

EGLINTON ESTATES

COMPLIANCE REPORT (EPBC 2010/5777) 4 NOVEMBER 2022 TO 3 NOVEMBER 2023

Prepared for: Eglinton Estates Pty Ltd

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ENVIRONMENTAL

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1 INTRODUCTION

1.1 Background

The Eglinton Estates Pty Ltd (Eglinton Estates) landholding is located 45km north-west of the Perth Central Business District (Figure 1). The landholding is being developed in accordance with a Local Structure Plan approved by the Western Australian Planning Commission.

In December 2010, the eastern portion of the Eglinton Local Structure Plan Area was referred to the Department of Sustainability, Environment, Water, Population and Communities (now known as the Department of Agriculture, Water and Environment (DAWE)) for approval under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). In January 2011, the proposal (EPBC 2010/5777) was deemed a controlled action under the EPBC Act, requiring assessment and approval under that Act. The controlling provisions were identified as Listed Threatened Species and Communities (Sections 18 and 18a).

On 30 April 2013 the Minister for the Environment approved the clearing of approximately 298ha of native vegetation for the urban development of Lot 1007 and the eastern portion of Lot 1008 Pipidinny Road, Eglinton, WA (Appendix 2). The approval was subject to 15 conditions relating to the action undertaken at Eglinton. The Graceful Sun-moth conservation status was downgraded in June 2013 and the DAWE issued a variation on the approval removing the conditions related to the Graceful Sun-moth (Appendix 3).

Eglinton Estates requested a variation to the approval conditions 12 and 13 in correspondence dated 25 May 2015. The variation was approved by the DAWE in accordance with the provisions of the EPBC Act on 20 October 2015 (Appendix 4). The original conditions 12 and 13 were replaced with new conditions.

Eglinton Estates is the approval holder of the EPBC Act approval (EPBC 2010/5777). The company that has taken action on behalf of the proponent to date is Stockland WA Developments Pty Ltd (Stockland).

The Public Transit Authority (PTA) has undertaken clearing and construction works in the Yanchep Rail Extension corridor and in the vicinity of the future Eglinton Station both of which are in the EPBC approval area (Figure 2).

Eglinton Estates sold Lot 5001 to Peet 2018 No. 1 Pty Ltd (Peet) in 2019. The eastern portion of Lot 5001 is in the EPBC approval area (Figure 2). Peet will be taking the action on Lot 5001 and is responsible for acting in accordance with the EPBC approval. Peet have provided a report on action taken in the EPBC approval area during the reporting period.

Eglinton Estates sold Lot 801 Marmion Avenue to Lonnegal Property Pty Ltd (Lonnegal) in December 2021. Lot 801 is in the EPBC approval area (Figure 2). Lonnegal will be taking action on Lot 801 and is responsible for acting in accordance with the EPBC approval.

A section 143 was submitted to the DAWE on 28 September 2018 to vary the EPBC 2010/5777 conditions to reflect the change in ownership and Approval Holder for Lot 5001. It now incorporates

the change in ownership and Approval Holder for Lot 801. Once the variation is approved the EPBC approval will be split across the superlots and the responsibility for compliance will then be transferred to the relevant proponents as the approval holder for each area.

As the Section 143 is currently in the process of being approved, Eglinton Estates is still the Proponent for Lot 5001 and Lot 801 and are therefore responsible for annual compliance reporting. Woodsome Management Pty Ltd is the overall project manager for the Eglinton Project and is authorised on behalf of the proponent (Eglinton Estates) to submit the Compliance Assessment Report and the Declaration of Accuracy (Appendix 1).

1.2 Purpose of this Document

This report has been prepared to satisfy Condition 3 of the EPBC 2010/5777 approval which requires the preparation of an annual Compliance Report. The reports provide an update on the progress of the project actions including conditions that have been fulfilled and conditions that remain ongoing.

1.3 Reporting Period

The reporting period is dated from 4 November 2022 to 3 November 2023. This Compliance Report will be made available to the public within 3 months of the reporting period (4 February 2024).

This report was prepared in January 2024 and is the tenth Compliance Report.

1.4 Revisions to Terminology

The following revisions to terminology have been provided:

- The WA Department of Parks and Wildlife (DPaW) is now known as the Department of Biodiversity, Conservation and Attractions (DBCA);
- The WA Office of the Environmental Protection Authority (OEPA) is now known as the EPA Services - Department of Water and Environmental Regulation (DWER);
- The area under development at Eglinton is known as 'Amberton';
- Lot 5001 that was purchased by Peet is known as 'Elavale';
- The area referred to POS Area AA in Attachment A of the EPBC 2010/5777 approval notice is also referred to as POS 7;
- Lot 801 that was purchased by Lonnegal and is known as 'Eglinton Village'; and
- The Department of Agriculture, Water and the Environment (DAWE) is now the Department of Climate Change, Energy, the Environment and Water (DCCEEW).

1.5 Key Dates

The following key dates have been provided:

- EPBC Approval Date – approved 30 April 2013 (Appendix 2);
- Variation to Approval Conditions – approved 17 July 2013 (Appendix 3);
- Commenced action - 4 November 2013;
- Commenced clearing in CBC habitat – 9 January 2014 (see Plate 1 Landgate Aerial Photography dated 29 January 2014);

- Condition 12 Clearing Revegetation Management Plan (CRMP) – approved 8 November 2013;
- Condition 10 Conservation Management Plan – approved 23 July 2014;
- First EPBC Compliance Report submitted to the Department - 10 December 2014;
- Variation to Approval Conditions 12 and 13 - approved 20 October 2015 (Appendix 4);
- Revised CRMP lodged with the Department - 22 December 2015;
- Funds have been provided to the DPaW for the purchase of an additional offset site in accordance with Condition 13 - 21 January 2016;
- 2016 Compliance Report was approved by the Department on the 25 February 2016;
- CRMP was approved by the Department on 9 May 2016;
- The Eglinton Local Structure Plan (LSP) Amendment 1 was approved by the Western Australian Planning Commission on 17 November 2017. The amendment recognises the EPBC Conservation Areas;
- 2017 Compliance Report was approved by the Department on the 29 June 2018;
- Variation to Approval Condition 10(b) approved 25 October 2018 (Appendix 5)
- 2018 Compliance Report was received by the Department on the 5 February 2019;
- Revisions to the Conservation Management Plan and Clearing and Revegetation Management Plan – approved by the Department on 5 June 2019 (Appendix 6);
- Section 143 to change the conservation POS area AG (conditions 9, 11, 12, 14, Attachments A, B and Attachment D) – approved by the Department 17 June 2019 (Appendix 6);
- Lot 5001 purchased by Peet in February 2019 (entity is Peet 2018 No.1 Pty Ltd), EPBC approval over Lot 5001 has remained with Eglinton Estates;
- The PTA cleared the Perth Yanchep Rail corridor through the EPBC approval area in 2020;
- 2019 Compliance Report was received by the Department on 4 February 2020;
- Revegetation at sites 1a and 1b at Yellagonga Regional Park were considered to have met the completion criteria in Year 2020 and Spring flora monitoring of quadrats would not be required in Year 2021;
- 2020 Compliance Report was received by the Department on 4 February 2021;
- Peet has commenced work on Stage 1 and 2 of the Elavale development which is partially in the EPBC approval area. 4. ha has been cleared in the EPBC approval area in 2021 in accordance with the EPBC approval and CRM, no clearing has occurred adjacent to the conservation area AH;
Flora and vegetation monitoring was undertaken in accordance with the Eglinton CMP on 23 September 2021 in conservation area AH;
- Eglinton Estates cleared two small areas adjacent to the rail corridor for storage of fill for future use and cleared and extended interface between the future development and rail corridor to facilitate construction levels.
The total area of clearing was approximately 13.1ha and was in accordance with the EPBC approval and CRMP;
- Lot 801 was purchased by Lonnegal, EPBC approval over Lot 801 has remained with Eglinton Estates.
- 2021 Compliance Report was sent to the Department on 3 February 2022.
- Revegetation of Areas 1a and 1b of Yellagonga Regional Park have been completed.
- UXO search of Lot 801 completed by September 2022 (Plate 2).

- Flora and Vegetation Monitoring was undertaken in Spring 2023 in the three EPBC conservation areas in accordance with the Conservation Area Management Plan.
- Construction of Eglinton Village (Lot 801) commenced in this reporting period in accordance with the EPBC approval.
- Construction (PTA) of the Perth Yanchep Rail and Eglinton Station continued in this reporting period.
- Construction has continued to progress in Elavale (Lot 5001) during the reporting period with clearing of approximately 6ha outside of the EPBC 2010/5777 area.

Plate 1: Landgate Aerial Photography dated 29 January 2014



Plate 2: Landgate Aerial Photography dated 30 October 2023



1.6 Declaration of Accuracy

The declaration of accuracy is provided at Appendix 1.

2 REVISIONS TO CONDITIONS OF APPROVAL AND MANAGEMENT PLANS

2.1 Variation Request Sale of Super Lots 5001 and 801

Eglinton Estates sold Lot 5001 to Peet (entity is Peet 2018 No.1 Pty Ltd). The eastern portion of Lot 5001 is in the EPBC approval area. Lot 801 was sold to Lonnegal, all of which is in the eastern part of the approval area. The Section 143 request to split the approval to each proponent is progressing but has not been finalised.

Peet is responsible for taking the action on Lot 5001 in accordance with the EPBC approval and Lonnegal for Lot 801. The splitting of the approval is anticipated to be authorised in the 2022 to 2023 Compliance Period.

2.2 Future Variation Requests

The development has not progressed to the point that conservation areas will be transferred within ten years of the substantial commencement in accordance with the updated Condition 10(b)

*within 10 years of the **substantial commencement** of the action, the person taking the action must provide the **department** with written evidence, including certificates of title, that the 'POS Conservation' areas (marked in green in Attachment A) have been transferred to the City of Wanneroo for the purpose of conservation.*

Condition 10(b) is being addressed in the section 143 variation that is currently with DCCEEW. The proposed rewording is as follows:

“Before 2035, or within 12 months after the conservation area has been ceded to the Crown, the person taking the action will provide the department with written evidence, including certificates of title, that the POS Conservation areas have been ceded to the Crown.”

3 CURRENT STATUS

3.1 Project Description

The project area subject to EPBC approval 2010/5777 is shown in Plate 1. The extent of clearing within the referral area to October 2023 (last flown aerial available on Landgate Map Viewer Plus) is shown in Plate 2 and Figure 2.

Stockland is delivering the urban development project known as Amberton at the southern end of the Eglinton development.

The Amberton development will deliver the following:

- Residential Lots;
- Commercial Precinct;
- Schools;
- District and Local Public Open Space (recreational and drainage functions); and
- Conservation Public Open Space.

The PTA is constructing the Yanchep Rail Extension from Butler to Yanchep which will include the Eglinton Station. A portion of the works is located in the EPBC approval area. The works include construction of the rail, station, associated access roads, earthworks outside of the rail corridor associated with the rail alignment and a temporary carriage turning yard. The Yanchep Rail Extension works are partly in land owned by the PTA and partly land owned by Eglinton Estates. All works undertaken by PTA are in accordance with the EPBC approval and the construction works are guided by a Construction Environmental Management Plan as supplied in the 2021-2022 Compliance Report.

Peet is continuing earthworks and development of Elavale for residential lots, public open space and associated infrastructure. The change in ownership and responsibility for compliance with EPBC 2010-5777 has been addressed in the above sections 2.1.

Lonnegal is continuing construction of Eglinton Village on Lot 801 for residential lots, public open space and associated infrastructure. The change in ownership and responsibility for compliance with EPBC 2010-5777 has been addressed in the above sections 2.1.

3.2 Current Project Activities

During this reporting period the construction of Phase 1, 2 and 3 of Amberton has continued in the south-west corner of the referral area. Figure 2 shows the EPBC approval area in October 2023.

The following tasks have been undertaken during the reporting period:

- Annual spring monitoring and reporting of the permanent quadrats in Conservation POS areas AE, AG (Appendix 7) and AH (Appendix 5 of Appendix 7) as identified in Figure 2.
- Implementation of the Eglinton CRMP has continued (see section 5 for implementation status)
 - Revegetation of sites 2 and 3 in Yellagonga Regional Park commenced in 15 June 2022 and will be reported in the 2023 Compliance Report; and

- Ongoing weed control has been undertaken throughout the reporting period.
- CBC foraging species have been used in street plantings at Amberton;
- Dust curtains have been maintained by the PTA adjacent to conservation area POS AG and by Peet around the Elavale development (Plate 3); and
- Firebreaks were maintained in the EPBC approval area.

Plate 3: Dust Curtin around Elavale



Annual monitoring of the revegetation in Yellagonga Regional Park Sites 1a and 1b Monitoring Report was concluded after six years monitoring. Meetings with DBCA concluded with site 1a and 1b being handed back to DBCA. The 1.8m fence around sites 1a and 1b that was constructed prior to revegetation has been taken down. The existing farm fence has been left in place on the west, south and east sides. DBCA has constructed new fencing along the northern side of the lot adjacent to Whitfords Ave.

Site 1a and 1b will have two additional years of weed control, that will conclude in the next reporting period (August 2024). The DBCA are now responsible for managing the sites 1a and 1b.

Annual monitoring in Yellagonga Regional Park revegetation sites 2 and 3 commenced in this reporting period.

3.3 Project Activity Year 2024

Stockland and Eglinton Estates will not be undertaking any clearing in the EPBC area in the next reporting period.

Development in Elavale (Peet) will continue with clearing of 7ha adjacent to the conservation area AH in the next reporting period. Peet will be undertaking all ongoing works in accordance with the CRMP

and CMP. Compliance with the management plans will be monitored by Peet's Environmental Consultant in consultation with Eglinton Estates and PGV Environmental.

Development on Lot 801, east of Marmion Ave will continue in the next reporting period (Plate 2). Subdivision works will include bulk earthworks, road and lot construction which will require clearing of Black Cockatoo habitat.

Construction works continued in the Yanchep Rail Extension and Eglinton Station project which traverses the EPBC approval area, however, no additional clearing was undertaken in this monitoring period. These works are being undertaken by the PTA and will be in accordance with the EPBC 2010/5777 approval, the CMP and the CRMP. Implementation of CMP management actions along the interface of Conservation Area AG and the eastern boundary of the rail reserve will be maintained to protect the conservation area from construction works .

Revegetation works on sites 2 and 3 in Yellagonga Regional Park will continue in accordance with the CRMP in the next reporting period.

Final weed control program will conclude on sites 1a and 1b in August 2024.

Implementation of the listed tasks in section 3.2 will continue in Year 2023.

4 COMPLIANCE

4.1 Compliance Assessment Method

An audit of the Eglinton project was conducted on 23 January to 1 February 2024 to facilitate the assessment of compliance against EPBC 2010/5777 Approval Conditions and the implementation of required management plans (CMP and CRMP). The audit was conducted PGV Environmental.

The following provided information during the audit:

- PGV Environmental;
- Eglinton Estates;
- Peet; and
- JBS&G - Environmental Consultants to Peet.

The terminology used during the audit to define the level of compliance is listed below:

1. **Compliant:** Implementation of the proposal has been carried out in accordance with the requirements of the audit.
2. **Not Applicable/Not Required:** The requirements of the audit element were not triggered during the reporting period or were no longer applicable to the reporting period.
3. **Partially non-compliant:** Implementation of the proposal has been partially implemented, however has not been carried out in accordance with all of the requirements of the audit element.
4. **Non-compliant:** Implementation of the proposal has not been carried out in accordance with the requirements of the audit element.
5. **Complete:** The condition has been fulfilled.

The information reviewed, and the evidence obtained during this audit has been presented within the Compliance Audit Table (Table 1), along with additional information gathered during a desktop study/investigation.

4.2 Compliance Audit Table

The section 143 variation approved by the DAWE on 17 June 2019 resulted in a change to conditions 3, 9, 11, 12 and 14 and Attachments A, B and D to the approval. The conditions have been updated accordingly in the Compliance Audit Table.

The Compliance Audit Table has been updated to reflect compliance with conditions during the reporting period (Table 1).

Table 1: EPBC 2010/5777 Compliance Audit Table

(note: for each EPBC Condition listed below, the reference to attachments relates the actual EPBC Approval 2010/5777 document that is appended to this report as Appendix 2).

EPBC 2010/5777 Approval	Comment	Evidence	Requirement	Verification Method	Status
EPBC Condition 1	<i>Within 30 days after the commencement of the action, the person taking the action must advise the department in writing of the actual date of commencement.</i>				
1.1 Submission of written advice from Eglinton regarding commencement within 30 days of the commencement of action	Letter sent on 13 August 13 informing DAWE that commencement was likely in November 2013. Letter sent to DAWE on 11 Feb 2014 informing actual commencement date of 4 Nov 2013.	Documents 10007_136_BH (2) 10007_162_BH V2	Evidence of advice to DAWE	Sighting of the written advice and proof of transmittal	Complete
EPBC Condition 2	<i>The person taking the action must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the management plans required by this approval, and make them available upon request to the department. Such records may be subject to audit by the department or an independent auditor in accordance with section 458 of the EPBC Act or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the department's website. The results of audits may also be publicised through the general media.</i>				
2.1 Records maintained substantiating all associated or relevant activities	In accordance with Condition 2 of the approval, records of all activities relating to the conditions of approval are being maintained on behalf of Eglinton Estates by Woodsome Management and PGV Environmental. This compliance report provides an overview of all the actions relating to each condition.	Records are maintained	Evidence of Eglinton Estate's records	Sighting of all relevant records	Compliant
2.2 Records to be made available to DAWE upon request	DAWE has not requested records from Eglinton Estates	N/A	Evidence of request and availability	Sighting of DAWE request and proof of transmittal of records	Not required

EPBC 2010/5777 Approval	Comment	Evidence	Requirement	Verification Method	Status
EPBC Condition 3	<i>Within three months of every 12 month anniversary of the commencement of the action, the person taking the action must publish a report on their website addressing compliance with the conditions of this approval over the previous 12 months, including implementation of any management plans as specified in the conditions.</i> <i>3.A. The person taking the action must notify the Department in writing of any 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 non-compliance. The notification must specify:</i> <i>a. the condition which is or may be in breach; and</i> <i>b. a short description of the non-compliance.</i> <i>3.B. The person taking the action must provide to the Department the details of any 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 non-compliance, specifying:</i> <i>a. any corrective action or investigation which the person taking the action has already taken or intends to take in the immediate future;</i> <i>b. the potential impacts of the non-compliance; and</i> <i>c. the method and timing of any remedial action that will be undertaken by the person taking the action.</i>				
3.1 Compliance report published on project website within 3 months of every 12 month anniversary of the commencement of action.	This report will be published on the project website and updated annually for the duration of the approval.	The compliance report can be found at https://www.stockland.com.au/residential/wa/amberton-beach/news-and-events/conservation-at-amberton	Evidence of publication	Viewed on website	Compliant
3.2 Report addresses compliance with each of the conditions of the approval.	This report provides an overview of all the actions relating to each approval condition	This report	Report complies with this requirement	Review Report	Compliant
3.3 Report addresses implementation of management plans specified in the approval.	This report addresses the implementation of management plans specified in the approval.	This report	Report complies with this requirement	Review report	Compliant

EPBC 2010/5777 Approval	Comment	Evidence	Requirement	Verification Method	Status
3.4 Inform the Department in writing of any potential and or non-compliance with the approval conditions or commitments made in the CMP and CRMP as soon as practical and no later than 2 business days 2 days after becoming aware of the non-compliance at the same time as the compliance report is published	Review any potential or non -compliance issues as soon as they become known and provide a short summary of the non-compliance. Detail which conditions or commitments are impacted in the non-compliance.	Prepare written correspondence detailing the non-compliance	Provide correspondence to the Department	Acknowledgment that the Department has received correspondence	Compliant
3.5 Prepare a report within days 10 days of becoming aware of the non-compliance addressing the following: • non-compliance with conditions impacted; • any investigations that have been implemented, • what corrective actions will be taken in the future, and • the method and timing of any remedial action to be undertaken by the person taking the action.	The non-compliance report will provide the detail about the non-compliance, any investigations required to inform remedial action by the Proponent.	Non-compliance report	Provide report to the Department	Acknowledgment that the Department has received the report.	Compliant
3.6 Date of publication of the compliance report provided to DAWE at the same time as the report is published.	This report will made available to the public in the first week of February. The report can be found on the Stockland website. https://www.stockland.com.au/residential/wa/amberton-beach/news-and-events/conservation-at-amberton	Email to the DAWE dated 3 February 2023.	Email correspondence with DAWE	Sighting of email correspondence	Compliant

EPBC 2010/5777 Approval	Comment	Evidence	Requirement	Verification Method	Status
EPBC Condition 4	<i>Upon the direction of the Minister, the person taking the action must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the Minister. The independent auditor must be approved by the Minister prior to the commencement of the audit. Audit criteria must be agreed to by the Minister and the audit report must address the criteria to the satisfaction of the Minister.</i>				
4.1 If requested by the Minister an independent auditor will be will undertake an audit of compliance with the approval conditions.	The Minister has not requested an independent audit of compliance with approval conditions	Letter from the Minister	Evidence of compliance	Sighting of Minister letter	Not Required
4.2 The Minister must approve the independent auditor	N/A	Eglinton Estates to provide letter to the Minister informing of independent auditor	Letter correspondence to the Minister	Sighting of letter to Minister.	Not required
4.3 Audit criteria must be prepared and approved by the Minister prior to the audit being undertaken.	N/A	Independent auditor to provide audit criteria to Minister for approval	Letter to Minister	Sighting of letter	Not required
4.4 The audit report must address the criteria to the satisfaction of the Minister.	N/A	Independent auditor to provide audit report addressing the agreed audit criteria to the Minister	Audit report provided to the Minister	Sighting of report and transmittal	Not required
EPBC Condition 5	<i>If the person taking the action wishes to carry out any activity otherwise than in accordance with the management plans as specified in the conditions, the person taking the action must submit to the department for the Minister's written approval a revised version of that management plan. The varied activity shall not commence until the Minister has approved the varied management plan in writing. The Minister will not approve a varied management plan unless the revised management plan would result in an equivalent or improved environmental outcome over time. If the Minister approves the revised management plan, the revised management plan must be implemented in place of the management plan originally approved.</i>				

EPBC 2010/5777 Approval	Comment	Evidence	Requirement	Verification Method	Status
5.1 If any activity other than those identified in management plans as specified in the conditions, a written request must be made to the DAWE to revise the management plan.	In accordance with this condition Eglinton Estates will notify the DAWE of any changes to the management plans. The CRMP was revised during the last reporting period to reflect the variation on approval condition 12(a).	N/A	The CRMP has been approved by the DAWE	Sighting of correspondence	Compliant
5.2 The varied action will not commence until the minister has approved the variation to the management plan.	The CRMP was revised on the 10 May 2016 The CRMP and CMP were revised and submitted to the Department on 2 June 2019	This Report	CRMP, CMP and this Compliance Report provided to DAWE	Sighting of reports	Compliant
5.3 On the Minister's approval the revised management plan must be implemented in place of the original management plan	The revised CRMP and CMP were approved by the Minister and are being implemented	This Report and Letter from DAWE dated 17 June 2019	Verify conformance with approved revised management plan	Sighting of evidence verifying implementation of management plans	Compliant
EPBC Condition 6	<i>If the Minister believes that it is necessary or convenient for the better protection of listed threatened species to do so, the Minister may request that the person taking the action make specified revisions to the management plan/s specified in the conditions and submit the revised management plans for the Minister's written approval. The person taking the action must comply with any such request. The revised approved management plans must be implemented. Unless the Minister has approved the revised management plans, then the person taking the action must continue to implement the management plan/s originally approved, as specified in the conditions.</i>				
6.1 Management Plans to be revised as specified in the Minister's request.	No revisions to the Management Plans have been requested by the Minister	N/A	Correspondence from the Minister	Sight correspondence from the Minister	Not required
6.2 Revised management plans to be submitted to the Minister for written approval.	No revisions to the Management Plans have been requested by the Minister	N/A	Correspondence to the DAWE	Sight correspondence to the DAWE	Not required

EPBC 2010/5777 Approval	Comment	Evidence	Requirement	Verification Method	Status
6.3 The approved revised plan must be implemented.	No revisions to the Management Plans have been requested by the Minister	N/A	Verify implementation of revised management plans	Sight records to Confirm implementation of the revised approved management plan.	Not required
6.4 If the Minister has not approved the revised management plan, the original management plan must be implemented.	No revisions to the Management Plans have been requested by the Minister	N/A	Verify implementation of the original management plan	Sight records to confirm implementation of the management plan.	Not required
EPBC Condition 7 <i>If, at any time after 5 years from the date of this approval, the person taking the action has not substantially commenced the action, then the person taking the action must not substantially commence the action without the written agreement of the Minister.</i>					
7.1 If the action has not commenced after five years from the approval date written agreement must be given by the Minister before commencement of action.	The project has commenced, and the Minister has been informed.	Letters to DAWE 10007_136_BH (2) 10007_162_BH V2	Commencement of action on 4 Nov 2013	Letter to DAWE sighted	Complete
EPBC Condition 8 <i>Unless otherwise agreed to in writing by the Minister, the person taking the action must publish all management plans referred to in these conditions of approval on their website. Each management plan must be published on the website within 1 month of being approved.</i>					
8.1 Approved management plans published on website of person taking the action within one month of approval.	Following the approval of all management plans, the plans will be published on the project website for the duration of the approval. The revised CRMP and CMP was placed on the website on 9 August 2019.	The management plans can be found at https://www.stockland.com.au/residential/wa/amberton-beach/news-and-events/conservation-at-amberton	Verify management plans are on the website	Approved management plans are sighted on the website	Compliant

EPBC 2010/5777 Approval	Comment	Evidence	Requirement	Verification Method	Status
EPBC Condition 9	<i>9. To mitigate impacts to Carnaby's Black Cockatoo (Calyptorhynchus latirostris), the person taking the action must not clear any land that is proposed to be retained that is also habitat for Carnaby's Black Cockatoo</i>				
9.1 Land identified in Attachment B of the approval must not be cleared.	Clearing has commenced in the Project area (see Figure 2) in accordance with the approval conditions. Figure 2 shows that no land has been cleared in the conservation areas identified in Attachment B of the approval. PTA cleared vegetation adjacent to conservation area AG, prior to clearing fences were constructed with dust curtains.	Figure 2 provides evidence of the clearing to November 2019.	Figure 2 confirms that the areas identified for protection in Attachment B have not been cleared.	View Figure 2	Compliant
EPBC Condition 10	<i>To protect and enhance habitat for listed threatened species that is retained on the proposal site, the person taking the action must:</i> <i>(a) Prepare and submit, within 12 months of the date of this approval, a Conservation Management Plan detailing management of habitat for listed threatened species that is retained on the proposal site for the Minister's approval. The plan must include:</i> <i>i. Measures to physically delineate (through fencing or other means) areas that will be retained;</i> <i>ii. Erosion and dust control measures during construction;</i> <i>iii. The management of weeds, phytophthora dieback, bushfire and feral animals;</i> <i>iv. Identification of any degraded habitat for listed threatened species and revegetation of those areas;</i> <i>v. A monitoring program for listed threatened species and their habitat;</i> <i>vi. Performance indicators and corrective actions;</i> <i>vii. Roles and responsibilities;</i> <i>viii. Time frames for the implementation of the above measures; and</i> <i>ix. How condition 10(b) will be implemented, including who will be responsible for the long-term management of the retained land, and how the land will protected in the long-term.</i> <i>If the Minister approves the plan, the approved plan must be implemented.</i> <i>(b) within 10 years of the substantial commencement of the action, the person taking the action must provide the department with written evidence, including certificates of title, that the 'POS Conservation' areas (marked in green in Attachment A) has been transferred to the City of Wanneroo for the purpose of conservation.</i>				
Criteria 10.1	To protect habitat for listed threatened species, the person taking the action must prepare and submit a Conservation Management Plan (CMP) detailing management of POS (designated Conservation POS at Attachment B), for the approval by the Minister.				

EPBC 2010/5777 Approval	Comment	Evidence	Requirement	Verification Method	Status
10.1.1 The CMP prepared detailing management of the areas identified in Attachment B of the approval.	In accordance with the timeframes required by condition 10 the CMP was prepared	Hard copy of the CMP	CMP prepared	Review CMP	Complete
10.1.2 The CMP must be submitted for approval by the Minister.	In accordance with the timeframes required by condition 10 the CMP was submitted on 29 April 2014. A revised CMP was approved by the Minister on 5 June 2019	Email to the Department on 29 April 2014.	Correspondence to the DAWE	Sight correspondence to the Department	Complete
Criteria 10.2	Measures to physically delineate (through fencing or other means) areas that will be retained				
10.2.1 The conservation POS areas will be surveyed and fenced.	Clearing has commenced in the Project area (see Figure 2) in accordance with the approval conditions. Figure 2 shows that no land has been cleared in the conservation areas identified in Attachment B of the approval. PTA cleared vegetation adjacent to conservation area AG, prior to clearing fences were constructed with dust curtains.	Hard copy of the CMP	The CMP includes this requirement	Review CMP	Compliant See Figure 2
Criteria 10.3	Erosion and dust control measures during construction				
10.3.1 Erosion and dust control measures are provided in the CMP	Provision for the control of erosion and dust are provided in the CMP.	Hard copy of the CMP	The CMP includes this requirement	Review CMP	Compliant
Criteria 10.4	The management of weeds, Phytophthora dieback, bushfire and feral animals				
10.4.1 Management of weeds, phytophthora dieback, bushfires and feral animals are provided in the CMP	Provision for the management of weeds, Phytophthora dieback, bushfires and feral animals are provided in the CMP.	Hard copy of the CMP	The CMP includes this requirement	Review CMP	Compliant
Criteria 10.5	Identification of any degraded habitat for listed threatened species and revegetation of those areas				
10.5.1 Degraded habitat within the conservation POS is identified in the CMP.	The CMP identifies degraded areas within the conservation POS.	Hard copy of the CMP	The CMP includes this requirement	Review CMP	Compliant

EPBC 2010/5777 Approval	Comment	Evidence	Requirement	Verification Method	Status
10.5.2 The degraded areas will be rehabilitated using primary CBC foraging species	The CMP identifies the species to be used in revegetation of the degraded areas.	Hard copy of the CMP	The CMP includes this requirement	Review CMP	Compliant
Criteria 10.6	A monitoring program for listed threatened species and their habitat				
10.6.1 Monitoring Program for CBC and their habitat	Monitoring measures are provided in the CMP	Hard copy of the CMP	The CMP includes this requirement	Review CMP	Compliant
Criteria 10.7	Performance indicators and corrective actions				
10.7.1 Performance Indicators	The CMP includes performance indicators	Hard copy of the CMP	The CMP includes this requirement	Review CMP	Compliant
10.7.2 Corrective Measures	The CMP includes corrective measures	Hard copy of the CMP	The CMP includes this requirement	Review CMP	Compliant
Criteria 10.8	Roles and responsibilities				
10.8.1 Roles and Responsibilities	The CMP includes roles and responsibilities	Hard copy of the CMP	The CMP includes this requirement	Review CMP	Compliant
Criteria 10.9	Time frames for the implementation of the above measures				
10.9.1 Time frames for the implementation of the above measures	The CMP includes time frames for the implementation of the above measures	Hard copy of the CMP	The CMP includes this requirement	Review CMP	Compliant
Criteria 10.10	How condition 10(b) will be implemented, including who will be responsible for the long-term management of the retained land, and how the land will protected in the long-term				
10.10.1 How condition 10(b) will be implemented	The CMP provides an implementation schedule	Hard copy of the CMP	The CMP includes this requirement	Review CMP	Compliant
10.10.2 Long term management	The CMP identifies those responsible for the long-term management of the conservation POS	Hard copy of the CMP	The CMP includes this requirement	Review CMP	Compliant
10.10.3	The CMP identifies the process for the long-term protection of the conservation POS.	Hard copy of the CMP	The CMP includes this requirement	Review CMP	Compliant
Criteria 10.11	If the Minister approves the plan, the approved plan must be implemented.				

EPBC 2010/5777 Approval	Comment	Evidence	Requirement	Verification Method	Status
10.11.1 Approval of the CMP	The Minister approved the CMP The revised CMP was approved by the Department on the 5 June 2019	Letter from DAWE dated 23 July 2014 Letter from DAWE dated 20 June 2019	Correspondence from the Minister	Sighting DAWE letter	Complete
10.11.2 Implement the CMP	The CMP will be implemented as approved (see Table 2 for CMP implementation status)	Implementation of management CMP actions	Verify conformance with CMP	Sight evidence to confirm implementation of the CMP.	Compliant
Criteria 10.12	Within 10 years of the substantial commencement of the action, the person taking the action must provide the department with written evidence, including certificates of title, that the 'POS Conservation' areas (marked in green in Attachment A) has been transferred to the City of Wanneroo for the purpose of conservation.				
10.12.1 Within ten years of commencement of action provide written evidence that the conservation POS has been transferred to the City of Wanneroo for the purpose of conservation	Transfer of conservation POS will occur as part of the subdivision process for the adjacent development areas. To date there is no development adjacent to the conservation POS.	Letter to the Department informing of transfer of conservation POS to the City of Wanneroo. Transfer of certificate of Titles	Verify that conservation POS has been transferred to the City of Wanneroo for conservation purposes by 4 November 2018	Sighting letter and Certificate of Titles.	Not required Section 143 variation to change the 10 year timeframe is with DCCEW pending approval.
EPBC Condition 11	<i>11. To mitigate impacts to Carnaby's Black Cockatoo, the person taking the action must fully implement the revegetation of at least 12.7 ha of native vegetation (including primary feeding plants for Carnaby's Black Cockatoo) in the Yellagonga Regional Park (in consultation with the DBCA) in accordance with the Clearing and Revegetation Management Plan required under condition 12.</i>				
11.1.1 Four sites (12.7ha) have been identified in the Yellagonga Regional Park that requires full rehabilitation.	The four sites are identified in the CRMP.	Hard copy of the CRMP	CRMP includes this requirement	Review CRMP	Compliant

EPBC 2010/5777 Approval	Comment	Evidence	Requirement	Verification Method	Status
EPBC Condition 12	12. To mitigate impacts to Carnaby's Black Cockatoo, the person taking the action must submit a Clearing and Revegetation Management Plan (the plan) for the Minister's approval. The plan must include: (a) a commitment to revegetate at least 1.9 ha of native vegetation within Public Open Space on the proposal site; (b) methodology for revegetation, both on-site, and in Yellagonga Regional Park (as required under condition 11) along with: i. survival targets proposed for plantings; ii. performance indicators and corrective measures; iii. roles and responsibilities; and iv. timeframes for the implementation and management of the above measures. (c) a commitment for at least 50% of plantings for trees and shrubs in street-scaping to consist of plants known to be primary feeding plants for Carnaby's Black Cockatoo. Site selection for street- scaping must take account of any risk of vehicle strike to Carnaby's Black Cockatoos. If the Minister approves the plan, then the approved plan must be implemented.				
Criteria 12.1	To mitigate impacts to Carnaby's Black Cockatoo, the person taking the action must prepare and submit a Clearing and Revegetation Management Plan (the plan) for the Minister's approval				
12.1.1 A CRMP must be prepared and approved by DPaW and submitted to DAWE.	The CRMP has been prepared in consultation with DPaW within the given timeframes.	Hard Copy of the CRMP 10007_118_BH	CRMP prepared and approved by the DPaW on 9 August 2013.	Review Plan and DPaW approval. DPaW 2006/005833-1	Complete
12.1.2 The CRMP was submitted to DAWE for the Ministers approval	The CRMP was submitted to the Minister for approval. A revised CRMP was submitted to the Department in December 2015. A revised CRMP was submitted to the Department on the 2 June 2019	Email and hardcopy of the CRMP lodged with DAWE Hard Copy of the CRMP submitted to DAWE 10007_118_BH Electronic copy	CRMP approved by DAWE on 8 November 2013 CRMP approved by the DAWE on 9 May 2016 Revised CRMP approved by the Department on 5 June 2019	Review CRMP and DAWE email approval	Complete Compliant Compliant

EPBC 2010/5777 Approval	Comment	Evidence	Requirement	Verification Method	Status
Criteria 12.2	A commitment to revegetate at least 1.9 ha of native vegetation within Public Open Space on the proposal site				
12.2.1 The CRMP identifies areas where the 1.9ha of revegetation can occur.	A commitment was made in the CRMP to revegetate 1.9ha of POS at Eglinton.	Hard Copy of the CRMP 10007_118_BH V9	CRMP includes this requirement	Review Plan	Complete
Criteria 12.3	survival targets proposed for plantings				
12.3.1 The survival targets are provided in the CRMP	Survival targets were prepared in consultation with Tranen and DPaW.	Hard Copy of the CRMP	CRMP includes this requirement	Review Plan	Complete
Criteria 12.4	performance indicators and corrective measures				
12.4.1 Performance measures and corrective measures are provided in the CRMP	Performance measures are being prepared based on nearby reference site spring survey conducted in 2017 and the final species list.	Hard Copy of the CRMP	CRMP includes this requirement	Review Plan	Complete
Criteria 12.5	A commitment for at least 50% of plantings for trees and shrubs in street-scaping to consist of plants known to be primary feeding plants for Carnaby's Black Cockatoo. Site selection for street-scaping must take account of any risk of vehicle strike to Carnaby's Black Cockatoo.				
12.5.1 A commitment to at least 50% of street scapes being planted with CBC foraging species has been made in the CRMP	The landscape architects will include 50% of plantings in streetscapes with CBC foraging species.	Hard Copy of the CRMP	CRMP includes this requirement.	Sight CRMP and tree masterplan for developments.	Compliant
12.5.2	Site selection for street scaping with CBC species is considered in the CRMP.	Hard Copy of the CRMP.	CRMP includes this requirement	Review Plan	Complete
Criteria 12.6	If the Minister approves the plan, then the approved plan must be implemented.				

12.6 The approved CRMP will be implemented	The CRMP will be implemented as per the listed management actions and implementation schedule (see Table 4 for implementation status).	Implementation of CRMP management actions	Verify conformance with CRMP	Sight Monitoring Report for YRP.	Compliant Revegetati on of Sites 1a and 1b at Yellagonga Regional Park have been satisfied. Monitoring ceased in 2021 as the sites met the completi on criteria and have been monitored for 6 years in accordanc e with the CRMP. Sites 1a and 1b have been handed back to DBCA. Additional weed control for two years will
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EPBC 2010/5777 Approval	Comment	Evidence	Requirement	Verification Method	Status
					conclude in August 2024. Commence ment of annual monitoring and reporting on the revegetati on for sites 2 and 3 has commence d in this reporting period.
EPBC Condition 13	<i>To offset the loss of habitat for Carnaby's Black Cockatoo, within 12 months of the date of this approval, the person taking the action must, by January 2016:</i> <i>(a) Provide monies to the DEC to fully fund. the acquisition of:</i> <i>i. An offset property (or properties) that contains at least 886 ha of good quality foraging habitat for Carnaby's Black Cockatoo, that is within the 'Regans Ford' or Gingin area; or</i> <i>ii. Another parcel of land approved in writing by the department; and</i> <i>(b) Provide the department with a textual description and map clearly defining the location and boundaries of the offset property described in condition 13(a), which must be accompanied with the offset attributes and a shapefile.</i>				
Criteria 13.1	Provide monies to the DEC to fully fund the acquisition of: i. an offset property that contains at least 886 ha of good quality foraging habitat for Carnaby's Black Cockatoo, that is within the 'Regans Ford' locality according to Landgate's WA Atlas; or ii. another parcel of land approved in writing by the department				

EPBC 2010/5777 Approval	Comment	Evidence	Requirement	Verification Method	Status
13.1.1 Within 12 months provide monies within 12 months of the date of the approval to DPaW for the acquisition of an offset property not less than 850ha of good quality CBC habitat that is within 'Regans Ford' locality according to Landgate's WA Atlas	Alex Errington (DPaW) confirmed receipt of funds for the acquisition of a property that contains at least 850ha of good quality CBC habitat in the Regan's Ford locality within 12 months of the approval date. Eglinton Estate's request confirmation from DAWE that condition 13 (a) has been cleared	DPaW email correspondence dated 22 August 2013 confirming transfer of funds. DAWE provide correspondence that condition has been cleared 14 January 2014.	Provide funds to the DPaW	Sighting of DPaW correspondence Sighting of DAWE correspondence	Complete
13.1.2 Variation requires that additional funds are to be provided to DPaW by January 2016 to purchase 36ha of CBC habitat in the Regan's Ford or Gingen locality.	Additional funds to be provided to the DPaW to purchase an additional 36ha of CBC habitat at Wannamal.	DPaW invoiced Eglinton Estates on the 20 January 2016	Provide funds to the DPaW	Sighting of DPaW Receipt Number 58771.	Complete
Criteria 13.2	Provide the department with a textual description and map clearly defining the location and boundaries of the offset property described in condition 13(a), which must be accompanied with the offset attributes and a shapefile.				
13.2.1 Within 12 months of the date of approval provide the DAWE with a textual description and map clearly defining the location and boundaries of the offset property, which must be accompanied with the offset attributes and a shapefile.	Alex Errington (DPaW) provided the information relating to the property to Sam Wagstaff (DAWE).	DPaW email 22 August 2013. DAWE provide correspondence that condition has been cleared 14 January	Provide property information to DAWE	Sighting of DPaW correspondence Sighting of DAWE correspondence	Complete
13.2.2 By January 2016 provide the DAWE with a textual description and map clearly defining the location and boundaries of the offset property, which must be accompanied with the offset attributes and a shapefile.	Alex Errington (DPaW) has committed to provide the information relating to the property to the DAWE on 29 January 2016.	DPaW email 22 January 2016 confirming that payment has been made and that textual description will be provided by the DPaW	Provide property information to DAWE	Sighting of DPaW correspondence	Complete

EPBC 2010/5777 Approval	Comment	Evidence	Requirement	Verification Method	Status
EPBC Condition 14	14. The person taking the action must not undertake any clearing of habitat for Carnaby's Black Cockatoo (such habitat being designated in <u>Attachment B</u> as the areas hatched in black), except for the area designated in <u>Attachment D</u> by yellow outline, unless the <i>Clearing and Revegetation Management Plan</i> required under condition 12 has been approved by the Minister .				
Criteria 14.1	The person taking the action must not undertake any clearing of habitat for Carnaby's Black Cockatoo (as shown in <u>Attachment B</u> hatched in black) apart from of the area outlined in yellow in Attachment D, unless the Clearing and Revegetation Management Plan required under condition 12 has been approved by the Minister; and:				
14.1.1 No clearing of CBC habitat is allowed in areas apart from those outlined in yellow in Attachment D.	No clearing occurred in CBC habitat apart from the areas identified with yellow boundaries in Attachment D prior to the CRMP being approved.	Compliance Report 1.	Requirement of CRMP	Sighting of Figure 2 in Compliance Report 1	Complete

4.3 Reporting on Instances of Potential Non-compliance or Non-Compliance

Based on the information received and reviewed, the Proponent has demonstrated compliance with all of the conditions of EPBC approval 2010/5777.

