

Attachment B – Approved Koala Management Plan

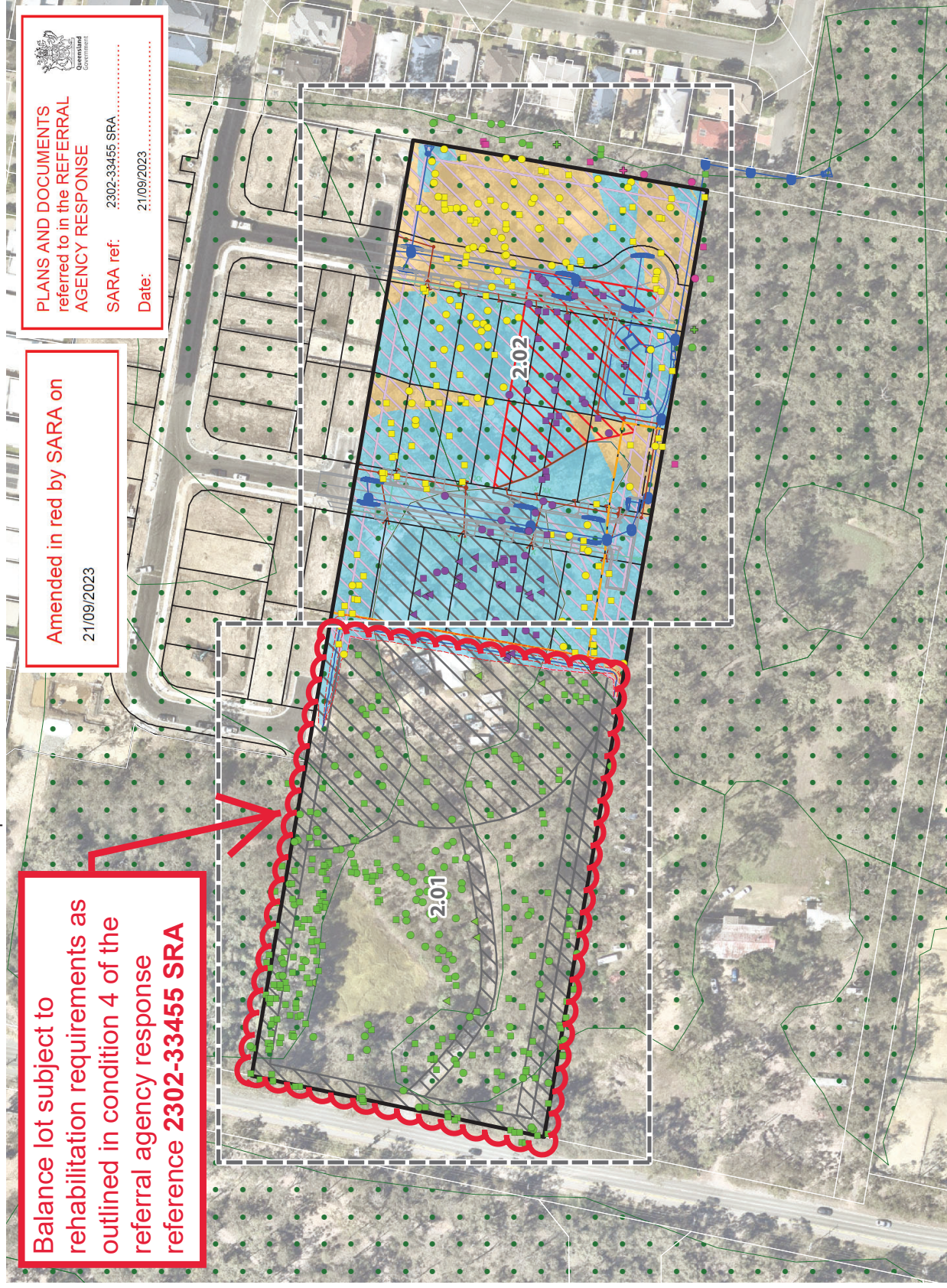
PLANS AND DOCUMENTS
referred to in the REFERRAL
AGENCY RESPONSE

SARA ref: 2302-33455 SRA

Date: 21/09/2023

Balance lot subject to rehabilitation requirements as outlined in condition 4 of the referral agency response reference **2302-33455 SRA**

Amended in red by SARA on
21/09/2023



George Alexander Way, Coomera

Address / RPID: 96/RP187418

18/08/2023 | 11:24 | E02 KHA Impact B



Koala Management Plan

SDAP v3.0 State Code 25 (Qld)

54 George Alexander Way, Coomera, Queensland 4209
Prepared for Coomera GA Pty Ltd

18 August 2023

Job 11241

Document Control

Document: State Code 25 (Qld) Koala Management Plan – 54 George Alexander Way, Coomera, prepared by Saunders Havill Group for Coomera GA Pty Ltd, dated 18 August 2023.

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Prepared by

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Acronyms and Abbreviations

Legislation, policies and guidelines

Draft Code	<i>Draft Code of Practice for the Welfare of Animals Affected by Land-clearing and Other Habitat Impacts</i>
EMP Guidelines	<i>Environmental Management Plan Guidelines, prepared by the Commonwealth of Australia, 2014</i>
VMA	<i>Vegetation Management Act 1999 (Qld)</i>

Government departments

CGC	City of Gold Coast
DES	Department of Environment and Science (Qld)
DSDILGP	Department of State Development, Infrastructure, Local Government and Planning (Qld)

General terms

CPP	<i>Gold Coast City Plan 2016 City Plan Policy – Ecological site assessments</i>
DBH	Diameter at Breast Height
ha	hectares
km	kilometres
KMP	Koala Management Plan
mm	millimetres
PO	Performance Outcome
RE	Regional Ecosystems
SAT	Spot Assessment Technique
SDAP	State Development Assessment Provisions
SHG	Saunders Havill Group
VCFMP	Vegetation Clearing and Fauna Management Plan
WHIMP	Wildlife Habitat Impact Mitigation Plan
WPMP	Wildlife Protection and Management Plan

1. Introduction

Saunders Havill Group (SHG) have been engaged by Coomera GA Pty Ltd to prepare a Koala Management Plan (KMP) to demonstrate compliance with the State Development Assessment Provisions (SDAP) *State Code 25: Development in South East Queensland Koala habitat areas version 3* (State Code 25), implemented by the Department of State Development, Infrastructure, Local Government and Planning (DSDILGP). Specifically, this KMP is required to demonstrate compliance with Performance Outcome 10 (PO10) within the State Code 25, to demonstrate the development within a mapped KHA is undertaken in a way that prevents the risk of injury or death of Koalas.

