

Annual EPBC Compliance Report 2023

EPBC 2022/09243

17 January 2023 - 16 January 2024

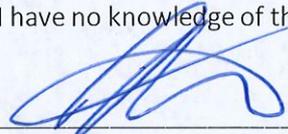
Visy Glass Recycling and Manufacturing Facility

222 & 298 Stapylton Jacobs Well Road, Stapylton

27 March 2024

Declaration of accuracy

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) ROBERT KAYE

Position (please print) DIRECTOR / GROUP GENERAL COUNSEL

Organisation (please print including ABN/ACN if applicable)

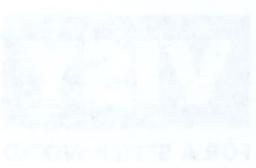
Visy Glass Operations (Australia) Pty Ltd 94 004 230 326

Date 27 / 3 / 24

Document Control

Issue	Date	Prepared By	Checked By
Issue A	27/03/2024	AT	MB/AM

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



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Glossary of Terms

ACR	Annual Compliance Report
CoGC	City of Gold Coast
DAM	Declared Area Map
DCCEEW	Department of Climate Change, Energy, the Environment and Water
EPBC	<i>Environmental Protection and Biodiversity Act 1999</i>
Ha	Hectares
NAMU	Natural Area Management Unit of the City of Gold Coast
OMP	Visy Offset Management Plan for EPBC 2022-09243
Project	Visy Glass Recycling and Manufacturing Facility, Stapylton, Queensland
VMA	<i>Vegetation Management Act 1999</i>
Visy	Visy Glass Operations (Australia) Pty Ltd, the Proponent

1 Introduction

This Annual Compliance Report (ACR) Year 1 (17 January 2023 – 16 January 2024) has been prepared by Visy Glass Operations (Australia) Pty Ltd (Visy; the Proponent) as per the EPBC approval granted on 17 January 2023 for the Visy Glass Recycling and Manufacturing Facility (the Project) located at 222 & 298 Stapylton Jacobs Well Road, Stapylton, Queensland (EPBC 2022/09243, provided at Attachment 1).

In accordance with EPBC 2022/09243 granted under the *Environmental Protection and Biodiversity Act 1999* (EPBC Act), this ACR has been prepared to meet requirements of Conditions 28, 29, 30 and 31 of the approval which state:

28. The approval holder must prepare a compliance report for each 12-month period following the date of this approval, or as otherwise agreed to in writing by the Minister.

29. Each compliance report must be consistent with the department's Annual Compliance Report Guidelines (2014).

30. Each compliance report must include:

- a. Accurate and complete details of compliance and any non-compliance with the conditions and the plans, and any incidents.*
- b. One or more shapefile showing all clearing of any protected matters, and/or their habitat, undertaken within the 12-month period at the end of which that compliance report is prepared.*
- c. A schedule of all plans in existence in relation to these conditions and accurate and complete details of how each plan is being implemented.*

31. The approval holder must:

- a. Publish each compliance report on the website within 60 business days following the end of the 12-month period for which that compliance report is required.*
- b. Notify the department electronically, within 5 business days of the date of publication that a compliance report has been published on the website.*
- c. Provide the weblink for the compliance report in the notification to the department.*
- d. Keep all published compliance reports required by these conditions on the website until the expiry date of this approval.*
- e. Exclude or redact sensitive ecological data from compliance reports published on the website or otherwise provided to a member of the public.*
- f. If sensitive ecological data is excluded or redacted from the published version, submit the full compliance report to the department within 5 business days of its publication on the website and notify the department in writing what exclusions and redactions have been made in the version published on the website.*

1.1 Reporting Period

This ACR details the status and compliance of the Project for the 12 month period between the 17 January 2023 and 16 January 2024.

This ACR must be published on the Visy website within 60 business days of the 12 month period following the date of approval (17 January 2023) and notification and the weblink to the ACR provided to Department of Climate Change, Energy, the Environment and Water (DCCEEW, the department) within 5 business days of the date of publication.

1.2 EPBC Approval

Visy Glass Operations (Australia) Pty Ltd, as the Proponent of the Project (EPBC Act Referral 01189) was issued with an approval by DCCEEW on 17 January 2023 subject to conditions. Key details related to the EPBC 2022/09243 approval are provided in Table 1.

Table 1. Approval details

Commonwealth Reference	EPBC 2022/09243
Approval Holder	Visy Glass Operations (Australia) Pty Ltd
ABN	94 004 230 326
Project Name on the Approval	Visy Glass Recycling and Manufacturing Facility
Approved Acton	To construct a glass recycling and manufacturing facility in Stapylton, Queensland.
Controlling Provision(s)	Listed threatened species and communities (section 18 and section 18A)
Approval Date	17 January 2023
Expiry Date of the Approval	17 January 2048
Date of Commencement of the Action	6 February 2023
Address	222 and 298 Stapylton Jacobs Well Rd, Stapylton, QLD
Local Government Area	City of Gold Coast (CoGC)

1.3 Project site and context

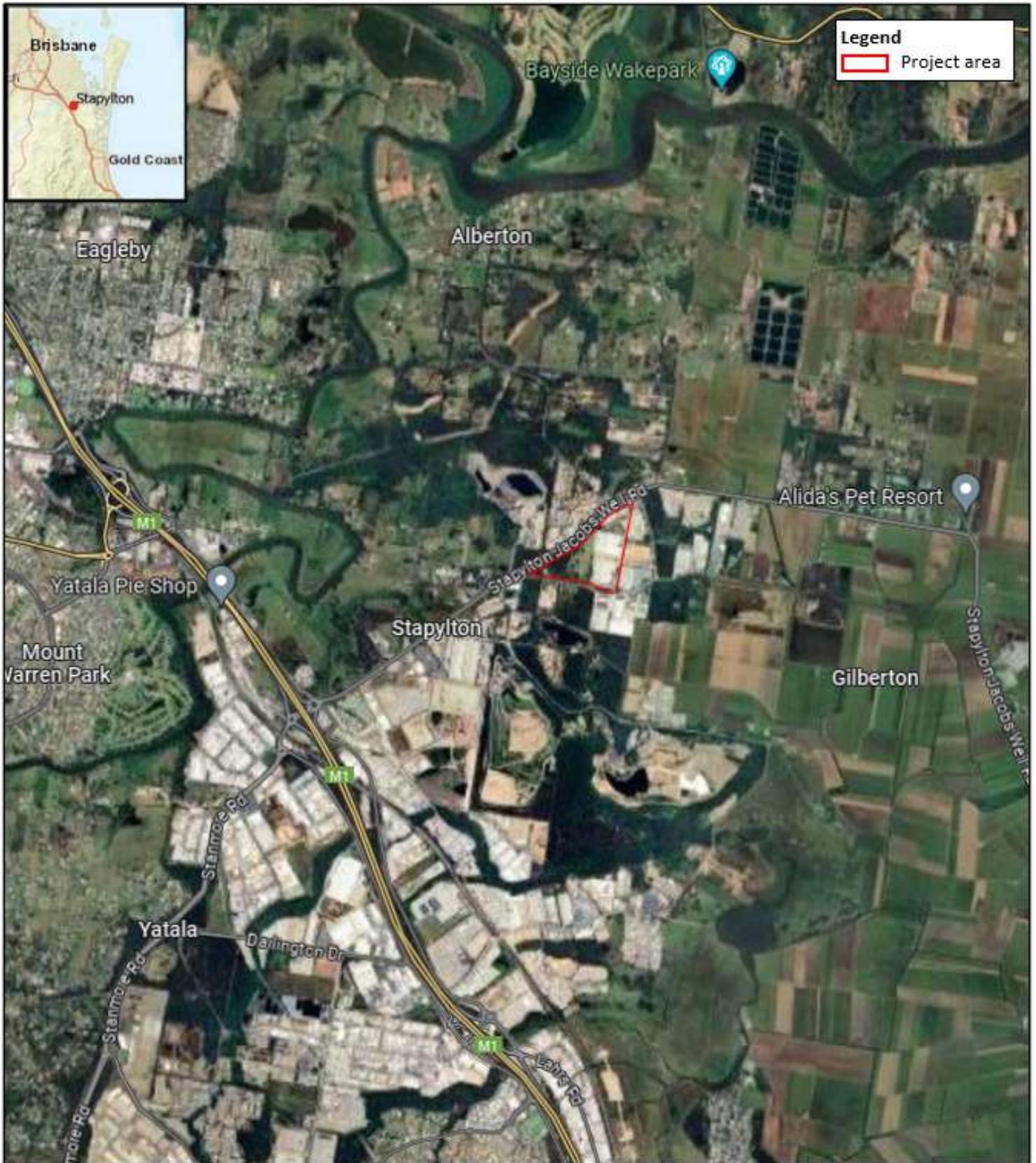
The Project is located in south-east Queensland at 222 and 298 Stapylton Jacobs Well Road, Stapylton across a combined area of 29 hectares (ha) in the City of Gold Coast local government area. EPBC 2022/09243 relates to the impact area of 11.95 ha of habitat on 222 Stapylton Jacobs Well Road (Lot 2 WD4654). Figure 1 shows the context of the Project area and Figure 2 shows the Project impact area within Lot 2 WD4654.

The Project is located in an area predominantly zoned medium impact industry/future medium impact industry precinct with some adjacent sites zoned high impact industry/future high impact industry precinct. Visy has two existing manufacturing facilities and two warehouse buildings (now project offices) on 298 Stapylton Jacobs Well Road (Lot 2 SP189558) with access via Stapylton Jacobs Well Road and Quinns Hill Road East. The adjacent land uses comprise various industrial or commercial operations and undeveloped blocks. The area beyond remains rural, with agricultural cropping and farmland uses.

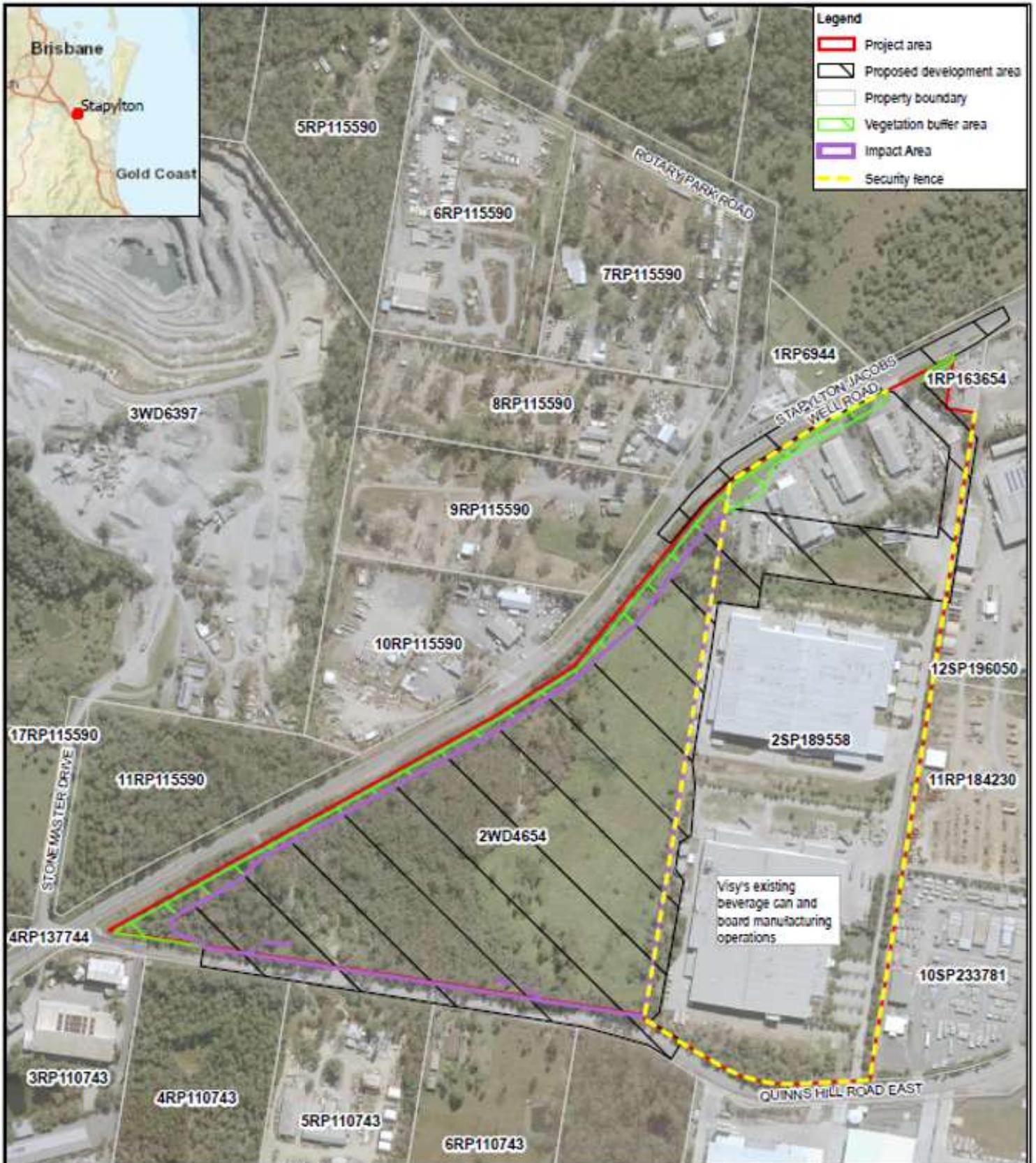
1.4 Overview of Key Activities and Achievements

During Year 1 of compliance reporting, the following development and environmental management activities occurred:

- Clearing of a total of 11.95 ha of Koala habitat within the impact area of Lot 2 WD4654. This represents the entirety of the vegetation clearing under EPBC 2022/09243 for the Project.
- Implementing the Visy Offset Management Plan (OMP) at the offset site (Lot 906 SP280831) located in Stage Coach Reserve, Kingsholme within the City of Gold Coast and legally securing the site under a Voluntary Declaration.
- Surveys at the offset site for:
 - o Baseline weed and feral animals
 - o Koala density and habitat activity
 - o Year 1 ecological condition
- Various weed control practices at the offset site including prescribed burns, mechanical mulching of large areas containing woody weeds, chemical stem injecting and spot spraying woody and vine weeds.
- Pest animal trapping on and adjacent to the offset site which removed 6 red foxes.
- Establishment of Year 1 photo points at the offset site, being 12 on-ground and 12 drone points, to monitor habitat restoration delivered through the OMP.



<p>0 0.5 1.0 1.5 2.0 kilometres</p> <p>Source: Google maps 23/02/2024</p>		<p>Project: Visy Stapylton Glass Recycling and Manufacturing Facility EPBC 2022/09243 Year 1 ACR Date: 21/02/2024</p>	<p>Figure 1. Project area context.</p> <p style="text-align: right;">Author: A. Trevena</p>
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0 50 100 150 200 metres

Source: Reproduced from Preliminary Documentation Glass Manufacturing and Recycling Facility, GHD, 21/10/2022

Project: Visy Stapylton Glass Recycling and Manufacturing Facility EPBC 2022/09243 Year 1 ACR
 Date: 6/03/2024

Figure 2. Project impact area.

Author: A. Trevena

2 Current Status of the Project

2.1 Management Plans

The approved management plans in relation to EPBC 2022-09243 are:

- ~~*Visy Offset Management Plan, Glass Manufacturing and Recycling Facility 222 & 298 Stapylton Jacobs Well Road, Stapylton, Visy Glass Operations (Australia) Pty Ltd, 31 October 2022, GHD*~~ (superseded in accordance with Condition 8)
- *Visy Offset Management Plan, Glass Manufacturing and Recycling Facility 222 & 298 Stapylton Jacobs Well Road, Stapylton, Visy Glass Operations (Australia) Pty Ltd, 13 October 2023, GHD.*

The *Visy Offset Management Plan* (OMP) is available via the Project webpage on the Visy website at:

<https://www.visy.com/about/projects-and-investments/brand-new-yatala-glass-plant>

The Project webpage also provides information on the Project and construction updates.

Table 2 provides a review of the OMP commitments and implementation during the Year 1 reporting period (17 January 2023 – 16 January 2024).

2.2 Offset Delivery

Visy entered into an agreement with City of Gold Coast (CoGC) in April 2023 to provide and manage the offset required for EPBC 2022-09243. CoGC is the owner of the offset property being Lot 906 SP280831 which forms part of CoGC's Stage Coach Reserve in Kingsholme. CoGC will deliver an Offset Restoration Project at the property in accordance with the OMP for EPBC 2022-09243.

2.3 Offset Area Legally Secured

The offset property was legally secured via a Voluntary Declaration under the *Vegetation Management Act 1999* (VMA) on 15 September 2023. The Chief Executive of the Department of Resources declared the property area, identified on Declared Area Map DAM 2023/002001, as an area of high nature conservation value under section 19G(1)(b) of the *Vegetation Management Act 1999* (VMA). The Declaration is provided at Attachment 2.

2.4 Vegetation Clearing

A total of 11.95 ha of Koala habitat was cleared within the impact area of Lot 2 WD4654 during the Year 1 reporting period. This represents the entirety of the vegetation clearing under EPBC 2022/09243 for the Project. The impact area is shown in Figure 1. A shapefile of the impact area vegetation clearing is provided electronically to DCCEEW as required.

Table 2 Offset Management Plan implementation.

ID	Commitment	Evidence/Comments/Status
MONITORING TO SUPPORT MANAGEMENT OBJECTIVES		
	Conduct Baseline Weed and Feral animal surveys across offset property.	A Baseline Survey Report for EPBC 2022-0924 at the offset property was conducted by Saunders Havill Group to determine the extent of weed cover and abundance of feral animals. The survey is provided at Attachment 3. Refer also to EPBC 2022/09243 Condition 7.
	Conduct Koala Surveys on the offset area to determine species presence and stocking rate in years 1, 10 and 14.	A Baseline Koala Survey at the offset property was conducted by EnviroSphere Consulting to provide a snapshot of koala density and habitat activity. The report is provided at Attachment 4.
	Conduct photo and drone monitoring of the offset area in years 1, 3, 7, 10 and 14.	A Year One Monitoring Report for the offset property was conducted by EnviroSphere Consulting to assess the current ecological condition of the site and establish 12 on-ground photo monitoring points and 12 drone photo monitoring at specified coordinates. The report is provided at Attachment 5.
	Complete BioCondition surveys in years 2, 7, 10 and 15. (Survey years as per EPBC 2022/09243 Condition 14)	Not applicable at year 1.
LEGALLY SECURING OFFSET AREA		
8.1A	Legally secure the offset via VDec under the VMA via lodgement of application within 6 months of the action commencing.	The action commenced on 6 February 2023. A Voluntary Declaration over the entire 31.07 ha offset property Lot 906 SP280831 was submitted on 30 May 2023 by the land owner, CoGC. Declaration 2023-002001 was made on the property on 15 September 2023 under the VMA. The Declaration is provided at Attachment 2.
8.1B	Exclude all incompatible land uses via installation of project information signage at entries to the offset site.	Signage has been installed at 3 entries to the offset site by CoGC. Refer to Attachment 6.

REVEGETATION AND REGENERATION		
8.2A	Increase native plant richness via a planting program based on site-specific information from baseline surveys.	Site-specific information has been obtained from Biocondition survey (refer OMP), baseline weed survey (refer Attachment 3), and Year 1 ecological condition survey (refer Attachment 5). Based on this information, the offset site is divided into 11 pre-determined zones which fall into 2 main restoration management methods to be employed for the future of the offset, being Assisted Regeneration and Revegetation (refer Attachment 5).
8.2B	Access to planting areas to follow existing tracks with no new vehicle access tracks constructed.	No new vehicle access tracks have been constructed at the offset site.
8.2C	Establish watering regime for planted areas.	Not commenced as planting has not occurred.
8.2D	Increase large trees to at least 50% of RE benchmark via protection of regrowth trees suitable for RE large tree species through inclusion of offset site into CoGC conservation estate actively managed by the NAMU.	CoGC is delivering an Offset Restoration Project at the property in accordance with the OMP (refer Section 2.5). Assisted Regeneration and Revegetation zones to increase large trees is actively managed by CoGC's Natural Area Management Unit (NAMU). The Year 1 Baseline Survey Report identifies natural regeneration of Eucalypts in Zone 02B and 02F (refer Attachment 5).
8.2E	Fire management to reduce fuel load and uncontrolled fire risk with protection of new plantings and individual trees as needed.	A hazard reduction burn was completed during July 23 by CoGC NAMU.
8.2F	Implement appropriate bushfire management practices to reduce heavy infestation of introduced grasses and weeds and stimulate in situ generation of native plants.	As for 8.2E. The Year 1 Baseline Survey Report identifies regeneration of native plants is occurring following the hazard reduction burn (refer Attachment 5).
8.2G	Reduce non-native plant cover within offset area using a variety of control measures and identify and map priority weed management areas.	As for 8.3A-C.
8.2H	Habitat quality retention to achieve 80% retention of fallen logs, rocks, trunk hollows, leaf litter.	As for 8.2D. Waste material including fencing wire, star pickets was removed from the site in November 23.

8.2I	Re-plant if the density of native vegetation is below the required density for appropriate RE thresholds.	Not applicable at year 1.
8.2J	Erosion and sediment control to protect planted areas and remediate soil where necessary.	No evidence of erosion and sediment loss that requires control or remediation.
WEED MANAGEMENT		
8.3A	Weed management to reduce the potential impacts of existing weed infestations on retained vegetation/habitats via a weed maintenance program during years 1-3 monthly during warmer months and bi-monthly during colder months.	February-March 23 – Baseline weed survey completed (refer to Attachment 3) The following weed control activities were completed by CoGC NAMU: April-May 23 – Hazard reduction burn site preparation completed, including mechanical control of weeds.
8.3B	Maintain the existing restoration area with the offset area via rehabilitation works (including weed management and assisted natural regeneration) via weed management program as for 8.3A.	July 23 – Hazard reduction controlled burn completed, including burn control for woody weeds.
8.3C	Reduce the extent of weed infestations within the offset area as for 8.3B.	November 23 - Vegetation surveys approximately 6-8 weeks after the hazard reduction burn to detail native and exotic flora species were conducted by EnviroSphere (refer Attachment 5) which will inform follow up weed control activities by CoGC NAMU. October-December 23 – Additional weed control activities typical of primary works, such as forest mulching of large areas containing woody weeds, cut/scrape/paining woody and vines weeds, stem injecting large woody weeds, careful overspray and/or spot spraying of woody and vine weeds.
PEST MANAGEMENT		
8.4A	Minimising feral pests within the offset area and restricting native species from entering residential areas and roadways via control of feral pests that impact ecological success of offset area and fencing along neighbouring properties that have yet to erect fencing.	Pest animal trapping was undertaken across the offset site and surrounding areas during May 23 by CoGC’s Invasive Animal Operations. Six (6) red foxes were trapped and removed. Refer to Attachment 5.

FIRE MANAGEMENT		
8.6A	Managing bushfires within the offset area whilst maintaining habitat quality characteristics via inclusion of offset area within CoGC’s bushfire reduction program. Complete initial fire management burns within 3 years to reduce non-native plant cover and stimulate in situ generation of native shrubs, grasses and forbes.	A hazard reduction burn was completed during July 23 by CoGC’s NAMU.
8.6B	Preventing unplanned fire events within the offset area by maintaining fire breaks and fire access trails, prohibiting domestic fires and documenting and incidence of wildfire.	A fire break area is maintained along the majority of the north and eastern boundary of the offset property adjacent to residential properties. Existing access tracks within the property are maintained for fire and works access.

3 EPBC Conditions and Compliance

Table 3 provides details of Project compliance for EPBC 2022/09243.

Table 3. EPBC 2022-09243 Project compliance table.

No.	Condition	Project compliance	Evidence/Comments
DEVELOPMENT AREA			
1	<p>The approval holder must not clear:</p> <ul style="list-style-type: none"> a. outside of the development area, b. more than 11.95 hectares of Koala habitat. 	Compliant	<ul style="list-style-type: none"> a. Clearing has occurred only within the development area. b. A total of 11.95 ha of Koala habitat was cleared during the Year 1 reporting period. This represents the entirety of the vegetation clearing under EPBC 2022/09243 for the Project.
2	<p>To minimise the risk of injury or death to the Koala (<i>Phascolarctos cinereus</i>) within the development area, the approval holder must:</p> <ul style="list-style-type: none"> a. ensure that a suitably qualified fauna spotter catcher who is given sufficient authority to delay and/or cease any clearing and construction is present during all clearing, to ensure Koalas have safely vacated the area of works before the Koala habitat is cleared, b. clear only in accordance with the <i>Nature Conservation (Koala) Conservation Plan 2017 (Qld)</i>, so as to allow Koalas to safely relocate out of any area to be cleared and into nearby appropriate areas of Koala habitat, c. implement sequential clearing during clearing, d. install temporary or permanent fencing around any area of construction work 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, 	Compliant	<ul style="list-style-type: none"> a. During all clearing, a fauna spotter catcher was present. b. No koalas were observed within the development area before, during, and after clearing. c. Sequential clearing was undertaken. d/e. Temporary fencing was installed prior to clearing and will remain in place during construction until permanent fencing is installed. f. Not applicable as permanent fencing has not yet been installed. g. No domestic animals are permitted in the development area which is secure with access for inducted persons or accompanied visitors only. h. Koala sensitive guidelines are incorporated into the development area that is adjacent to Koala habitat.

No.	Condition	Project compliance	Evidence/Comments
	<p>e. ensure that all temporary fencing around any construction area required by condition 2(d) remains in place until permanent fencing is installed,</p> <p>f. ensure that any permanent fencing required by condition 2(d) and 2(e), and is within 100 meters of Koala habitat, must be Koala exclusion fencing,</p> <p>g. prohibit workers bringing domestic dogs into the development area during clearing and construction, and</p> <p>h. implement the Koala-sensitive Design Guideline in all parts of the development area that are adjacent to Koala habitat.</p>		
OFFSET SITE			
3	To compensate for the clearing of 11.95 hectares of Koala habitat, the approval holder must, prior to any clearing within the development area, commence implementing the Visy Offset Management Plan and continue to implement the Visy Offset Management Plan for the life of this approval.	Compliant	Clearing in the development area commenced on 6 February 2023. Implementation of the Offset Management Plan commenced in late January 2023 with planning to complete Condition 7 baseline weed and feral survey and undertake hazard reduction burn and weed management at the offset site. Ongoing Year 1 activities for the Offset Management Plan are reported herein (refer Table 2).
4	<p>The approval holder must:</p> <p>a. within 10 months of this approval, legally secure at least 31.07 hectares of land at the Kingsholme Offset Property,</p> <p>b. within 10 business days of legally securing the Kingsholme Offset Property, provide the department with written evidence demonstrating that the Kingsholme Offset Property has been legally secured, and provide shapefiles and offset attributes of the Kingsholme Offset Property, and</p>	Compliant	<p>a. The 31.07 ha of the Kingsholme Offset Property was legally secured on 15 September 2023 via Declaration 2023-002001. (refer Attachment 2).</p> <p>b. The department was provided with Declaration 2023-002001 documents and shapefiles on 20 September 2023.</p> <p>c. Year 1 offset monitoring and Offset Management Plan activities for habitat quality uplift have been completed as identified in this Year 1 ACR.</p>

No.	Condition	Project compliance	Evidence/Comments
	c. complete all monitoring and Habitat quality uplift prior to the end of Year 15.		
5	If the approval holder has not legally secured the 31.07 hectares of land at the Kingsholme Offset Property within 10 months of this approval, all clearing and construction within the development area must cease immediately, or as otherwise agreed to in writing by the Minister.	Compliant	The 31.07 ha was legally secured in accordance with Condition 4.
6	The approval holder must not recommence any clearing or construction unless the approval holder legally secures at least 31.07 hectares of land of the Kingsholme Offset Property and provides written evidence to the department demonstrating that the Kingsholme Offset Property has been legally secured, or as otherwise agreed to in writing by the Minister.	Not applicable	There was no requirement to cease works under Condition 5 as the 31.07 ha was legally secured in accordance with Condition 4.
PEST AND WEED MANAGEMENT			
7	<p>Within 6 months of this approval, the approval holder must ensure a suitably qualified field ecologist completes baseline surveys of the Kingsholme Offset Area in accordance with a scientifically valid, robust and repeatable methodology, to determine the:</p> <p>a. extent of weed cover, and</p> <p>b. abundance of feral animals.</p>	Compliant	<p>Baseline surveys of the Kingsholme Offset Area in accordance with this condition were completed during February and March 2023 (refer to Attachment 3).</p> <p>The department was provided with the baseline survey report via email to epbcmonitoring@dcceew.gov.au on 9 May 2023.</p>
8	<p>Within 9 months of this approval, the approval holder must submit to the department a version of the Visy Offset Management Plan, revised to include:</p> <p>a. the methods, dates and results of the baseline surveys required under condition 7,</p> <p>b. details of how the outcomes specified in conditions 11 and 12 will be achieved, and</p>	Compliant	<p>A revised Offset Management Plan in accordance with this condition was submitted to the department via email to epbcmonitoring@dcceew.gov.au on 16 October 2023.</p> <p>The revised Offset Management Plan is being implemented as reported herein (refer Section 2.1 and Table 2).</p>

No.	Condition	Project compliance	Evidence/Comments
	<p>c. a program of monitoring and a schedule to report progress against performance and completion criteria in respect of achieving the ecological outcomes specified in conditions 11 and 12.</p> <p>The approval holder must implement the revised Visy Offset Management Plan for the life of the approval.</p>		
9	<p>If the Minister writes to the approval holder stating that he/she considers that the revised Visy Offset Management Plan, required under condition 8 is not likely to achieve the requirements of conditions 11 and 12, all clearing and construction in the development area must cease within 48 hours of receiving notice from the Minister, or as otherwise directed by the Minister.</p>	Compliant	<p>The Minister did not state that the revised Visy Offset Management Plan is not likely to achieve the requirements of Conditions 11 and 12.</p>
10	<p>Clearing and/or construction may only recommence once the Minister notifies the approval holder that the Minister approves the revised Visy Offset Management Plan, or otherwise with the Minister's written agreement.</p>	Not applicable	<p>The Minister did not direct for all clearing and construction to cease under Condition 9.</p>
11	<p>The approval holder must, by the end of Year 10 , ensure that the highest abundance of each feral animal species is less than 10% of the maximum feral animal species abundance as determined by the baseline surveys required under condition 7.</p>	Not applicable	<p>The end of Year 10 has not yet elapsed.</p>
12	<p>The approval holder must, by the end of Year 7, have reduced the extent of weed cover at the Kingsholme Offset Area by 95% relative to the extent of weed cover determined by the baseline surveys required under condition 7.</p>	Not applicable	<p>The end of Year 7 has not yet elapsed.</p>
13	<p>Once the approval holder achieves the outcomes of condition 11 and 12, the outcomes must be maintained or improved for the rest of the period of effect of approval.</p>	Not applicable	<p>The specified timeframes for Condition 11 and 12 have not yet elapsed.</p>

No.	Condition	Project compliance	Evidence/Comments
MONITORING			
14	<p>Within 3 months prior to the end of each of Year 2, Year 7, Year 10 and Year 15, the approval holder must have an independent suitably qualified field ecologist undertake an assessment as to whether conditions 4.c), 11 and 12 have been, or are likely to be, achieved. Within 6 months of the end of the respective period, the approval holder must publish the findings of each assessment on the website and provide the findings to the department. The approval holder must ensure the findings of each assessment remain published on the website for the remainder of the period of effect of approval.</p>	Compliant	The end of Year 2 has not yet elapsed.
15	<p>If, at any time during the period of effect of the approval, the Minister is not satisfied that any of the requirements or outcomes required under conditions 4.c), 11 and 12 have been or are likely to be achieved or maintained, the Minister may require the approval holder to submit a revised Visy Offset Management Plan to the department for approval by the Minister, specifying corrective actions and/or commitments to monitor, manage, avoid, mitigate, offset, record and/or report on, impacts to the Koala. In addition:</p> <p>a. The Minister may specify a timeframe in which the approval holder must submit the revised Visy Offset Management Plan to the department.</p> <p>b. The Minister may specify that the revised Visy Offset Management Plan must be prepared or reviewed by an independent suitably qualified field ecologist.</p> <p>c. If the revised Visy Offset Management Plan is not provided within a timeframe specified by the Minister, all clearing and construction within the development area must cease immediately. The approval holder must not recommence any clearing or construction unless the Minister approves the revised Visy Offset Management Plan in writing, or as otherwise agreed to in writing by the Minister.</p>	Not applicable	The Minister has not required the submission of a revised Offset Management Plan additional to that required by Condition 8.

