each of the outcomes specified in conditions 9-11.	**Compliant**	Baseline Surveys were conducted between April and May 2021, within 6 months of the Approval and addressed each of the items outlined in Condition 6 and specified in Conditions 9-11.
7	For the protection of the Koala and the Grey-headed Flying-fox, the approval holder must exclude all livestock from both the Burnett Creek Offset site and Lyons Offset site prior to any clearing in the development area, and maintain this for the period of effect of the approval.	**Compliant**	The Burnett Creek offset site and Lyons offset site are not used for grazing or agricultural activities. The Offset provider, EnviroCaptial, has commenced maintenance of fences to ensure cattle cannot access the offset sites.

Condition		Is the Project compliant with this condition?	Evidence/ Comments
8	Within one month of the completion of baseline surveys at Burnett Creek Offset site and Lyons Offset site, the approval holder must: a. Publish all survey data (including survey methodology and dates) from the baseline surveys required under condition 6	**Non-compliant (resolved 2 February 2022)**	The baseline surveys for the Burnett Creek and Lyons Offset Sites was conducted on the 27 May 2021. A separate report was completed for each of the offset sites, and both were published on the website. The Burnett Creek Baseline Survey Report was published on the website on 6 August 2021 and the Lyons Baseline Survey Report was published on the website on 2 February 2022. Neither of the reports were published within one (1) month of completing the baseline surveys. However, a significant amount of data and information was provided in the reports. The one (1) month timeframe is a very short period to provide such a comprehensive technical report, especially for two (2) large offset areas. These reports will remain on the website for the duration of the project. This non-compliance has been resolved and the condition is considered to be satisfied.

Condition		Is the Project compliant with this condition?	Evidence/ Comments
	b. Submit an Offset Monitoring and Reporting framework prepared by a Suitably qualified field ecologist for approval by the Minister. The Offset Monitoring and Reporting framework must include (but is not limited to):	**Non-compliant (resolved 1 April 2022)**	Preparation of the Offset Management Framework (OMF) commenced during the previous reporting period following publication of the two (2) Baseline Survey Reports. The OMF was submitted to the Department for approval on 1 April 2022 and approved by the Department on 2 May 2022 (outside of this reporting period). The OMF was also required to be completed within one (1) month of completing the baseline surveys. The OMF could not be completed prior to the completion of the Baseline Survey Reports. As noted above within condition 8a, a significant amount of data and information had to be provided in the Baseline Survey Reports delaying publication. Preparation of the OMF commenced following the publication of the Baseline Survey Reports. One (1) month to prepare Baseline Survey Reports and an OMF for two (2) large offset areas is not considered sufficient time to prepare adequate documents. This non-compliance has been resolved and the condition is considered to be satisfied.
	i. the ecological outcomes specified in conditions 9-11 (including key milestones and baseline survey results);	**Compliant**	The OMF version B, dated 22 April 2022, was approved by the Department on 2 May 2022 after achieving all requirements specified under condition 8b
	ii. management measures proposed to achieve the ecological outcomes specified in conditions 9-11.	**Compliant**	
	iii. for each management action and monitoring outcome, detail how and when performance will be quantified, measured and monitored;	**Compliant**	

Condition		Is the Project compliant with this condition?	Evidence/ Comments
	iv. detail contingency measures to be implemented if some or all of the specified milestones in conditions 9-11 are not achieved.	**Compliant**	
	c. The approval holder must publish the approved Offset Monitoring and Reporting framework on the website within 20 business days of approval by the Minister.	**Compliant**	The OMF was published on the project website on 5 May 2022, 3 business days following approval by the Department.
Offset site pest and weed management			
9	The approval holder must apply relevant Offset site management activities at both the Burnett Creek Offset site and Lyons Offset site to: a. Relative to baseline survey results, achieve a 95% reduction in the numbers of non-native predators by the end of year 5; and	**On going**	No weed reduction or invasive species management occurred this reporting period. Offset actions are anticipated to commence within the subsequent reporting period following the guidance of the OMF version B, dated 22 April 2022.
	b. Reduce the extent of weed cover to less than 20% of baseline survey results by the end of year 5; and to less than 5% of baseline survey results by the end of year 10.	**On going**	
Burnett Creek Offset Site			
10	The approval holder must apply assisted natural regeneration to achieve the following outcomes in all operational management units at the Burnett Creek Offset site: a. Average recruitment of woody perennial species in the ecologically dominant layer greater than 50% of the benchmark for relevant Regional Ecosystems present by the end of year 5 and to an average greater than 75% of the benchmark for relevant Regional Ecosystems present by the end of year 15.	**On going**	Baseline surveys were conducted in April – May 2021 across both offset sites. Future milestone surveys are to be conducted within the same baseline survey month(s). Monitoring surveys of the Burnett Creek Offset Site occurred on the 6th March 2023, within 12 months of the original baseline surveys. This survey found that offset site management activities have not commenced within this