This KMP has been prepared in accordance with the document *Environmental Management Plan Guidelines, prepared by the Commonwealth of Australia, 2014* (EMP Guidelines). The purpose of this KMP is to provide a single explanatory management document for the inclusion in the design, construction and operation of the development. The objectives of this KMP are as follows:

- 1) To highlight the existing flora, fauna and ecosystem values on the subject site and in surrounding areas;
- 2) Describe key results from survey data, including Koala occurrence and the availability and quality of habitat;
- 3) Identify key direct and indirect impacts on Koalas and describe proposed avoidance and mitigation measures; and,
- 4) List out actions and legislative requirements to be implemented to manage construction impacts.

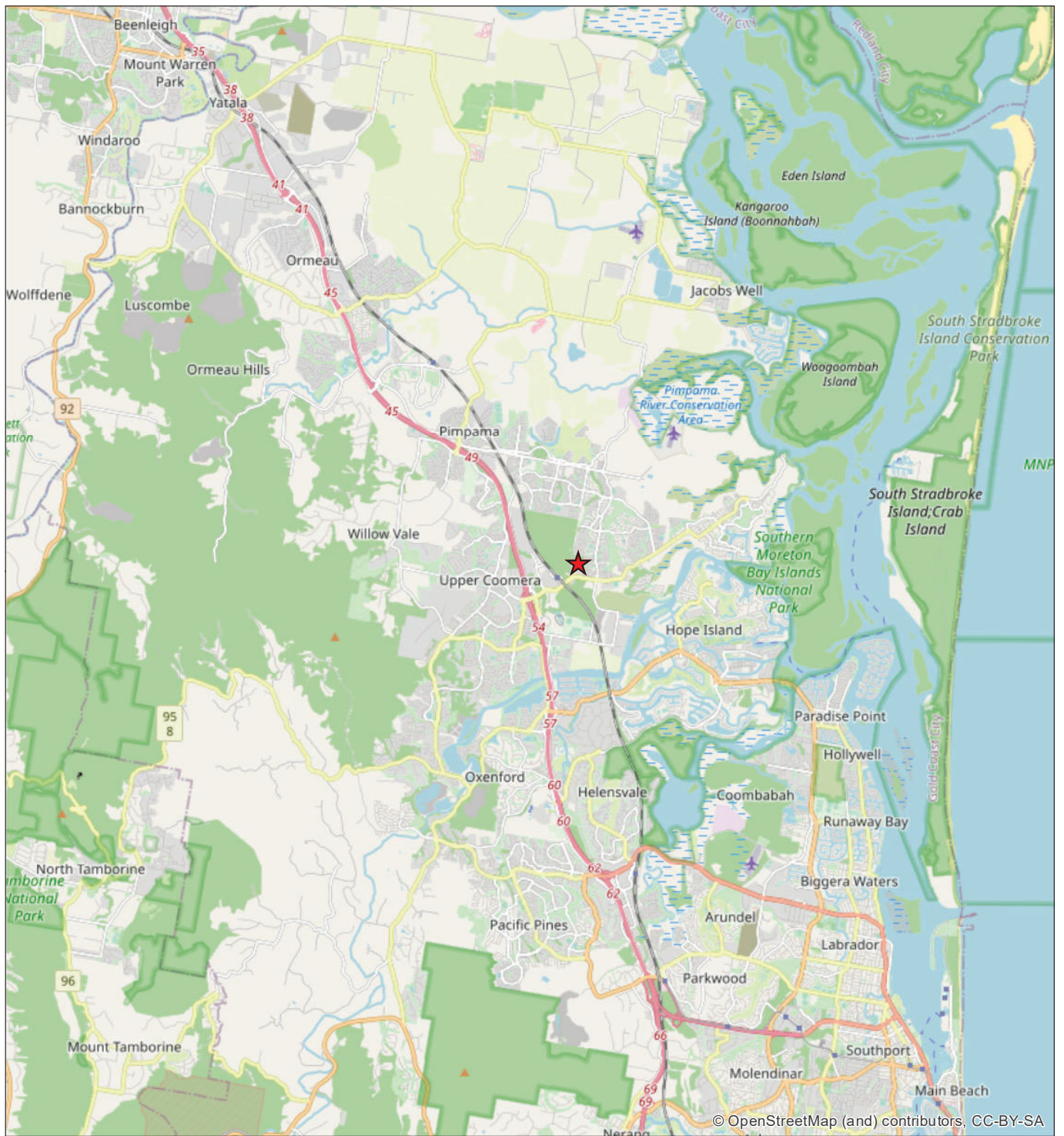
2. Project description

The subject site is located at 54 George Alexander Way, Coomera, Queensland, and is described as Lot 96 on RP187418. Contextually, the site comprises approximately 3.01 hectares (ha) located within the suburb of Coomera.

Parts of the site have been historically cleared and modified for previous residential purposes (refer **Figure 1** for Site Context and **Figure 2** for Site Aerial). Currently, the site is surrounded by residential developments to the east, a new residential development under construction to the north and a larger vegetated lot to the south. Vegetation exists to the west; however, the site is bound by George Alexander Way to the west. The wider landscape is characterised by significant urban development with a mix of residential, commercial, and retail land uses and is bisected by major infrastructure including the Gold Coast Railway Line and the Pacific Motorway.

The proposed development is to reconfigure one (1) lot into twenty-two (22) residential lots including internal access roads, a stormwater detention basin and park area. The development footprint is located in the eastern portion of the site within the area zoned as medium density residential under the *Gold Coast City Plan 2015*. The western portion of the site is zoned as high density residential. Proposed works are considered to meet planning intent of the City Plan. Furthermore, the proposal is consistent with surrounding land uses, being residential uses located to the east and residential development under construction immediately north of the subject site. The project has been designed to link to the adjoining northern development as it will be accessible via access roads to the north.