No.	Condition	Project compliance	Evidence/Comments
SUBMISSIONS AND PUBLICATION OF PLANS			
16	The approval holder must submit all plans required by these conditions electronically to the department.	Compliant	All plans for the Project required by EPBC 2022-09243 have been submitted to the department electronically.
17	<p>Unless otherwise agreed to in writing by the Minister, the approval holder must publish each plan on the website within 15 business days of the date:</p> <p>a. of this approval, if the version of the plan to be implemented is specified in these conditions; or</p> <p>b. the plan is approved by the Minister in writing, if the plan requires the approval of the Minister; or</p> <p>c. the plan is submitted to the department in accordance with a requirement of these conditions, if the plan does not require the approval of the Minister; or</p> <p>d. the plan is approved by a state/territory government official as required under a state/territory government condition which must be complied with in accordance with these EPBC Act conditions.</p>	Compliant	<p>The Offset Management Plan was published on the Proponent's website on 2 November 2022 (for Preliminary Documentation public notification).</p> <p>The revised Offset Management Plan as required by Condition 8 was published on the Visy website on 1 November 2023. The plan was submitted to the department on 16 October 2023 and did not require approval of the Minister. Its publication was in accordance with item c, being 12 business days after submission to the department.</p>
18	The approval holder must keep all published plans required by these conditions on the website until the expiry date of this approval.	Compliant	<p>The Offset Management Plan is published on the Project webpage in Visy's website at:</p> <p>https://www.visy.com/about/projects-and-investments/brand-new-yatala-glass-plant</p>
19	The approval holder is required to exclude or redact sensitive ecological data from plans published on the website or otherwise provided to a member of the public.	Compliant	There is no sensitive ecological data associated with the Project for the reporting period.
20	If sensitive ecological data is excluded or redacted from a plan in accordance with condition 19, the approval holder must notify the	Not applicable	No sensitive ecological data has been excluded from a plan during the reporting period.

No.	Condition	Project compliance	Evidence/Comments
	department in writing what exclusions and redactions have been made in the version published on the website.		
NOTIFICATION OF DATE OF COMMENCEMENT OF ACTION			
21	The approval holder must notify the department electronically of the date of commencement of the Action, within 5 business days of commencement of the Action.	Compliant	The department was notified on the 6 February 2023 via email to epbcmonitoring@dcceew.gov.au that the action commenced on 6 February 2023.
22	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 without the prior written agreement of the Minister.	Not applicable	The Action has commenced within 5 years from date of EPBC 2022-09243.
COMPLIANCE RECORDS			
23	The approval holder must maintain accurate and complete compliance records.	Compliant	Accurate and complete compliance records are maintained by the approval holder and can be made available to allow a third party audit of the Project.
24	If the department makes a request in writing, the approval holder must provide electronic copies of compliance records to the department within the timeframe specified in the request.	Not applicable	No request for compliance records for the Project has been made during the reporting period.
25	The approval holder must ensure that any monitoring data (including sensitive ecological data), surveys, maps, and other spatial and metadata required under the conditions of this approval are prepared in accordance with the department's <i>Guidelines for biological survey and mapped data</i> (2018), or as otherwise specified by the Minister in writing.	Compliant	Monitoring data has been prepared in accordance with the specified guidelines.
26	The approval holder must ensure that any monitoring data (including sensitive ecological data), surveys, maps, and other spatial and metadata required under the conditions of this approval are prepared in accordance with the department's <i>Guide to providing</i>	Compliant	Monitoring data has been prepared in accordance with the specified guidelines.

No.	Condition	Project compliance	Evidence/Comments
	<i>maps and boundary data for EPBC Act projects (2021), or as otherwise specified by the Minister in writing.</i>		
27	The approval holder must submit all monitoring data (including sensitive ecological data), surveys, maps, other spatial and metadata and all species occurrence record data (sightings and evidence of presence) electronically to the department within 3 months or in accordance with the requirements of the Visy Offset Management Plan.	Compliant	Monitoring data has been electronically submitted to the department with the required timeframe.
ANNUAL COMPLIANCE REPORTING			
28	The approval holder must prepare a compliance report for each 12-month period following the date of this approval, or as otherwise agreed to in writing by the Minister.	Compliant	This Year 1 ACR is prepared for the 12 month period 17 January 2023 and 16 January 2024.
29	Each compliance report must be consistent with the department's <i>Annual Compliance Report Guidelines (2014)</i> .	Compliant	This Year 1 ACR is consistent with specified guidelines.
30	Each compliance report must include: a. Accurate and complete details of compliance and any non-compliance with the conditions and the plans, and any incidents. b. One or more shapefile showing all clearing of any protected matters, and/or their habitat, undertaken within the 12-month period at the end of which that compliance report is prepared. c. A schedule of all plans in existence in relation to these conditions and accurate and complete details of how each plan is being implemented.	Compliant	This Year 1 ACR includes: a. accurate and complete details as specified b. a shapefile (provided electronically to the department via epbcmonitoring@dceew.gov.au . c. a schedule of plans and details of implementation is provided in Section 2.1 and Table 2.
31	The approval holder must:	Compliant	a. This Year 1 ACR will be published on the Visy website before 9 April 2024 (60 business days following end of ACR reporting period, being 16 January 2024).

No.	Condition	Project compliance	Evidence/Comments
	<p>a. Publish each compliance report on the website within 60 business days following the end of the 12-month period for which that compliance report is required.</p> <p>b. Notify the department electronically, within 5 business days of the date of publication that a compliance report has been published on the website.</p> <p>c. Provide the weblink for the compliance report in the notification to the department.</p> <p>d. Keep all published compliance reports required by these conditions on the website until the expiry date of this approval.</p> <p>e. Exclude or redact sensitive ecological data from compliance reports published on the website or otherwise provided to a member of the public.</p> <p>f. If sensitive ecological data is excluded or redacted from the published version, submit the full compliance report to the department within 5 business days of its publication on the website and notify the department in writing what exclusions and redactions have been made in the version published on the website.</p>		<p>b. The department will be notified before 16 April 2024 that this Year 1 ACR is published on the Visy website.</p> <p>c. The weblink for this Year 1 ACR will be provided in the notification to the department.</p> <p>d. All published compliance reports will remain on the Visy website.</p> <p>e. There is no sensitive ecological data associated with this Project or ACRs.</p> <p>f. Not applicable.</p>
REPORTING NON-COMPLIANCE			
32	The approval holder must notify the department electronically, within 2 business days of becoming aware of any incident and/or potential non-compliance and/or actual non-compliance with the conditions or commitments made in a plan.	Compliant	There were no such matters required to be notified during the reporting period.
33	<p>The approval holder must specify in the notification:</p> <p>a. Any condition or commitment made in a plan which has been or may have been breached.</p>	Not applicable	No notifications were made during the reporting period.

No.	Condition	Project compliance	Evidence/Comments
	<p>b. A short description of the incident and/or potential non-compliance and/or actual non-compliance.</p> <p>c. The location (including co-ordinates), date, and time of the incident and/or potential non-compliance and/or actual non-compliance.</p>		
34	<p>The approval holder must provide to the department in writing, within 12 business days of becoming aware of any incident and/or potential non-compliance and/or actual non-compliance, the details of that incident and/or potential non-compliance and/or actual non-compliance with the conditions or commitments made in a plan. The approval holder must specify:</p> <p>a. Any corrective action or investigation which the approval holder has already taken</p> <p>b. The potential impacts of the incident and/or non-compliance and/or non-compliance</p> <p>c. The method and timing of any corrective action that will be undertaken by the approval holder.</p>	Not applicable	There were no non-compliance matters during the reporting period.
INDEPENDENT AUDIT			
35	The approval holder must ensure that an independent audit of compliance with the conditions is conducted for every three-year period following the commencement of the Action until this approval expires, unless otherwise specified in writing by the Minister.	Compliant	A three year period has not yet elapsed for the Project.
36	<p>For each independent audit, the approval holder must:</p> <p>a. Provide the name and qualifications of the nominated independent auditor, the draft audit criteria, and proposed</p>	Not applicable	An independent audit has not been undertaken as a three year period has not yet elapsed for the Project.

No.	Condition	Project compliance	Evidence/Comments
	<p>timeframe for submitting the audit report to the department prior to commencing the independent audit.</p> <p>b. Only commence the independent audit once the nominated independent auditor, audit criteria and timeframe for submitting the audit report have been approved in writing by the department.</p> <p>c. Submit the audit report to the department for approval within the timeframe specified and approved in writing by the department.</p> <p>d. Publish each audit report on the website within 15 business days of the date of the department’s approval of the audit report.</p> <p>e. Keep every audit report published on the website until this approval expires.</p>		
37	Each audit report must report for the three-year period preceding that audit report.	Not applicable	As for condition 36.
38	Each audit report must be completed to the satisfaction of the Minister and be consistent with the department’s <i>Environment Protection and Biodiversity Conservation Act 1999 Independent Audit and Audit Report Guidelines</i> (2019).	Not applicable	As for condition 36.
COMPLETION OF THE ACTION			
39	The approval holder must notify the department electronically 60 business days prior to the expiry date of this approval, that the approval is due to expire.	Compliant	The approval will not expire until 17 January 2048.
40	Within 20 business days after the completion of the Action, and, in any event, before this approval expires, the approval holder must notify the department electronically of the date of completion of the Action and provide completion data.	Compliant	The Action ‘to construct a glass recycling and manufacturing facility in Stapylton, Queensland’ is underway and is not completed.

ATTACHMENT 1

EPBC Approval Conditions (EPBC 2022/09243)



Notification of approval

Visy Glass Recycling and Manufacturing Facility, Stapylton, QLD (EPBC 2022/09243)

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

Proposed action

person to whom the approval is granted (approval holder)	Visy Glass Operations (Australia) Pty Ltd
ABN of approval holder	ABN 94 004 230 326
Action	To construct a glass recycling and manufacturing facility in Stapylton, Queensland. [See EPBC Act referral 2022/09243]

approval decision

decision	My decision on whether or not to approve the taking of the Action for the purposes of the controlling provision for the Action is as follows.	
	Controlling Provision	Decision
	Listed threatened species and communities (section 18 and section 18A)	Approved
period for which the approval has effect	This approval has effect until 17 January 2048.	
conditions of approval	The approval is subject to conditions under the EPBC Act as set out in Annexure A.	

Person authorised to make decision

name and position	Mark Say Acting Branch Head Assessments Queensland and Sea Dumping Branch
signature	
date of decision	17 January 2023

Annexure A

Note: Words appearing in **bold** have the meaning assigned to them at PART C – DEFINITIONS.

Part A – Conditions specific to the Action

DEVELOPMENT AREA

1. The approval holder must not **clear**:
 - a. outside of the **development area**,
 - b. more than 11.95 hectares of **Koala habitat**.
2. To minimise the risk of injury or death to the **Koala** (*Phascolarctos cinereus*) within the **development area**, the approval holder must:
 - a. ensure that a suitably qualified **fauna spotter catcher** who is given sufficient authority to delay and/or cease any **clearing** and **construction** is present during all **clearing**, to ensure **Koalas** have safely vacated the area of works before the **Koala habitat** is **cleared**,
 - b. **clear** only in accordance with the *Nature Conservation (Koala) Conservation Plan 2017 (Qld)*, so as to allow **Koalas** to safely relocate out of any area to be **cleared** and into nearby appropriate areas of **Koala habitat**,
 - c. implement **sequential clearing** during **clearing**,
 - d. install temporary or permanent fencing around any area of **construction** work 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,
 - e. ensure that all temporary **fencing** around any **construction** area required by condition 2(d) remains in place until permanent fencing is installed,
 - f. ensure that any permanent fencing required by condition 2(d) and 2(e), and is within 100 meters of **Koala habitat**, must be **Koala exclusion fencing**,
 - g. prohibit workers bringing domestic dogs into the **development area** during **clearing** and **construction**, and
 - h. implement the **Koala-sensitive Design Guideline** in all parts of the **development area** that are adjacent to **Koala habitat**.

OFFSET SITE

3. To compensate for the **clearing** of 11.95 hectares of **Koala habitat**, the approval holder must, prior to any **clearing** within the **development area**, commence implementing the **Visy Offset Management Plan** and continue to implement the **Visy Offset Management Plan** for the life of this approval.
4. The approval holder must:
 - a. within 10 months of this approval, **legally secure** at least 31.07 hectares of land at the **Kingsholme Offset Property**,
 - b. within 10 **business days** of **legally securing** the **Kingsholme Offset Property**, provide the **department** with written evidence demonstrating that the **Kingsholme Offset Property**

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has been **legally secured**, and provide **shapefiles** and **offset attributes** of the **Kingsholme Offset Property**, and

- c. complete all monitoring and **Habitat quality uplift** prior to the end of **Year 15**.
5. If the approval holder has not **legally secured** the 31.07 hectares of land at the **Kingsholme Offset Property** within 10 months of this approval, all **clearing** and **construction** within the **development area** must cease immediately, or as otherwise agreed to in writing by the **Minister**.
6. The approval holder must not recommence any **clearing** or **construction** unless the approval holder **legally secures** at least 31.07 hectares of land of the **Kingsholme Offset Property** and provides written evidence to the **department** demonstrating that the **Kingsholme Offset Property** has been **legally secured**, or as otherwise agreed to in writing by the **Minister**.

PEST AND WEED MANAGEMENT

7. Within 6 months of this approval, the approval holder must ensure a **suitably qualified field ecologist** completes baseline surveys of the **Kingsholme Offset Area** in accordance with a scientifically valid, robust and repeatable methodology, to determine the:
 - a. **extent of weed cover**, and
 - b. abundance of **feral animals**.
8. Within 9 months of this approval, the approval holder must submit to the **department** a version of the **Visy Offset Management Plan**, revised to include:
 - a. the methods, dates and results of the baseline surveys required under condition 7,
 - b. details of how the outcomes specified in conditions 11 and 12 will be achieved, and
 - a. a program of monitoring and a schedule to report progress against performance and completion criteria in respect of achieving the ecological outcomes specified in conditions 11 and 12.

The approval holder must implement the revised **Visy Offset Management Plan** for the life of the approval.

9. If the **Minister** writes to the approval holder stating that he/she considers that the revised **Visy Offset Management Plan**, required under condition 8 is not likely to achieve the requirements of conditions 11 and 12, all **clearing** and **construction** in the **development area** must cease within 48 hours of receiving notice from the **Minister**, or as otherwise directed by the **Minister**.
10. **Clearing** and/or **construction** may only recommence once the **Minister** notifies the approval holder that the **Minister** approves the revised Visy Offset Management Plan, or otherwise with the **Minister's** written agreement.
11. The approval holder must, by the end of **Year 10**, ensure that the highest abundance of each **feral animal** species is less than 10% of the maximum **feral animal** species abundance as determined by the baseline surveys required under condition 7.
12. The approval holder must, by the end of **Year 7**, have reduced the **extent of weed cover** at the **Kingsholme Offset Area** by 95% relative to the **extent of weed cover** determined by the baseline surveys required under condition 7.

13. Once the approval holder achieves the outcomes of condition 11 and 12, the outcomes must be maintained or improved for the rest of the period of effect of approval.

MONITORING

14. Within 3 months prior to the end of each of **Year 2**, **Year 7**, **Year 10** and **Year 15**, the approval holder must have an **independent suitably qualified field ecologist** undertake an assessment as to whether conditions 4.c), 11 and 12 have been, or are likely to be, achieved. Within 6 months of the end of the respective period, the approval holder must publish the findings of each assessment on the **website** and provide the findings to the **department**. The approval holder must ensure the findings of each assessment remain published on the **website** for the remainder of the period of effect of approval.
15. If, at any time during the period of effect of the approval, the **Minister** is not satisfied that any of the requirements or outcomes required under conditions 4.c), 11 and 12 have been or are likely to be achieved or maintained, the **Minister** may require the approval holder to submit a revised Visy Offset Management Plan to the **department** for approval by the **Minister**, specifying corrective actions and/or commitments to monitor, manage, avoid, mitigate, offset, record and/or report on, impacts to the **Koala**. In addition:
- The **Minister** may specify a timeframe in which the approval holder must submit the revised Visy Offset Management Plan to the **department**.
 - The **Minister** may specify that the revised Visy Offset Management Plan must be prepared or reviewed by an **independent suitably qualified field ecologist**.
 - If the revised Visy Offset Management Plan is not provided within a timeframe specified by the **Minister**, all **clearing** and **construction** within the **development area** must cease immediately. The approval holder must not recommence any **clearing** or **construction** unless the **Minister** approves the revised Visy Offset Management Plan in writing, or as otherwise agreed to in writing by the **Minister**.

SUBMISSION AND PUBLICATION OF PLANS

16. The approval holder must submit all **plans** required by these conditions electronically to the **department**.
17. Unless otherwise agreed to in writing by the **Minister**, the approval holder must publish each **plan** on the **website** within 15 **business days** of the date:
- of this approval, if the version of the **plan** to be implemented is specified in these conditions; or
 - the **plan** is approved by the **Minister** in writing, if the **plan** requires the approval of the **Minister**; or
 - the **plan** is submitted to the **department** in accordance with a requirement of these conditions, if the **plan** does not require the approval of the **Minister**; or
 - the **plan** is approved by a state/territory government official as required under a state/territory government condition which must be complied with in accordance with these **EPBC Act** conditions.

18. The approval holder must keep all published **plans** required by these conditions on the **website** until the expiry date of this approval.
19. The approval holder is required to exclude or redact **sensitive ecological data** from **plans** published on the **website** or otherwise provided to a member of the public.
20. If **sensitive ecological data** is excluded or redacted from a **plan** in accordance with condition 19, the approval holder must notify the **department** in writing what exclusions and redactions have been made in the version published on the **website**.

Part B – Administrative conditions

NOTIFICATION OF DATE OF COMMENCEMENT OF THE ACTION

21. The approval holder must notify the **department** electronically of the date of **commencement of the Action**, within 5 **business days** of **commencement of the Action**.
22. 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** without the prior written agreement of the **Minister**.

COMPLIANCE RECORDS

23. The approval holder must maintain accurate and complete **compliance records**.
24. If the **department** makes a request in writing, the approval holder must provide electronic copies of **compliance records** to the **department** within the timeframe specified in the request.

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

25. The approval holder must ensure that any **monitoring data** (including **sensitive ecological data**), surveys, maps, and other spatial and metadata required under the conditions of this approval are prepared in accordance with the **department's** *Guidelines for biological survey and mapped data* (2018), or as otherwise specified by the **Minister** in writing.
26. The approval holder must ensure that any **monitoring data** (including **sensitive ecological data**), surveys, maps, and other spatial and metadata required under the conditions of this approval are prepared in accordance with the **department's** *Guide to providing maps and boundary data for EPBC Act projects* (2021), or as otherwise specified by the **Minister** in writing.
27. The approval holder must submit all **monitoring data** (including **sensitive ecological data**), surveys, maps, other spatial and metadata and all species occurrence record data (sightings and evidence of presence) electronically to the **department** within 3 months or in accordance with the requirements of the **Visy Offset Management Plan**.

ANNUAL COMPLIANCE REPORTING

28. The approval holder must prepare a **compliance report** for each 12-month period following the date of this approval, or as otherwise agreed to in writing by the **Minister**.
29. Each **compliance report** must be consistent with the **department's** *Annual Compliance Report Guidelines* (2014).

30. Each **compliance report** must include:

- a. Accurate and complete details of compliance and any non-compliance with the conditions and the **plans**, and any **incidents**.
- b. One or more **shapefile** showing all **clearing** of any **protected matters**, and/or their habitat, undertaken within the 12-month period at the end of which that **compliance report** is prepared.
- c. A schedule of all **plans** in existence in relation to these conditions and accurate and complete details of how each plan is being implemented.

31. The approval holder must:

- a. Publish each **compliance report** on the website within 60 **business days** following the end of the 12-month period for which that **compliance report** is required.
- b. Notify the **department** electronically, within 5 **business days** of the date of publication that a **compliance report** has been published on the **website**.
- c. Provide the weblink for the **compliance report** in the notification to the **department**.
- d. Keep all published **compliance reports** required by these conditions on the **website** until the expiry date of this approval.
- e. Exclude or redact **sensitive ecological data** from **compliance reports** published on the **website** or otherwise provided to a member of the public.
- f. If **sensitive ecological data** is excluded or redacted from the published version, submit the full **compliance report** to the **department within 5 business days** of its publication on the **website** and notify the **department** in writing what exclusions and redactions have been made in the version published on the website.

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

REPORTING NON-COMPLIANCE

32. The approval holder must notify the **department** electronically, within 2 **business days** of becoming aware of any **incident** and/or potential non-compliance and/or actual non-compliance with the conditions or commitments made in a **plan**.

33. The approval holder must specify in the notification:

- a. Any condition or commitment made in a **plan** which has been or may have been breached.
- b. A short description of the **incident** and/or potential non-compliance and/or actual non-compliance.
- c. The location (including co-ordinates), date, and time of the **incident** and/or potential non-compliance and/or actual non-compliance.

Note: If the exact information cannot be provided, the approval holder must provide the best information available.

34. The approval holder must provide to the **department** in writing, within 12 **business days** of becoming aware of any **incident** and/or potential non-compliance and/or actual non-compliance, the details of that **incident** and/or potential non-compliance and/or actual non-compliance with the conditions or commitments made in a **plan**. The approval holder must specify:

- a. Any corrective action or investigation which the approval holder has already taken
- b. The potential impacts of the **incident** and/or non-compliance and/or non-compliance
- c. The method and timing of any corrective action that will be undertaken by the approval holder.

INDEPENDENT AUDIT

35. The approval holder must ensure that an **independent audit** of compliance with the conditions is conducted for every three-year period following the **commencement of the Action** until this approval expires, unless otherwise specified in writing by the **Minister**.
36. For each **independent audit**, the approval holder must:
- a. Provide the name and qualifications of the nominated **independent** auditor, the draft audit criteria, and proposed timeframe for submitting the **audit report** to the **department** prior to commencing the **independent audit**.
 - b. Only commence the **independent audit** once the nominated **independent** auditor, audit criteria and timeframe for submitting the **audit report** have been approved in writing by the **department**.
 - c. Submit the **audit report** to the **department** for approval within the timeframe specified and approved in writing by the **department**.
 - d. Publish each **audit report** on the **website** within 15 **business days** of the date of the **department's** approval of the **audit report**.
 - e. Keep every **audit report** published on the **website** until this approval expires.
37. Each **audit report** must report for the three-year period preceding that **audit report**.
38. Each **audit report** must be completed to the satisfaction of the **Minister** and be consistent with the **department's** *Environment Protection and Biodiversity Conservation Act 1999 Independent Audit and Audit Report Guidelines* (2019).

COMPLETION OF THE ACTION

39. The approval holder must notify the **department** electronically 60 **business days** prior to the expiry date of this approval, that the approval is due to expire.
40. Within 20 **business days** after the **completion of the Action**, and, in any event, before this approval expires, the approval holder must notify the **department** electronically of the date of **completion of the Action** and provide **completion data**.

Part C - Definitions

In these conditions any bolded use of a word or term refers to the below definition of that word or term:

Audit report means a written report of compliance and fulfilment of the conditions attached to this approval, objectively evaluated against the audit criteria approved by the **department**.

Assessment unit(s) means areas of vegetation consistent with a **regional ecosystem**, and within a broadly homogeneous vegetation condition, represented in Attachment C by the whole of the blue shaded zones labelled '1' and the orange shaded zones labelled '2', identified as follows:

Assessment Unit



Business day(s) means a day that is not a Saturday, a Sunday or a public holiday in the state or territory of the Action.

Clear, clearance, cleared or clearing means the cutting down, felling, thinning, logging, removing, killing, destroying, poisoning, ringbarking, uprooting, or burning of vegetation within the **development area**.

Commence the Action or Commencement of the Action means the date on which the first instance of any activity associated with the Action (including **clearing** and **construction**) is undertaken. **Commencement of the Action** does not include minor physical disturbance necessary to:

- a. Undertake pre-clearance surveys or monitoring programs.
- b. Install signage and /or temporary fencing to prevent unapproved use of the project area.
- c. Protect environmental and property assets from fire, weeds, and feral animals, including use of existing surface access tracks.
- d. Install temporary site facilities for persons undertaking pre-commencement activities so long as these are located where they have no impact on any **protected matter**.

Completion data means an environmental report and spatial data clearly detailing how the conditions of this approval have been met. The **department's** chosen format for spatial data is a **shapefile**.

Completion of the Action means the date on which all activities associated with this approval have permanently ceased and/or been completed.

Compliance records means all documentation or other material in whatever form required to demonstrate compliance with the conditions of approval in the approval holder's possession, or that are within the approval holder's power to obtain lawfully.

Compliance report means a written report of compliance with, and fulfilment of, the conditions attached to the approval.

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

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

Development area means the location of the action, within Lot 2 WD4654 and the northern section of Lot 2 SP189558 on Stapylton Jacobs Well Road, Stapylton, Queensland, represented by the zone(s) enclosed within the black line with hatching, and labelled 'Proposed development area' on [Attachment A1](#), identified as follows:

 Proposed development area

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

Extent of weed cover means the proportion (expressed as a percentage) of the total land area in which any square metre contains a non-native plant species known to restrict the movement of **Koala** and/or degrade the quality of **Koala habitat** or reduce their ability to regenerate.

Fauna spotter catcher means a person holding an appropriate license issued under the *Queensland Nature Conservation Act 1992* to detect, capture, care for, assess, and release wildlife disturbed by vegetation **clearance** activities who have at least three years' experience undertaking this work with **Koalas**.

Feral animal means any non-native predator or non-native herbivore, including those known to predate on the **Koala**, or with the potential to impact on vegetation habitat regeneration that is consistent with **Koala habitat**.

Habitat quality uplift means, at the **assessment units** within the **Kingsholm Offset Area**, ecological restoration work to exceed the 'baseline score' for 'site condition', 'site context' and 'species stocking rate' scores for the **Koala** as specified in [Attachment D](#), and achieve or exceed all scores specified in [Attachment D](#) in the:

- 'Year 7 score' columns by the end of **year 7**, and
- 'Year 15 score' columns by the end of **year 15**.

Incident means any event which has the potential to, or does, impact on any **protected matter**.

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

*Other than for the purpose of undertaking the role for which an independent person is required

Independent audit means an audit conducted by an **independent** and **suitably qualified person** as detailed in the *Environment Protection and Biodiversity Conservation Act 1999 Independent Audit and Audit Report Guidelines* (2019).

Kingsholme Offset Area means the area within the property located on Lot 906 SP280831, Kingsholme, Queensland, represented in [Attachment C](#) by the whole of the zone enclosed by the solid orange line labelled 'Offset Area', identified as follows:

 Offset area

Kingsholme Offset Property means the property located on Lot 906 SP280831, Kingsholme, Queensland, represented in [Attachment C](#) by the whole of the zone enclosed by the solid red line labelled 'Offset Property', identified as follows:

 Offset property

Koala means the **EPBC Act** listed threatened species *Phascolarctos cinereus* (combined populations of Qld, NSW and the ACT).

Koala exclusion fencing means directional fencing designed to prevent koala access to a site, but allow to allow escape from a site as described on page 9 and 10 of the **Koala-sensitive Design Guideline**.

Koala habitat means:

- a. the areas represented in Attachment B by the blue shaded zones labelled 'Moderate value (4.8ha)' and the orange shaded zones labelled 'Low value (7.15ha)', identified as follows:

Koala Habitat

-  Moderate value (4.8 ha)
-  Low value (7.15 ha)

- b. any area which provides habitat suitable for the **Koala** as described in the following reference documents:
 - Department of Agriculture, Water and the Environment (2022). *Conservation Advice for Phascolarctos cinereus (Koala) combined populations of Queensland, New South Wales and the Australian Capital Territory*. Canberra: Department of Agriculture, Water and the Environment. In effect under the EPBC Act from 12-Feb-2022.
 - Department of Agriculture, Water and the Environment (2022). *National Recovery Plan for the Koala Phascolarctos cinereus (combined populations of Queensland, New South Wales and the Australian Capital Territory)*. Department of Agriculture, Water and the Environment, Canberra. In effect under the EPBC Act from 08-Apr-2022.
 - Youngentob, K.N, Marsh, K.F., Skewes, J., *A review of koala habitat assessment criteria and methods*, report prepared for the Department of Agriculture, Water and the Environment, Canberra, November 2021.

Koala-sensitive Design Guideline means the *Koala Sensitive Design Guideline: A guide to koala sensitive designed measures for planning and development activities*, Version 2.0, State of Queensland 2020.

Legally secure/secured/secures means to provide ongoing conservation protection, on the title of the land, under an enduring protection mechanism, such as a voluntary declaration under the *Vegetation Management Act 1999 (Qld)* or as a nature refuge under the *Nature Conservation Act 1992 (Qld)*, or another enduring protection mechanism agreed to in writing by the **Minister**.

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

Monitoring data means the data required to be recorded under the conditions of this approval.

Offset attributes means an '.xls' file capturing relevant attributes of the **Kingsholme Offset Area**, including:

- i. **EPBC Act** reference number

- ii. Physical address of **Kingsholme Offset Area**
- iii. Coordinates of the boundary points in decimal degrees
- iv. **Protected matters** that the offset compensates for
- v. Any additional **EPBC Act** listed threatened species and communities that are benefiting from the offset
- vi. Size of the **Kingsholme Offset Area** in hectares.

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

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

Regional ecosystem(s) means a vegetation community in a bioregion that is consistently associated with a particular combination of geology, landform and soil as classified by the Queensland Government under the *Vegetation Management Act, 1999*.

Sensitive ecological data means data as defined in the Australian Government Department of the Environment *Sensitive Ecological Data – Access and Management Policy V1.0* (2016).

Sequential clearing means the provisions specified in *Sequential clearing in Koala district A or B* under the *Nature Conservation (Koala) Conservation Plan 2017* under the *Nature Conservation Act 1992* (Qld).

Shapefile(s) means location and attribute information about the Action provided in an Esri shapefile format. Shapefiles must contain '.shp', '.shx', '.dbf' files and a '.prj' file that specifies the projection/geographic coordinate system used. Shapefiles must also include an '.xml' metadata file that describes the shapefile for discovery and identification purposes.

