

# Compliance Report 02 – Beerburrum to Nambour Rail Upgrade Project, Queensland

EPBC 2020 / 8803

June 2023 - June 2024



Australian Government

**BUILDING AUSTRALIA**



Queensland Government

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# Document control options

## Departmental approvals

Refer to the appropriate Risk Assessment Tool for relevant reviewer and approver

Date	Name	Position	Action required (Review/endorse/approve)
13/05/2024	[redacted]	Senior Environmental Officer	Initial draft
12/06/2024	[redacted]	Senior Environmental Officer	Final issue

## Risk level

GACC major       GACC minor       High risk (but not GACC)       Medium risk

Prepared by	[redacted]
Title	Senior Environmental Officer
District & Region	North Coast Region
Branch & Division	Rail Infrastructure Delivery Office, Translink
Project/program	Beerburrum to Nambour Rail Upgrade
Project number	TMR: 858087 Commonwealth Approval Number: 097044-17QLD-NRP
Project location	Beerburrum
Status	Preconstruction and detailed design
DMS ref. no.	450/01766

## Proponent and approval action

EPBC reference number	2020/8803
Project name	Beerburrum to Nambour Rail Upgrade Project, Queensland
Proponent	Department of Transport and Main Roads
ABN	390 407 690 291
Proposed action	To upgrade the North Coast Line between Beerburrum and Nambour, including a new rail corridor and associated infrastructure, Queensland
Location of action	Between Beerburrum and Nambour, Queensland.
Reporting period	June 2023 - June 2024
Date prepared	12 June 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**

[redacted]

**Position**

Project Manager

**Organisation**

Department of Transport and Main Roads (ABN 39 407 690 291)

**Date**

12/06/2024

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# 1. Introduction

## 1.1 Purpose of this report

The Queensland Department of Transport and Main Roads (TMR) is completing a rail and infrastructure upgrade to the existing rail line between Beerburrum and Nambour, termed the Beerburrum to Nambour Rail Upgrade (hereafter referred to as "the project" or "the B2N project").

The project was referred to the Department of Environment in October 2020 for determination of whether the project was likely to have a significant impact on Matters of National Environmental Significance (MNES). Projects likely to cause a significant impact on MNES require approval under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). The project was deemed a controlled action in January 2021 and was approved, subject to conditions, on 25 February 2022 (reference number 2020/8803).

Condition 14 of the approval for EPBC 2020/8803 requires the approval holder (TMR) to prepare a compliance report for each 12-month period following the date of commencement of the Action. This report is the second annual compliance report for the project for the period 06 June 2023 to 06 June 2024.

This report has been prepared in accordance with DCCEEW annual compliance report guidelines.

## 2. Description of activity

### 2.1 Project location

The B2N project is located within the Sunshine Coast Council (SCC) Local Government Area. The project area is between Beerburrum and Nambour on the North Coast Rail Line, which is Queensland's major north-south rail corridor and the major freight and passenger route from Brisbane to the Sunshine Coast and Cairns.

The project alignment partially follows the existing rail corridor, however there are areas of road reserve, private property and State Forest that are affected where the alignment is outside the existing rail corridor. The total area of the project boundary is approximately 253 ha.

### 2.2 Description of the project

The scope of the B2N project includes rail duplication between Beerburrum and Landsborough and other infrastructure improvements, such as station upgrades and additional passing loops between Landsborough and Nambour.

The project will be delivered in three separate stages: early works, Stage 1 and Stage 2. A summary of each stage is provided below.

#### Early works

The early works package included:

- The expansion of the Nambour station park 'n' ride facility
- The expansion of the Landsborough station park 'n' ride facility
- Construction of a new bus interchange at Landsborough
- Realignment of a portion of Steve Irwin Way with associated public utility plant relocations.

## Stage 1

Stage 1 has been funded with detailed design commencing April 2023. Construction is scheduled to commence late 2024. Stage 1 includes:

- Road works to accommodate the new rail corridor and track infrastructure
- Public utility plant (such as Energex, Unitywater, Telstra and other service) relocations and other enabling works
- Duplication of the section of rail between Beerburrum and Glass House Mountains on an improved alignment, and between Glass House Mountains and Beerwah following the existing alignment
- Beerburrum Road and Steve Irwin Way intersection upgrade including a new road overpass on Beerburrum Road
- Replacement of the Barrs Road level crossing in Glass House Mountains with a new road overpass connecting Barrs Road to Moffatt Road
- Replacement of the Burgess Street road-over-rail bridge in Glass House Mountains with a new road overpass
- Expansion of the park 'n' ride facility on the northern side of Beerburrum station (partial)
- Re-signalling of the entire corridor from Beerburrum to the single-line section between Beerwah and Landsborough to meet minimum headway targets and permit bi-directional operation on all tracks
- Power systems upgrades required to facilitate the new track and capacity.

## Stage 2

Stage 2 is currently unfunded and timing for construction is unknown. Activities and scope pertaining to Stage 2 include:

- Duplication of the section of rail between Beerwah and Landsborough following the existing alignment
- Replacement of the Caloundra Street level crossing in Landsborough with a road-over-rail, grade-separated crossing
- Extension of existing passing loops at Landsborough, Eudlo and Woombye
- Expansion of park 'n' ride facilities at Beerburrum (remainder), Landsborough (remainder), Palmwoods and Nambour (remainder) stations
- Replacement of the temporary single platforms at Mooloolah, Eudlo, Palmwoods and Woombye stations with permanent dual platforms connected by lifts and overbridges
- Re-signalling of the corridor from Beerwah to Nambour with bi-directional 3 aspect signals including ATP and ETCS level 1 integration
- Public utility plant (such as Energex, Unitywater, Telstra and other service) relocations and enabling works.

**Figure 1** provides an overview of the project area.

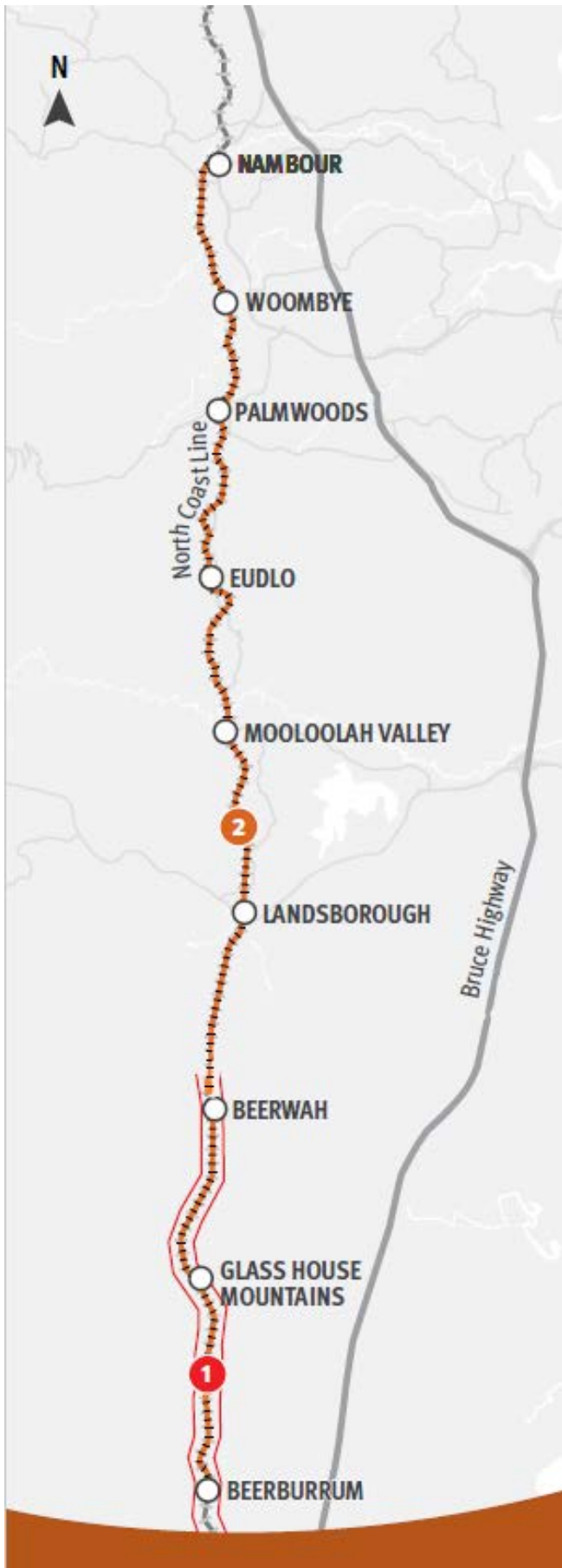


Figure 1 Beerburrum to Nambour Rail Upgrade Project area, with Stages 1 and 2 marked



## 2.3 Project status

The project will be delivered in three separate stages; early works, Stage 1 and Stage 2. Timeframes for the project stages are outlined in **Table 1** below.