The site is not located within a KPA, however, approximately 2.0 ha of KHA is mapped across the site (refer **Figure 3**). The subject site is located at the edge of a development and represents a logical area to progress development within the rapidly urbanising Coomera Urban Centre as it will reduce impacts such as fragmentation of habitat values.



Legend



Figure 1
Site Context

Coomera GA
Pty Ltd

File ref. 11241 E Figure 1 Site Context A
Date 2/02/2023
Project George Alexander Way, Coomera

0 1 2 3 4 5 km

Scale (A4): 1:150,000 [GDA 2020 MGA Z56]



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Legend



Figure 2

Site Aerial

Coomera GA
Pty Ltd

File ref. 11241 E Figure 2 Site Aerial A
Date 2/02/2023
Project George Alexander Way, Coomera

0 10 20 30 40 50 m

Scale (A4): 1:2,000 [GDA 2020 MGA Z56]



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Legend



Site DCDB



Qld DCDB

Koala Habitat Areas



Core Remnant Koala Habitat Areas



Core Regrowth Koala Habitat Areas



Locally Refined Koala Habitat Areas



Koala Priority Areas

Figure 3

Koala Priority Areas and
Koala Habitat Areas

File ref. 11241 E Figure 3 Koala 2019 A

Date 2/02/2023

Project George Alexander Way, Coomera

0 10 20 30 40 50 m

Scale (A4): 1:2,000 [GDA 2020 MGA Z56]



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3. Summary of Ecological values

Two Ecologists from SHG assessed the project area on 18 October 2022. The entire site was traversed by foot to ensure all vegetation communities, and flora and fauna species were recorded. Particular attention was paid to threatened flora and habitat for threatened fauna species that were listed as possibly occurring on or within the vicinity of the development site, and specific micro assemblages which may support these threatened species.

This included a detailed tree plot to confirm vegetation habitat structure and status, and meandering searches for presence of Koala in the forms of scats and specimens where habitat was considered of suitable size and structure to potentially support Koala. As detailed in the State Code 25 Response and Ecological Assessment Report (EAR), the patch of KHA located on and directly adjoining the site is considered relatively isolated and is anticipated to become increasingly fragmented due to surrounding development approvals and as the planning intent is for medium and high-density residential areas.

The site is mapped as Category X (non-remnant) vegetation and Category B (remnant) vegetation containing Least Concern RE12.11.5 along the western section of the northern and southern boundaries and Least Concern RE 12.11.24 in the eastern portion (refer **Figure 4** and **Figure 5**). Regulated vegetation areas are also mapped as KHA and essential habitat for Koala under the State Planning Policy 2017 (SPP).

Field surveys confirmed on-ground vegetation values are generally reflective of regional ecosystem mapping. Modified areas containing minimal to no native vegetation values are located in the central portion the site and are generally associated with the dwelling and surrounding areas. Relatively intact eucalypt woodland is present within the mapped Category B (remnant) vegetation areas which contains large eucalypt species aligning with RE12.11.24 and RE12.11.5. *Corymbia citriodora* (Spotted Gum), *Eucalyptus fibrosa* (Broad-leaved Red Ironbark), *E. siderophloia* (Grey Ironbark), *E. microcorys* (Tallowwood), *E. carnea* (Broad-leaved White Mahogany) and *E. acemnoides* (White Mahogany).

The understorey contains a mix of *Acacia disparrima* (Hickory Wattle), *Lophostemon saueolens* (Swamp Box), *Melaleuca saligna* (White Bottlebrush) and *Allocasuarina littoralis* (Black She-oak). The ground and shrub layer throughout the site is modified in previously cleared areas, particularly surrounding the dwelling. Ground layer weed species including *Senecio madagascariensis* (Fireweed) and *Ageratum houstonianum* (Blue Billygoat Weed) were recorded.

The property contains two constructed dams, one in the north-western corner of the site and a second smaller dam in the north-eastern corner. The dam in the north-eastern corner is surrounded by *Acacia disparrima* (Hickory Wattle) and *Acacia concurrens* (Black Wattle) along with *Lophostemon saueolens* (Swamp Box) and *Allocasuarina littoralis* (Black She-Oak). Vegetation surrounding the second larger dam in the west includes *A. disparrima*, *L. saueolens* and *Melaleuca saligna* (White Bottlebrush).

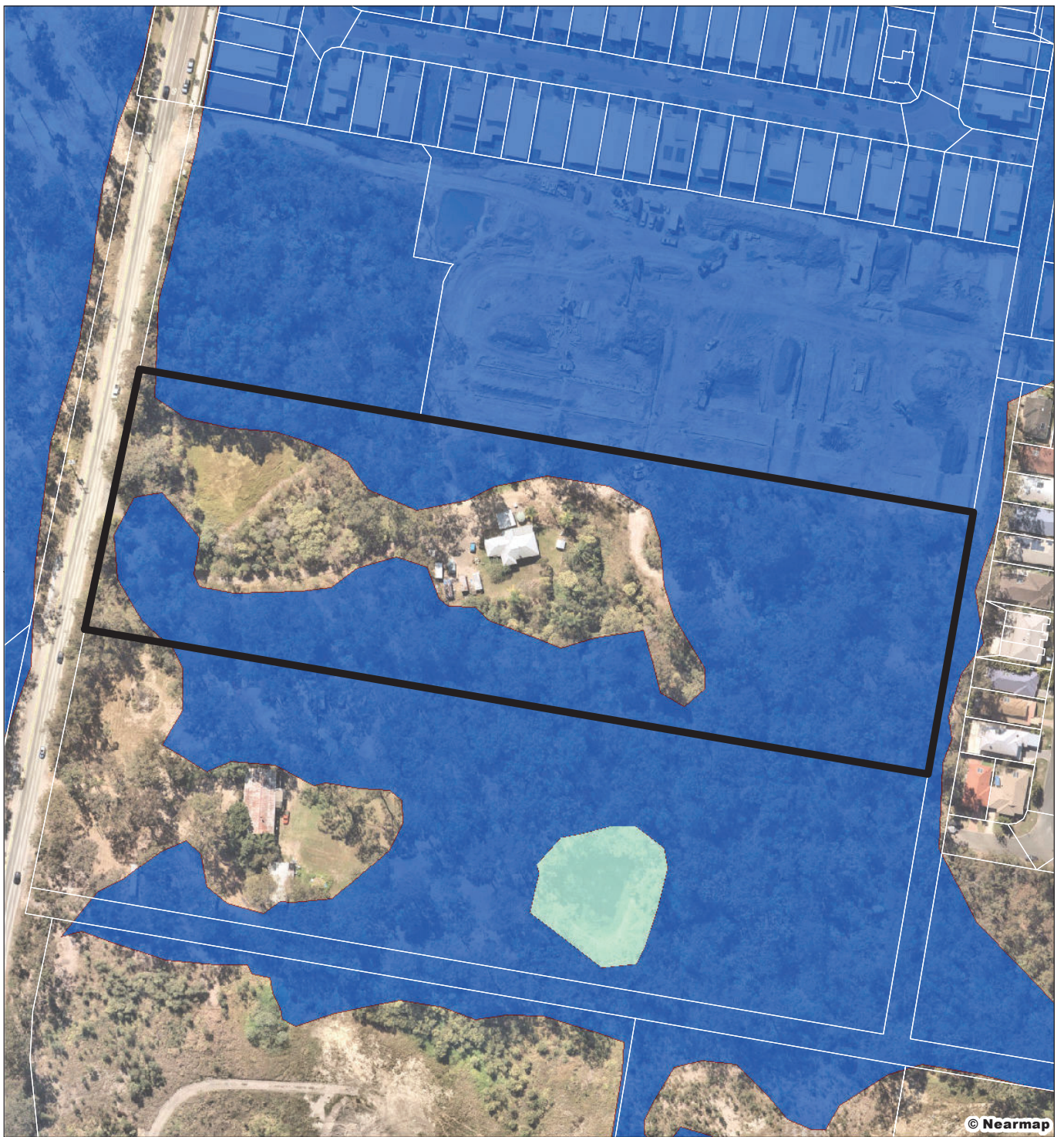
The field data collected during this period is considered to provide sufficient information to effectively understand and assess the existing ecological features and consequently the constraints that would influence the extent of developable land. The identification of ecological features considered to be of significance was