Suitably qualified expert (for the purpose of undertaking environmental surveys) means a person who has relevant professional qualifications and at least 3 years of work experience designing and implementing surveys for the **Koala** and can give an authoritative assessment and advice on the presence of **Koalas** using relevant protocols, standards, methods and/or literature.

Suitably qualified field ecologist means a person who has professional qualifications and at least three (3) years of work experience designing and implementing surveys for **regional ecosystems**, and can give an authoritative assessment and advice on the type and quality of **regional ecosystems** present, including management and restoration of the **regional ecosystems** using relevant protocols, standards, methods and/or literature.

Suitably qualified person means a person who has professional qualifications, training, skills and/or experience related to the nominated subject matter and can give authoritative independent assessment, advice and analysis on performance relative to the subject matter using the relevant protocols, standards, methods and/or literature.

Visy Offset Management Plan means the *Visy Offset Management Plan 2022*, prepared by GHD Pty Ltd dated 31 October 2022 and forms Appendix 5 of the Preliminary Documentation dated 21 October 2022 prepared by GHD Pty Ltd, or subsequent revised version approved by the **Minister**.

OFFICIAL

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

Year 2 means the period within two years from the date of this approval

Year 7 means the period within seven years from the date of this approval.

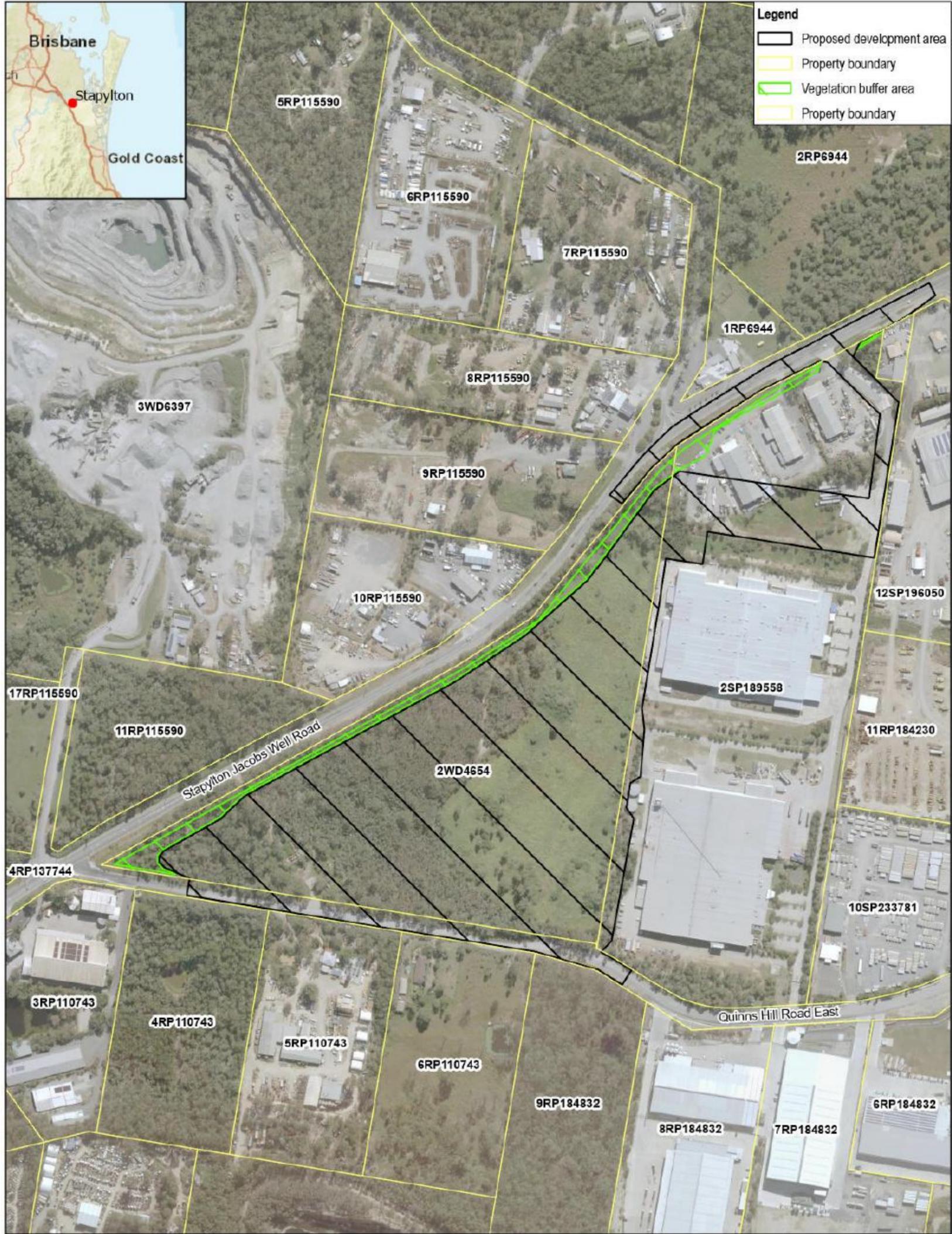
Year 10 means the period within ten years from the date of this approval.

Year 15 means the period within fifteen years from the date of this approval.



Attachments

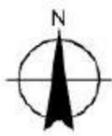
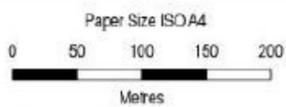
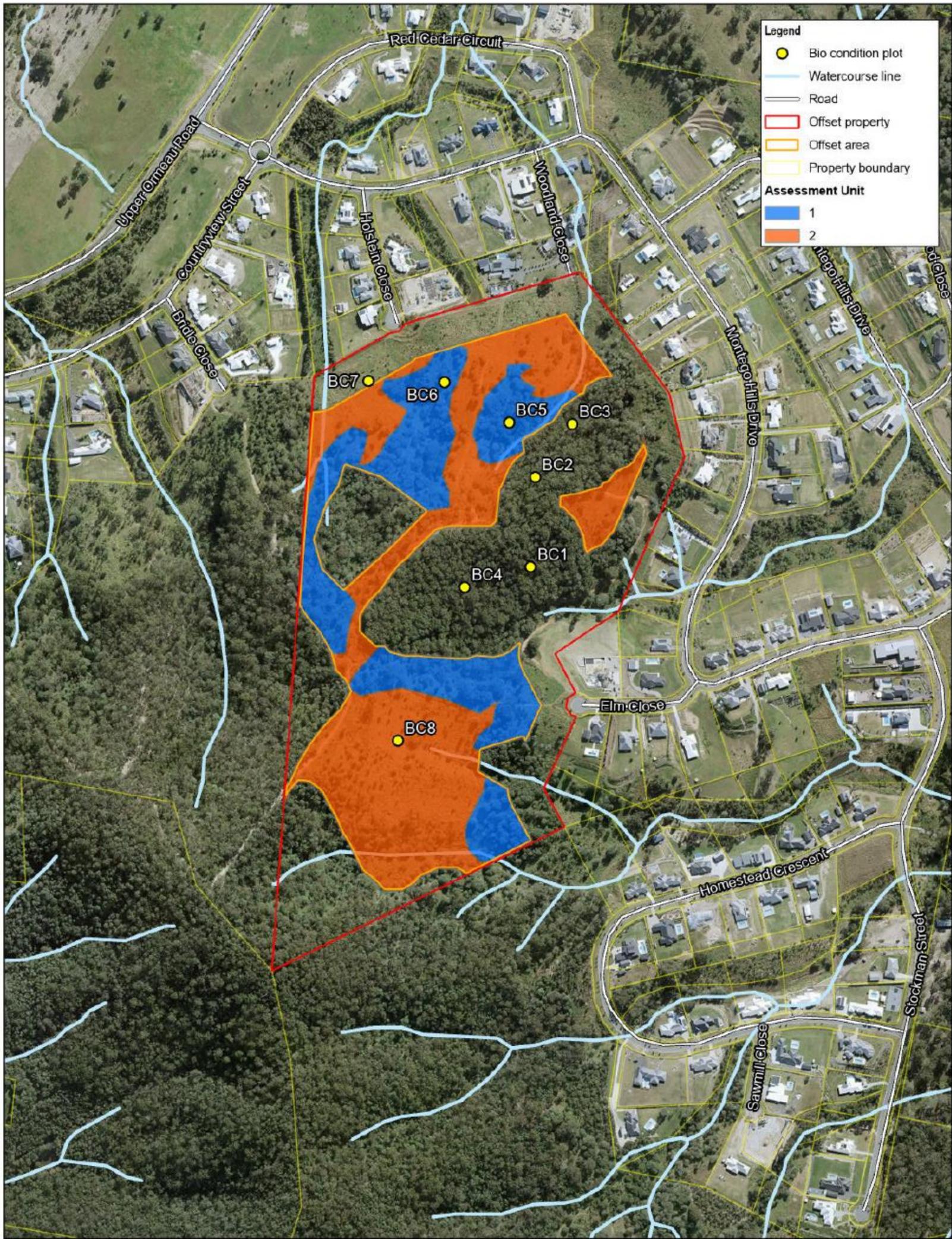
Attachment A: Development Area



Attachment B: Koala Habitat area



Attachment C: Kingsholme Offset Area



Visy Offset Management Plan

Project No. 12550313
 Revision No. 1
 Date 13/01/2023

Map Projection: Transverse Mercator
 Horizontal Datum: GDA2020
 Grid: GDA2020 MGA Zone 56

Location of habitat condition scoring plots within the proposed offset area

FIGURE 6.4

N:\AUM\locky\Projects\42\12550313\GIS\Map\1\12550313_BioConditionAssessment\12550313_BioConditionAssessment.aprx
 Layout: 12550313_002_HabitatConditionScoringPlots_Rev1
 Print date: 13 Jan 2023 - 11:38

Data source: GHD bio condition plots, assessment units (2022); Visy project area (2022); DoR roads and watercourse lines (2021); cadastre (2021); Metromap Tile Service; imagery
 Created by: court2

ATTACHMENT 2

Offset Site Voluntary Declaration 2023-
002001 Package

Author: Amy Sprott
File/Ref number: 2023/002001:2053213
Unit: Vegetation Management Unit
Phone: 4529 1320



Department of
Resources

15 September 2023

Mikalah Koch for
City of Gold Coast
PO Box 5042
Gold Coast Mail Centre
QLD 9726

Dear Mikalah,

RE: Declaration of lot 906 on SP280831 - Council of the City of Gold Coast (the property) as an area of high nature conservation value.

We refer to your request dated 30 May 2023 for a declared area on the property.

The Department of Resources has considered your request for a declaration and is satisfied that the proposed declaration area meets the requirements of an area of high nature conservation value under the *Vegetation Management Act 1999* (VMA).

Accordingly, a declaration on the property has been made on 15 September 2023.

A copy of each of the following documents is attached for your records:

- Declaration notice
- Declared area map (DAM 2023/002001)
- Declared area Property Map of Assessable Vegetation (PMAV 2023/002085)
- Declared area PMAV information notice
- Declared area management plan

Please note this declaration (2023/002001) will be noted on the property title and is binding on current and future owners.

In accordance with the declared area management plan, you are required to undertake management of the declared area to achieve the stated outcomes.

If you wish to discuss these matters further, please contact Amy Sprott on telephone number 4529 1320 or via email amy.sprott@resources.qld.gov.au quoting the above reference number.

Yours sincerely

Michael Gordon

Senior Natural Resource Management Officer

Declaration notice

Vegetation Management Act 1999 Sections 19E to 19G

1. Details of request

- 1.1. **Proponent's name:** Council of the City of Gold Coast
- 1.2. **Registered owner's name(s):** Council of the City of Gold Coast
- 1.3. **Date request received:** 30 May 2023
- 1.4. **Request:** Request for a declared area.
- 1.5. **Property description:** Lot 906 on SP280831 - Council of the City of Gold Coast
- 1.6. **Land tenure:** Estate in Fee Simple (Freehold)
- 1.7. **Decision reference:** 2023/002001

2. Declaration information

2.1. Declaration made:

The Chief Executive of the Department of Resources declares the area, identified on Declared Area Map DAM 2023/002001, as an area of high nature conservation value in accordance with section 19F of the *Vegetation Management Act 1999*.

The chief executive considers the declared area to meet the following criteria under section 19G of the *Vegetation Management Act 1999*—

The declared area is an area of high nature conservation value under section 19G(1)(b), as the area is considered to be:

- an area containing a vegetation clump or corridor that contributes to the maintenance of biodiversity; and
- another area that contributes to the conservation of the environment.

The documents outlined in 2.2 form part of this declaration.

2.2. Declaration documents:

The following documents are part of this declaration, and must be read in conjunction with this notice:

- Declared area map (DAM 2023/002001)
- Declared area management plan, signed 15/05/2023.

2.3. Property Map of Assessable Vegetation

In accordance with s20B of the *Vegetation Management Act 1999*, the following Property Map of Assessable Vegetation has been prepared for the declared area.

Declared area PMAV (DA PMAV): 2023/002085

2.4. Date of declaration: 15 September 2023

3. Delegated officer's signature

A handwritten signature in black ink, appearing to be 'MG' or similar initials, written in a cursive style.

Michael Gordon

Senior Natural Resource Management Officer (VM1)



Declared area management plan

Vegetation Management Act 1999

Complete the following management plan for an area to be declared as an area of high nature conservation value or an area vulnerable to land degradation.

For guidance on declared areas see the Guide to declared areas at www.qld.gov.au. For guidance on legally securing an exchange area see the General guide to accepted development vegetation clearing codes at www.qld.gov.au (search 'vegetation management').

Note: Examples of information to include in this management plan are intended as guidance only. The level of detail or scope of the management plan will depend on the purpose of the declaration and the particular circumstances of the area being secured.

1. Owner's details

First name: Middle name: Surname:

Company name:

If a corporation then enter one of the following: ACN ARBN

Main phone: Other phone:

Address line 1:

Address line 2:

Town/Suburb: State: Postcode:

Email address:

Preferred method of contact Phone Email Letter

Local government area:

Office use only:

eLVAS case number:

Notification number:

2. Property description

This is the property on which the declared area is proposed. The declared area management plan should indicate the specific location of the proposed declared area on the property.

Extra pages may be attached to list additional lots.

Lot number	Plan number	Declared area in hectares	Tenure
906	SP280831	31.07	freehold
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

3. Description of declared area

Include enough information to allow the chief executive to map the boundary of the stated area, including a description of the area subject to the declared area and a map showing the location and extent of the area.

The declared area is the property described as Lot 906 SP280831, which is a freehold parcel with the northern Gold Coast suburb of Kingsholme. A map is provided in Figure 4.1 EPBC 2022/09243_Offset Management Plan. Spatial data is provided as a separate .shp file.

A map may be attached to this plan and submitted with the request for a declared area. Please provide spatial data in the format of a .kml or .shp file of your proposed area so that the exact extent can be used for the assessment.

4. Purpose of the declaration

The purpose of this declaration is to legally secure:

- an area of high nature conservation value
 - an area vulnerable to land degradation
- under sections 19E-19L of the *Vegetation Management Act 1999* (VMA)

5. Registered interest holders consent

A registered interest is one registered under the *Land Act 1994* or the *Land Title Act 1994*.

Registered interests include mortgages, leases, subleases, covenants, profit a prendres, easements and building management statements.

A declaration may not be made unless the holder of a registered interest (other than the owner) in the proposed declaration area has consented in writing to the making of the declaration.

READ BEFORE SIGNING THIS SECTION

Acknowledgement and waiver by all registered interest holders.

By signing this section, those signing are taken to:

- acknowledge that a declared area resulting from a request for a declared area may have legal and financial implications for your interest in the property, and you agree that in no event shall the Department of Resources be liable for any special, indirect or consequential damages or any damages whatsoever rising out of or in connection with a request for a declared area or any subsequent declaration of the area in accordance with the request for a declared area.
- consent to the making of a declared area as proposed in the request for a declared area.

Extra pages may be attached to list additional lots and/or registered interest holders and provide their consent to the making of the declaration

Parcel (Lot & plan)	Type of registered interest	Registered interest holder's name	Contact details	Signature

Principles for drafting management plan: In the sections below you will need to outline how you will achieve the management outcomes, including details on what actions will be taken to achieve this and how you will mitigate any impacts and manage any potential risks that may hinder the specified outcome.

6. Management intent

The management intent for the area is the conservation and restoration of the regional ecosystem vegetation. Management will support State conservation intent as 'koala restoration area' and 'biodiversity planning' terrestrial corridors and Local intent in being proximate to the City of Gold Coast's northern critical corridor habitat (refer Section 4.1.3 EPBC 2022/09243_Offset Management Plan)

Examples:

1. *The management intent for the area is the conservation of the native vegetation in the area. Conservation of the native vegetation will prevent the loss of biodiversity and maintain ecological processes.*
2. *The management intent for an area vulnerable to land degradation is to rehabilitate a degraded, unstable watercourse in an area subject to stream bank instability.*

7. Management outcome

The management outcome for the area is that it achieves pre-clear regional ecosystem vegetation for RE12.11.5 and RE12.11.24 within 15 years.
The fundamental purpose for this outcome is to provide habitat for the koala as an offset for controlled action impact for a proposed development and, in doing, to support the National Recovery Plan for koalas.

Principles for drafting management outcomes: *The management outcomes for the area should be achievable, measurable and related to the to the conservation value or land degradation issue associated with the area.*

Examples:

1. *The management outcome for the area is that it achieves the definition of remnant vegetation.*
2. *The management outcome for the area is to establish (insert number) habitat trees and to have restored and enhanced (insert hectares) of natural area within (insert number) of years.*

Note for exchange areas: If the declaration is to legally secure an exchange area, the management objective must be either of the following:

- i. If the exchange area is located in a category X area, category C area or category R area—to return the exchange area to remnant vegetation (a category B area on the regulated vegetation management map) as soon as possible and within 20 years
- ii. If the exchange area is located in a category B area—to achieve the nominated substantial conservation outcome or address the nominated significant land degradation issue as soon as possible

8. Activities and restrictions

To achieve the management outcome a range of actions will be undertaken for each of the following management principles:

1. Legally secure the offset area
2. Revegetation and regeneration
3. Weed management
4. Management of pest fauna
5. Fire management.

Detailed activities and monitoring for each principle are provided in Section 8 EPBC 2022/09243_Offset Management Plan.

Example: To achieve the management outcome, the landholder will comply with the following activities and restrictions:

- 1. Clearing of native vegetation will not occur unless in accordance with an exemption listed in Schedule 21 of the Planning Regulation 2017 or a development approval under the Planning Act 2016.*
- 2. All reasonable measures will be taken to maintain and enhance the structure and function of the regional ecosystem. For example, minimizing the introduction, establishment and spread of non-native plants. Where non-native plants already occur in the area, all reasonable measures will be taken to control the non-native plants.*
- 3. Burning will only occur in accordance with the fire guideline/s specified in the Regional ecosystem description database (available at www.qld.gov.au) for the regional ecosystem/s in the declared area.*
- 4. Pest animals and pest plants considered an invasive biosecurity matter under the Biosecurity Act 2014 will be controlled.*
- 5. Livestock will be managed to ensure the growth of native vegetation and biodiversity is not impeded.*

Note for exchange areas: If the declaration is to legally secure an exchange area, this section of the management plan must include:

- Description of the works / management actions that will be undertaken to achieve the management objective, including the methods, timing, frequency, intended benefits etc.
- The conservation outcomes that will be achieved by the works / management actions
- Description of the management actions that will be undertaken to ensure that the effects of the works do not result in land degradation
- Details of who is responsible for all works and management actions, and the estimated length of time the area/s will be managed

9. Term

A management plan for a declared area has effect until the earlier of the following happens:

- the plan ends under its terms; or
- the declaration of the area as a declared area ends under section 19L of the VMA

The management plan will end under its terms when EPBC 2022/09243 condition 4c is fulfilled "4/ The approval holder must: (c) complete all monitoring and Habitat quality uplift prior to the end of Year 15." The monitoring and uplift required are defined in Section 8 EPBC 2022/09243_Offset Management Plan.

Ending a declaration

Under section 19L of the VMA the chief executive may, by written notice given to the owner of the land the subject of a declaration, end the declaration if the chief executive considers:

- the declaration is not in the interests of the State, having regard to the public interest; or
- the management outcomes mentioned in section 19E(3)(c) of the VMA for the management plan relevant to the declaration have been achieved.

The chief executive may, by notice given to the owner of land declared as an area of high conservation value, end the declaration if:

- the area is, on or after the commencement of subsection 19L(2) of the VMA, a legally secured offset area; and
- a prescribed activity is, under an authority under another Act, to be carried out in or on the area; and
- the holder of the authority has entered into an agreed delivery arrangement in relation to an environmental offset for impacts to the area.

Note: If the landholder considers the management outcomes have been achieved, they may submit a request to end a declaration to the Department of Resources. The Department of Resources will assess whether the management outcomes have been met before removing the declaration. If the declaration is to legally secure an environmental offset and the Department of Resources is not the administering agency, the department should also be satisfied that the administering agency agrees the management outcomes have been met and agrees to the ending of the declaration in order for the department to end the declaration.

Once the declaration has ended this plan will cease to have effect and the department will remove the declaration notice from the title of the land. The landholder should submit a 20C PMAV application with the request to remove the declaration to replace the PMAV currently over the declared area and map the appropriate category of vegetation for the area (for example, category B).

10. Monitoring and record keeping

Detailed activities, monitoring, record keeping, and adaptive management for each management principle are provided in Section 8 EPBC 2022/09243_Offset Management Plan.

Requirements for EPBC 2022/09243 are identified primarily under conditions 14 and 28.

Monitoring and record keeping should be undertaken to track the state of the declared area and progress towards achieving the management outcomes specified in this plan. The following information should also be provided:

- Monitoring and auditing processes including adaptive management approaches to rectify negative results from the monitoring and auditing processes
- Record keeping process for retaining appropriate records for monitoring and auditing processes.

Note: Providing the information above complies with the ADVCC requirements for legally securing an exchange area.

To apply for an area to be legally secured as an exchange area, complete the application to legally secure an exchange area at www.qld.gov.au (search 'vegetation management'). For guidance on legally securing an exchange area see the General guide to accepted development vegetation clearing codes at www.qld.gov.au (search 'vegetation management').

11. Additional information

The management plan may also include any other information the applicant considers will assist in the determination of the request. Additional information can be provided below or as an attachment to this plan.

The declaration is intended to cover the period of EPBC 2022/09243 Offset Management Plan until the habitat quality uplift is achieved. This is expected to occur by year 15 (ie. by 2038) (refer 'Time until ecological benefit' Table 7.9 EPBC 2022/09243_Offset Management Plan). At the completion of attaining the ecological benefit the land parcel will be retained within the City of Gold Coast's conservation estate. The declaration may be sought to be removed at that time.

12. Administering agency approval

If you are using a declared area to legally secure an environmental offset and the Department of Resources is not the administering agency, has the administering agency approved this management plan?

- Yes – Please include a copy of this approval with the request
- No – Please provide contact information for the administering agency and details of the offset delivery progress

Note: this management plan complies with the requirements for a declared area under the VMA, it does not fulfil the requirements of an offset management plan.

13. Signature of owner (applicant) and all registered owners

If there is more than one owner of the land on which the declared area is proposed, each owner must complete and sign this management plan. The owner of the land is the party/s registered on title as the registered owner.

Where the owner is a company, execution by the company must be provided in accordance with the requirements of the **Corporations Act 2001 (Commonwealth)**, section 127.

A company:

- may execute a document without using a common seal if the document is signed by two (2) directors of the company or a director and a company secretary; or for a proprietary company that has a sole director who is also the sole company secretary - that director; or
- with a company seal may execute a document if the seal is fixed to the document and the fixing of the seal is witnessed by two (2) directors of the company or a director and a company secretary; or for a proprietary company that has a sole director who is also the sole company secretary - that director.

If there are more owners, extra pages containing the additional signature(s) may be attached.

Lot	Plan number	Owner's name	If a corporation record one of the following:		Owner's signature	Date	Company seal (if applicable)
			ARBN	84 858 548 460			
906	SP280831	Council of the City of Gold Coast	ARBN	84 858 548 460	 James Dixon Manager Property Services	15/5/23	Delegation No. DEO 2592

Department of Resources (office use only)

Name	<input type="text"/>	Position	<input type="text"/>	Signature	<input type="text"/>	Date	<input type="text"/>
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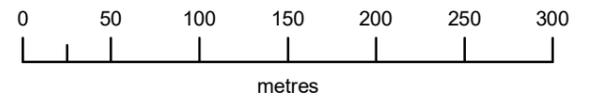


Declared Area Map

DAM 2023/002001

LOT on PLAN
906SP280831

Sheet 1 of 1



Scale: 1:4000
(original size A3)



LEGEND

- Subject Lot
- Declared Area (A1)

This plan must be read in conjunction with Declaration Notice 2023/002001

Notes:

Property boundary provided by Department of Resources.
The property boundaries shown on this map are approximate only.
They are not an accurate representation of the legal boundaries.

Map Information:
Horizontal Datum: GDA 2020
Projection: Universal Transverse Mercator - Zone 56

Digital Imagery: Gold_Coast_LGA_2022_10cm_SISP
Imagery Capture Date: July to September 2022
Imagery Type: Queensland Digital Orthophoto Image

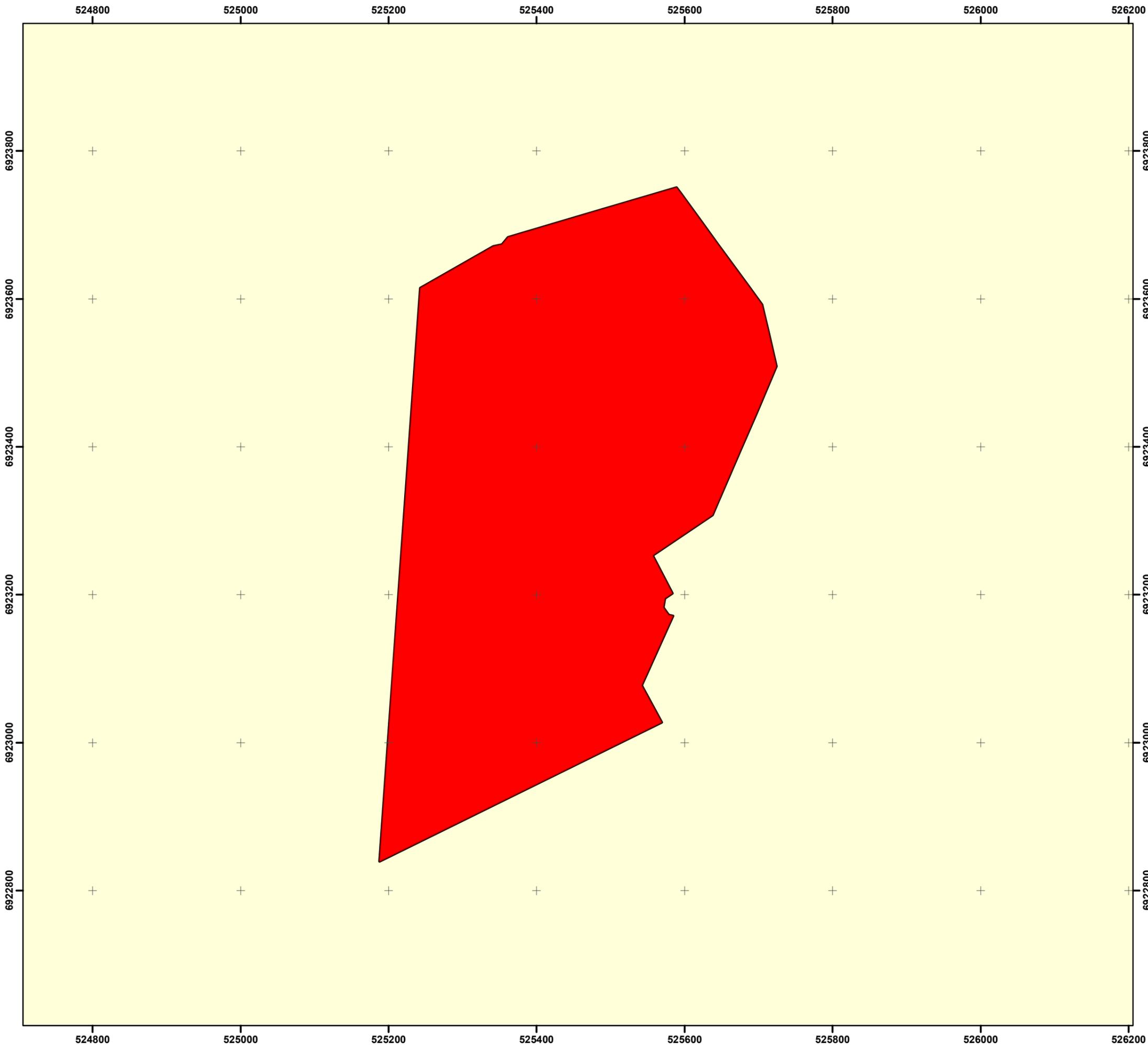
While every care is taken to ensure the accuracy of this product, the Department of Resource makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability, including without limitation, liability in negligence for all expenses, losses, damages (including indirect or consequential damage) and costs which might incur as a result of the product being inaccurate or incomplete in any way and for any reason. Data must not be used for direct marketing or be used in breach of the privacy laws.

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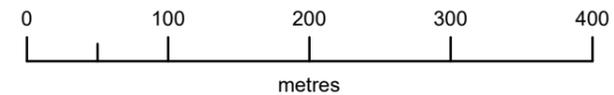
Map Prepared by: LMO (VMGIS-NR-1934)

Map Preparation Date: 25/07/2023

This is a colour map and must be reproduced in colour.



Sheet 1 of 1
Property Map of Assessable Vegetation
PMAV 2023/002085
 LOT on PLAN
 906SP280831

Scale: 1:5000
(original size A3)



LEGEND

- Subject Lot(s)
 - Area to which the PMAV does not apply
- Vegetation Category Area**
- Category A area

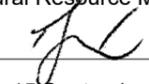
Notes:

Property boundaries provided by Department of Resources. The property boundaries on this map are a spatial representation of the property boundaries. They are not the legal property boundaries and are subject to change as more accurate information becomes available. The PMAV does not move with changes to the property boundaries.

Map Information:
 Horizontal Datum: GDA 2020
 Projection: Universal Transverse Mercator - Zone 56

This is a colour map and must be reproduced in colour

This PMAV is made under Section 20B(1)(a) of the Vegetation Management Act 1999.

Signed for the Chief Executive of the Department of Resources by:
 Name: Michael Gordon
 Title: Senior Natural Resource Management Officer
 Signature: 
 Date: 15 September 2023

Map Prepared by: LMO
 Department of Resources,
 PO Box 15216
 CITY EAST QLD 4002

Map Preparation Date: 25/07/2023

INFORMATION NOTICE

Information Notice issued pursuant to section 20B(2) of the *Vegetation Management Act 1999*

Property Map of Assessable Vegetation issued under section 20B(1)(a) of the *Vegetation Management Act 1999*

This information notice has been issued to the owner of lot 906 on SP280831 – Council of the City of Gold Coast (the subject land) pursuant to section 20B(2) of the *Vegetation Management Act 1999* (VMA).

The information notice pertains to the decision by the delegate of the chief executive to make a Property Map of Assessable Vegetation (PMAV) 2023/002085 over the subject land.