The Proponent has met all commitments as listed within the CRMP and CMP for this reporting period.

5 COMPLIANCE WITH MANAGEMENT PLANS

The Eglinton Estates CMP and CRMP have been partially implemented during this reporting period. Audit Tables 3 and 4 provide the status of the management actions for each of the management plans.

A number of the activities/commitments associated with implementation of the CMP (Table 2) and CRMP (Table 3) were not relevant for the current reporting period as they were not part of the current years' work schedule. These items were reported as Not Applicable/Not required.

5.1 Conservation Management Plan

The CMP was approved on 23 July 2014 and some management actions have been implemented since then. Development has not occurred within vicinity of the EPBC Conservation POS areas in this reporting period, therefore the CMP has not required to be fully implemented.

Construction of the Yanchep Rail Extension by the PTA commenced in the 2020 reporting period. Management actions were implemented to protect the adjoining Conservation Area AG. Fences with dust curtains were constructed by the PTA around the boundary of the conservation area (Plates 3 and 4).

5.1.1 Compliance with Management Actions

Table 2 below provides the status of the management actions for the CMP. Many of the actions were not relevant to this reporting period.

The Vegetation and Flora Survey and Baseline Weed Surveys for the EPBC Conservation POS areas were completed in spring 2014.

Vegetation monitoring and reporting was undertaken in spring 2023 by PGV Environmental (Eglinton Estates and Lonnegal landholdings) and JBS&G (Lot 5001). The annual monitoring report is provided at Appendix 7.

5.1.2 Amendments to Plan

The section 143 change to conditions 3, 9, 11, 12, and 14 required the CMP to be revised. The main changes to the CMP included the change to the boundary of conservation area AG.

Table 3 has been revised to reflect the newly approved version of the CMP.

5.1.3 Potential Non-Compliance or Non-Compliance

There are no non-compliances as detailed in section 4 of this report.

Table 2: Conservation Management Plan Compliance Audit Table

Action		Comment	Evidence	Requirement	Verification Method	Status
1	Retain the 16.45ha of vegetation in the POS conservation area as shown in Figure 3 and manage as POS conservation. Within these areas, no clearing of trees or understorey will be permitted other than for approved paths, boardwalks, seating, lookout points and educational signage which where possible will be established on existing tracks.	The LSP will be updated in 2016 to reflect some changes in the boundaries of conservation area AG. LSP Amendment process has not been completed during this reporting period.	WAPC LSP Amendment Approval	EPBC Approval 2010/5777	Sight WAPC Approval (Figure 2)	Complete
2	Negotiate and document the procedure for ceding the POS conservation to the City of Wanneroo for the purpose of preservation of bushland.	The procedure for ceding the POS conservation areas will be documented when planning for subdivisions adjacent to the POS conservation is commenced. Ceding will occur at the relevant stage of subdivision adjacent to the conservation areas. CoW will not accept the conservation POS prior to subdivision. Subdivision planning adjacent to the POS conservation areas is not anticipated in the next reporting period.	CoW Subdivision Approval	EPBC Approval 2010/5777	Sight CoW subdivision approval.	Not required
3	Mitigate the impact of subdivision by fronting the POS conservation area with single fronted roads (to be designed by the developer).	Conservation POS areas will have a hard interface (i.e. road or dual use path) separating them from the development.	CoW Subdivision Approval	CMP	Sight CoW subdivision approval.	Not required
4	Construct appropriate fencing (e.g. standard stock/farm fencing with lockable gates) around the POS conservation to control access and passive	Fencing the conservation POS will occur prior to subdivisional works.	Photos of fencing	CMP	Sight fencing in field	Not required

Action		Comment	Evidence	Requirement	Verification Method	Status
	recreational use to minimise impacts on native vegetation prior to subdivision.					
5	Prepare 3m fire breaks around POS conservation and maintain prior to development.	Firebreaks will be constructed once fencing is in place. Provision of fire breaks earlier than this will allow for off road vehicle access to conservation POS. Note firebreaks are in place around wider landholding.	Photos	CMP	Sight fire breaks	Not Required
6	Undertake a vegetation and flora survey in Spring 2014 in the POS conservation areas.	The spring survey will provide a species list.	Report	CMP	Sight Report	Complete
7	Undertake a baseline weed mapping survey in CBC habitat, in accordance with DPaW's Standard Operating Procedure No. 22.1.	The weed survey will identify key weed species and areas that require weed control.	Report	CMP	Sight Report	Complete
8	Set up two permanent quadrats in each area of POS conservation for annual vegetation/weed monitoring.	Set up quadrats to monitor long term condition of the conservation areas.	Report	CMP	Sight Monitoring Report 2022 (Appendix 7)	Compliant 1 replacement quadrat was set up in AG
9	Contract a qualified rehabilitation and revegetation contractor to undertake on-ground planning for revegetation works	The Spring Survey will identify areas that require rehabilitation that will be undertaken during subdivisional works.	Rehabilitation Plan	CMP	Sight Plan	Not Required
10	Prepare revegetation site works plan, schedule and costs.	Schedule of costs for rehabilitation works will be prepared during subdivisional works.	Rehabilitation Plan/Cost Schedule	CMP	Sight Plan	Not Required
11	Undertake weed control programme targeting invasive weeds recorded during Action 2.	Weed control will be undertaken prior to and during construction works	Weed Control Completion Report	CMP	Sight Report	Not Required

Action		Comment	Evidence	Requirement	Verification Method	Status
12	Undertake short term monitoring of weed control programme to identify any outbreaks following weed removal or suppression.	Weeds will be monitored by revegetation contractor	Weed Control Completion Report	CMP	Sight Report	Not Required
13	Implement revegetation site works plan.	Revegetation works will occur once subdivision construction has commenced	Photos and revegetation completion report	CMP	Sight photos and report	Not Required
14	Monitor health of planted species and replace dead plants as necessary.	Revegetation contractor to undertake supplement planting as needed	Photos	CMP	Sight photos	Not Required
15	Install signage to ensure that residents are aware of the POS conservation and rehabilitation activity.	Signage will be installed as part of adjacent subdivisional works	Photos	CMP	Sight photos	Not Required
16	Provide locked access for management vehicles into the POS conservation using access points away from major roads. The minimum required vehicle access is to be established.	Fencing and gates will be provided as part of subdivisional works	Photos	CMP	Sight photos	Not Required
17	Install tree guards when required to control rabbit grazing	Rabbit control will be implemented by revegetation contractor if required	Photos	CMP	Sight photos	Not Required
18	A 1.8m high chain mesh fence will be installed around the conservation fencing prior to construction.	Construction style fence to protect against construction vehicles entering and to assist with dust management	Photos	CMP	Sight photos	Not Required
19	Installation of dust curtains prior to clearing to protect remnant vegetation from sand drift during construction.	Dust curtains will be installed as part of subdivisional works	Photos	CMP	Sight photos	Compliant Plates 3 and 4 show the fencing along the rail and PO SAG interface.

Action		Comment	Evidence	Requirement	Verification Method	Status
20	Maintain fencing in functional condition and repair promptly if damage occurs. Fencing to be upgraded to rabbit-proof if and where required.	Fence monitoring and maintenance will be part of subdivisional works	Photos	CMP	Sight photos	Not Required
21	Dispose of food waste into covered waste facilities to ensure that feral or other animals are not attracted to the site.	Part of construction site general management	Ensure environmental matters are included in weekly site meeting	CMP	Sight minutes of site meetings	Not Required
22	Prepare and deliver an Environmental Induction Program to all personnel, which includes information on: - Requirement to remain within marked clearing line; - identification of Carnaby's Black-Cockatoo birds and the care to be taken in avoiding clearing areas if they are present; and -fauna encounter procedures.	Part of construction site general management. Prepare basic work instruction if required.	Ensure environmental matters are included in weekly site meeting	CMP	Sight minutes of site meetings	Not Required
23	All construction staff, sub-contractors and other personnel working on site will complete the Environmental Induction Program prior to commencing work on the site.	Part of construction site general management. Prepare basic work instruction if required.	Ensure environmental matters are included in weekly site meeting	CMP	Sight minutes of site meetings	Not Required
24	Carnaby's Black-Cockatoos encountered during construction shall be allowed to make their own way from the works area.	Part of construction site general management. Prepare basic work instruction if required.	Ensure environmental matters are included in weekly site meeting	CMP	Sight minutes of site meetings	Not Required
25	If Carnaby's Black-Cockatoos are present feeding on site, work in the immediate area shall cease until they have flown away from the area.	Part of construction site general management. Prepare	Ensure environmental matters are	CMP	Sight minutes of site meetings	Not Required

Action		Comment	Evidence	Requirement	Verification Method	Status
		basic work instruction if required.	included in weekly site meeting			
26	If an injured Carnaby's Black-Cockatoo is encountered, the nominated carer or Wildlife Hotline shall be called to rescue the animal.	Part of construction site general management. Prepare basic work instruction if required.	Ensure environmental matters are included in weekly site meeting	CMP	Sight minutes of site meetings	Compliant
27	Site maintenance to be carried out. This will include regular watering schedules, maintenance of tree guards and perimeter fence, weed management and rabbit control as required.	Part of construction site general management. Prepare basic work instruction if required.	Ensure environmental matters are included in weekly site meeting	CMP	Sight minutes of site meetings	Not Required
28	Install educational signage that clearly states that access is restricted to defined pathways, fauna/flora interpretation, importance of domestic animal control and include a contact number to report any dumping or inappropriate activity.	Post construction installation of educational signage.	Photos	CMP	Sight photos	Not Required
29	Discuss community monitoring of CBC activity with residents' group	Discuss community monitoring of CBC with residents' group and school	Meeting agenda and minutes	CMP	Sight minutes	Not Required
30	Monitor CBC activity on an annual basis	Visit conservation POS to determine CBC visits to the site through sightings, chewed banksia cones etc.	Photos to be included in annual monitoring report	CMP	Sight Photos	Not Required

5.2 Clearing and Revegetation Management Plan

The CRMP was approved in November 2013 prior to any clearing of CBC habitat within the referral area. A revised CRMP was approved by the Department on the 5 June 2019.

Construction of the Yanchep Rail Extension by the PTA commenced in the 2020 reporting period. Management actions were implemented in accordance with the CRMP during the ongoing construction of the Yanchep Rail Extension during the next reporting period.

Development east of Marmion Avenue commenced in the 2023 reporting period. Management actions will be implemented in accordance with the CRMP and prior to vegetation clearing.

5.2.1 Compliance with Management Actions

Table 3 below provides an update on the status of the CRMP management actions. Area 1a and 1b were completed in the previous compliance period. Site 1a has been handed back to DBCA and the 1.8m fence has been removed. An additional 2 years of weed control is being undertaken at Site 1b before the site is taken back by DBCA.

Revegetation commenced in Autumn 2022 on sites 2 and 3 and monitoring was conducted in Autumn and Spring 2023 (Appendix 8).

5.2.2 Amendments to Plan

Due to the variation to conditions 3, 9, 11, 12 and 14, a revised CRMP was submitted to the Department for approval on 2 June 2019. The Department approved the CRMP on the 5 June 2019.

5.2.3 Potential Non-Compliance or Non-Compliance

There are no potential or non-compliance issues in this reporting period.

Table 4: Clearing and Revegetation Management Plan - Compliance Audit Table

Key Tasks	Action	Action	Comment	Evidence	Requirement	Verification Method	Status
Species Selection Strategy	1	Determine plant communities once present at YRP revegetation sites.	Survey similar habitat in reference site.	Reference Site Flora List	CRMP	Sight List	Complete
	2	Identify CBC foraging species present in each plant community.	Review DPaW CBC List against reference site and YRP Bush Forever Flora List	Combined Species List	CRMP	Sight List	Complete
	3	Develop an agreed approach for selecting species for revegetation from Eglinton and YRP species lists.	Process identified in the CRMP	CRMP	CRMP	Sight CRMP	Complete
	4	Identify revegetation technique for each species.	Focus on species that have high rate of return to provide early CBC habitat and are cost effective to establish.	Tranen revegetation notes	CRMP	Sight revegetation notes	Complete
	5	Set Completion Targets	Use reference site to determine end of revegetation project	CRMP	CRMP	Sight Completion targets	Complete
	6	Design monitoring program	To ensure success of revegetation works.	Long term monitoring quadrats and program	CRMP	Photos and sight monitoring results	Complete
	7	Provide the species list and completion criteria in the annual Compliance Report provided to the Department to meet Condition 3 of the EPBC 2010/5777 approval.	Keeping the Department informed an ensuring compliance with EPBC Approval. Provided in the third Compliance Report.	This compliance report	CRMP	Sight species list and completion criteria	Complete
YRP Planting Schedule	8	Prepare planting design and schedule for YRP sites based on agreed species list	To inform the design of the CBC habitat.	Revegetation Plan	CRMP	Sight Plan and photos from site.	Complete
	9	Discuss with the DPAW and agree on planting design and schedule	To have an agreed approach to the YRP revegetation	Email correspondence on species list	CRMP	Site correspondence	Complete

Key Tasks	Action	Action	Comment	Evidence	Requirement	Verification Method	Status
YRP Revegetation Plan	10	Provide the planting design in the annual Compliance Report provided to the Department to meet Condition 3 of the EPBC 2010/5777 approval.	Keeping the Department informed an ensuring compliance with EPBC Approval	Planting design for sites 1a and 1b attached to this audit report	CRMP	Site Planting Design	Complete
	11	Provide landscape design package for POS areas AA, AC, AD, AF and T in the annual Compliance Report at the relevant stage of subdivision to demonstrate revegetation of 10% of each POS with CBC foraging species. The package will include layout of POS, CBC species to be established, completion criteria as per City of Wanneroo requirements, ongoing maintenance and timeline for transfer of POS to the City of Wanneroo.	To create 1.9 ha of CBC foraging species at Eglinton. Construction of POS AA (known as POS 7) is being undertaken in accordance with the landscape plan. The planting guide indicates that 35% of POS 7 will be planted with Black Cockatoo foraging species consisting of 103 trees, 175 shrubs and 6 815 tubestock.	Landscape masterplan for POS 7	CRMP	Sight Landscape Plan	Compliant
	12	Establish 50% of streetscapes with suitable CBC foraging species.	To date the streetscapes constructed in the Referral area include Amberton and Elavale. Street Tree Masterplans are provided at Appendix 8.	Email correspondence Landscape Masterplan Photo Evidence	CRMP	Amberton and Elavale Street Tree Masterplans.	Compliant
	13	Contract a qualified rehabilitation and revegetation contractor to undertake on-ground planning for and revegetation works across the YRP sites.	Tranen have been engaged for rehabilitation works at YRP.	Contract	CRMP	Sight Contract	Complete
	14	Prepare revegetation site works plan, schedule and costs.	Detailed plan of works	Work schedule for sites 1a and 1b	CRMP	Sight work schedule	Complete

Key Tasks	Action	Action	Comment	Evidence	Requirement	Verification Method	Status
YRP Revegetation Plan	15	Review site works and revegetation plan with DPAW.	Agreed approach for the revegetation and site works.	Email correspondence	CRMP	Sight email correspondence	Complete
	16	Discuss community participation with DPAW. DPAW to keep local community informed of project and to manage communication with Local Groups (note DPAW to manage community process).	Keep community informed about project	Presentation to YRP Community Advisory Committee on 9 June 2016.	CRMP	Meeting presentation	Compliant
	17	Implement weed management, ripping, and fencing as per site works plan	Sites 1a and 1b at YRP have been completed. The 1.8m fence has been removed from site 1a and 1b and management for the site has been passed back to DBCA. The sites have an additional two years of weed control which will conclude in the next reporting period (August 2024). Sites 2 and 3 have been prepared and planted during the reporting period. A weed control program has been implemented for sites 2 and 3.	Site works reports	CRMP	Sight works report	Compliant
	18	Signs indicating that rehabilitation work is occurring should be erected along the fence lines (e.g. No access – rehabilitation in progress). DPAW Regional Parks Unit standard signs to be used.	Keeping the public informed. Design of sign approved by DPAW. Signs to be placed around rehab sites.	Sign	CRMP	Sight Sign	Compliant

Key Tasks	Action	Action	Comment	Evidence	Requirement	Verification Method	Status
	19	Minimise the use of herbicides in riparian areas.	Protect wetland ecosystems from herbicide run-off. Note sites 1a and 1b are upland habitats. Sites 2 and 3 are largely upland, herbicides utilised in the low-lying areas are approved by DBCA.	Site Works Report	CRMP	Sight Work Reports	Compliant
	20	Supplement with tubestock planting	To maximise species for CBC habitat. Infill planting Areas 2 and 3 in 2023.	Site works reports	CRMP	Sight works reports	Compliant
	21	Implement vegetation monitoring program.	Long term monitoring quadrats were set up in October 2014 (sites 1a and 1b) and March and November 2023 (Sites 2 and 3). Monitoring report Appendix 7.	Monitoring report Appendix 7.	CRMP	Sight Monitoring Report	Compliant
	22	Undertake short term monitoring of weed control success to identify any outbreaks following weed removal or suppression.	To manage weed outbreaks post planting	Site works reports	CRMP	Sight works reports	Compliant
YRP Revegetation Plan	23	Supplement with infill planting when required.	To ensure completion criteria is met.	Site Monitoring	CRMP	Site Monitoring Report	Complete Completion criteria has been met for sites 1a and 1b. Sites 2 and 3 were planted during the reporting period and the first

Key Tasks	Action	Action	Comment	Evidence	Requirement	Verification Method	Status
							monitoring survey was conducted in November 2022.
	24	Site maintenance to be carried out. This will include maintenance of tree guards and perimeter fence, weed management and rabbit control as required.	To minimise impacts to new CBC habitat	Site works reports	CRMP	Sight works reports	Compliant
	25	Design a monitoring survey for future CBC activity.	To determine if new habitat is being visited by CBC	Photo evidence of Black Cockatoo foraging.	CRMP	Site Observation	Commenced sites 1a and 1b
	26	Discuss community monitoring of CBC activity once YRP phase is complete.	To encourage community ownership of new habitat				Not Required
	27	Monitor CBC activity on a biannual basis five years post revegetation.	To determine if revegetation project has met primary objective of providing CBC with foraging opportunities	Photo evidence of Black Cockatoo foraging	CRMP	Site Observation	Not Required
	28	Handover YRP sites to the DBCA					Sites 1a and 1b have been revegetated and are complete. Sites 2 and 3 revegetation works commenced in June 2022

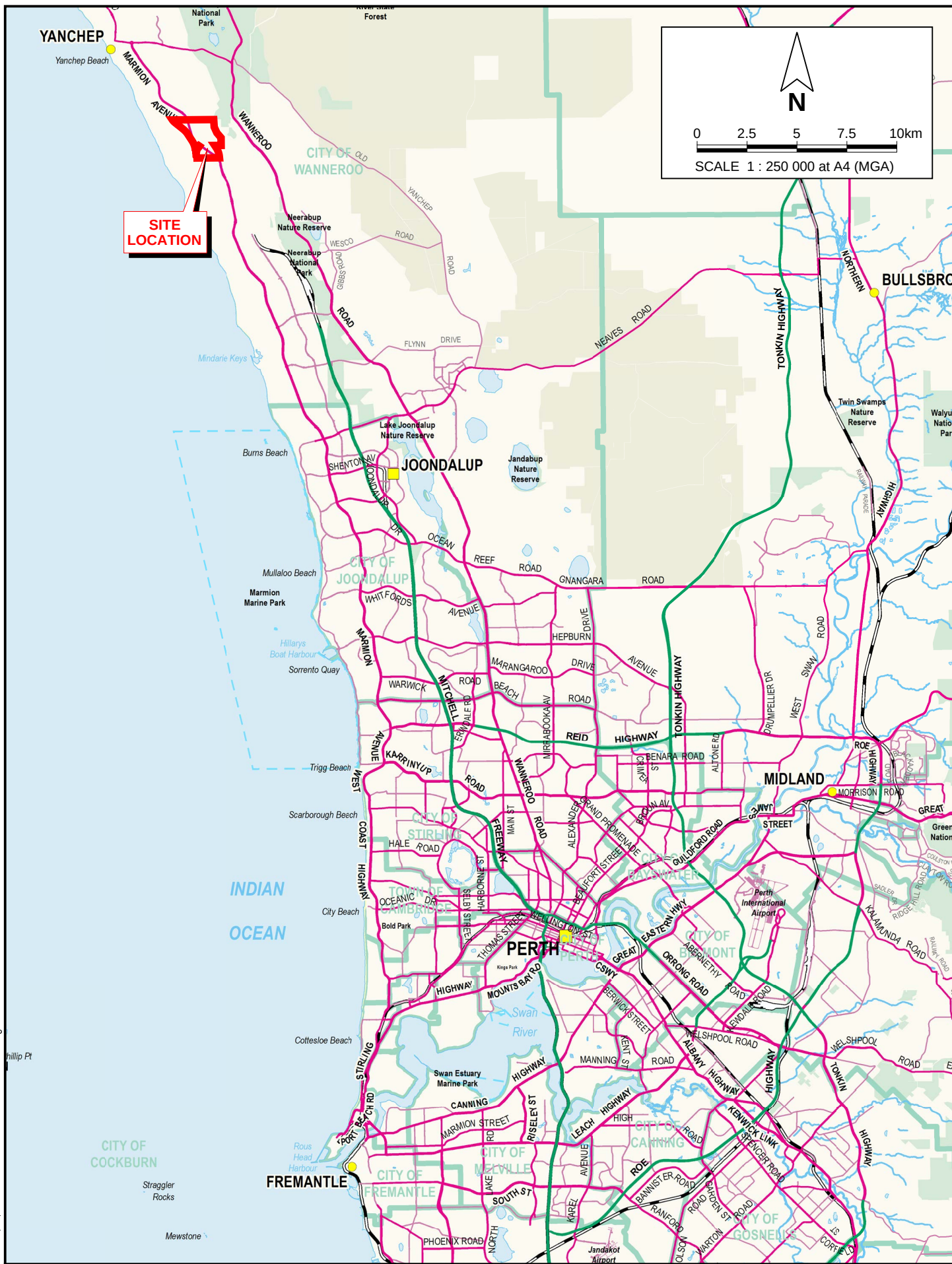
6 PUBLIC AVAILABILITY OF THE REPORT

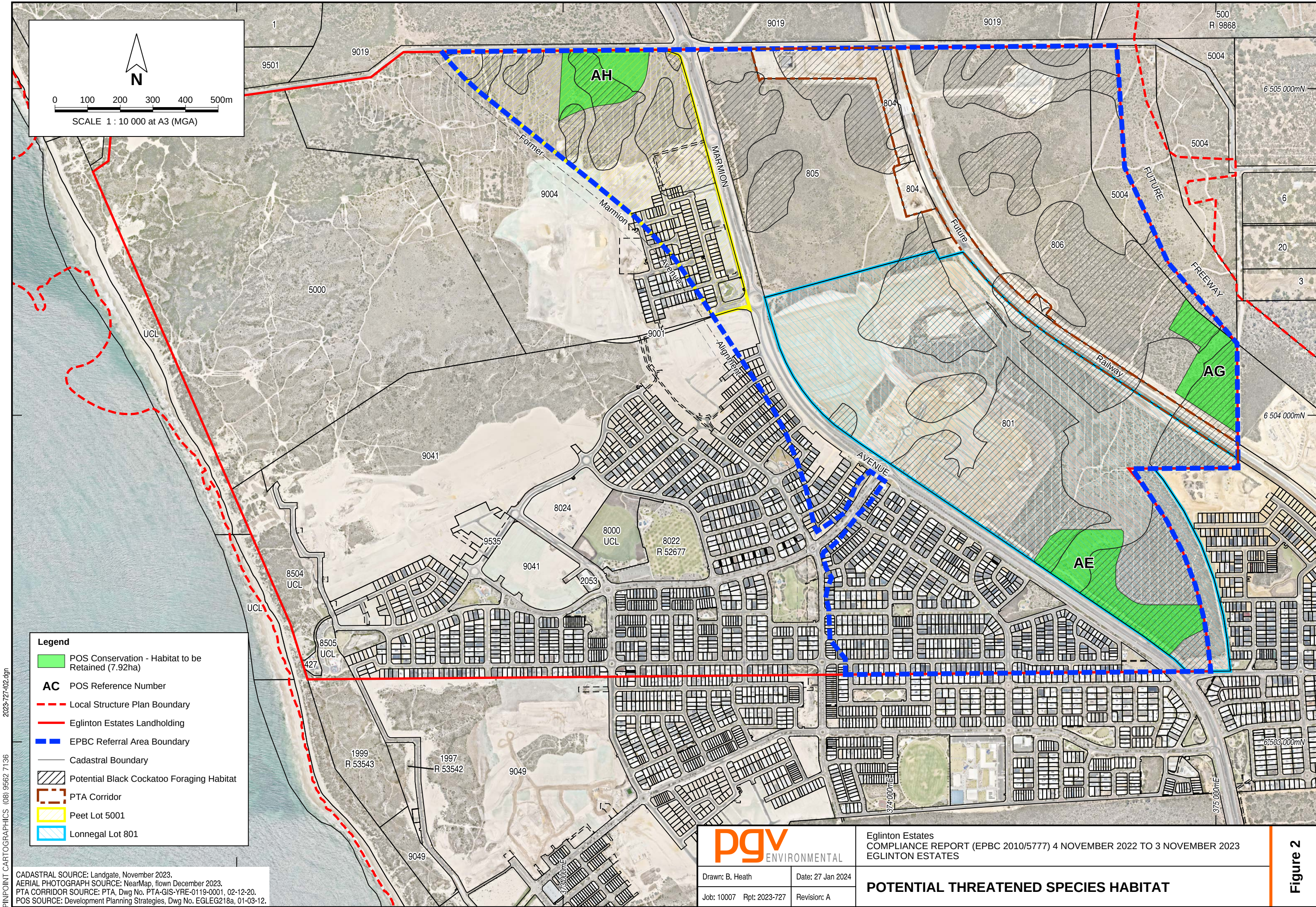
In accordance with Condition 3 of EPBC 2010/5777, Eglinton Estates must publish an annual compliance report on the project website by 4 February of each year following the commencement of the project.

Accordingly, this is the tenth compliance report addressing compliance with EPBC 2010/5777, a copy of the most recent compliance report will be placed on the Stockland website at:

<https://www.stockland.com.au/residential/wa/amberton-beach/news-and-events/conservation-at-amberton>

FIGURES





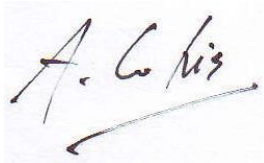
APPENDIX 1

Declaration of Accuracy

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:

A handwritten signature in black ink, appearing to read 'A. Cokis', with a long horizontal stroke extending from the end.

Full name (please print): Anastasios Cokis

Position (please print): Director

Organisation : Woodsome Management Pty Ltd CAN 068149486

Date: 2/02/2024

APPENDIX 2

**EPBC 2010/5777 Approval
30 April 2013**



Australian Government

Department of Sustainability, Environment, Water, Population and Communities

Approval

Eglinton Estates Residential Development, Lot 1007 & Part Lot 1008, Pipidinny Road, Eglinton, WA (EPBC 2010/5777)

This decision is made under sections 130(1) and 133 of the *Environment Protection and Biodiversity Conservation Act 1999*.

Proposed action

person to whom the approval is granted Eglinton Estates Pty Ltd

proponent's ACN (if applicable) ABN: 48 009 460 397

proposed action The clearing of approximately 298 ha of native vegetation for the urban development of Lot 1007 and the eastern portion of Lot 1008, Pipidinny Road, Eglinton, WA, [See EPBC Act referral 2010/5777], within the footprint shown as a blue dotted line in Attachment A.

Approval decision

Controlling Provision	Decision
Listed threatened species and communities (sections 18 & 18A)	Approved

conditions of approval This approval is subject to the conditions specified below.

expiry date of approval

This approval has effect until 28 February 2038.

Decision-maker

name and position Barbara Jones
Assistant Secretary
North, West and Offshore Assessment Branch

signature

date of decision 30/4/2013

Conditions attached to the approval

1. Within 30 days after the **commencement** of the action, the person taking the action must advise the **department** in writing of the actual date of **commencement**.
2. The person taking the action must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the management plans required by this approval, and make them available upon request to the **department**. Such records may be subject to audit by the **department** or an independent auditor in accordance with section 458 of the **EPBC Act**, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the **department's** website. The results of audits may also be publicised through the general media.
3. Within three months of every 12 month anniversary of the **commencement** of the action, the person taking the action must publish a report on their website addressing compliance with the conditions of this approval over the previous 12 months, including implementation of any management plans as specified in the conditions. Non-compliance with any of the conditions of this approval must be reported to the **department** at the same time as the compliance report is published.
4. Upon the direction of the **Minister**, the person taking the action must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the **Minister**. The independent auditor must be approved by the **Minister** prior to the commencement of the audit. Audit criteria must be agreed to by the **Minister** and the audit report must address the criteria to the satisfaction of the **Minister**.
5. If the person taking the action wishes to carry out any activity otherwise than in accordance with the management plans as specified in the conditions, the person taking the action must submit to the **department** for the **Minister's** written approval a revised version of that management plan. The varied activity shall not commence until the **Minister** has approved the varied management plan in writing. The **Minister** will not approve a varied management plan unless the revised management plan would result in an equivalent or improved environmental outcome over time. If the **Minister** approves the revised management plan, the revised management plan must be implemented in place of the management plan originally approved.
6. If the **Minister** believes that it is necessary or convenient for the better protection of listed threatened species to do so, the **Minister** may request that the person taking the action make specified revisions to the management plan/s specified in the conditions and submit the revised management plan/s for the **Minister's** written approval. The person taking the action must comply with any such request. The revised approved management plan/s must be implemented. Unless the **Minister** has approved the revised management plan/s, then the person taking the action must continue to implement the management plan/s originally approved, as specified in the conditions.
7. If, at any time after 5 years from the date of this approval, the person taking the action has not **substantially commenced** the action, then the person taking the action must not **substantially commence** the action without the written agreement of the **Minister**.

8. Unless otherwise agreed to in writing by the **Minister**, the person taking the action must publish all management plans referred to in these conditions of approval on their website. Each management plan must be published on the website within 1 month of being approved.
9. To mitigate impacts to Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*), the person taking the action must not **clear** any land that is proposed to be **retained** that is also habitat for Carnaby's Black Cockatoo, (as shown in Attachment B).
10. To protect and enhance habitat for **listed threatened species** that is **retained** on the proposal site, the person taking the action must:
 - (a) prepare and submit, within 12 months of the date of this approval, a *Conservation Management Plan* detailing management of habitat for **listed threatened species** that is **retained** on the **proposal site** for the **Minister's** approval. The plan must include:
 - i. measures to physically delineate (through fencing or other means) areas that will be **retained**;
 - ii. erosion and dust control measures during construction;
 - iii. the management of weeds, *Phytophthora* dieback, bushfire and feral animals;
 - iv. identification of any degraded habitat for **listed threatened species** and **revegetation** of those areas;
 - v. a monitoring program for **listed threatened species** and their habitat;
 - vi. performance indicators and corrective actions;
 - vii. roles and responsibilities;
 - viii. time frames for the implementation of the above measures; and
 - ix. how condition 10(b) will be implemented, including who will be responsible for the long-term management of the **retained** land, and how the land will be protected in the long-term.

If the Minister approves the plan, the approved plan must be implemented.

- (b) within 5 years of the **substantial commencement** of the action, the person taking the action must provide the **department** with written evidence, including certificates of title, that the 'POS Conservation' areas (marked in green in Attachment A) has been transferred to the City of Wanneroo for the purpose of conservation.
11. To mitigate impacts to Carnaby's Black Cockatoo, the person taking the action must fully implement the **revegetation** of at least 12.7 ha of native vegetation (including **primary feeding plants** for Carnaby's Black Cockatoo) in the Yellagonga Regional Park (in consultation with the **DEC**) using seed and topsoil collected in accordance with the *Clearing and Revegetation Management Plan* required under condition 12.
12. To mitigate impacts to Carnaby's Black Cockatoo, the person taking the action must prepare and submit a *Clearing and Revegetation Management Plan* (the plan) for the **Minister's** approval. The plan must include:
 - (a) a commitment to the staged collection of native seed prior to **clearing**, and collection of topsoil following clearing, from within Carnaby's Black Cockatoo foraging habitat as shown in Attachment B (checked in black, but excluding those areas shaded green in Attachment B), for use in **revegetation**;
 - (b) a commitment to store native seed and topsoil, and transport it to a receiving site(s) where **revegetation** is being undertaken by the **DEC** or another receiving party (or parties), and at least 50% of the collected seed and topsoil must be used within 20 km of the **proposal site**;

(c) detailed protocols for staged collection and use of native seed and topsoil required by conditions 12(a) and 12(b) to be developed in consultation with an **independent revegetation expert** (approved in writing by the department) and the **DEC** or other receiving party (or parties) including:

- i. the optimal methodology for native seed and topsoil collection from the **proposal site**;
- ii. how clearing will be staged to best harvest utilise the native seed and topsoil resource for **revegetation**;
- iii. how native seed and topsoil will be stored and transported,
- iv. measures to manage any topsoil from the site that contains invasive weeds (at a level that makes that soil not suitable for use in **revegetation**) or soil infestations such as *Phytophthora*; and
- v. onsite supervision and implementation monitoring mechanisms.

(d) a commitment to **revegetate** at least 1.9 ha of native vegetation within Public Open Space on the **proposal site**;

(e) methodology for **revegetation**, both on-site, and in Yellagonga Regional Park (as required under condition 11), using native seed and topsoil collected in accordance with the protocols required by condition 12(c), along with:

- i. survival targets proposed for plantings;
- ii. performance indicators and corrective measures;
- iii. roles and responsibilities; and
- iv. timeframes for the implementation and management of the above measures.

(f) a commitment for at least 50% of plantings for trees and shrubs in street-scaping to consist of plants known to be **primary feeding plants** for Carnaby's Black Cockatoo. Site selection for street-scaping must take account of any risk of vehicle strike to Carnaby's Black Cockatoos.

If the **Minister** approves the plan, then the approved plan must be implemented.

13. To offset the loss of habitat for Carnaby's Black Cockatoo, within 12 months of the date of this approval, the person taking the action must:

(a) provide monies to the **DEC** to fully fund the acquisition of:

- i. an offset property that contains at least 850 ha of good quality foraging habitat for Carnaby's Black Cockatoo, that is within the 'Regans Ford' locality according to Landgate's WA Atlas; or
- ii. another parcel of land approved in writing by the **department**; and

(b) provide the **department** with a textual description and map clearly defining the location and boundaries of the offset property described in condition 13(a), which must be accompanied with the **offset attributes** and a **shapefile**.

14. The person taking the action must not undertake any **clearing** of habitat for Carnaby's Black Cockatoo (as shown in Attachment B hatched in black) apart from of the area outlined in yellow in Attachment D, unless:

(a) the *Clearing and Revegetation Management Plan* required under condition 12 has been approved by the **Minister**; and

(b) for each proposed clearing stage, the **department** has been provided written evidence that the **DEC** or other receiving party (or parties) agree(s) to utilise the seed and soil for the purposes of **revegetation** in accordance with the protocols developed under condition 12(c).

15. To mitigate impacts to the Graceful Sun Moth (*Synemon gratiosa*) and offset the loss of habitat for that species, the person taking the action must:
- (a) not **clear** any land that is proposed to be **retained** that is also habitat for the Graceful Sun Moth (as shown in Attachment C);
 - (b) provide monies to the **DEC** to maintain and improve the quality of at least 180 ha of Graceful Sun Moth habitat within the Wilbinga Conservation Park. This funding must be adequate to fully fund, for a period of 20 years, all management actions deemed necessary by the **DEC** to mitigate known threats to Graceful Sun Moths and their habitat; and improve habitat quality through **revegetation** or restoration. All funding must be provided within 12 months of the date of this approval; and
 - (c) prepare and submit, within 6 months of the date of this approval, a *Wilbinga Conservation Park Graceful Sun Moth Habitat Management Funding Plan* (the plan) detailing how condition 15(b) will be satisfied, for the **Minister's** approval. The plan must include:
 - i. what management actions are likely to be funded;
 - ii. the amount of funding that will be provided;
 - iii. written evidence that the **DEC** agree that the funding is adequate for them to undertake the management actions.

If the **Minister** approves the plan, the approved plan must be implemented.

Definitions

Clearing of native vegetation, including the cutting down, felling, thinning, logging, removing, killing, destroying, poisoning, ringbarking, uprooting or burning of native vegetation.

Construction includes any preparatory works required to be undertaken including the erection of any onsite temporary structures and the use of heavy duty equipment for the purpose of breaking the ground for buildings or infrastructure.

Substantial commencement of the action is when more than 1 ha of land on the proposal site has been impacted by **clearing** or **construction**.

DEC is the Western Australian Government's Department of Environment and Conservation (or equivalent agency).

Department is the Australian Government Department administering the *Environment Protection and Biodiversity Conservation Act 1999*.

EPBC Act is the *Environment Protection and Biodiversity Conservation Act 1999*.

Independent revegetation expert. A scientist with relevant qualifications and expertise in best-practise **revegetation** (including the use of native seed and topsoil in **revegetation**), who is not affiliated with the person taking the action.

Listed Threatened Species are species listed under the EPBC Act including Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) and the Graceful Sun Moth (*Synemon gratiosa*).

Minister is the Minister administering the *Environment Protection and Biodiversity Conservation Act 1999* and includes a delegate of the Minister.

Offset attributes means an '.xls' file capturing relevant attributes of the Offset Area, including the EPBC reference ID number, the physical address of the offset site, coordinates of the boundary points in decimal degrees, the EPBC protected matters that the offset compensates for, any additional EPBC protected matters that are benefiting from the offset, and the size of the offset in hectares.

Primary feeding plants for Carnaby's Black Cockatoo include: any *Banksia*; any plants identified in a relevant search of the DEC's Plants for Carnaby's Search Tool (at <http://www.dec.wa.gov.au/management-and-protection/threatened-species/5983-plants-for-carnabys-search-tool.html>); or other plants approved in writing by the **Department**.

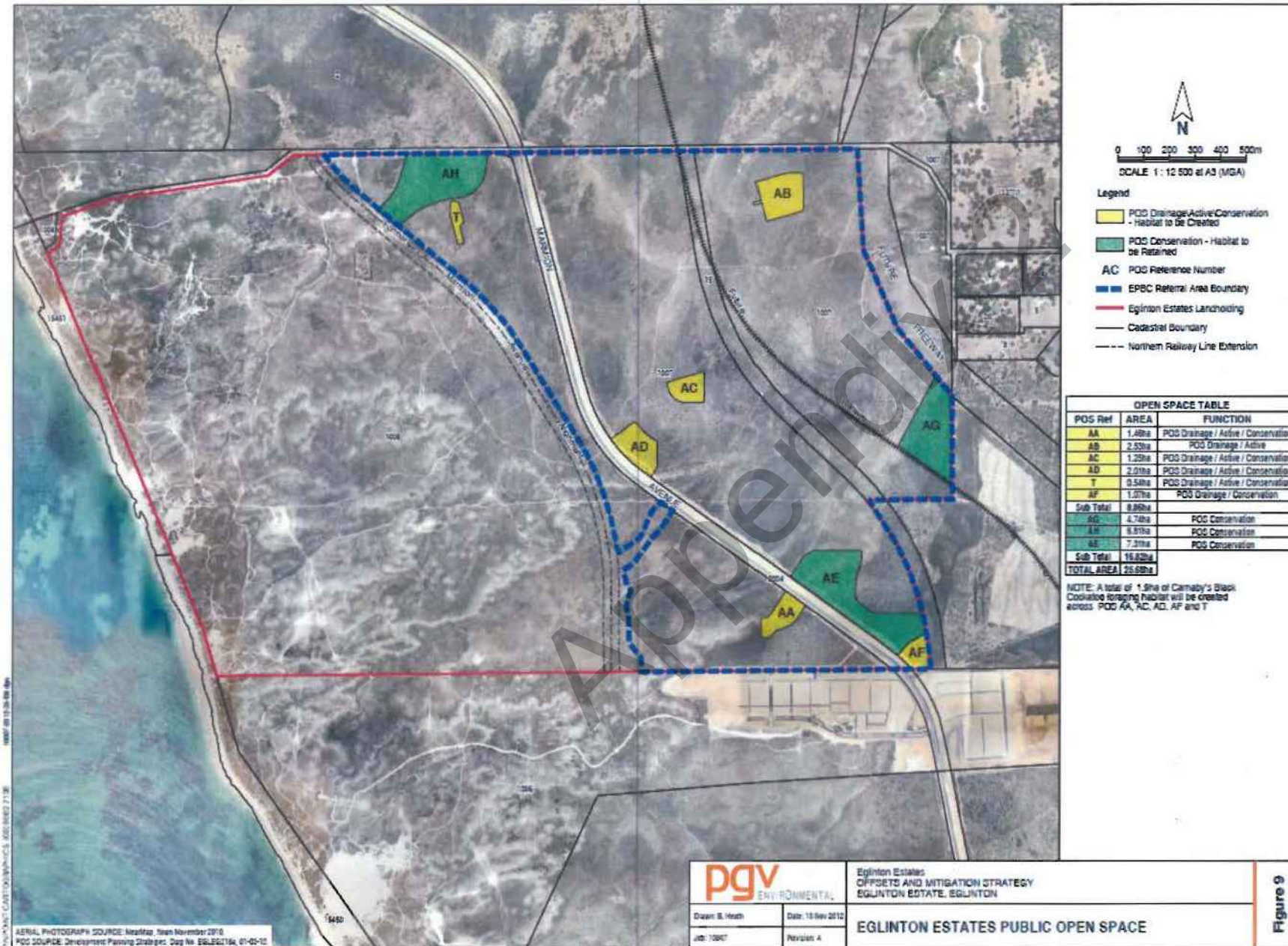
Proposal site is the area shown at Attachment A as EPBC Referral Area Boundary.

Retained land means: the 'POS Conservation' areas marked in green in Attachment A.