facilitated through application of the field survey methodology. Field surveys were conducted in accordance with State Guidelines and *Gold Coast City Plan 2016* City Plan Policy – Ecological site assessments (CPP).

Whilst the mapped KHA contains suitable Koala food and shelter trees, the on-site KHA is already relatively fragmented and considered unlikely to provide long-term value as a stepping-stone or patch habitat for Koala given the site is surrounded by residential development and George Alexander Way to the west.

Under the Planning Regulation framework's definition of exempted development, a total of 0.95 ha including 174 Non-Juvenile Koala Habitat Trees (NJKHTs) can be cleared for essential management for the purpose of bushfire risk mitigation. An additional 0.05 ha can be cleared as a one-off clearing area as exempted development and 0.29 ha as boundary clearing exemptions (refer **Plan 1**).

The proposed development proposes assessable impacts of 0.24 ha of mapped KHA containing 22 NJKHTs with an additional 114 proposed to be removed outside of a KHA (refer **Plan 2**).



Legend

	Site DCDB		Category C area - High value regrowth vegetation
	Old DCDB		Category R area - Reef regrowth watercourse vegetation
	Regulated Vegetation Category A area - Vegetation Offset/Compliance notices/VDecs		Category X area - Vegetation not regulated under the VMA
	Category B area - Remnant vegetation		Water
			Area not categorised

Figure 4

Regulated Vegetation Management Map

File ref. 11241 E Figure 4 RVMM A
Date 2/02/2023
Project George Alexander Way, Coomera

0 10 20 30 40 50 m

Scale (A4): 1:2,000 [GDA 2020 MGA Z56]