The PMAV is made under section 20B(1)(a) of the VMA. Section 20B(1)(a) of the VMA allows the delegate to make a PMAV over an area that is a declared area under the VMA.

This decision can be internally reviewed if requested by an owner. The details on how to do this are contained in **Appendix 1**.

Reasons for the decision

Under section 19E of the VMA, an owner of land may, by written notice given to the chief executive, ask the chief executive to declare that a stated area of the land is either an area of high nature conservation value or an area vulnerable to land degradation.

The chief executive declared the area to be an area of high nature conservation value under section 19F of the VMA on 15 September 2023.

The area identified as category A area on PMAV 2023/002085 is subject to Declared Area 2023/002001 and its' associated Declared Area Management Plan.

The regulated vegetation management map will be amended to show the declared area as a category A area, pursuant to section 20AL(a)(i) of the VMA.

Date: 15 September 2023



Delegate: Michael Gordon (VM1)

Appendix 1: Rights of Review of the Decision

If you do not agree with the decision to make this PMAV, you may make an application for an internal review of the decision under Part 4 of the *Vegetation Management Act 1999* (VMA).

Internal Review information can be sent to:

Vegetation Management
PO Box 318
Toowoomba Qld 4350

Please refer to the following extracts from the VMA for:

- your rights of review
- the time period in which you have to apply for review; and
- how the rights of review are exercised under the VMA.

Extracts from the VMA:

Part 4 Reviews and legal proceedings

Division 1 Internal reviews by chief executive

62 Internal review process before external review

Every review of an original decision must be, in the first instance, by way of an application for an internal review of the decision.

63 How to apply for internal review

- (1) A person who is given, or is entitled to be given, an information notice about a decision made under this Act may apply for an internal review of the decision.
- (2) An application for internal review of a decision must be—
 - (a) in the approved form; and
 - (b) made to the chief executive; and
 - (c) supported by enough information to enable the chief executive to decide the application.
- (3) The application must be made within 20 business days after—
 - (a) the day the person is given the information notice about the decision; or
 - (b) if paragraph (a) does not apply—the day the person otherwise becomes aware of the decision.
- (4) The chief executive may extend the time for applying for the internal review.
- (5) The application does not stay the decision.

63A Review decision

- (1) The chief executive must, within 30 business days after receiving the application—
 - (a) review the decision (the original decision); and
 - (b) make a decision (the review decision) to—
 - (i) confirm the original decision; or
 - (ii) amend the original decision; or
 - (iii) substitute another decision for the original decision; and
 - (c) give the applicant notice (the review notice) of the review decision.
- (2) If the review decision is not the decision sought by the applicant, the review notice must comply with the QCAT Act, section 157(2).
- (3) However, subsection (2) does not apply if the review decision relates to an original decision under section 138(1)(b).

Division 1A External reviews by QCAT

63B Who may apply for external review

- (1) A person who is dissatisfied with a review decision may apply, as provided under the QCAT Act, to QCAT for a review of the review decision.
- (2) However, subsection (1) does not apply if the review decision relates to an original decision mentioned in section 63A(3).

ATTACHMENT 3

Baseline Weed and Feral Animal Survey Report



Baseline Survey Report

EPBC -2022/09243

Baseline Offset Area

Prepared for Visy Industries Australia Pty Ltd

5 May 2023

Job No. 11510

Document Control

Document: EPBC Act Offset Baseline Surveys for Lot 906 SP280831, Kingsholme under EPBC 2022/09243 prepared by Saunders Havill Group for Visy Industries Australia Pty Ltd.

Document Issue

Issue	Date	Prepared By	Checked By
A	09/05/23	LF	AR

Prepared by

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Abbreviations and Acronyms

DAM	Declared Area Map
DAWE	Department of Agriculture, Water and the Environment
DES	Department of Environment and Science (Qld)
DoR	Department of Resources (Qld) (formerly DNRME, Department of Natural Resources, Mines and Energy)
EDQ	Economic Development Queensland (Qld)
EPBC	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
GHFF	Grey-headed Flying-fox (<i>Pteropus poliocephalus</i>)
NCA	<i>Nature Conservation Act 1992 (Qld)</i>
NCPR	Nature Conservation (Plants) Regulation 2020
OMU	Operational Management Unit
PDA	Priority Development Area (herein referencing the Greater Flagstone Priority Development Area)
PMAV	Property Map of Assessable Vegetation
RAI	Relative Abundance Index
RE	Regional Ecosystem
SEQ	South-east Queensland
SHG	Saunders Havill Group
VMA	<i>Vegetation Management Act 1992 (Qld)</i>
WONS	Weeds of National Significance

Terminology

Kingsholme Offset Area means the area within the property located on Lot 906 SP280831, Kingsholme, Queensland.

Kingsholme Offset Property means the property located on Lot 906 SP280831, Kingsholme, Queensland.

1. Introduction

The *Environmental Management Division* of Saunders Havill Group (SHG) was engaged by Visy Industries Australia Pty Ltd to prepare a Baseline Survey Report for the Kingsholme offset site associated with the impact for the approved 'Glass Recycling and Manufacturing Facility located at Stapylton in the City of Gold Coast (EPBC ref: 2022/09243)'. The approval pertains to the development of a Glass Recycling and Manufacturing Facility located over a vacant greenfield site at 222 Stapylton Jacobs Well Road, Stapylton (Lot 2 on WD4654) and part of the adjoining brownfield site located at 298 Stapylton Jacobs Well Road (Lot 2 SP189558) which has existing Visy packaging manufacturing facilities for beverage cans and cardboard. The action involves directly impacting 11.95 ha of suitable koala habitat on Lot 2 WD4654. The proponent has partnered with the City of Gold Coast to deliver a local direct land-based offset to compensate for the loss of 11.95 ha of koala habitat within the impact area. The City of Gold Coast is the custodian of over 13,000 ha of conservation estate across the Gold Coast, including Stage Coach Reserve in Kingsholme, which is the location for the offset. The offset area is located within the offset property described as Lot 906 SP280831, which is a freehold parcel approximately 31.07 ha in size. The offset area within the Kingsholme offset property is 15.17 ha.

The action was approved under the EPBC Act subject to conditions on 17 January 2023 with effect until 17 January 2048. Condition 7 of the approval requires that the approval holder must complete and provide the Department with the results and dates of the following surveys:

7. *Within 6 months of this approval, the approval holder must ensure a suitably qualified field ecologist completes baseline surveys of the Kingsholme Offset Area in accordance with a scientifically valid, robust and repeatable methodology, to determine the:*
 - a) *extent of weed cover, and*
 - b) *abundance of feral animals.*

The surveys must be conducted by a suitably qualified person, consistent with the Department's approved survey guidelines and designed to provide results that are representative of the entire areas of the offset site.

This report has been prepared to satisfy the requirements of the conditions of approval.

1.1. Offset Area Summary

The proponent has partnered with the City of Gold Coast to deliver a local direct land-based offset to compensate for the loss of 11.95 ha of koala habitat within the impact area. The offset area is located within the offset property described as Lot 906 SP280831, which is a freehold parcel approximately 31.07 ha in size, hereafter referred to as the Kingsholme offset property. The offset area within the Kingsholme offset property is 15.17 ha, hereafter referred to as the Kingsholme offset area.

The Kingsholme offset property is located in the Gold Coast City Council, 2 kilometres (km) south of Ormeau and approximately 43.5km from the Queensland-New South Wales state border. The Offset property is zoned rural and Rural, Rural landscape and environment precinct located within the suburban boundary of Kingsholme. Key details relating to the Kingsholme offset site are located in **Table 1**.

Table 1: Kingsholme offset site summary

Address	Lot 906 Elm Cl, Kingsholme, Queensland, 4208
Lot / Plan	Lot 906 on SP280831
Property Area	31.1 ha
Offset Area	15.17ha
Tenure	Freehold
Local government area	Gold Coast City Council



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Legend

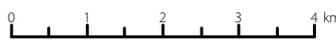
 Site DCDB

Figure 1
Site Context

Visy Industries
Australia Pty Ltd

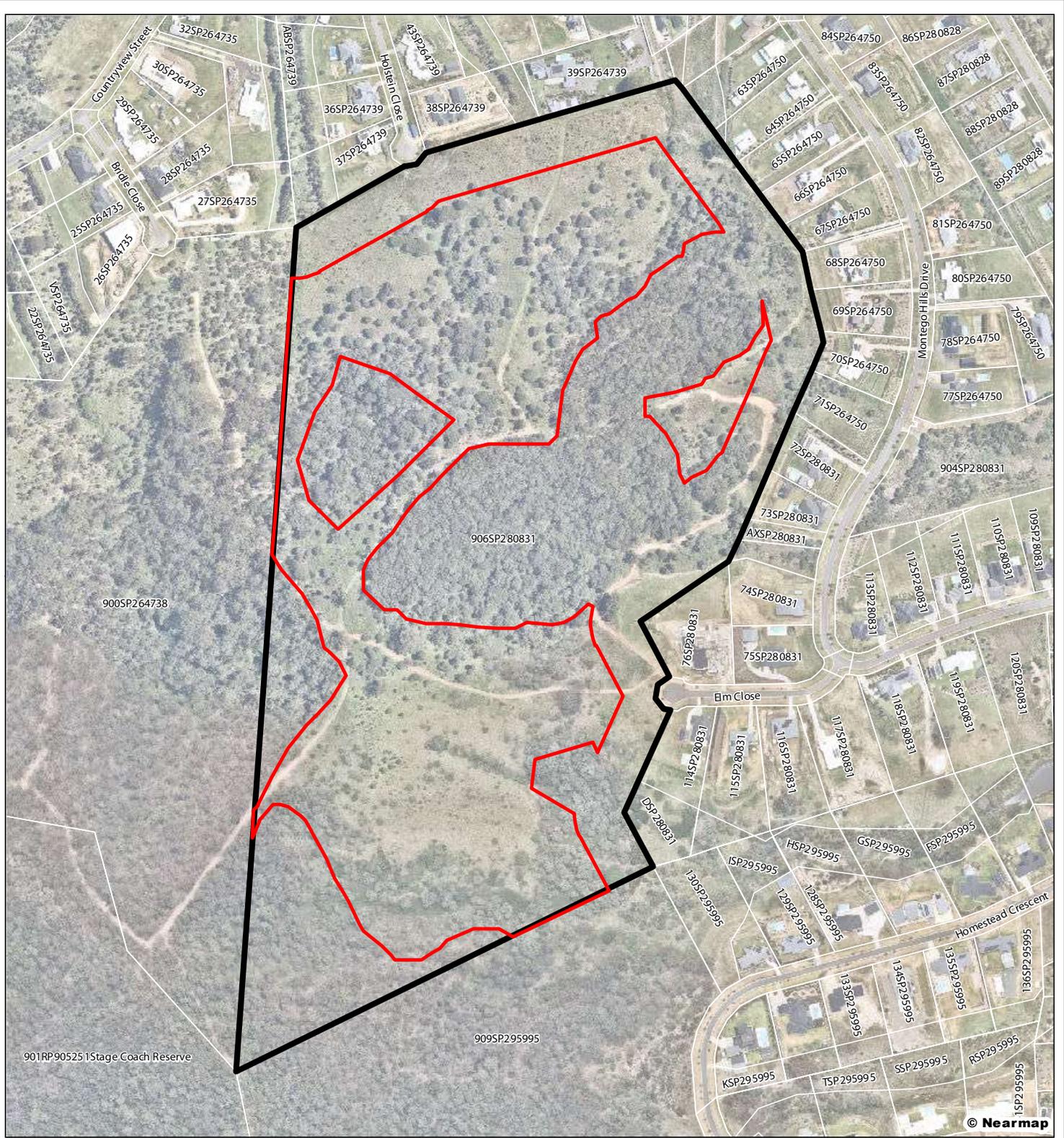
File ref. 11510 E Figure 1 Site Context A
Date 31/03/2023
Project Stapylton Jacobs Well Road, Stapylton




Scale (A4): 1:100,000 [GDA 2020 MGA Z56]



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© Nearmap

Legend

- Offset Property
- Offset Area
- Qld DCDB

Figure 2
Site Aerial

Visy Industries
Australia Pty Ltd

File ref. 11510 E Figure 2 Site Aerial A
Date 5/04/2023
Project Stapylton Jacobs Well Road, Stapylton



Scale (A4): 1:5,000 [GDA 2020 MGA Z56]

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2. Baseline survey methodology

These surveys have been conducted by the Saunders Havill Group, and suitably qualified personnel consistent with the Department's approved survey guidelines and designed to provide results that are representative of the entire Kingsholme offset site.

Condition 7 states that within 6 months of the date of the approval, the approval holder must ensure a suitably qualified field ecologist completes baseline surveys of the **Kingsholme Offset Area** in accordance with a scientifically valid, robust and repeatable methodology, to determine the:

- a. **extent of weed cover**, and
- b. abundance of **feral animals**.

The methodology of each survey detailed within the following sections incorporates the required baseline surveys outlined above. A summary of the surveys conducted is provided within **Table 2**.

Table 2: Survey Methodology Summary

Condition	Methodology	Date
7 (a)	Diurnal observations Weed cover extent survey	15 & 16 February 2023 and 6 March 2023
7 (b)	Diurnal observations Motion Sensor Camera survey	15 February 2023 to 6 March 2023

All surveys were conducted by a suitably qualified person with professional qualifications and experience related to the nominated subject matter, ensuring an independent assessment and analysis in accordance with relevant standards and methodologies (refer **Table 3**).

Table 3: Surveyor Details

Position	Qualifications	Survey Date	Years of experience
Principal Ecologist	Bachelor of Applied Science (Natural Systems and Wildlife Management) Diploma of Arboriculture	15 February 2023 6 March 2023	~24 years
Ecologist	Bachelor of Science (Ecology and Conservation Biology)	16 February 2023 6 March 2023	~14 years
Ecologist	Bachelor of Biological Sciences (Biotechnology and Genomics / Urban and Regional Town Planning)	15 & 16 February 2023	~3 years

2.1. Diurnal observations

Diurnal observations of flora and fauna or signs of fauna activity were conducted simultaneously with all other surveys conducted throughout the surveying period and across the Kingsholme Offset site (detailed in following sections). Diurnal observations included the recording of all weed species and feral animals observed across the offset property.

2.2. Extent of Weed Cover Survey

Where patches of weed cover were identified within the Kingsholme Offset Area, these were located and traced using a hand-held GPS. The result of this survey methodology is illustrated in **Plan 2**. Additionally, as discuss above, all weed species identified across the site were recorded and listed in **Section 3.1**.

This survey method was utilised to address Condition 7a to determine the extent of weed cover across the Kingsholme Offset Area.

2.3. Feral Animal Abundance Survey

Together with the weed cover extent survey, an assessment of feral animal abundance to address Condition 7b was conducted via the use of camera trapping along with assessing and recording evidence of predators (e.g. scats, tracks, den count and traces) and/or Koala mortalities attributable to predators. Feral animal means any non-native predator or non-native herbivore, including those known to predate on the Koala, or with the potential to impact on vegetation habitat regeneration that is consistent with Koala habitat.

Camera traps have the advantage of potentially obtaining a wide range of significant information. Automatic camera systems are triggered by an animal passing in front of a sensor that detects movement, changes in ambient light, or a thermal differential (Moen & Lindquist 2004). Cameras allow for the detection of species that are difficult to study due to their elusive and nocturnal habits (Mace *et al.* 2004). They are less time consuming, less costly, and less invasive than long-term direct observation of animals. They are also beneficial in studying animals in inaccessible or difficult to access locations such as dens and nest cavities, or in rugged terrain (Mace *et al.* 1994). In addition, they enable the collection of valuable information about multiple species within any given community (Rosellini *et al.* 2008) and provide data that is more permanent and less disputable than data gathered by direct observation.

The use of camera trapping and den count is considered to be an effective method in capturing, assessing and monitoring pest management.

2.3.1 Motion-triggered infrared camera trap

Camera trapping involves setting up a fixed motion-triggered infrared camera to capture images or video of animals which pass in front of camera or are lured by bait. This set-up identifies fauna activity beyond the scope of direct observational studies and in the absence of potential observer impacts.

Infrared sensing cameras with an infrared flash were deployed, which use motion to trigger. Cameras were attached 30-50 cm from the ground on a tree or post, and directed towards the bait which is placed about 1.5-2 m from the mounted camera. The bait generally consisted of chicken bones/carcasses. The programming was consistent across all cameras, and cameras were set up in a consistent manner to maintain similar detection probabilities. For detecting Koala predators, cameras were placed in the vicinity of an animal trail. Cameras may be placed in alternate locations where active trails are identified.

Six (6) cameras were deployed across the Kingsholme Offset Property, located throughout the site for 114 survey nights between 15 February and 6 March 2023.

2.3.2 Relative Abundance Index

A relative abundance index (RAI) is then calculated for feral animal abundance, using the formula $RAI = D/TN \times 100$, where D is numbers of detection and TN is the total number of camera-trap nights (all cameras combined). This methodology ensures that the surveys are representative of the entire offset area and are repeatable for future monitoring requirements.



Photo set 1: Camera trap set-up at Kingsholme Offset Property (Camera 1).

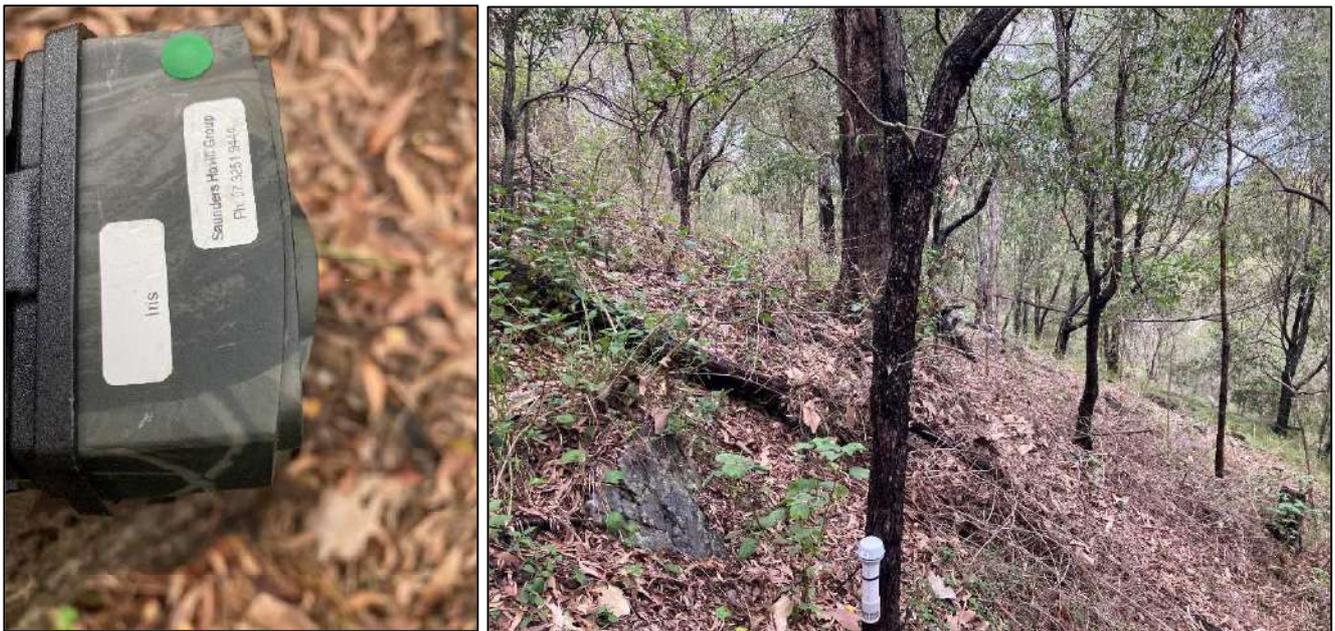


Photo set 2: Camera trap set-up at Kingsholme Offset Property (Camera 2).



Photo set 3: Camera trap set-up at Kingsholme Offset Property (Camera 3).



Photo set 4: Camera trap set-up at Kingsholme Offset Property (Camera 4).

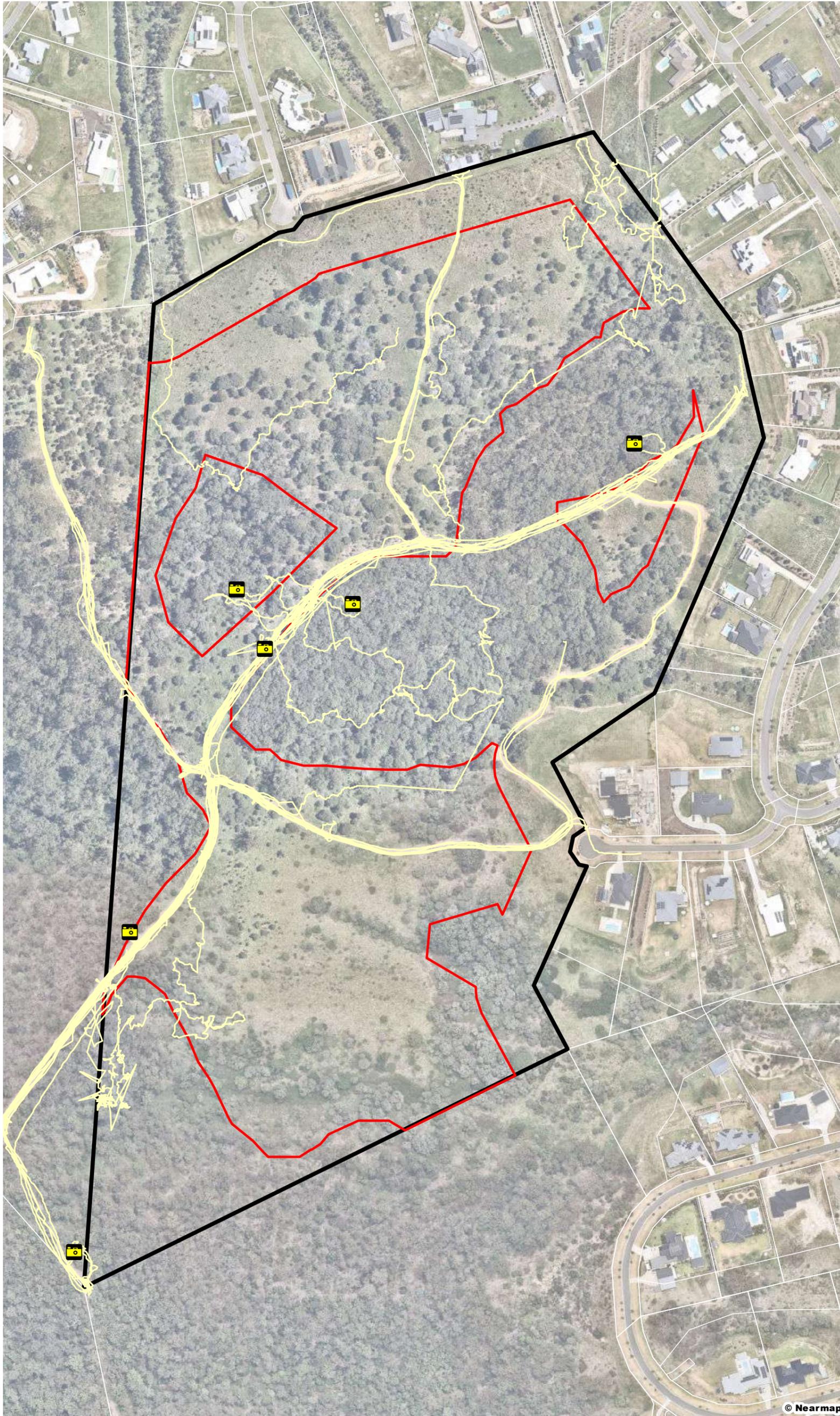


Photo set 5: Camera trap set-up at Kingsholme Offset Property (Camera 5).



Photo set 6: Camera trap set-up at Kingsholme Offset Property (Camera 6).

01. Baseline Survey Effort



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Legend

-  Offset Property
-  Offset Area
-  Qld DCDB
-  GPS Track Log
-  Camera Trap Locations

Issue	Date	Description	Drawn	Checked
A	5/04/2023	Preliminary	LS	LF

0 20 40 60 m

Transverse Mercator | GDA 2020 | Zone 56 | 1:3,000 @ A3



Address / RPD: Lot 906 on SP280831

S/04/2023 | 11510 E 01 Survey Effort A

3. Baseline Survey Results

3.1. Extent of Weed Cover

All weed species recorded across the Kingsholme offset area were recorded. A list of the recorded weed species is provided in **Table 4**.

Table 4: Recorded Weed Species – Kingsholme Offset Property

Scientific Name	Common Name	Biosecurity Act 2014 Restricted Matter	Weeds of National Significance (WONS)
<i>Ageratum houstonianum</i>	Blue Billygoat Weed		
<i>Ambrosia artemisiifolia</i>	Annual Ragweed	Category 3	
<i>Andropogon virginicus</i>	Whisky Grass		
<i>Ascelias curassavica</i>	Red-head Cotton Bush		
<i>Asparagus aethiopicus</i>	Climbing Asparagus Fern	Category 3	WONS
<i>Baccharis halimifolia</i>	Groundsel Bush	Category 3	
<i>Bidens pilosa</i>	Cobbler's Pegs		
<i>Cassytha glabella</i>	Devil's Twine		
<i>Celtis sinensis</i>	Chinese Elm	Category 3	
<i>Cestrum parqui</i>	Green Cestrum		
<i>Chloris gayana</i>	Rhodes Grass		
<i>Cirsium vulgare</i>	Spear Thistle		
<i>Commelina diffusa</i>	Wandering Jew		
<i>Conyza bonariensis</i>	Flaxleaf Fleabane		
<i>Conyza sumatrensis</i>	Tall Fleabane		
<i>Corymbia torelliana</i>	Cadaghi		
<i>Cyperus polystachyos</i>	Bunchy Sedge		
<i>Desmodium rhytidophyllum</i>	Hairy Trefoil		
<i>Eremophila debilis</i>	Winter Apple		
<i>Gomphocarpus physocarpus</i>	Balloon Cotton Bush		
<i>Heliotropium amplexicaule</i>	Blue Heliotrope		
<i>Hypochaeris radicata</i>	Flatweed		

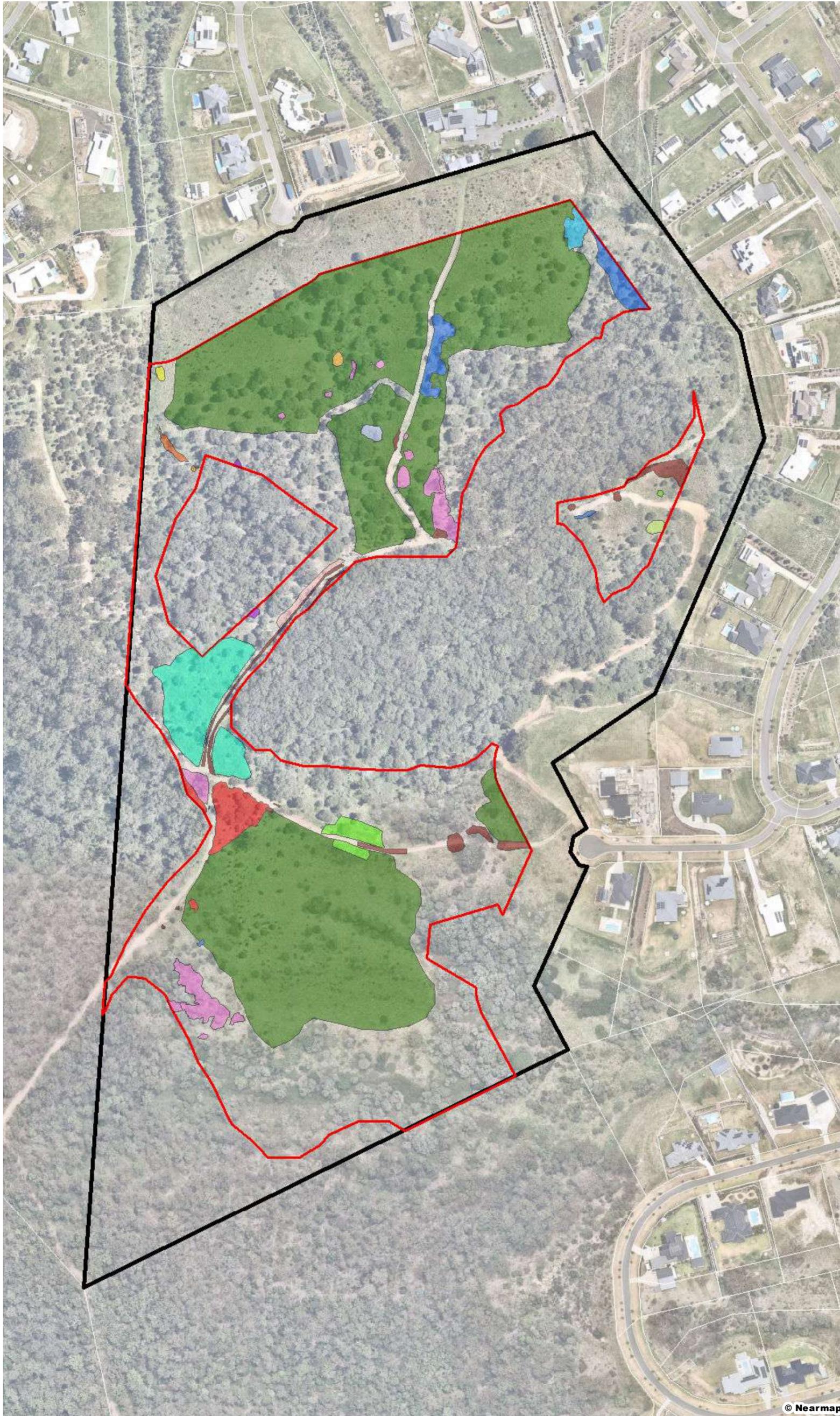
Scientific Name	Common Name	Biosecurity Act 2014 Restricted Matter	Weeds of National Significance (WONS)
<i>Lantana camara</i>	Lantana	Category 3	WONS
<i>Lantana montevidensis</i>	Creeping Lantana	Category 3	
<i>Leucaena leucocephala</i>	Leucaena		
<i>Macroptilium lathyroides</i>	Phasey Bean		
<i>Megathyrus maximus</i>	Guinea Grass		
<i>Melinis repens</i>	Red Natal Grass		
<i>Murraya paniculata</i>	Mock Orange		

The extent of weed cover across the Kingsholme offset area was recorded by locating and tracing weed cover extent with hand-held GPS. These extents are then illustrated on **Plan 2**. The area of weed extents are provided in **Table 5**. The total extent of weed cover across the site is approximately 50.87 %.