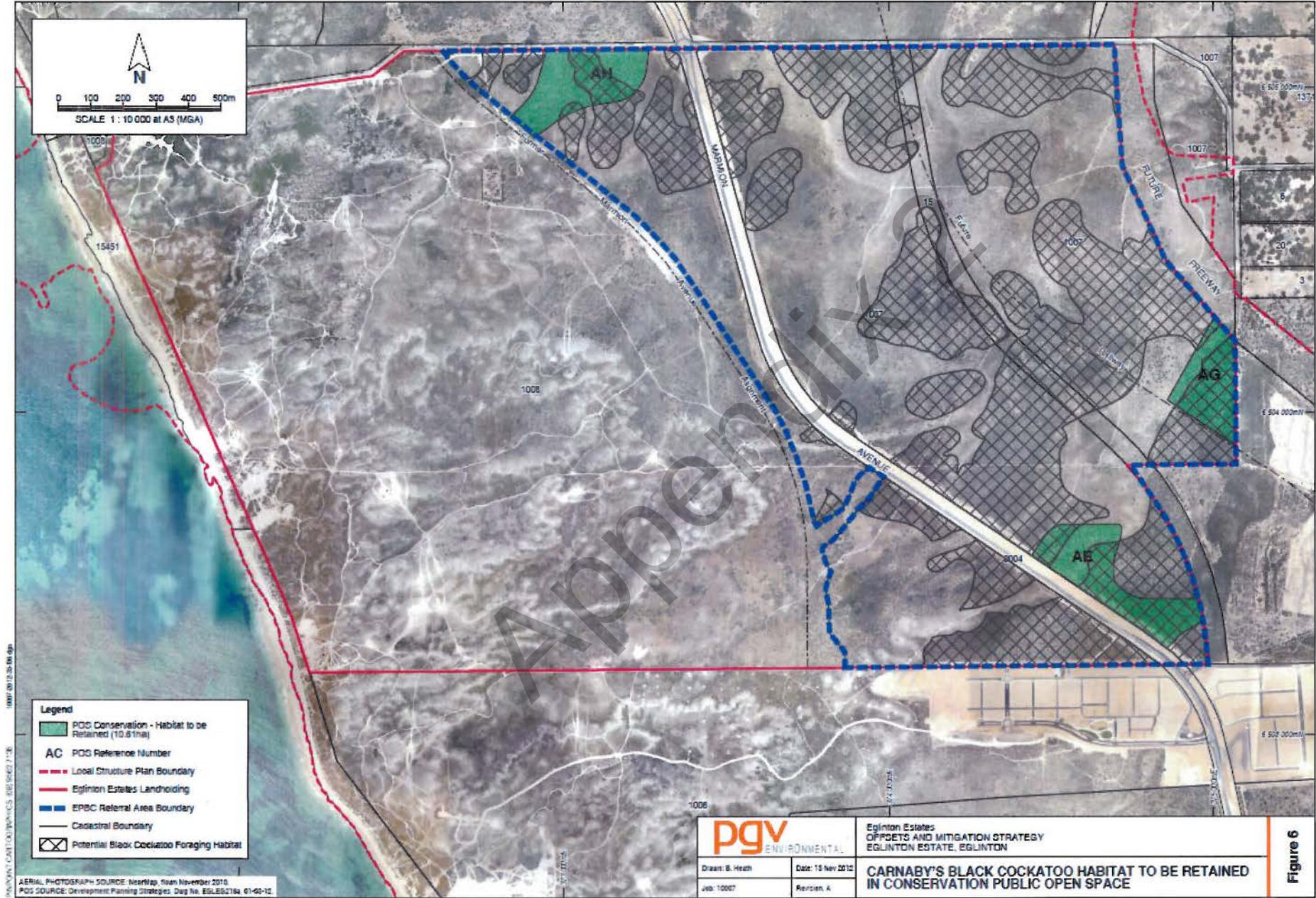
Revegetation is the removal of weeds and the long-term establishment of native vegetation.

Shapefile means an ESRI Shapefile containing '.shp', '.shx' and '.dbf' files and other files capturing attributes of the Offset Area, including the shape, EPBC reference ID number and EPBC protected matters present at the relevant site. Attributes should also be captured in '.xls' format.

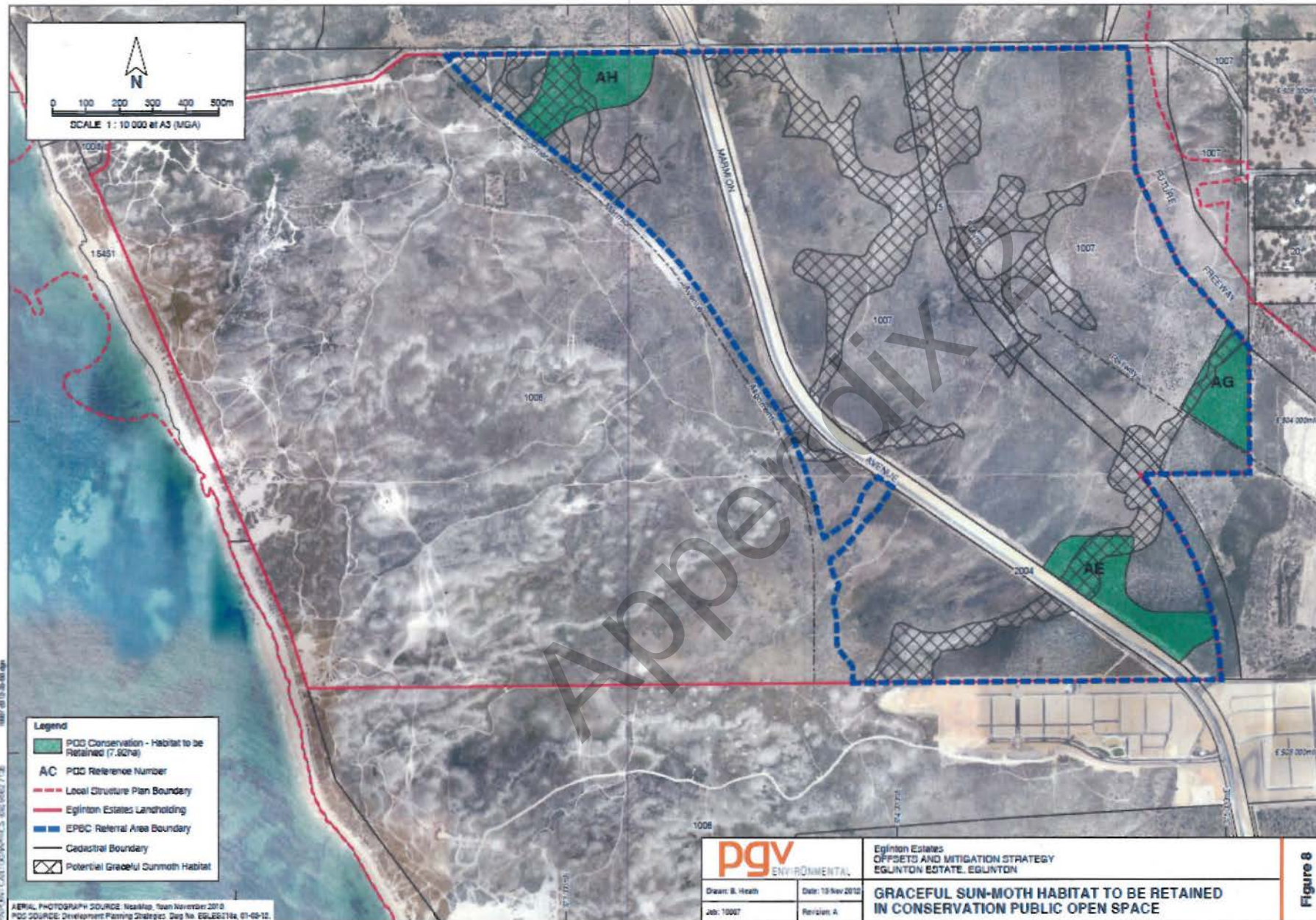
Attachment A



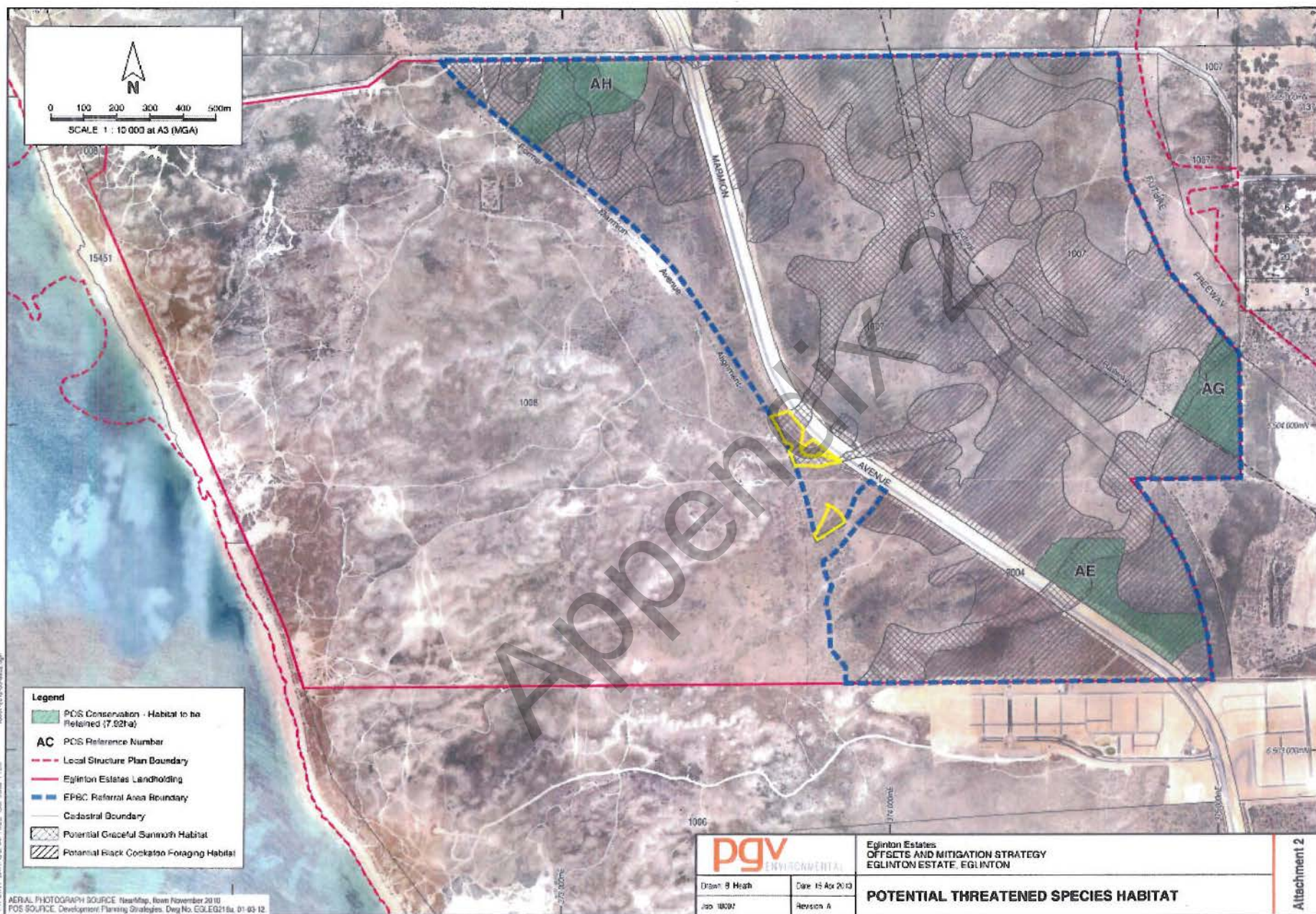
Attachment B



Attachment C



Attachment D



APPENDIX 3

**EPBC 2010/5777 Variation to Approval
17 July 2013**



VARIATION TO CONDITIONS ATTACHED TO APPROVAL

Eglinton Estates Residential Development, Lot 1007 & Part Lot 1008, Pipidinny Road, Eglinton, WA (EPBC 2010/5777)

This decision to vary a condition of approval is made under section 143 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Approved action

Person to whom the approval is granted Eglinton Estates Pty Ltd
ABN: 48 009 460 397

Approved action The clearing of approximately 298 ha of native vegetation for the urban development of Lot 1007 and the eastern portion of Lot 1008, Pipidinny Road, Eglinton, WA, [See EPBC Act referral 2010/5777], within the footprint shown as a blue dotted line in Attachment A of the approval notice, dated 30 April 2013.

Variation

Variation of conditions of approval The variation is:
Revoke condition 15 attached to the approval dated 30 April 2013.
Revoke Attachment C attached to the approval dated 30 April 2013.
Delete the definition for 'listed threatened species' attached to the approval dated 30 April 2013 and substitute with the definition specified below.
Delete Attachments A, B, and D attached to the approval decision notice, dated 30 April 2013 and substitute with Attachment A, B and D specified below.

Date of effect This variation has effect on the date the instrument is signed.

Person authorised to make decision

name and position Barbara Jones
Assistant Secretary
North, West and Offshore Assessment Branch

Signature

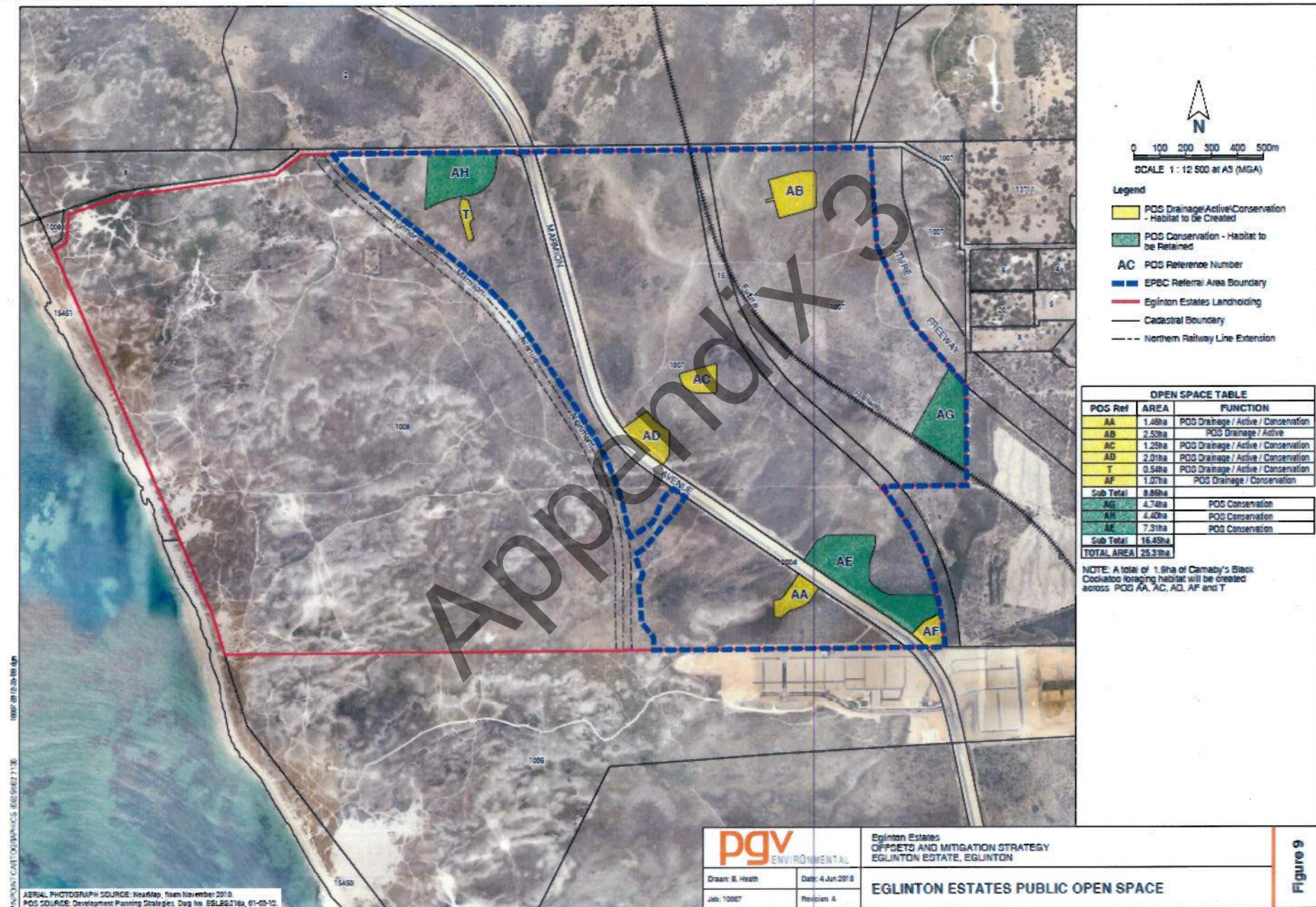
Date of decision 17/7/2013

Definition attached to the approval

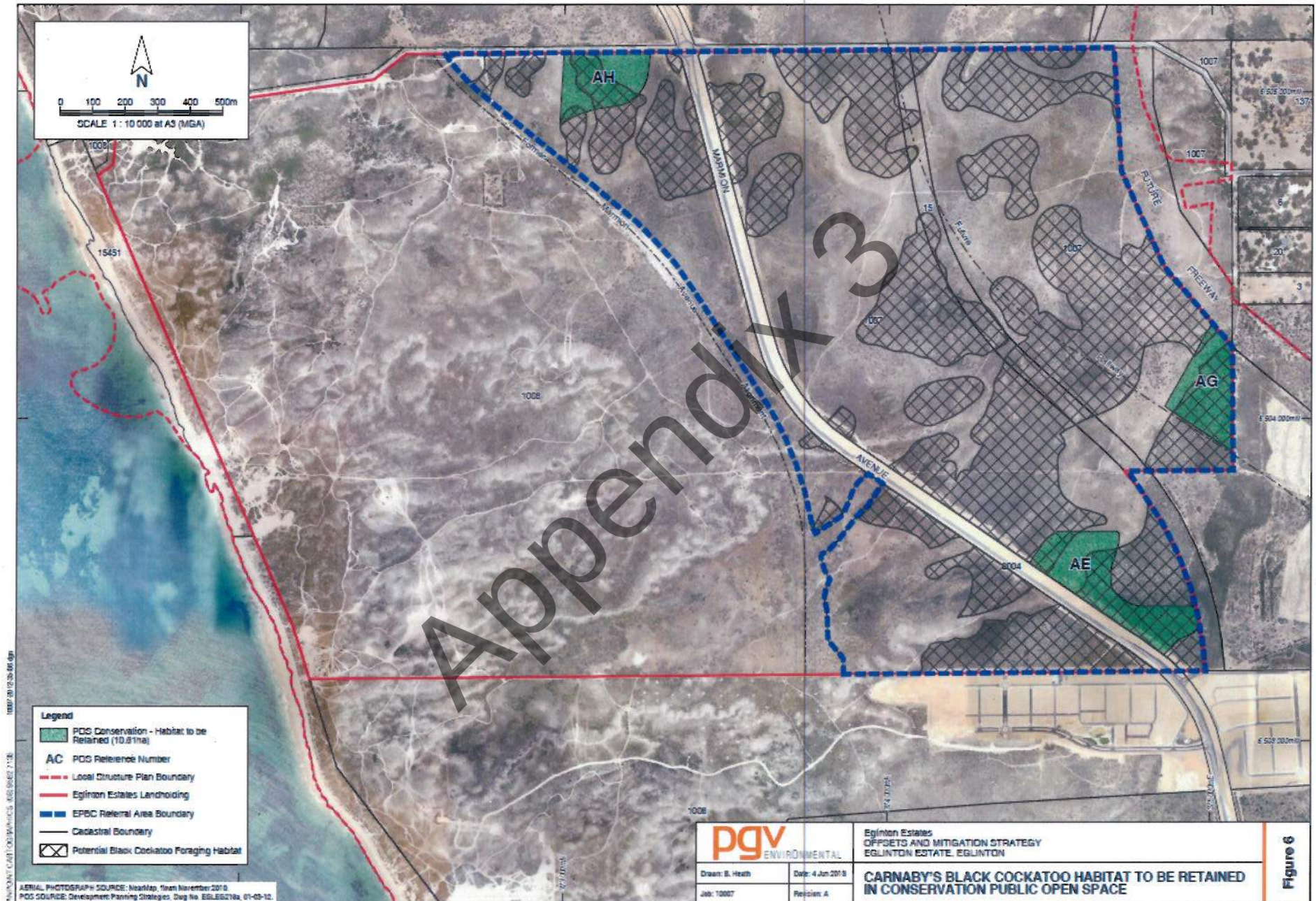
Listed Threatened Species are species listed under the EPBC Act including Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*).

Attachments attached to the approval

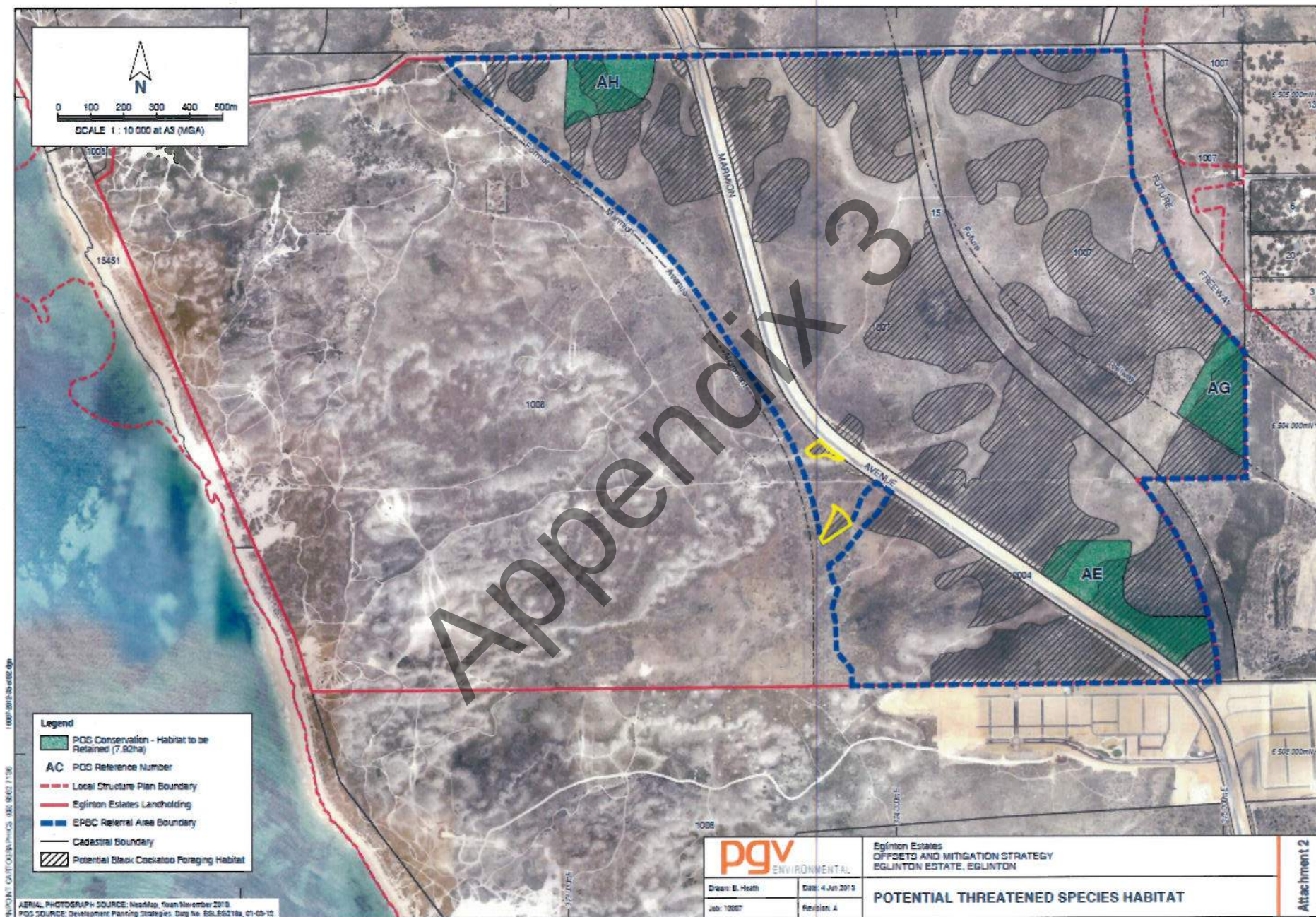
Attachment A



Attachment B



Attachment D

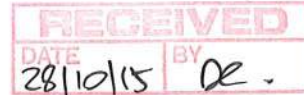


APPENDIX 4

**EPBC 2010/5777 Variation to Approval
20 October 2015**



Australian Government
Department of the Environment



Our reference: 2010/5777

Contact Officer: Rochelle Tomkins
Telephone: (02) 6275 9455 Facsimile: (02) 6274 1878
Email: post.approvals@environment.gov.au

Mr Darren Walsh
CEO / Managing Partner
PO Box 243
SUBIACO WA 6904

Dear Mr Walsh

EPBC 2010/5777 – Eglinton Estates: Clearing of Native Vegetation from Lot 1007 and Part Lot 1008 – Variation to Approval Conditions 12 and 13

I refer to your letter of 25 May 2015 to the Department, on behalf of Eglinton Estates Pty Ltd requesting a variation to conditions 12 and 13 of the approval dated 30 April 2013.

Officers of the Post Approvals Section have assessed your request and provided advice regarding the variation. As delegate of the Minister for the Environment, I have decided to approve your request to vary conditions 12 and 13 of the approval in accordance with the provisions of the national environment law, the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The variation of conditions of approval does not relieve the person to whom it has been granted from an obligation to comply with any other law of the Commonwealth, state or territory that is applicable to do the action and to have any right, title or interest that is required to access land or waters and to do the action.

Please ensure that you maintain accurate records of all activities associated with, or relevant to the conditions of approval, so that they can be made available to the department on request. Such documents may be subject to audit and used to verify compliance. Summaries of results of audits may be published by the department. Information about the monitoring and audit program can be found on the department's website at www.environment.gov.au/epbc/compliance/auditing.html.

If you have any enquiries please contact Rochelle Tomkins on 02 6275 9455.

Yours sincerely

Kynan Gowland
A/g Assistant Secretary
Compliance & Enforcement Branch
Environment Standards Division

20 October 2015



VARIATION TO CONDITIONS ATTACHED TO APPROVAL

Eglinton Estates Residential Development, Lot 1007 & Part Lot 1008, Pipidinny Road, Eglinton, WA (EPBC 2010/5777)

This decision to vary a condition of approval is made under section 143 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Approved action

Person to whom the approval is granted	Eglinton Estates Pty Ltd ABN: 48 009 460 397
---	---

Approved action	The clearing of approximately 298 ha of native vegetation for the urban development of Lot 1007 and the eastern portion of Lot 1008, Pipidinny Road, Eglinton, WA [See EPBC Act referral 2010/5777], within the footprint shown as a blue dot line in <u>Attachment A</u> .
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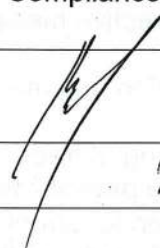
Variation

Variation of conditions of approval	The variation is: Delete conditions 12 and 13 attached to the approval dated 30 April 2013 and substitute with the conditions specified below.
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Date of effect	This variation has effect on the date the instrument is signed
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Person authorised to make decision

name and position	Kynan Gowland Assistant Secretary (A/g) Compliance & Enforcement Branch
--------------------------	---

Signature	
------------------	---

Date of decision	20/10/ 2015
-------------------------	-------------

Condition attached to the approval

12. To mitigate impacts to Carnaby's Black Cockatoo, the person taking the action must prepare and submit a *Clearing and Revegetation Management Plan* (the plan) for the **Minister's** approval. The plan must include:
- a) A commitment to the staged collection of native seed prior to **clearing** from within Carnaby's Black Cockatoo foraging habitat as shown in Attachment B (checked in black, but excluding those areas shaded green in Attachment B), and the collection of topsoil from 33 ha of the project site, from within 73 ha of good or better condition Carnaby's Black Cockatoo habitat as shown in Attachment B (checked in black), for use in **revegetation**.
 - b) A commitment to store native seed (excluding that which is required for revegetation on-site and within Yellongonga Regional Park) and transport it to a seed bank or receiving site(s) where **revegetation** is being undertaken by the **DPaW** or another receiving party (or parties).
 - c) Detailed protocols for staged collection and use of native seed and topsoil required by conditions 12a, 12d and 12e to be developed in consultation with an **independent revegetation expert** (approved in writing by the Department) and the **DPaW** or other receiving party (or parties) including:
 - i. The optimal methodology for native seed and topsoil collection from the **proposal site**
 - ii. How clearing will be staged to best utilise the native seed and topsoil resource for **revegetation**
 - iii. How native seed and topsoil will be stored and transported
 - iv. Measures to manage any topsoil from the site that contains invasive weeds (at a level that makes that soil not suitable for use in **revegetation**) or soil infestation such as *Phytophthora*, and
 - v. On-site supervision and implementation of monitoring mechanisms.
 - d) A commitment to **revegetate** at least 1.9 ha of native vegetation within Public Open Space on the proposal site.
 - e) Methodology for revegetation, both on-site, and in Yellagonga Regional Park (as required under condition 11), using native seed and topsoil collected in accordance with the protocols require by condition 12c, along with:
 - i. Survival targets proposed for plantings
 - ii. Performance indicators and corrective measures
 - iii. Roles and responsibilities, and
 - iv. Timeframes for the implementation and management of the above measures.
 - f) A commitment for at least 50% of planting of trees and shrubs in street-scaping to consist of plants known to be **primary feeding plants** for Carnaby's Black Cockatoo. Site selection for street-scaping must take account of any risk of vehicle strike to Carnaby's Black Cockatoos.

If the **Minister** approves the plan, then the approved plan must be implemented.

13. To offset the loss of habitat for Carnaby's Black Cockatoo, the person taking the action must, by January 2016:
- a) Provide monies to the DPaW to fully fund the acquisition of:
 - i. An offset property (or properties) that contains at least 886 ha of good quality foraging habitat for Carnaby's Black Cockatoo, that is within the 'Regans Ford' or Gingin area, or
 - ii. Another parcel of land approved in writing by the **Department**.

- b) Provide the **Department** with a textual description and map clearly defining the location and boundaries of the offset property (or properties) described in condition 13(a), which must be accompanied with the **offset attributes** and a **shapefile**.

Appendix 4

APPENDIX 5

**EPBC 2010/5777 Variation to Approval
25 October 2018**



Australian Government

Department of the Environment and Energy

Belinda Heath
Senior Environmental Consultant
PGV Environmental
Unit 1, 61 Guthrie Street
OSBORNE PARK WA 6017

**Eglinton Estates Residential Development, Eglinton, WA (EPBC 2010/5777)
Variation of condition 10**

Dear Ms Heath

Thank you for your letter dated 16 October 2018 to the Department, for and on behalf of Eglinton Estates Pty Ltd, requesting variation of condition 10(b) of the approval dated 30 April 2013.

Officers of this Department have reviewed the variation request. As delegate of the Minister, I have varied condition 10 of EPBC Approval 2010/5777 under section 143(1)(c) of the *Environment Protection and Biodiversity Conservation Act 1999* to extend the timeframe for the transfer of 'POS Conservation' areas to the City of Wanneroo to align with the development of the land adjacent to the conservation area. Condition 10 must now be undertaken in accordance with the varied condition specified in the variation notification, which has been attached for your information.

As you are aware, the Department has an active monitoring program which includes monitoring inspections, desk top document reviews and audits. Please ensure that you maintain accurate records of all activities associated with, or relevant to, the conditions of approval so that they can be made available to the Department on request.

Should you require any further information please contact Peter Blackwell, Assistant Director, Post Approvals Section, on 03 6208 2927 or by email: post.approvals@environment.gov.au.

Yours sincerely

Greg Manning
Assistant Secretary
Assessments (WA, SA, NT) and Post Approvals Branch
Environment Standards Division

25/10/2018



VARIATION OF CONDITIONS ATTACHED TO APPROVAL

Eglinton Estates Residential Development, Lot 1007 & Part Lot 1008, Pipidinny Road, Eglinton WA. (EPBC 2010/5777)

This decision to vary conditions of approval is made under section 143 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Approved action

Person to whom the approval is granted	Eglinton Estates Pty Ltd ABN: 48 009 460 397
---	---

Approved action	The clearing of approximately 298 ha of native vegetation for the urban development of Lot 1007 and the eastern portion of Lot 1008, Pipidinny Road, Eglinton, WA [See EPBC Act referral 2010/5777], within the footprint shown as a blue dotted line in <u>Attachment A</u>
------------------------	--

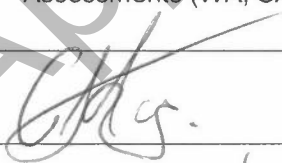
Variation

Variation of conditions attached to approval	The variation is: Delete condition 10 attached to the approval and substitute with the condition specified below
---	---

Date of effect	This variation has effect on the date the instrument is signed
-----------------------	--

Person authorised to make decision

Name and position	Greg Manning Assistant Secretary Assessments (WA, SA, NT) and Post Approvals Branch
--------------------------	---

Signature	
------------------	---

Date of decision	25/10/2018
-------------------------	------------

Conditions attached to the approval

10. To protect and enhance habitat for **listed threatened species** that is **retained** on the proposal site, the person taking the action must:

- (a) prepare and submit, within 12 months of the date of this approval, a *Conservation Management Plan* detailing management of habitat for **listed threatened species** that is **retained** on the **proposal site** for the **Minister's** approval. The plan must include:
 - i. measures to physically delineate (through fencing or other means) areas that will be **retained**;
 - ii. erosion and dust control measures during construction;
 - iii. the management of weeds, *Phytophthora* dieback, bushfire and feral animals;
 - iv. identification of any degraded habitat for **listed threatened species** and **revegetation** of those areas;
 - v. a monitoring program for **listed threatened species** and their habitat;
 - vi. performance indicators and corrective actions;
 - vii. roles and responsibilities;
 - viii. time frames for the implementation of the above measures; and
 - ix. how condition 10(b) will be implemented, including who will be responsible for the long-term management of the **retained** land, and how the land will be protected in the long-term.

If the Minister approves the plan, the approved plan must be implemented.

- (b) within 10 years of the **substantial commencement** of the action, the person taking the action must provide the **department** with written evidence, including certificates of title, that the 'POS Conservation' areas (marked in green in Attachment A) have been transferred to the City of Wanneroo for the purpose of conservation.

APPENDIX 6

**EPBC 2010/5777 Variation to Approval
17 June 2019
(includes CMP and CRMP approval)**



Belinda Heath
Senior Environmental Consultant
PGV Environmental
Unit 1, 61 Guthrie Street
OSBORNE PARK WA 6017

**Eglinton Estates Residential Development, Eglinton, WA (EPBC 2010/5777)
Variation of conditions 3, 9, 11, 12 and 14 and approval of revised Conservation
Management Plan and Clearing and Revegetation Management Plan**

Dear Ms Heath

Thank you for your letter dated 17 April 2019 to the Department, for and on behalf of Eglinton Estates Pty Ltd, requesting:

- variation of conditions 9, 11, 12 and 14 and Attachment A, Attachment B and Attachment D of the approval dated 30 April 2013;
- approval of *Eglinton Estates Conservation Management Plan, 5 June 2019* in accordance with condition 10 and approval of *Eglinton Estates Clearing and Revegetation Management Plan, 5 June 2019* in accordance with condition 12 (the plans).

Officers of this Department have reviewed the variation request. As delegate of the Minister for the Environment, I have varied conditions of EPBC Approval 2010/5777 under section 143(1)(c) of the *Environment Protection and Biodiversity Conservation Act 1999*. The variation is to align the retained conservation area AG with the Local Structure Plan and to remove the requirement of using native seed and top soil from the proposal site for revegetation. In addition, requirements for reporting have been updated. The conditions of approval must now be undertaken in accordance with the varied conditions and attachments specified in the variation notification, which has been attached for your information.

Officers of this Department have considered the plans and are satisfied *Eglinton Estates Conservation Management Plan, 5 June 2019* meets the requirements of condition 10 and *Eglinton Estates Clearing and Revegetation Management Plan, 5 June 2019* meets the requirements of condition 12 of the approval as varied. On this basis, and as a delegate of the Minister for the Environment, I have decided to approve the *Eglinton Estates Conservation Management Plan, 5 June 2019* and *Eglinton Estates Clearing and Revegetation Management Plan, 5 June 2019*. These plans must now be implemented.

As you are aware, the Department has an active monitoring program which includes monitoring inspections, desk top document reviews and audits. Please ensure that you maintain accurate records of all activities associated with, or relevant to, the conditions of approval so that they can be made available to the Department on request.

Should you require any further information please contact Panna Patel, Post Approvals Section, on 02 6275 9299 or by email: post.approvals@environment.gov.au.

Yours sincerely



Greg Manning, Assistant Secretary
Assessments (WA, SA, NT) and Post Approvals Branch

17 June 2019

Appendix 6

Note: Under s 491 of the *Environment Protection and Biodiversity Conservation Act 1999* it is an offence to knowingly provide false and/or misleading information to a departmental officer.

APPENDIX 7

Eglinton Conservation POS Monitoring Report – Year 2023

EGLINTON ESTATES CONSERVATION PUBLIC OPEN SPACE

2023 MONITORING REPORT

Prepared for: Eglinton Estates

Report Date: 23 January 2024

Version: 1

Report No. 2024-806

pgv
ENVIRONMENTAL

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1 INTRODUCTION

1.1 Location

The Eglinton Estates Pty Ltd (Eglinton) landholding is located 45km north west of the Perth Central Business District (Figure 1). The land is being developed in accordance with the Local Structure Plan (LSP) for residential and commercial purposes and includes Urban Development, the Eglinton District Centre, primary schools and playing fields, the Eglinton Marina and Coastal Village, Regional Open Space and Public Open Space.

1.2 Background

1.2.1 EPBC Referral

Development of the eastern half of the LSP area was assessed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) due to the impact of clearing on Carnaby's Black Cockatoo (*Calyptrorhynchus latirostris*) foraging habitat. The proposed development was approved by the Commonwealth Environment Minister on 30 April 2013 and modified on 17 July 2013.

As a result of the assessment and approval under the EPBC Act, three areas that contained Carnaby's Black Cockatoo foraging habitat in very good condition were identified for retention within Conservation Public Open Space (POS). The locations of the POS areas are shown in Figure 2 and are:

- To the east of Marmion Avenue in the southern part of the site (POS Area AE);
- To the south of Pipidinny Road in the western part of the site (POS Area AH); and
- In the south eastern corner of the site adjacent to the future Mitchell Freeway extension (POS Area AG).

In 2019 Eglinton sold a portion of their land, Lot 5001, to Peet 2018 No. 1 Pty Ltd (Peet). Lot 5001 is located west of Marmion Ave and south of Pipidinny Road. POS Area AH is located on Lot 5001. Vegetation monitoring of POS Area AH was undertaken by Strategen JBS&G on behalf of Peet for Year 2021. The Elavale Monitoring Report is provided at Appendix 5 and summarised in this report.

In 2021 Eglinton sold a portion of their land, Lot 801 Marmion Avenue, to Lonnegal Pty Ltd (Cedar Woods Pty Ltd). Lot 801 is located east of Marmion Avenue. POS Area AE is location on Lot 801. Vegetation monitoring of POS Area AE was undertaken by PGV Environmental for Cedar Woods. The results are included in this report.

1.2.2 Conservation Management Plan

A Conservation Management Plan (CMP) was prepared for the three areas of conservation POS in accordance with Condition 10 (a) of the EPBC Act approval (PGV Environmental, 2014). The specific intent of the CMP was to protect, enhance and manage the Carnaby's Cockatoo habitat retained in the Conservation POS areas. The plan included:

- i. Measures to physically delineate (through fencing or other means) areas that will be retained;
- ii. Erosion and dust control measures during construction;

- iii. The management of weeds, phytophthora dieback, bushfire and feral animals;
- iv. Identification of any degraded habitat for listed threatened species and revegetation of those areas;
- v. A monitoring program for listed threatened species and their habitat;
- vi. Performance indicators and corrective actions;
- vii. Roles and responsibilities;
- viii. Time frames for the implementation of the above measures; and
- ix. Implementation of the CMP, including who has responsibilities for the long-term management.

The Conservation Management Plan (CMP) was approved on 23 July 2014 by the Minister for the Environment's Delegate.

Management Actions 6, 7 and 8 in the CMP are to:

- 6 Undertake a vegetation and flora survey in Spring 2014 in the POS conservation areas.
- 7 Undertake a baseline weed mapping survey in Carnaby's Black Cockatoo habitat in accordance with DPaW's Standard Operating Procedure No. 22.1.
- 8 Set up two permanent quadrats in each area of POS conservation areas for annual vegetation/weed monitoring.

Those management actions were undertaken in 2014 and were the subject of the Baseline Flora, Vegetation and Weed survey report (PGV Environmental, 2015).

1.2.3 Section 143 Variation POS Area AG

The original boundary of POS Area AG has been modified as it unintentionally extended into the Yanchep Rail Reserve and Mitchell Freeway extension. The detailed planning for the two transport corridors was not completed at the time of the original EPBC Approval 2010/5777 and approval of the CMP (23 July 2013).

A section 143 variation to the EPBC Approval was submitted to the Department of the Environment and Energy (DoEE) on 17 April 2019. The variation request included changing the boundary of POS Area AG which resulted in a net increase of 0.17ha of Black Cockatoo habitat being retained from 10.61ha to 10.78ha.

The DoEE approved the section 143 variation and revised CMP in June 2019 (Appendix 4). One of the permanent quadrats in POS Area AG was impacted by the variation to the boundary.

1.3 Purpose

The CMP contains a monitoring program for the POS Conservation Areas. Among other things the monitoring programme requires the vegetation in the two 10m x 10m quadrats established in each of the three POS areas to be monitored annually in mid-spring until the areas are handed over to the City of Wanneroo.

This report includes the results of the 2023 vegetation quadrat monitoring and any additional species recorded in the three POS areas.

2 SITE DESCRIPTIONS

2.1 POS AE

POS AE is located on Lot 801 (Lonnegal Pty Ltd) to the east of and adjoining Marmion Avenue (Figure 2). The vegetation types in POS AE are outlined in Table 1. Two land systems occur on the site, the Spearwood Dune soils in the southern two-thirds of the area and a portion of a Quindalup parabolic dune ridge in the northern part.

Table 1: Vegetation Types in POS AE

POS Area	Vegetation Type		Carnaby's Foraging Habitat (Y/N)
7.31ha	CqDs	<i>Calothamnus quadrifidus</i> , <i>Dryandra sessilis</i> (now <i>Banksia sessilis</i>) Open Heath to Closed Heath	Y
	MsLm	<i>Melaleuca systema</i> , <i>Lomandra maritima</i> Low Open Heath	N
	BaBm	<i>Banksia attenuata</i> , <i>Banksia menziesii</i> Low Woodland	Y
	AsJf	<i>Acacia saligna</i> and <i>Jacksonia furcellata</i> Open Scrub	N
	Ds	<i>Dryandra sessilis</i> (now <i>Banksia sessilis</i>) Open to Closed Heath	Y

Overall the Carnaby's Cockatoo foraging vegetation in the POS is in Very Good Condition with sections in Excellent condition while the Quindalup dune vegetation is mostly in Good Condition in the northern part. A strip running along the western boundary is cleared and has a sandy track running along the edge that is mapped as being Completely Degraded.

2.2 POS AG

POS AG is located in the eastern part of the Eglinton Estates development (Figure 2), between the rail reserve and the future freeway reserve. The vegetation types in POS AG are described in Table 2. Two land systems occur on the site, the Spearwood Dune soils in the southeastern and northeastern part of the area and a narrow portion of a Quindalup parabolic dune ridge through the site running in a south-west/north-east direction.