**Table 1 Project status**

Construction stage	Start date	Completion date	Comments
Early works	06 June 2022	18 September 2023 (actual)	Early works package completed.
Stage 1 – current stage	2024	2027 (estimated)	Detailed design for Stage 1 commenced April 2023. Construction is scheduled to commence late 2024.
Stage 2	TBC	TBC	Stage 2 is currently unfunded and timing for construction is unknown.

## 2.4 Approval history

EPBC approval and approval documentation dates, compliance reporting dates and status of the annual compliance reports are provided in **Table 2** and **Table 3**.

**Table 2 EPBC approval dates**

Approval document	Comment	Date of decision	Expiry date
EPBC 2020/8803		25 February 2022	27 February 2052
Offset Area Management Plan (OAMP)	In development following consultation with DCCEEW		
Grey-headed Flying-fox Environmental Management Plan (GHFF EMP)	In development following consultation with DCCEEW		

**Table 3 Chronology of compliance reports**

Reporting dates	Report number	Status
June 2022 – June 2023	01	Completed
June 2023 – June 2024	02	Completed (this report)

## 3. Condition compliance

**Table 4** provides an overview of the approval conditions and project compliance status. Where additional information is required, reference has been made to relevant sections of this report for further evidence of compliance.

NOTE: **Table 4** provides a summary of compliance relevant to the project status as outlined in **Table 1**.

**Table 4 Summary of compliance with EPBC Act approval conditions**

No.	Condition	Status	Is the project compliant with this condition?	Evidence / Comments
1.	To minimise impacts to the Koala and Grey-headed Flying-fox, the approval holder must not clear more than 64.15 hectares (Ha) of Koala habitat and Grey-Headed Flying-fox foraging habitat within the development area. The approval holder must not clear outside the development area.	Ongoing	Compliant	A post construction clearing audit on 10 October 2023 confirmed a total of 2.27Ha of mapped Koala and Grey-headed Flying Fox habitat was cleared as part of early works.  Clearing outside the approved EPBC boundary has not occurred as demonstrated by the as-constructed clearing survey attached as Appendix A.
2.	To minimise the risk of injury or death to Koalas and Grey-headed Flying-foxes within the development area during clearing and construction, the approval holder must: a) ensure that a suitably qualified fauna spotter catcher is present during all clearing, and given sufficient authority to ensure that Koalas and Grey-headed Flying-foxes have safely moved out of the area of works of their own volition before Koala habitat and Grey-headed Flying-fox foraging habitat is cleared;	Ongoing	Compliant	This requirement was included within contract documentation and within the Construction Contractor's Environmental Management Plan (Construction).  No additional vegetation clearing occurred within the reporting period.  No Koalas or Grey-headed Flying-foxes were identified during clearing works.
	b) clear in accordance with the Nature Conservation (Koala) Conservation Plan 2017 under the Nature Conservation Act 1992 (Qld) so as to enable Koalas to safely move into connected areas of Koala habitat when moving out of clearing areas;	Ongoing	Compliant	This requirement was included within the contract documentation and within the Construction Contractor's Environmental Management Plan (Construction).  No vegetation clearing occurred within the reporting period.
	c) immediately after clearing and prior to the commencement of construction, install temporary Koala exclusion fencing between any area of Koala habitat and any area of construction works. Temporary Koala exclusion fencing must extend beyond any Koala habitat and construction by a minimum of 50 metres. Temporary Koala exclusion fencing must remain in place between Koala habitat and any construction area until all construction activities adjacent to the temporarily fenced area are completed.	Ongoing	Compliant	Approximately 380m of temporary Koala exclusion fencing was installed immediately after clearing, adjacent to a section of mapped Koala habitat along a portion of the Steve Irwin Way realignment. Evidence of the temporary fence was provided within Compliance Report 01.  Temporary fencing remained in place until the completion of permanent Koala fencing either side of the fauna underpass underneath Steve Irwin Way. Photographs depicting the permanent Koala exclusion fence were provided within Compliance Report 01.

<p>3. For the ongoing protection of Grey-headed Flying-fox populations, the approval holder must:</p> <p>a) Submit an Environmental Management Plan (EMP) for the Minister's approval that, to the satisfaction of the Minister, details avoidance and mitigation measures to manage the impacts from clearing and construction on Grey-headed Flying-fox roosts;</p>	<p>In development</p>		<p>On 21 July 2023, TMR submitted an Environmental Management Plan for protection of Grey-headed Flying-Fox populations for approval by the Minister. The plan is in review.</p>
<p>b) Prepare the EMP in accordance with the Environmental Management Plan Guidelines;</p>	<p>In development</p>		<p>On 21 July 2023, TMR submitted an Environmental Management Plan for protection of Grey-headed Flying-Fox populations for approval by the Minister. The plan is in review.</p>
<p>c) not commence clearing or construction in the areas represented in Attachment A by the zones enclosed by the lines designated 'EPBC Stage 1 Main Works Boundary' and 'EPBC Stage 2 Boundary' identified by the aqua and green boundaries respectively, unless the Minister has approved the EMP in writing; and</p>	<p>Ongoing</p>	<p>Compliant</p>	<p>Clearing and construction works within EPBC Stage 1 Main Works Boundary and EPBC Stage 2 Boundary have not commenced.</p> <p>Refer to Appendix A, identifying areas of construction that have been limited to the early works boundary within the approved development area only.</p>
<p>d) implement the approved EMP until the completion of the Action.</p>	<p>Yet to commence</p>		
<p>4. For the ongoing protection of the local Koala population within the development area and to provide Koala habitat connectivity throughout the landscape that maintains or improves on pre-construction east-west fauna connectivity in the development area, the approval holder must, in addition to installing and maintaining safe movement solutions at the locations identified as 'fauna movement corridors' in Attachment A:</p>			
<p>a) not create or allow any breaks in contiguous Koala habitat except where safe movement solutions that allow corridor connectivity for the Koala have been installed prior to the completion of construction and are maintained for the life of the approval;</p>	<p>Ongoing</p>	<p>Compliant</p>	<p>Safe movement solutions including a fauna underpass and Koala-proof fencing have been installed as part of early works.</p> <p>Aerial and field photographs provided within Compliance Report 01 demonstrated that the safe movement solutions were installed prior to opening the section of Steve Irwin Way road realignment to public motorists.</p> <p>The safe movement solutions have been uploaded into TMR's Environmental Asset Register and have been incorporated into TMR's inspection and maintenance program.</p>
<p>b) install safe movement solutions prior to opening any road to public motorists, where the presence of Koalas is known or expected. Safe movement solutions as listed in Table 8 and/or Table 6 of Attachment B with listed low effectiveness must only be used when in conjunction with safe movement solutions of moderate and/or high effectiveness;</p>	<p>Ongoing</p>	<p>Compliant</p>	<p>Safe movement solutions including a fauna underpass and Koala-proof fencing have been installed as part of early works.</p> <p>Aerial and field photographs provided in Compliance Report 01 demonstrated that the safe movement solutions were installed prior to opening the section of Steve Irwin Way road realignment to public motorists.</p>