Table 5: Weed Extent

Dominant Species	Area (m ²)	Percentage Of Offset Area (%)
<i>Lantana camara</i> (Lantana)	2504.45	1.65
<i>Lantana camara</i> (Lantana) / <i>Solanum mauritianum</i> (Wild Tobacco)	66.65	0.04
<i>Lantana camara</i> (Lantana) / <i>Urena lobata</i> (Urena Burr)	1601.2	1.06
<i>Lantana camara</i> (Lantana) / <i>Urena lobata</i> (Urena Burr) / <i>Solanum chrysotrichum</i> (Giant Devil's Fig) / <i>Passiflora suberosa</i> (Corky Passion Vine)	165.48	0.11
<i>Lantana camara</i> (Lantana) / <i>Urena lobata</i> (Urena Burr) / <i>Solanum chrysotrichum</i> (Giant Devil's Fig)	402.88	0.27
<i>Setaria</i> dominated vegetation	62720.18	41.34
<i>Setaria</i> dominated / <i>Sporobolus pyramidalis</i> (Giant Rats Tail Grass)	4828.27	3.18
<i>Solanum chrysotrichum</i> (Giant Devil's Fig)	849.48	0.56
<i>Solanum chrysotrichum</i> (Giant Devil's Fig) / <i>Solanum mauritianum</i> (Wild Tobacco)	119.16	0.08
<i>Solanum chrysotrichum</i> (Giant Devil's Fig) / <i>Lantana camara</i> (Lantana)	63.31	0.04
<i>Solanum mauritianum</i> (Wild Tobacco)	85.83	0.06
<i>Solanum mauritianum</i> (Wild Tobacco) / <i>Solanum chrysotrichum</i> (Giant Devil's Fig)	139.94	0.09
<i>Sporobolus pyramidalis</i> (Giant Rats Tail Grass)	1687.27	1.11
<i>Urena lobata</i> (Urena Burr)	1614.21	1.06
<i>Urena lobata</i> (Urena Burr) and <i>Chloris gayana</i> (Rhodes Grass)	337.03	0.22
Total:	77,185.34 m² (7.71ha)	50.87%

02. Baseline Weed Cover Extent



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Legend

- Offset Property
- Offset Area
- Qld DCDB
- Lantana camara (Lantana)
- Lantana camara (Lantana) / Solanum mauritianum (Wild Tobacco)
- Lantana camara (Lantana) / Urena lobata (Urena Burr)
- Lantana camara (Lantana) / Urena lobata (Urena Burr) / Solanum chrysotrichum (Giant Devil's Fig) / Passiflora suberosa (Corky Passion Vine)
- Lantana camara (Lantana) / Urena lobata (Urena Burr) / Solanum chrysotrichum (Giant Devil's Fig)
- Setaria dominated / Sporobolus pyramidalis (Giant Rats Tail Grass)
- Setaria Dominated Vegetation
- Solanum chrysotrichum (Giant Devil's Fig)
- Solanum chrysotrichum (Giant Devil's Fig) / Solanum mauritianum (Wild Tobacco)
- Solanum chrysotrichum (Giant Devil's Fig) / Lantana camara (Lantana)
- Solanum mauritianum (Wild Tobacco)
- Solanum mauritianum (Wild Tobacco) / Solanum chrysotrichum (Giant Devil's Fig)
- Sporobolus pyramidalis (Giant Rats Tail Grass)
- Urena lobata (Urena Burr)
- Urena lobata (Urena Burr) / Chloris gayana (Rhodes Grass)

Issue	Date	Description	Drawn	Checked
A	14/04/2023	Preliminary	LS	LF



Transverse Mercator | GDA 2020 | Zone 56 | 1:3,000 @ A3



Address / RPD: Lot 906 on SP280831

14/04/2023 | 11510E02 Weed Cover A

3.2. Feral Animal Abundance Survey

Field surveys did not identify any evidence of Koala mortalities.

Six (6) motion activated cameras were deployed across the Kingsholme offset property, one (1) within the Kingsholme offset area from 15 February to 6 March 2023. Surveys across the entire Kingsholme Offset Property are relevant for the baseline surveys and future monitoring and management actions to be implemented following the approval of the Offset Management Plan.

The Kingsholme Offset Property cameras detected eight (8) individual sightings of feral animals over a total of 114 survey nights (refer to **Table 5**). The introduced predators of *Vulpes vulpes* (Red Fox) and *Bos taurus* (Cow) were recorded across the six (6) camera traps (refer **Photo set 1**). Other fauna species were captured during this survey. A full list of animals captured throughout this survey is provided in **Appendix E**.

Using the methodology described in **Section 2.3.2** the RAI for Kingsholme Offset property is **7.02** (refer **Table 5**).

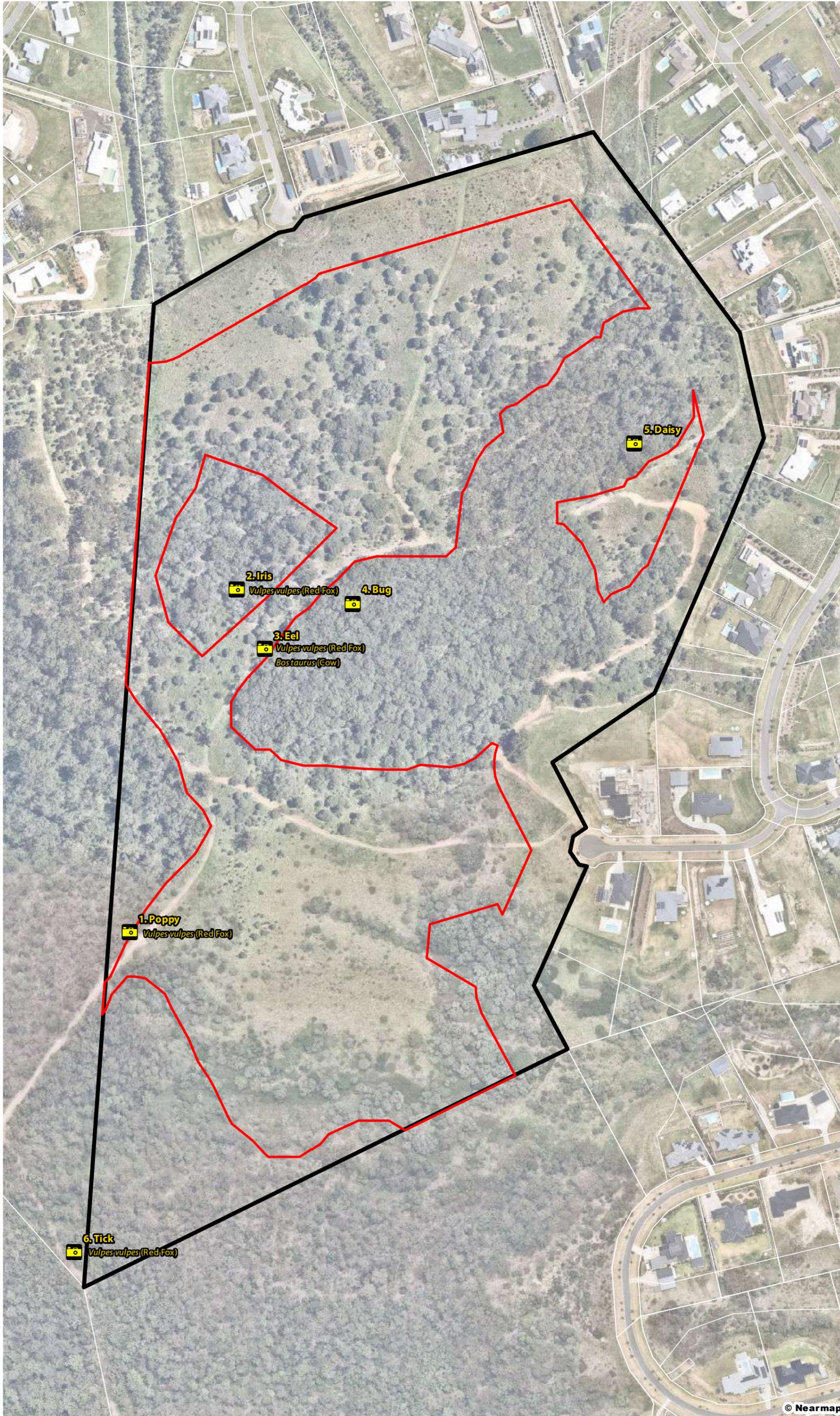
Table 6: Non-native Koala Predator Survey Results Summary – Kingsholme Offset Property

Camera	Camera Name	Survey Duration (nights)	Species	Detection	Within offset site	RAI
1	Poppy	19	<i>Vulpes vulpes</i> (Red Fox)	1		7.02
2	Iris	19	<i>Vulpes vulpes</i> (Red Fox)	1		
3	Eel	19	<i>Vulpes vulpes</i> (Red Fox)	2	✓	
			<i>Bos taurus</i> (Cow)	1		
4	Bug	19	Nil	-		
5	Daisy	19	Nil	-		
6	Tick	19	<i>Vulpes vulpes</i> (Red Fox)	3		
Total		114		8		



Photo set 1: *Vulpes vulpes* (Red Fox) and *Bos taurus* (Cow) captured on Kingsholme Offset Property.

03. Baseline Predators



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Legend

-  Offset Property
-  Offset Area
-  Qld DCDB
-  Camera Trap Locations

Issue	Date	Description	Drawn	Checked
A	12/04/2023	Preliminary	LS	LF

0 20 40 60 m

Transverse Mercator | GDA 2020 | Zone 56 | 1:3,000 @ A3



Address / RPD: Lot 906 on SP280831

12/04/2023 | 11510E03 Predators A

4. Completion Criteria

4.1. Extent of Weed Cover

In accordance with condition 12 of the EPBC Act approval, the approval holder must, by the end of Year 7, have reduced the extent of weed cover at the Kingsholme Offset Area by 95% relative to the extent of weed cover determined by the baseline surveys required under condition 7. Using the extent of weed cover recorded in the baseline surveys the weed extent cover will need to be reduced to 3,859.27 m² (0.39 ha) or 2.54% of the Kingsholme offset area.

4.2. Feral Animal Abundance

In accordance with condition 11 of the EPBC Act approval, the approval holder must, by the end of Year 10, ensure that the highest abundance of each feral animal species is less than 10% of the maximum feral animal species abundance as determined by the baseline surveys required under condition 7. Using the RAI recorded in the baseline surveys the RAI to achieve the Year 10 milestone would be <0.702.

Once the approval holder achieves the outcomes of condition 11 and 12, the outcomes must be maintained or improved for the rest of the period of effect of approval, 17 January 2048.

5. Appendices

Appendix A

Fauna Species List

Appendix A

Fauna Species List

Site Fauna Species		Taxa	Native/Introduced
Scientific Name	Common name		
<i>Alectura lathami</i>	Australian Brush-turkey	Bird	Native
<i>Cracticus nigrogularis</i>	Pied Butcherbird	Bird	Native
<i>Cygnus atratus</i>	White throated gerygone	Bird	Native
<i>Egretta novaehollandiae</i>	White-faced Heron	Bird	Native
<i>Eopsaltria australis</i>	Eastern Yellow Robin	Bird	Native
<i>Gymnorhina tibicen</i>	Australian Magpie	Bird	Native
<i>Manorina melanocephala</i>	Noisy Miner	Bird	Native
<i>Bos taurus</i>	Domestic Cow	Mammal	Introduced
<i>Macropus giganteus</i>	Eastern Grey Kangaroo	Mammal	Native
<i>Macropus parryi</i>	Whiptail Wallaby	Mammal	Native
<i>Macropus rufogriseus</i>	Red-necked Wallaby	Mammal	Native
<i>Phascolarctos cinereus</i>	Koala	Mammal	Native
<i>Trichosurus vulpecula</i>	Common Brushtail Possum	Mammal	Native
<i>Vulpes vulpes</i>	Red Fox	Mammal	Introduced
<i>Wallabia bicolor</i>	Swamp Wallaby	Mammal	Native
<i>Cryptoblepharus pulcher</i>	Elegant Snake Eyed Skink	Reptile	Native
<i>Varanus varius</i>	Lace Monitor	Reptile	Native

ATTACHMENT 4

Baseline Koala Survey at Offset Site

BASELINE KOALA SURVEY AT STAGE COACH RESERVE OFFSET AREA

Stage Coach Reserve
Kingsholme QLD 4208
Lot 906 on SP280831

Last Revision: 17 November 2023

Author:
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Prepared for:
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Project Details: City of Gold Coast Baseline Koala Survey at Stage Coach Reserve Offset Area

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Revision History

Date	Author(s)	Reviewer	File name
27/10/2023	K. Entwistle	S. Towner	CoGC Stage Coach Reserve Baseline Koala Survey_271023ENSC
03/11/2023	K. Entwistle	S. Towner	CoGC Stage Coach Reserve Baseline Koala Survey_031123ENSC
17/11/2023	K. Entwistle	S. Towner	CoGC Stage Coach Reserve Baseline Koala Survey_171123ENSC

Recipients are responsible for eliminating all superseded documents in their possession. The information contained within this report is provided in good faith in the belief that no information, opinions or recommendations made are misleading. All comments and opinions given in this report are based on a survey of the study site, or on information supplied by the client, their agent and third parties. EnviroSphere Consulting, its agents and employees, expressly disclaim any and all liability for representations, expressed or implied, contained in, or omissions from, this report or any written or oral communications transmitted to the client or any third party. Acceptance of this document denotes acceptance of these terms.

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Acronyms and Terms

CoGC	City of the Gold Coast
DES	Department of Environment and Science (DES)
Koala habitat tree	koala habitat tree means a tree of any of the following genera— <ul style="list-style-type: none"> a) <i>Angophora</i> b) <i>Corymbia</i> c) <i>Eucalyptus</i> d) <i>Lophostemon</i> e) <i>Melaleuca</i>
NJKHT (Non-Juvenile koala habitat tree)	Non-juvenile koala habitat tree means a koala habitat tree that— <ul style="list-style-type: none"> a. is more than 4 m high; or b. has a trunk with a circumference of more than 31.5 cm at 1.3 m above the ground.
Offset matter area	An offset matter area is an area where an advanced offset receiving site is located
RE	Regional ecosystem. A vegetation community in a bioregion that is consistently associated with a particular combination of geology, landform and soil

1. INTRODUCTION

1.1 Background

As part of its environmental offset program, the City of Gold Coast (CoGC) is in the process of delivering an environmental offset in the northern extent of Stage Coach Reserve in Kingsholme. The offset is in accordance with VISY Glass Operations Australia PTY LTD federal offset conditions and a formal offset agreement comprising an Offset Agreement and Offset Management Plan. As part of the agreement and conditions, Koala (*Phascolarctos cinereus*) density and habitat activity surveys of the offset areas are required at years 1, 5, 10 and 15, to assess koala density and habitat activity within the offset areas over time.

Envirosphere Consulting (ENSC) was engaged by the City of Gold Coast (CoGC) to undertake the baseline (Year 1) surveys and reporting.

1.2 Objectives

The aim of the project is to provide a snapshot of koala density and habitat activity at the offset site and fulfil the federal offset conditions and Offset Management Plan requirements. Specifically, this report seeks to document the results of site assessment including Spot Assessment Technique (SAT) surveys, Strip Transects, and incidental observations.

1.3 Site Description

The offset site is described as Lot 906, Elm Close (Lot 906 on SP280831) Stage Coach Reserve, Kingsholme. The proposed offset receiving site is located in the northern extent of Stage Coach Reserve; and is bound by residential development to the north and east, and contiguous tracts of vegetation within the conservation managed Stage Coach Reserve to the south and west.

Preclearing Regional Ecosystem (RE) mapping suggests that the parcels historically supported predominantly RE 12.11.5 *Corymbia citriodora subsp. variegata* woodland to open forest +/- *Eucalyptus siderophloia*/*E. crebra*, *E. carnea*, *E. acmenoides*, *E. propinqua* on metamorphics +/- interbedded volcanics and RE 12.11.24 *Eucalyptus carnea* or *E. tindaliae*, *Corymbia intermedia* +/- *E. siderophloia* or *E. crebra* woodland on metamorphics +/- interbedded volcanics. A small area of 12.3.11 *Eucalyptus tereticornis* +/- *Eucalyptus siderophloia*, *Corymbia intermedia* open forest on alluvial plains usually near coast is associated with a drainage line in the central area of the lot, and minor patches of Regional Ecosystem 12.11.27 *Eucalyptus racemosa subsp. racemosa* and/or *E. seeana* and *Corymbia intermedia* woodland on metamorphics +/- interbedded volcanics are located adjacent to the northern boundary.

1.4 Validity of Document

The following Envirosphere staff were utilised in the preparation of this report:

Table 1. Personnel preparing this report

Name	Qualification (s)	Role
Steve Towner	<ul style="list-style-type: none"> - Bachelor of Science - Diploma of Conservation and land management - Certificate IV in Project Management - Certificate IV in Government Statutory Investigation and Enforcement - Accredited Spot Assessment Technique (SAT) 	Principal environmental scientist, project oversight.
Kristina Entwistle	<ul style="list-style-type: none"> - Master of Coastal and Marine Science (combined research and coursework) - Bachelor of Applied Science (Coastal Management) - Diploma of Conservation and land management - Certificate in Project Management 	Senior environmental consultant, report writing
Simon Muirhead	<ul style="list-style-type: none"> - Bachelor Environmental Science - Honours in Science 	Senior environmental consultant, spatial data specialist, GIS analysis and mapping.
Renee Courtney	<ul style="list-style-type: none"> - Bachelor Environmental Science 	Senior environmental consultant, field work
Envirosphere Consulting	<ul style="list-style-type: none"> - DAFF Animal Ethics Permit - DES Scientific Purposes Permit - DES "Spotter-catcher" Permit 	

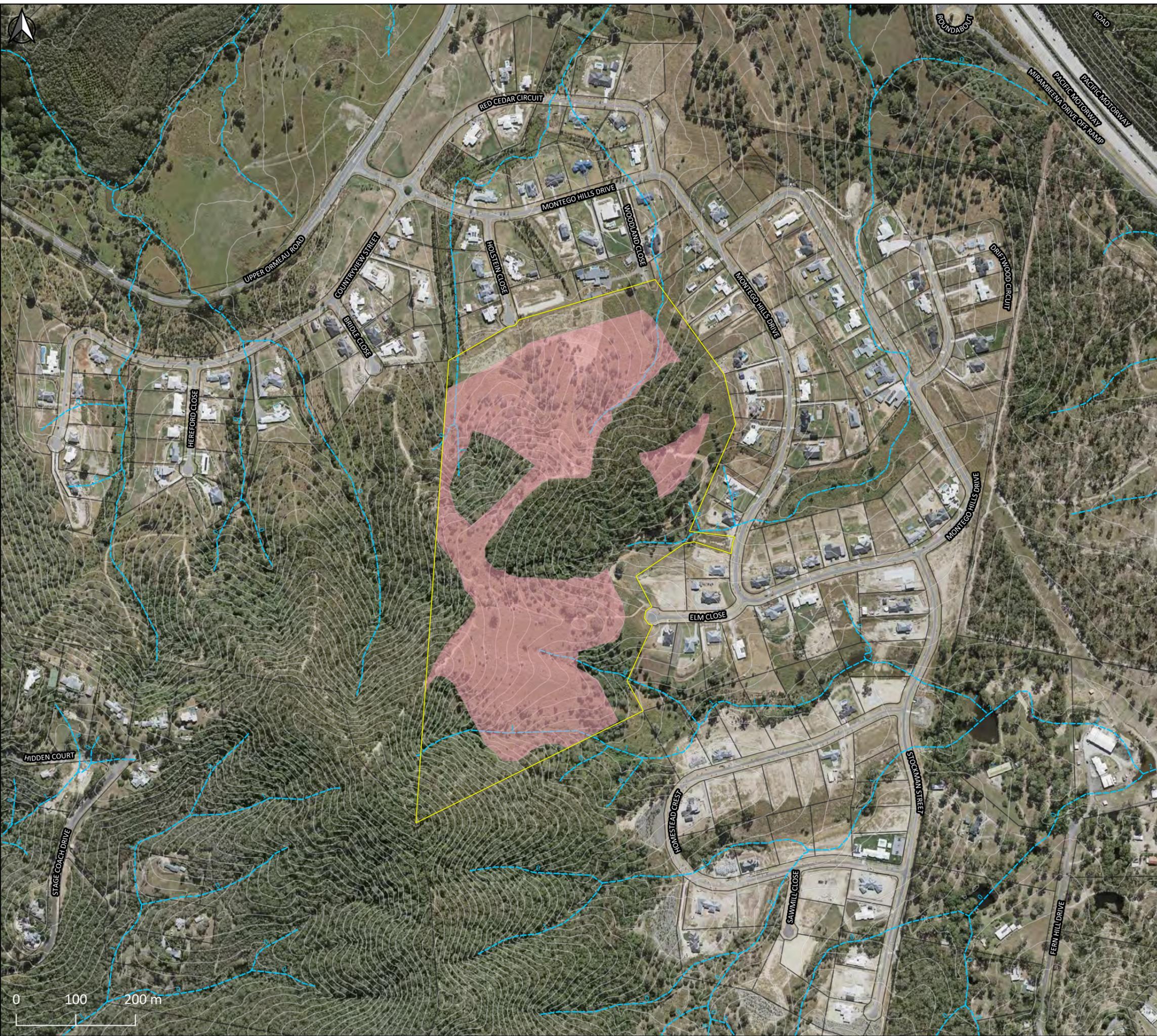


FIGURE 1.
CONTEXT & OVERVIEW

- LEGEND**
-  1 m contour
 -  Watercourses
 -  Approved offset areas
 -  Cadastral data
 -  Subject site

ADDRESS: Stage Coach Road

CLIENT: City of Gold Coast

AUTHOR: Simon Muirhead

DATE: 27.10.23

PAGE SIZE: A3

SCALE: 1:6000

COORDINATE SYSTEM: GDA94 MGA56



2. METHODOLOGY

This project denotes the first year of koala surveys which will form the baseline for the consecutive 5,10, and 15-year monitoring events. Consequently, the methodology must be easily replicable for future monitoring events. The following sections describe the site-based survey methods which were the koala Spot Assessment Technique (SAT) surveys, strip transects and incidental observations at 8 sites within the Stage Coach Reserve offset site. Surveys were conducted across multiple days on the 16th, 23rd and 25th of October 2023.

2.1 SAT Surveys

The Spot Assessment Technique (SAT) was completed at 8 plot locations as per Phillips and Callaghan, 2011. This methodology is used to estimate site occupancy (that is the presence of koala scat under at least one tree), within a 1 m radius of the base of a central tree and its nearest 29 neighbouring trees. Koala activity levels are determined by the proportion of trees under which scats are observed relative to the total number of trees sampled.

Site selection was determined by placing a 200 m by 200 m grid over the area. A SAT site was placed at the intersection of each grid line. While 250 m grids are typically used by the City of Gold Coast for koala surveys, when placed over the subject site, this resulted in too few (3) SAT sites being present. A 200 m grid allowed for maximum SATs within the subject while still providing spatial independence between sites. The grid was orientated on an angle to allow for maximum grid intersections falling over the site and for SATs to be located in both remnant vegetation and offset treatment zones. GPS coordinates of grid intersections were used to locate SATs on the ground using Avenza maps. It is noted that SAT 47 was shifted approximately 75 m to the north to avoid a dense infestation of lantana.

While measurements for each tree were taken, the tree in question was scanned for any sitting koalas, and a short search for koala scat, which is distinctive from other potentially co-occurring species, was undertaken around the base of the tree. The activity levels for the SAT site are expressed as a percentage equivalent of the proportion of surveyed trees within the site that had a *P. cinereus* faecal pellet recorded within the prescribed search area. For example, if one tree of 30 trees had a faecal pellet below it, this would be expressed as $1/30 = 0.03 = 3\%$.

Koala searches to estimate the density and abundance by counting the number of sightings within a 25 m fixed radius search around the central tree at each sampled field site across the study area were also performed as per Phillips and Callaghan (2011).

2.1.1. Null Sites

As the registered offset site is in its infancy being a year one (baseline) monitoring event, some of the vegetation within the offset site is yet to reach a size and/or structure that permits a standard SAT assessment. This included two of the SAT sites which were deemed 'NULL' sites for the purpose of the baseline monitoring. Nonetheless, areas that are currently devoid of mature vegetation were still included in the SAT sites, so that these sites can be replicated over time – as significant restoration works occurring over the site are expected to ensure that vegetation of adequate height for SAT assessment will be captured within the current null sites in subsequent monitoring years. It is expected that with ongoing vegetation maturity, a corresponding increase in koala density and activity will occur.

The location of the SAT surveys is provided over page in **Figure 2**.

2.2 Strip Transects

A pre-determined 125 x 80 m (1ha) contour-aligned strip transect koala search (as per Dique et al. 2003) at or close to the 8 plot locations was carried out to inform koala population density and abundance estimates. These were undertaken by two observers walking 20 m apart along a pre-selected transect so that each tree was searched from multiple angles to observe koalas within the defined study area. A total of six transects were completed due to the size of the site.

Again, while canopy vegetation cover was low in some of the nominated transects, transects were placed in areas that will be subject to significant restoration works. As this monitoring event is a baseline for future replication to measure the success of the offset project over time, it is expected that vegetation height will achieve maturity over time and allow replication. This approach also ensures that any koalas present can be picked up at a broader scale.

Transect locations were placed in a way that maximised spatial independence and as such were not located in a standardised orientation e.g., north-south, or east west. The target of the transects was to ensure maximum coverage while ensuring spatial independence, as was completion of transects over a limited time period to minimise the probability of the same koala being counted twice over multiple transects. The location of strip transects is also shown in **Figure 2**.

2.3 Incidental Observations

Incidental observations observed while traversing to/from the SAT sites and transects were to be recorded and photographed if sighted, along with GPS coordinates, tree species and if known sex of the koala, supporting photographs, reproductive status, age class and apparent health.



FIGURE 2.
KOALA BASELINE SURVEY LOCATIONS

LEGEND

-  SAT locations
-  Transects
-  Approved offset areas
-  Cadastral data
-  Subject site

ADDRESS: Stage Coach Reserve

CLIENT: City of Gold Coast

AUTHOR: Simon Muirhead

DATE: 27.10.23

PAGE SIZE: A3

SCALE: 1:4000

COORDINATE SYSTEM: GDA94 MGA56



3. RESULTS

The results of the site assessment are summarised below.

3.1 SAT Surveys

A summary of the SAT survey data is presented below. Tree photos are contained in Appendix A and raw data sheets are presented in Appendix B. The full set of survey data is provided separately as an excel spreadsheet. As evidenced by **Table 3**, two of the sites were described as Null sites, and many of the sites returned a default negative SAT result due to the insufficient age of vegetation – i.e., non-juvenile koala habitat trees are considered to be > 4 m high or >31.5 cm at 1.3 m above ground and from planted stock, typically take around 10-15 years to reach maturity.

Excluding the two null sites (SAT Sites 39 and 40) of the six sites, four contained scats with the following activity levels: 27%; 17%, 7% and 20%. The remaining two sites did not contain scats. The East Coast Low Activity Levels (considered applicable to this site) as per Phillips and Callahan (2011) are shown in **Table 2** below. When expressed as a site average, the overall activity level would be rated as medium or normal use (11.83%). **Figure 3** presents the activity level for each SAT site.

Table 2. Categorisation of koala activity into Low, Medium and High Use Categories (East Coast low)*

Activity category	Low use	Medium (normal) use	High use
East Coast (low)	<3.33%	>3.33% but <12.59%	>12.59%

*As per Phillips and Callahan (2011)

The age of the scats was predominantly old at all of the 4 sites in which they were found.

No koalas were observed within a 25 m fixed radius search around the central tree at each sampled field site.

Table 3. SAT Survey Results

SAT No.	Dom. species	Canopy Density	Canopy Species	Est. height of tallest stratum	Dom. Understorey species	Density Understorey Species	Activity Level (%)	Scat Age (if present)	Density/ Abundance (25 m radius)
39	NULL	-	-	-	-	-	0	N/A	0
40	NULL	-	-	-	-	-	0	N/A	0
41	E microcorys E siderophloia	Very sparse		16 m	A. disparrima E microcorys E siderophloia	Mid - dense	27%	Old	0
42	E. propinqua L. confertus C. intermedia E. microcorys	Mid - dense		27 m	L. confertus A. disparrima A. maidenii	Mid - dense	17%	Mostly Old	0
43	C. citriodora E. tereticornis	Sparse		18 m	A. disparrima Erythrina x sykesii*	Sparse	7%	Mostly old	0
44	-	-		7 m	A. disparrima E. propinqua G. sumatranum	0	0	N/A	0

				A. leiocarpa				
45	E. crebra L. confertus E microcorys	Sparse	22 m	E. crebra L. confertus A. disparrima	0	0	N/A	0
47	L. confertus C. citriodora	Mid - dense	20 m	L. confertus E. propinqua C. citriodora	Sparse	20%	All old	0

*Non-native species



FIGURE 3.
SAT ACTIVITY LEVELS AT STAGE COACH RESERVE OFFSET SITE.

LEGEND

SAT activity

- Null site
- Low SAT activity
- Medium SAT activity
- High SAT activity
- No activity

No activity

- Approved offset areas
- Cadastral data
- Subject site



ADDRESS: Stage Coach Reserve

CLIENT: City of Gold Coast

AUTHOR: Simon Muirhead

DATE: 27.10.23

PAGE SIZE: A3

SCALE: 1:4000

COORDINATE SYSTEM: GDA94 MGA56



0 100 200 m



3.2 Strip Transects

A summary of the strip transect survey data is presented in **Table 4** below. Of the six transects, only two contained canopy height vegetation, with the remaining sites containing vegetation in the T2 (understorey) or shrub layers only. Non-native vegetation density was low across 5 of the 6 sites with the exception of one transect which contained non-native vegetation at moderate densities.