Condition		Is the Project compliant with this condition?	Evidence/ Comments
	b. Average native tree species richness must be >50% of the benchmark for relevant Regional Ecosystems present by the end of year 5 and be >90% of the benchmark for relevant Regional Ecosystems present by the end of year 15.	**On going**	reporting period, with management of weeds not yet evident. Natural regeneration was also observed within areas of disturbance, including those previously affected by bushfires, with species noted to include Koala food trees. Further offset actions, including weed management activities, are anticipated to commence within the subsequent reporting period following the guidance of the OMF version B, dated 22 April 2022. Habitat quality transects and GHFF foraging habitat assessments were not conducted during this reporting period. Assessments of species richness, coverage and density are anticipated to occur at Year 5 when the first key milestone occurs. Prior to and following this key milestone, annual monitoring will occur to ensure offset management actions are transpiring in order to assure agreed benchmarks are reached by Year 5.
	c. Average tree canopy cover must be greater than 30% of the benchmark for relevant Regional Ecosystems present by the end of year 5 and increase to between 50% and 200% of the benchmark for relevant Regional Ecosystems by the end of year 15.	**On going**	
	d. The number of large trees must be greater than 30% of the benchmark for relevant Regional Ecosystems present by the end of year 5, and between 50% and 100% of the benchmark for relevant Regional Ecosystems present by the end of year 15.	**On going**	
	e. An increase in Koala density above average Koala density by the end of year 15.	**On going**	
	f. An average of at least 6 different winter or spring flowering Grey-headed Flying-fox foraging species present in each assessment plot by the end of year 15.	**On going**	
Lyons Offset Site			
11	The approval holder must apply assisted natural regeneration to achieve the following outcomes in all operational management units at the Lyons Offset site: a. Average recruitment of woody perennial species in the ecologically dominant layer greater than 50% of the benchmark for relevant Regional Ecosystems present by the end of year 5 and to an average greater than 75% of the benchmark for relevant Regional Ecosystems present by the end of year 15.	**On going**	Baseline surveys were conducted in April – May 2021 across both offset sites. Future milestone surveys are to be conducted within the same baseline survey month(s). Monitoring surveys of the Lyons Offset Site occurred on the 14th April 2023, within 12 months of the original baseline surveys. This survey found that offset site

Condition		Is the Project compliant with this condition?	Evidence/ Comments
	b. Average native tree species richness must be greater than 90% of the benchmark for relevant Regional Ecosystems by the end of year 10.	**On going**	management activities have not commenced within this reporting period, with management of weeds not yet evident. Natural regeneration was also observed within areas of disturbance, including those previously affected by bushfires, with species noted to include Koala food trees. Further offset actions, including weed management activities, are anticipated to commence within the subsequent reporting period following the guidance of the OMF version B, dated 22 April 2022. Habitat quality transects and GHFF foraging habitat assessments were not conducted during this reporting period. Assessments of species richness, coverage and density are anticipated to occur at Year 5 when the first key milestone occurs. Prior to and following this key milestone, annual monitoring will occur to ensure offset management actions are transpiring in order to assure agreed benchmarks are reached by Year 5.
	c. Average tree canopy cover must be between 50% and 200% of the benchmark for relevant Regional Ecosystems by year 10.	**On going**	
	d. The number of large trees must be greater than 25% of the benchmark for relevant Regional Ecosystems present by the end of year 10, and between 50% and 100% of the benchmark for relevant Regional Ecosystems present by the end of year 15.	**On going**	
	e. An increase in Koala density above in average Koala density by the end of year 15.	**On going**	
	f. An average of at least 6 different winter or spring flowering Grey-headed Flying-fox foraging species present in each assessment plot by the end of year 15.	**On going**	
12	The approval holder must maintain each environmental outcome specified under conditions 9, 10 and 11 from the time that it is first achieved, for the remainder of the period of effect of the approval.	**Not Applicable**	Environmental outcomes and key milestones have not been achieved. Surveys of the offset areas have found that that offset management procedures have commenced as of this reporting period, including rehabilitation plantings. The first major milestone for the project occurs at Year 5 where a suitably qualified independent expert will be engaged to undertake an assessment of the offset area against the agreed benchmarks specified in conditions 9-11.

Condition		Is the Project compliant with this condition?	Evidence/ Comments
13	For each of the Burnett Creek Offset site and Lyons Offset site, the approval holder must engage a Suitably qualified independent expert to undertake an assessment at the end of each of year 5, year 10, year 15, and year 20 as to whether each outcome required under conditions 9, 10 and 11 has been, or is likely to be, achieved in accordance with the condition requirements, and provide advice of any circumstance/s which they consider is/are affecting the achievement of each outcome. The findings of each assessment must be documented and published within 3 months of the end of the particular period in which the assessment is undertaken and be provided to the Department within 5 business days of being published.	**Not Applicable**	The reporting period covers the second 12 month anniversary of commencement of the action. A Suitably qualified independent expert will be engaged to undertake an assessment at the end of each of year 5, year 10, year 15, and year 20
14	If, at any time during the period of effect of the approval, the Minister is not satisfied that any of the requirements and/or outcomes under the conditions of approval, including (but not limited to) conditions 9, 10 and 11, have been or are likely to be achieved or maintained, the Minister may require the approval holder to submit a corrective action plan for the Burnett Creek Offset site and/or Lyons Offset site for the Minister's approval, or to monitor, manage, avoid, mitigate, offset, record and/or report on, impacts to the Koala and/or the Grey-headed Flying-fox. a. The Minister may set a timeframe in which the corrective action plan must be submitted and suitable for approval, may require that the corrective action plan be prepared and/or reviewed by a suitably qualified independent expert and may specify consequences for the approval holder if the corrective action plan is not suitable for approval within the specified timeframe.	**Not applicable**	A request for a corrective action plan was not made by the Minister during this reporting period.
	a. The approval holder must implement the corrective action plan approved by the Minister in writing.	**Not applicable**	
Compliance records			

Condition		Is the Project compliant with this condition?	Evidence/ Comments
17	The approval holder must maintain accordance and complete compliance records.	**Compliant**	All records substantiating all activities associated with or relevant to the conditions of approval are maintained by the Proponent. If required by the Minister, these records can be made available to allow a third-party audit of the Project.
18	If the Department makes a request in writing, the approval holder must be provided 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 an independent auditor in accordance with section 485 of the EPBC Act, and or used to verify compliance with the conditions. Summaries of the results of an audit may be published on the Department's website or through general media.	**Not applicable**	A request for an independent audit of the Project was not made by the Minister during the reporting period.