Table 2: Vegetation Types in POS AG

POS Area	Vegetation Type		Carnaby's Foraging Habitat(Y/N)
4.74ha	BaBmDs	<i>Banksia attenuata</i> , <i>Banksia menziesii</i> Low Woodland over <i>Dryandra sessilis</i> (now <i>Banksia sessilis</i>)	Y
	Ds	<i>Dryandra sessilis</i> (now <i>Banksia sessilis</i>) Open to Closed Heath	Y
	MsLm	<i>Melaleuca systema</i> , <i>Lomandra maritima</i> Low Open Heath	N
	BaBmJf	<i>Banksia attenuata</i> , <i>Banksia menziesii</i> Low Woodland over <i>Jacksonia furcellata</i>	Y
	AsSgOa	<i>Acacia saligna</i> , <i>Spyridium globulosum</i> , <i>Olearia axillaris</i> Heath	N

The Ds vegetation unit in the south-eastern corner of the site also contains a small stand of *Eucalyptus decipiens* trees. The vegetation Condition in this POS is mapped as Very Good over most of the POS

with an area along the western boundary mapped as Very Good to Good. Portions of the vegetation are in Excellent condition.

2.3 POS AH

POS AH is located on Lot 5001 (Peet) to the west of Marmion Avenue and to the south of and adjacent to Pipidinn Road (Figure 2). The vegetation types are outlined in Table 3. Two land systems occur on the site, the Spearwood Dune soils the Quindalup Dune soils in a mixed configuration.

Table 3: Vegetation Types in POS AH

POS Area	Vegetation Type		Carnaby's Foraging Habitat (Y/N)
4.40ha	Ds	<i>Dryandra sessilis</i> (now <i>Banksia sessilis</i>) Open to Closed Heath	Y
	BaBm	<i>Banksia attenuata</i> , <i>Banksia menziesii</i> Low Woodland	Y
	MsLm	<i>Melaleuca systema</i> , <i>Lomandra maritima</i> Low Open	N
	Sa	<i>Santalum acuminatum</i> Heath	N

The vegetation condition in this POS is more variable than the other two POS areas with Very Good condition vegetation in the eastern and western parts of the POS and an area in the centre that is described as Good to Degraded. There is also a small area of Good to Degraded vegetation in the southern western part of the POS.

3 2023 MONITORING

3.1 Timing

The 2023 monitoring of conservation POS AE and AG was undertaken by Dr Paul van der Moezel on 21 September 2023. Conservation POS AH monitoring was undertaken by JBS&G on 4 and 5 October 2023.

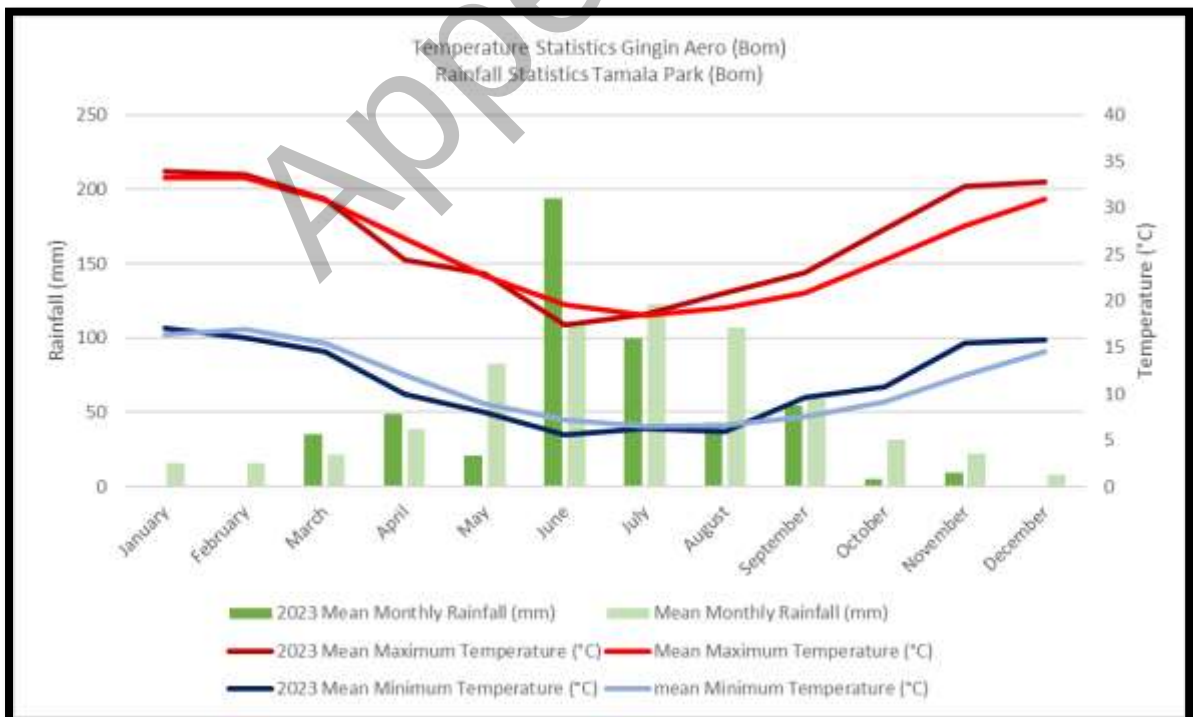
3.2 Climate

Western Australia experiences a Mediterranean climate with warm dry summers and wet cool winters. Peak rainfall periods are between May and September. Climate statistics from the Bureau of Meteorology (BOM, 2023) can be used to compare the survey climatic conditions to mean values for temperature maximum, minimum and rainfall (Graph 1). The statistics have been measured on the Gingin Aero Site (BOM Site Number 009178), which has been collecting data from 1996 except 2022 and 2023 rainfall which is measured at the Tamala Park Station (BOM Site Number 009264) (BOM, 2022).

Comparatively, the seasonal conditions for the 2023 monitoring were above average rainfall in March, April and June and no rainfall was recorded in January, February and December. Total rainfall in 2023 was 511.6mm which is below the average rainfall of 635mm.

Temperature was slightly cooler than average in April and June and then above average from August to December. The 2023 monitoring was not preceded by any extreme weather events (Graph 1).

Graph 1: Mean climate statistics compared to Year to Date 2023



3.3 POS Areas Species List

The 2014-2023 monitoring surveys have recorded a combined total of 174 species within the POS areas consisting of 141 native and 40 introduced species (Appendix 1). One additional species was recorded in 2023 (*Wurmbea dioica*).

The total for each individual area of POS is shown in Table 4.

Table 4: Species Richness in POS Areas

POS Area	Area (ha)	Native Species	Introduced Species	Total Species
AE	7.31	97	17	114
AG	4.74	94	24	118
AH	4.40	72	29	101
Total	16.45	139	35	174

No Threatened (Declared Rare) or Priority flora species have been recorded in any of the POS areas.

3.4 Monitoring Quadrats

3.4.1 POS AE

The two vegetation monitoring quadrats are located in *Banksia attenuata*/*B. menziesii* woodland in Excellent condition.

The number of species recorded in AE1 and AE2 was very similar to previous years with a total of 50 and 43 species, respectively (Appendix 2).

3.4.2 POS AG

The two vegetation monitoring quadrats are located in different Carnaby's Cockatoo foraging habitat. AG2 is located in *Banksia attenuata*/*B. menziesii* woodland vegetation that is most prevalent on the site, and AG1 is located in an area of Parrot Bush (*Banksia sessilis*) dominated vegetation with some emergent *Eucalyptus decipiens*.

The number of species recorded in AG1 and AG2 was very similar to previous years with a total of 45 and 47 species, respectively (Appendix 2).

3.4.3 POS AH

The two vegetation monitoring quadrats in POS AH are located in different types of Carnaby's Cockatoo foraging habitat. AH2 is located in a small stand of *Banksia attenuata*/*B. menziesii* woodland and the AH1 is located in a larger stand of dense Parrot Bush (*Banksia sessilis*) vegetation.

The two quadrats were monitored in 2023 by JBS&G. The number of species in AH1 was well below the number recorded in 2022 by JBS&G but similar to 2021. The reduction was explained by JBS&G as an absence of annual native and weed species caused by the below average rainfall in the spring of 2023. The number of species in AH2 was the same as the previous year although still well below the previous years' monitoring by Eglinton consultants from 2016-2019.

Table 5: Species Richness in Monitoring Quadrats (2014 to 2022)

Year	Species	Quadrat					
		AE1	AE2	AG1	AG2	AH1	AH2
2014	Native	30	29	29	31	23	20
	Introduced	8	5	5	7	7	11
	Total	38	34	34	38	30	31
2015	Native	33	25	30	30	20	22
	Introduced	5	2	5	7	1	9
	Total	38	27	35	37	21	31
2016	Native	37	34	30	36	20	23
	Introduced	10	5	7	8	13	12
	Total	47	39	37	44	33	35
2017	Native	36	37	36	35	28	27
	Introduced	8	6	7	10	14	19
	Total	44	43	43	45	42	46
2018	Native	42	41	33	42	24	27
	Introduced	8	6	8	8	11	21
	Total	50	47	41	50	35	48
2019	Native	35	36	32	40	26	32
	Introduced	9	5	7	9	11	20
	Total	44	41	39	49	37	52
2020	Native	38	36	34	40		
	Introduced	8	4	7	7		
	Total	46	40	41	47		
2021	Native	36	40	35	40	12	19
	Introduced	9	5	9	9	6	10
	Total	45	45	44	49	18	29
2022	Native	37	36	31	39	18	19
	Introduced	9	4	9	11	10	10
	Total	46	40	40	50	28	29
2023	Native	40	38	35	39	10	17
	Introduced	10	5	10	8	7	11
	Total	50	43	45	47	17	28

3.4.4 Photo Monitoring

Appendix 3 provides the photo monitoring point comparisons from 2014 to 2023 for the six monitoring quadrats. Overall, there were no major differences in the condition of the vegetation in the POS areas recorded in 2023.

3.5 Weed Monitoring

The 2014 weed monitoring required the mapping of weeds over the entire POS areas to assist in developing a weed control programme.

The follow-up annual weed monitoring was intended to only occur in the two permanent vegetation monitoring plots established in each POS area so that any new infestations of significant weeds could be recorded.

The quadrat monitoring data provided in Appendix 2 and summarised in Table 5 shows that the number of weed species in the quadrats has remained more or less the same as previous years. While the number of weed species in AG2 is higher than normal all the species recorded in 2023 have previously been recorded in the quadrat.

Overall, the quality of the vegetation in monitoring plots in conservation POS AE and AG has not changed over the nine annual monitoring events. The percentage of overall weed cover in the AE and AG quadrats is <1-2%.

The condition of the vegetation in POS area AH was similar to that assessed in 2022 (Appendix 5).

Appendix 7

4 CONCLUSION

4.1 Vegetation Monitoring

Monitoring of the vegetation in the three POS areas has shown no change in the condition of the vegetation overall since monitoring began in 2014. The four quadrats established in the two Conservation POS AE and AG recorded a similar number of species, both native and introduced, compared to previous years. The monitoring results for POS area AH in 2023 showed a large reduction in numbers in AH1 compared to 2022 which was attributed to the below average rainfall in early spring 2023.

4.2 Weed Monitoring

Observations in the POS areas overall showed no noticeable change in weed species presence or cover. Quadrat data showed some differences in weed species which were considered not significant. The quality of the vegetation in the POS areas has not changed since the baseline monitoring.

Appendix A

5 REFERENCES

Bureau of Meteorology (BOM, 2022). <http://www.bom.gov.au/climate/data/> Website accessed on 25 January 2022

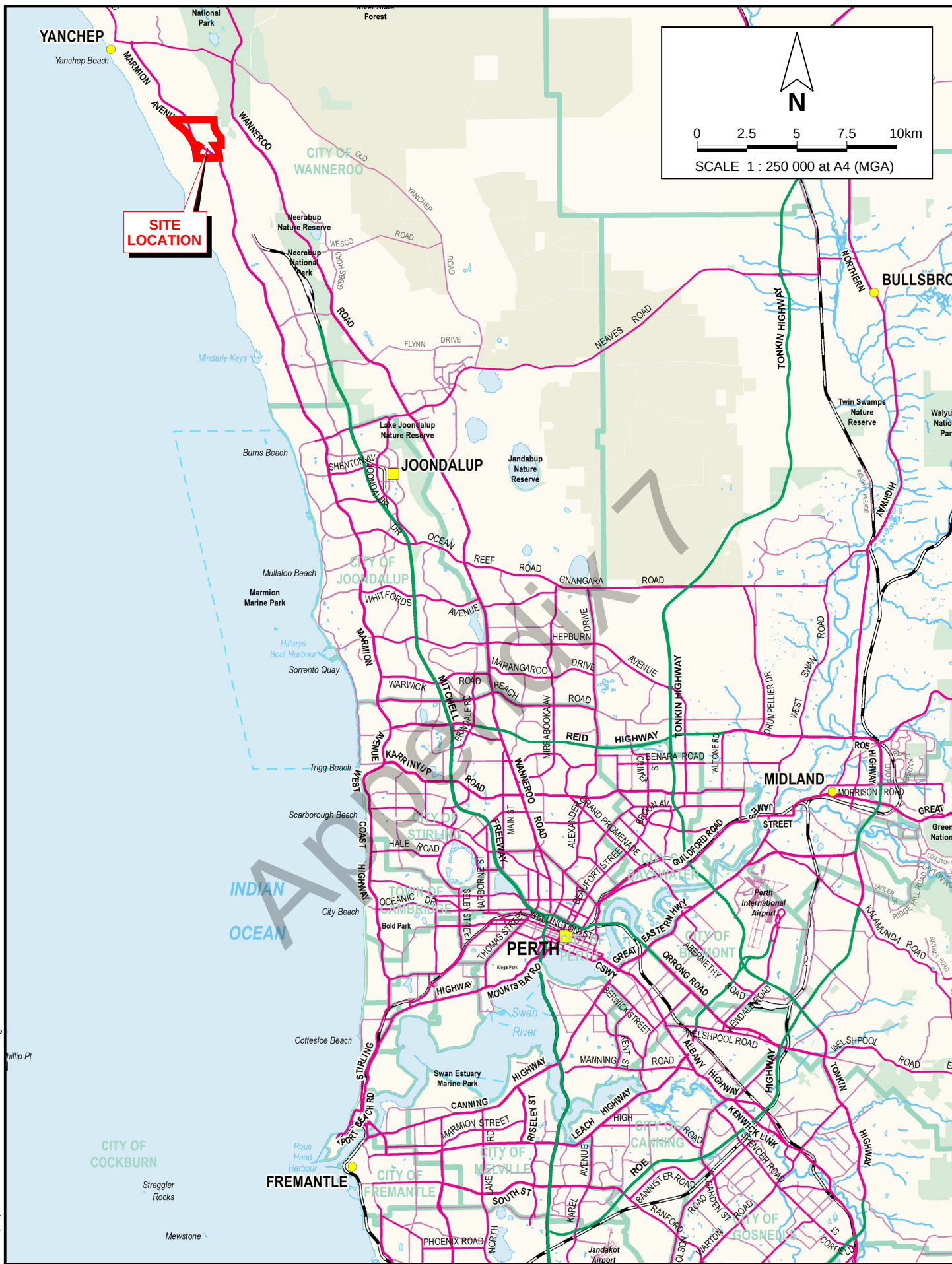
PGV Environmental (2014) *Eglinton Estates Conservation Management Plan*. Prepared for Eglinton Estates Pty Ltd 29 April 2014. Report 2014-142.

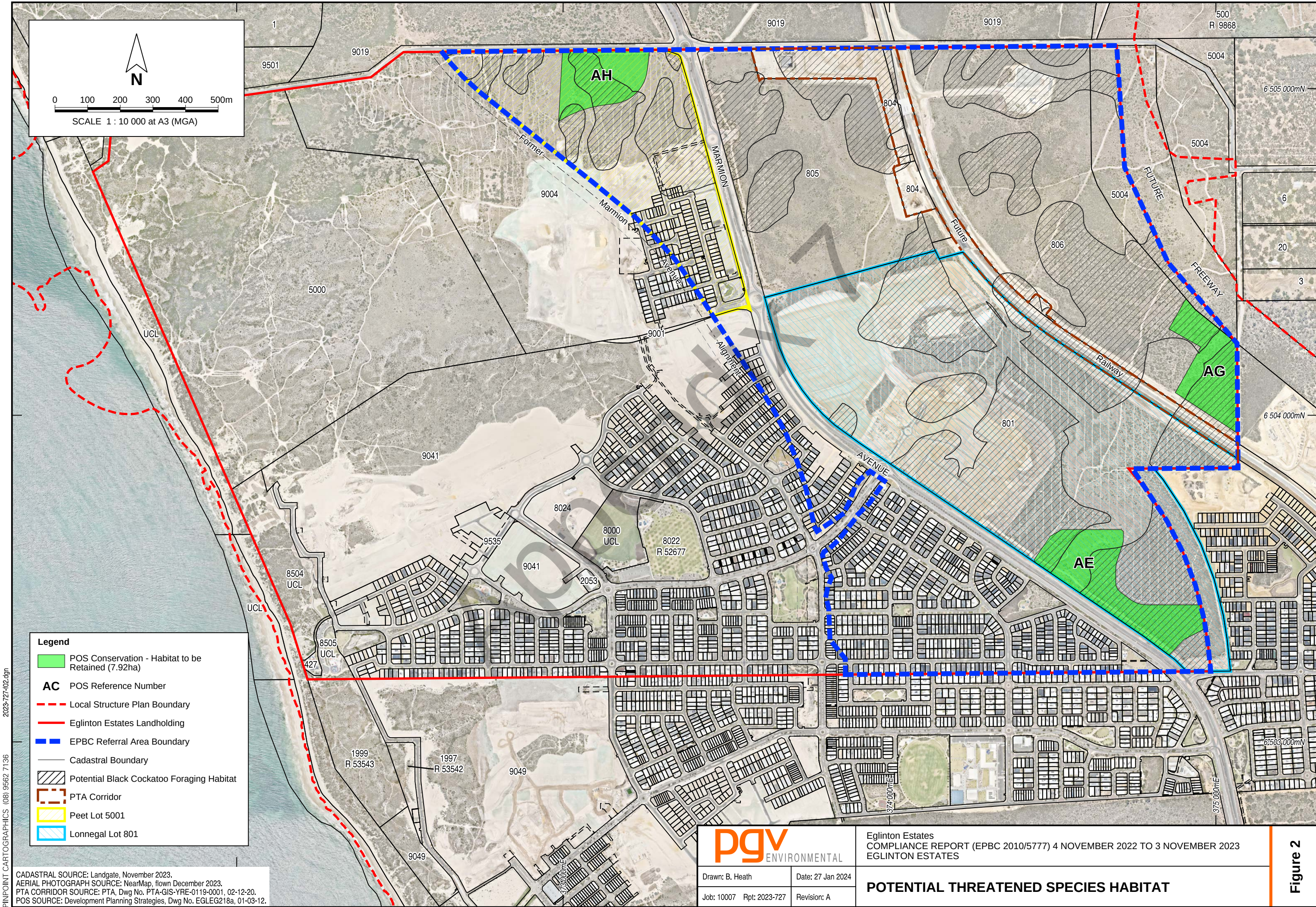
PGV Environmental (2015) *Eglinton Estates Conservation Public Open Space Baseline Flora, Vegetation and Weed Survey*. Prepared for Eglinton Estates 4 March 2015. Report 2015-198.

Appendix 7

FIGURES

Appendix ↗





Legend

- POS Conservation - Habitat to be Retained (7.92ha)
- AC** POS Reference Number
- Local Structure Plan Boundary
- Eglinton Estates Landholding
- EPBC Referral Area Boundary
- Cadastral Boundary
- Potential Black Cockatoo Foraging Habitat
- PTA Corridor
- Peet Lot 5001
- Lonnegal Lot 801

CADASTRAL SOURCE: Landgate, November 2023.
AERIAL PHOTOGRAPH SOURCE: NearMap, flown December 2023.
PTA CORRIDOR SOURCE: PTA, Dwg No. PTA-GIS-YRE-0119-0001, 02-12-20.
POS SOURCE: Development Planning Strategies, Dwg No. EGLEG218a, 01-03-12.

pgv ENVIRONMENTAL		Eglinton Estates COMPLIANCE REPORT (EPBC 2010/5777) 4 NOVEMBER 2022 TO 3 NOVEMBER 2023 EGLINTON ESTATES	
Drawn: B. Heath	Date: 27 Jan 2024	POTENTIAL THREATENED SPECIES HABITAT	
Job: 10007 Rpt: 2023-727	Revision: A		

Figure 2

APPENDIX 1

Species List

Eglinton POS Sites - September 2023 (includes species recorded in whole site not just quadrats)			
* = Introduced Species			
	Site AE	Site AG	Site AH
GYMNOSPERMS			
ZAMIACEAE			
<i>Macrozamia riedlei</i>	✓		✓
MONOCOTYLEDONS			
ANARTHRIACEAE			
<i>Lyginia barbata</i>	✓		
ASPHODELACEAE			
* <i>Trachyandra divaricata</i>			✓
ASPARAGACEAE			
<i>Acanthocarpus preissii</i>		✓	✓
<i>Lomandra hermaphrodita</i>	✓	✓	
<i>Lomandra maritima</i>	✓	✓	✓
<i>Lomandra preissii</i>		✓	
<i>Lomandra purpurea</i>		✓	
<i>Sowerbaea laxiflora</i>	✓	✓	✓
<i>Thysanotus multiflorus</i>			✓
<i>Thysanotus patersonii</i>	✓	✓	✓
<i>Thysanotus thyrsoides</i>			✓
CENTROLEPIDACEAE			
<i>Centrolepis</i> sp	✓		
COLCHICACEAE			
<i>Burchardia congesta</i>	✓	✓	
<i>Wurmbea dioica</i>		✓	
CYPERACEAE			
* <i>Isolepis marginata</i>	✓		
<i>Lepidosperma angustatum</i>		✓	✓
<i>Lepidosperma pubisquameum</i>		✓	
<i>Lepidosperma squamatum</i>	✓		
<i>Mesomelaena pseudostygia</i>	✓	✓	✓
<i>Schoenus grandiflorus</i>	✓	✓	✓
<i>Schoenus latitans</i>		✓	
DASYPOGONACEAE			
<i>Calectasia narragara</i>	✓		
HAEMODORACEAE			
<i>Anigozanthos humilis</i>	✓	✓	
<i>Conostylis aculeata</i>	✓	✓	
<i>Conostylis candicans</i>	✓	✓	✓
<i>Conostylis candicans</i> subsp. <i>calcicola</i>			✓
<i>Conostylis setigera</i>	✓	✓	
HEMEROCALLIDACEAE			
<i>Corynotheca micrantha</i>		✓	✓
<i>Dianella revoluta</i> var. <i>divaricata</i>	✓	✓	✓
<i>Tricoryne elatior</i>	✓	✓	✓
IRIDACEAE			
* <i>Gladiolus caryophyllaceus</i>	✓	✓	✓
* <i>Moraea flaccida</i>			✓
<i>Orthrosanthus laxus</i>	✓		
* <i>Romulea rosea</i>		✓	✓
ORCHIDACEAE			
<i>Caladenia arenicola</i>	✓		
<i>Caladenia longicauda</i> subsp. <i>calcigena</i>			✓

	Site AE	Site AG	Site AH
<i>Caladenia flava</i>	✓	✓	✓
<i>Caladenia latifolia</i>			✓
<i>Diuris corymbosa</i>	✓	✓	
<i>Microtis media</i>	✓		
<i>Pterostylis vittata</i>	✓		
<i>Pyrorchis nigricans</i>	✓	✓	
<i>Thelymitra campanulata</i>	✓		
POACEAE			
* <i>Aira cupaniana</i>	✓	✓	
<i>Austrostipa flavescens</i>	✓	✓	✓
* <i>Avena fatua</i>	✓	✓	✓
* <i>Briza maxima</i>	✓	✓	✓
* <i>Bromus diandrus</i>	✓	✓	✓
* <i>Ehrharta calycina</i>			✓
* <i>Ehrharta longiflora</i>	✓	✓	
* <i>Lolium perenne</i>	✓	✓	✓
<i>Neurachne alopecuroidea</i>		✓	
<i>Poa poiformis</i>		✓	✓
* <i>Vulpia myuros</i>			✓
RESTIONACEAE			
<i>Alexgeorgea nitens</i>	✓	✓	
<i>Desmocladus flexuosus</i>	✓	✓	✓
XANTHORRHOEACEAE			
<i>Xanthorrhoea brunonis</i>	✓	✓	
<i>Xanthorrhoea preissii</i>	✓	✓	
DICOTYLEDONS			
AIZOACEAE			
* <i>Carpobrotus edulis</i>		✓	✓
APIACEAE			
<i>Daucus glochidiatus</i>			✓
<i>Homalosciadium homalocarpum</i>	✓	✓	✓
<i>Xanthosia huegelii</i>	✓	✓	
ARALIACEAE			
<i>Trachymene pilosa</i>	✓	✓	✓
ASTERACEAE			
* <i>Cirsium vulgare</i>			✓
* <i>Hypochaeris glabra</i>	✓	✓	✓
* <i>Urospermum picroides</i>		✓	✓
<i>Lagenophora huegelii</i>	✓	✓	
<i>Millotia myosotidifolia</i>			✓
<i>Olearia axillaris</i>	✓	✓	✓
<i>Olearia rudis</i>		✓	✓
<i>Podotheca angustifolia</i>	✓	✓	✓
<i>Podotheca chrysantha</i>	✓	✓	
<i>Quinettia urvillei</i>		✓	
<i>Senecio pinnatifolius</i> var. <i>maritimus</i>	✓	✓	✓
<i>Siloxerus humifusus</i>		✓	
* <i>Sonchus oleraceus</i>	✓	✓	✓
* <i>Ursinia anthemoides</i>	✓	✓	✓
<i>Waitzia suaveolens</i>		✓	✓
BRASSICACEAE			
* <i>Brasica tournefortii</i>	✓	✓	✓
* <i>Heliophila pusilla</i>	✓	✓	✓
<i>Stenopetalum gracile</i>	✓		
CAMPANULACEAE			
<i>Lobelia gibbosa</i>			✓
* <i>Wahlenbergia capensis</i>		✓	
<i>Wahlenbergia gracilentia</i>	✓	✓	

	Site AE	Site AG	Site AH
CARYOPHYLLACEAE			
* <i>Cerastium glomeratum</i>			✓
* <i>Petrorhagia dubia</i>		✓	✓
* <i>Silene gallica</i>		✓	✓
CASUARINACEAE			
<i>Allocasuarina humilis</i>	✓	✓	✓
CELASTRACEAE			
<i>Stackhousia monogyna</i>			✓
CHENOPODIACEAE			
<i>Rhagodia baccata</i> subsp. <i>baccata</i>	✓	✓	✓
CRASSULACEAE			
<i>Crassula colorata</i>	✓	✓	✓
* <i>Crassula glomerata</i>			✓
DILLENIACEAE			
<i>Hibbertia hypericoides</i>	✓	✓	✓
<i>Hibbertia racemosa</i>	✓	✓	✓
DROSERACEAE			
<i>Drosera erythrorhiza</i>	✓	✓	✓
<i>Drosera menziesii</i>	✓	✓	✓
ERICACEAE			
<i>Styphelia pallida</i>	✓		
<i>Conostephium pendulum</i>	✓	✓	
<i>Styphelia polymorpha</i>	✓		
<i>Leucopogon parviflorus</i>			✓
<i>Lysinema pentapetalum</i>	✓		
<i>Styphelia insularis</i>			✓
<i>Styphelia propinqua</i>		✓	
EUPHORBIACEAE			
* <i>Euphorbia terracina</i>	✓	✓	✓
FABACEAE			
<i>Acacia cochlearis</i>	✓		✓
<i>Acacia lasiocarpa</i>	✓	✓	✓
<i>Acacia pulchella</i>	✓	✓	
<i>Acacia saligna</i>	✓	✓	✓
<i>Bossiaea eriocarpa</i>		✓	
<i>Bossiaea ornata</i>		✓	
<i>Daviesia divaricata</i>		✓	✓
<i>Gastrolobium capitatum</i>	✓	✓	✓
<i>Gompholobium tomentosum</i>	✓	✓	✓
<i>Hardenbergia comptoniana</i>	✓		✓
<i>Hovea trisperma</i>	✓	✓	
<i>Isotropis cuneifolia</i>	✓	✓	
<i>Jacksonia calcicola</i>	✓	✓	
<i>Jacksonia furcellata</i>			✓
<i>Kennedia prostrata</i>	✓		✓
<i>Sphaerolobium medium</i>		✓	
<i>Templetonia retusa</i>			✓
* <i>Trifolium campestre</i>			✓
GERANIACEAE			
* <i>Erodium botrys</i>	✓		
* <i>Erodium moschatum</i>		✓	✓
<i>Geranium solanderi</i>	✓		
* <i>Pelargonium capitatum</i>	✓	✓	✓
GOODENIACEAE			
<i>Lechenaultia linarioides</i>	✓	✓	✓
<i>Scaevola canescens</i>	✓	✓	✓
<i>Scavevola repens</i>	✓		
<i>Scaevola thesioides</i>		✓	✓

	Site AE	Site AG	Site AH
GYROSTEMONACEAE			
<i>Tersonia cyathiflora</i>	✓	✓	
LAURACEAE			
<i>Cassytha racemosa</i>	✓	✓	
LOGANIACEAE			
<i>Phyllangium paradoxum</i>	✓	✓	
MONTIACEAE			
<i>Calandrinia liniflora</i>			✓
MYRTACEAE			
<i>Calothamnus sanguineus</i>	✓	✓	
<i>Calothamnus quadrifidus</i>	✓	✓	✓
<i>Calytrix flavescens</i>	✓		
<i>Eremaea asterocarpa</i> subsp. <i>asterocarpa</i>	✓	✓	
<i>Eremaea pauciflora</i>	✓		
<i>Eucalyptus decipiens</i>		✓	
<i>Melaleuca systema</i>	✓	✓	✓
OXALIDACEAE			
* <i>Oxalis corniculata</i>		✓	
PHYLLANTHACEAE			
<i>Phyllanthus calycinus</i>	✓	✓	✓
<i>Poranthera microphylla</i>	✓	✓	
PRIMULACEAE			
* <i>Lysimachia arvensis</i>	✓	✓	✓
<i>Samolus repens</i>	✓		
PROTEACEAE			
<i>Banksia attenuata</i>	✓	✓	✓
<i>Banksia dallanneyi</i>	✓	✓	✓
<i>Banksia menziesii</i>	✓	✓	
<i>Banksia sessilis</i>	✓	✓	✓
<i>Conospermum stoechadis</i>		✓	✓
<i>Hakea lissocarpha</i>			✓
<i>Hakea prostrata</i>		✓	✓
<i>Hakea ruscifolia</i>	✓	✓	
<i>Hakea trifurcata</i>	✓	✓	
<i>Petrophile brevifolia</i>		✓	
<i>Petrophile linearis</i>	✓		
<i>Petrophile macrostachya</i>	✓	✓	✓
<i>Stirlingia latifolia</i>	✓		
RHAMNACEAE			
<i>Cryptandra mutila</i>	✓	✓	✓
<i>Spyridium globulosum</i>	✓	✓	✓
RUBIACEAE			
* <i>Galium murale</i>			✓
<i>Opercularia vaginata</i>	✓	✓	✓
SANTALACEAE			
<i>Santalum acuminatum</i>			✓
SCROPHULARIACEAE			
* <i>Dischisma arenarium</i>		✓	✓
<i>Eremophila glabra</i>	✓		
SOLANACEAE			
<i>Solanum nigrum</i>			✓
STYLIDIACEAE			
<i>Stylidium brunonianum</i>	✓	✓	
<i>Stylidium calcaratum</i>	✓	✓	

	Site AE	Site AG	Site AH
<i>Stylidium piliferum</i>	✓		
<i>Stylidium repens</i>		✓	
THYMELAEACEAE			
<i>Pimelea sulphurea</i>	✓		
URTICACEAE			
<i>Parietaria debilis</i>			✓
VIOLACEAE			
<i>Pigea calycinus</i>	✓	✓	✓
TOTAL SPECIES	111	116	101

Appendix ^

APPENDIX 2

Quadrat Data

QUADRAT AG2	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
*Aira cupaniana	+			+						
*Avena fatua				+						
*Briza maxima	+	+	+	+	+	+	+	+	+	+
*Carpobrotus edulis			+							+
*Ehrharta longiflora	+	+	+		+	+				+
*Geranium/Pelargonium						+			+	
*Gladiolus caryophyllaceus	+	+	+	+	+	+	+	+	+	+
*Hypochaeris glabra	+	+	+	+	+	+	+	+	+	+
*Lolium perenne				+	+	+	+	+	+	
*Lysimachia arvensis			+			+		+		
*Pelargonium capitatum		+	+	+	+	+	+	+	+	+
*Petrarhagia dubia	+	+							+	+
*Romulea rosea				+					+	
*Silene gallica					+				+	
*Ursinia anthemoides	+	+	+	+	+	+	+	+	+	+
*Wahlenbergia capensis				+	+	+	+	+	+	
Acacia pulchella	+	+	+	+	+	+	+	+	+	+
Acanthocarpus preissii	+	+	+	+	+	+	+	+	+	+
Alexgeorgea nitens						+	+	+		
Allocasuarina humilis	+	+	+	+	+		+	+	+	+
Anigozanthos humilis	+	+	+	+	+	+	+	+	+	+
Banksia attenuata	+	+	+	+	+	+	+	+	+	+
Banksia dallanneyi					+	+		+	+	
Banksia menziesii	+	+	+	+	+	+	+	+	+	+
Burchardia congesta	+	+	+	+	+	+	+	+	+	+
Caladenia flava	+	+	+	+	+	+	+	+	+	+
Calothamnus quadrifidus	+	+	+	+	+	+	+	+	+	+
Conostephium pendulum				+		+	+	+	+	
Conostylis aculeata	+	+	+	+	+	+	+	+	+	+
Conostylis setigera	+	+	+	+	+	+	+	+	+	+
Corynotheca micrantha				+						
Crassula colorata			+		+			+		
Cryptandra mutila					+	+				
Desmodium flexuosus	+	+	+	+	+	+	+	+	+	+
Drosera erythrorhiza			+		+		+	+	+	
Drosera menziesii	+	+	+	+	+		+	+	+	+
Eremaea asterocarpa			+	+	+	+	+	+	+	+
Gompholobium tomentosum	+	+			+	+				+
Hibbertia hypericoides	+	+	+	+	+	+	+	+	+	+
Homaloscladium homalocarpum					+		+		+	+
Hovea trisperma		+						+	+	+
Isalepis marginata						+			+	
Lagenophora huegelii			+				+	+	+	
Leucopogon propinquus				+	+		+		+	+
Lomandra hermaphrodita						+				
Mesomelaena pseudostygia	+	+	+	+	+	+	+	+	+	+
Neurochne alopecuroidea/Amphipogon	+		+	+	+		+	+		
Opecularia vaginata	+	+	+	+	+	+	+	+	+	+
Petrophile brevifolia	+	+	+	+	+	+	+	+	+	+
Phyllangium paradoxum			+		+	+				
Podotheca angustifolia		+	+	+	+	+	+	+	+	+
Podotheca chrysantha	+	+	+				+	+	+	+
Pyrorchis nigricans	+	+		+	+	+	+	+	+	+
Quinettia urvillei			+		+		+		+	+
Scaevola conescens	+	+	+	+	+	+	+	+	+	+
Schoenus latitans	+	+	+	+	+	+	+	+	+	+
Siloxerus humifusus						+				+
Sowerbaea laxiflora	+	+	+	+	+	+	+	+	+	+
Styridium globulosum										+
Styridium brunonianum	+	+	+	+	+	+	+	+	+	+
Styridium calcaratum	+	+	+	+	+	+	+	+	+	+
Styridium repens	+	+	+	+	+			+	+	+
Thysanotus patersonii			+			+	+	+		
Trachymene pilosa	+		+	+	+	+	+	+	+	+
Waitzia suaveolens				+	+	+				+
Xanthorrhoea brunonis	+	+	+	+	+	+	+	+	+	+
Xanthorrhoea preissii	+	+	+	+	+	+	+	+	+	+
Xanthosia huegelii	+		+	+	+	+	+	+	+	+
TOTAL SPECIES	38	37	44	45	50	49	47	49	50	47
Native	31	30	36	35	42	40	40	40	39	39
Introduced	7	7	8	10	8	9	7	9	11	8

2% weed % weeds
Exc Exc

APPENDIX 3

Photo Monitoring Points

AE1

2014



2015



2016



2017



2018



2019



2020



2021



2022



2023



Appendix

AE2

2014



2015



2016



2017



2018



2019



2020



2021



2022



2023



Appendix

AG1

2014



2015



2016



2017



2018



2020



2021 New Photo Point Location



2022



2023



Appendix

AG2

2014



2015



2016



2017



2018



2019



2020



2021



2022



2023



Appendix

AH1

2014



2015



2016



2017



2018



2019



2021 (Strategen Photo)



2022 (JBS&G photo)



2023 (JBS&G photo)



Appendix

AH2

2014



2015



2016



2017



2018



2019



2021 (Strategen Photo)



2022 (JBS&G photo)



2022 (JBS&G photo)



Appendix

APPENDIX 4

Section 143 Variation and Revised CMP Approval



VARIATION OF CONDITIONS ATTACHED TO APPROVAL
Eglinton Estates Residential Development, Lot 1007 & Part Lot 1008,
Pipidinny Road, Eglinton WA (EPBC 2010/5777)

This decision to vary conditions of approval is made under section 143 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Approved action

Person to whom the approval is granted	Eglinton Estates Pty Ltd ABN: 48 009 460 397
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Approved action	The clearing of approximately 298 ha of native vegetation for the urban development of Lot 1007 and the eastern portion of Lot 1008, Pipidinny Road, Eglinton, WA [see EPBC Act referral 2010/5777], within the footprint shown as a blue dotted line in Attachment A.
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Variation

Variation of conditions attached to approval	The variation is: Delete conditions 3, 9, 11, 12 and 14 attached to the approval and substitute with the conditions 3, 3A, 3B, 9, 11, 12 and 14 specified in the table below. Delete Attachment A, Attachment B and Attachment D and substitute with Attachment A, Attachment B and Attachment D specified in the table below. Delete the definition of Clearing and substitute with the definition of Clearing specified in the table below. Add the definitions of Business Day, Commencement, DBCA and Plan(s).
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Date of effect	This variation has effect on the date the instrument is signed
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Person authorised to make decision

Name and position	Greg Manning Assistant Secretary Assessments (WA, SA, NT) and Post Approval Branch
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Signature	
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Date of decision	17 June 2019
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Date of decision	Conditions attached to approval
Original dated 30/4/2013	1. Within 30 days after the commencement of the action, the person taking the action must advise the department in writing of the actual date of commencement .
Original dated 30/4/2013	2. The person taking the action must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the management plans required by this approval, and make them available upon request to the department . Such records may be subject to audit by the department or an independent auditor in accordance with section 458 of the EPBC Act , or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the department's website. The results of audits may also be publicised through the general media.
As varied on the date this instrument was signed	3. Within three months of every 12 month anniversary of the commencement of the action, the person taking the action must publish a report on their website addressing compliance with the conditions of this approval over the previous 12 months, including implementation of any management plans as specified in the conditions.
As varied on the date this instrument was signed	Reporting non-compliance 3.A. The person taking the action must notify the Department in writing of any 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 non-compliance. The notification must specify: a. the condition which is or may be in breach; and b. a short description of the non-compliance.
As varied on the date this instrument was signed	3.B. The person taking the action must provide to the Department the details of any 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 non-compliance, specifying: a. any corrective action or investigation which the person taking the action has already taken or intends to take in the immediate future; b. the potential impacts of the non-compliance; and c. the method and timing of any remedial action that will be undertaken by the person taking the action.
Original dated 30/4/2013	4. Upon the direction of the Minister , the person taking the action must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the Minister . The independent auditor must be approved by the Minister prior to the commencement of the audit. Audit criteria must be agreed to by the Minister and the audit report must address the criteria to the satisfaction of the Minister .

Date of decision	Conditions attached to approval
Original dated 30/4/2013	5. If the person taking the action wishes to carry out any activity otherwise than in accordance with the management plans as specified in the conditions, the person taking the action must submit to the department for the Minister's written approval a revised version of that management plan. The varied activity shall not commence until the Minister has approved the varied management plan in writing. The Minister will not approve a varied management plan unless the revised management plan would result in an equivalent or improved environmental outcome over time. If the Minister approves the revised management plan, the revised management plan must be implemented in place of the management plan originally approved.
Original dated 30/4/2013	6. If the Minister believes that it is necessary or convenient for the better protection of listed threatened species to do so, the Minister may request that the person taking the action make specified revisions to the management plan/s specified in the conditions and submit the revised management plan/s for the Minister's written approval. The person taking the action must comply with any such request. The revised approved management plan/s must be implemented. Unless the Minister has approved the revised management plan/s, then the person taking the action must continue to implement the management plan/s originally approved, as specified in the conditions.
Original dated 30/4/2013	7. If, at any time after 5 years from the date of this approval, the person taking the action has not substantially commenced the action, then the person taking the action must not substantially commence the action without the written agreement of the Minister .
Original dated 30/4/2013	8. Unless otherwise agreed to in writing by the Minister , the person taking the action must publish all management plans referred to in these conditions of approval on their website. Each management plan must be published on the website within 1 month of being approved.
As varied on the date this instrument was signed	9. To mitigate impacts to Carnaby's Black Cockatoo (<i>Calyptorhynchus latirostris</i>), the person taking the action must not clear any land that is proposed to be retained that is also habitat for Carnaby's Black Cockatoo.
Variation dated 25/10/2018	10. To protect and enhance habitat for listed threatened species that is retained on the proposal site, the person taking the action must: (a) prepare and submit, within 12 months of the date of this approval, a <i>Conservation Management Plan</i> detailing management of habitat for listed threatened species that is retained on the proposal site for the Minister's approval. The plan must include: i. measures to physically delineate (through fencing or other means) areas that will be retained ; ii. erosion and dust control measures during construction; iii. the management of weeds, <i>Phytophthora</i> dieback, bushfire and feral animals;

Date of decision	Conditions attached to approval
	iv. identification of any degraded habitat for listed threatened species and revegetation of those areas; v. a monitoring program for listed threatened species and their habitat; vi. performance indicators and corrective actions; vii. roles and responsibilities; viii. time frames for the implementation of the above measures; and ix. how condition 10(b) will be implemented, including who will be responsible for the long-term management of the retained land, and how the land will be protected in the long-term. If the Minister approves the plan, the approved plan must be implemented. (b) within 10 years of the substantial commencement of the action, the person taking the action must provide the department with written evidence, including certificates of title, that the 'POS Conservation' areas (marked in green in <u>Attachment A</u>) have been transferred to the City of Wanneroo for the purpose of conservation.
As varied on the date this instrument was signed	11. To mitigate impacts to Carnaby's Black Cockatoo, the person taking the action must fully implement the revegetation of at least 12.7 ha of native vegetation (including primary feeding plants for Carnaby's Black Cockatoo) in the Yellagonga Regional Park (in consultation with the DBCA) in accordance with the <i>Clearing and Revegetation Management Plan</i> required under condition 12.
As varied on the date this instrument was signed	12. To mitigate impacts to Carnaby's Black Cockatoo, the person taking the action must submit a <i>Clearing and Revegetation Management Plan</i> (the plan) for the Minister's approval. The plan must include: (a) a commitment to revegetate at least 1.9 ha of native vegetation within Public Open Space on the proposal site; (b) methodology for revegetation, both on-site, and in Yellagonga Regional Park (as required under condition 11) along with: i. survival targets proposed for plantings; ii. performance indicators and corrective measures; iii. roles and responsibilities; and iv. timeframes for the implementation and management of the above measures. (c) a commitment for at least 50% of plantings for trees and shrubs in street-scaping to consist of plants known to be primary feeding plants for Carnaby's Black Cockatoo. Site selection for street-scaping must take account of any risk of vehicle strike to Carnaby's Black Cockatoos.