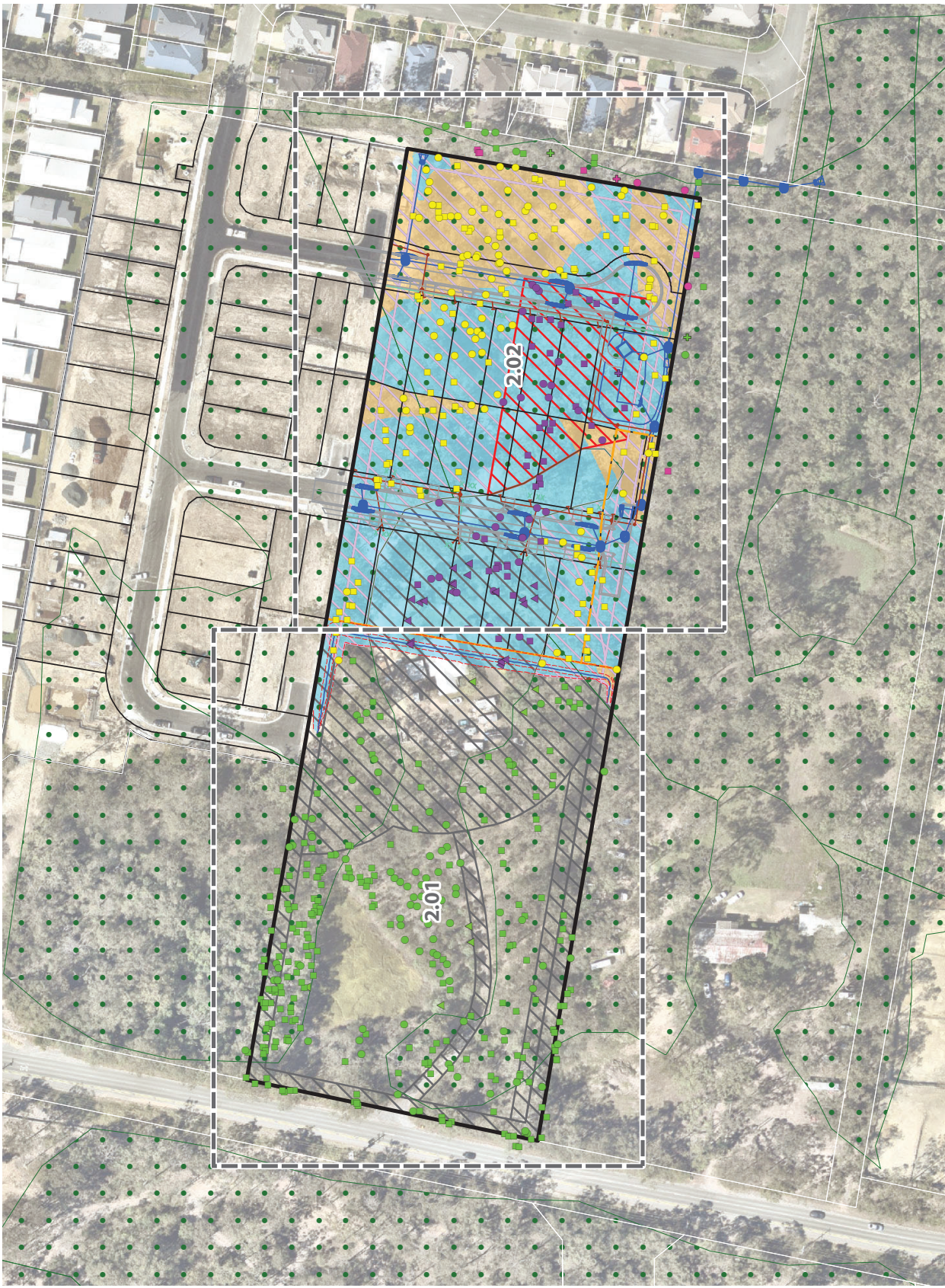


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2.00 Koala Habitat Area Impact Assessment



This map was prepared for a desktop assessment only. The information on this map is not suitable for any other purpose. The map is not a guarantee of accuracy and is not to be used as a basis for any other purpose. The map is not a guarantee of accuracy and is not to be used as a basis for any other purpose. The map is not a guarantee of accuracy and is not to be used as a basis for any other purpose.

Legend

- Site DCD8
- Old DCD8
- Koala Habitat Areas (KHA)
- Koala habitat that can be cleared as exempted development under Planning Regulation 2017
- Koala habitat to be cleared as exempted development under Planning Regulation 2017
- Koala habitat to be impacted outside of definition of exempted development (0.24 ha)

Engineering Detail

- Proposed Lot Boundaries
- Proposed Easements
- Proposed Road Design
- Stage Boundaries
- Earthworks Interface
- Sewer Services
- Water Services
- Earthworks (Extent of Cut)
- Earthworks (Extent of Fill)

GPS Tree Plot

- Non-Juvenile Koala habitat tree
- Juvenile tree
- Dead/Tag tree
- Introduced species/environmental weed to retain
- Non-Juvenile Koala habitat tree in neighbouring lot, retention in subject to arborist assessment
- Native tree in neighbouring lot, retention subject to arborist assessment
- Dead/Tag tree in neighbouring lot, retention subject to arborist assessment
- Non-Juvenile Koala habitat tree to remove
- Native tree to remove
- Dead/Tag tree to remove
- Introduced species/environmental weed to remove
- Non-Juvenile Koala habitat tree to remove as exempted development
- Native tree to remove as exempted development
- Introduced species/environmental weed to remove as exempted development

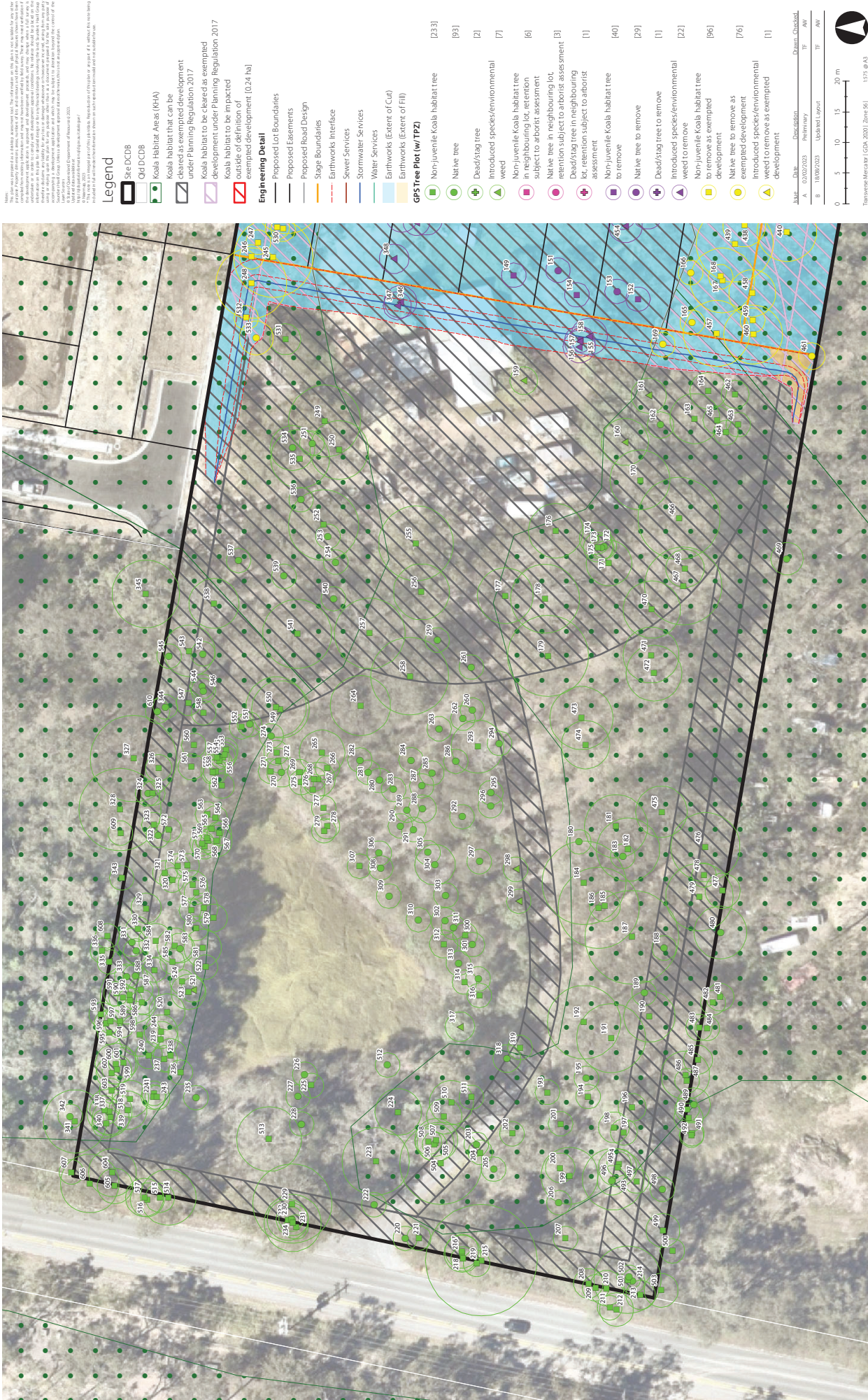
DATE	DESCRIPTION	PREPARED BY	DATE	DATE
A	02/02/2023	Preliminary	AW	AW
B	18/08/2023	Updated Layout	TP	AW

Transverse Mercator (GDA 2020) Zone 56 | 112.90 8743

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1:2,500 @ A3

2.01 Koala Habitat Area Impact Assessment



4. Impacts to the Koala

The following direct and indirect impacts have been identified as having potential to occur as a result of construction.