	c) prior to opening the road to public motorists, install prominent Koala awareness signage consistent with Queensland's wildlife signing guidelines on any road where the presence of Koalas is known or expected and the likelihood of Koala vehicle strike is possible or more likely than possible;	Ongoing	Compliant	2 x Koala awareness signs were installed on 6 July 2023 as part of the safe movement solutions for the early works. Appendix B contains field photographs of the installed sign.  The section of Steve Irwin Way road realignment was opened to public motorists on 14 August 2023.
	d) complete baseline weed surveys in each stage prior to the commencement of construction or clearing in each stage, and within one month of the completion of baseline weed surveys, submit the baseline weed survey results to the department;	Ongoing	Compliant	A baseline weed survey was completed for the early works construction area on 22 – 23 March 2022 and provided to the Department on 19 April 2022. The baseline weed survey and evidence of compliance was provided within Compliance Report 01.
	e) ensure that within 12 months of construction or clearing commencing in each stage and until the completion of the Action, weed cover within each stage where construction or clearing has commenced remains less or no worse than that of the baseline weed surveys and must not restrict the movement of the Koala; and	Ongoing	Compliant	A post construction weed survey was completed for the early works construction area on 23 October 2023. The post construction weed survey is provided in Appendix C.  The report noted a reduction in weed quantity when compared to the original 2022 baseline weed survey and the 2023 annual report provided within Compliance Report 01.
	f) within each stage where construction or clearing has commenced, complete annual monitoring of weed cover consistent with the baseline weed surveys, with the results to be included in each annual compliance report or as otherwise requested in writing by the Minister.	Ongoing	Compliant	Results of the 12-month annual weed survey for the early works construction area was provided in Compliance Report 01.
5.	The approval holder must submit an Offset Area Management Plan (OAMP) for the Minister's approval that, to the satisfaction of the Minister, compensates for the significant residual impact of clearing 64.15 ha of Koala habitat and Grey-Headed Flying-fox foraging habitat within the development area. The OAMP must, to the satisfaction of the Minister, meet the requirements of the Environmental Offsets Policy and the Environmental Management Plan Guidelines, and must include:  a) environmental objectives, relevant EPBC Act protected matter/s and a reference to EPBC Act approval conditions to which the OAMP refers;  b) a table of commitments to achieve the environmental objectives, and a reference to where the commitments are detailed in the OAMP;  c) reporting and review mechanisms, and documentation standards to demonstrate compliance with the OAMP;  d) details of the nature and timing of the mechanism to legally secure the offset site/s;	In development		On 21 July 2023, TMR submitted an Offset Area Management Plan for approval by the Minister. The plan is in review.

e) an assessment of risks to achieving environmental objectives and risk management strategies that will be applied, including contingency measures and their timing; and

f) a monitoring program to be undertaken by a suitably qualified field ecologist, which must include:  
 i. measurable performance indicators;  
 ii. trigger values for corrective actions;  
 iii. the timing and frequency of monitoring to detect trigger values and changes in the performance indicators; and  
 iv. proposed corrective actions, if trigger values are reached.

6.	The approval holder must implement the approved OAMP for the life of the approval.	Yet to commence		
7.	The approval holder must not commence clearing or construction in the areas represented in Attachment A by the zones enclosed by the lines designated 'EPBC Stage 1 Main Works Boundary' and 'EPBC Stage 2 Boundary' identified by the aqua and green boundaries respectively, unless the Minister has approved the OAMP in writing.	Ongoing	Compliant	Clearing under this reporting period has been restricted to the approved EPBC boundary for the early works only, as demonstrated by the post construction clearing survey attached as Appendix A.
8.	Within 20 business days of legally securing the offset site/s identified within the approved OAMP, the approval holder must provide the department with legal security documentation demonstrating that the offset site/s identified within the approved OAMP has/have been legally secured, accompanied by shapefiles and the offset attributes.	Yet to commence		
9.	The approval holder must notify the Department in writing of the date of:  a) commencement of the Action within 10 business days after the date of commencement of the Action; and  b) the commencement of works in each stage, within 10 business days after the date of the commencement of works in the particular stage.	Completed	Compliant	Email notification was provided to the Department on 7 June 2022, stating the commencement of the Action/construction works within the approved EPBC early works Boundary on 6 June 2022. Refer Compliance Report 01.
		Ongoing	Compliant	Early works – completed. Refer Compliance Report 01. Stage 1 – Yet to commence Stage 2 – Yet to commence
10.	The approval holder must maintain accurate and complete compliance records.	Ongoing		

11.	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.	Yet to commence		
12.	The approval holder must:			
	a. submit plans electronically to the Department for approval by the Minister	Initiated		The OAMP and Grey-headed Flying-fox EMP were submitted to the Department on 21 July 2023 and are currently in review.
	b. publish each plan on the website within 20 business days of the date the plan is approved by the Minister or of the date a revised Action management plan is submitted to the Minister or the Department, unless otherwise agreed to in writing by the Minister			
	c. exclude or redact sensitive ecological data from plans published on the website or provided to a member of the public			
	d. keep plans published on the website until the end date of this approval.			
13.	The approval holder must ensure that any monitoring data (including sensitive ecological data), surveys, maps and other spatial and metadata required under conditions of this approval, is prepared in accordance with the Department's Guidelines for biological survey and mapped data (2018) and submitted electronically to the Department in accordance with the requirements of the plan.	Ongoing	N/A	
14.	The approval holder must prepare a compliance report for each 12-month period following the date of commencement of the Action, or otherwise in accordance with an annual date that has been agreed to in writing by the Minister. The approval holder must:	Ongoing	Compliant	This is the second annual compliance report and will cover the period of 6 June 2023 to 6 June 2024.
	a. publish each compliance report on the website within 60 business days following the relevant 12-month period	Ongoing	Compliant	The first annual compliance report (6 June 2022 – 6 June 2023) was published to the TMR website on 18 August 2023. Evidence of compliance will be provided within the third annual compliance report.
	b. notify the Department by email that a compliance report has been published on the website and provide the weblink for the compliance report within 5 business days of the date of publication	Ongoing	Compliant	Notification to the Department relevant to Compliance Report 01 (6 June 2022 – 6 June 2023) was provided via email on 18 August 2023. Evidence of compliance for this report will be provided within the third annual compliance report.

	c. keep all compliance reports publicly available on the website until this approval expires	Ongoing	Compliant	This compliance report, along with past and future compliance reports will be published and remain available on TMR's project webpage ( <a href="https://www.tmr.qld.gov.au/projects/beerburrum-to-nambour-rail-upgrade-stage-1">https://www.tmr.qld.gov.au/projects/beerburrum-to-nambour-rail-upgrade-stage-1</a> ) with contingency for continued publication online when the project webpage is taken offline in future.
	d. exclude or redact sensitive ecological data from compliance reports published on the website	Ongoing	N/A	Sensitive ecological data (as defined in the Australian Government Department of the Environment (2016) <i>Sensitive Ecological Data – Access and Management Policy</i> ) has not been included within this compliance report.  No information shall need to be excluded or redacted from the compliance report that will be published on TMR's project webpage ( <a href="https://www.tmr.qld.gov.au/projects/beerburrum-to-nambour-rail-upgrade-stage-1">https://www.tmr.qld.gov.au/projects/beerburrum-to-nambour-rail-upgrade-stage-1</a> )
	e. where any sensitive ecological data has been excluded from the version published, submit the full compliance report to the Department within 5 business days of publication.	Ongoing	N/A	Not applicable for this annual report.
15.	The approval holder must notify the Department in writing of any: incident; non-compliance with the conditions; or non-compliance with the commitments made in plans. The notification must be given as soon as practicable, and no later than two business days after becoming aware of the incident or non-compliance. The notification must specify:	Ongoing	Compliant	There have been no incidents or non-compliance with any conditions of the EPBC approval within this reporting period.
	a. any condition which is, or may be, in breach	Ongoing	N/A	
	b. a short description of the incident and/or non-compliance	Ongoing	N/A	
	c. the location (including co-ordinates), date and time of the incident and/or non-compliance. In the event the exact information cannot be provided, provide the best information available.	Ongoing	N/A	
16.	The approval holder must provide to the Department the details of any incident or non-compliance with the conditions or commitments made in plans as soon as practicable and no later than 10 business days after becoming aware of the incident or non-compliance, specifying:	Ongoing	Compliant	There have been no incidents or non-compliance with any of the conditions of the EPBC approval within this reporting period.
	a. any corrective action or investigation which the approval holder has already taken or intends to take in the immediate future	Ongoing	N/A	
	b. the potential impacts of the incident or non-compliance	Ongoing	N/A	
	c. the method and timing of any remedial action that will be undertaken by the approval holder.	Ongoing	N/A	

17.	The approval holder must ensure that independent audits of compliance with the conditions are conducted for the 36-month period from the date of commencement of the Action and for every subsequent 36-month period until the completion of the Action, or as otherwise requested in writing by the Minister.	Yet to commence
18.	<p>For each independent audit, the approval holder must:</p> <p>a. provide the name and qualifications of the independent auditor and the draft audit criteria to the Department</p> <p>b. only commence the independent audit once the audit criteria have been approved in writing by the Department</p> <p>c. submit an audit report to the Department within the timeframe specified in the approved audit criteria.</p>	Yet to commence
19.	The approval holder must publish the audit report on the website within 10 business days of receiving the Department's approval of the audit report and keep the audit report published on the website until the end date of this approval.	Yet to commence
20.	Within 30 days after the completion of the Action, the approval holder must notify the Department in writing and provide completion data.	Yet to commence



## **4. Conclusion**

This report has been prepared to fulfil condition 14 of Approval 2020/8803 and demonstrate the Department's compliance from June 2023 to June 2024.