Date of decision	Conditions attached to approval
	If the Minister approves the plan, then the approved plan must be implemented.
Variation dated 20/10/2015	13. To offset the loss of habitat for Carnaby's Black Cockatoo, the person taking the action must, by January 2016: (a) provide monies to DPaW to fully fund the acquisition of: - an offset property (or properties) that contains at least 886 ha of good quality foraging habitat for Carnaby's Black Cockatoo, that is within the 'Regans Ford' or Gingin area or - another parcel of land approved in writing by the department; and (b) provide the department with a textual description and map clearly defining the location and boundaries of the offset property (or properties) described in condition 13(a), which must be accompanied with the offset attributes and a shapefile.
As varied on the date this instrument was signed	14. The person taking the action must not undertake any clearing of habitat for Carnaby's Black Cockatoo (such habitat being designated in <u>Attachment B</u> as the areas hatched in black), except for the area designated in <u>Attachment D</u> by yellow outline, unless the <i>Clearing and Revegetation Management Plan</i> required under condition 12 has been approved by the Minister .
Variation dated 17/7/2013	15. Revoked

Date of decision	Definitions attached to approval
As varied on the date this instrument was signed	Business day means a day that is not a Saturday, a Sunday or a public holiday in the state or territory of the action.
As varied on the date this instrument was signed	Clearing means the cutting down, felling, thinning, logging, removing, killing, destroying, poisoning, ringbarking, uprooting or burning of native vegetation.
As varied on the date this instrument was signed	Commencement means the first instance of any specified activity associated with the action including clearance of vegetation and construction of any infrastructure. Commencement does not include minor physical disturbance necessary to: - undertake pre-clearance surveys or monitoring programs; - install signage and /or temporary fencing to prevent unapproved use of the project area; - protect environmental and property assets from fire, weeds and pests.
Original dated 30/4/2013	Construction includes any preparatory works required to be undertaken including the erection of any onsite temporary structures and the use of heavy duty equipment for the purpose of breaking the ground for

Date of decision	Definitions attached to approval
	buildings or infrastructure.
Original dated 30/4/2013	Substantial commencement of the action is when more than 1 ha of land on the proposal site has been impacted by clearing or construction .
As varied on the date this instrument was signed	DBCA is the Western Australian Government Department of Biodiversity, Conservation and Attractions (or equivalent agency) (formerly DEC and DPaW).
Original dated 30/4/2013	DEC is the Western Australian Government's Department of Environment and Conservation (or equivalent agency).
Variation dated 20/10/2015	DPaW is the Western Australian Government's Department of Parks and Wildlife (or equivalent agency).
Original dated 30/4/2013	Department is the Australian Government Department administering the <i>Environment Protection and Biodiversity Conservation Act 1999</i> .
Original dated 30/4/2013	EPBC Act is the <i>Environment Protection and Biodiversity Conservation Act 1999</i> .
Original dated 30/4/2013	Independent revegetation expert. A scientist with relevant qualifications and expertise in best-practise revegetation (including the use of native seed and topsoil in revegetation), who is not affiliated with the person taking the action.
Variation dated 17/7/2013	Listed Threatened Species are species listed under the EPBC Act including Carnaby's Black Cockatoo (<i>Calyptorhynchus latirostris</i>).
Original dated 30/4/2013	Minister is the Minister administering the <i>Environment Protection and Biodiversity Conservation Act 1999</i> and includes a delegate of the Minister.
Original dated 30/4/2013	Offset attributes means an '.xls' file capturing relevant attributes of the Offset Area, including the EPBC reference ID number, the physical address of the offset site, coordinates of the boundary points in decimal degrees, the EPBC protected matters that the offset compensates for, any additional EPBC protected matters that are benefiting from the offset, and the size of the offset in hectares.
As varied on the date this instrument was signed	Plan(s) means any of the documents required to be prepared, approved by the Minister , and/or implemented by the approval holder and published on the website in accordance with these conditions.
Original dated 30/4/2013	Primary feeding plants for Carnaby's Black Cockatoo include: any <i>Banksia</i> ; any plants identified in a relevant search of the DEC's Plants for Carnaby's Search Tool (at http://www.dec.wa.gov.au/management-and-protection/threatened-species/5983-plants-for-carnabys-search-tool.html); or other plants approved in writing by the Department .

APPENDIX 5

Elavale Monitoring Report



Pipidinny Road Weed and Vegetation Monitoring 2023

Peet Limited

Report

JBS&G 65684 | 155384

18 December 2023



We acknowledge the Traditional Custodians of Country throughout Australia and their connections to land, sea and community.

We pay respect to Elders past and present and in the spirit of reconciliation, we commit to working together for our shared future.

Appendix 7

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1. Introduction

1.1 Background

Peet Limited Pty Ltd (Peet) is a residential developer in the process of establishing the Eglinton Beach residential estate, 50 km north of Perth, Western Australia in the City of Wanneroo (CoW). Construction of this project has commenced and is currently in stage 4 of development at Lot 5001, Pipidinny Rd (the Site). The greater project boundary encompasses Public Open Space (POS) and conservation areas.

The land is being developed in accordance with the Local Structure Plan (LSP) for residential and commercial purposes and includes urban development, the Eglinton District Centre, a primary school, playing fields, the Eglinton Marina and Conservation Open Space.

1.1.1 Approvals History

Peet purchased the Site in 2019 from Eglinton Estates, who previously acquired a State environmental approval under Ministerial Statement 992 (MS 992) and Commonwealth environmental approval (EPBC 2010/5777). Eglinton Estates remain the approval holder for MS 992 and EPBC 2010/5777.

Condition 5-2 of MS 992 requires that a Conservation Area Management Plan (CAMP) is prepared to the satisfaction of the Department of Biodiversity Conservation and Attractions (DBCA) to define on-going management requirements of the POS. The objectives of the CAMP are listed below:

- No reduction in the extent of vegetation in the conservation areas; and
- no reduction in vegetation health in the conservation areas.

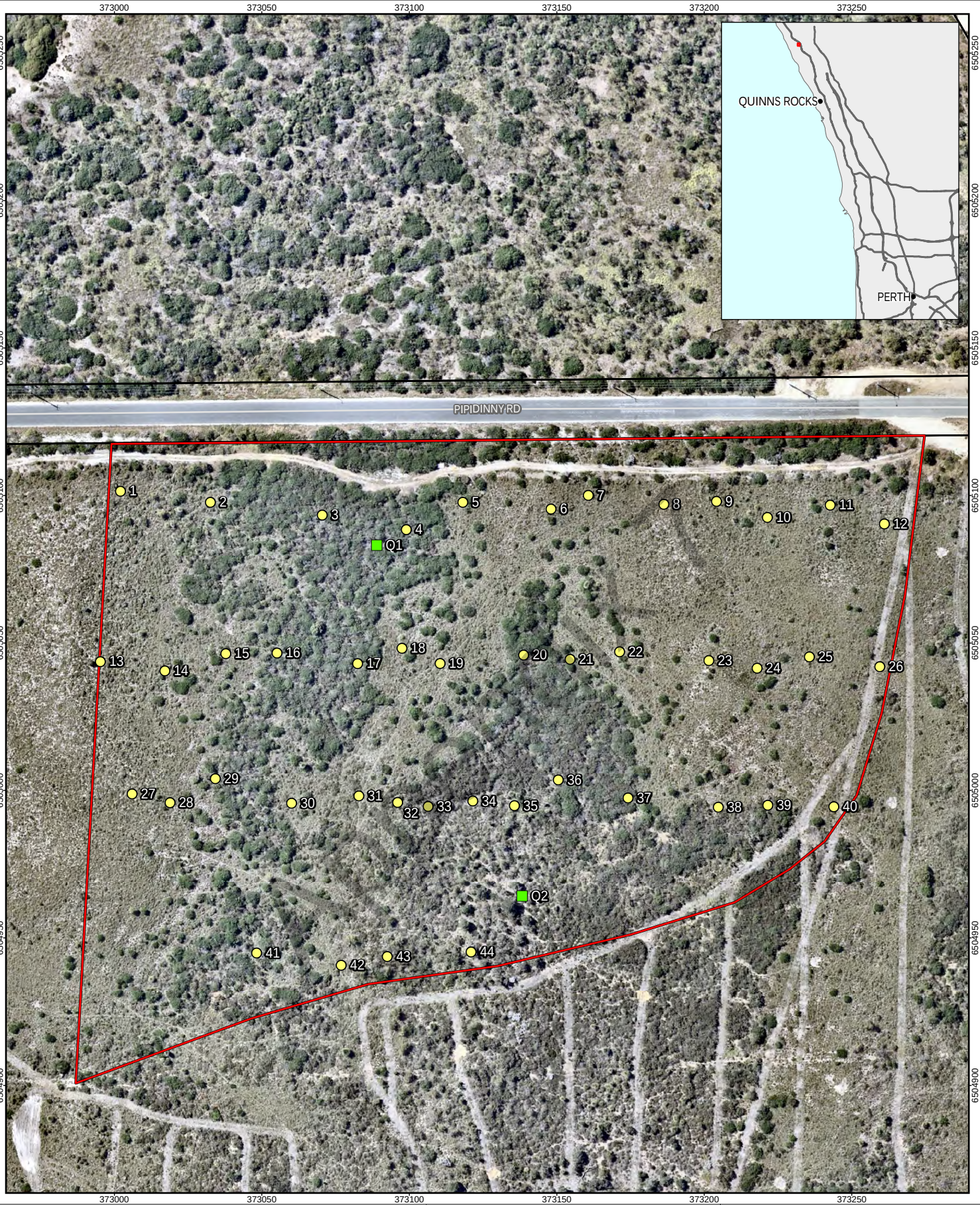
Condition 10 of EPBC 2010/5777 requires a Conservation Management Plan (CMP) to the satisfaction of Department of Climate Change, Energy, the Environment and Water (DCCEEW) in order to conserve Carnaby's Black Cockatoo (CBC) foraging habitat within the POS. The CMP states that the POS will be monitored annually for vegetation condition and weeds. Initial surveys in the monitoring area were undertaken in 2019. Since then, JBS&G has engaged with PEET to provide 2021, 2022 and 2023 annual monitoring data to meet these CMP requirements.

1.2 Scope

JBS&G was engaged to continue weed and vegetation monitoring in 2023 in the POS, at Pipidinny Road residential development.

1.3 Purpose of this document

This report presents the findings of the 2023 weed and vegetation monitoring survey undertaken within the POS at Pipidinny Road residential development within the northwest corner of the greater project area (survey area; Figure 1.1). The results of the 2023 survey have been compared to against previous monitoring results for weed presence and cover as well as vegetation condition to assess the efficacy of environmental management strategies within the POS.



Legend Survey area Cadastral boundary Monitoring site Quadrat Minor road	Scale: 1:1,700 at A4		0 15 30 metres	Pipidinny Road, Yanchep, WA	
	Coord. Sys. GDA2020 MGA Zone 50				MONITORING LOCATIONS
	Job Number: 65684				
	Client: PEET		FIGURE 1.1		
	Version: A	Date: 13-Dec-2023			
Drawn By: jcrute	Checked By: EB				

2. Methods

2.1 Weed Assessment

Weeds within the survey area were assessed along a series of transect lines with sampling every approximately 20 m within a 5 m x 5 m (25 m²) area (Figure 1.1). A total of 44 weed monitoring points were sampled for weed presence (Figure 1.1).

Weed cover for each species was recorded as a percentage within the area and then each percentage per species was added to obtain total weed cover per plot. These values were then evaluated against the Braun-Blanquet Scale (Table 2.1) to define the status of weed populations (as percent cover). The total weed coverage was used to develop a weed coverage map for the survey area. Using this map, the number of hectares presenting each weed status category was measured using GIS applications.

Dead/spent grasses were included in weed coverage mapping (live plus dead) to account for changes in seasonality between survey years and to aid in predicting increased weed recruitment.

Species which couldn't be identified in the field were either collected for further identification or listed by their family name (i.e. Poaceae sp.) where distinguishing characteristics (flowers/ fruiting bodies) were not evident.

At each monitoring point, the following was recorded:

- the number of weed species evident;
- height and percent cover of each weed species present;
- photograph from monitoring point; and
- GPS location of monitoring point.

Table 2.1: Braun-Blanquet Scale used for weed coverage (Braun-Blanquet 1932)

Class	Cover
0	0% coverage
1	<5% coverage
2	6–75% coverage
3	76–100% coverage

2.2 Vegetation assessment

Two permanent 10 m x 10 m quadrats (Q1, Q2) were monitored for vegetation communities with the POS area (Figure 1.1). The following data was recorded in the quadrats:

- all native species present, height and percentage cover;
- all weed species present, height, and percentage cover;
- any observations regarding plant health and evidence of pest species;
- photographs of each quadrat taken from the north-west corner; and
- any evidence of animal activity.

Vegetation for each quadrat was assessed according to the Keighery scale for vegetation condition, as described in Bush Forever (Government of Western Australia, 2000; Keighery 1994) (Table 2.2).

Table 2.2: Keighery *et al.* (1994) Vegetation Condition Scale

Condition	Description
Pristine	Pristine or nearly so, no obvious signs of disturbance.
Excellent	Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species.
Very Good	Vegetation structure altered, obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbance. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and grazing.
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing.
Completely Degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.

2.3 Timing and Personnel

The 2023 weed and vegetation monitoring survey was conducted on the 4th and 5th of October 2023 by an Ecologist and field assistant from JBS&G (Table 2.3).

Table 2.3: Personnel and licence numbers for 2023 spring monitoring event

Personnel	Licence number(s)
Emma Bentley	FB62000336-2 TFL 186-2021
Claire Jury	N/A

2.4 Climate

The Pipidiny Rd survey site is located on the Swan Coastal Plain and subjected to a dry, warm, Mediterranean climate with warm, dry summers and cool, wet winters. Temperature and rainfall data was retrieved from Bureau of Meteorology (BoM) (2023), at Gingin Aero Station (site Number 009178). This station is located approximately 40 km from the survey site and is the nearest of which to present both rainfall and temperature data.

The average monthly maximum temperature ranged from 18.4°C in July to 33.2°C in January with average monthly minimum temperature ranging from 6.5°C in July to 17°C in February (Figure 2.1). Average monthly rainfall (1996-2023) amounts to 630.4 mm and during the previous 12-months, the survey area received 420.6 mm, 209.8mm below the long-term average (Figure 2.1).

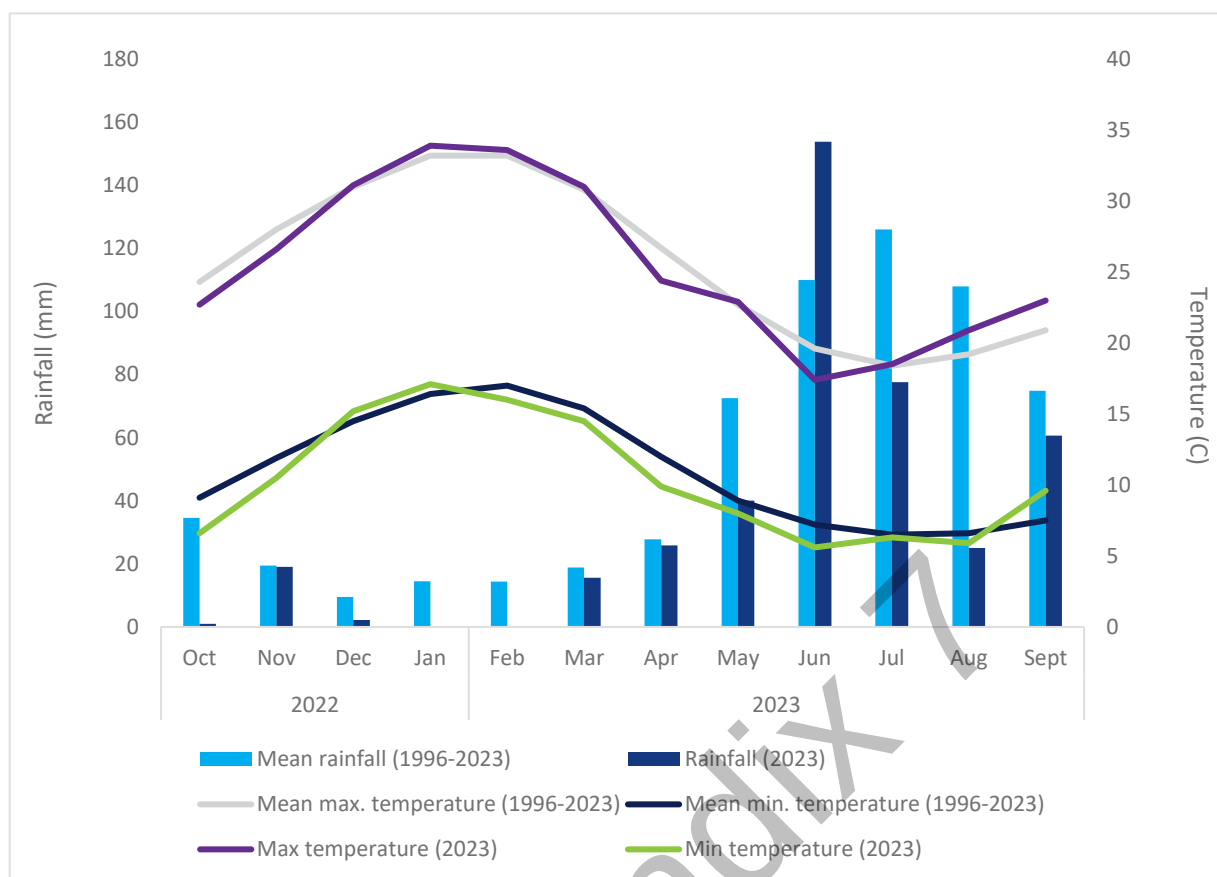


Figure 2.1: Climate data and average monthly rainfall and temperature at Gingin 2023 (Station ID 009178)(BoM, 2023).

3. Results

3.1 Weed Assessment

In 2023, the majority (72.7%) of the weed monitoring points had less than 5% weed foliage coverage (Table 3.1). The remainder (27.3%) of the monitoring points had 5-75% weed cover. Weed cover ranged from 0.02% (site 23) to 14% (sample site 8) across the survey area, with 97.7% of sites presenting weed covers of less than 10% weed coverage. These values indicate a reduction in weed cover compared to the 2022 monitoring event, where the remaining areas of higher weed cover (>5%), largely coincide with areas proximal to the access track in the north of the study area.

Weed mapping shows 69.89% of the site had less than 5% weed cover and 30.11% of the site had between 6-75% weed cover (Table 3.2). This represents a reduction in weed cover across 18.4% of the monitoring sites from 2022 to 2023.

The most dominant weed taxa identified in 2023 weed monitoring (as a measure of overall total cover indices) are **Bromus diandrus*, **Lysimachia arvensis*, **Avena barbata*, **Lysimachia arvensis*, **Lolium perenne* and **Lagurus ovatus*. The most widespread weed taxa (as a measure of number of times sampled in monitoring points) were **Lysimachia arvensis*, **Bromus diandrus*, **Hypochaeris glabra* and **Crassula glomerata*; with 32, 28, 22 and 17 records, respectively. It should be noted that **Lagurus ovatus* was not noted in 2022 monitoring and is now present in over 20% of sites surveyed. **Lagurus ovatus* has historically been recorded at the site during the 2020 and 2021 monitoring events. Therefore, it is likely that **Lagurus ovatus* was not identified to species level in 2022 and recorded as **Poaceae* sp and but was flowering in 2023 and able to be identified to species level again.

No Weeds of National Significance (WoNS) were identified in the survey area in 2023. No Declared Pests, as listed in section 2.2 of the *Biosecurity and Agriculture Management Act 2007* (BAM Act) were recorded in 2023.

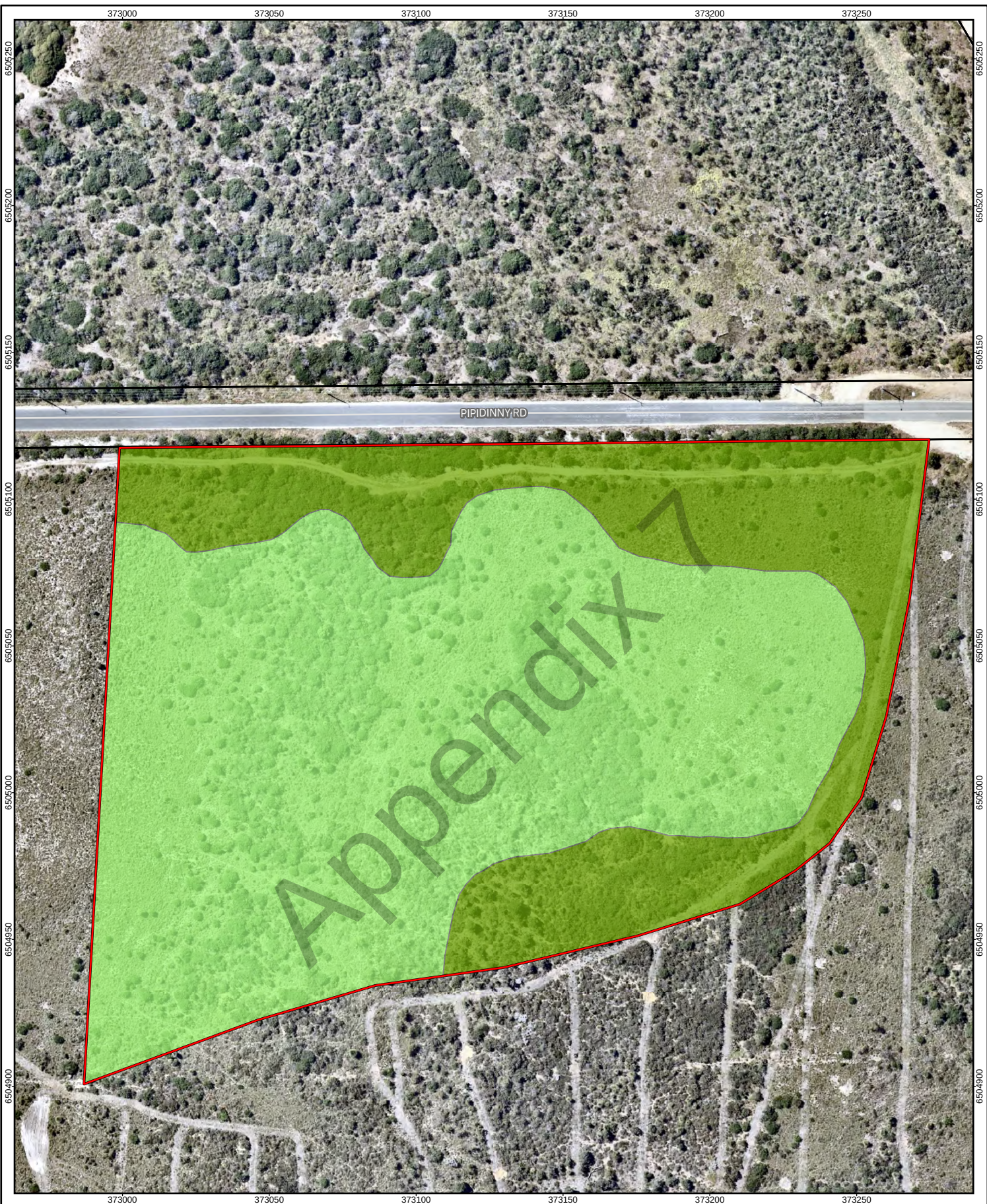
Weed species identified in monitoring points and quadrats are presented in Appendix A.

Table 3.1: Percentage of monitoring sites conferring to Weed cover indices (Braun-Blanquet Scale)

Braun-Blanquet Scale	% of monitoring points corresponding to each cover score		
	2021	2022	2023
0% coverage	0	0.00	0
<5% coverage	44	54.3	72.7
6–75% coverage	56	45.7	27.3
76–100% coverage	0.00	0.00	0
Total	100.00	100.00	100

Table 3.2: Total area in hectares of live weed coverage based on Braun-Blanquet scale

Braun-Blanquet Scale	Total ha			% of survey area		
	2021	2022	2023	2021	2022	2023
0-5%	1.70	2.62	3.32	39.08	59.68	69.89
6-75%	2.65	1.77	1.43	60.91	40.32	30.11
76-100%	0.00	0.00	0.00	0.00	0.00	0.00
Total Monitoring Area	4.35	4.39	4.75	100.00	100.00	100.00



Legend Survey area Cadastral boundary Weed cover 0-5% Weed cover 6 to75%	Minor road	Scale: 1:1,700 at A4	01530 metres	Pipidinny Road, Yanchep, WA	
		Coord. Sys. GDA2020 MGA Zone 50			WEED MAPPING
			Job Number: 65684		
			Client: PEET		FIGURE 3.1
			Version: A	Date: 13-Dec-2023	JBS&G
		Drawn By: jcrute	Checked By: EB		

3.2 Vegetation Monitoring

Vegetation condition at Q1 and Q2 was classified as “Good” based on the Keighery *et al.* (1994) vegetation condition scale. Overall, vegetation condition largely reflected below average rainfall, with fewer native annuals and weed cover comparative to previous years.

Species richness was 17 species per 100 m² (59% native and 41% introduced) for Q1 and 28 species per 100 m² (61% native and 39% introduced) for Q2. Species richness decreased in Q1 in comparison to the 2022 monitoring event, with data reflecting an absence of annual species (both weeds and natives) and orchids (*Caladenia flava* subsp. *maculate*, *Caladenia latifolia* and *Caladenia longicauda*). Q2 presented little variation in species richness between monitoring periods. This could be due to higher-than-average rainfall in 2022, and below average rainfall in 2023.

Overall percentage foliage cover (per unit area) in quadrats reflect a strong dominance of native species over weed species, with 93% native and 7% weed in Q1; and 89% native and 11% weed cover in Q2. Additionally, the presence and overall cover of perennial species did not change significantly between 2022 and 2023 monitoring events.

No signs of pests or feral animals were observed in Q1. Kangaroo scats and rabbit diggings were observed in Q2.

The taxa recorded within the monitoring quadrats remain consistent with the vegetation associated with the Quindalup Dune system and data reported by PGV in 2018 (Appendix A, Appendix B).

Table 3.3: Quadrat result summary

Monitoring factor	Quadrat 1 (AH1)			Quadrat 2 (AH2)		
	2021	2022	2023	2021	2022	2023
Vegetation condition	Good	Good	Good	Good	Good	Good
Species richness total (per 100m ²)	18	28	17	30	29	28
Native species richness (per 100m ²)	12	18	10	21	19	17
Introduced (weed) species richness (per 100m ²)	6	10	7	9	10	11
Signs of pests/feral animals	No	No	No	Roo scats and rabbit diggings	Roo scats and rabbit diggings	Roo scats and diggings
Bare ground cover (%)	3	3	3	5	8	10
Litter cover (%)	10	8	5	5	7	5

4. Conclusion

4.1 Weed monitoring

Overall weed coverage in the survey area was generally low, with 72.7% of monitoring sites presenting a total weed foliage cover of less than 5%. The remainder (27.3%) of sites yielded a total weed cover of 5-75% against the Braun-Blanquet Scale.

Results of 2023 weed monitoring suggests a reduction in weed cover across the weed monitoring points for the second consecutive year. Of the sites sampled, 18.4% of sites shifted to a lower cover category from 2022 to 2023. This may be explained by below average rainfall leading up to data collection (BOM, 2023), monitoring event occurring later in spring 2023 compared to the 2022 event as well as effective weed control strategy and management.

Although weed populations were generally low, remaining patches of higher weed coverage (>5%) were observed in areas adjacent to the roads and tracks in the north of the POS. Pre-established vehicle tracks are likely vectors for the introduction of weed material and also pose risks of degradation through soil disturbance and edge effects. This also occurs outside the POS, with areas adjacent to Pipidiny road presenting large densities of weeds (mainly Poaceae sp.).

4.2 Vegetation monitoring

There was no reduction in the extent of vegetation in the conservation area and no significant reduction in vegetation health between baseline monitoring by PGV Environmental in 2019 and this monitoring event in 2023. Since the collection of baseline data in 2019, quadrat two has remained in good condition whilst quadrat one has shown no further reduction in condition since 2022 (from very good in 2019).

Native species richness decreased from the previous monitoring event in Q1 (from 18 to 10) and Q2 (from 19 to 17). Weed species richness decreased in Q1 (from 10 to 7) and increased in Q2 (from 10 to 11 species). Changes in species richness in Q1 exclusively reflect the absence of annual species, with no changes in perennial species presence noted. The decrease in native species richness is largely due to an absence of ephemeral species, potentially absent due to seasonal conditions and low rainfall in the preceding months. Average monthly rainfall (1996-2023) amounts to 630.4 mm and during the previous 12-months however, the survey area received 209.8mm below the long-term average (Figure 2.1).

An increase in weed species richness was exclusively observed in Q2 (from 10 to 11 species). However, this change is largely insignificant and is not echoed with significant increases in weed cover.

Burrowing and herbivory pressure can impede recruitment of both annual and perennial species, whilst soil disturbance associated with rabbits can encourage weed establishment. Rabbit diggings continue to be observed in 2023 monitoring within and surrounding Q2 and have the potential to influence condition ratings, as well as weed and native species cover in future if left unmanaged.

5. References

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6. Limitations

Scope of services

This report ("the report") has been prepared by JBS&G in accordance with the scope of services set out in the contract, or as otherwise agreed, between the Client and JBS&G. In some circumstances, a range of factors such as time, budget, access and/or site disturbance constraints may have limited the scope of services. This report is strictly limited to the matters stated in it and is not to be read as extending, by implication, to any other matter in connection with the matters addressed in it.

Reliance on data

In preparing the report, JBS&G has relied upon data and other information provided by the Client and other individuals and organisations, most of which are referred to in the report ("the data"). Except as otherwise expressly stated in the report, JBS&G has not verified the accuracy or completeness of the data. To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in the report ("conclusions") are based in whole or part on the data, those conclusions are contingent upon the accuracy and completeness of the data. JBS&G has also not attempted to determine whether any material matter has been omitted from the data. JBS&G will not be liable in relation to incorrect conclusions should any data, information or condition be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to JBS&G. The making of any assumption does not imply that JBS&G has made any enquiry to verify the correctness of that assumption.

The report is based on conditions encountered and information received at the time of preparation of this report or the time that site investigations were carried out. JBS&G disclaims responsibility for any changes that may have occurred after this time. This report and any legal issues arising from it are governed by and construed in accordance with the law of Western Australia as at the date of this report.

Environmental conclusions

Within the limitations imposed by the scope of services, the preparation of this report has been undertaken and performed in a professional manner, in accordance with generally accepted environmental consulting practices. No other warranty, whether express or implied, is made.

The advice herein relates only to this project and all results conclusions and recommendations made should be reviewed by a competent person with experience in environmental investigations, before being used for any other purpose.

JBS&G accepts no liability for use or interpretation by any person or body other than the client who commissioned the works. This report should not be reproduced without prior approval by the client, or amended in any way without prior approval by JBS&G, and should not be relied upon by other parties, who should make their own enquiries.

Appendix A Species List

Table A.1: 2023 species list for AH area (Quadrat data)

Family	Species
Aizoaceae	<i>Carpobrotus virescens</i>
Asparagaceae	<i>Thysanotus ?patersonii</i>
Asteraceae	* <i>Hypochaeris glabra</i>
	<i>Podotheca gnaphalioides</i>
	* <i>Sonchus oleraceus</i>
	* <i>Ursinia anthemoides</i>
	<i>Waitzia sp.</i>
Araliaceae	<i>Trachymene pilosa</i>
	<i>Trachymene sp.</i>
Chenopodiaceae	<i>Rhagodia baccata</i> subsp. <i>baccata</i>
Cyperaceae	<i>Mesomelaena pseudostygia</i>
Dilleniaceae	<i>Hibbertia hypericoides</i>
Euphorbiaceae	<i>Euphorbia terracina</i>
Fabaceae	<i>Acacia saligna</i>
	<i>Hardenbergia comptoniana</i>
	<i>Jacksonia furcellata</i>
	<i>Kennedia prostrata</i>
	* <i>Trifolium sp.</i>
Geraniaceae	* <i>Pelargonium capitatum</i>
Haemodoraceae	<i>Conostylis candicans</i> subsp. <i>candicans</i>
Hemerocallidaceae	<i>Dianella revoluta</i> var. <i>divaricata</i>
Myrtaceae	<i>Calothamnus quadrifidus</i>
Orobanchaceae	* <i>Orobanche minor</i>
*Poaceae	* <i>Avena barbata</i>
	* <i>Briza maxima</i>
	* <i>Ehrharta longiflora</i>
	* <i>Lagurus ovatus</i>
Primulaceae	* <i>Lysimachia arvensis</i>
Proteaceae	<i>Banksia attenuata</i>
	<i>Banksia dallanneyi</i>
	<i>Banksia sessilis</i> var. <i>sessilis</i>
	<i>Hakea lissocarpha</i>
	<i>Hakea prostrata</i>
	<i>Petrophile macrostachya</i>
Restionaceae	<i>Desmocladus flexuosus</i>
Zamiaceae	<i>Macrozamia riedlei</i>

*Indicates weed species

Table A.2: Weeds present in quadrats

Quadrat	Weed species present
Quadrat 1 (AH1)	<i>*Avena barbata</i>
	<i>*Euphorbia terracina</i>
	<i>*Hypochaeris glabra</i>
	<i>*Lagurus ovatus</i>
	<i>*Lysimachia arvensis</i>
	<i>*Pelargonium capitatum</i>
	<i>*Sonchus oleraceus</i>
Quadrat 2 (AH2)	<i>*Avena barbata</i>
	<i>*Briza maxima</i>
	<i>*Ehrharta longiflora</i>
	<i>*Hypochaeris glabra</i>
	<i>*Lysimachia arvensis</i>
	<i>*Orobanche minor</i>
	<i>*Pelargonium capitatum</i>
	<i>*Sonchus oleraceus</i>
	<i>*Trifolium sp.</i>
	<i>*Ursinia anthemoides</i>

Appendix 7

Appendix B Quadrat Photos

Quadrat 1 (AH1) (2023)



Quadrat 2 (AH2) (2023)



Appendix 1

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APPENDIX 8

Yellagonga Regional Park Sites 2 and 3 Revegetation Monitoring Report – Year 2023

EGLINTON ESTATES

YELLAGONGA REGIONAL PARK SITES 2 AND 3 REVEGETATION MONITORING REPORT 2023

Prepared for: Eglinton Estates

Report Date: 2 February 2024

Version: 1

Report No. 2024-808

pgv
ENVIRONMENTAL

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Appendix 8

1 INTRODUCTION

1.1 Background

Eglinton Estates Pty Ltd (Eglinton) is developing their landholding at Eglinton, located on the coast 45km north-west of the Perth Central Business District. The land is being developed in accordance with the approved Local Structure Plan (LSP) for residential and commercial purposes and includes urban development, the Eglinton District Centre, primary schools and playing fields, a marina and coastal village, Regional Open Space and Public Open Space.

Development of the site will result in the clearing of Carnaby's Black Cockatoo (CBC) habitat which is listed as an Endangered species under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The development was assessed under the EPBC Act and approved by the Commonwealth Minister for the Environment in 2013.

As a condition of the EPBC Act approval Eglinton is undertaking an extensive mitigation and offset package which includes, among other things, the revegetation of 12.7ha of cleared land in Yellagonga Regional Park primarily with plant species used by Carnaby's Black Cockatoos for foraging. The method of revegetation is outlined in the Clearing and Revegetation Management Plan (CRMP) prepared in collaboration with the Department of Biodiversity, Conservation and Attractions (DBCA). The CRMP was approved by the Minister for the Environment on 8 November 2013, as varied on the 9 May 2016 and 5 June 2019 (PGV Environmental, 2013).

1.2 Site Location and Description

Yellagonga Regional Park (YRP) is located approximately 20km north of the Perth CBD and 20km to the south of Eglinton (Figure 1). The DBCA Regional Parks Unit identified four areas (Sites 1a, 1b, 2 and 3) totalling 12.7ha of completely degraded land within YRP that are suitable for revegetation (Figure 2).

1.3 Scope of Works

The CRMP requires annual monitoring of the revegetation sites in autumn and spring for a minimum of 5 years and is to include:

- Establishment of three photo monitoring points to enable comparison of the area over time;
- Establishment of three monitoring plots in each of the four sites;
- An assessment of weeds present;
- Signs of pest animal species such as rabbits and kangaroos; and
- Recommendations on the need for infill planting, weed and pest control.

This monitoring report is the first annual monitoring report and outlines the results of the activities undertaken in Sites 2 and 3 in 2023.

The permanent monitoring plots were set up in November 2022 and the native species and weed species were recorded. Autumn and Spring monitoring occurred in March and November 2023 and was conducted by Dr Paul van der Moezel from PGV Environmental.

The general appearance of both sites 2 and 3 before any revegetation works had commenced is shown in Plates 1 and 2.

Plate 1: Site 2 Looking North



Plate 2: Site 3 Looking North



2 REVEGETATION ACTIONS

2.1 Fauna Control

Fencing was constructed around Sites 2 and 3 between 20 May – 13 June 2022 to protect the sites from kangaroos and rabbits (Appendix 1). The fences consist of 1.8m high chain mesh with a rabbit-proof skirt buried 300mm deep.

According to the CRMP rabbit control was to be undertaken following fence construction, however in consultation with DBCA it was determined that there were no rabbit burrows on the sites and therefore the fence was considered appropriate to exclude rabbits from the revegetation area.

2.2 Weed Control

The sites were hand sprayed with glyphosate and metsulfuron in May 2022. A second application of glyphosate was applied prior to vegetation instalment.

Weed management was undertaken by initially scraping the topsoil off the site in rows approximately 5m wide using a grader and piling the topsoil into narrow bunds between the rows.

Additional spot spraying with glyphosate was undertaken by hand from 20 September to 4 October and again on 12 -15 December 2022. No metsulfuron was used as it can affect germination.

Weed control using spot spraying of glyphosate occurred in 1-7 June 2023.

2.3 Earthworks

Initial earthworks were undertaken between 12-23 May 2022 and included the following:

- Scalping the sites into windrows;
- Introduction of soil improver compost;
- Rotary hoeing to a depth of 100mm; and
- Site 2 also received 1m³ of lime spread across the site to reduce the soil pH.

A second stage of earthworks was undertaken in June 2022 where the sites were ripped to a depth of 300 – 400 mm at approximately 800 mm spacing along the contours.

2.4 Direct Seeding

Direct seeding was carried out at Sites 2 and 3 in June 2022. Direct seeding of 19.8 kg across the 6.6Ha as follows:

- 9.63 kg of seed was used from the Amberton pre-development seed bank; and
- 10.17 kg of seed was procured from the closest available source to the project area. The species that were included in the seed mix are listed in Appendix 2.

2.5 Planting

The site was planted at 1 stem/m² totalling 66,000 seedlings. See Appendix 2 for species and allocations. Seedlings were installed using pottiputki planting tubes. 10g fertiliser tablets suitable for

native species were installed adjacent to each plant, except in the parts of the site containing elevated levels of phosphorus. A total of 44,000 tablets were used (Tranen, 2023).

2.6 Site Maintenance

Signs have been installed on both sites to inform the public about the revegetation program.

The areas seeded are relatively large therefore irrigation was not installed. Instead, seed germination relied on rainfall following seed broadcast during winter.

No fence repairs were required during 2023.

Follow up spot weed control (Glyphosate) was undertaken in December 2022 and June 2023. Spot spraying focused on Couch, Fleabane, Nightshade, Primrose, Castor Oil, and Golden Crown Beard (Appendix 1).

The fence has been successful in excluding rabbits from the revegetation sites and rabbit control will only be required if damage to plants is observed.

2.7 Dieback

Dieback (*Phytophthora cinnamomi* or some other species) is not suspected to be present in the revegetation sites.

2.8 Infill Planting

Infill planting occurred across sites 2 and 3 on 7-9 June 2023 focusing on the areas highlighted in autumn monitoring as needing seedlings to meet the completion criteria of the site. A total of 22,517 seedlings were planted using planting tubes, and 14,813 fertiliser tablets were installed adjacent to seedlings in areas that had not been previously identified as having high levels of phosphorus. Batching sheet and map provide more detail on planted areas (Appendix 1).

3 MONITORING RESULTS

3.1 Timing

The 2023 monitoring of sites 2 and 3 was undertaken by Dr Paul van der Moezel on 30 March and 10 November 2023.

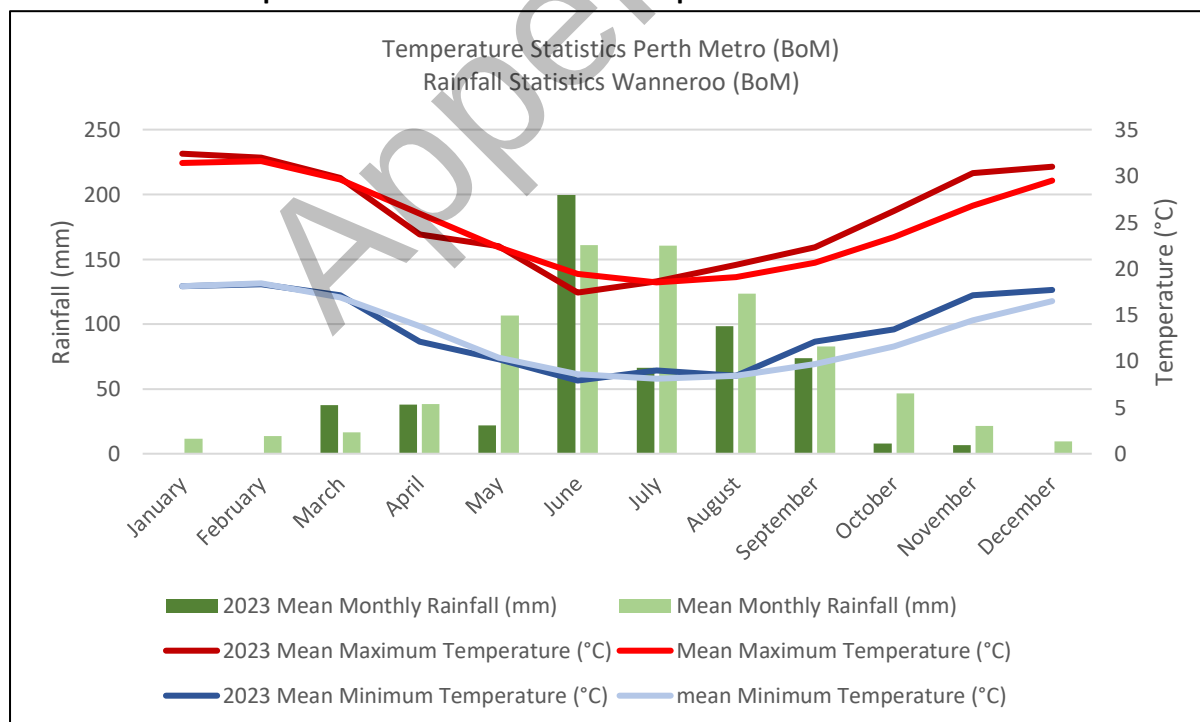
3.2 Climate

Western Australia experiences a Mediterranean climate with warm dry summers and wet cool winters. Peak rainfall periods are between May and September. Climate statistics from the Bureau of Meteorology (BOM, 2023) can be used to compare the survey climatic conditions to mean values for temperature maximum, minimum and rainfall (Graph 1). The statistics have been measured on the Perth Metro (BOM Site Number 009225), which has been collecting data from 1961 and the rainfall statistics are from Wanneroo (BOM Site Number 009105) (BOM, 2023).