Construction Impacts

- Direct loss of approximately 1.24 ha of mapped KHA habitat including 0.24 ha of assessable impacts.
- Indirect loss of habitat through edge effects.
- Loss of 136 non-juvenile koala habitat trees (NJKHTs), 22 of which are assessable impacts within a KHA.
- Potential loss of an additional five (5) NJKHTs subject to arborist assessment and supervision.
- Potential for injury or mortality caused by vegetation clearing.
- Potential for injury or mortality caused by vehicle use during construction.
- Potential species displacement into surrounding habitat areas.

4.1. Risk Assessment

Each of the identified potential impacts were considered in the context of the proposed action within the Risk Assessment Table (refer **Table 1**) to identify where avoidance and mitigation measures are to be focused.

Table 1: Risk Assessment

Impact	Likelihood	Consequence	Risk Rating
Construction Phase			
Direct loss of approximately 1.24 ha of mapped KHA habitat.	Almost certain (A)	Minor (2)	High
Indirect loss of habitat through edge effects	Almost certain (A)	Minor (2)	High
Loss of 136 NJKHTs	Almost certain (A)	Minor (2)	High
Potential loss of an additional five (5) NJKHTs	Possible (C)	Minor (2)	Moderate
Injury and mortality due to vegetation clearing	Unlikely (D)	Major (4)	Moderate
Injury and mortality due to increased vehicle usage	Unlikely (D)	Major (4)	Moderate
Potential species displacement into other habitat areas	Possible (C)	Minor (2)	Moderate

As identified from the risk assessment above, management measures will focus on avoiding and mitigating impacts caused by:

- Loss of habitat (direct and indirect).

- Risk of injury and death caused by:
 - vegetation clearing; and
 - vehicle strike.
- Barriers to dispersal into surrounding habitat areas.

5. KMP Framework

This KMP focuses on the management and safety of Koalas during the construction of the project. To achieve the objectives of the KMP, as detailed in **Section 1**, the implementation of specific management actions at each phase of project design and construction will occur. Management tasks and actions relevant to the project are explained throughout the following subsections. Specific actions are converted to schedules within **Section 6**, and documented using the S.M.A.R.T criteria (Specific, Measurable, Achievable, Reasonable and Time Specific).

5.1. General Management

5.1.1 Roles and Responsibilities

The successful implementation of this KMP requires a number of key personnel to complete various roles. While many of the contractors for the project are yet to be appointed, these will be specified within on-site working versions of the KMP.

Environmental Coordinator

SHG is the Environmental Coordinator for the project and is responsible for the development of this KMP and documentation for overarching environmental management. SHG will be responsible for managing non-compliance by appointed contractors and sub-contractors, including establishing additional management procedures.

Administering Authority

CGC is the government approval authority for the Local Government Area and issuer of development and operational approvals for the project.

Site Coordinator

The Site Coordinator is a representative of the project team (typically the Project Engineer) and is responsible for coordinating the project consultants and construction contractor.

Site Supervisor

The Site Supervisor is a representative of the Construction Contractor (to be appointed) and is responsible for overseeing all pre-clearing, clearing and construction activities. The Site Supervisor is responsible for ensuring all pre-clearing, clearing and construction activities are undertaken in accordance with this KMP and subsequent environmental management documentation. The Site Contractor will be responsible for engaging and commissioning the Fauna Spotter Catcher.

Fauna Spotter Catcher

A Department of Environment and Science (DES) approved Fauna Spotter Catcher is a person who holds a rehabilitation permit with an extended authority issued by DES specifying the holder may take, keep or use an animal whose habitat is about to be destroyed by a human activity. A DES approved Fauna Spotter Catcher will be engaged by the Proponent for pre-construction and construction phases of the project. It is noted that

the Fauna Spotter Catcher must hold a Rehabilitation Permit and a copy of this permit along with their contact details will be passed on to the Environmental Coordinator. The engaged Fauna Spotter Catcher will be responsible for undertaking pre-clearing surveys of the site and preparing all required pre-clearing and post-clearing reporting. The Fauna Spotter Catcher must be present on site during all clearing activities and is responsible for the relocation of native fauna.

A list of key contacts for the project is contained in **Table 2**.

Table 2: Key Management Personnel

Role	Nominated Person	Company
Proponent/ Project Coordinator	Michael Zielski	Coomera GA Pty Ltd
Environmental Coordinator	Amy Westman	Saunders Havill Group
CGC Contact	TBA	City of Gold Coast
Site Coordinator	TBA	TBA
Principal Site Contractor	TBA	TBA
Registered Fauna Spotter	TBA	TBA

5.1.2 Environmental Training

The KMP will be issued to all site contractors and sub-contractors and will be made available within the site construction office. Elements of compliance with the KMP will form part of the responsibility of the Principal Site Contractor. Training on the KMP will be incorporated as part of the broader environmental management and workplace health and safety procedures for the site. This will include the following management plans actions:

- 1) Providing a copy of the KMP to all site contractors and sub-contractors.
- 2) Requirements of the KMP discussed during site induction.
- 3) Making available the final copy of the KMP within the site construction office.
- 4) Requirements of the KMP to be incorporated into workplace checklists, work method statement and toolbox talks.
- 5) Monthly review and report on compliance with the KMP as part of the Principal Contractor's role.