Since the commencement of the Action there have been no incidents or non-compliance.

## **5. List of appendices**

- A. Post construction clearing survey
- B. Safe movement solutions
- C. Post construction weed survey

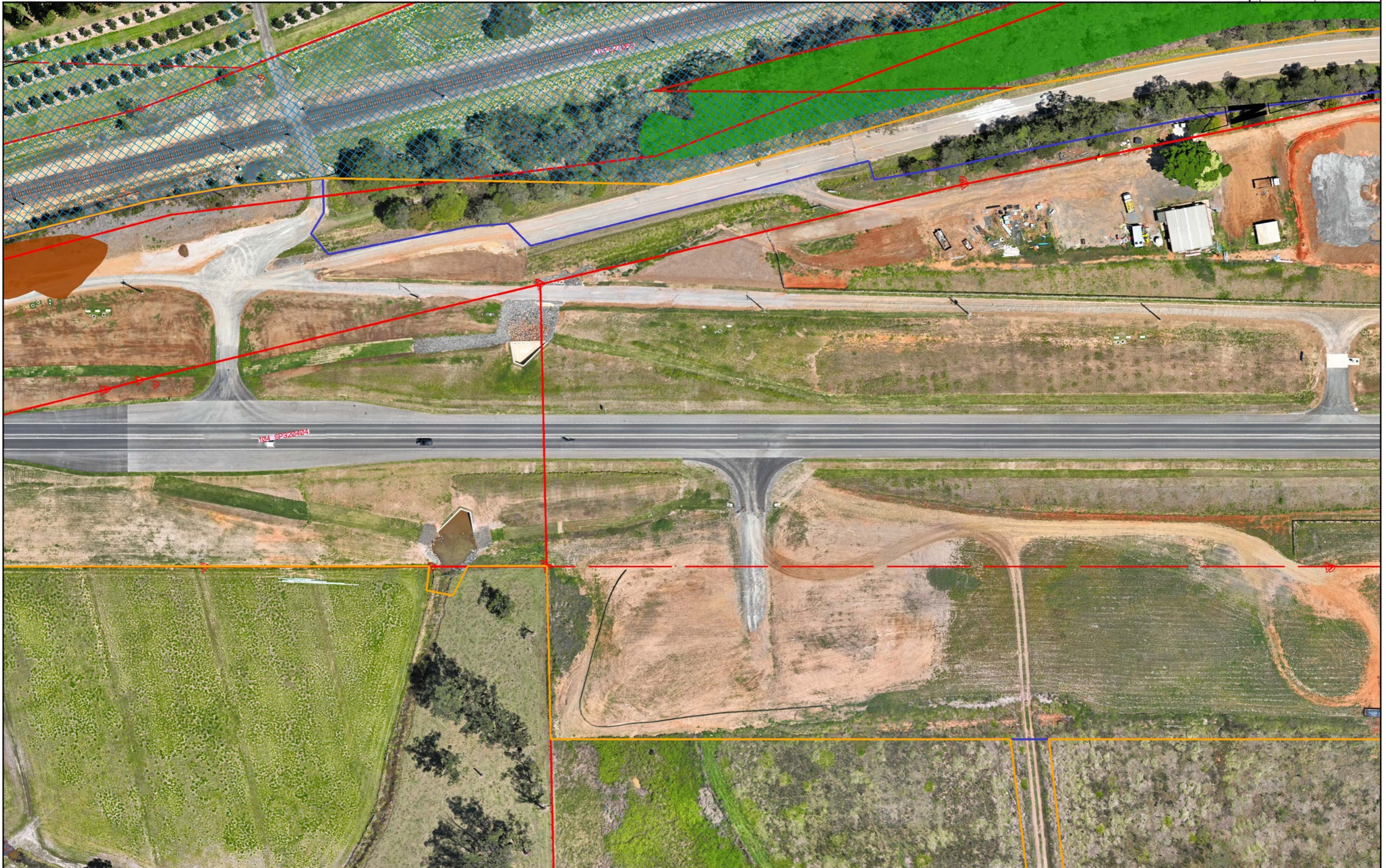
# **Appendix A**

Early works - Post construction clearing survey

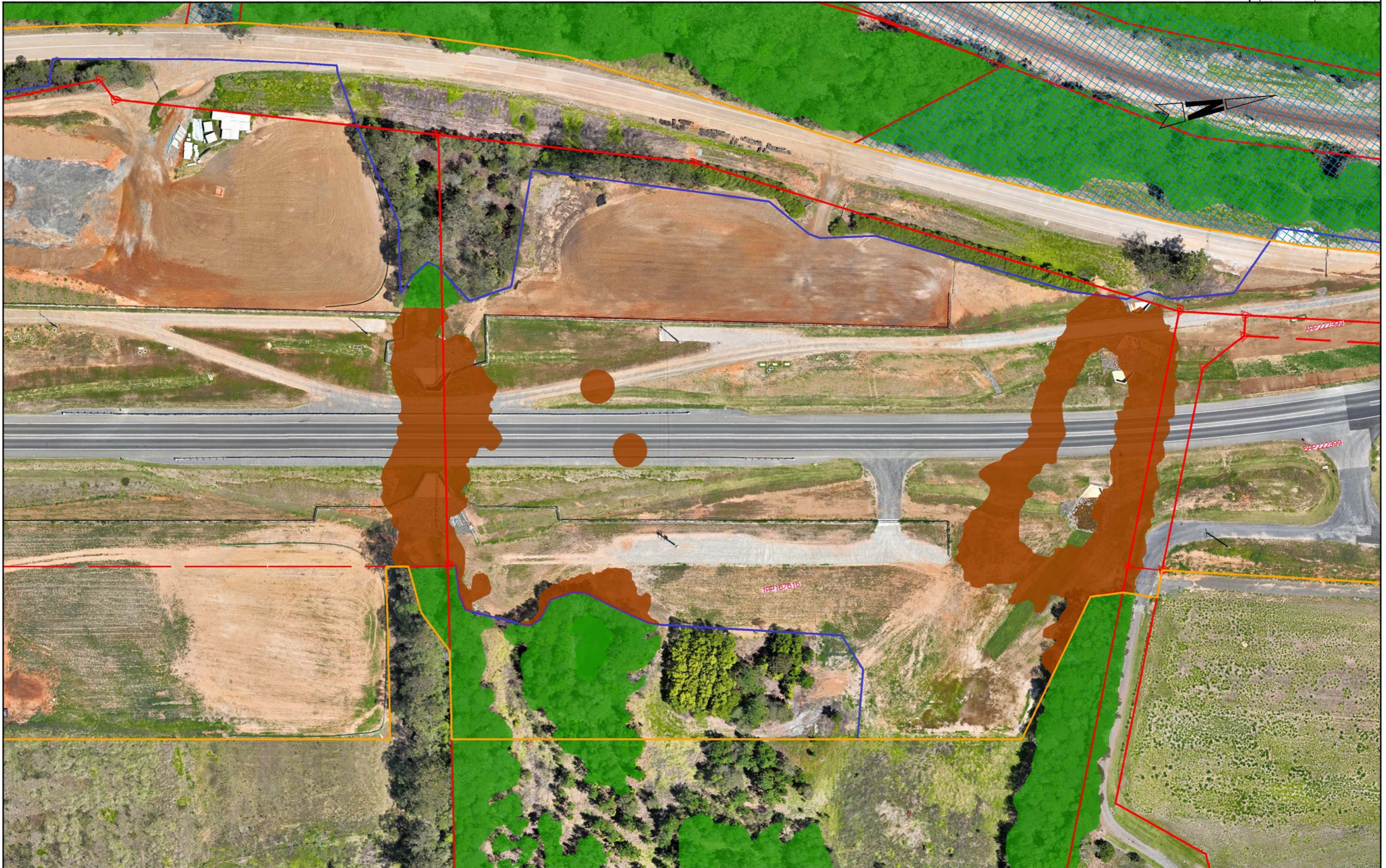


LEGEND		
Object	Description	Area
	B2N Early Works EPBC Boundary	
	Total Cleared Area (10 October 2023)	16.7Ha
	Koala/ GHFF Habitat- cleared	2.27Ha
	Koala/ GHFF Habitat- Remain	
	Cadastral Boundaries	
	EPBC Stage 1 Main Works	