Comparatively, the seasonal conditions for the 2023 monitoring were above average rainfall in March and June and no rainfall was recorded in January, February and December. Total rainfall in 2023 was 549.6mm which is below the average rainfall of 791.4mm.

Temperature was slightly cooler than average from February to July and then above average from August to December. The 2023 monitoring was not preceded by any extreme weather events (Graph 1).

Graph 1: Mean climate statistics compared to Year to Date 2023



3.3 Fauna Control

No evidence of rabbits or kangaroos was observed on the sites during the November 2023 monitoring.

3.4 Photo Monitoring Points

The first revegetation monitoring site visit following seeding was undertaken in November 2022. The first round of photos for each photo monitoring point from Sites 2 and 3 were taken during the site visit (Plates 3-8). The photo monitoring points are located at the end of each monitoring plot (Figure 2). The photos are included in Appendix 4 and will be used to compare the progress of revegetation of the sites over time.

Plate 3: Site 2 Plot 1 Nov 2022



Plate 4: Site 3 Plot 1 Nov 2022



Plate 5: Site 2 Plot 1 Mar 2023



Plate 6: Site 3 Plot 1 Mar 2023



Plate 7: Site 2 Plot 1 Nov 2023

Plate 8: Site 3 Plot 1 Nov 2023



3.5 Native Species

Three permanent monitoring plots were established in Site 2 and four permanent monitoring plots were established in Site 3 (Figure 2). Each monitoring plot was marked with steel fence droppers at all four corners. The monitoring plots were changed from the 10m x 10m plots recommended in the CRMP to 5m x 20m plots as those dimensions better fit the size of the rows.

The number of native plants was counted in each plot. In addition, the presence of other native species within the rows but outside the monitoring plots was recorded.

A total of 41 native species were recorded throughout sites 2 and 3 during the monitoring survey as well as some unidentified species due to their very small size (Appendix 5). The plants were all small, having recently germinated direct seeding in June 2022 or tubestock installation in June 2022 and June 2023. As a result some seedlings were not able to be identified or were potentially mid-identified. Those species which were questionable are denoted by a question mark or recorded as 'unidentified' in Appendix 5. Table 1 indicates the number of native species recorded and in which locations.

Table 1: The Number of Native Species in each Plot within Sites 2 and 3 - November 2022- November 2023

Site	Location	Number of Native Species November 2022	Number of Native Species March 2023	Number of Native Species November 2023
2	Plot 1	20	17	19
	Plot 2	28	25	27
	Plot 3	16	16	21
	Plots + Rows	36	32	41
3	Plot 1	19	23	27
	Plot 2	22	22	17
	Plot 3	19	19	24
	Plot 4	18	18	26
	Plots + Rows	36	34	45

The 51 native species that were recorded in Sites 2 and 3 are listed below in Table 2 along with the locations they were recorded in and their value to CBCs.

Table 2: The Native Species Identified in Sites 2 and 3, their Locations and Value to Carnaby's Black Cockatoos

Native Species	Location (Site#-Plot#)	Other Sightings	CBC Habitat
<i>Acacia cyclops</i>	2-2, 3-1		
<i>Acacia huegelii</i>	2-2, 3-3		
<i>Acacia lasiocarpa</i>	2-1, 2-2, 2-3, 3-1, 3-2, 3-4		
<i>Acacia pulchella</i>	2-1,2-2,2-3, 3-2,2-2,3-4		
<i>Acacia saligna</i>	2-2, 2-3, 3-2		
<i>Acacia stenoptera</i>	2-1, 3-1, 2-1		
<i>Adenanthos cygnorum</i>	2-1, 3-1, 3-3-		Foraging
<i>Allocasuarina fraseriana</i>	2-3, 3-1, 3-2,		Foraging
<i>Allocasuarina humilis</i>	2-1, 2-2, 2-3, 3-2, 3-4		Foraging
<i>Anigozanthos manglesii</i>	3-1,3-3,3-4	+	
<i>Aotus gracillima</i>	3-3		
<i>Banksia attenuata</i>	2-3, 3-1, 3-4		Foraging
<i>Banksia grandis</i>	2-1, 2-3, 3-1, 3-4		Foraging
<i>Banksia ilicifolia</i>	3-4?	+	Foraging
<i>Banksia littoralis</i>	2-3,		Foraging
<i>Banksia menziesii</i>	2-3, 3-1, 3-4		Foraging
<i>Banksia prionotes</i>	3-1, 3-3, 3-4	+	Foraging
<i>Banksia sessilis</i>	3-3, 3-4		Foraging
<i>Beaufortia sp</i>	2-2, 2-3,		Foraging
<i>Calothamnus quadrifidus</i>	2-1, 2-2, 2-3, 3-2, 3-3, 3-4		
<i>Calothamnus sanguineus</i>	2-1, 2-2, 3-1, 3-2, 3-3, 3-4		
<i>Conostylis aculeata</i>	3-2		
<i>Corymbia calophylla</i>	2-1, 2-2, 3-1, 3-2, 3-3		
<i>Dampiera linearis</i>			
<i>Eremaea pauciflora</i>	2-2, 2-3,		
<i>Eucalyptus gomphocephala</i>	2-2, 2-2, 2-3, 3-1, 3-2, 3-3		Foraging, Roosting, Breeding
<i>Eucalyptus marginata</i>		+	Foraging, Roosting, Breeding
<i>Eucalyptus rudis</i>	2-1, 2-3, 3-4?		Roosting
<i>Eucalyptus tottiana</i>	2-2, 3-2, 3-4		Roosting
<i>Gastrolobium capitatum</i>	3-3, 3-4	+	
<i>Gompholobium tomentosum</i>	2-1, 2-2, 2-3, 3-1, 3-3, 3-4		
<i>Hakea lissocarpa</i>	3-1, 3-4		Foraging
<i>Hakea prostrata</i>	2-1, 2-2, 2-3, 3-1, 3-3, 3-4		Foraging
<i>Hakea ruscifolia</i>	2-1, 2-2, 3-1		Foraging
<i>Hakea trifurcata</i>	3-1, 3-3, 3-4	+	Foraging
<i>Hemiantra pungens</i>	2-1, 3-1, 3-2, 3-3		
<i>Hibbertia racemosa</i>			
<i>Hovea trisperma</i>			
<i>Hypocalymma angustifolium/robustum</i>	2-2, 2-3, 3-2, 3-3		
<i>Jacksonia furcellata</i>	2-1, 2-2, 2-3, 3-1, 3-3, 3-4		
<i>Kennedia prostrata</i>	2-1, 2-2, 2-3, 3-1, 3-3, 3-4		
<i>Kunzea glabrescens</i>	2-1, 2-3,		
<i>Melaleuca huegelii</i>	2-2, 2-3, 3-3, 3-4		
<i>Melaleuca systena</i>	2-1, 2-2, 2-3, 3-1, 3-2, 3-3, 3-4		
<i>Patersonia occidentalis</i>	2-2, 3-1, 3-3, 3-4		
<i>Phyllanthus calycinus</i>	3-4		
<i>Pultenaea reticulata</i>	2-2, 3-1		

Native Species	Location (Site#-Plot#)	Other Sightings	CBC Habitat
<i>Regelia inops</i>	2-3, 3-1, 3-2, 3-4		
<i>Rhagodia baccata</i>	2-2, 3-1		
<i>Spyridium globulosum</i>			
<i>Templetonia retusa</i>			

The perennial species with the largest number of seedlings recorded throughout the two sites were *Acacia saligna*, *Acacia pulchella*, *Banksia attenuata*, *Banksia prionotes*, *Calothamnus sanguineus*, *Corymbia calophylla*, *Gompholobium tomentosum*, *Patersonia occidentalis*, and *Melaleuca systema*. Full details and opportunistic sighting data are in Appendix 5.

Seventeen species used by CBCs for foraging were recorded over both sites (Table 2). Tuart and Marri seedlings, which are used by CBC for roosting and breeding, were also recorded.

Table 3: The Numbers of Each Native Species Recorded within the Plots in Site 2 and Site 3

Native Species	Site 2	Site 3
<i>Acacia cyclops</i>	2	1
<i>Acacia huegelii</i>	1	2
<i>Acacia lasiocarpa</i>	7	49
<i>Acacia pulchella</i>	36	16
<i>Acacia saligna</i>	8	18
<i>Acacia stenoptera</i>	4	4
<i>Adenanthos cygnorum</i>	5	5
<i>Allocasuarina fraseriana</i>	1	7
<i>Allocasuarina humilis</i>	5	9
<i>Anigozanthos manglesii</i>		3
<i>Aotus gracillima</i>		2
<i>Banksia attenuata</i>	3	16
<i>Banksia grandis</i>	2	8
<i>Banksia ilicifolia</i>		1
<i>Banksia littoralis</i>	1	
<i>Banksia menziesii</i>	2	6
<i>Banksia prionotes</i>		29
<i>Banksia sessilis</i>		2
<i>Beaufortia sp</i>	1	1
<i>Calothamnus quadrifidus</i>	11	9
<i>Calothamnus sanguineus</i>	6	27
<i>Conostylis aculeata</i>		3
<i>Corymbia calophylla</i>	2	17
<i>Eremaea pauciflora</i>	4	10
<i>Eucalyptus gomphocephala</i>	12	12
<i>Eucalyptus marginata</i>		
<i>Eucalyptus rudis</i>	3	2
<i>Eucalyptus todiana</i>	1	5
<i>Gastrolobium capitatum</i>		3
<i>Gompholobium tomentosum</i>	20	28
<i>Hakea lissocarpa</i>		11
<i>Hakea prostrata</i>	16	17
<i>Hakea ruscifolia</i>	23	5
<i>Hakea trifurcata</i>		11
<i>Hemiandra pungens</i>	8	13
<i>Hibbertia racemosa</i>		
<i>Hovea trisperma</i>		1

<i>Hypocalymma angustifolium/robustum</i>	4	9
<i>Jacksonia furcellata</i>	12	13
<i>Kennedia prostrata</i>	4	3
<i>Kunzea glabrescens</i>	7	
<i>Melaleuca huegelii</i>	2	5
<i>Melaleuca systena</i>	20	40
<i>Patersonia occidentalis</i>	2	21
<i>Phyllanthus calycinus</i>		1
<i>Pultenaea reticulata</i>	3	1
<i>Regelia inops</i>	3	4
<i>Rhagodia baccata</i>	9	1
Total November 2023	217	451
Total March 2023	210	346
Total November 2022	625	613

3.6 Weed Species

The seven monitoring plots established in both Sites 2 and 3 described in 3.3.1 were surveyed for weeds as well as native species.

Table 4 indicates the number of weed species recorded on each site and in which locations.

Table 4: The Number of Weed Species in each Plot within Sites 2 and 3 - November 2022- November 2023

Site	Location	Number of Weed Species November 2022	Number of Weed Species March 2023	Number of Weed Species November 2023
2	Plot 1	1	1	10
	Plot 2	3	3	10
	Plot 3	2	1	9
	Plots + Rows	4	4	15
3	Plot 1	4	4	10
	Plot 2	2	2	9
	Plot 3	2	2	9
	Plot 4	0	0	11
	Plots + Rows	4	4	17 (some dead)

Fifteen weed species were recorded in Site 2 and 17 in Site 3 in November 2023 (Table 5). The most common weed species were Blue Lupin (*Lupinus cosentinii*), Flaxleaf Fleabane (*Erigeron bonariensis*) and Mediterranean Turnip (*Brassica tournefortii*). Couch Grass was common to very common in four of the seven plots.

Weed species occurring in five (5) out of seven (7) monitoring plots included Cape Weed, Mediterranean Turnip (*Brassica tournefortii*), *Crassula glomerata*, Fleabane (*Erigeron bonariensis*), Flatweed (*Hypochaeris glabra*), Blue Lupin (*Lupinus cosentinii*), and *Vulpia bromoides* (Table 5).

Table 5: Weed Species Recorded in Sites 2 and 3 in November 2023

Species	Common Name	Site 2			Site 3			
		Plot 1	Plot 2	Plot 3	Plot 1	Plot 2	Plot 3	Plot 4
<i>Aira caryophyllea</i>		+					+	
<i>Arctotheca calendula</i>	Cape Weed	+	+	+		+ dead	VC dead	
<i>Avena fatua</i>	Wild Oats							
<i>Brassica tournefortii</i>	Mediterranean Turnip	+		+	+	+	VC dead	+
<i>Bromus diandrus</i>	Great Brome				+ dead			
<i>Carpobrotus edulis</i>	Hottentot Fig	+			c	+	+	
<i>Crassula glomerata</i>		c	c	c	dead	+	+	c
<i>Cynodon dactylon</i>	Couch Grass				vc	vc	c	
<i>Dischisma capitatum</i>					c			+
<i>Ehrharta calycina</i>	Annual Veldt Grass							+
<i>Eragrostis curvula</i>	African Lovegrass		+					
<i>Erigeron bonariensis</i>	Flaxleaf Fleabane	c seedlings	+	+	C seedlings	vc		
<i>Erodium cicutarium</i>	Storksbill			+				
<i>Euphorbia terracina</i>	Geraldton Carnation Weed							
<i>Hypochaeris glabra/radicata</i>	Flatweed	+	+			c	vc dead	V
<i>Lagurus ovatus</i>	Hare's Tail Grass							
<i>Lolium perenne</i>	Ryegrass							+
<i>Lupinus cosentinii</i>	Blue Lupin	+	+	+	+ sprayed	+ dead		+
<i>Lysimachia arvensis</i>	Pimpernel							
<i>Malva parviflora</i>	Marshmallow							
<i>Moraea flaccida</i>	Cape Tulip							
<i>Oenothera drummondii</i>	Beach Evening Primrose							
<i>Oenothera stricta</i>	Common Evening Primrose							
<i>Orobancha minor</i>	Lesser Broomrape		+					
<i>Pelargonium capitatum</i>	Rose Pelargonium							
<i>Romulea rosea</i>	Guildford Grass				dead			C
<i>Silene gallica</i>								
<i>Solanum nigrum</i>	Blackberry Nightshade							

Species	Common Name	Site 2			Site 3			
		Plot 1	Plot 2	Plot 3	Plot 1	Plot 2	Plot 3	Plot 4
<i>Sonchus oleraceus</i>	Sow Thistle							
<i>Trachyandra divaricata</i>	Onion Weed		+	+	sprayed			+
<i>Trifolium sp.</i>	Clover							
<i>Ursinia anthemoides</i>	Ursinia		+				+	c
<i>Vulpia bromoides</i>		+	c	c	+		+	+
<i>Wahlenbergia capensis</i>		+		+				
Overall % cover		30	20	25	30 but lots dead	30	40	30 before spraying
Total Species		15			17 (some dead)			

3.7 Dieback

No evidence of Dieback (*Phytophthora cinnamomi* or some other species) was observed during the revegetation monitoring.

3.8 Carnaby's Black Cockatoo Monitoring

An annual CBC foraging monitoring program will commence in 2027 to determine their activity in the revegetation sites. Currently it is too early to implement this program as the seedlings require many more years to mature.

4 SUMMARY AND RECOMMENDATIONS

The rehabilitation monitoring of Sites 2 and 3 in the Yellagonga Regional Park (YRP) during 2022-23 has resulted in the following:

Findings

- Three 5m x 20m permanent monitoring plots were established in each Site 2 and four 5m x 20m permanent monitoring plots were established to monitor the effectiveness of seeding and tubestock planting. A total of 41 native species were recorded throughout Sites 2 and 3, with roughly similar numbers between the two sites. The number of native species recorded in each 5m x 20m plot ranged from 0 – 27;
- Seventeen (17) species used by CBCs for foraging were recorded in both sites, however they occurred in very low densities; and
- Fifteen (15) weed species were recorded in site 2 and seventeen (17) were recorded in site 3. Some of the weed species were dead (sprayed). The most common weed species were Blue Lupin (*Lupinus cosentinii*), Flaxleaf Fleabane (*Erigeron bonariensis*) and Mediterranean Turnip (*Brassica tournefortii*).

Recommendations

- Follow-up weed control should be implemented to reduce the presence of weeds on sites 2 and 3; and
- Rabbit control is not currently required.

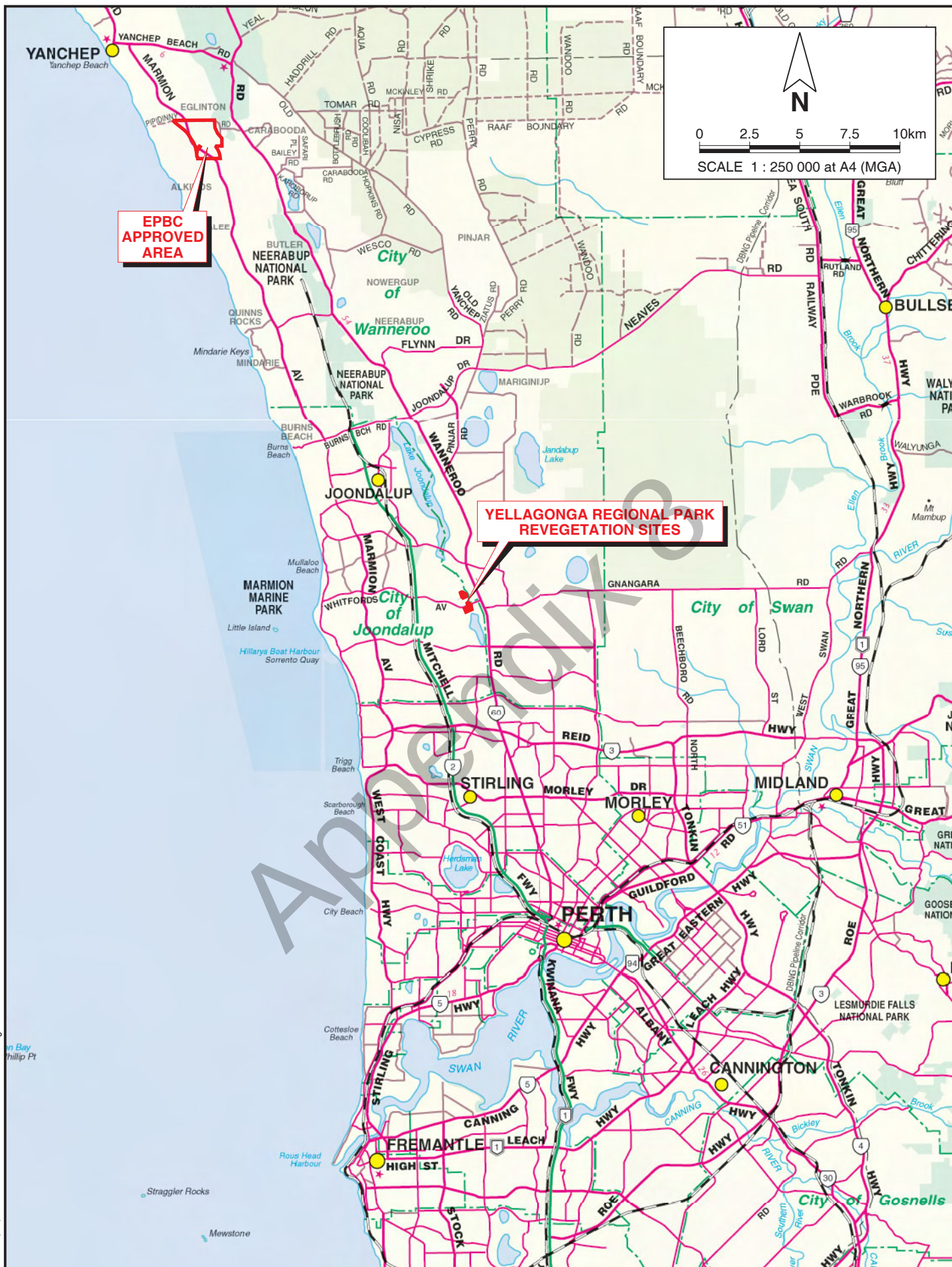
5 REFERENCES

PGV Environmental (2013) *Clearing and Revegetation Management Plan*. Prepared for Eglinton Estates. Perth, Western Australia.

Appendix 8

FIGURES

Appendix 8





APPENDIX 1

**Completion Reports for work undertaken
at Sites 2 and 3 in Yellagonga Regional
Park: Preparation of site, weed control,
fencing, seeding and planting**

Yellagonga Revegetation Stage 2 & 3 – Eglinton Estates

Post Activity Report

Activity Date(s):	September - October 2023	Conducted By:	Cory Kennedy
Site Reference:	Yellagonga Stage 2 & 3	Reviewed By:	James Lawton
Area (ha):	6.6	Project No:	P466E

Site Condition

- The Project currently in the first year of the five-year maintenance phase.
- DBCA requested a two-year weed control program focusing on grassy weeds and lupins in site 1a and 1b along with temporary fence removal before handover.
- Weed control was conducted as per maintenance works for stage 2 and for handover purposes for stage 1. To help control the spread of weeds throughout either site.
- Kangaroo and rabbit proof fencing for stage 1 was removed as per DBCA instructions for handover.

Action Taken

Date(s):	Activity	Description
12-20 th September 2023	Weed Control	Spot spraying of glyphosate across the site focusing on: dune onion weed, cape weed, vetch, lupin, one leaf cape tulip, couch, wild turnip, soursob, blackberry nightshade.
19 th September 2023	Fence removal	Removal of Kangaroo and rabbit proof fencing from stages 1a and 1b.
3 rd October 2023	Stage 1 Weed Control	Weed control occurred in stage 1a and 1b for handover with DBCA. Glyphosate was used throughout the site spraying all weeds on the firebreaks and into the bushland area (where practicable) focussing on lupins, grassy weeds and euphorbia species. This is one of two events with the second weed control event to occur in August 2024.

Prior Works History

Date(s):	Activity	Description
8 th April 2022	Soil testing / analysis	Soil testing was conducted across the sites by Smithson Environmental. Samples were sent to the lab for analysis with results and recommendations being sent through on the 4/5/22.
12 – 13 th May 2022	Weed control	Broad spraying of glyphosate and metsulfuron was carried out across the entirety of sites 2 and 3 prior to scalping.
16 – 23 rd May 2023	Earth works	Sites 2 and 3 had the surface scalped into windrows. Organic soil improver (wandalup) was spread across both sites and rotary hoed to a depth of 100 mm. In addition to soil nutrients, site 2 also received 1 m ³ of lime spread across the site to increase the soil pH to a level that will promote stronger plant development.
20 th May – 13 th June 2022	Fence installation	Both sites 2 and 3 have been fully enclosed with a total of 1,452 lineal metres of 1.8 m chainmesh fence with trenched rabbit skirt.
8 th – 9 th June 2022	Weed control	Hand spraying of glyphosate was carried out across the entirety of sites 2 and 3 prior to scalping.
14 th June 2022	Earthworks	Rip lines at were run between the windrows at 800mm spacing through the site along the contours of the slope at 300 - 400mm depth.
15 th June 2022	Direct Seeding	6.6 ha was direct seeded at 3kg/ha, totalling 19.8kg of seed. This seed mix comprised 9.63kg of seed allocated from the Amberton seed bank (collected in advance of development), with the remaining 10.17 kg purchased from the closest available source to the project area. Attached is the species allocations and quantities breakdown. Seed was pre-treated to break dormancy using methods appropriate to species (aerosol smoke, scarification, hot water, etc.), bulked with yellow sand, and hand broadcast.
16 – 28 th June 2022	Tubestock installation	6.6 ha was planted at a density of 1 plant / m ² , totalling 66,000 seedlings. See attachment for species allocations and quantities. Seedlings were installed using Pottiputki planting tubes. One 10 g fertiliser tablet suitable for use with natives installed adjacent to each plant in the areas except for in areas which have been identified as having increased levels of Phosphorus in the soil. A total of 44,000 fertiliser tablets were installed.
20 th September – 4 October 2022	Weed Control	Spot spraying of glyphosate across the site focusing on: dune onion weed, cape weed, vetch, lupin, one leaf cape tulip, couch, wild turnip, soursob, blackberry nightshade. No metsulfuron was used as this can affect seed germination.
18 th November 2022	Spring Monitoring	Formal monitoring across sites 2 and 3 highlighted areas for weed control during December weed control period. Monitoring report sent to client in November.
12 – 15 th December 2022	Weed Control	Spot spraying of glyphosate across the site focusing on: couch, fleabane, nightshade, primrose, castor oil, golden crown beard. No metsulfuron was used.

17 February 2023	Autumn Monitoring	Formal monitoring across sites 2 and 3 highlighted areas for infill planting and autumn weed control.
1 – 7 June 2023	Weed Control	Spot spraying of weeds throughout sites 2 and 3 occurred using glyphosate. No metsulfuron was used as this can affect native seed germinant's.
7 – 9 June 2023	Planting	Infill planting occurred across sites 2 and 3 focusing on the areas highlighted in autumn monitoring as needing seedlings to meet the completion criteria of the site. A total of 22,517 seedlings were planted using planting tubes, and 14,813 fertiliser tablets were installed adjacent to seedlings in areas that had not been previously identified as having high levels of phosphorus. Batching sheet and map provide more detail on planted areas.
17 July 2023	Asbestos Removal	AARCO was engaged to complete, hand removal (Emu pick) of 10m ² non-friable asbestos. Two locations were traversed in zone 3 as highlighted in map below. Asbestos was correctly disposed of after removal from site (see disposal form attached).
29 August 2023	Spring Monitoring	Formal monitoring across sites 2 and 3 indicated weed control areas for spring and summer weed control events.

Additional Comments

- The next event to occur on site is the summer weed control for stage 2 and 3.

Photographs

Stage 2 and 3 Weed Control – Large lupins sprayed – 14/09/2023.



Stage 1 Weed Control – Lupins and Grasses Sprayed – 04/10/2023.



Yellagonga Revegetation Stage 2+3 – Ellington Estates

Monitoring Report – Spring 2022

Monitoring Date(s):	18/11/2022	Conducted By:	Cory Kennedy
Site Reference:	Yellagonga Stage 2 & 3	Reviewed By:	Damian Grose
Area (ha):	6.6	Project No:	P466E

Summary of Revegetation Progress / Condition

- Direct seeding of 19.8kg of seed occurred in early June.
- Seedling installation occurred in late June. 66,000 stems with 44,000 fertiliser tablets.
- Overall, the site is in good condition.
- Evidence of seed germination.
- Evidence of seed production and flowering maturity from planted seedlings.
- Species richness currently below target.
- Single golden crown beard (*Verbena enceloides*) species on site and was removed immediately. No other evidence of weed on site.
- Couch grass (*Cynodon dactylon*) and prickly paddy melon (*Citrullus lantanus*) are most abundant weeds across the site.
- Weed control too occur in summer months. To maintain low weed coverage.

Assessment Against Completion Criteria

Text is **green** if meeting criteria or **red** if not meeting criteria

Criteria	Target	2a	2b	3a1	3a2	3b	3c	3d	3e	Overall Total
Plant density/m ²	1.6	3.3	3.7	2.6	6.3	4.7	1.3	2.7	4.4	3.4
Species richness	58									44
Native cover %	NA	7	5	2	6	5	1	3	7	4
Weed cover %	≤10%	2	2	3	5	5	5	5	5	4
Weed density/m ²	NA	1.1	1.3	3.1	2.6	2.1	4.3	2.1	2.7	2.4

Brief Works History

Date	Activity	Description
April 2022	Soil testing/analysis	Soil testing/ analysis was conducted revealing elevated nutrients and pH in parts of the site.
May 2022	Weed Control	Weed control of site via hand spraying of glyphosate and metsulfuron
	Earth Works	Earthworks including: Scalping of the site into windrows. Introduction of soil improver compost. Rotary hoeing to a depth of 100mm. Site 2 also received 1 m ³ of lime spread across the site to reduce soil pH.
	Fence Installation	Fence installation around both sites 2 and 3 - 1.8 m chainmesh fencing with trenched rabbit skirt (1,452 lineal meters).
June 2022	Weed Control	A second application of glyphosate spraying was applied just prior to vegetation installation.
	Earth Works	Site ripped to a depth of 300 – 400 mm at approximately 800 mm spacing along the contours.
	Direct Seeding	Direct seeding of 19.8 kg across the 6.6Ha, see Appendix 1 for species list 9.63 kg of seed was used from the Amberton pre-development seed bank. 10.17 kg of seed was procured from the closest available source to the project area.
	Planting	The site was then planted at 1 stem/m ² totalling 66,000 seedlings. See Appendix 2 for species and allocations. Seedlings were installed using pottiputki planting tubes. 10g fertiliser tablets suitable for native species were installed adjacent to each plant, except in the parts of the site containing elevated levels of phosphorus. A total of 44,000 tablets were used - see Appendix 3 for tablet locations.

Methods

Quadrat Establishment

- 78 2 m x 2 m randomly placed temporary quadrats were assessed.
- All quadrat locations were recorded by GPS and placed facing north / south
- Revegetation areas were walked in a diagonal pattern covering the entirety of reserve
- Photos were taken of various quadrats that best indicated changes in vegetation conditions.

Data Collection

- Native and weed stems were counted in each quadrat, and native cover % and weed cover % were also estimated. Species richness within each quadrat was not recorded due to the small sample size, but all species were noted as observed across the site.

Results, Observations, and Discussion

Native Stem Density

- Stem density was recorded quite high in areas, a maximum of 120 stems was recorded in one quadrat located in site 3b. Site 3c had the lowest recorded stems.
- Only site 3c was below the required stem density for both areas 2 and 3.
- Overall, the project is more than 2x the required target of 1.6 stems/m² with a site average of 3.6 stems/m².

Weed Cover %

- Overall, the site was below the required 10% for completion.
- Sites 2a and 2b had lower weed coverage than site 3.
- Site 3 had an average of 5% weed cover across the site, with the primary weed species being couch grass.

General Observations

- Overall, the site is in good condition, with evidence of seed germination occurring and minimal weed coverage across the site.
- One specimen of golden crown beard occurred on site and was immediately removed as this species can quickly establish and outcompete native germinates.
- Asbestos was observed in section 3e (see photographs).
- Species richness was 44 species, below the target of 58. Given the age of the project, the majority of the specimens observed were planted as seedlings with 41 of the 45 species recorded. Three of the species observed were only seeded, and it is expected that this will increase as more seeds germinate over time.
- Possible fox predation on birds within site 3.

Conclusions and Recommendations

- Stem densities are on average twice the target, with some sections performing better than others. Remedial action will be directed towards the underperforming areas to ensure a consistent outcome across the site.
- Evidence of natural seed production occurring with several species flowering throughout reserve including *Anigozanthos manglesii* and *Isopogon drummondii*.
- Weeds are presently low, and summer weed control will occur to control prickly paddy melon and couch grass spread across reserve.
- Removal of asbestos from reserve should occur in early 2023.
- Removal of PVC retic pipe is to occur in summer 2022/2023.
- Consideration of fox control in surrounding areas as site develops and habitat development encourages return of endangered cockatoo species.

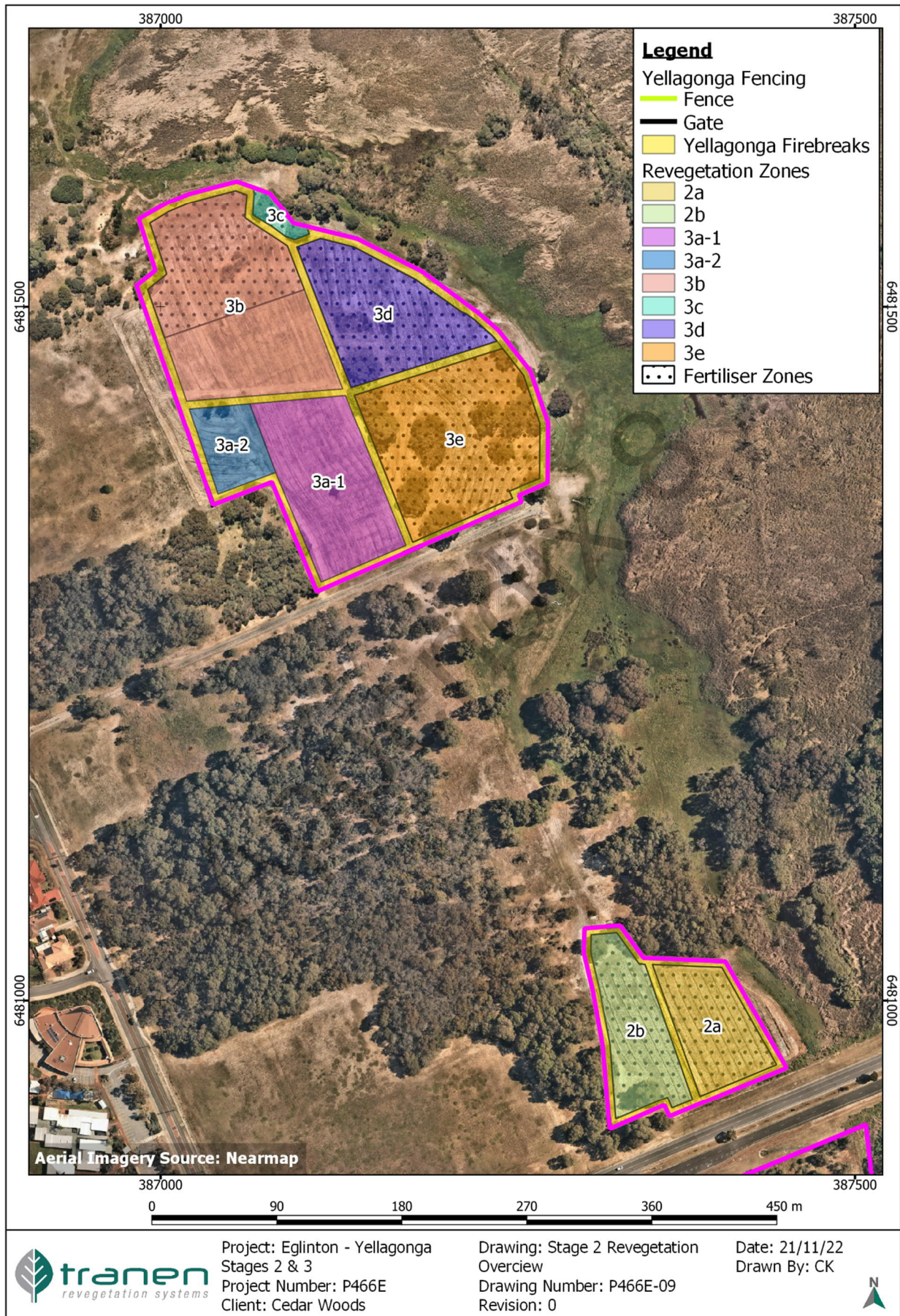
Appendix 8

Yellagonga Species List Showing Species Initially Seeded and Planted with Corresponding Site Occurrence, Spring 2022

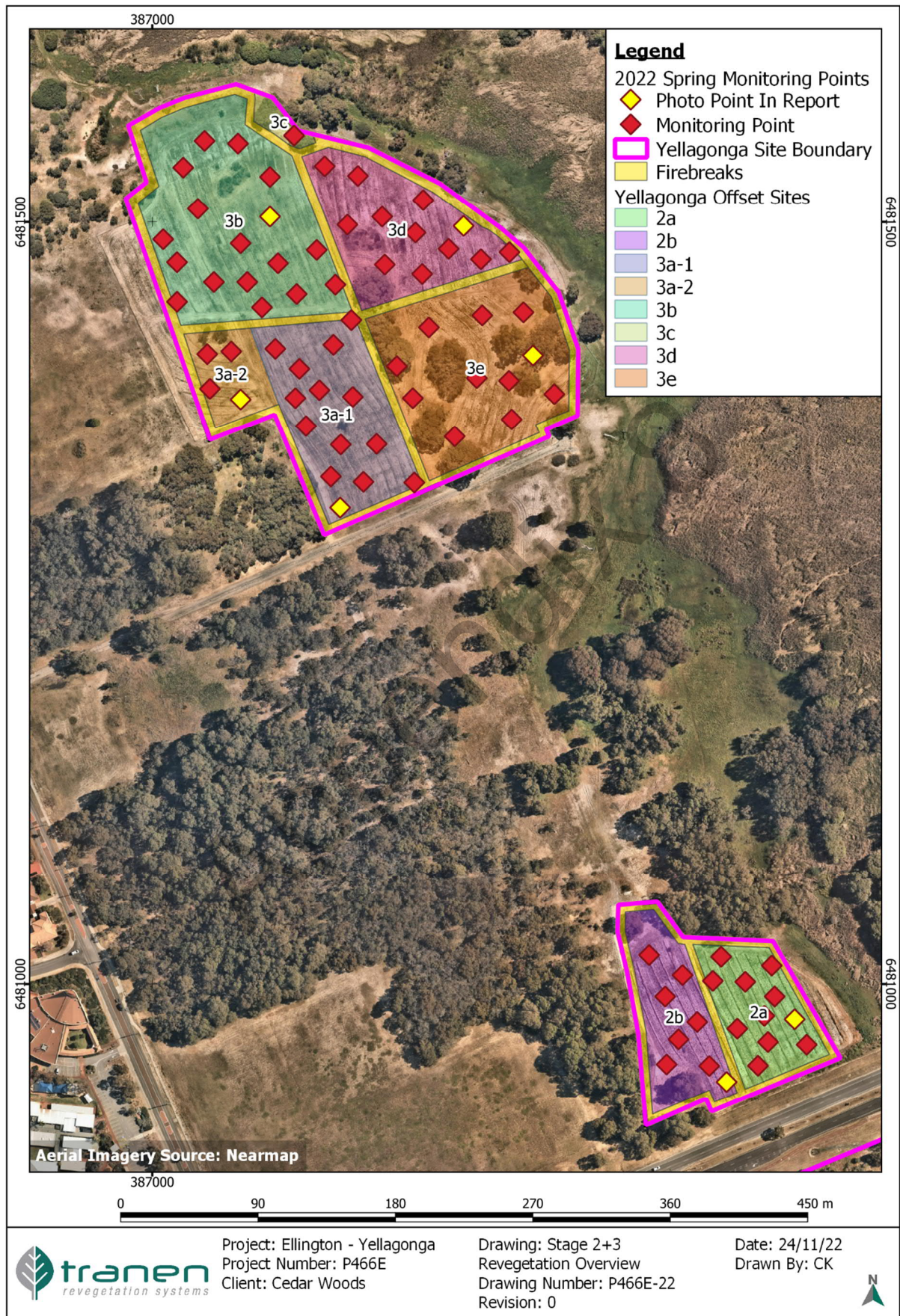
Species	Planted	Seeded	Site 2 Occurrence	Site 3 Occurrence
Acacia cyclops		x		y
Acacia huegelii	x	x	y	y
Acacia lasiocarpa	x	x		y
Acacia pulchella	x	x	y	y
Acacia saligna	x	x	y	y
Acacia stenoptera	x	x	y	y
Adenanthos cygnorum	x	x	y	y
Allocasuarina fraseriana	x	x	y	y
Allocasuarina humilis	x	x	y	y
Anigozanthos manglesii	x	x	y	y
Aotus gracillima	x	x		
Banksia attenuata	x	x		y
Banksia grandis	x	x	y	y
Banksia ilicifolia	x	x		y
Banksia menziesii	x	x	y	y
Banksia prionotes	x	x	y	y
Banksia sessilis var. cygnorum	x	x		y
Banksia sessilis var. sessilis		x		
Bossiaea eriocarpa		x		
Burchardia congesta		x		
Calothamnus quadrifidus		x		
Calothamnus sanguineus	x	x	y	y
Conostylis aculeata	x	x		
Corymbia calophylla	x	x	y	y
Dampiera linearis	x	x	y	
Daviesia divaricata		x		
Eremaea pauciflora	x	x	y	y
Eremophila glabra		x		
Eucalyptus gomphocephala var. gomphocephala	x	x	y	y
Eucalyptus marginata subsp. marginata	x	x	y	y
Eucalyptus todtiana	x	x	y	y
Gastrolobium capitatum	x	x		y
Gastrolobium ebracteolatum		x		
Gompholobium tomentosum	x	x		
Hakea costata		x		
Hakea lissocarpha	x	x		y
Hakea prostrata	x	x	y	y
Hakea ruscifolia	x	x		y
Hakea trifurcata	x	x	y	y

Species	Planted	Seeded	Site 2 Occurrence	Site 3 Occurrence
<i>Hardenbergia comptoniana</i>		x		
<i>Hemiandra pungens</i>	x	x	y	y
<i>Hibbertia racemosa</i>	x	x		y
<i>Hovea pungens</i>	x	x		y
<i>Hypocalymma angustifolium</i>	x	x	y	y
<i>Hypocalymma robustum</i>	x	x		y
<i>Isopogon drummondii</i>		x		y
<i>Jacksonia furcellata</i>		x		y
<i>Kennedia prostrata</i>	x	x	y	y
<i>Kunzea glabrescens</i>	x	x		y
<i>Melaleuca systema</i>		x		
<i>Myoporum insulare</i>		x		
<i>Opercularia vaginata</i>		x		
<i>Patersonia occidentalis</i>	x	x	y	y
<i>Petrophile linearis</i>		x		
<i>Petrophile macrostachya</i>		x		
<i>Phyllanthus calycinus</i>	x	x		y
<i>Podotricha chrysantha</i>		x		
<i>Ptilotus polystachyus</i>		x		
<i>Pultenaea reticulata</i>	x	x		y
<i>Regelia inops</i>	x	x		y
<i>Rhagodia baccata</i>	x	x	y	y
<i>Spyridium globulosum</i>		x		y
<i>Stirlingia latifolia</i>	x	x		y
<i>Templetonia retusa</i>	x	x		y
<i>Verticordia densiflora</i>		x		
<i>Xanthorrhoea preissii</i>	x	x		
Total Species Richness	45	68	25	44