5.2. Construction Management

5.2.1 Fauna

The sequential clearing of site vegetation will be undertaken in accordance with fauna management protocols implemented by a Fauna Spotter Catcher registered by DES. Additionally, the adoption of aspects of a leading practice fauna management model to guide works prior, during and post construction. This model is cited as the *Draft Code of Practice for the Welfare of Animals Affected by Land-clearing and Other Habitat Impacts*,

endorsed by the Australia Zoo Wildlife Warriors and Voiceless (the Draft Code). Under the Draft Code, the following procedures will apply to all clearing works:

Action 1- Engagement of Fauna Spotter Catcher

This action requires that the developer engage a Fauna Spotter Catcher with full registrations and licences provided in accordance with the DES.

Action 2- Fauna Spotter Catcher to prepare a Wildlife Protection and Management Plan (WPMP)

The WPMP will include the following information:

- description of the project with reference to impacts on wildlife and wildlife habitat;
- pre-development plan of the site showing habitat areas, features, corridors, riparian habitats and adjacent areas;
- results of any fauna surveys including pre-clearance surveys; and
- a wildlife and habitat impact assessment based on the proposed development works.

Action 3- Prepare a Wildlife and Habitat Impact Mitigation Plan (WHIMP)

Following the completion of the WPMP, the Fauna Spotter Catcher will prepare a more detailed WHIMP, which will provide details on:

- measures required to be completed to minimise wildlife and habitat impacts during operational works;
- wildlife capture and removal plan;
- contingency plan for wildlife requiring euthanasia, other veterinary procedures or captive care;
- wildlife storage and housing plan;
- wildlife release and disposal plan; and
- post works measures to minimise impacts on wildlife.

Action 4 – Role of Fauna Spotter Catcher at Pre-Start Meeting

Prior to the commencement of any construction works, a pre-start meeting is to be held between the project manager, site foreperson, plant operators and Local Government representatives (if required). At the pre-start meeting, the Fauna Spotter Catcher is to outline the clearing process and the requirements of the WPMP.

Action 5 – During Construction

The Fauna Spotter Catcher is to be on-site during all phases of construction which involve potential impacts on wildlife or habitat. This will enable the Fauna Spotter Catcher to make any necessary adjustments to the WPMP to cater for any specific issues encountered during the clearing works.

Action 6 – Post Works Reporting (Wildlife Management Report)

During the course of all site works, including the pre-clearance surveys, the Fauna Spotter Catcher is to keep an accurate record of all animals encountered, captured, incidents and disposals for the project. The records

should form part of the post-works Wildlife Management Report to be issued under licence requirements to DES. The Wildlife Management Report should consist of the following three sections:

1. Wildlife Habitat Management Plan – Aspects of the planning, design, construction and ongoing operation of the project in which risks to wildlife have been identified. This plan should also include recommendations and outline the type, frequency and timeframes for monitoring
2. Wildlife Capture and Disposal Plan – Should contain the following details for each captured animals:
 - a. Species.
 - b. Identification name or number.
 - c. Sex (M, F or unknown).
 - d. Approximate Age or Age Class (neonate, juvenile, sub-adult, adult).
 - e. Time and date of capture.
 - f. Method of capture.
 - g. Exact point of capture (GPS coordinates).
 - h. State of health.
 - i. Incidents associated with capture likely to affect health.
 - j. Veterinary intervention or treatments.
 - k. Time held in captivity.
 - l. Disposal method (euthanasia, translocation, re-release).
 - m. Date and time of disposal.
 - n. Detailed of disposal (GPS points of release).
 - o. For released animals, location relative to point of capture.
3. Animal Injury and Euthanasia Report – similar details for the Wildlife Capture and Disposal Plan should be included in this report.

5.2.2 Vegetation Management / Sequential Clearing

Vegetation clearing over the development footprint will occur sequentially and most likely in accordance with an endorsed Vegetation Clearing and Management Plan and Fauna Management Plan (VCFMP) to be provided at the Operational Works phase. VCFMP's if required will detail fauna exclusion fencing to be erected around construction areas to prevent fauna from dispersing into these hostile areas.

Sequential clearing means the clearing of vegetation that:

- ensures any Koalas in the area being cleared have enough time to move out of the clearing zone without human intervention. For sites with an area of more than 3 ha, this means:
 - i. vegetation clearing is to be carried out in stages, where the total area to be cleared in any one stage:
 - is no greater than 50 % of the area of a site that is 6 ha or smaller;

- is no greater than 3 ha or 3 % of the area of a site that is larger than 6 ha.
 - ii. between each stage and the next, there is at least one 12-hour period commencing at 6 pm on one day and concluding at 6 am the following day, during which no trees are cleared on the site.
 - iii. no tree in which a Koala is present, or a tree with a crown overlapping a tree in which a Koala is present, is cleared until the tree is vacated by the Koala.
- ensures vegetation clearing is directed away from threatening processes, or hostile environments, and towards any retained vegetation or habitat links, ensuring that:
 - i. Koalas are not pressured, through loss of habitat, to cross roads or move through developed or disturbed areas, such as residential areas or areas that require movement of greater than 100 m over cleared ground to reach suitable habitat;
 - ii. Koalas are not isolated to an “island” of habitat between hostile environments, such as road and cleared areas, unless there are no other more suitable habitat areas in which to direct Koalas; and
 - iii. Koalas can safely leave the site of clearing and relocate to adjacent habitat through maintained habitat links.

The following additional controls for the appointed DES Fauna Spotter Catcher during vegetation clearing include:

1. No vegetation clearing is to commence or continue without the presence of the appointed DES endorsed Fauna Spotter Catcher.
2. All trees scheduled for removal will be checked on the day of their removal (prior to the start of operations) for the presence of Koalas by the appointed DES endorsed Fauna Spotter Catcher.
3. The appointed DES endorsed Fauna Spotter Catcher is responsible for ensuring, throughout the duration of the clearing operations, that no tree in which a Koala is present, or a tree with a crown overlapping a tree in which a Koala is present, or a tree identified as being a risk to Koalas, should not be felled, damaged or interfered with until the Koala has moved from the clearing zone on its own volition.
4. Where a Koala is present within a clearing zone, the tree will be marked with distinctive flagging (and other advisory means as required) and machinery operators will be briefed on the location of the area. No clearing works can occur within 20 m of the tree retaining a Koala until the animal has moved on via its own volition (where the strategy is to allow the Koala to move of its own accord, overnight). On the following day, the tree and retained area, are to be checked again prior to their removal. If necessary, the procedure is repeated until the Koala has moved.
5. In the event that the Koala is sick or injured and needs medical attention, DES will be contacted and trapping by the Fauna Spotter Catcher may be required to allow the Koala to receive medical attention. Actions will be guided by DES and the Fauna Spotter Catcher.