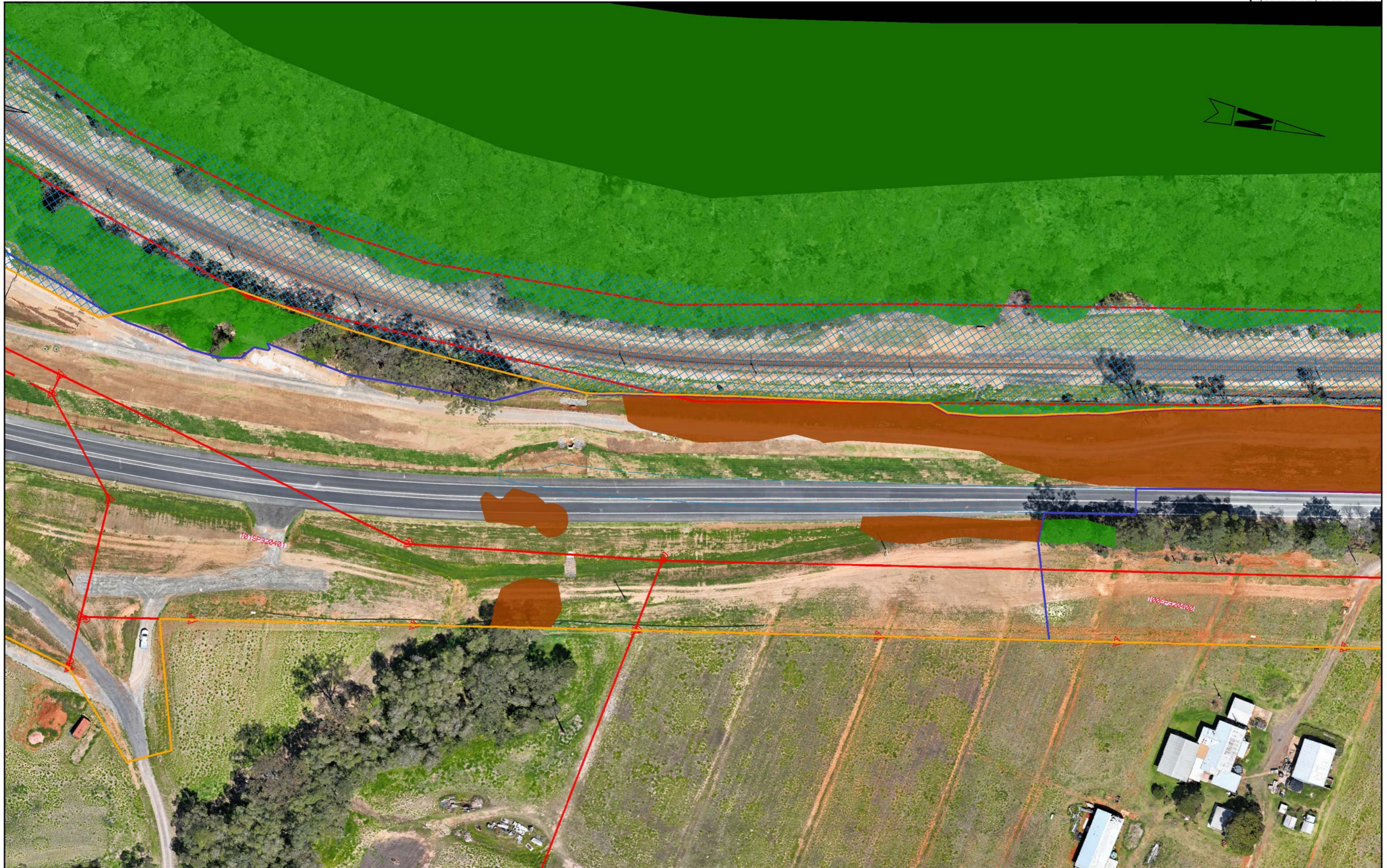
Revisions		Certified	Date	Microfiled	Associated Job Nos	Survey Data		Scales		As-Constructed Clearing				SURVEY PLAN		
						Horiz. Datum	GDA2020			Orthophoto Plot				B2N Early Works - Steve Irwin Way		
					Auxiliary Drg Nos	Horiz. Grid		Horizontal 1: 1000 Vertical 1: 1000		Imagery date 10/10/2023				Captured By		Surveyor Responsible / /
						Height Datum	AHDD	Reference Points Preceding RP    Dist. to start of job (km)    From start to end of job    From end to Following RP    Following RP		Processed By				/ /		
A		Original Issue A3			SRV Project	SIW Construction		Dimensions in Metres except where shown otherwise		Gazetted Chainage from					Job No. Contract No. Drawing No. SV 1 of 6 Series Number	
File Names										to				MRS_GDA2020_A3 (07/2021)		



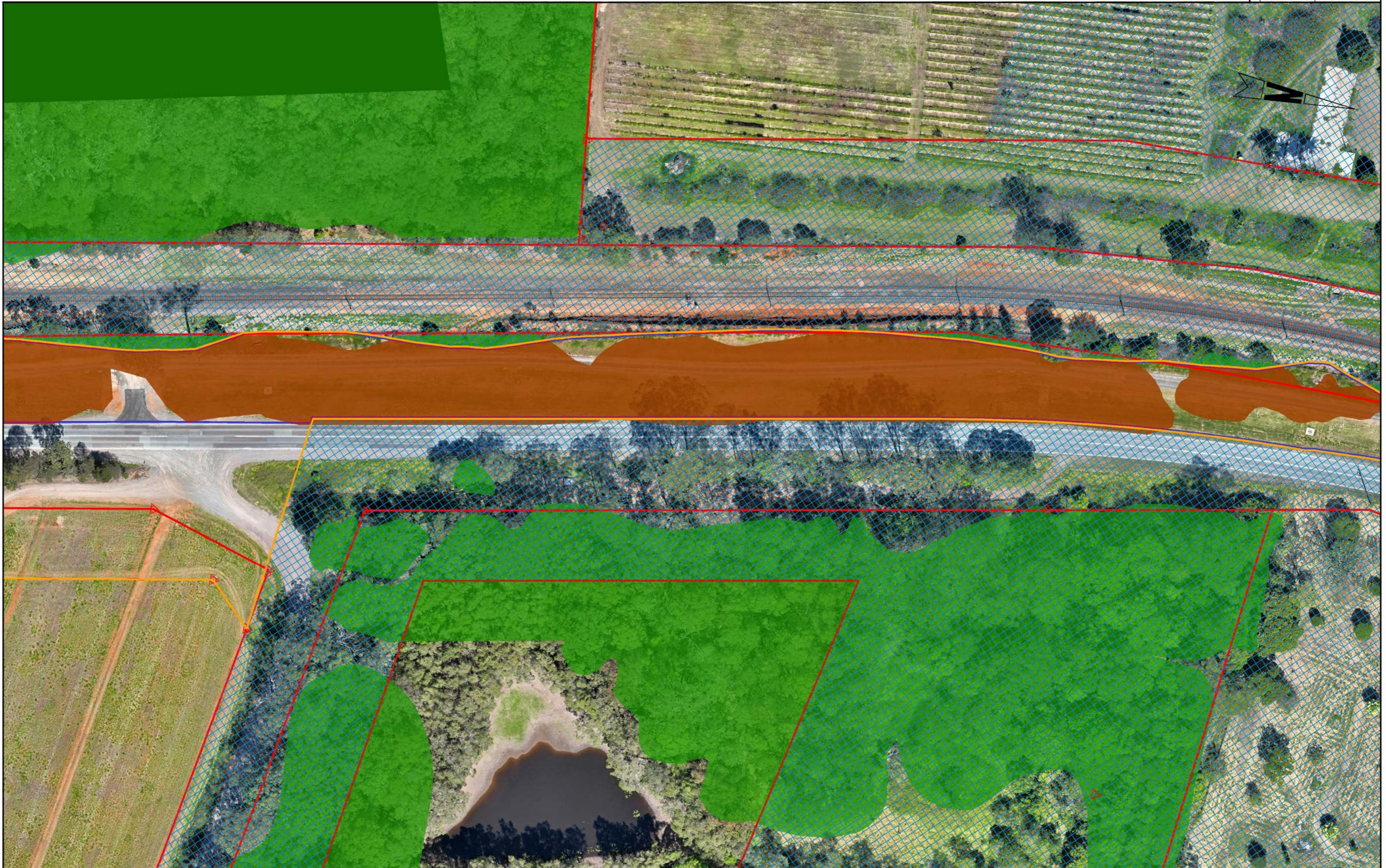
Revisions		Certified	Date	Microfilmed	Associated Job Nos	Survey Data		Scales		As-Constructed Clearing Orthophoto Plot Imagery date 10/10/2023					SURVEY PLAN B2N Early Works - Steve Irwin Way				
						Horiz. Datum	GDA2020	Horizontal 1: 1000 Vertical 1: 1000		Reference Points					Captured By		Surveyor Responsible		Job No.
					Auxiliary Drg Nos	Horiz. Grid				Preceding RP    Dist. to start of job (km)    From start to end of job    From end to Following RP    Following RP					/ /		/ /		Contract No.
						Height Datum	AHDD			Gazetted Chainage from    to					/ /				Drawing No.
A		Original Issue A3				Survey Books		Dimensions in Metres except where shown otherwise											Series Number
File Names					SRV Project	SIW Construction													SV 2 of 6
																			MRS_GDA2020_A3 (07/2021)