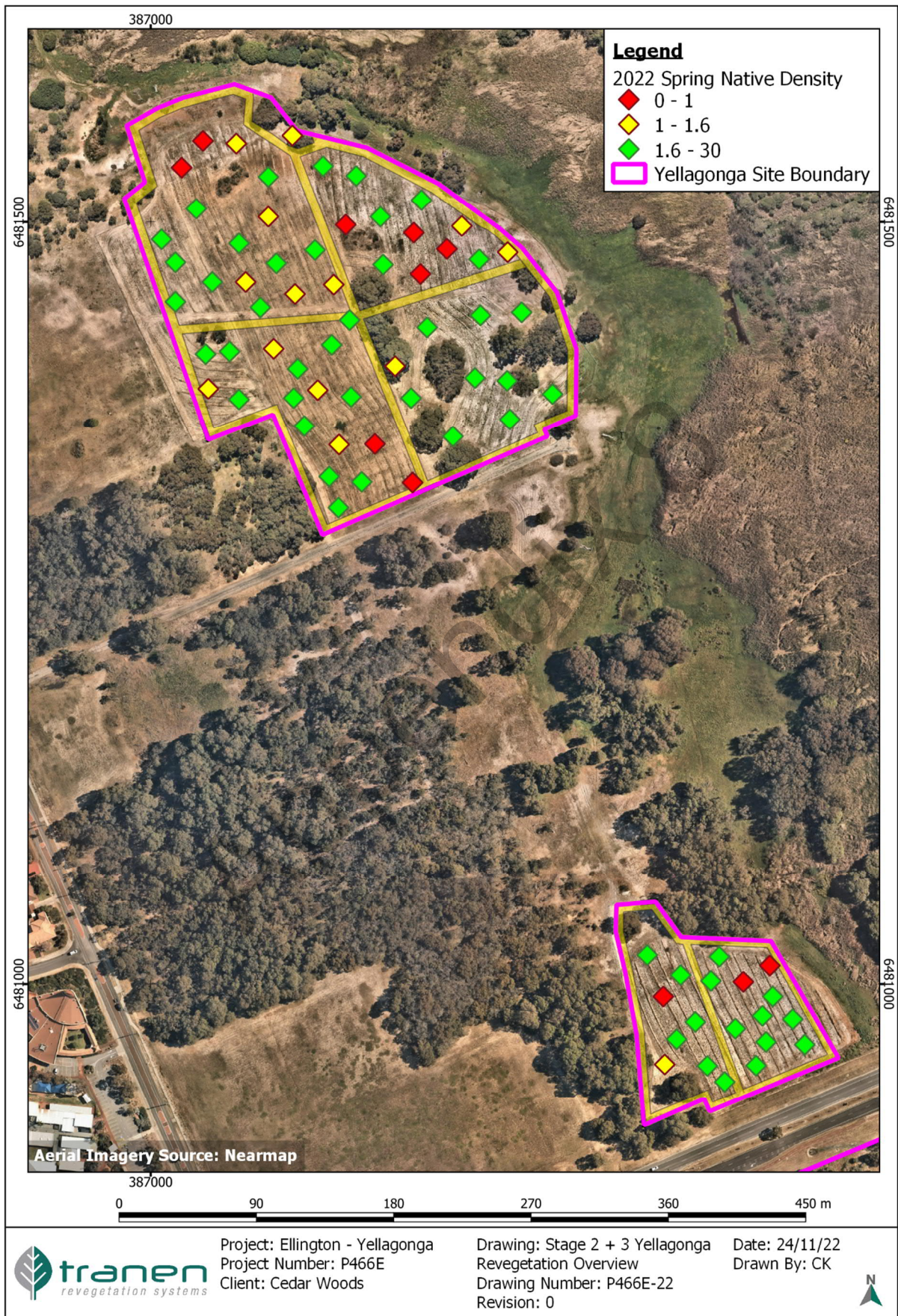
Yellagonga Revegetation Zones 2 + 3, 2022



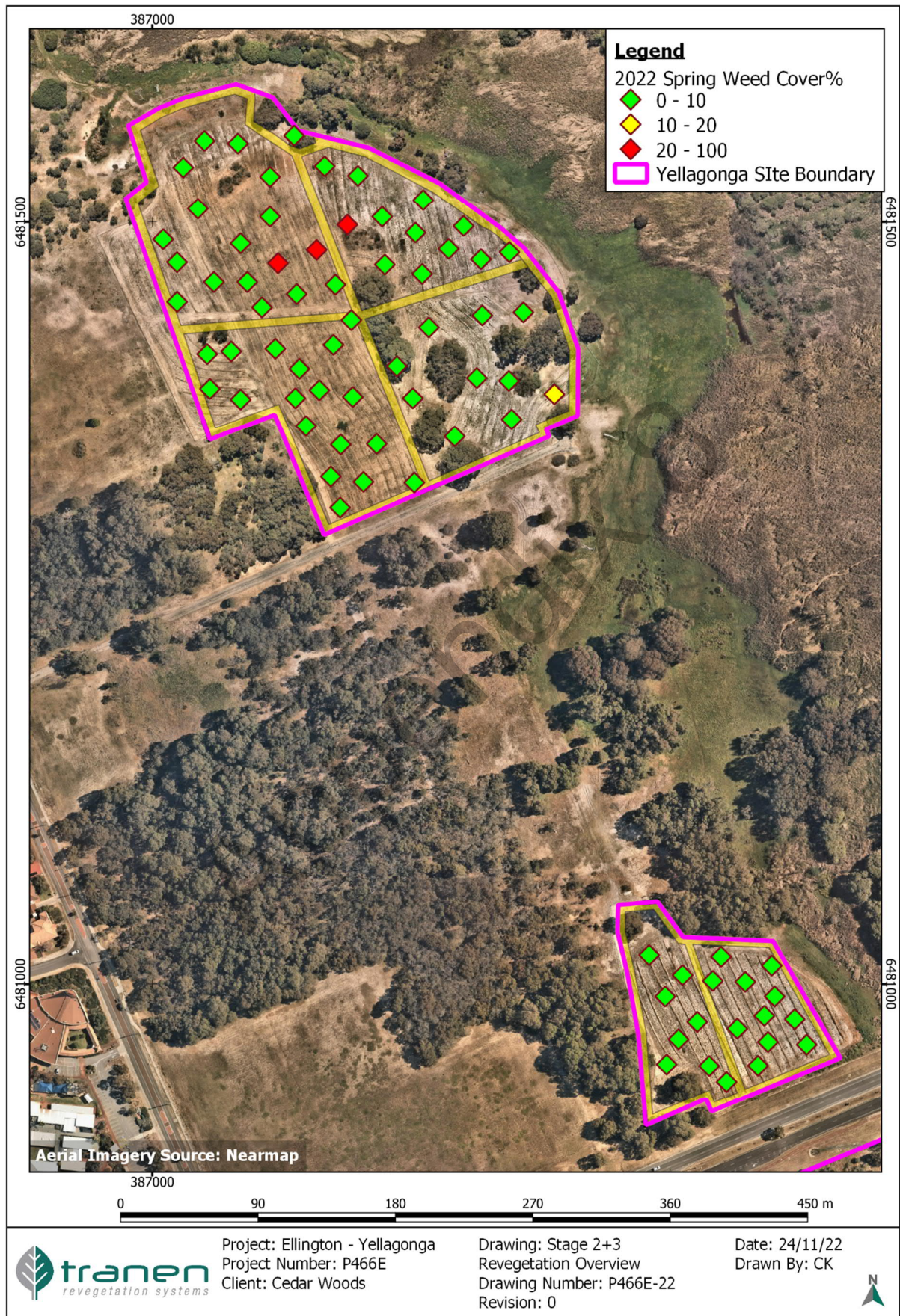
Yellagonga Spring Monitoring Points 2022



Yellagonga Spring Native Density 2022



Yellagonga Spring Weed Cover 2022



Photographs

Site 2a quadrat. Low weed and Native Cover – 17/11/2022



Site 2b quadrat. High species richness with low weed cover – 17/11/2022



Site 3a1 quadrat. Seedling development with *Cynodon dactylon* regrowth evident – 17/11/2022



Site 3a2 quadrat. Low weed Cover – 17/11/2022



Site 3b quadrat. Eucalyptus species growing well – 17/11/2022



Site 3d – Dead grasses with Native germinants growing – 17/11/2022



Site 3e – Evidence of Asbestos on Surface – 17/11/2022



Appendix

APPENDIX 2

Revegetation Species List

Eglinton CRMP
Yellagonga staghes 2 & 3
Batching - 2023

Location Name		Total
Area (ha)		6.6
Density (plants/m2)	size	1
Species List		
<i>Acacia cyclops</i>	FT	280
<i>Acacia huegelii</i>	FT	25
<i>Acacia lasiocarpa</i>	Cell	738
<i>Acacia pulchella</i>	Cell	650
<i>Acacia saligna</i>	Cell	871
<i>Allocasuarina fraseriana</i>	Cell	623
<i>Allocasuarina humilis</i>	Cell	800
<i>Anigozanthos manglesii</i>	Cell	597
<i>Banksia attenuata</i>	FT	523
<i>Banksia grandis</i>	FT	497
<i>Banksia littoralis</i>	FT	85
<i>Banksia menziesii</i>	FT	515
<i>Banksia prionotes</i>	FT	1053
<i>Bossiaea eriocarpa</i>	Cell	85
<i>Calothamnus sanguineus</i>	Cell	1409
<i>Conostylis aculeata</i>	Cell	986
<i>Corymbia calophylla</i>	Cell	1421
<i>Daviesia divaricata</i>	FT	45
<i>Eremaea pauciflora</i>	Cell	917
<i>Eucalyptus gomphocephala</i> var. <i>gomphocephala</i>	Cell	1137
<i>Eucalyptus rudis</i>	Cell	140
<i>Gompholobium tomentosum</i>	Cell	63
<i>Grevillea vestita</i>	FT	231
<i>Hakea lissocarpa</i>	Cell	383
<i>Hakea prostrata</i>	Cell	1116
<i>Hakea ruscifolia</i>	FT	393
<i>Hakea trifurcata</i>	FT	453
<i>Hemiandra pungens</i>	FT	653
<i>Kennedia prostrata</i>	Cell	728
<i>Kunzea glabrescens</i>	FT	1156
<i>Melaleuca huegelii</i>	Cell	820
<i>Melaleuca raphiophylla</i>	Cell	120
<i>Melaleuca systema</i>	Cell	815
<i>Orthrosanthus laxus</i> var. <i>laxus</i>	FT	60
<i>Patersonia occidentalis</i>	Cell	820
<i>Rhagodia baccata</i>	Cell	543
<i>Templetonia retusa</i>	Cell	685
<i>Xanthorrhoea preissii</i>	FT	81
Total		22517

387000

Legend

Yellagonga Fencing

Fence

Gate

Yellagonga Firebreaks

Revegetation Zones

2a

2b

3a-1

3a-2

3b

3c

3d

3e

Fertiliser Zones

6481500

6481500

3b

3c

3d

3a-2

3a-1

3e

Aerial Imagery Source: Nearmap

387000

0 40 80 120 160 200 m





Yellagonga Revegetation Stage 2+3 – Eglinton Estates

Monitoring Report – Spring 2023

Monitoring Date(s):	29/08/2023	Conducted By:	Cory Kennedy
Site Reference:	Yellagonga Stage 2 & 3	Reviewed By:	James Lawton
Area (ha):	6.6	Project No:	P466E

Summary of Revegetation Progress / Condition

- Overall, the site is progressing well.
- Evidence of seed production and flowering maturity from some planted seedlings.
- Species richness is now above target.
- Average plant density is above target.
- No castor oil plants (*Ricinus communis*) have returned since control event. Continuous monitoring of species will occur.
- Lupins (*Lupinus cosentinii*) is the most abundant weed across both stages. Wild radish (*Raphanus raphanistrum*) is also prevalent throughout both stages.
- Couch grass (*Cynodon dactylon*) is dormant during winter months and has not continued to grow since the last weed control event. However, control of this species was a focus during the spring weed control event to minimise risk of spread throughout the site.
- The small Brazilian pepper (*Schinus terebinthifolius*) sapling was also treated during the monitoring event using the drill and fill method.

Assessment Against Completion Criteria

Text is **green** if meeting criteria or **red** if not meeting criteria.

Criteria	Target	2a	2b	3a1	3a2	3b	3c	3d	3e	Overall Total
Plant density/m ²	1.6	2.3	2.4	2.0	2.1	2.9	2.2	2.3		2.3
Species richness	58									60
Native cover %	NA	35	29	26	34	15	29	24		27
Weed cover %	≤10%	18	21	28	29	12	32	16		22

Brief Works History

Date(s):	Activity	Description
8 April 2022	Soil testing / analysis	Soil testing was conducted across the sites by Smithson Environmental. Samples were sent to the lab for analysis with results and recommendations being sent through on the 4/5/22.
12 – 13 May 2022	Weed control	Broad spraying of glyphosate and metsulfuron was carried out across the entirety of sites 2 and 3 prior to scalping.
16 - 23 May 2023	Earth works	Sites 2 and 3 had the surface scalped into windrows. Organic soil improver (wandalup) was spread across both sites and rotary hoed to a depth of 100 mm. In addition to soil nutrients, site 2 also received 1 m ³ of lime spread across the site to increase the soil pH to a level that will promote stronger plant development.
20 th May – 13 th June 2022	Fence installation	Both sites 2 and 3 have been fully enclosed with a total of 1,452 lineal metres of 1.8 m chainmesh fence with trenched rabbit skirt.
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14 th June 2022	Earthworks	Rip lines at were run between the windrows at 800mm spacing through the site along the contours of the slope at 300 - 400mm depth.
15 June 2022	Direct Seeding	6.6 ha was direct seeded at 3kg/ha, totalling 19.8kg of seed. This seed mix comprised 9.63kg of seed allocated from the Amberton seed bank (collected in advance of development), with the remaining 10.17 kg purchased from the closest available source to the project area. Attached is the species allocations and quantities breakdown. Seed was pre-treated to break dormancy using methods appropriate to species (aerosol smoke, scarification, hot water, etc.), bulked with yellow sand, and hand broadcast.
16 – 28 June 2022	Tubestock installation	6.6 ha was planted at a density of 1 plant / m ² , totalling 66,000 seedlings. See attachment for species allocations and quantities. Seedlings were installed using Pottiputki planting tubes. One 10 g fertiliser tablet suitable for use with natives installed adjacent to each plant in the areas except for in areas which have been identified as having increased levels of Phosphorus in the soil. A total of 44,000 fertiliser tablets were installed.
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7 – 9 June 2023	Planting	Infill planting occurred across sites 2 and 3 focusing on the areas highlighted in autumn monitoring as needing seedlings to meet the completion criteria of the site. A total of 22,517 seedlings were planted using planting tubes, and 14,813 fertiliser tablets were installed adjacent to seedlings in areas that had not been previously identified as having high levels of phosphorus. Batching sheet and map provide more detail on planted areas.
17 th July 2023	Asbestos Removal	AARCO was engaged to complete, hand removal (Emu pick) of 10m ² non-friable asbestos. Two locations were traversed in zone 3 as highlighted in map below. Asbestos was correctly disposed of after removal from site.
	Weed Control	
	Spring Monitoring	

Methods

Quadrat Establishment

- 172 2 m x 2 m randomly placed temporary quadrats were assessed.
- All quadrat locations were recorded by GPS.
- Revegetation areas were walked in a random pattern covering the entirety of reserve.
- Photos were taken of various quadrats that best indicated changes in vegetation conditions.

Data Collection

- Native stems were counted in each quadrat, and native cover % and weed cover % were also estimated. Species richness within each quadrat was not recorded due to the small sample size, but all species were noted as observed across the site.

Results, Observations, and Discussion

Native Stem Density

- Stem frequency is currently above the required levels for completion, this is expected during spring monitoring as plant mortality generally occurs over the hot dry summer months.
- Stem density was below the required levels in a few quadrats but overall, the average across each site is now above the required target density of 1.6 stems/m².
- Overall, the project average is above the required target of 1.6 stems/m² with 2.3 stems/m².

Weed Cover %

- Overall, the site was above the required 10% for completion, with a 22% average recorded across the site.
- Sites 3c and 3e had lower weed coverage than the rest of the site however, all sites were above the 10% target set.
- Blue lupins are the most prominent weed across the site. This species is most active over winter and spring.
- Two-leafed cape tulip (*Moraea miniata*) was also found throughout stage 3.

Species Richness

- Species richness across the site is now recording at 60, this is above the target of 58. A total of 66 species have been planted and seeded in 2 revegetation events this provides a species survival rate of 83% since beginning revegetation works.
- There is one natural recruit recorded on site. *Daucus glochidiatus* (Australian carrot) is an annual herb native to WA and the Perth area.
- More species may be present on site but may not appear until later in the year. (November-January). The site will be continuously monitored during weed control events and other site visits to assess whether further species are occurring on site.

General Observations

- Overall, the site is in good condition, with stem density above target, native cover increasing, and flowering maturity and seed production beginning to occur for some species (including Banksia species).
- Weed cover is currently above target with declared pest, two-leaf cape tulip now evident on site.

Conclusions and Recommendations

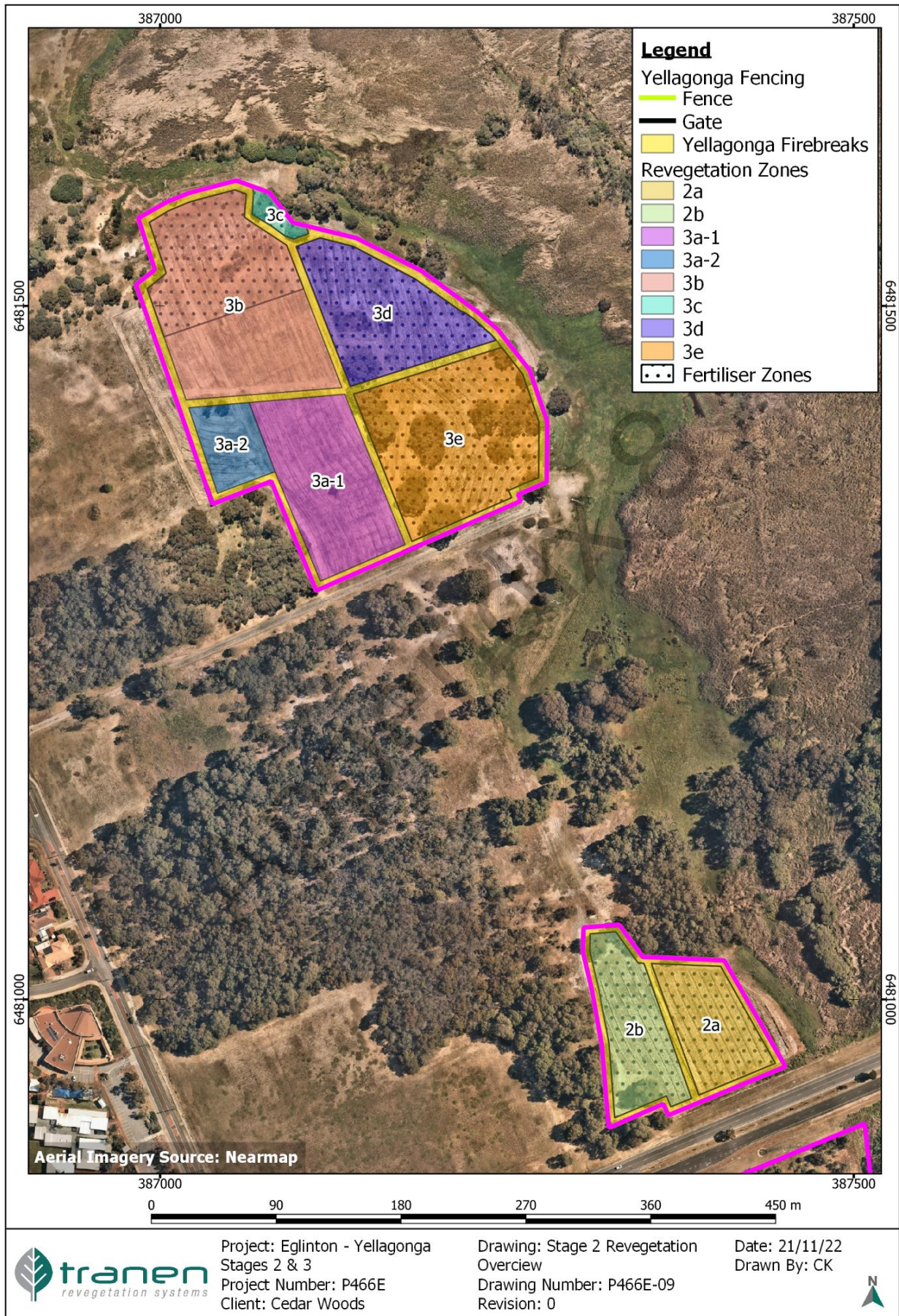
- It is expected some areas stem densities will drop below the target with the dry summer months approaching. Remedial planting action will be directed towards the underperforming areas to ensure a consistent outcome across the site.
- Weed control will continue under tree canopies but will not be planted. As likelihood of plant establishment in these areas is relatively low.
- Weeds were high during this monitoring event. Weed control in spring was conducted and these weed loads will begin to reduce over the coming weeks.

Yellagonga Species List Showing Species Seeded and Planted (r) with Natural Recruits (n), With Corresponding Site Occurrence, Spring 2023

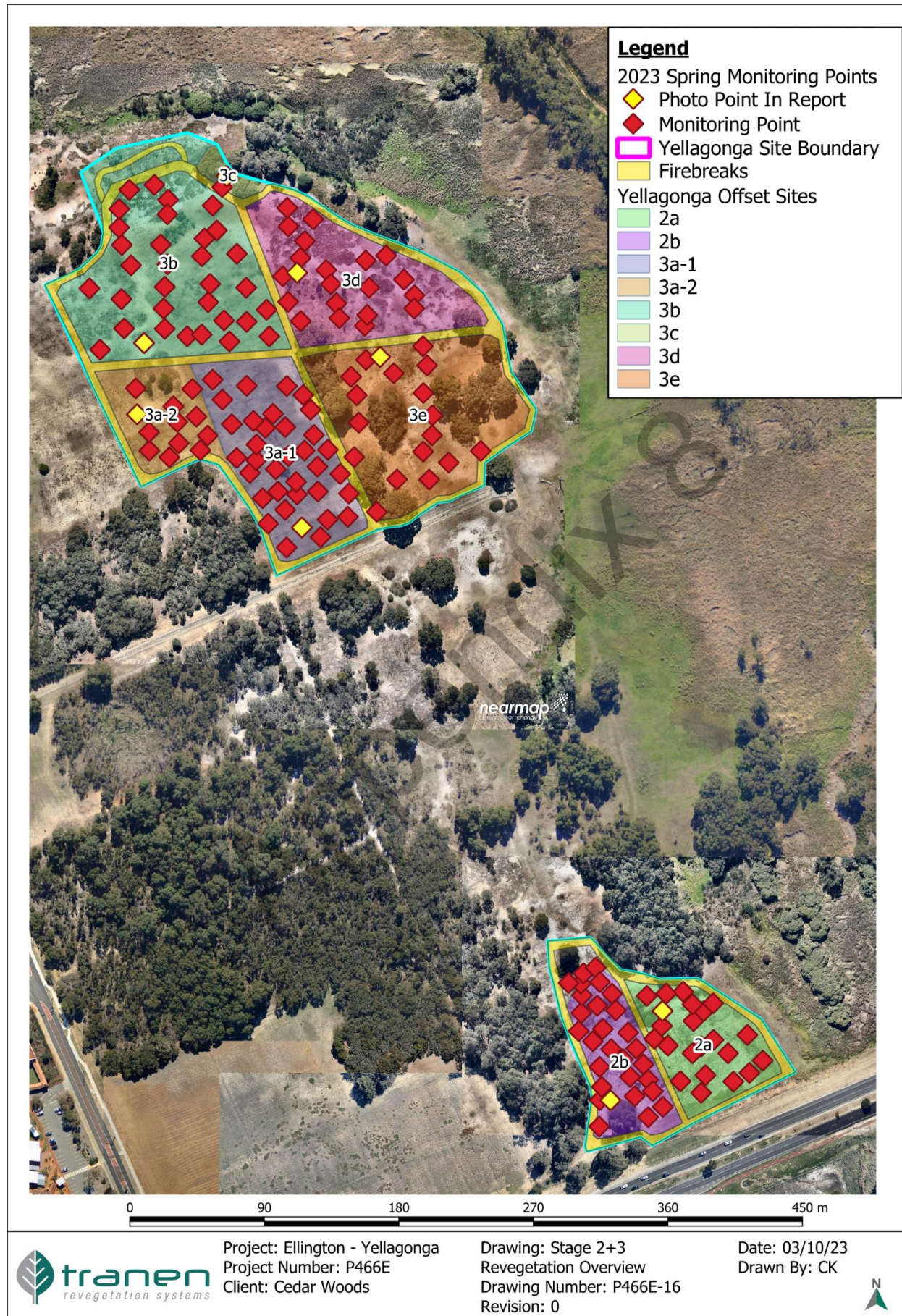
Native Species Present	Reveg (r) Natural Recruit (n)	Site 2	Site 3	Occurrence
Acacia cyclops	r	Y	Y	Y
Acacia huegelii	r		Y	Y
Acacia lasiocarpa	r	Y	Y	Y
Acacia pulchella	r	Y	Y	Y
Acacia saligna	r	Y	Y	Y
Acacia stenoptera	r	Y	Y	Y
Adenanthos cygnorum	r	Y	Y	Y
Allocasuarina fraseriana	r	Y	Y	Y
Allocasuarina humilis	r	Y	Y	Y
Anigozanthos manglesii	r	Y	Y	Y
Aotus gracillima	r			
Banksia attenuata	r	Y	Y	Y
Banksia grandis	r	Y	Y	Y
Banksia ilicifolia	r	Y	Y	Y
Banksia menziesii	r	Y	Y	Y
Banksia prionotes	r	Y	Y	Y
Banksia sessilis var. cygnorum	r	Y	Y	Y
Banksia sessilis var. sessilis	r	Y	Y	Y
Bossiaea eriocarpa	r		Y	Y
Burchardia congesta	r			
Calothamnus quadrifidus	r	Y	Y	Y
Calothamnus sanguineus	r	Y	Y	Y
Conostylis aculeata	r	Y	Y	Y
Corymbia calophylla	r	Y	Y	Y
Dampiera linearis	r			
Daviesia divaricata	r			
Daucus glochidiatus	n	Y	Y	Y
Eremaea pauciflora	r		Y	Y
Eremophila glabra	r	Y	Y	Y
Eucalyptus gomphocephala var. gomphocephala	r	Y	Y	Y
Eucalyptus marginata subsp. marginata	r	Y	Y	Y
Eucalyptus todtiana	r	Y	Y	Y
Gastrolobium capitatum	r	Y		Y
Gastrolobium ebracteolatum	r			
Gompholobium tomentosum	r	Y	Y	Y
Grevillea vestita	r	Y	Y	Y
Hakea costata	r			
Hakea lissocarpha	r	Y	Y	Y

Native Species Present	Reveg (r) Natural Recruit (n)	Site 2	Site 3	Occurrence
Hakea prostrata	r	Y	Y	Y
Hakea ruscifolia	r	Y	Y	Y
Hakea trifurcata	r	Y	Y	Y
Hardenbergia comptoniana	r			
Hemiandra pungens	r	Y	Y	Y
Hibbertia racemosa	r	Y	Y	Y
Hovea pungens	r	Y	Y	Y
Hypocalymma angustifolium	r	Y	Y	Y
Hypocalymma robustum	r	Y	Y	Y
Isopogon drummondii	r	Y	Y	Y
Jacksonia furcellata	r	Y	Y	Y
Kennedia prostrata	r	Y	Y	Y
Kunzea glabrescens	r	Y	Y	Y
Melaleuca huegelii	r	Y	Y	Y
Melaleuca raphiophylla	r		Y	Y
Melaleuca systema	r	Y	Y	Y
Myoporum insulare	r			
Opercularia vaginata	r		Y	Y
Orthrosanthus laxus var. laxus	r		Y	Y
Patersonia occidentalis	r	Y	Y	Y
Petrophile linearis	r			
Petrophile macrostachya	r			
Phyllanthus calycinus	r	Y	Y	Y
Podotheca chrysantha	r	Y	Y	Y
Ptilotus polystachyus	r	Y	Y	Y
Pultenaea reticulata	r			
Regelia inops	r	Y	Y	Y
Rhagodia baccata	r	Y	Y	Y
Spyridium globulosum	r	Y	Y	Y
Stirlingia latifolia	r	Y		Y
Templetonia retusa	r	Y	Y	Y
Verticordia densiflora	r	Y	Y	Y
Xanthorrhoea preissii	r		Y	Y
Total	70	53	58	60

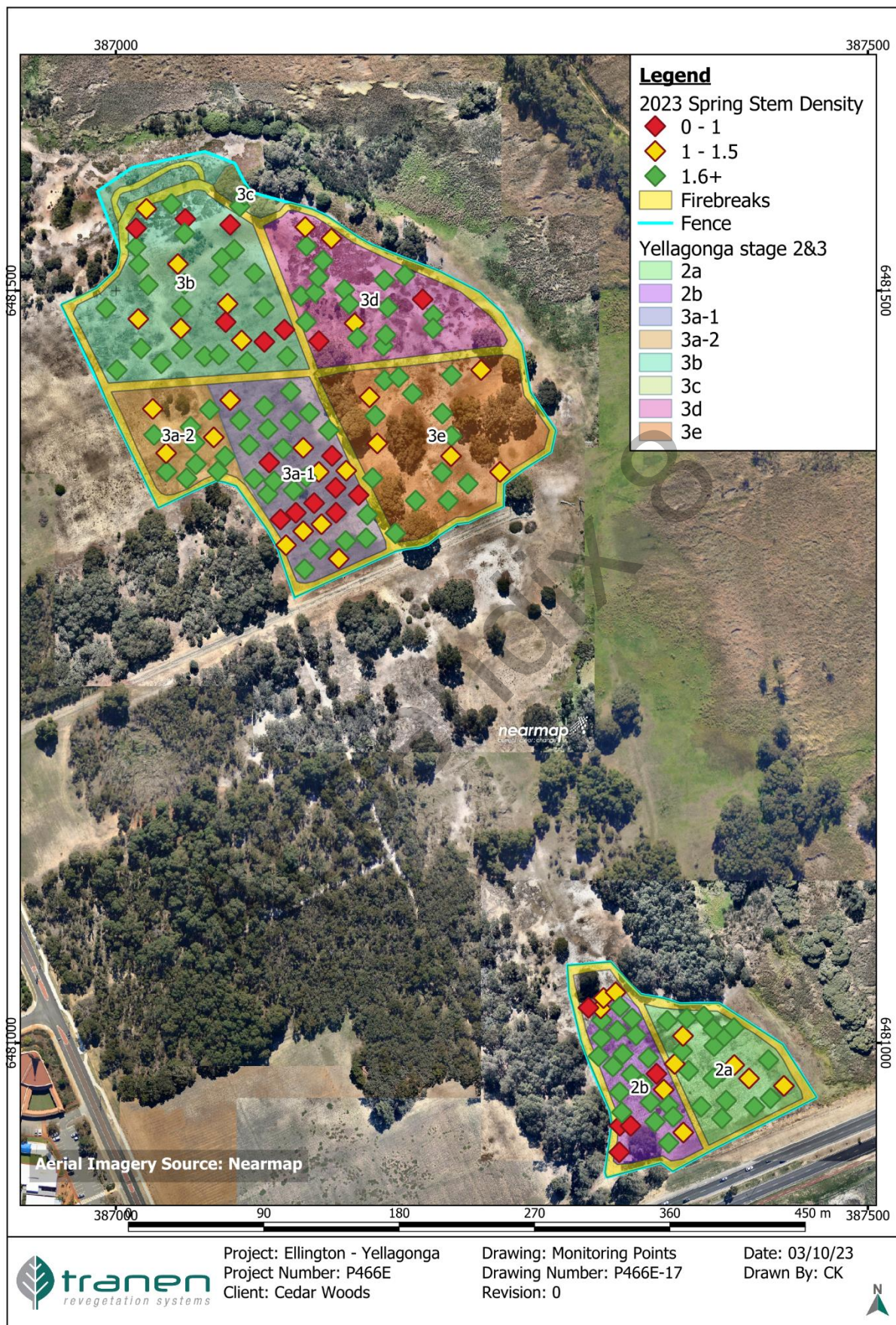
Yellagonga Revegetation Zones 2 + 3, 2023



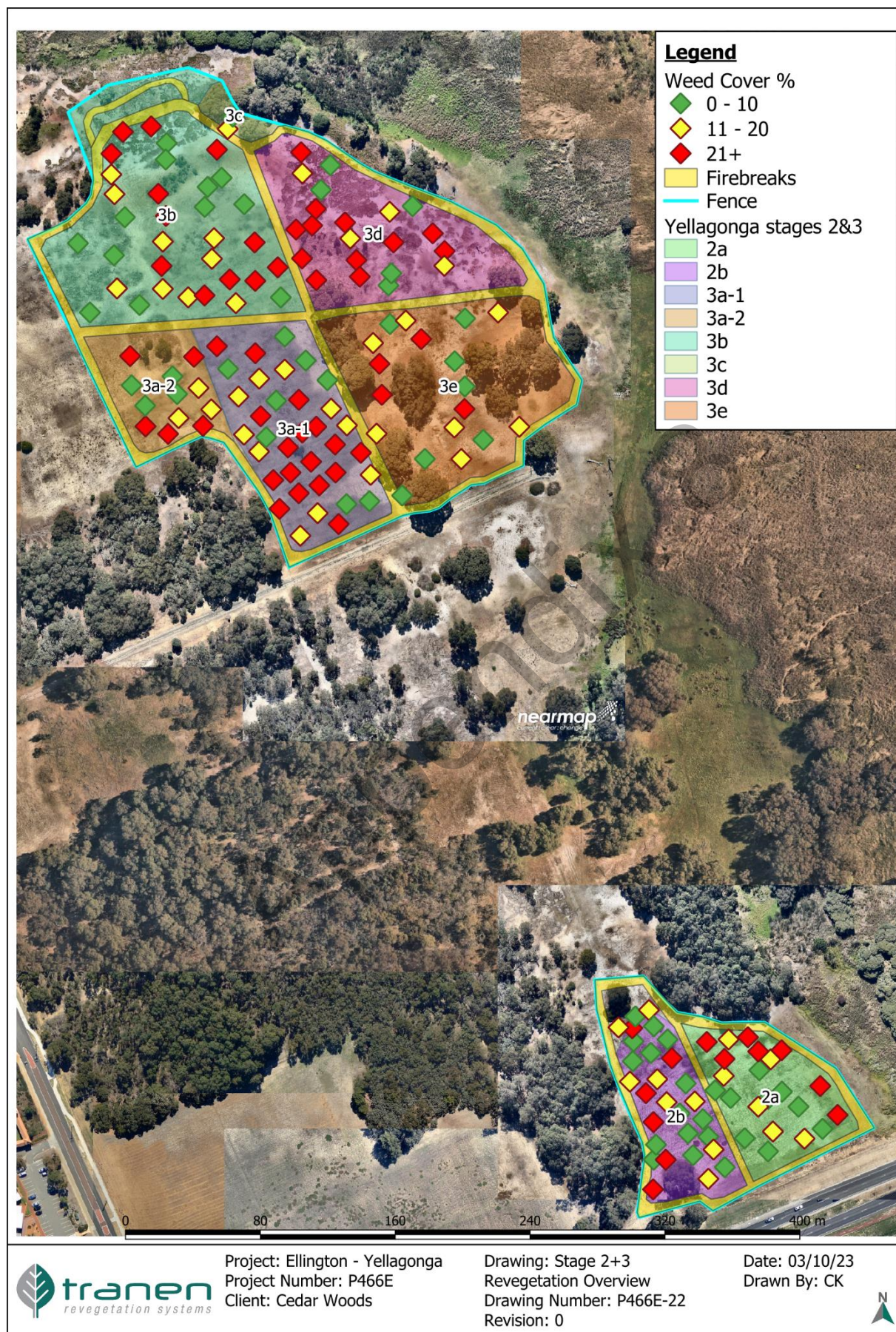
Yellagonga Spring Monitoring Points 2023



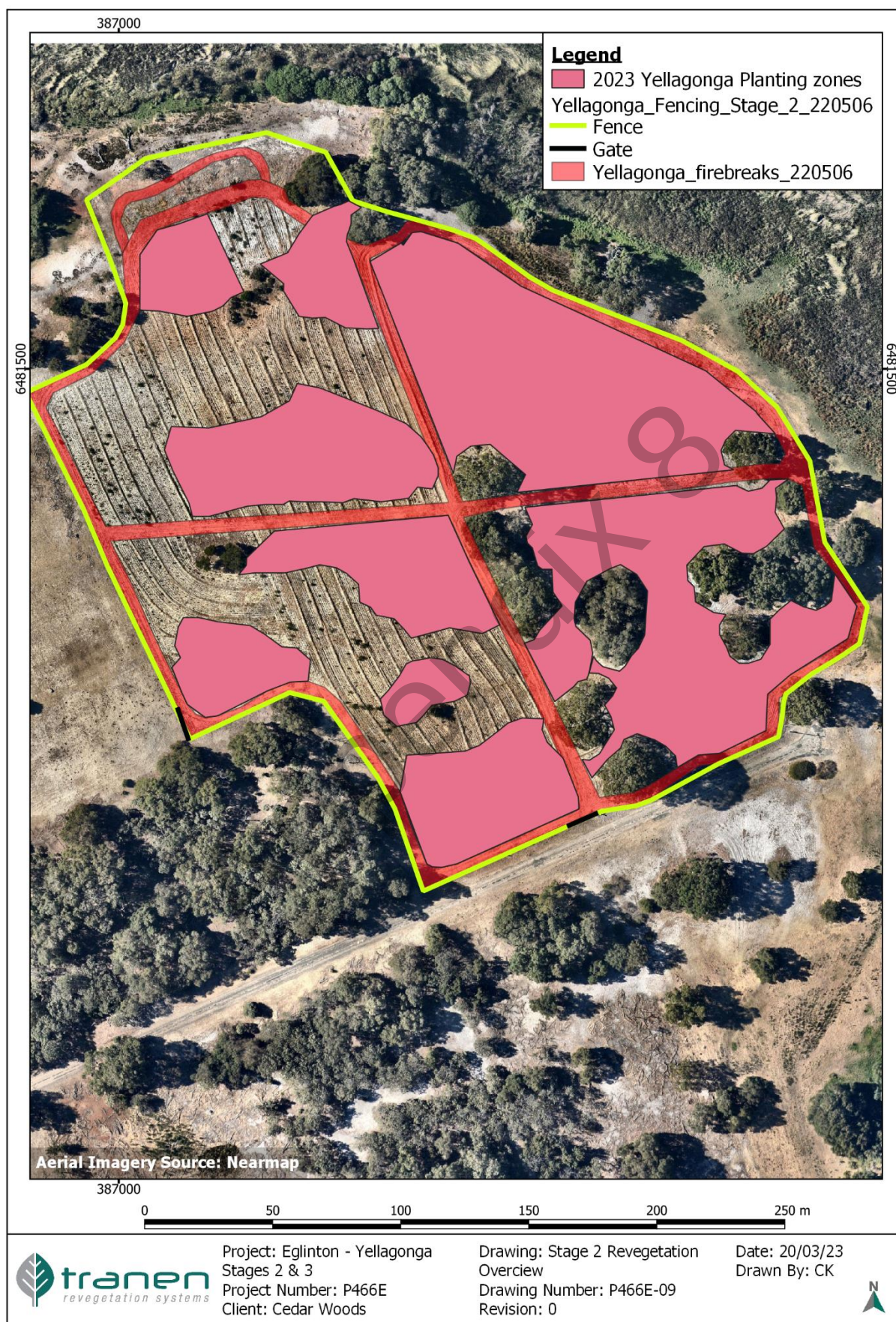
Yellagonga Spring Native Density 2023



Yellagonga Spring Weed Cover 2023



Yellagonga Infill Planting Zones Stage 3, 2023



Yellagonga Infill Planting Zones Stage 2, 2023



Photographs (Note Quadrat Locations Random, Not Same Locations)



Site 2b – 29/08/2023



Site 2b quadrat - 17/02/2023



Site 3a1 – 29/08/2023



Site 3a1 quadrat – 17/02/2023



Site 3a2 – 29/08/2023



Site 3a2 quadrat – 17/02/2023



Site 3b – 29/08/2023



Site 3b quadrat – 17/02/2023



Site 3c – 29/08/2023



Site 3c quadrat – 17/02/2023



Site 3d – 29/08/2023



Site 3d – 17/02/2023



Site 3e – 29/08/2023



Site 3e – 17/02/2023



Yellagonga Revegetation Stage 2+3 – Eglinton Estates

Monitoring Report – Autumn 2023

Monitoring Date(s):	17/02/2023	Conducted By:	Cory Kennedy
Site Reference:	Yellagonga Stage 2 & 3	Reviewed By:	Damian Grose
Area (ha):	6.6	Project No:	P466E

Summary of Revegetation Progress / Condition

- Overall, the site is progressing well.
- High mortality of seed germinants between spring and autumn due to long summer period with no rain.
- Evidence of seed production and flowering maturity from some planted seedlings.
- Species richness is below target.
- Average plant density has dropped below target.
- Castor oil plants (*Ricinus communis*) were located on site and were hand removed during monitoring event. Continuous monitoring of species will occur.
- Couch grass (*Cynodon dactylon*) is the most abundant weed across the site. No evidence of previously controlled prickly paddy melon (*Cucumis myriocarpus*).
- A small Brazilian pepper (*Schinus terebinthifolius*) sapling was also located on site. This woody weed was observed growing amongst already established *Hakea prostrata* and will be removed to prevent it from growing any further.
- Weed control too occur in autumn to remove invasive species and maintain low weed coverage.

Assessment Against Completion Criteria

Text is **green** if meeting criteria or **red** if not meeting criteria.