Table 4. Strip Transect Results

SAT Transect No.	Dominant Canopy Species	Non-Native Vegetation Density	Koalas Sighted
39	N/A	Low	0
40	N/A	Low	0
41	Eucalyptus propinqua, Lophostemon confertus Corymbia intermedia, Eucalyptus microcorys	Medium	0
42	Eucalyptus propinqua, Lophostemon confertus Corymbia intermedia, Eucalyptus microcorys	Low	0
45	N/A	Low	0
47	N/A	Low	0
Total Koalas Sighted			0

3.3 Incidental Observations

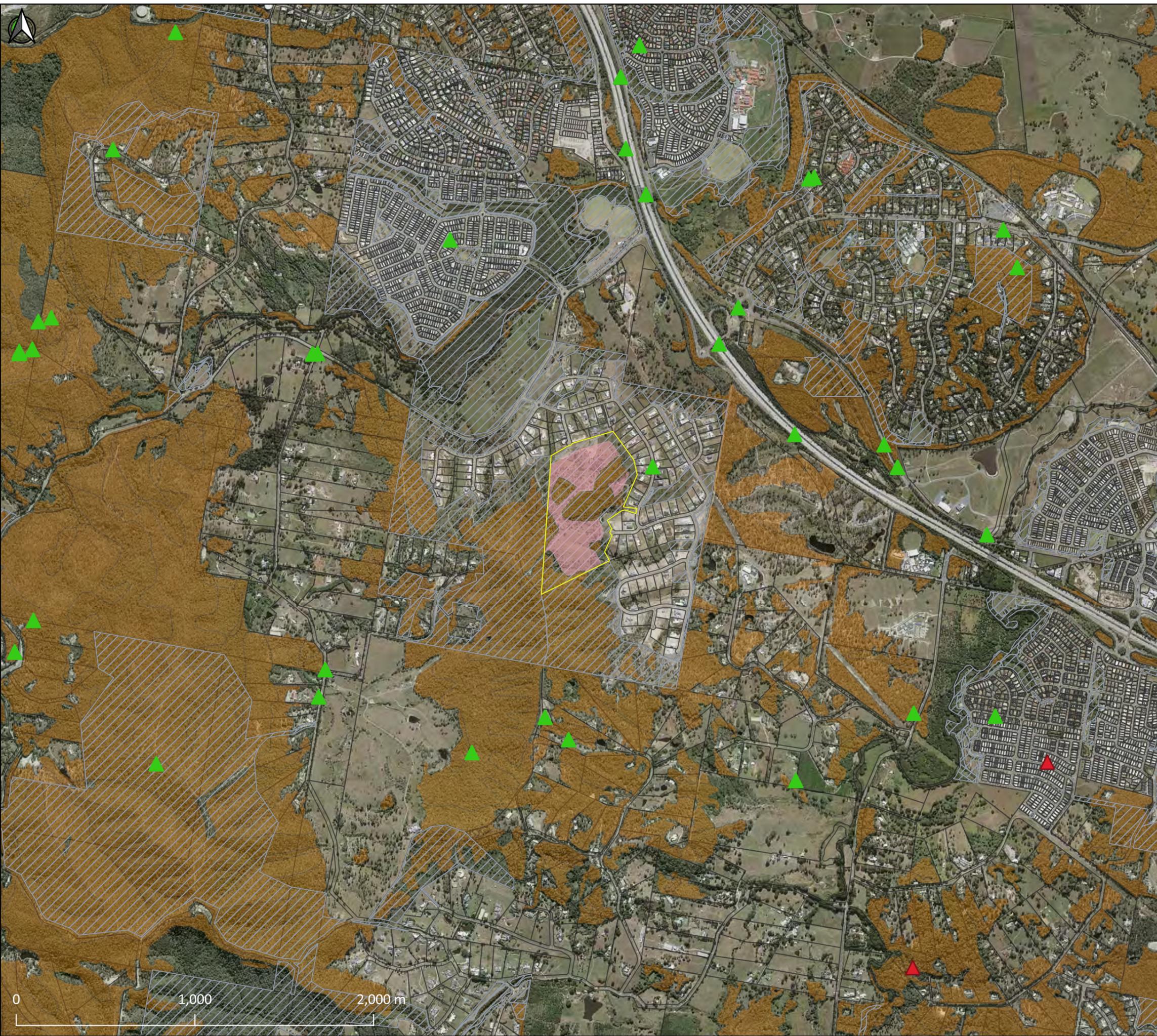
There were no incidental observations of koalas during the site assessment period. Previous koala sightings in the vicinity of the offset area are shown in Figure 3 over page, with 7 WildNet records shown in the vicinity of the offset matter area, and over 30 records from the City of the Gold Coast data.

3.3 Koala Density

It should be noted that due to no koalas being sighted in the transects or radial searches, no density estimate can be determined for the site during this initial baseline monitoring period.



FIGURE 4.
KOALA SIGHTINGS IN THE VICINITY OF
THE KOALA OFFSET AREA



LEGEND

- CoGC Koala records
- Wildnet Koala records
- Approved offset areas
- Cadastral data
- CoGC open Space
- Core koala habitat area
- Subject site

ADDRESS: Stage Coach Reserve

CLIENT: City of Gold Coast

AUTHOR: Simon Muirhead

DATE: 27.10.23

PAGE SIZE: A3

SCALE: 1:20000

COORDINATE SYSTEM: GDA94 MGA56



4. DISCUSSION

Suitable habitat for koala can broadly be defined as any forest or woodland community containing known koala food trees from *Eucalyptus* and related genera, or shrubland with an emergent layer of food trees. At the regional scale, koalas show a preference for a small group of favoured food trees. Preferred koala food trees on the Gold Coast (CoGC, date unknown) include Forest red gum (*Eucalyptus tereticornis*); Tallowwood (*E. microcorys*); Swamp mahogany (*E. robusta*) and grey gums (*E. propinqua* and *E. biturbinata*).

Of these preferred species, *E. tereticornis*, *E. propinqua* and *E. microcorys* were common in the SAT sites including 3 of the 4 SAT sites containing koala scat. Other known locally important supplementary food sources common in the canopy layer included the Narrow-leaved Ironbark (*E. crebra*) and Brushbox (*Lophostemon confertus*). Pink bloodwood (*Corymbia intermedia*) and Lemon-scented Gum (*Corymbia citriodora*) were also common species in the canopy layer; both are listed as medium utility for koalas in the *Spatial modelling for koalas in South East Queensland: Report version 3.0* (DES, 2022).

Minimum koala home ranges in high quality habitat in South East Queensland are approximately one hectare for female koalas and two hectares for male koalas, however this is variable dependent on the quality of habitat, with poorer quality habitat tending to result in larger home ranges (McAlpine et al. 2005). Therefore, given the presence of known koala feed trees and scats, koalas are utilising the site for feeding and shelter on a regular or intermittent basis. The extent of mapped koala habitat occurring within and immediately adjacent to the study area (see preceding **Figure 4**), and presence of koala records in proximity indicates a population of koalas whose range includes the subject site and most likely remnant vegetation communities predominantly to the south and west.

For the site, six SATs were undertaken due to two of the sites being classed as null. Of the six sites, four contained scats with the following activity levels: 27%; 17%, 7% and 20%. The East Coast Low Activity Levels (considered applicable to this site) as per Phillips and Callahan (2011) are as follows: Low use is considered below 3.33%, medium or normal use is considered greater than 3.33% but less than 12.59% and high use is considered greater than 12.59%. Of the six SATs undertaken for the proposal, two returned no activity (0%) one was considered medium or normal, and three were considered high, indicating significant variability across the site. When expressed as a site average however, the overall activity level would be rated as medium or normal use (11.83%).

Management of the offset site by the City of the Gold Coast has included koala habitat tree plantings, assisted natural regeneration (weed control) and prescribed burns for weed control. Whilst much of the vegetation on the site is comprised of areas of assisted natural regeneration areas containing regrowth and planted areas, some scattered canopy vegetation exists, including non-juvenile koala habitat trees, and the site is connected to broader areas of contiguous remnant vegetation that is suitable for koalas. This variation in koala habitat tree density and vegetation age likely accounts for the variability of koala usage across the offset site. Subsequently, whilst koalas are utilising the site, usage is expected to increase over time as regenerating and planted koala habitat trees reach maturity over the life of the offset.

Additionally, it was noted that some of the younger restoration sites were impacted following the prescribed burn. Some of the younger trees appeared to be dead, however some are resprouting from the base. Due to the presence of weed species in the understorey and ground layers, it is recommended that the active management practices of assisted natural regeneration and prescribed burns continue into the next monitoring period as required, noting that regular fuel reduction burning

needs to be assessed against potential degradation of koala habitat. This can be supplemented with infill plantings into all strata where natural regeneration is not occurring, or plant replacement is required.

Monitoring should continue to include documenting any potential threats to the viability of the site as an offset, for example the presence of wild dogs, high fuel load levels, and drought conditions. Field assessment identified the presence (through scat identification) of several native and non-native herbivores including the European hare, deer, cow, and Wallaby. Herbivore browsing can be a threat to regenerating and planted trees, consequently plant guards should be used for any infill plantings.

Ongoing adaptive management will continue to improve the habitat quality and connectivity for the koala within the offset matter area.

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APPENDIX A: SAT MONITORING IMAGES



SAT 39



SAT 40



SAT 41



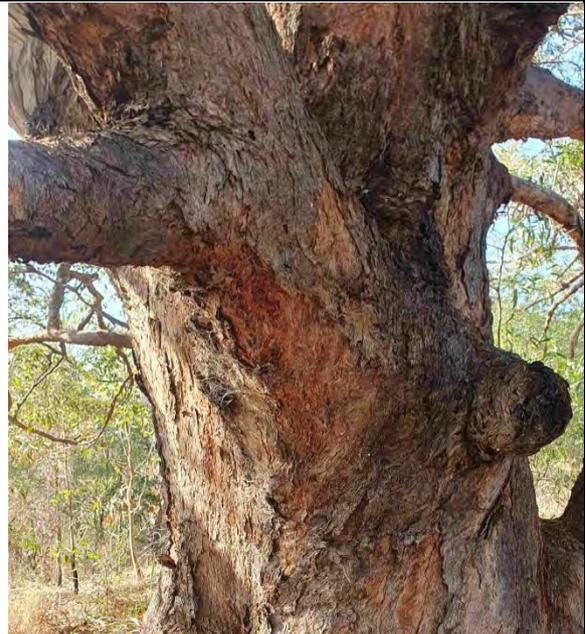
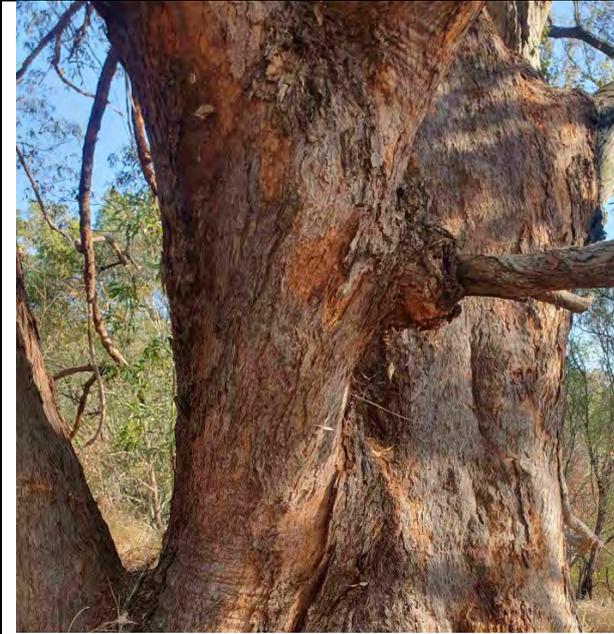
SAT 42



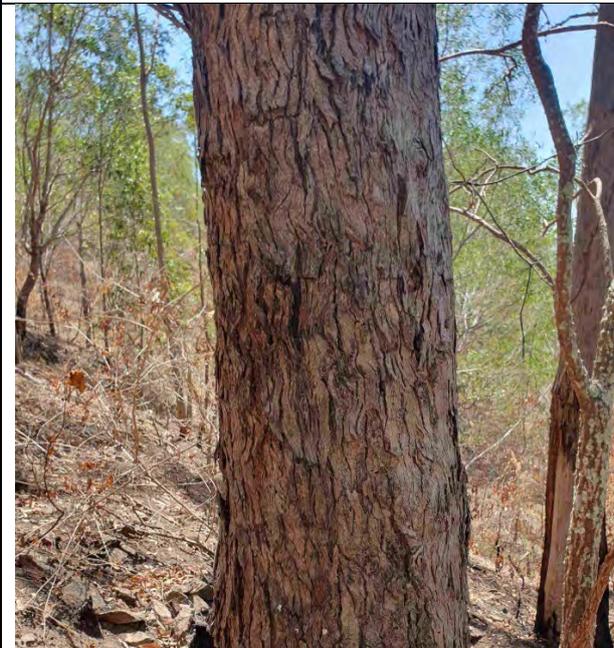
SAT 43



SAT 44



SAT 45



SAT 47



APPENDIX B: FIELD DATA SHEETS

ATTACHMENT 5

Offset Year One Monitoring Report

Stage Coach Reserve Visy Offset Year One Monitoring Report

Stage Coach Reserve, Kingsholme
Lot 906 SP280831

Last Revision:
15 January 2024

Author:
Envirosphere Consulting

Prepared for:
City of Gold Coast



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Document Control Sheet



Project Details:	Stage Coach Reserve Visy Offset Year One Monitoring Report
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Title:	Stage Coach Reserve Visy Offset Year One Monitoring Report
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Revision History

Date	Author(s)	Reviewer	File name
28.11.23	S. Muirhead	S. Towner	StageCoachReserveOffsetMonitoring281123ENSC
04.12.23	S. Muirhead	S. Towner	StageCoachReserveOffsetMonitoring041223ENSC
11.12.23	S. Muirhead	S. Towner	StageCoachReserveOffsetMonitoring111223ENSC
15.01.24	R. Courtney	S. Towner	StageCoachReserveOffsetMonitoring150124ENSC

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1. INTRODUCTION

Envirosphere Consulting was engaged by the City of Gold Coast (CoGC) Council to undertake the first year (January 2023 to December 2023) of monitoring and reporting of site management activities undertaken for Koala offsets at Stage Coach Reserve, Kingsholme. Stage Coach Reserve (hereafter referred to as the subject site), is accessed from Elm Close, Holstein Close and Bridle Close and includes Lot 906 SP280831.

1.1 Background

Within the framework of the environmental offset program, the City of Gold Coast (CoGC) is in the process of delivering an environmental offset in the northern extent of Stage Coach Reserve in Kingsholme. The offset is in accordance with VISY Glass Operations Australia Pty Ltd federal offset conditions and a formal offset agreement comprising an Offset Agreement and Offset Management Plan.

As part of the Offset Agreement and its conditions, a site assessment of the current ecological condition is required to ascertain baseline flora and fauna data and provide on-ground and drone photo monitoring at specified coordinates. Envirosphere Consulting (ENSC) was engaged by the City of Gold Coast (CoGC) to undertake the first year of offset monitoring and assessment.

In addition to presenting the current condition of the vegetation on site and assessing Year 1 management activities, this report collates and combines data from site-specific studies recently carried out on behalf of CoGC and/or Visy Industries Australia Pty Ltd. These include a Feral Animal and Weed Baseline Report and a Koala Population Survey of which the results are included.

1.2 Validity of Assessment

The following Envirosphere staff were utilised in the preparation of this report:

Table 1. Personnel undertaking field assessments and report

Name	Qualification (s)	Role
Steve Towner	<ul style="list-style-type: none"> - Bachelor of Science - Diploma of Conservation and land management - Certificate IV in Project Management - Certificate IV in Government Statutory Investigation and Enforcement - Accredited Spot Assessment Technique (SAT) 	Principal environmental scientist, project oversight and project botanist.
Simon Muirhead	<ul style="list-style-type: none"> - Bachelor Environmental Science - Honours in Science 	Senior environmental consultant, spatial data specialist, drone pilot, report preparation, GIS analysis and mapping.
Renee Courtney	<ul style="list-style-type: none"> - Bachelor of Applied Science - Certificate 2 Conservation and land management 	Ecologist, site survey, field data collation and report preparation
Envirosphere Consulting	<ul style="list-style-type: none"> - DAFF Animal Ethics Permit - DES Scientific Purposes Permit - DES "Spotter-catcher" Permit 	

2. SITE DESCRIPTION

2.1 Site Location

The offset site is described as Lot 906, Elm Close (Lot 906 on SP280831) Stage Coach Reserve, Kingsholme. The offset receiving site is in the northern extent of Stage Coach Reserve; and is bound by residential development to the north and east, and contiguous tracts of vegetation within the conservation managed Stage Coach Reserve to the south and west. Lot 906 is approximately 31 ha, with the approved offset area within Lot 906 being approximately 15 ha. Refer to **Figure 1. Context and Overview**.

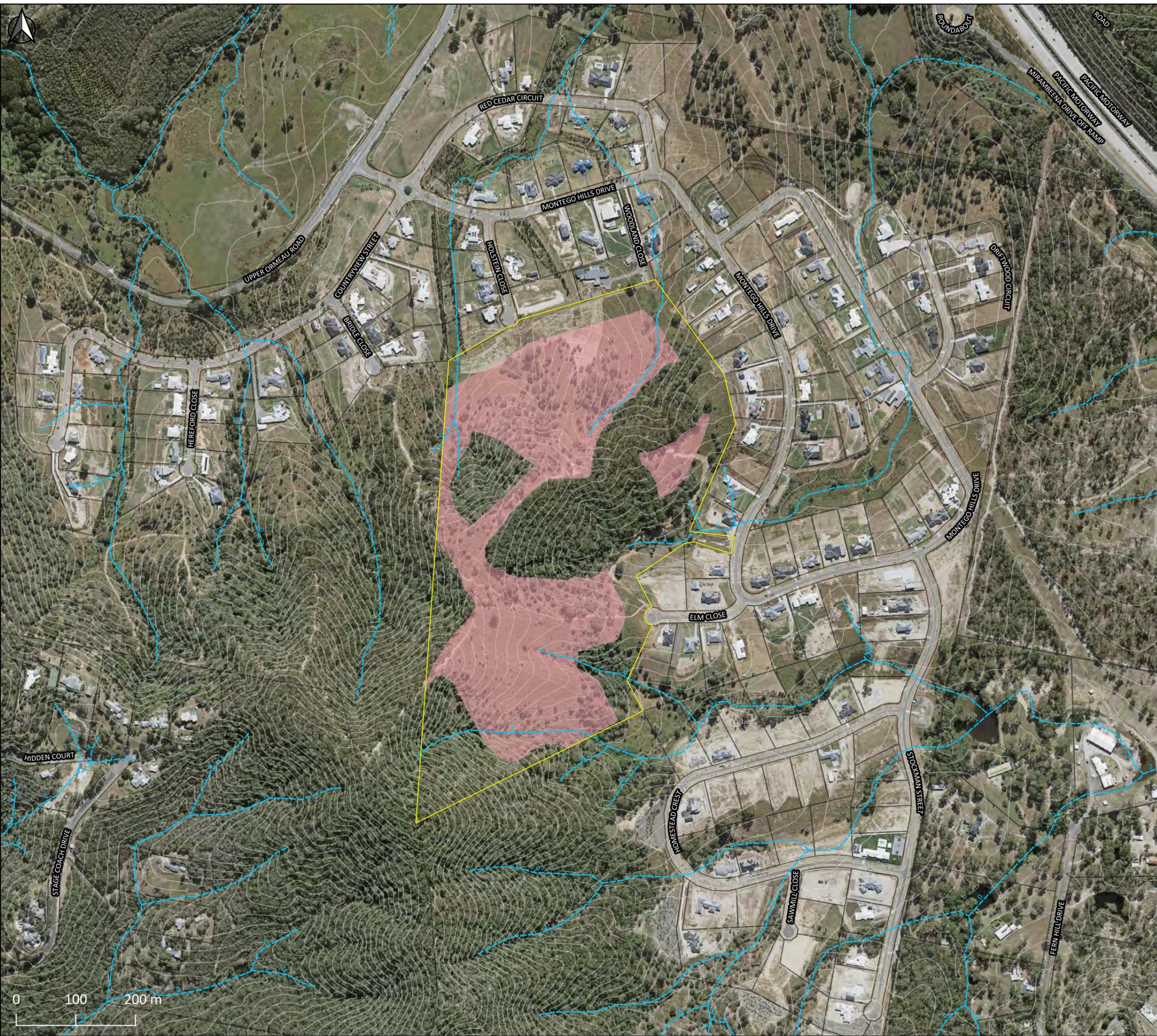


FIGURE 1.
CONTEXT & OVERVIEW

LEGEND

-  1 m contour
-  Watercourses
-  Approved offset areas
-  Cadastral data
-  Subject site

ADDRESS: Stage Coach Reserve, Kingsholme

CLIENT: City of Gold Coast

AUTHOR: Simon Muirhead

DATE: 23.11.23

PAGE SIZE: A3

SCALE: 1:6000

COORDINATE SYSTEM: GDA94 MGA56



2.2 State Vegetation Mapping

According to the Queensland Herbarium (2023) Regional Ecosystem Description Database (REDD), mapping shows two (2) Regional Ecosystems (RE) present: RE 12.11.5 and 12.11.24. **Refer to Figure 2. Regional Ecosystem Mapping.**

Table 2. Regional ecosystems mapped as occurring within the study area.

RE	Description	VM Act Status
12.11.5	<i>Corymbia citriodora</i> subsp. <i>variegata</i> open forest to woodland, usually including <i>Eucalyptus siderophloia</i> / <i>E. crebra</i> (sub coastal ranges), <i>E. propinqua</i> and <i>E. acmenoides</i> or <i>E. carnea</i> . Other species that may be present and abundant locally include <i>Corymbia intermedia</i> , <i>C. trachyphloia</i> subsp. <i>trachyphloia</i> , <i>Eucalyptus tereticornis</i> , <i>E. microcorys</i> , <i>E. portuensis</i> , <i>E. helidonica</i> , <i>E. major</i> , <i>E. longirostrata</i> , <i>E. biturbinata</i> , <i>E. moluccana</i> and <i>Angophora leiocarpa</i> . <i>Lophostemon confertus</i> often present in gullies and as a sub-canopy or understorey tree. Mixed understorey of grasses, shrubs and ferns. Occurs on hills and ranges of Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics. Not a Wetland.	Least concern
12.11.24	<i>Eucalyptus carnea</i> or <i>E. tindaliae</i> , <i>Corymbia intermedia</i> woodland +/- <i>E. crebra</i> or <i>E. siderophloia</i> , <i>Eucalyptus resinifera</i> , <i>Eucalyptus major</i> , <i>E. helidonica</i> , <i>Angophora woodsiana</i> , <i>C. trachyphloia</i> , <i>E. microcorys</i> , <i>Corymbia citriodora</i> subsp. <i>Variegata</i> , <i>C. henryi</i> . Occurs on Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics usually at altitudes <300 metres. Not a Wetland.	Least concern

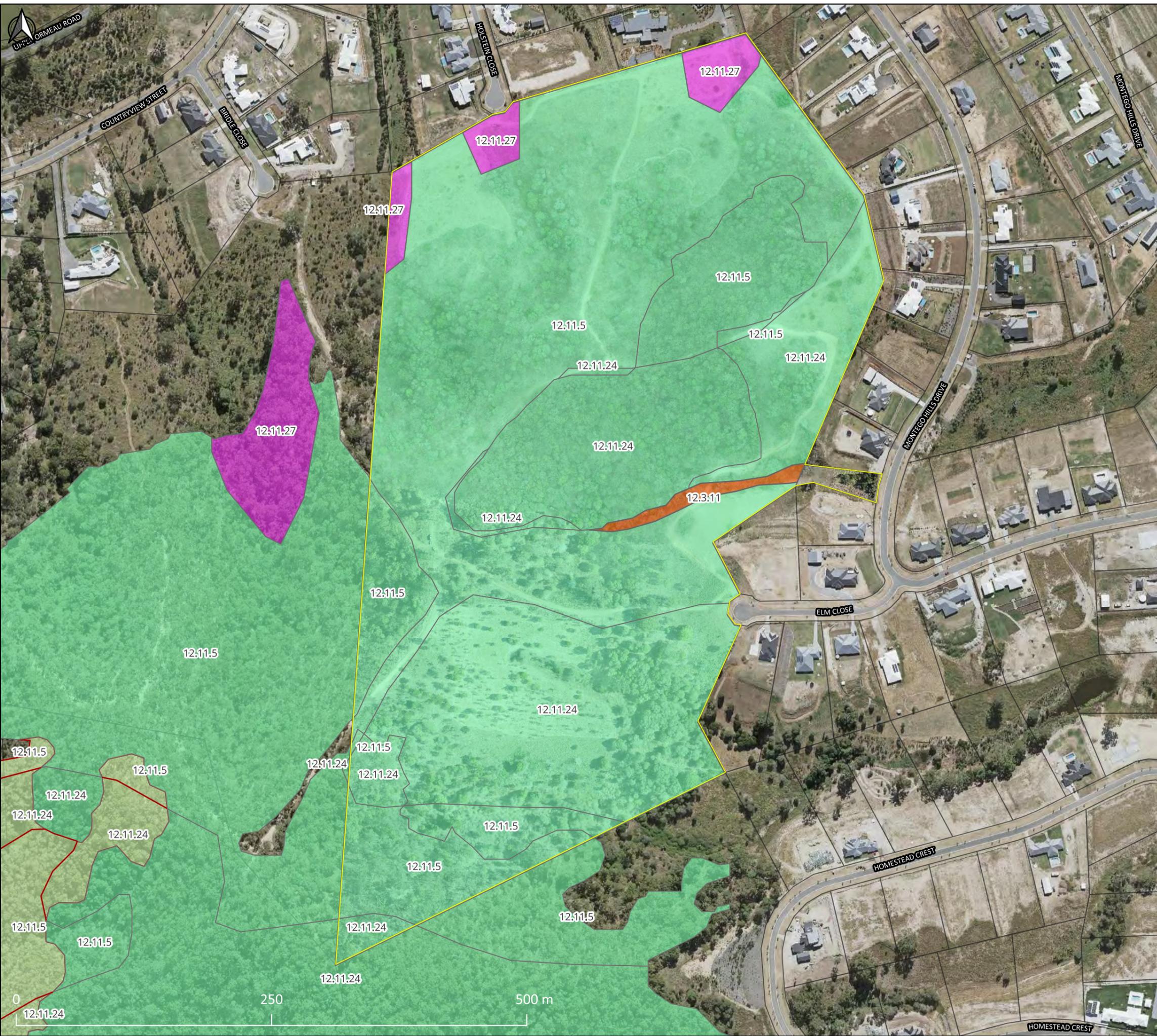


FIGURE 2.
REGIONAL ECOSYSTEMS

- LEGEND**
- Cadastral data
 - Category A or B area containing endangered
 - Category A or B area that is least concern
 - Category C or R area that is of least concern
 - Subject site

ADDRESS: Stage Coach Reserve, Kingsholme

CLIENT: City of Gold Coast

AUTHOR: Simon Muirhead

DATE: 23.11.23

PAGE SIZE: A3

SCALE: 1:3500

COORDINATE SYSTEM: GDA94 MGA56



2.3 Site Description

The subject site is described as containing patches of remnant vegetation, interspersed with zones of regrowth native vegetation and revegetated areas. The existing revegetation zones were carried out by a previous developer between 7-10 years ago. The sections of remnant vegetation are not included in the offset areas.

The offset is divided into eleven (11) pre-determined zones which fall into two (2) main restoration management methods to be employed for the future of the offset. These are Assisted Regeneration and Revegetation. Refer to **Figure 3. Zones and Photo Monitoring Locations**.



FIGURE 3.
ZONES AND PHOTO MONITORING POINTS

LEGEND

- Drone photo points
- Ground photo points
- Cadastral data
- Assisted regeneration
- Revegetation
- Subject site

ADDRESS: Stage Coach Reserve, Kingsholme

CLIENT: City of Gold Coast

AUTHOR: Simon Muirhead

DATE: 23.11.23

PAGE SIZE: A3

SCALE: 1:3500

COORDINATE SYSTEM: GDA94 MGA56



2.4 Site Management Activities

Site management activities that have been employed in Year 1 of the offset project included:

- Feral animal and weed assessment
- Feral animal trapping
- Weed control activities, and a
- Koala survey.

2.4.1 Feral animal and weed assessment

A site survey assessing weeds and feral animals was carried out by Saunders Havill Group for Visy Industries Australia Pty Ltd during February/March 2023. Six camera traps were deployed across the site and detected seven Red foxes (*Vulpes vulpes*) and one cow (*Bos taurus*) over 19 nights.

Weed species densities were ascertained across the offset area. Refer to **Appendix A** for baseline data including a map of the offset's dominant weeds and as derived from the EPBC Act Offset Baseline Surveys for Lot 906 SP280831, Kingsholme under EPBC 2022/09243 Report - prepared by Saunders Havill Group for Visy Industries Australia Pty Ltd.

2.4.2 Feral animal trapping

CoGC's Invasive Animal Operations team carried out a trapping program in May 2023 across the site and surrounding areas. They successfully trapped four female and two male Red foxes (*Vulpes vulpes*). Refer to **Appendix B** for map locations of the captured foxes.

2.4.3 Weed control activities

CoGC have carried out weed control activities over the course of the offset's first year in the form of slashing and controlled burns, with the aim to prepare areas to be revegetated. **Figure 3** indicates which zones are designated for revegetation and assisted regeneration. Some zones containing exotic tufting grass infestations continue to be slashed, whilst in other zones, weed reduction burns were carried out. The burn took place approximately 6-8 weeks prior to the commencement of the site assessment for this offset monitoring report. Refer to **Appendix C** for a map of the burn locations and exclusion zones on the offset site.

2.4.4 Koala survey

Envirosphere Consulting Ltd carried out a Koala (*Phascolarctos cinereus*) density and habitat activity survey of the offset area in October 2023. As part of the offset requirements, these are required at years 1, 5, 10 and 15, to assess koala density and habitat activity over time. The site-based survey methods performed included Koala Spot Assessment Technique (SAT) surveys, strip transects and incidental observations at 8 sites. In brief, SAT surveys involve searching for koala faecal pellets (scats) around 30 trees per SAT site.

No koalas were sighted during the survey however the SAT survey indicated high koala activity at 3 SAT locations and one with medium koala activity. The koala scats were all mostly old, however it is likely that as habitat quality improves over time, new or fresh scats will be found (confirming recent or ongoing activity), or the physical presence of koalas will be detected. Refer to **Appendix D** for a map of the koala activity locations.

3. MONITORING

3.1 Photo Monitoring

The aerial photo monitoring images were taken with a drone at coordinates and pathways pre-determined by CoGC with baseline images taken in May 2023. Due to weather constraints, the imagery was captured in November 2023 after CoGC contractors had been on site for weed control. There is a small degree of variability in imagery due to differences in drone models used for capturing the photos. Drone imagery is presented in **Section 3.2** and drone coordinate data is listed in **Table 3**.

Baseline photo monitoring points were taken on-ground in representative positions within each zone and in each cardinal direction (north, east, south, west) in order to initiate a visual record of changes over time. These images are presented in **Section 3.3** and the coordinates are listed in **Table 4**.

Locations of photo monitoring points in context with zones are shown in **Figure 3**.