Revisions		Certified	Date	Microfied	Associated Job Nos		Survey Data		Scales		As-Constructed Clearing				SURVEY PLAN					
							Horiz. Datum: GDA2020 Horiz. Grid: Height Datum: AHDD Survey Books:		Horizontal: 1: 1000 Vertical: 1: 1000 Dimensions in Metres except where shown otherwise		Orthophoto Plot Imagery date 10/10/2023 Reference Points				B2N Early Works - Steve Irwin Way					
A Original Issue A3											Preceding RP    Dist. to start of job (km)    From start to end of job    From end to Following RP    Following RP				Captured By / / Surveyor Responsible / / Processed By / /				A MRS_GDA2020_A3 (07/2021)	
File Names		SRV Project		SIW Construction						Gazetted Chainage from to										



Revisions		Certified	Date	Microfiled	Associated Job Nos		Survey Data		Scales		As-Constructed Clearing				SURVEY PLAN			
							Horiz. Datum	GDA2020	Horizontal 1: 1000		Orthophoto Plot				B2N Early Works - Steve Irwin Way			Job No.
					Auxiliary Drg Nos		Horiz. Grid		Vertical 1: 1000		Imagery date 10/10/2023				Captured By		Contract No.	
							Height Datum	AHDD	Reference Points		Preceding RP				Surveyor Responsible		Drawing No.	
							Survey Books		From start to end of job				Processed By		Series Number		SV 4 of 6	
A		Original Issue A3					Dimensions in Metres except where shown otherwise		Gazetted Chainage from to						MRS_GDA2020_A3 (07/2021)		A	
File Names		SRV Project		SIW Construction														



Revisions		Certified	Date	Microfiled	Associated Job Nos		Survey Data		Scales		As-Constructed Clearing				SURVEY PLAN		
							Horiz. Datum	GDA2020			Orthophoto Plot				B2N Early Works - Steve Irwin Way		
					Auxiliary Drg Nos		Horiz. Grid		Horizontal 1: 1000 Vertical 1: 1000		Imagery date 10/10/2023				Captured By		Contract No.
							Height Datum	AHDD	Reference Points		Preceding RP    Dist. to start of job (km)    From start to end of job    From end to Following RP    Following RP				Surveyor Responsible		Drawing No.
A							Survey Books		Dimensions in Metres except where shown otherwise		Gazetted Chainage from    to				Processed By		Series Number
File Names					SRV Project	SIW Construction									SV5 of 6		A
															MRS_GDA2020_A3 (07/2021)		



Revisions		Certified	Date	Microfiled	Associated Job Nos	Survey Data		Scales		As-Constructed Clearing					SURVEY PLAN			
						Horiz. Datum	GDA2020		Horizontal	Orthophoto Plot					B2N Early Works - Steve Irwin Way			
					Auxiliary Drg Nos	Horiz. Grid				Vertical	Imagery date 10/10/2023					Surveyor Responsible		
						Height Datum	AHDD			Reference Points					Captured By			Drawing No.
						Survey Books				Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP	Processed By			Series Number
A		Original Issue A3																SV 6 of 6
File Names		SRV Project		SIW Construction		Dimensions in Metres except where shown otherwise		Gazetted Chainage from		to							MRS_GDA2020_A3 (07/2021)	



# **Appendix B**

Early works - Safe movement solutions

# Appendix B

Early works - Safe movement solutions  
- Koala awareness signs installed 6 July 2023

Date & Time: Thu, 06 Jul 2023 at 12:23:04 AEST  
SIW Koala signs erected



# **Appendix C**

Early works – Post construction weed survey



# Final Weed Survey Report

Beerburrum to Nambour (B2N) Railway Upgrade Project

Steve Irwin Way

**Report Prepared for Hall Contracting**

23 October 2023



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## LEGISLATION

Under the **Biosecurity Act 2014** are biosecurity measures to safeguard our economy, agricultural and tourism industries, environment and way of life, from:

- pests (e.g., wild dogs and weeds)
- diseases (e.g., foot-and-mouth disease)
- contaminants (e.g., lead on grazing land).

Under the Act, the **Biosecurity Regulation 2016** sets out how the Act is implemented and applied. Biosecurity is everyone's responsibility, and we must all play a role to ensure we minimise biosecurity risks to protect Queensland's lifestyle, industries and environment from pests and diseases. All Queenslanders have a general biosecurity obligation (GBO) under Queensland's **Biosecurity Act 2014** to ensure you do not spread a pest, disease or a contaminant.

## STATEMENT OF QUALIFICATION

Biodiverse Environmental is a certified Scientific Research and Fauna Spotter Catcher service provider under the NCA and an independent environmental consultancy with appropriate experience to undertake fauna trapping, handling, research and management, environmental and ecological surveying and reporting, along with land, conservation, ecosystem and fire management activities in accordance with federal, state and local laws and regulations.

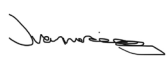


The staff at Biodiverse Environmental are passionate about environmental management and are respected leaders in their field. Our project managers and ecologists are experienced practitioners in flora, fauna and environmental management projects and hold degrees in Science, Environmental Science, Wildlife Biology, Animal Management, Horticulture whilst also possessing numerous industry qualifications.

Biodiverse Environmental field staff possess the relevant qualifications and certifications to ensure exceptional project delivery and adherence to safety on site to themselves and others including Construction White Cards, 4x4 Driving, ACDC Licences, First Aid Certificates, current vaccination status for Lyssa Virus, Venomous Snake Handling Certificates, Chainsaw Certificates, Working at Heights and Confined Spaces Qualifications and various government, infrastructure certifications and inductions.

## LICENCES AND ACCREDITATIONS

Biodiverse Environmental holds a Ground Distribution Contractor Licence (Licence Number GDC228935) granted to the company by the Department of Agriculture and Fisheries under the *Agricultural Chemicals Distribution Act 1966*. This licence authorises Biodiverse Environmental to carry out the business of ground distribution of herbicides.

## DOCUMENT CONTROL

<b>Our Reference</b>	PR0594		
<b>Document Title</b>	PR0594-Hall-B2N-FinalWSR-20231023		
<b>Revision</b>	0		
<b>Prepared by</b>	[redacted] Environmental Officer		16/11/2023
<b>Reviewed by</b>	[redacted] Director/Principal Ecologist		16/11/2023
<b>Approved by</b>	[redacted] Director/Principal Ecologist		16/11/2023

## ACKNOWLEDGEMENTS

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# 1. INTRODUCTION

## 1.1. Purpose

This report gives details of the final weed survey carried out by Biodiverse Environmental for Hall Contracting on the 23<sup>rd</sup> of October 2023. Works involved surveying the site located at Steve Irwin Way for the Beerburrum to Nambour (B2N) Rail Upgrade project. Biodiverse Environmental conducted the baseline weed survey on the 23<sup>rd</sup> - 24<sup>th</sup> of March 2022 and the follow-up weed survey on the 13<sup>th</sup> and 17<sup>th</sup> of February 2023.

The purpose of this report is to demonstrate compliance with Section 10.1 MRTS51.1 Principal identified Biosecurity Matters within the Site and/or specific management requirements (Clause 8.12.2) of (ref: EPBC2020/8803) where it requires:

“Ensure that within 12 months of construction or clearing commencing and until final construction completion, weed cover within the approved EPBC Early Works footprint remains less or no worse than that of the baseline weed surveys and must not restrict the movement of the Koala; and

Complete annual monitoring of weed cover consistent with the baseline weed surveys, with the results to be included in the Monthly Environmental Report at the completion of the 12-month period, or otherwise requested in writing by the principal.”