5.2.3 Adaptive Management and Management Strategy

An adaptive management strategy is to be applied to this KMP to enable it to alter as necessary to better protect Koala from injury or mortality if required. As a part of this strategy the following minimal protocols are to be applied in the event of koala injury or mortality as a result of clearing or construction:

1. Clearing and construction is immediately ceased.
2. The DES is notified in writing within 48 hours of the Koala injury or mortality occurring.
3. Measures for minimising impacts to Koalas as a result of clearing and construction are revised, in consultation with a suitably qualified person to reduce the likelihood of Koala injury or mortality before clearing and construction recommences.

6. Management activities

A number of management activities have been identified within this KMP and broadly explained through **Section 5. Table 3** provides environmental management commitments to be implemented during construction works. Specific details relevant to each management commitment are provided, including timing, funding, responsible parties, and monitoring to ensure each commitment can be achieved. Each suite of management activities is categorised into pre-construction, during construction and operational measures. This KMP will be reviewed annually, or at the completion of each phase of the project, and where necessary edited.

Table 3: Management Roles and Responsibilities

Environmental Management Commitment	Responsibility	Timing	Funding	Monitoring / Frequency
PRE-COMMENCEMENT MANAGEMENT ACTIONS				
1. Provide a copy of the KMP to all contractors and subcontractors, and retain a final copy at the construction office on-site, at all times.	Proponent to provide to principal contractor. Principal Contractor to all sub-contractors	As part of contractor appointment and throughout construction.	Contractor costs associated with action to be included in tender scope funded by Proponent.	Provision for supplying the KMP to the Principal Contractor will occur with contractual appointment. The Principal Contractor is responsible for providing evidence that each appointed sub-contractor has been provided the KMP.
2. Key KMP Criteria to be included on the Workplace Health and Safety and Environmental Management work method statement.	Prepared by the principal contractor as part of other site induction checklists	Checklist to be completed prior to commencement and issued as part of all site inductions.	Principal Contractor via Proponent	The site induction process requires all visitors and personnel at the site to read and acknowledge work method statements as part of a signed checklist. This is provided to and signed by each new entrant to the site as part of induction procedures.
3. Contractor will review project compliance with the KMP, on a monthly basis, if required.	Principal Contractor in their role as Superintendent for the project.	Monthly	Principal Contractor via Proponent	Review of compliance on a monthly basis. Any non-compliances must be reported immediately.

Environmental Management Commitment	Responsibility	Timing	Funding	Monitoring / Frequency
4. Engagement of DES approved Fauna Spotter Catcher - ensure Fauna Spotter Catcher retains all necessary licenses and accreditations.	Proponent (or as passed onto Principal contractor)	Before clearing commences on any stage of works and during construction including any post construction reporting.	Proponent	Pre-clearance report issued to the Environmental Coordinator prior to commencement of works. Fauna Spotter Catcher on site during all vegetation clearing works.
5. Develop Wildlife Protection and Management Plan (Prepared in accordance with elements of the Draft Queensland Code of Practice for the Welfare of Animals affected by Land Clearing).	Fauna Spotter Catcher	Before construction commences.	Proponent	Prior to commencement of clearing in any stage.
6. Develop Wildlife and Habitat Impact Mitigation Plan (Prepared in accordance with elements of the Draft Queensland Code of Practice for the Welfare of Animals affected by Land Clearing).	Fauna Spotter Catcher	Before construction commences.	Proponent	Prior to commencement of clearing in any stage
7. Attendance of Fauna Spotter Catcher at Pre-Start Meeting.	Fauna Spotter Catcher / Principal contractor	At the pre-start meeting clearing works.	Proponent	Fauna Spotter Catcher to confirm attendance.
8. Install temporary fauna exclusion fence or other suitable barrier around construction areas to prevent koala access into construction zone.	Contractors	After the clearing is completed and prior to construction occurring within the development area.	Proponent	Fence is to be monitored monthly by the Principal Contactor.
DURING CONSTRUCTION MANAGEMENT ACTIONS				

Environmental Management Commitment	Responsibility	Timing	Funding	Monitoring / Frequency
9. All clearing of koala habitat is to occur in a staged and sequential pattern enabling the directional flushing of native animals as guided by the suitably qualified Fauna Spotter Catcher.	Principal Contractor and or appointed clearing sub-contractor.	At the time of clearing works for each stage	Proponent	Staged and sequential clearing may also be guided by the VCFMP if conditioned. Monitoring occurs as part of pre-start and completion inspections if required by officers from CGC.
10. Stop works procedures for clearing vegetation supporting any Koalas until such time that any present Koalas vacate the vegetation or are relocated by a suitable qualified person.	Fauna Spotter Catcher / Principal Contractor and or appointed clearing sub-contractor.	During clearing no tree in which a Koala is present, or a tree with a crown overlapping a tree in which a Koala is present, or a tree identified as being a risk to Koalas, to be felled, damaged or interfered with until the Koala has moved from the clearing zone of its own volition.	Proponent	Where a Koala is present within a clearing zone, the tree will be marked with distinctive flagging (and other advisory means as required) and machinery operators will be briefed on the location of the area. No clearing works can occur within 20 m of the tree retaining a Koala until the animal has moved on via its own volition (where the strategy is to allow the Koala to move of its own accord, overnight). On the following day, the tree and retained area, are to be checked again prior to their removal. If necessary, the procedure is repeated until the Koala has moved. In the event the Koala is sick or injured and needs medical attention, DES will be contacted and trapping by the Fauna Spotter Catcher may be required to allow the Koala to receive medical attention.
11. A Post clearing and construction works Wildlife Management Report is to be prepared by the appointed Fauna Spotter Catcher at the completion of each stage of works - Prepared in accordance with elements of the Draft Queensland Code of Practice for the Welfare of Animals affected by Land Clearing.	Fauna Spotter/Catcher	Records to be kept during construction and final report submitted at completion of works	Proponent	Within 10 working days of the conclusion of each stage of clearing.