3.2 Drone Photo Monitoring Results

Photo Point 1 (Lat -27.817408993, Lon 153.258089158) Left: May 2023 Right: November 2023



Photo Point 2 (Lat -27.817485438, Lon 153.257517125) Left: May 2023 Right: November 2023



Photo Point 3 (Lat -27.81588333, Lon 153.25941292) Left: May 2023 Right: November 2023



Photo Point 4 (Lat -27.81364258, Lon 153.256526528)) Left: May 2023 Right: November 2023



Photo Point 5 (Lat -27.813452802, Lon 153.255564942) Left: May 2023 Right: November 2023



Photo Point 6 (Lat -27.812250045, Lon 153.256968931) Left: May 2023 Right: November 2023



Photo Point 7 (Lat -27.811914151, Lon 153.259275477) Left: May 2023 Right: November 2023



Photo Point 8 (Lat -27.811942298, Lon 153.259178253) Left: May 2023 Right: November 2023



Photo Point 9 (-27.813850994, Lon 153.25939762) Left: May 2023 Right: November 2023



Photo Point 10 (-27.812503936, Lon 153.260990156) Left: May 2023 Right: November 2023



Photo Point 11 (-27.812503219, Lon 153.260992033) Left: May 2023 Right: November 2023



Photo Point 12 (-27.812503219, Lon 153.260992033) Left: May 2023 Right: November 2023

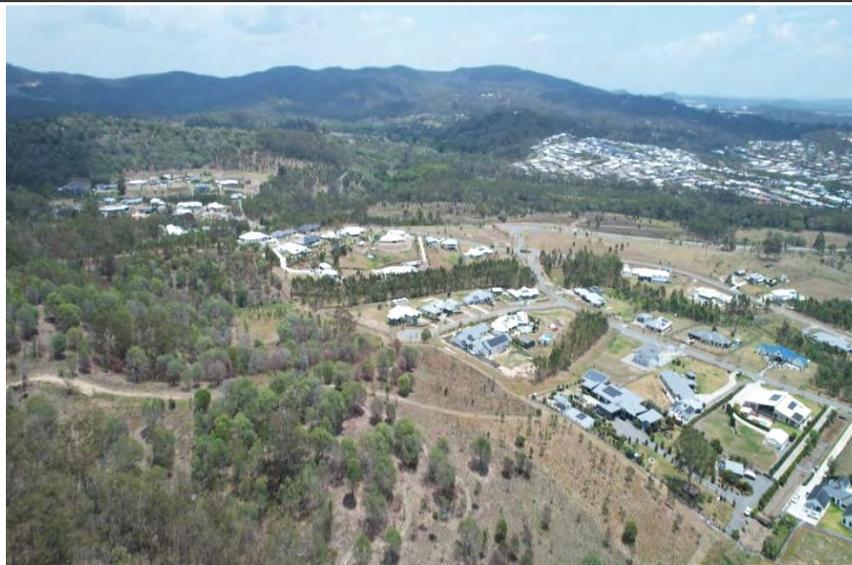


Table 3. GPS locations of drone monitoring points (reproduced from CoGC)

Site	Description	Latitude	Longitude	Height_AGL	Heading	Gimbal_pitch_angle	Date	UAV_model
Stage Coach Reserve	Homepoint (PP1-4)	-27.816163027	153.256429330				18/05/2023	
Stage Coach Reserve	PP1	-27.817408993	153.258089158	30.1	343	-22	18/05/2023	DJI Air 2S
Stage Coach Reserve	PP2	-27.817485438	153.257517125	30.2	5	-22	18/05/2023	DJI Air 2S
Stage Coach Reserve	PP3	-27.815883330	153.259412920	30	248	-22	18/05/2023	DJI Air 2S
Stage Coach Reserve	PP4	-27.816314801	153.259463229	30	271	-22	18/05/2023	DJI Air 2S
Stage Coach Reserve	Homepoint (PP5-9)	-27.813752736	153.257664145				18/05/2023	DJI Air 2S
Stage Coach Reserve	PP5	-27.813642580	153.256526528	63	12	-24	18/05/2023	DJI Air 2S
Stage Coach Reserve	PP6	-27.813452802	153.255564942	72.4	43	-25	18/05/2023	DJI Air 2S
Stage Coach Reserve	PP7	-27.812250045	153.256968931	72.3	69	-25	18/05/2023	DJI Air 2S
Stage Coach Reserve	PP8	-27.811914151	153.259275477	72.4	253	-25	18/05/2023	DJI Air 2S
Stage Coach Reserve	PP9	-27.811942298	153.259178253	72.3	253	-21	18/05/2023	DJI Air 2S
Stage Coach Reserve	Homepoint	-27.813405707	153.259967016				18/05/2023	DJI Air 2S
Stage Coach Reserve	PP10	-27.813850994	153.259397620	72.5	52	-28	18/05/2023	DJI Air 2S
Stage Coach Reserve	PP11	-27.812503936	153.260990156	96.1	216	-43	18/05/2023	DJI Air 2S
Stage Coach Reserve	PP12	-27.812503219	153.260992033	100.7	296	-34	18/05/2023	DJI Air 2S

3.3 Ground Photo Monitoring Results

Zone 01A (153.258, -27.815) Left: North Right: South



Zone 01A (153.258, -27.815) Left: East Right: West



Zone 01B (153.257, -27.814) Left: North Right: South



Zone 01B (153.257, -27.814) Left: East Right: West



Zone 01C (153.258, -27.813) Left: North Right: South



Zone 01C (153.258, -27.813) Left: East Right: West



Zone 01D (153.259, -27.812) Left: North Right: South



Zone 01D (153.259, -27.812) Left: East Right: West



Zone 01E (153.259, -27.817) Left: North Right: South



Zone 01E (153.259, -27.817) Left: East Right: West



Zone 02A unburnt (153.258, -27.817) Left: North Right: South



Zone 02A unburnt (153.258, -27.817) Left: East Right: West



Zone 02A burnt (153.257, -27.816) Left: North Right: South



Zone 02A burnt (153.257, -27.816) Left: East Right: West



Zone 02B (153.258, -27.813) Left: North Right: South



Zone 02B (153.258, -27.813) Left: East Right: West



Zone 02C (153.258, -27.812) Left: North Right: South



Zone 02C (153.258, -27.812) Left: East Right: West



Zone 02D (153.259, -27.812) Left: North Right: South



Zone 02D (153.259, -27.812) Left: East Right: West



Zone 02E (153.257, -27.812) Left: North Right: South



Zone 02E (153.257, -27.812) Left: East Right: West



Zone 02F (153.26, 27.813) Left: North Right: South



Zone 02F (153.26, 27.813) Left: East Right: West



Table 4. GPS locations of ground monitoring points

Zone Photo Point	Longitude	Latitude
O1A	153.258	-27.815
O1B	153.257	-27.814
O1C	153.258	-27.813
O1D	153.259	-27.812
O1E	153.259	-27.817
O2A unburnt	153.258	-27.817
O2A burnt	153.257	-27.816
O2B	153.258	-27.813
O2C	153.258	-27.812
O2D	153.259	-27.812
O2E	153.257	-27.812
O2F	153.26	-27.813
All photos taken at cardinal compass directions North, South, East and West.		

4. FLORA SURVEY

The vegetation in each zone was surveyed on 6-7 November 2023. Utilising standard tertiary survey methods from the Queensland Herbarium, the site survey included an assessment of the vegetation species found in all 11 zones with dominant species identified in each stratum. An estimated proportional density ratio between native and weed species in each stratum is included, in order to monitor progress over time.

The field survey data is presented in below in **Table 5**. Native and exotic flora species lists are presented in **Tables 6 and 7** respectively. Fauna recorded incidentally during the site assessment are presented in **Table 8**.

Table 5. Tertiary Vegetation Assessment – Field Data

Location: Stage Coach Reserve Offset		Client: City of Gold Coast		
Recorder: Renee Courtney, Envirosphere Consulting		Survey Date: 6-7 November 2023		
Regional Ecosystem: RE 12.11.5 and RE 12.11.24				
Locality: Kingsholme, QLD				
Zone 01A				
Photo point: 1A Photo labels: 1A-N, 1A-E, 1A-S, 1A-W	GPS datum: GDA 94	E/ lat: -27.815434	N/ long: 153.257986	
Condition:	Burnt area with acacias and scattered large eucalypts in sparse canopy stratum. Slightly healthier woodland to the east of the zone containing higher density in shrub stratum. Weed shrubs burnt and showing little recovery however burnt exotic grasses resprouting.			
Vegetation Structure				
Stratum	Height (m)	Cover Density (%)	Native: Weed	Dominant Species
T1	18-28	30	100 : 0	<i>Eucalyptus tereticornis</i> , <i>E. crebra</i> .
T2	11-14	40	100 : 0	<i>E. tereticornis</i> , <i>E. microcorys</i> , <i>E. crebra</i> , <i>Acacia disparrima</i> .
S1	7-10	80	100 : 0	<i>Acacia disparrima</i> , <i>E. microcorys</i> , <i>Corymbia tessellaris</i> , <i>C. intermedia</i> .
S2	1-5	90	20 : 80	* <i>Solanum mauritianum</i> , * <i>S. chrysotrichum</i> , * <i>Lantana camara</i> , * <i>Triumfetta rhomboidea</i> , <i>A. disparrima</i> .
G	<0.5	30-50	30 : 70	* <i>Setaria sphacelata</i> , * <i>Chloris gayana</i> , * <i>L. camara</i> , * <i>T. rhomboidea</i> , <i>Lomandra longifolia</i> , <i>Ottochloa gracillima</i> (natives suppressed).
Zone 01B				
Photo point: 1B Photo labels: 1B-N, 1B-E, 1B-S, 1B-W	GPS datum: GDA 94	E/ lat: -27.814468	N/ long: 153.256522	
Condition:	Partially burnt area in the southern section of zone which contains higher weed densities. Zone containing acacias and scattered eucalypts in sparse canopy stratum becoming higher in density down slope in the north adjacent the western boundary. Weed shrubs burnt or drought affected and burnt exotic grasses are resprouting.			
Vegetation Structure				

Stratum	Height (m)	Cover Density (%)	Native Weed	Dominant Species
E	n/a			
T1	16-24	25	100 : 0	<i>Eucalyptus crebra</i> , <i>E. tereticornis</i> , <i>Corymbia citriodora</i> subsp. <i>variegata</i> .
T2	12-15	30-40	100 : 0	<i>E. crebra</i> , <i>E. carnea</i> , <i>Acacia disparrima</i> .
S1	7-10	80	95 : 5	<i>Acacia disparrima</i> , <i>E. crebra</i> , <i>E. tereticornis</i> , * <i>Erythrina x sykesii</i> .
S2	1-6	50	20 : 80	<i>A. disparrima</i> , * <i>Solanum mauritianum</i> , * <i>Lantana camara</i> , * <i>Triumfetta rhomboidea</i> , * <i>Erythrina x sykesii</i> .
G	<0.5	25	2 : 98	* <i>Setaria sphacelata</i> , * <i>Chloris gayana</i> , * <i>L. camara</i> , * <i>T. rhomboidea</i> ,

Zone 01C

Photo point: 1C Photo labels: 1C-N, 1C-E 1C-S, 1C-W	GPS datum: GDA 94	E/ lat: -27.812702	N/ long: 153.257611
Condition:	Burnt area containing senescing <i>Acacia</i> and scattered <i>Eucalyptus</i> and allies in sparse canopy stratum becoming higher in density in small northern gully. Exotic shrubs are burnt back and burnt exotic grasses are resprouting.		

Vegetation Structure

Stratum	Height (m)	Cover Density (%)	Native Weed	Dominant Species
E	n/a			
T1	18-26	20	100 : 0	<i>Corymbia citriodora</i> subsp. <i>variegata</i> , <i>Eucalyptus tereticornis</i> .
T2	12-16	30	100 : 0	<i>C. citriodora</i> subsp. <i>variegata</i> , <i>E. tereticornis</i> .
S1	7-10	80	100 : 0	<i>Acacia disparrima</i> , <i>Corymbia intermedia</i> .
S2	1-4	30	80 : 20	<i>A. disparrima</i> , * <i>Solanum mauritianum</i> , * <i>Lantana camara</i> .
G	<0.5	30-50	20 : 80	* <i>Setaria sphacelata</i> , <i>Lomandra longifolia</i> (suppressed).

Zone 01D

Photo point: 1D Photo labels: 1D-N, 1D-E, 1D-S, 1D-W	GPS datum: GDA 94	E/ lat: -27.812207	N/ long: 153.258955
Condition:	Unburnt area containing <i>Acacia</i> , <i>Allocasuarina</i> in shrub stratum and limited <i>Eucalyptus</i> and allies in canopy stratum. Excellent diversity and density of native groundcovers and shrub stratum.		

Vegetation Structure

Stratum	Height (m)	Cover Density (%)	Native Weed	Dominant Species
E	n/a			
T1	26	5	100 : 0	<i>Eucalyptus propinqua</i> (single significant habitat tree).
T2	14-18	10	50 : 50	<i>Corymbia intermedia</i> , * <i>Pinus radiata</i> .
S1	7-10	80	100 : 0	<i>Allocasuarina torulosa</i> , <i>Acacia disparrima</i> , <i>Corymbia citriodora</i> subsp. <i>variegata</i> .
S2	1-4	20	80 : 20	<i>A. disparrima</i> , <i>Lophostemon confertus</i> , <i>Alphitonia excelsa</i> , * <i>Lantana camara</i> .
G	<0.5	75	70 : 30	<i>Lomandra longifolia</i> , <i>L. confertifolia</i> , <i>Cymbopogon refractus</i> , * <i>Setaria sphacelata</i> , * <i>Lantana</i>

				<i>montevidensis.</i>
Zone 01E				
Photo point: 1E Photo labels: 1E-N, 1E-E, 1E-S, 1E-W	GPS datum: GDA 94	E/ lat: -27.817019	N/ long: 153.258791	
Condition:	Unburnt area containing senescing <i>Acacia</i> in shrub stratum and almost no <i>Eucalyptus</i> and allies in canopy stratum. Heavy weed incursions in ground and shrub stratum although very drought affected.			
Vegetation Structure				
Stratum	Height (m)	Cover Density (%)	Native Weed :	Dominant Species
E	n/a			
T	12	2	100 : 0	<i>Eucalyptus siderophloia, Corymbia intermedia.</i>
S1	5-7	75	100 : 0	<i>Acacia disparrima, Lophostemon confertus.</i>
S2	1-3	75	15 : 85	<i>*Lantana camara, *Triumfetta rhomboidea</i>
G	<0.5	90	20 : 80	<i>*Setaria sphacelata, *Lantana montevidensis, Lomandra longifolia (suppressed).</i>
Zone 02A				
Photo point: 2A-U & 2A-B Photo labels: Unburnt: 2A-U-N, 2A-U-E, 2A-U-S, 2A-U-W; Burnt: 2A-B-N, 2A-B-E, 2A-B-S, 2A-B-W.	GPS datum: GDA 94	E/ lat (PP1): -27.816631 E/ lat (PP4): -27.816440	N/ long (PP1): 153.257901 N/ long (PP4): 153.256725	
Condition:	Partially burnt area where the upper slopes in the west have been burnt and the lower slopes have not at a ratio of 30:70 respectively. Zone contains an established revegetation of a variety of <i>Acacias</i> , <i>Glochidion</i> and <i>Eucalyptus</i> and allies. Groundcover is predominantly invasive, exotic grass, where maintenance is by means of slashing			
Vegetation Structure				
Stratum	Height (m)	Cover Density (%)	Native Weed :	Dominant Species
E	n/a			
T	n/a			
S1	5-7	20	95 : 0	<i>Acacia disparrima, Corymbia citriodora subsp. variegata, C. tessellaris Eucalyptus tereticornis</i>
S2	2-4	25	90 : 10	<i>Glochidion sumatranum, A. disparrima, A. fimbriata, A. complanata, Melaleuca viminalis.</i>
G	<0.5	60	5 : 95	<i>*Setaria sphacelata.</i>
Zone 02B				
Photo point: 2B Photo labels: 2B-N, 2B-E, 2B-S, 2B-W	GPS datum: GDA 94	E/ lat: -27.813269	N/ long: 153.258441	
	Burnt area along the western side of the central main track and continuing down into the head of an ephemeral gully. Southern section of zone containing an older revegetation of eucalypts and allies and contains sparse canopy. Burnt exotic grasses are resprouting. Good natural regeneration of Spotted gum in the northern section.			

Vegetation Structure				
Stratum	Height (m)	Cover Density (%)	Native Weed	Dominant Species
E	n/a			
T	14-18	10	100 : 0	<i>Corymbia citriodora subsp. variegata</i> , <i>C. intermedia</i> , <i>Eucalyptus crebra</i> .
S1	8-12	80	100 : 0	<i>Acacia disparrima</i> , <i>C. citriodora subsp. variegata</i> , <i>E. crebra</i> .
S2	1-4	20	80 : 20	<i>A. disparrima</i> , <i>C. citriodora subsp. variegata</i> , * <i>Lantana camara</i> , * <i>Triumfetta rhomboidea</i> .
G	<0.5	75	70 : 30	* <i>Setaria sphacelata</i> , * <i>Chloris gayana</i> , <i>Lomandra longifolia</i> , <i>C. citriodora subsp. variegata</i> .
Zone 02C				
Photo point: 2C Photo labels: 2C-N, 2C-E, 2C-S, 2C-W		GPS datum: GDA 94	E/ lat: -27.811599	N/ long: 153.258466
Condition:		Burnt revegetation area contains <i>Eucalyptus</i> and allies. Species difficult to identify due to recent burn. Epicormic growth on stems and at base. Smaller shrubs are not showing signs of resprouting as yet. Burnt exotic grasses are resprouting.		
Vegetation Structure				
Stratum	Height (m)	Cover Density (%)	Native Weed	Dominant Species
E	n/a			
T	n/a			
S1	5-7	10	100 : 0	<i>Acacia disparrima</i>
S2	1-4	30	100 : 0	<i>Eucalyptus</i> / <i>Corymbia</i> reveg spp.
G	<0.5	90	0 : 100	* <i>Setaria sphacelata</i> , * <i>Sporobolus natalensis</i> .
Zone 02D				
Photo point: 2D Photo labels: 2D-N, 2D-E, 2D-S, 2D-W		GPS datum: GDA 94	E/ lat: -27.811601	N/ long: 153.259344
Condition:		Burnt revegetation area contains <i>Eucalyptus</i> and allies. Epicormic growth on stems and at base. Burnt exotic grasses are resprouting.		
Vegetation Structure				
Stratum	Height (m)	Cover Density (%)	Native Weed	Dominant Species
E	n/a			
T	n/a			
S1	7-11	40	100 : 0	<i>Acacia disparrima</i> , <i>A. fimbriata</i> , <i>Corymbia citriodora subsp. variegata</i> , <i>C. tessellaris</i> .
S2	1-4	20	95 : 5	<i>A. fimbriata</i> , <i>C. citriodora subsp. variegata</i> , <i>C. tessellaris</i> , * <i>Solanum chrysotrichum</i> .
G	<0.5	40	20 : 80	* <i>Setaria sphacelata</i> , * <i>Sporobolus natalensis</i> .
Zone 02E				
Photo point: 2E Photo labels: 2E-N, 2E-E, 2E-S, 2E-W		GPS datum: GDA 94	E/ lat: -27.812190	N/ long: 153.256813

Condition:		Burnt revegetation area contains <i>Eucalyptus</i> and allies. Epicormic growth on stems and at base. Burnt exotic grasses are resprouting.		
Vegetation Structure				
Stratum	Height (m)	Cover Density (%)	Native Weed :	Dominant Species
E	n/a			
T	n/a			
S1	5-10	30	100 : 0	<i>Acacia disparrima</i> , <i>Eucalyptus tereticornis</i> .
S2	1-4	20	95 : 5	<i>Lophostemon confertus</i> , <i>A. disparrima</i> , <i>Corymbia intermedia</i> , <i>C. tessellaris</i> .
G	<0.5	40	20 : 80	* <i>Setaria sphacelata</i> , * <i>Sporobolus natalensis</i> , <i>Lomandra longifolia</i> (suppressed)
Zone 02F				
Photo point: 2F Photo labels: 2F-N, 2F-E, 2F-S, 2F-W		GPS datum: GDA 94	E/ lat: -27.813313	N/ long: 153.260226
Condition:		Partially burnt cleared area contains sparse vegetation of <i>Acacia</i> , <i>Eucalyptus</i> and allies. Burnt exotic grasses in the south of the zone are resprouting. Natural regeneration occurring on the edges of the forested remnant.		
Vegetation Structure				
Stratum	Height (m)	Cover Density (%)	Native Weed :	Dominant Species
E	n/a			
T	13	2	100 : 0	<i>Corymbia citriodora</i>
S1	7	10	100 : 0	<i>Acacia disparrima</i> , <i>A. fimbriata</i> , <i>Eucalyptus siderophloia</i> .
S2	1-4	20	95 : 5	<i>A. fimbriata</i> , <i>A. disparrima</i> , * <i>Solanum mauritanum</i> , <i>Corymbia intermedia</i> .
G	<0.5	40	20 : 80	* <i>Setaria sphacelata</i> , * <i>Sporobolus natalensis</i> , <i>Lomandra longifolia</i> (suppressed).

E: Emergent; T1: Canopy; T2: Sub-canopy; S1: Shrub; S2: Mid-shrub; G: Groundcover

Table 6. Native Flora list

Family	Species	Common name	Status					Stratum	Zones											
			Native	NC Act	EPBC Act	Exotic	Class		O1A	O1B	O1C	O1D	O1E	O2A	O2B	O2C	O2D	O2E	O2F	
NATIVE FLORA SPECIES																				
Asteraceae	<i>Sigesbeckia orientalis</i>	Indian weed	1					G					1							
Blechnaceae	<i>Blechnum neohollandicum</i>	Prickly rasp fern	1					G					1							
Casuarinaceae	<i>Allocasuarina torulosa</i>	Forest sheoak	1					G				1								
Commelinaceae	<i>Commelina diffusa</i>	Native commelina	1					G					1							
Cyperaceae	<i>Cyperus gracilis</i>	Slender flatsedge	1					G					1							
Dennstaedtiaceae	<i>Pteridium esculentum</i>	Common bracken	1					G				1	1	1						
Euphorbiaceae	<i>Breynia oblongifolia</i>	Coffee bush	1					G-S				1								
Euphorbiaceae	<i>Mallotus philippensis</i>	Red kamala	1					S		1				1						
Goodeniaceae	<i>Goodenia rotundifolia</i>	Goodenia	1					G			1	1								
Hemerocallidaceae	<i>Dianella brevipedunculata</i>	Short-flowered flax-lily	1					G				1								
Hemerocallidaceae	<i>Dianella caerulea</i>	Blue flax-lily	1					G				1	1		1					
Hemerocallidaceae	<i>Dianella rara</i>	Rare flax-lily	1					G				1								
Hemerocallidaceae	<i>Geitonophlesium cymosum</i>	Scrambling lily	1					G				1	1							
Laxmanniaceae	<i>Eustrephus latifolius</i>	Wombat berry	1					G				1	1							
Laxmanniaceae	<i>Lomandra confertifolia subsp. pallida</i>	Pale mat rush	1					G			1	1	1				1	1		
Laxmanniaceae	<i>Lomandra longifolia</i>	Spiny matrush	1					S	1	1	1	1	1	1	1	1	1	1		

Family	Species	Common name	Status					Stratum	Zones										
			Native	NC Act	EPBC Act	Exotic	Class		O1A	O1B	O1C	O1D	O1E	O2A	O2B	O2C	O2D	O2E	O2F
NATIVE FLORA SPECIES																			
Laxmanniaceae	<i>Lomandra multiflora</i>	Many-flowered matrush	1					G		1	1				1			1	
Leguminaceae	<i>Daviesia ulicifolia</i>	Native gorse	1					S				1							
Menispermaceae	<i>Stephania japonica</i> <i>var. japonica</i>	Snake vine	1					G-S	1			1							
Mimosaceae	<i>Acacia disparrima</i>	Hickory wattle	1					S	1	1	1	1	1	1	1	1	1	1	1
Mimosaceae	<i>Acacia complanata</i>	Flat-stemmed wattle	1					S					1		1				
Mimosaceae	<i>Acacia fimbriata</i>	Brisbane wattle	1					S				1	1			1	1	1	
Mimosaceae	<i>Acacia leiocalyx</i>	Brisbane black wattle	1					S				1							
Moraceae	<i>Ficus rubiginosa</i>	Port Jackson fig	1					S				1							
Moraceae	<i>Ficus virens</i>	White fig	1					S		1									
Myrtaceae	<i>Angophora leiocarpa</i>	Rusty gum	1					S-T			1								
Myrtaceae	<i>Angophora subvelutina</i>	Broad-leaved apple	1					S								1			
Myrtaceae	<i>Corymbia citriodora</i> <i>subsp. variegata</i>	Spotted gum	1					S-T		1	1			1	1		1		1
Myrtaceae	<i>Corymbia intermedia</i>	Pink bloodwood	1					S-T	1		1	1	1		1		1	1	
Myrtaceae	<i>Corymbia tessellaris</i>	Moreton Bay ash	1					S-T	1					1				1	1
Myrtaceae	<i>Eucalyptus carnea</i>	Broad-leaved white mahogany	1					S-T		1									
Myrtaceae	<i>Eucalyptus crebra</i>	Narrow-leaved ironbark	1					S-T	1	1					1				
Myrtaceae	<i>Eucalyptus microcorys</i>	Tallowwood	1					S-T	1				1		1				
Myrtaceae	<i>Eucalyptus propinqua</i>	Small-fruited grey gum	1					S-T		1		1				1			

Family	Species	Common name	Status					Stratum	Zones											
			Native	NC Act	EPBC Act	Exotic	Class		O1A	O1B	O1C	O1D	O1E	O2A	O2B	O2C	O2D	O2E	O2F	
NATIVE FLORA SPECIES																				
Myrtaceae	<i>Eucalyptus siderophloia</i>	Grey ironbark	1					S-T				1	1	1		1		1	1	
Myrtaceae	<i>Eucalyptus tereticornis</i>	Blue gum	1					T	1	1	1			1	1	1	1	1		
Myrtaceae	<i>Leptospermum polygalifolium</i>	Tantoon	1					S										1		
Myrtaceae	<i>Lophostemon confertus</i>	Brush box	1					T				1	1		1			1		
Myrtaceae	<i>Melaleuca linariifolia</i>	Snow in summer	1					S						1						
Myrtaceae	<i>Melaleuca quinquenervia</i>	Broad-leaved paperbark	1					S						1						
Myrtaceae	<i>Melaleuca viminalis</i>	Creek bottlebrush	1					S						1				1		
Oleaceae	<i>Notelaea longifolia</i>	large mock olive	1					S		1										
Phyllanthaceae	<i>Glochidion ferdinandi</i>	Cheese tree	1					S						1						
Phyllanthaceae	<i>Glochidion sumatranum</i>	Umbrella cheese tree	1					S						1			1			
Poaceae	<i>Cymbopogon refractus</i>	Barbed wire grass	1					G				1								
Poaceae	<i>Entolasia stricta</i>	Wiry panic	1					G				1								
Poaceae	<i>Eragrostis brownii</i>	Brown's lovegrass	1					G				1								
Poaceae	<i>Imperata cylindrica</i>	Bladey grass	1					G					1	1	1		1			
Poaceae	<i>Microlaena stipoides</i>	Weeping grass	1					G		1					1					
Poaceae	<i>Ottochloa gracillima</i>	Graceful grass	1					G	1			1	1							
Pteridaceae	<i>Adiantum atroviride</i>	Maidenhair fern	1	SL				G					1							
Pteridaceae	<i>Adiantum hispidulum</i>	Rough maidenhair fern	1	SL				G					1							
Rhamnaceae	<i>Alphitonia excelsa</i>	Soap tree	1					S			1	1	1	1	1		1			

Family	Species	Common name	Status					Stratum	Zones											
			Native	NC Act	EPBC Act	Exotic	Class		O1A	O1B	O1C	O1D	O1E	O2A	O2B	O2C	O2D	O2E	O2F	
NATIVE FLORA SPECIES																				
Rutaceae	<i>Flindersia australia</i>	Crows ash	1					T2			1									
Sapindaceae	<i>Cupaniopsis anacardioides</i>	Brown tuckeroo	1					G-S				1								
Sapindaceae	<i>Jagera pseudorhus</i>	Foambark	1					S-T2	1			1	1							
Smilacaceae	<i>Smilax australis</i>	Barbwire vine	1					G					1							
Solanaceae	<i>Solanum stelligerum</i>	Devil's needles	1					S					1							
TOTAL NATIVE FLORA			58	2						10	12	11	28	23	17	13	6	11	11	7

Table 7. Exotic Flora list

Family	Species	Common name	Status					Stratum	Zones										
			Native	NC Act	EPBC Act	Exotic	Class		O1A	O1B	O1C	O1D	O1E	O2A	O2B	O2C	O2D	O2E	O2F
EXOTIC FLORA SPECIES																			
Apocynaceae	<i>Gomphocarpus fruticosus</i>	Narrow-leaved cotton bush				1		G-S	1					1			1		
Arecaceae	<i>Syragrus romanzoffiana</i>	Cocos palm				1		S											
Asteraceae	<i>Ageratum houstonianum</i>	Blue billygoat weed				1		G					1	1			1	1	
Asteraceae	<i>Ageratina adenophora</i>	Crofton weed				1		G					1						
Asteraceae	<i>Ageratina riparia syn. Eupatorium riparium</i>	Mist flower				1		G					1						
Asteraceae	<i>Circium vulgare</i>	Spear thistle				1		G	1					1					

Family	Species	Common name	Status					Stratum	Zones										
			Native	NC Act	EPBC Act	Exotic	Class		O1A	O1B	O1C	O1D	O1E	O2A	O2B	O2C	O2D	O2E	O2F
EXOTIC FLORA SPECIES																			
Asteraceae	<i>Crassocephalum crepidioides</i>	Thickhead				1		G	1								1		
Asteraceae	<i>Senecio madagascariensis</i>	Fireweed				1	W, C3	G									1	1	
Convolvulaceae	<i>Cuscuta campestris</i>	Golden dodder				1		G				1							
Fabaceae	<i>Erythrina x sykesii</i>	Common coral tree				1		S	1	1			1						
Lauraceae	<i>Cinnamomum camphora</i>	Camphor laurel				1	C3	S				1		1			1		
Malvaceae	<i>Sida rhombifolia</i>	Paddy's lucerne				1		G	1										
Myrsinaceae	<i>Lysimachia arvensis</i>	Scarlet pimpernel				1		G						1					
Myrtaceae	<i>Corymbia torelliana</i>	Cadaghi	1			1		S		1									
Nephrolepidaceae	<i>Nephrolepis cordifolia</i>	Fishbone fern	1			1		G					1						
Ochnaceae	<i>Ochna serrulata</i>	Ochna				1		S		1		1	1	1					
Passifloraceae	<i>Passiflora subpeltata</i>	White passion flower				1		G-S						1					
Passifloraceae	<i>Passiflora suberosa</i>	Corky passionvine				1		G	1	1	1	1	1						
Phytolaccaceae	<i>Phytolacca octandra</i>	Inkweed				1		G-S	1										
Phytolaccaceae	<i>Rivina humilis</i>	Coral berry				1		G					1						
Pinaceae	<i>Pinus radiata</i>	Radiata pine				1		S-T				1		1					
Poaceae	<i>Chloris gayana</i>	Rhodes grass				1		G	1	1	1				1		1		
Poaceae	<i>Megathyrsus maximus var. maximus</i>	Guinea grass				1		G				1	1						
Poaceae	<i>Setaria sphacelata</i>	South African pigeon grass				1		G	1	1	1	1	1	1	1	1	1	1	1

Family	Species	Common name	Status					Stratum	Zones											
			Native	NC Act	EPBC Act	Exotic	Class		O1A	O1B	O1C	O1D	O1E	O2A	O2B	O2C	O2D	O2E	O2F	
EXOTIC FLORA SPECIES																				
Poaceae	<i>Sporobolus natalensis</i>	Giant rat's tail grass				1	C3	G		1					1	1	1	1	1	
Poaceae	<i>Urochloa decumbens</i>	Signal grass				1		G		1					1					
Rosaceae	<i>Prunus persica</i>	Peach				1		S						1						
Sapindaceae	<i>Cardiospermum grandiflorum</i>	Balloon vine				1	C3	G-S					1							
Solanaceae	<i>Solanum chrysotrichum</i>	Giant devil's fig				1		S	1			1	1	1			1			
Solanaceae	<i>Solanum mauritianum</i>	Wild tobacco				1		S	1	1	1	1	1	1	1		1			
Solanaceae	<i>Solanum seafortianum</i>	Brazilian nightshade				1		S	1											
Sparmanniaceae	<i>Triumfetta rhomboidea</i>	Chinese burr				1		S	1	1			1		1		1			
Verbenaceae	<i>Lantana camara</i>	Lantana				1	W, C3	S	1		1		1	1	1		1			
Verbenaceae	<i>Lantana montevidensis</i>	Creeping lantana				1	C3	G	1	1	1	1	1	1						
Verbenaceae	<i>Verbena rigida</i>	Veined verbena				1		G	1			1	1	1			1			
TOTAL EXOTIC FLORA						35	6		16	11	6	11	17	15	7	2	13	4	2	

Table 8. Incidental fauna list

Family	Species	Common name	Status			
			Native	NC Act	EPBC Act	Pest
NATIVE FAUNA SPECIES - BIRDS						
Acanthizidae	<i>Gerygone olivacea</i>	White-throated gerygone	1			
Alcedinidae	<i>Dacelo novaeguineae</i>	Laughing kookaburra	1			
Alcedinidae	<i>Todiramphus macleayi</i>	Forest kingfisher	1			
Artamidae	<i>Cracticus nigrogularis</i>	Pied butcherbird	1			
Artamidae	<i>Gymnorhina tibicen</i>	Australian magpie	1			
Cacatuidae	<i>Cacatua galerita</i>	Sulphur crested cockatoo	1			
Campephagidae	<i>Coracina novaehollandiae</i>	Black-faced cuckoo shrike	1			
Climacteridae	<i>Climacteris affinis</i>	White-browed treecreeper	1			
Columbidae	<i>Ocyphaps lophotes</i>	Crested pigeon	1			
Coraciidae	<i>Eurystomus orientalis</i>	Dollarbird	1			
Corvidae	<i>Corvus orru</i>	Torresian crow	1			
Maluridae	<i>Malurus cyaneus</i>	Superb fairy wren	1			
Meliphagidae	<i>Manorina melanocephala</i>	Noisy miner	1			
Meliphagidae	<i>Meliphaga lewinii</i>	Lewin's honeyeater	1			
Meliphagidae	<i>Philemon corniculatus</i>	Blue-faced honeyeater	1			
Meropidae	<i>Merops ornatus</i>	Rainbow bee-eater	1			
Psittaculidae	<i>Trichoglossus moluccanus</i>	Rainbow lorikeet	1			
Rhipiduridae	<i>Rhipidura leucophrys</i>	Willie wagtail	1			
NATIVE FAUNA SPECIES - AMPHIBIANS						
Bufonidae	<i>Rhinella marina</i>	Cane toad				1
NATIVE FAUNA SPECIES - MAMMALS						
Bovidae	<i>Bos indicus</i>	Cow				1
Cervidae	<i>Cervus sp.</i>	Deer sp.				1
Leporidae	<i>Lepus europaeus</i>	Brown hare				1
Macropodidae	<i>Notamacropus rufogriseus</i>	Red-necked wallaby	1			
Macropodidae	<i>Wallabia bicolor</i>	Swamp wallaby	1			
NATIVE FAUNA SPECIES - REPTILES						
Elapidae	<i>Demansia psammophis</i>	Yellow-faced whipsnake	1			
Veranidae	<i>Varanus varius</i>	Lace monitor	1			

5. CONCLUSIONS

Variation across the site's zones can be attributed to prior land uses, landscape features including topography and aspect, and varying severity of weed infestations. The results of the baseline flora survey of the 11 zones indicated a pronounced impact from invasive grasses including South African pigeon grass (*Setaria sphacelata*) and shrubs like Chinese burr (*Triumfetta rhomboidea*). This was comparable with other assessment carried out in support of the offset program by Saunders Havill (2023).