Baseline weed survey/s are defined as “surveys conducted by a suitably qualified field ecologist for weeds in accordance with a scientifically valid, robust, and repeatable methodology to determine the extent of weed cover (expressed as a percentage) of the total land area in which any square metre containing weed species known to restrict the movement of Koala and/or degrade the quality of Koala habitat and/or Grey-headed Flying fox foraging habitat, or its ability to regenerate.”

As per the EPBC Approval, weeds mentioned in this report are species identified within the Weeds of National Significance (WoNS) and species listed under the *Biosecurity Act 2014*.

## 1.2. Background

The Beerburrum to Nambour Rail Upgrade (B2N) project involves upgrades of the rail line between Beerburrum and Nambour. The scope of the B2N project includes rail duplication between Beerburrum and Landsborough and other infrastructure improvements. The scope of this report encompasses the site at Steve Irwin Way which is known as the EPBC Early Works footprint.

Hall Contracting engaged Biodiverse Environmental to conduct a final weed survey within the planned development corridor to determine the contemporary presence of weeds in comparison to the baseline and follow-up weed surveys.

## 1.3. Relevant Documents

The following documents were consulted prior to undertaking the weed survey:

- Annexure MRTS51.1 (March 2022) Environmental Management CN-14137
- Approval Beerburrum to Nambour Rail Upgrade Project (EPBC 2020/8803)
- Previous weed survey reports prepared by Biodiverse Environmental



## 1.4. Suitably Qualified Persons

Weed survey services were conducted by Biodiverse Environmental's Ecologist [redacted] who has three [3] years' experience as an Ecologist and in conducting flora and fauna surveys, as well as formal qualifications in conservation and land management.

## 2. SITE LOCATION

The weed survey was undertaken along Steve Irwin Way, Glasshouse Mountains Queensland, within the EPBC Early Works footprint, approved under the EPBC Act, reference: EPBC 2020/8803 (**Figure 1**).

The site consists of highly modified environments, previously impacted by weeds due to past land uses and associated disturbances. The site was extensively cleared throughout the 1960s for agriculture, viticulture, and transportation (road & rail) corridors, and is largely mapped as non-remnant vegetation.

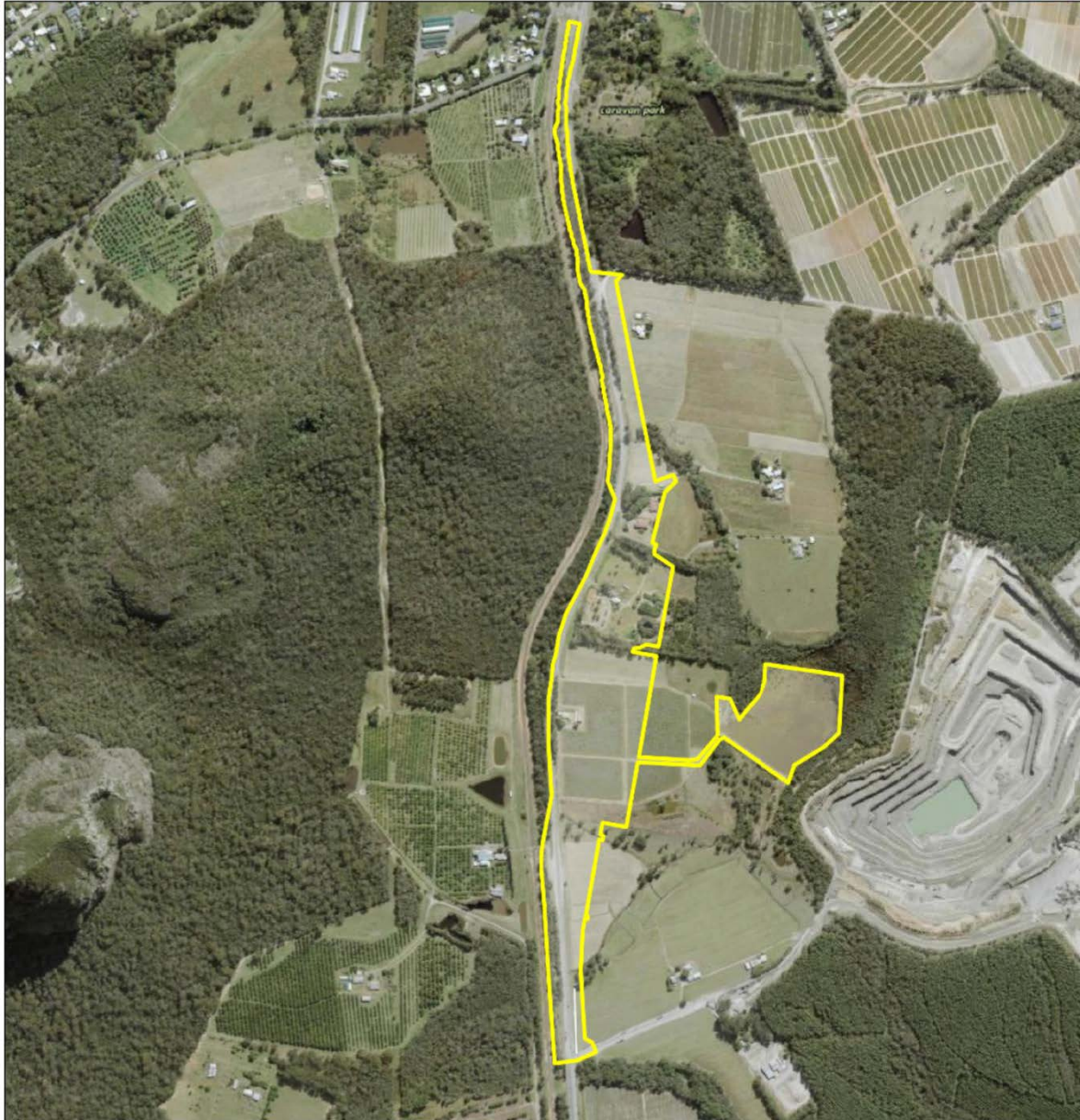
Historic Ecological Vegetation Classes (EVCs) present included RE12.3.4 *Melaleuca quinquenervia*, *Eucalyptus robusta* woodland on coastal alluvium and RE12.3.5 *Melaleuca quinquenervia* open forest on coastal alluvium.

### EPBC Early Works footprint

reference: EPBC 2020/8803

26°54'42"S 152°56'45"E

26°54'42"S 152°58'5"E



26°55'56"S 152°56'45"E

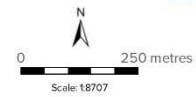
26°55'56"S 152°58'5"E

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#### LEGEND:

EPBC Early Works footprint boundary



Printed at: A3  
Print date: 8/4/2022  
Projection: Web Mercator: EPSG 102100 (3857)  
For more information, visit <https://qdglobe.information.qld.gov.au/help-info/Contact-us.html>



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**Figure 1. Map of site location along Steve Irwin Way (EPBC Early Works footprint boundary)**

### 3. SURVEY METHODOLOGY

The weed survey was conducted within the EPBC Early Works footprint area at the Site on the 23<sup>rd</sup> of October 2023. The target weed species for this survey included WoNS, and prohibited and restricted weeds listed as invasive plants under the *Biosecurity Act 2014*.

The meander survey method was considered the most appropriate field assessment method for the weed survey. Using the site maps, the site was systematically traversed on foot and by vehicle, and invasive weed species within the project boundary were identified, recorded, and photographed. The survey included a tracked GPS recording of survey areas traversed (**Figure 2**). Photographs were also taken of vegetation characteristics of each area surveyed and are provided in **APPENDIX I**. The data was then compiled to produce a list of invasive species on site and a map of areas (**Table 1** and **Figure 3**).

Weed hygiene protocols were followed prior to arriving and after leaving site to reduce the risk of weed seed spread. The vehicle taken onto Site was thoroughly washed down before entering. Driving through vegetated areas was avoided where possible to avoid contact with weeds. After conducting the surveys, all equipment, clothes, and boots were brushed down prior to leaving site. A thorough vehicle wash down was conducted upon returning to base.

### 4. RESULTS

Two [2] restricted invasive species *Lantana camara* (Lantana) and *Sphagneticola trilobata* (Singapore daisy) were observed within the planned project area. These include one [1] shrub and one [1] ground cover.