Criteria	Target	2a	2b	3a1	3a2	3b	3c	3d	3e	Overall Total
Plant density/m ²	1.6	1.3	2.4	1	1.9	1.3	0	0.7	1.2	1.3
Species richness	58									45
Native cover %	NA	6	8	5	11	9	0	3	6	6
Weed cover %	≤10%	2	1	16	3	4	0	1	2	4

Brief Works History

Date	Activity	Description
8 April 2022	Soil testing/analysis	Soil testing/ analysis was conducted revealing elevated nutrients and pH in parts of the site.
12 – 23 May 2022	Weed Control	Weed control of site via hand spraying of glyphosate and metsulfuron
	Earth Works	Earthworks including: Scalping of the site into windrows. Introduction of soil improver compost. Rotary hoeing to a depth of 100mm. Site 2 also received 1 m ³ of lime spread across the site to reduce soil pH.
	Fence Installation	Fence installation around both sites 2 and 3 - 1.8 m chainmesh fencing with trenched rabbit skirt (1,452 lineal meters).
20 May – 28 June 2022	Weed Control	A second application of glyphosate spraying was applied just prior to vegetation installation.
	Earth Works	Site ripped to a depth of 300 – 400 mm at approximately 800 mm spacing along the contours.
	Direct Seeding	Direct seeding of 19.8 kg across the 6.6Ha, see Appendix 1 for species list 9.63 kg of seed was used from the Amberton pre-development seed bank. 10.17 kg of seed was procured from the closest available source to the project area.
	Planting	The site was then planted at 1 stem/m ² totalling 66,000 seedlings. See Appendix 2 for species and allocations. Seedlings were installed using pottiputki planting tubes. 10g fertiliser tablets suitable for native species were installed adjacent to each plant, except in the parts of the site containing elevated levels of phosphorus. A total of 44,000 tablets were used - see Appendix 3 for tablet locations.
20 September – 4 October 2022	Weed Control	Spot spraying of glyphosate across the site focusing on: dune onion weed, cape weed, vetch, lupin, one leaf cape tulip, couch, wild turnip, soursob, blackberry nightshade. No metsulfuron was used as this can affect seed germination.
18 November 2022	Spring Monitoring	Formal monitoring across sites 2 and 3 highlighted areas for weed control during December weed control period. Monitoring report sent to client in November.
12 - 15 December 2022	Weed Control	Spot spraying of glyphosate across the site focusing on: couch, fleabane, nightshade, primrose, castor oil, golden crown beard. No metsulfuron was used.

Methods

Quadrat Establishment

- 128 2 m x 2 m randomly placed temporary quadrats were assessed.
- All quadrat locations were recorded by GPS.
- Revegetation areas were walked in a random pattern covering the entirety of reserve.
- Photos were taken of various quadrats that best indicated changes in vegetation conditions.

Data Collection

- Native and weed stems were counted in each quadrat, and native cover % and weed cover % were also estimated. Species richness within each quadrat was not recorded due to the small sample size, but all species were noted as observed across the site.

Results, Observations, and Discussion

Native Stem Density

- Stem frequency was significantly lower than spring monitoring results with a maximum of 19 stems recorded in 1 quadrat.
- Stem density is only meeting the required target of 1.6 stems/m² in areas 2b and 3a2. The average across each site is now below the required target density.
- Overall, the project average is below the required target of 1.6 stems/m² with 1.3 stems/m².

Weed Cover %

- Overall, the site was below the required 10% for completion, with a 4% average recorded across the site.
- Sites 2a and 2b had lower weed coverage than site 3. Site 3a1 was the only site above the 10% target at 16%.
- Couch grass is the most prominent weed across the site with one quadrat recording 90% cover. This species is most active over summer.

Species Richness

- Species richness was 45 species, below the target of 58. Given the age of the project, the majority of the specimens observed were planted as seedlings with 41 of the 45 species recorded. Three of the species observed were only seeded, and it is expected that this will increase as more seeds germinate over time.

General Observations

- Overall, the site is in good condition, with evidence of seed germination occurring and minimal weed coverage across the site.
- Asbestos fragments were observed all throughout zone 3. Primarily in zone 3b.
- Native cover has increased with a maximum recording of 40% cover in one quadrat.
- A fox den was located in zone 3d and seems recently built with evidence of predation occurring (dead birds located near the den).

Conclusions and Recommendations

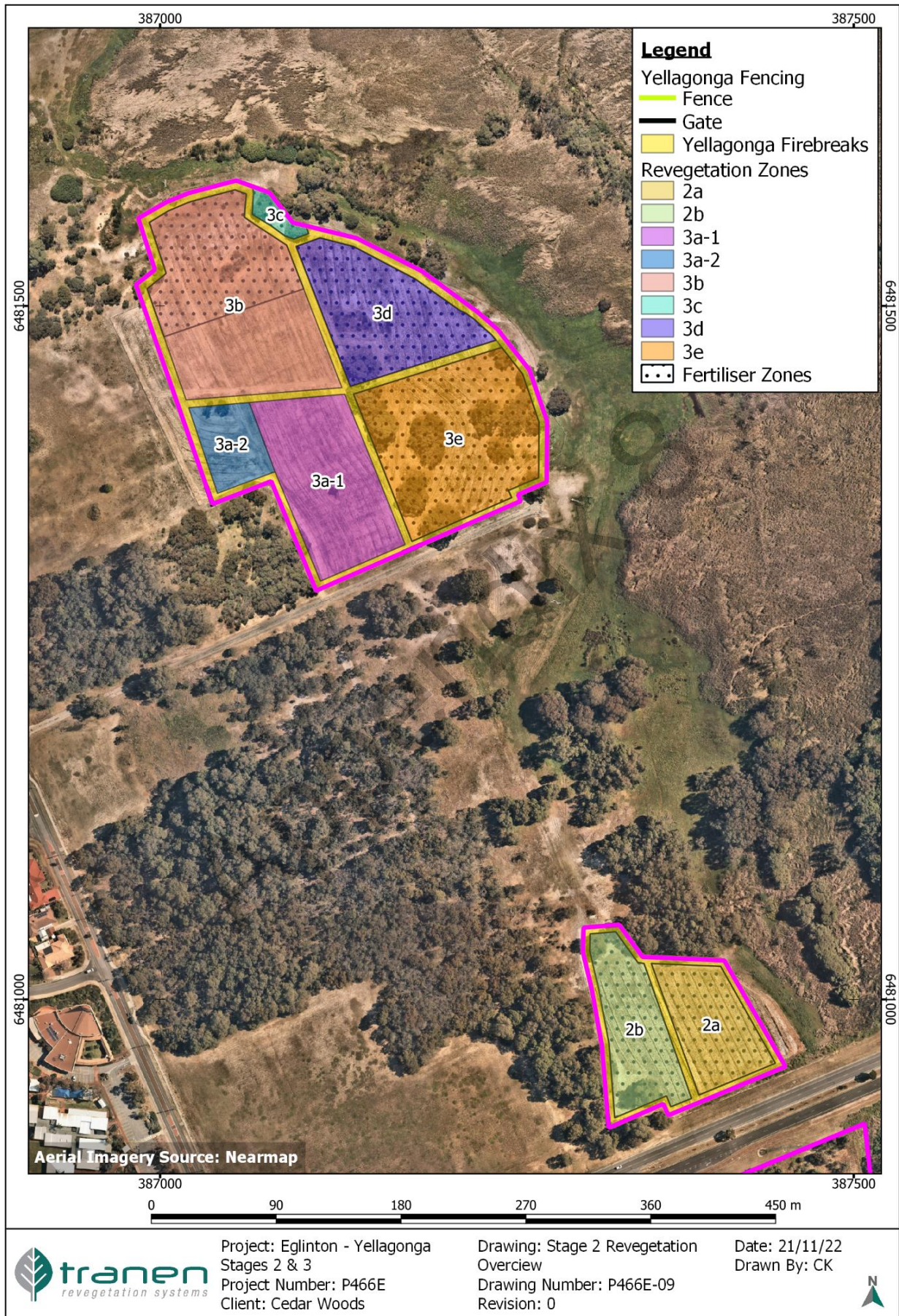
- Stem densities have dropped below the target with some sections performing better than others. Remedial planting action will be directed towards the underperforming areas to ensure a consistent outcome across the site.
- Areas directly under tree canopies recorded almost 100% losses. It is recommended these areas be excluded from future planting works and re-vegetation efforts focussed on bare areas of the site. With higher likelihood of plant establishment.
- Weeds are presently low across the site, an autumn weed control event will occur to control couch grass spread across reserve.
- A formal asbestos monitoring event should occur by trained professionals throughout site. Removal of asbestos from reserve should occur in early 2023.
- Revegetation numbers have been calculated by creating planting zones based on underperforming areas from the monitoring results.
- Fox control within revegetation areas and den destruction should occur. Although foxes pose no risk to the revegetation efforts, they are affecting wildlife.

Yellagonga Species List Showing Species Initially Seeded and Planted with Corresponding Site Occurrence, Spring 2022

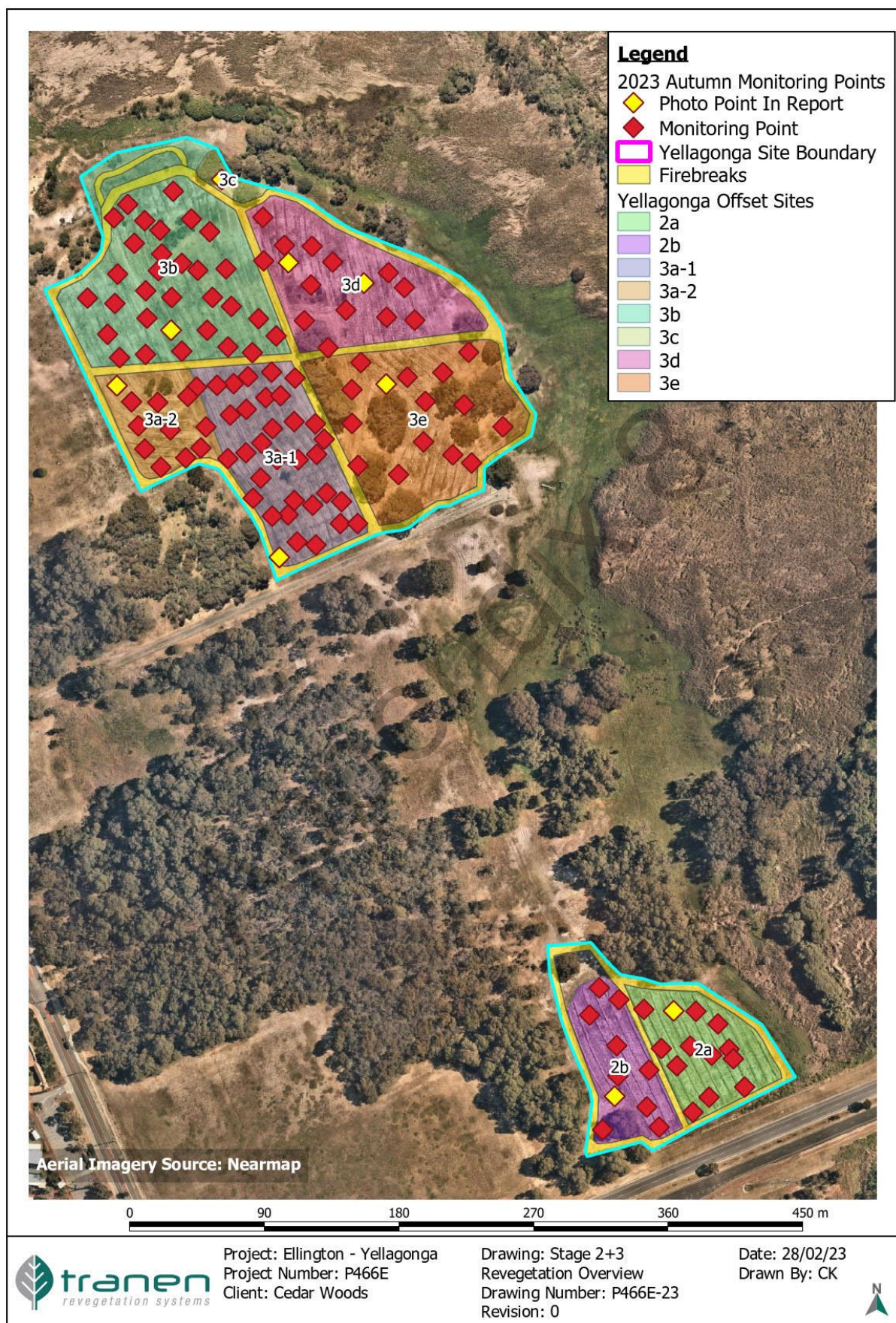
Species	Planting	Seeded	Site 2 Species Richness	Site 3 Species Richness
<i>Acacia cyclops</i>		X	Y	Y
<i>Acacia huegelii</i>	X	X	Y	Y
<i>Acacia lasiocarpa</i>	X	X		Y
<i>Acacia pulchella</i>	X	X	Y	Y
<i>Acacia saligna</i>	X	X	Y	Y
<i>Acacia stenoptera</i>	X	X	Y	Y
<i>Adenanthos cygnorum</i>	X	X	Y	Y
<i>Allocasuarina fraseriana</i>	X	X	Y	Y
<i>Allocasuarina humilis</i>	X	X	Y	Y
<i>Anigozanthos manglesii</i>	X	X	Y	Y
<i>Aotus gracillima</i>	X	X		
<i>Banksia attenuata</i>	X	X	Y	Y
<i>Banksia grandis</i>	X	X	Y	Y
<i>Banksia ilicifolia</i>	X	X		Y
<i>Banksia menziesii</i>	X	X	Y	Y
<i>Banksia prionotes</i>	X	X	Y	Y
<i>Banksia sessilis</i> var. <i>cygnorum</i>	X	X	Y	Y
<i>Banksia sessilis</i> var. <i>sessilis</i>		X		Y
<i>Bossiaea eriocarpa</i>		X		
<i>Burchardia congesta</i>		X		
<i>Calothamnus quadrifidus</i>		X	Y	Y
<i>Calothamnus sanguineus</i>	X	X	Y	Y
<i>Conostylis aculeata</i>	X	X	Y	Y
<i>Corymbia calophylla</i>	X	X	Y	Y
<i>Dampiera linearis</i>	X	X		
<i>Daviesia divaricata</i>		X		
<i>Eremaea pauciflora</i>	X	X	Y	Y
<i>Eremophila glabra</i>		X		
<i>Eucalyptus gomphocephala</i> var. <i>gomphocephala</i>	X	X	Y	Y
<i>Eucalyptus marginata</i> subsp. <i>Marginata</i>	X	X		Y
<i>Eucalyptus tottiana</i>	X	X	Y	Y
<i>Gastrolobium capitatum</i>	X	X		
<i>Gastrolobium ebracteolatum</i>		X		
<i>Gompholobium tomentosum</i>	X	X		
<i>Hakea costata</i>		X		
<i>Hakea lissocarpa</i>	X	X		Y
<i>Hakea prostrata</i>	X	X	Y	Y
<i>Hakea ruscifolia</i>	X	X	Y	Y
<i>Hakea trifurcata</i>	X	X	Y	Y
<i>Hardenbergia comptoniana</i>		X		

Species	Planting	Seeded	Site 2 Species Richness	Site 3 Species Richness
<i>Hemiandra pungens</i>	x	x	Y	Y
<i>Hibbertia racemosa</i>	x	x		
<i>Hovea pungens</i>	x	x	Y	Y
<i>Hypocalymma angustifolium</i>	x	x	Y	Y
<i>Hypocalymma robustum</i>	x	x		Y
<i>Isopogon drummondii</i>		x		Y
<i>Jacksonia furcellata</i>		x	Y	Y
<i>Kennedia prostrata</i>	x	x	Y	Y
<i>Kunzea glabrescens</i>	x	x	Y	Y
<i>Melaleuca systena</i>		x	Y	Y
<i>Myoporum insulare</i>		x		
<i>Opercularia vaginata</i>		x		
<i>Patersonia occidentalis</i>	x	x	Y	Y
<i>Petrophile linearis</i>		x		
<i>Petrophile macrostachya</i>		x		
<i>Phyllanthus calycinus</i>	x	x		
<i>Podotheca chrysantha</i>		x		
<i>Ptilotus polystachyus</i>		x		
<i>Pultenaea reticulata</i>	x	x	Y	Y
<i>Regelia inops</i>	x	x	Y	Y
<i>Rhagodia baccata</i>	x	x	Y	Y
<i>Spyridium globulosum</i>		x		Y
<i>Stirlingia latifolia</i>	x	x		
<i>Templetonia retusa</i>	x	x	Y	Y
<i>Verticordia densiflora</i>		x	Y	Y
<i>Xanthorrhoea preissii</i>	x	x		
Total Species Richness	45	68	37	45

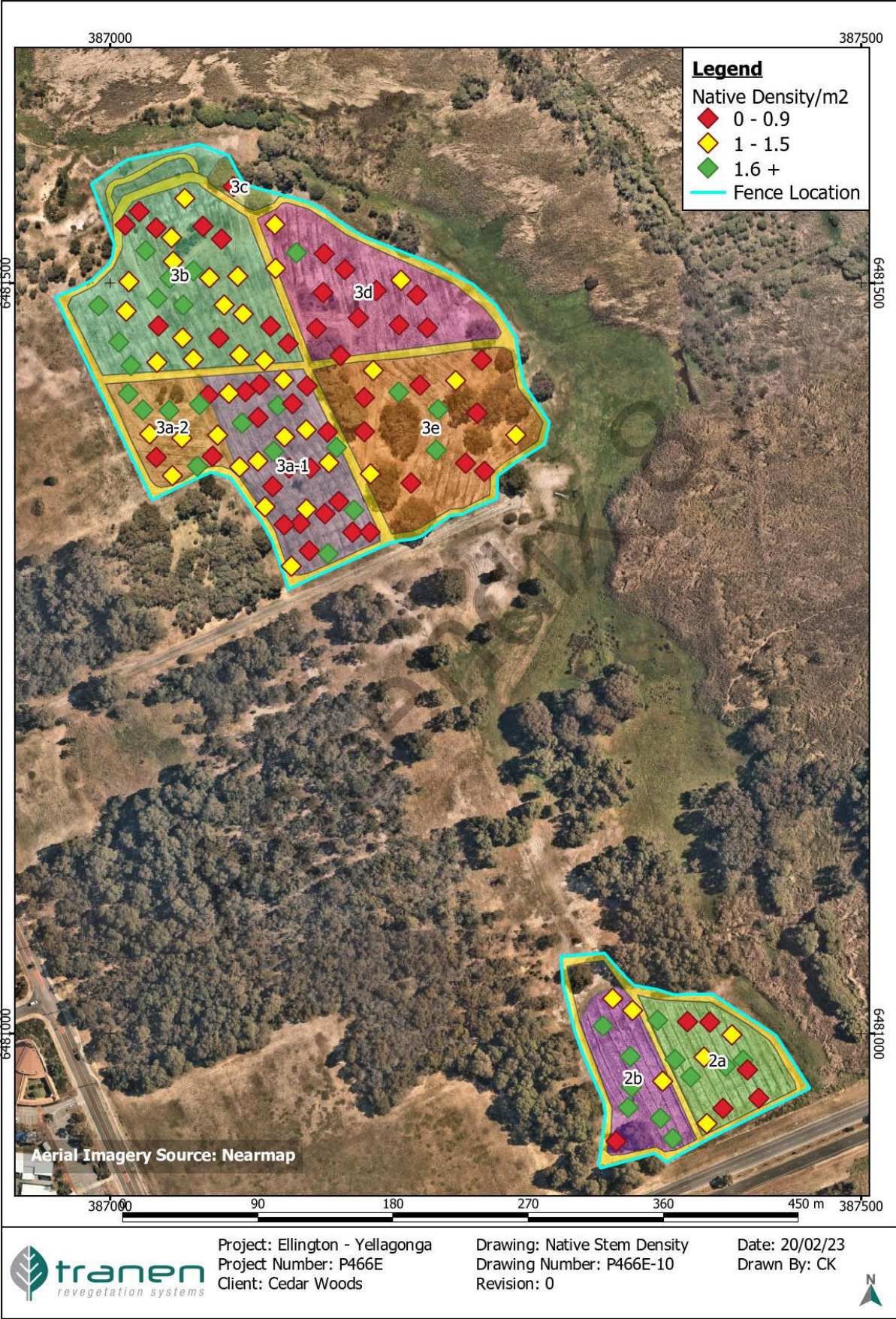
Yellagonga Revegetation Zones 2 + 3, 2022



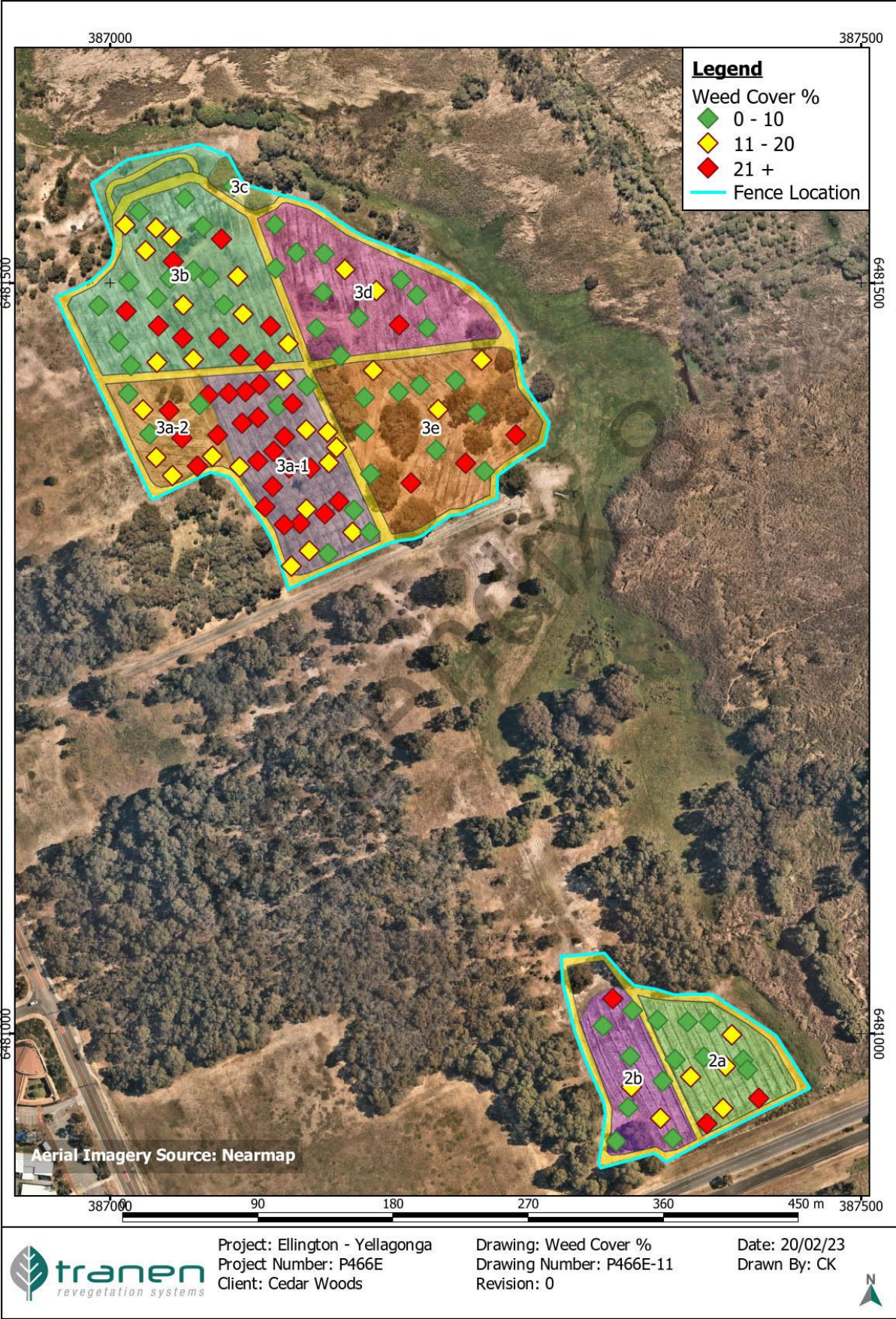
Yellagonga Autumn Monitoring Points 2023



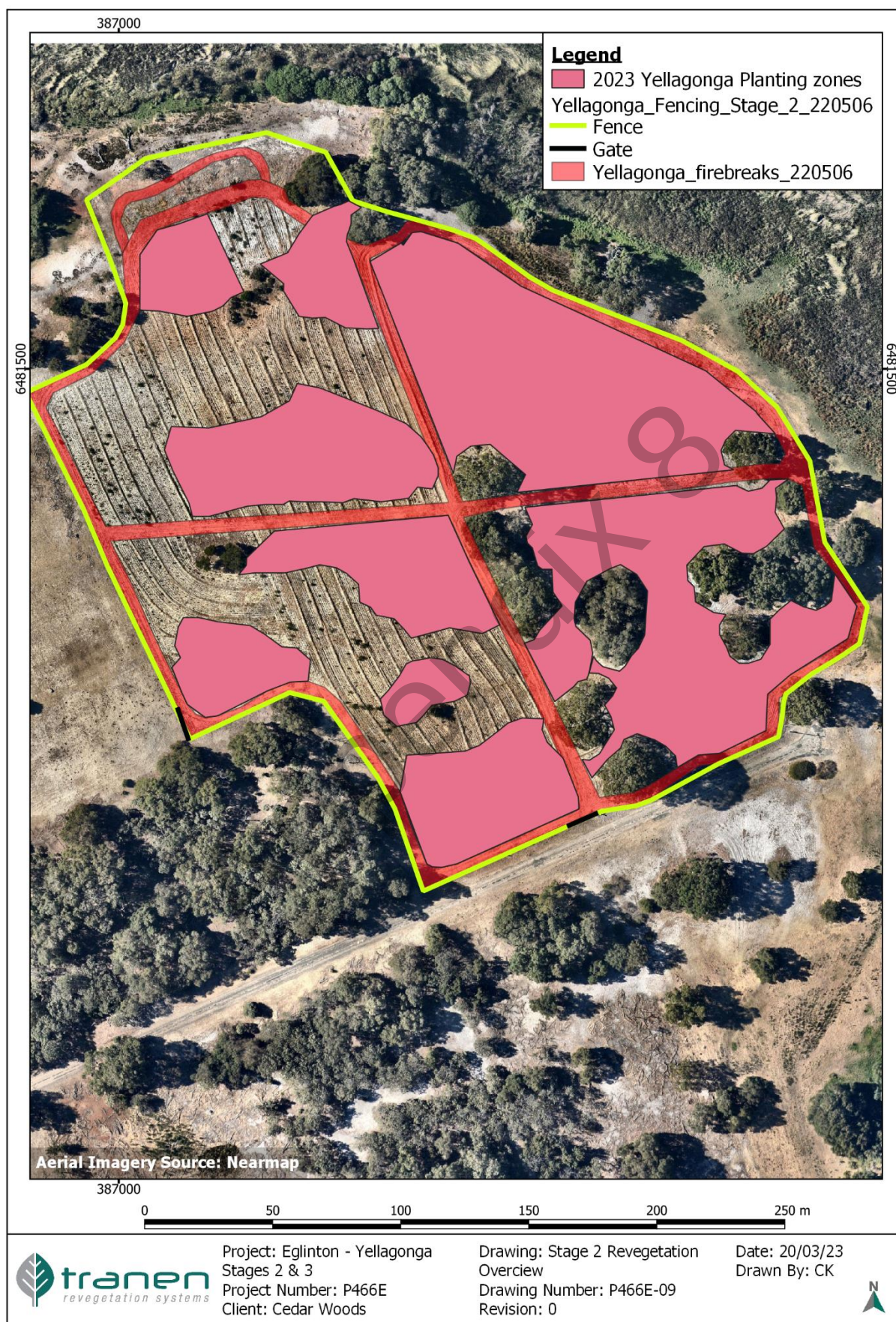
Yellagonga Autumn Native Density 2023



Yellagonga Autumn Weed Cover 2023



Yellagonga Infill Planting Zones Stage 3, 2023



Yellagonga Infill Planting Zones Stage 2, 2023



Photographs (Note Quadrat Locations Random, Not Same Locations)



Site 2b quadrat - 17/02/2023



Site 2b quadrat - 17/11/2022

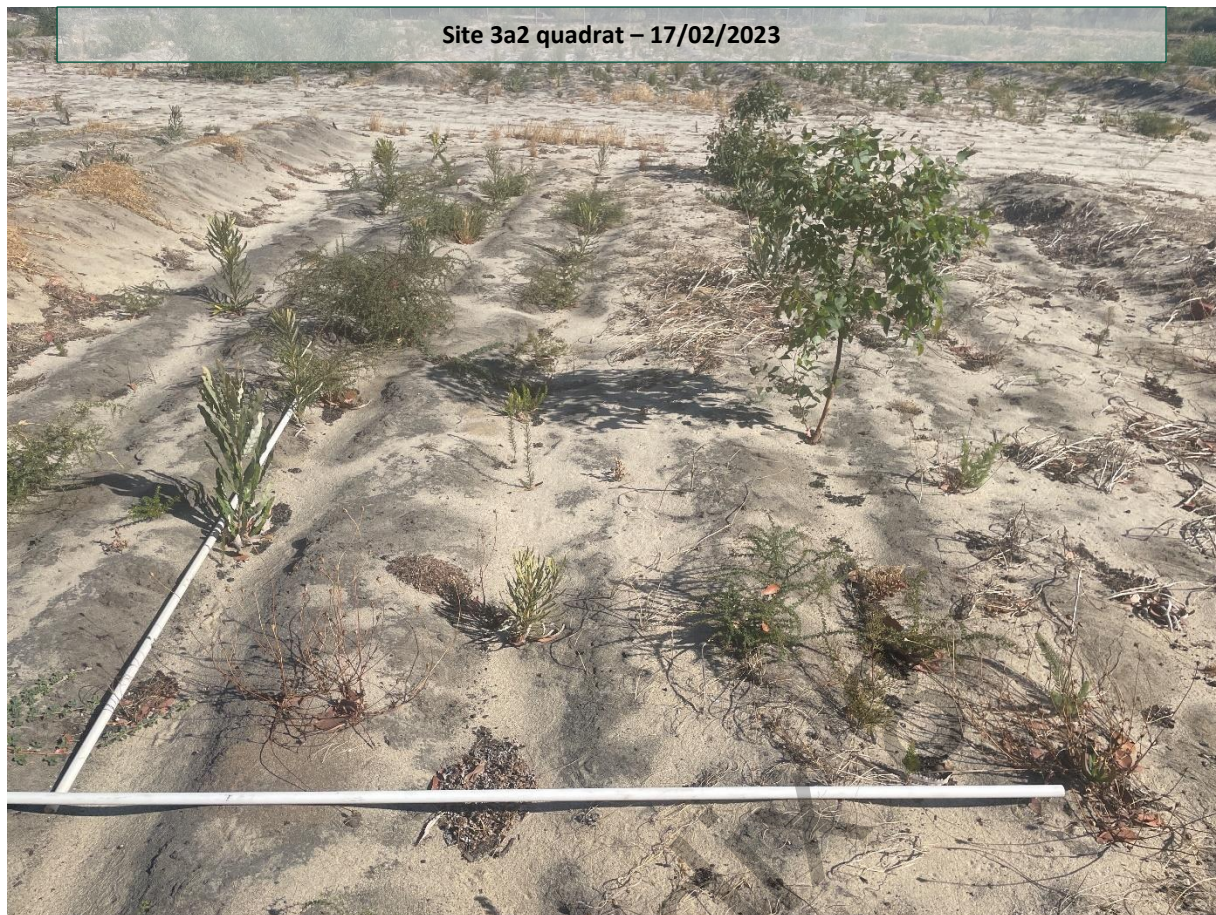


Site 3a1 quadrat – 17/02/2023



Site 3a1 quadrat – 17/11/2022





Site 3b quadrat – 17/02/2023



Site 3b quadrat – 17/11/2022



Site 3c quadrat – 17/12/2023



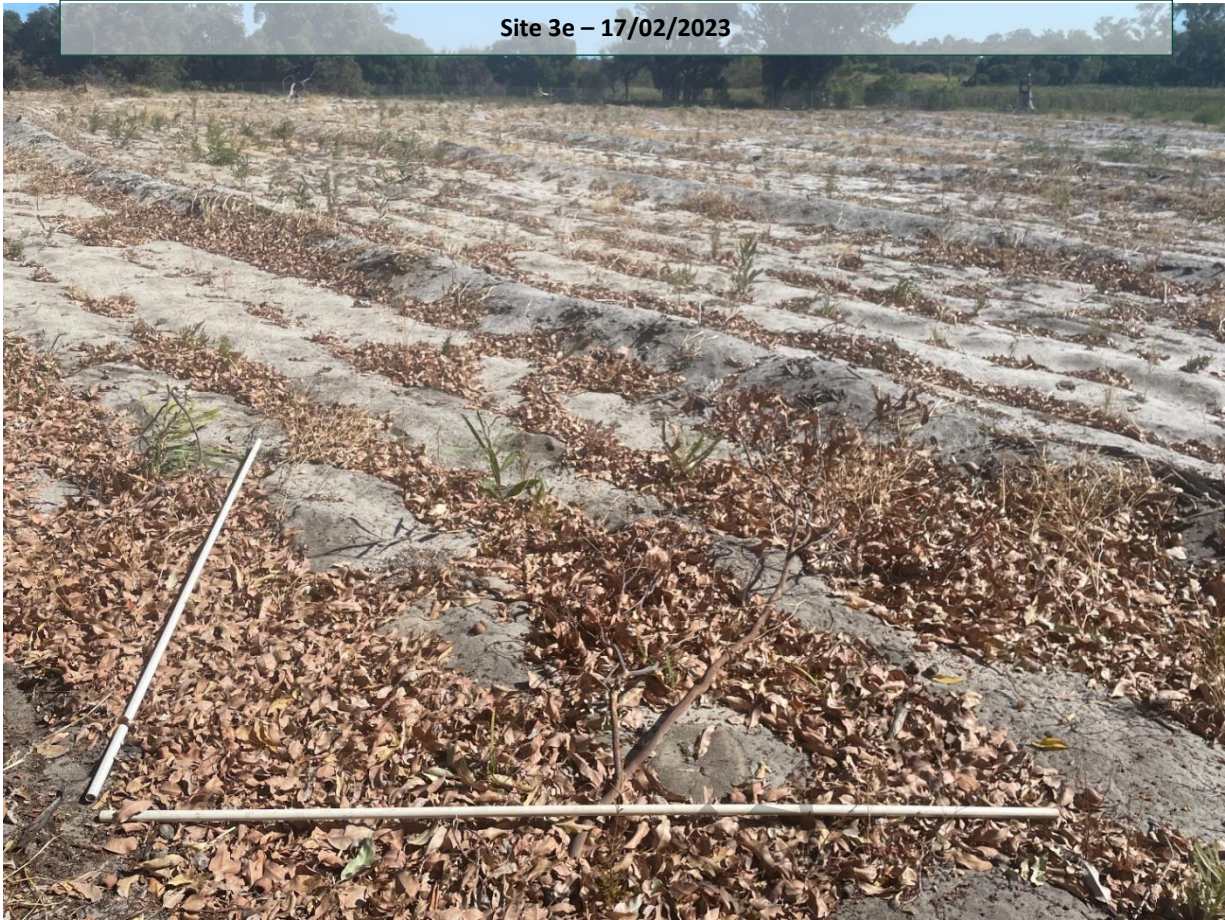
Site 3d – 17/02/2023



Site 3d – 17/11/2022



Site 3e – 17/02/2023



Site 3e – 17/11/2022





APPENDIX 3

Revegetation Sign

APPENDIX 4

Photos of Monitoring Plots

Site 2

November 2022

Site 2 Plot 1



Site 2 Plot 2



Site 2 Plot 3



March 2023

Site 2 Plot 1



Site 2 Plot 2



Site 2 Plot 3



Site 2

November 2023

Site 2 Plot 1



Site 2 Plot 2



Site 2 Plot 3



Site 3

November 2022

Site 3 Plot 1



Site 3 Plot 2



Site 3 Plot 3



Site 3 Plot 4



Site 3

March 2023

Site 3 Plot 1



Site 3 Plot 2



Site 3 Plot 3



Site 3 Plot 4



Site 3

November 2023

Site 3 Plot 1



Site 3 Plot 2



Site 3 Plot 3



Site 3 Plot 4



APPENDIX 5

Yellagonga Regional Park Rehabilitation Monitoring October 2023 – Native Species

Yellagonga Rehabilitation Monitoring 9 November 2023 – Native Species

Species	Site 2						Total Nov 2023	Site 3						Total Nov 2023
	Plot 1	Plot 2	Plot 3			Other Sightings		Plot 1	Plot 2	Plot 3	Plot 4		Other Sightings	
<i>Acacia cyclops</i>		2					2	1						1
<i>Acacia huegelii</i>		1					1			2				2
<i>Acacia lasiocarpa</i>	1	3	3				7	38	5		4			49
<i>Acacia pulchella</i>	5	18	13				36		3	8	5			16
<i>Acacia saligna</i>		4	4				8		18					18
<i>Acacia stenoptera</i>	4						4	3	1					4
<i>Adenanthos cygnorum</i>	5						5	4		1				5
<i>Allocasuarina fraseriana</i>			1				1	5	2					7
<i>Allocasuarina humilis</i>	2	2	1				5		6		3			9
<i>Anigozanthos manglesii</i>						+		1		1	1			3
<i>Aotus gracillima</i>										2				2
<i>Banksia attenuata</i>		1	2				3	13		2	1			16
<i>Banksia grandis</i>	1		1				2	4			4			8
<i>Banksia ilicifolia</i>						+					1?			1
<i>Banksia littoralis</i>			1				1							
<i>Banksia menziesii</i>		1	1				2	4			2			6
<i>Banksia prionotes</i>						+		10		6	13			29
<i>Banksia sessilis</i>										2				2
<i>Beaufortia sp</i>		1					1		1					1
<i>Calothamnus quadrifidus</i>	5	2	4				11		3	1	5			9
<i>Calothamnus sanguineus</i>	2	4					6	4	4	11	8			27
<i>Conostylis aculeata</i>									3					3
<i>Corymbia calophylla</i>	1	1					2	4	7	6				17
<i>Dampiera linearis</i>														
<i>Eremaea pauciflora</i>		1	3				4	4		1	5			10
<i>Eucalyptus gomphocephala</i>	3	6	3				12	6	5	1				12
<i>Eucalyptus marginata</i>													+	
<i>Eucalyptus rudis</i>	1		2				3				2?			2
<i>Eucalyptus todtiana</i>		1					1		2		3			5
<i>Gastrolobium capitatum</i>						+				2	1			3
<i>Gompholobium tomentosum</i>	11	5	4				20	11		7	10			28
<i>Hakea lissocarpa</i>								9			2			11
<i>Hakea prostrata</i>	3	7	6				16	2		14	1			17
<i>Hakea ruscifolia</i>	22	1					23	5						5
<i>Hakea trifurcata</i>						+		4		4	3			11
<i>Hemiandra pungens</i>	8						8	1	1	11				13
<i>Hibbertia racemosa</i>														
<i>Hovea trisperma</i>								1						1
<i>Hypocalymma angustifolium/robustum</i>		1	3				4		7	2				9
<i>Jacksonia furcellata</i>	5	1	6				12	3		2	8			13
<i>Kennedia prostrata</i>	1	2	1				4	1		1	1			3
<i>Kunzea glabrescens</i>	4		3				7							
<i>Melaleuca huegelii</i>		1	1				2			3	2			5
<i>Melaleuca systema</i>	6	2	12				20	15	4	5	16			40
<i>Patersonia occidentalis</i>		2					2	7		4	10			21
<i>Phyllanthus calycinus</i>											1			1
<i>Pultenaea reticulata</i>		3					3	1						1
<i>Regelia inops</i>		3					3	2	1		1			4
<i>Rhagodia baccata</i>		9					9	1						1

Species	Site 2						Total Nov 2023	Site 3						Total Nov 2023
	Plot 1	Plot 2	Plot 3			Other Sightings		Plot 1	Plot 2	Plot 3	Plot 4		Other Sightings	
<i>Spyridium globulosum</i>														
<i>Templetonia retusa</i>						+								
Overall % Cover Natives	2	25	1-2					5	1	2	1			
No. Plants in Plots	90	85	75				217	164	73	99	113			451
No. native species overall	19	27	21				41	27	17	24	26			45
Total plants in Plots Mar 23	62	99	48				210	150	34	52	114			346
No. Species Mar 23	17	25	16				32	23	13	19	20			34
Total plants in Plots Nov 22	304	199	109				625	204	120	107	184			613
No. Species Nov 22	20	28	16				36	19	22	19	18			36

T=Topsoil, S=Seeded

Appendix 8

APPENDIX 6

Yellagonga Regional Park Rehabilitation Monitoring October 2023 – Weeds

Yellagonga Rehabilitation Monitoring 9 Nov 2023 – Weed Species

Species	Common Name	Site 2				Site 3			
		Plot 1	Plot 2	Plot 3		Plot 1	Plot 2	Plot 3	Plot 4
<i>Aira caryophyllea</i>		+						+	
<i>Arctotheca calendula</i>	Cape Weed	+	+	+			+ dead	VC dead	
<i>Avena fatua</i>	Wild Oats								
<i>Brassica tournefortii</i>	Mediterranean Turnip	+		+		+	+	VC dead	+
<i>Bromus diandrus</i>	Great Brome					+ dead			
<i>Carpobrotus edulis</i>	Hottentot Fig	+				c	+	+	
<i>Crassula glomerata</i>		c	c	c		dead	+	+	c
<i>Cynodon dactylon</i>	Couch Grass					vc	vc	c	
<i>Dischisma capitatum</i>						c			+
<i>Ehrharta calycina</i>	Annual Veldt Grass								+
<i>Eragrostis curvula</i>	African Lovegrass		+						
<i>Erigeron bonariensis</i>	Flaxleaf Fleabane	c seedlings	+	+		C seedlings	vc		
<i>Erodium cicutarium</i>	Storksbill			+					
<i>Euphorbia terracina</i>	Geraldton Carnation Weed								
<i>Hypochaeris glabra/radicata</i>	Flatweed	+	+				c	vc dead	V
<i>Lagurus ovatus</i>	Hare's Tail Grass								
<i>Lolium perenne</i>	Ryegrass								+
<i>Lupinus cosentinii</i>	Blue Lupin	+	+	+		+ sprayed	+ dead		+
<i>Lysimachia arvensis</i>	Pimpernel								
<i>Malva parviflora</i>	Marshmallow								
<i>Moraea flaccida</i>	Cape Tulip								
<i>Oenothera drummondii</i>	Beach Evening Primrose								
<i>Oenothera stricta</i>	Common Evening Primrose								
<i>Orobanche minor</i>	Lesser Broomrape		+						
<i>Pelargonium capitatum</i>	Rose Pelargonium								

Species	Common Name	Site 2				Site 3			
		Plot 1	Plot 2	Plot 3		Plot 1	Plot 2	Plot 3	Plot 4
<i>Romulea rosea</i>	Guildford Grass					dead			C
<i>Silene gallica</i>									
<i>Solanum nigrum</i>	Blackberry Nightshade								
<i>Sonchus oleraceus</i>	Sow Thistle								
<i>Trachyandra divaricata</i>	Onion Weed		+	+		sprayed			+
<i>Trifolium sp.</i>	Clover								
<i>Ursinia anthemoides</i>	Ursinia		+					+	c
<i>Vulpia bromoides</i>		+	c	c		+		+	+
<i>Wahlenbergia capensis</i>		+		+					
Overall % cover		30	20	25		30 but lots dead	30	40	30 before spraying
Total Species		15				17 (some dead)			

T=Topsoil, S=Seeded, c=common, +=some