Most zones contained high densities of exotic grasses (burnt or unburnt) dominating the ground layer, including mainly South African pigeon grass (*Setaria sphacelata*) and Giant rat's tail grass (*Sporobolus pyramidalis*). Several zones contained either one or a combination of Lantana (*Lantana camara*), Chinese Burr (*Triumfetta rhomboidea*), Wild tobacco (*Solanum mauritianum*) and Giant devil's fig (*Solanum chrysotrichum*) dominating the shrub layer. A management strategy that is typically employed by restoration ecologists in areas containing tall invasive grasses, vines and other scrambling weeds, is to control weeds within "driplines" of trees and shrubs to reduce overcrowding and increase seed germination potential. This is usually carried out by herbicide spraying, mulching or mechanical control.

Management actions undertaken to date included controlled burns and slashing to reduce the overall abundance of weeds growing in the groundcover and shrub strata. These types of preparatory measures are necessary to assist the growth of young tube stock installed during revegetation activities by reducing competition from weeds for resources.

Ongoing planned burns may be required as part of assisted natural regeneration for some areas. However, this will be largely dependent on the dominant weed species and associated densities, and the ability for a given area to regenerate via recruitment through proximal seeding native species, particularly mature canopy trees or shrub.

It is anticipated that several of the sites that are proposed assisted regeneration areas may require in-fill plantings in future, however this will be re-assessed as part of ongoing monitoring. Likewise, if or where gaps or mortality is noticed in revegetation sites, in-fill planting should be undertaken.

Zone 1D is an example of a zone that contains good native structure in all strata. With the addition of assisted regeneration to target weed incursions, this zone would be on a trajectory to be deemed a successful offset in a relatively short time period.

Natural regeneration of Koala habitat trees (KHT's) was observed occurring adjacent to sections of established remnant forest, with the best examples of this occurring at zones 1D, 2C and 2F. Management through assisted regeneration will improve recruitment of KHT's and will ensure these areas steadily progress towards a self-sustaining patch of native vegetation.

As the offset site is subject to annual monitoring and re-assessment, it is expected that areas that do not achieve satisfactory native recruitment through assisted regeneration practices will be revegetated. Native to weed species ratios can be observed per zone and in detail within **Table 5** and would be expected to increase in favour of native species due to assisted regeneration or revegetation and the management techniques employed by CoGC. Consequently, it is expected that the habitat quality and connectivity for the koala within the offset matter area will continue to improve over time.

6. REFERENCES

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APPENDIX A: FERAL ANIMAL WEEDS AND BASELINE DATA

3. Baseline Survey Results

3.1. Extent of Weed Cover

All weed species recorded across the Kingsholme offset area were recorded. A list of the recorded weed species is provided in **Table 4**.

Table 4: Recorded Weed Species – Kingsholme Offset Property

Scientific Name	Common Name	Biosecurity Act 2014 Restricted Matter	Weeds of National Significance (WONS)
<i>Ageratum houstonianum</i>	Blue Billygoat Weed		
<i>Ambrosia artemisiifolia</i>	Annual Ragweed	Category 3	
<i>Andropogon virginicus</i>	Whisky Grass		
<i>Ascelias curassavica</i>	Red-head Cotton Bush		
<i>Asparagus aethiopicus</i>	Climbing Asparagus Fern	Category 3	WONS
<i>Baccharis halimifolia</i>	Groundsel Bush	Category 3	
<i>Bidens pilosa</i>	Cobbler's Pegs		
<i>Cassytha glabella</i>	Devil's Twine		
<i>Celtis sinensis</i>	Chinese Elm	Category 3	
<i>Cestrum parqui</i>	Green Cestrum		
<i>Chloris gayana</i>	Rhodes Grass		
<i>Cirsium vulgare</i>	Spear Thistle		
<i>Commelina diffusa</i>	Wandering Jew		
<i>Conyza bonariensis</i>	Flaxleaf Fleabane		
<i>Conyza sumatrensis</i>	Tall Fleabane		
<i>Corymbia torelliana</i>	Cadaghi		
<i>Cyperus polystachyos</i>	Bunchy Sedge		
<i>Desmodium rhytidophyllum</i>	Hairy Trefoil		
<i>Eremophila debilis</i>	Winter Apple		
<i>Gomphocarpus physocarpus</i>	Balloon Cotton Bush		
<i>Heliotropium amplexicaule</i>	Blue Heliotrope		
<i>Hypochaeris radicata</i>	Flatweed		

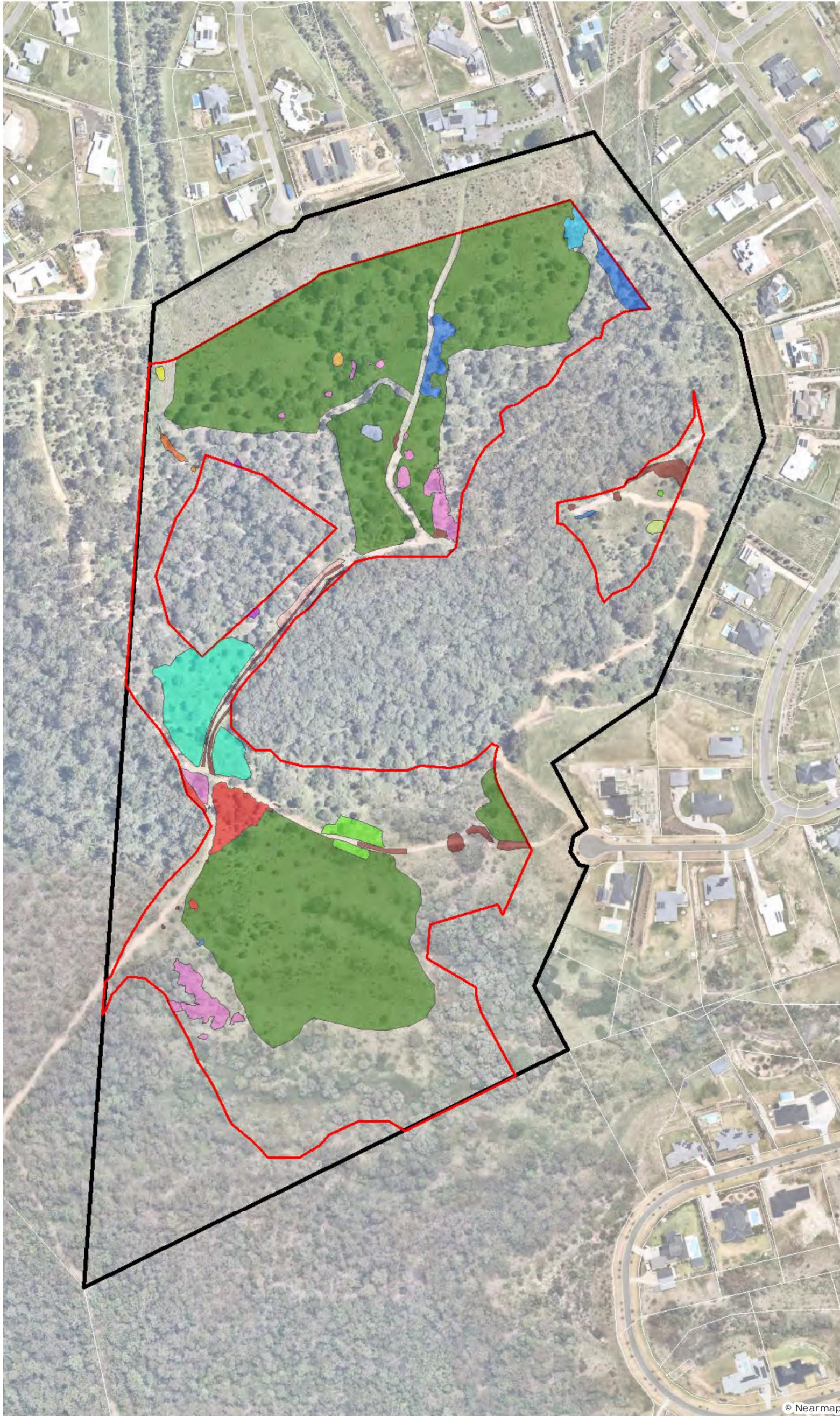
Scientific Name	Common Name	Biosecurity Act 2014 Restricted Matter	Weeds of National Significance (WONS)
<i>Lantana camara</i>	Lantana	Category 3	WONS
<i>Lantana montevidensis</i>	Creeping Lantana	Category 3	
<i>Leucaena leucocephala</i>	Leucaena		
<i>Macroptilium lathyroides</i>	Phasey Bean		
<i>Megathyrsus maximus</i>	Guinea Grass		
<i>Melinis repens</i>	Red Natal Grass		
<i>Murraya paniculata</i>	Mock Orange		

The extent of weed cover across the Kingsholme offset area was recorded by locating and tracing weed cover extent with hand-held GPS. These extents are then illustrated on **Plan 2**. The area of weed extents are provided in **Table 5**. The total extent of weed cover across the site is approximately 50.87 %.

Table 5: Weed Extent

Dominant Species	Area (m ²)	Percentage Of Offset Area (%)
<i>Lantana camara</i> (Lantana)	2504.45	1.65
<i>Lantana camara</i> (Lantana) / <i>Solanum mauritianum</i> (Wild Tobacco)	66.65	0.04
<i>Lantana camara</i> (Lantana) / <i>Urena lobata</i> (Urena Burr)	1601.2	1.06
<i>Lantana camara</i> (Lantana) / <i>Urena lobata</i> (Urena Burr) / <i>Solanum chrysotrichum</i> (Giant Devil's Fig) / <i>Passiflora suberosa</i> (Corky Passion Vine)	165.48	0.11
<i>Lantana camara</i> (Lantana) / <i>Urena lobata</i> (Urena Burr) / <i>Solanum chrysotrichum</i> (Giant Devil's Fig)	402.88	0.27
<i>Setaria</i> dominated vegetation	62720.18	41.34
<i>Setaria</i> dominated / <i>Sporobolus pyramidalis</i> (Giant Rats Tail Grass)	4828.27	3.18
<i>Solanum chrysotrichum</i> (Giant Devil's Fig)	849.48	0.56
<i>Solanum chrysotrichum</i> (Giant Devil's Fig) / <i>Solanum mauritianum</i> (Wild Tobacco)	119.16	0.08
<i>Solanum chrysotrichum</i> (Giant Devil's Fig) / <i>Lantana camara</i> (Lantana)	63.31	0.04
<i>Solanum mauritianum</i> (Wild Tobacco)	85.83	0.06
<i>Solanum mauritianum</i> (Wild Tobacco) / <i>Solanum chrysotrichum</i> (Giant Devil's Fig)	139.94	0.09
<i>Sporobolus pyramidalis</i> (Giant Rats Tail Grass)	1687.27	1.11
<i>Urena lobata</i> (Urena Burr)	1614.21	1.06
<i>Urena lobata</i> (Urena Burr) and <i>Chloris gayana</i> (Rhodes Grass)	337.03	0.22
Total:	77,185.34 m² (7.71ha)	50.87%

02. Baseline Weed Cover Extent



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.

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 Updated data available at <http://qldspatialinformation.qld.gov.au/catalogue/>
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Legend

- Offset Property
- Offset Area
- Qld DCDB
- Lantana camara (Lantana)
- Lantana camara (Lantana) / Solanum mauritianum (Wild Tobacco)
- Lantana camara (Lantana) / Urena lobata (Urena Burr)
- Lantana camara (Lantana) / Urena lobata (Urena Burr) / Solanum chrysotrichum (Giant Devil's Fig) / Passiflora suberosa (Corky Passion Vine)
- Lantana camara (Lantana) / Urena lobata (Urena Burr) / Solanum chrysotrichum (Giant Devil's Fig)
- Setaria dominated / Sporobolus pyramidalis (Giant Rats Tail Grass)
- Setaria Dominated Vegetation
- Solanum chrysotrichum (Giant Devil's Fig)
- Solanum chrysotrichum (Giant Devil's Fig) / Solanum mauritianum (Wild Tobacco)
- Solanum chrysotrichum (Giant Devil's Fig) / Lantana camara (Lantana)
- Solanum mauritianum (Wild Tobacco)
- Solanum mauritianum (Wild Tobacco) / Solanum chrysotrichum (Giant Devil's Fig)
- Sporobolus pyramidalis (Giant Rats Tail Grass)
- Urena lobata (Urena Burr)
- Urena lobata (Urena Burr) / Chloris gayana (Rhodes Grass)

Issue	Date	Description	Drawn	Checked
A	14/04/2023	Preliminary	LS	LF



Transverse Mercator | GDA 2020 | Zone 56 | 1:3,000 @ A3



Address / RPD: Lot 906 on SP280831

14/04/2023 | 11510E02 Weed Cover A

3.2. Feral Animal Abundance Survey

Field surveys did not identify any evidence of Koala mortalities.

Six (6) motion activated cameras were deployed across the Kingsholme offset property, one (1) within the Kingsholme offset area from 15 February to 6 March 2023. Surveys across the entire Kingsholme Offset Property are relevant for the baseline surveys and future monitoring and management actions to be implemented following the approval of the Offset Management Plan.

The Kingsholme Offset Property cameras detected eight (8) individual sightings of feral animals over a total of 114 survey nights (refer to **Table 5**). The introduced predators of *Vulpes vulpes* (Red Fox) and *Bos taurus* (Cow) were recorded across the six (6) camera traps (refer **Photo set 1**). Other fauna species were captured during this survey. A full list of animals captured throughout this survey is provided in **Appendix E**.

Using the methodology described in **Section 2.3.2** the RAI for Kingsholme Offset property is **7.02** (refer **Table 5**).

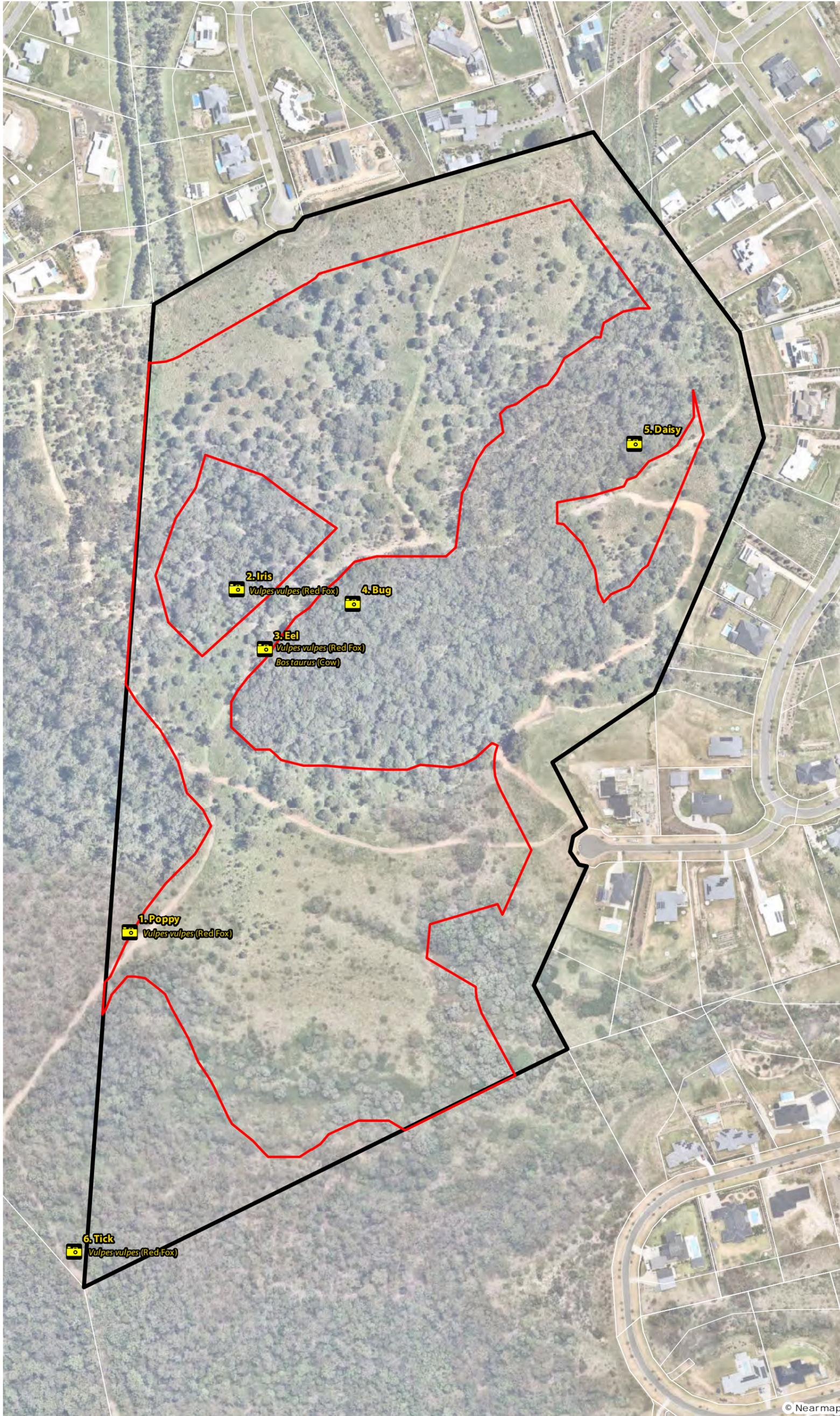
Table 6: Non-native Koala Predator Survey Results Summary – Kingsholme Offset Property

Camera	Camera Name	Survey Duration (nights)	Species	Detection	Within offset site	RAI
1	Poppy	19	<i>Vulpes vulpes</i> (Red Fox)	1		7.02
2	Iris	19	<i>Vulpes vulpes</i> (Red Fox)	1		
3	Eel	19	<i>Vulpes vulpes</i> (Red Fox)	2	✓	
			<i>Bos taurus</i> (Cow)	1		
4	Bug	19	Nil	-		
5	Daisy	19	Nil	-		
6	Tick	19	<i>Vulpes vulpes</i> (Red Fox)	3		
Total		114		8		



Photo set 1: *Vulpes vulpes* (Red Fox) and *Bos taurus* (Cow) captured on Kingsholme Offset Property.

03. Baseline Predators



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.

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Legend

-  Offset Property
-  Offset Area
-  Qld DCDB
-  Camera Trap Locations

Issue	Date	Description	Drawn	Checked
A	12/04/2023	Preliminary	LS	LF

0 20 40 60 m

Transverse Mercator | GDA 2020 | Zone 56 | 1:3,000 @ A3



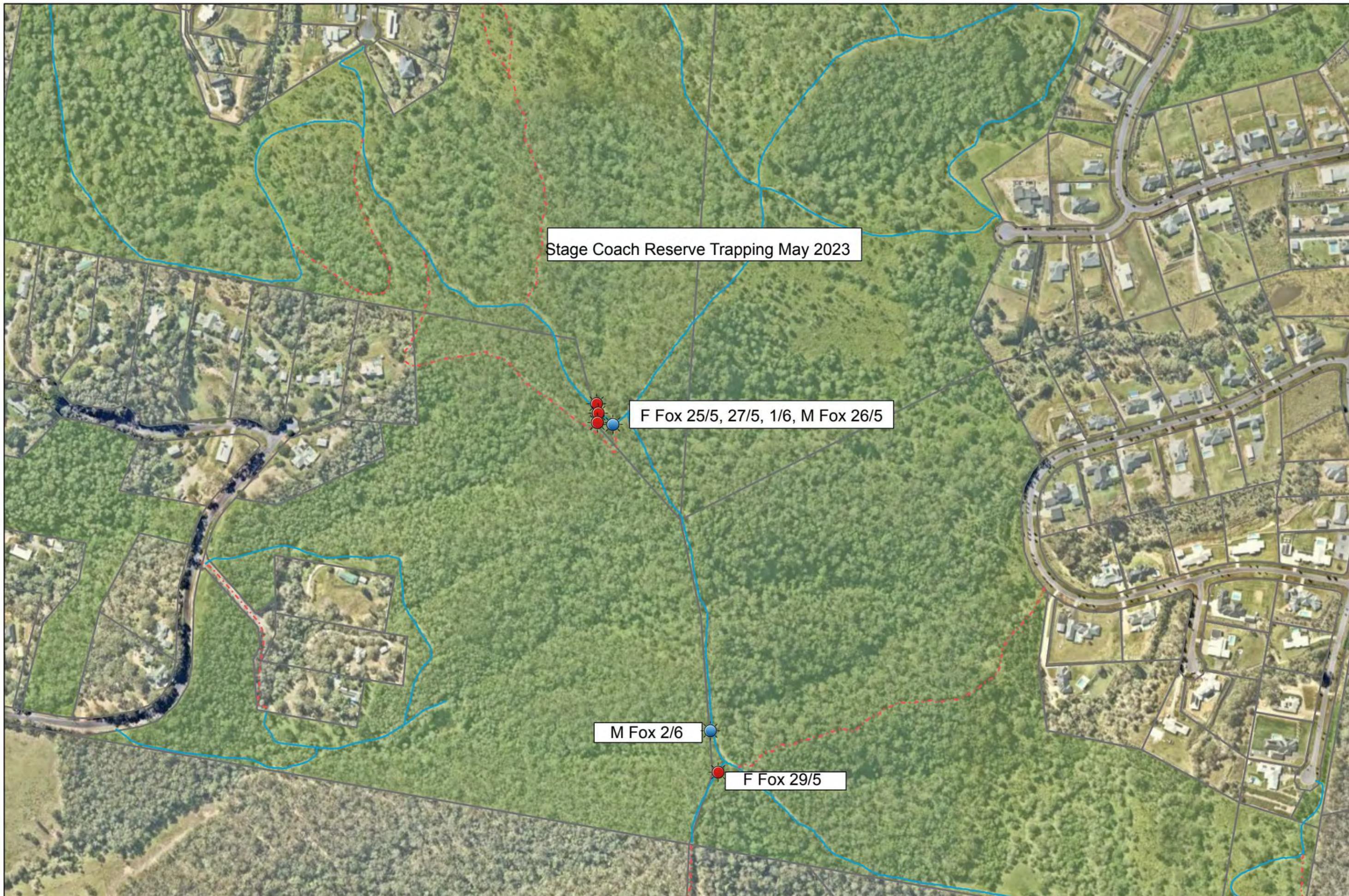
Address / RPD: Lot 906 on SP280831

12/04/2023 | 11510E03 Predators A



APPENDIX B: LOCATIONS OF CAPTURED FOXES

Stage Coach Reserve Trapping Results May 2023





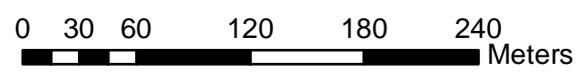
APPENDIX C: WEED REDUCTION BURNS AND EXCLUSION ZONES

VISY Offset - Stage Coach Reserve



Legend

-  Offset Zones
-  Fire Exclusion Zones
-  Waterways



Produced By: NAMU Restorations
Production Date: 02/02/2023
Prepared For: Service Provider
Version: 1
Projection: MGA94 Zone 56
CITY OF
GOLDCOAST.



APPENDIX D: SAT ACTIVITY LEVELS AT STAGE COACH RESERVE



APPENDIX D.
SAT ACTIVITY LEVELS AT STAGE COACH RESERVE OFFSET SITE.

LEGEND

SAT activity

- Null site
- Low SAT activity
- Medium SAT activity
- High SAT activity
- No activity
- Approved offset areas
- Cadastral data
- Subject site

ADDRESS: Stage Coach Reserve

CLIENT: City of Gold Coast

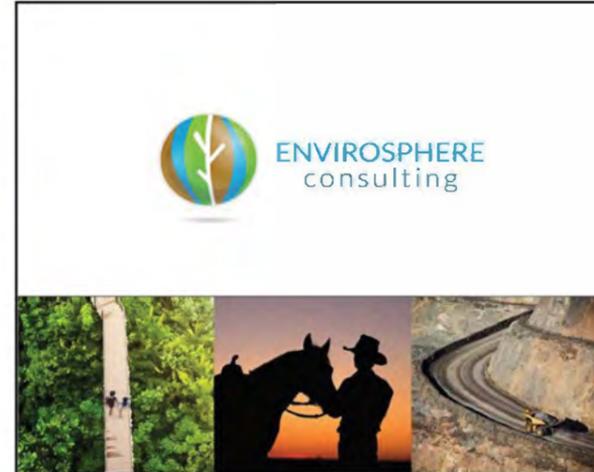
AUTHOR: Simon Muirhead

DATE: 27.10.23

PAGE SIZE: A3

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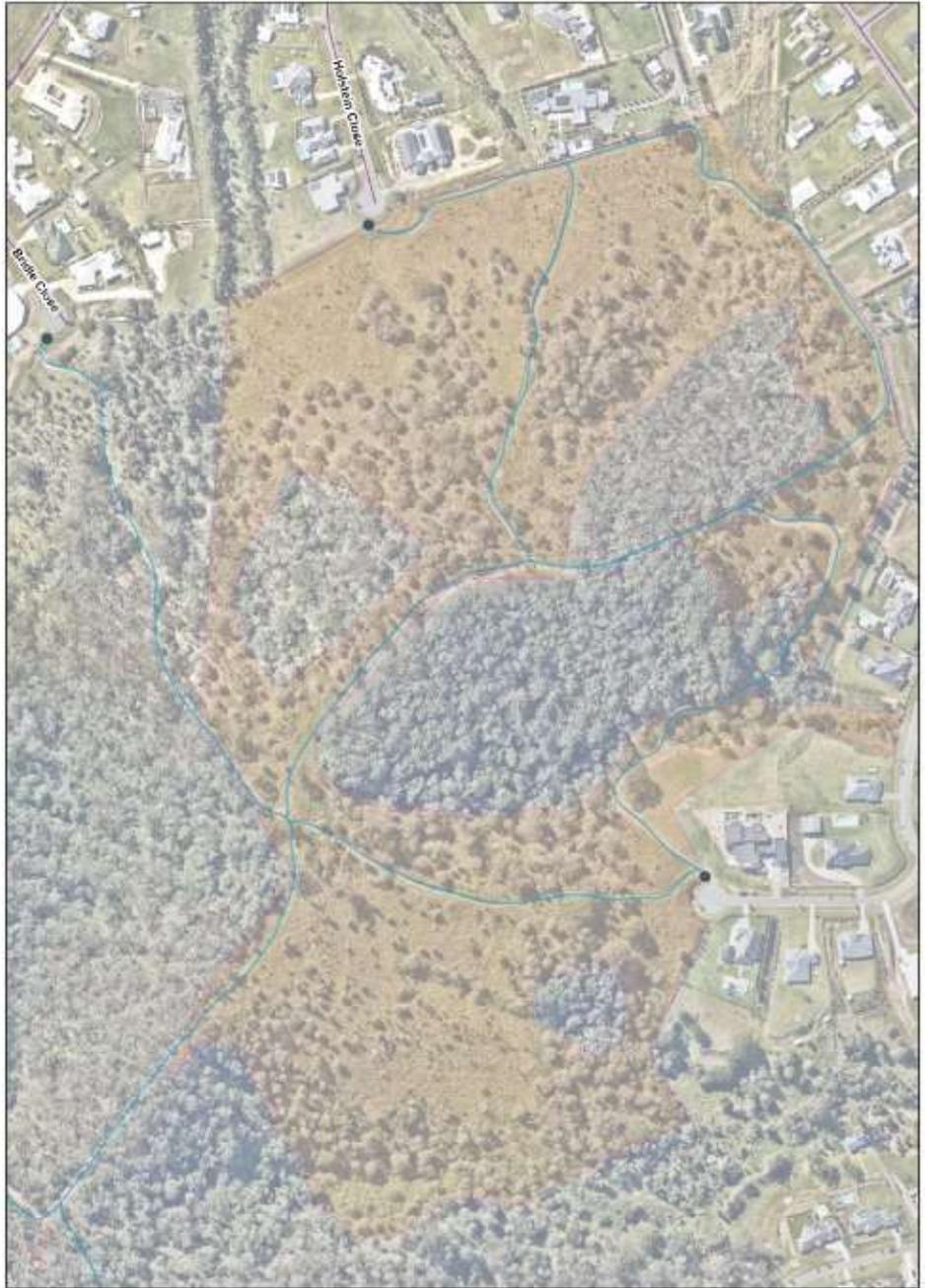


ATTACHMENT 6

Offset Site Signage Installation

Offset information signage installed at Lot 906 SP280831 at 3 entrances:

- Bridle Close
- Holstein Close
- Elm Close



Offset information signage installed at Holstein Close offset site entrance