#### **Area A (5% weed cover):**

Small patches of *Lantana camara* (Lantana) and *Sphagneticola trilobata* (Singapore daisy) were observed in Area A where native tree species such as Eucalypts and Melaleucas are present.

#### **Area B (0% weed cover):**

No invasive species present in this area.



#### **Area D (0% weed cover):**

No invasive species present in this area.

#### **Area F (0% weed cover):**

No invasive species present in this area.

**Table 1. Weed species identified and recorded within the EPBC Early Works footprint boundary**

Weed observation ID	01		Photograph/s
<b>Weed Species</b>	<i>Lantana camara</i> (Lantana)		
<b>Biosecurity Status</b>	<u>Queensland Listing</u> Prohibited: Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Restricted: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	<u>Other Listing</u> WoNS: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Local Govt: Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Other: Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
<b>GPS Coordinates</b>	-26.92315, 152.95780		
Weed observation ID	02		Photograph/s
<b>Weed Species</b>	<i>Sphagneticola trilobata</i> (Singapore daisy)		
<b>Biosecurity Status</b>	<u>Queensland Listing</u> Prohibited: Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Restricted: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	<u>Other Listing</u> WoNS: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Local Govt: Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Other: Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
<b>GPS Coordinates</b>	-26.92356, 152.95743		

26°54'42"S 152°56'57"E

26°54'42"S 152°58'15"E



26°55'51"S 152°56'57"E

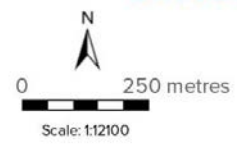
26°55'51"S 152°58'15"E

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**LEGEND:**

Final weed survey tracks



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 Print date: 7/11/2023  
 Not suitable for accurate measurement.  
 Projection: Web Mercator EPSG 102100 (3857)  
 For more information, visit  
<https://qldglobe.information.qld.gov.au/help-info/Contact-us.html>

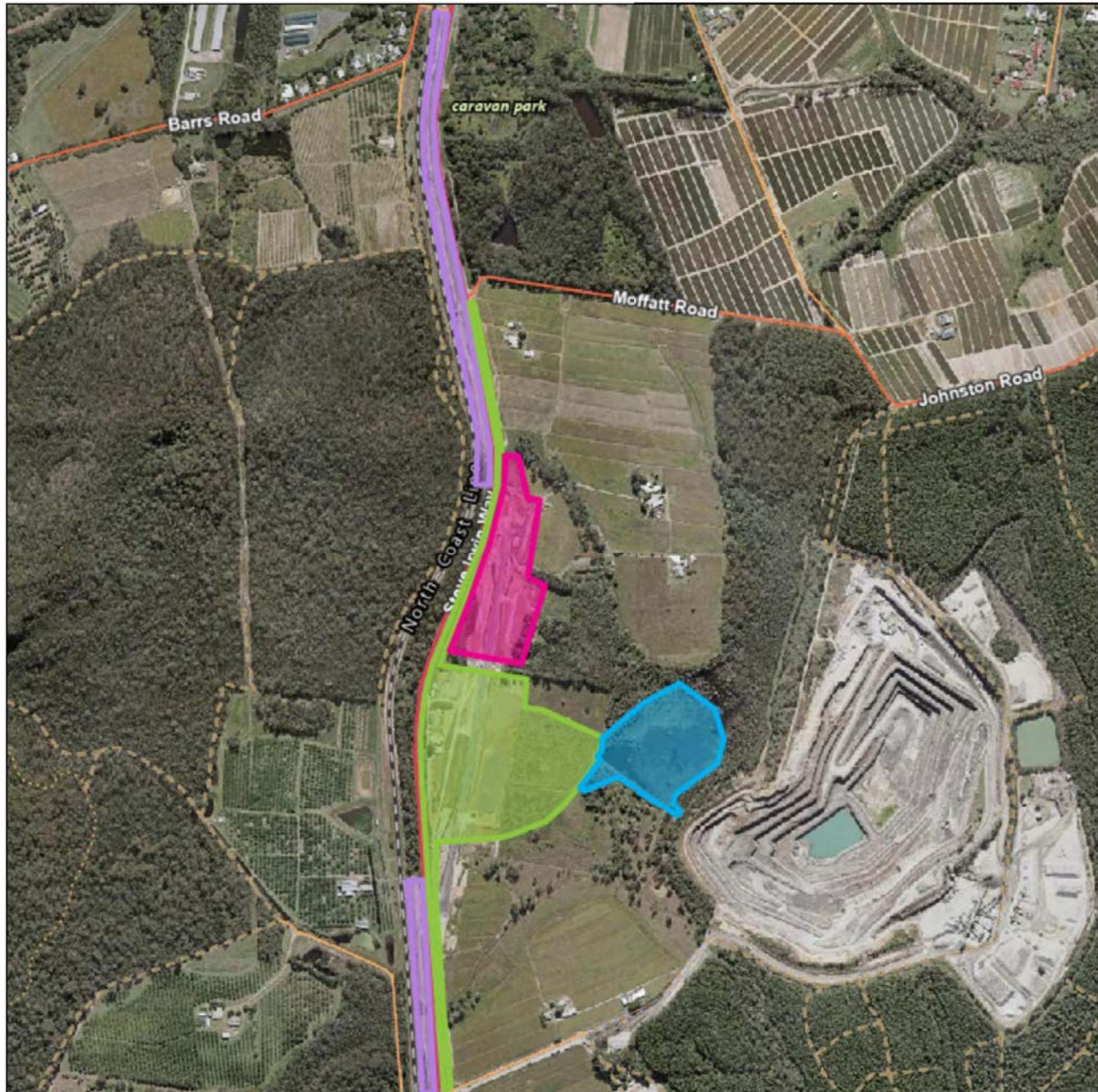


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**Figure 2. Final weed survey tracks within the EPBC Early Works footprint boundary**

26°54'42"S 152°56'57"E

26°54'42"S 152°58'14"E



26°55'51"S 152°56'57"E

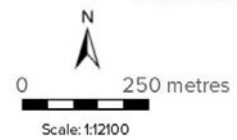
26°55'51"S 152°58'14"E

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**LEGEND:**

- Area A
- Area B
- Area D
- Area F



Printed at: A4  
 Print date: 7/11/2023  
 Not suitable for accurate measurement.  
 Projection: Web Mercator EPSG 102100 (3857)  
 For more information, visit  
<https://qldglobe.information.qld.gov.au/help-info/Contact-us.html>



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**Figure 3. Final weed survey areas within the EPBC Early Works footprint boundary**

## 5. DISCUSSION AND RECOMMENDATIONS

There were two [2] restricted invasive species, *Lantana camara* (Lantana) and *Sphagneticola trilobata* (Singapore daisy), identified and recorded within the Site as listed under the *Biosecurity Act 2014*, with all species classified as Category 3 Restricted Matter. Under the *Biosecurity Act 2014*, Category 3 Restricted Invasive Plants must not be given away, sold, or released into the environment. One [1] invasive species identified (*Lantana camara*) is also regarded as a Weed of National Significance (WoNS).

The percentage of weed coverage within the approved EPBC Early Works footprint was observed as between 0 – 5% during the final weed survey. The percentage of weed coverage has reduced significantly and remains less than that of the baseline and follow-up weed surveys. The reduction in weed coverage percentage is due to the weed treatment, clearing and road surface construction that has occurred since the baseline survey was conducted.

The potential for Koala and Grey-headed Flying Fox movement throughout the site is minimally inhibited by patches of Lantana and Singapore daisy. It is recommended weed control works occur to treat the remaining small patches of restricted invasive species within the Site. All weed control is to be performed by ACDC licenced bush regenerators as well as the company holding a Ground Distribution Licence. All bush regeneration works are to be conducted in accordance with the South-East Queensland Ecological Restoration Framework, using label and off label permits where chemical application is required and in accordance with the chemical safety data sheets.

### Recommendations:

- Weed treatment of all restricted invasive weeds.
- Ongoing weed control activities during construction.
- Awareness of biosecurity obligations during site inductions.
- Restrict site access near weeds until there is evidence of herbicide uptake.
- Restrict movement of machinery to avoid contact with any weed areas or stockpiles.
- Implementation of weed hygiene protocols and washdown procedures.
- Continued monitoring and treating any emerging weeds as they arise as construction works progress.

## APPENDIX



**Figure 4. Area A**



**Figure 5. Area B**





**Figure 6. Area D**



**Figure 7. Area F**