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**Dolwende Quarry Annual Review
September 2025**

Table of Contents

1.0. Introduction	2
1.1. Introduction	2
1.2. Purpose of this report	2
1.3. Reporting period	3
1.4. Key Personnel	3
1.5. Document Control	3
2.0. Overview of Development	4
2.1. Development in the previous financial year	4
2.2. Development in the current financial year	4
2.3. Figures	5
3.0. Performance Review	9
3.1 Condition 9, Schedule 5	9
3.1.1 (a) describe the development (including any rehabilitation) that was carried out in the previous financial year, and the development that is proposed to be carried out over the current financial year;	9
3.1.2 (b) include a comprehensive review of the monitoring results and complaints records of the development over the previous financial year, which includes a comparison of these results against the:	9
3.1.3 (c) identify any non-compliance over the past calendar year, and describe what actions were (or are being) taken to ensure compliance;	10
3.1.4. (d) identify any trends in the monitoring data over the life of the development;	10
3.1.5 (e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and	10
3.1.6 (f) describe what measures will be implemented over the current financial year to improve the environmental performance of the development.	10
3.2 Independent Environmental Audit results	10
4.0. Compliance Status	11
5.0. Incidents	11
6.0. Complaints	12
Appendix A – Action Status Table	13
Appendix B – Review of Biodiversity Offset Area Management 2025	24

1.0. Introduction

1.1. Introduction

In 2016 the Minister for Planning granted consent SSD6519 for the construction and operation of Dolwende Quarry (the Quarry). The consent authorises establishment and operation of a quarry limited to production and despatch of 250,000 tonnes of quarry products per year, rock crushing and screening plant, office, amenities and car parking. It includes a haul road to connect the quarry at a new intersection with the Golden Highway.

The Quarry will operate as a sandstone and conglomerate quarry located just north of the Golden Highway, approximately seven kilometres (km) north-west of Denman and 20 km south-west of Muswellbrook. The Quarry is located within the Muswellbrook Shire Council local government area over lots 2, 3 and 4 DP 11650936 which are zoned RU1 Primary Production under the Muswellbrook Local Environment Plan 2009 (LEP).

Upper Hunter Holdings Pty Ltd (UHH) achieved endorsement of commencement of works on the Quarry on 30th October 2023.

It should be noted that this Annual Review sought an extension until the 31 October 2025, this was granted by DPHI.

1.2. Purpose of this report

This Annual Review is prepared to satisfy the requirements under Condition 9, Schedule 5 of the SSD 6519 Consent which reads as follows:

Annual Review (Condition 9, Schedule 5)

By the end of September each year following the commencement of development under this consent, or other timing as may be agreed by the Secretary, the Applicant must submit a report to the Department reviewing the environmental performance of the development to the satisfaction of the Secretary. This review must:

(a) describe the development (including any rehabilitation) that was carried out in the previous financial year, and the development that is proposed to be carried out over the current financial year;

(b) include a comprehensive review of the monitoring results and complaints records of the development over the previous financial year, which includes a comparison of these results against the:

- relevant statutory requirements, limits or performance measures/criteria;
- requirements of any plan or program required under this consent;
- monitoring results of previous years; and
- relevant predictions in the documents listed in condition 2(a) of Schedule 2;

(c) identify any non-compliance over the past calendar year, and describe what actions were (or are being) taken to ensure compliance;

(d) identify any trends in the monitoring data over the life of the development;

(e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and

(f) describe what measures will be implemented over the current financial year to improve the environmental performance of the development.

The Applicant must ensure that copies of the Annual Review are submitted to Council and are available to the Community Consultative Committee (see condition 6 of Schedule 5) and any interested person upon request.

1.3. Reporting period

This Annual Review reporting period is for the Financial Year 2025, being 1 July 2024 to 30 June 2025.

1.4. Key Personnel

A table of key personnel, see below

cv	Name	Email	Phone Number
UHH Project Manager	Garry Williams	gaw909@gmail.com	0427 016 101
Planner	Adam Bishop	abishop@pittsh.com.au	0400 648 773
Senior Ecologist	Daniel Pogson	danielpogson@restoreag.com.au	0428 973 181
Ecologist	Jack Morrow	jackmorrow@restoreag.com.au	0403 069 161

1.5. Document Control

Document issued by	Date	Signature
Jack Morrow	28/10/25	

2.0. Overview of Development

(a) describe the development (including any rehabilitation) that was carried out in the previous financial year, and the development that is proposed to be carried out over the current financial year;

2.1. Development in the previous financial year

During the previous financial year development has been mainly limited to administrative and compliance matters. The Quarry is not yet operational and limited construction works have been undertaken to prepare for quarry commencement.

Some construction was undertaken over the last two years including establishing a hardstand pad for future establishment of the workshop and admin building and amenities. Stormwater drainage works have occurred including establishment of several sediment basins and diversion drains.

An Independent Environmental Audit (IEA) has been undertaken as per Schedule 5, Condition 10 of the Development Consent.

Following the IEA a number of updates occurred. Actions arising out of the IEA are discussed in Appendix A

The following management plans are all prepared and endorsed by DPHI, and are currently being reviewed and updated as required for Mod 1:

- Aboriginal Cultural Heritage Management Plan
- Air Quality Management Plan
- Biodiversity and Rehabilitation Management Plan
- Construction Traffic Management Plan
- Noise management Plan
- Soil and Water Management Plan

Additionally, the Offset bond was lodged as per Schedule 5, Condition 32. As per the IEA trigger in condition 33. The bond was reviewed and found to be adequate.

Mod 1 (haul road relocation) and related studies have been occurring in the last financial year and current financial year. Mod1 is currently with DPHI pending a Response to Submissions.

Baseline data is currently being reviewed and updated as part of the Mod 1 Application. Whilst this application has been submitted, the approval process is still occurring.

2.2. Development in the current financial year

Current efforts are focused on securing the Mod 1 approval for the haul road and intersection relocation. This is currently at the Response to Submissions stage.

UHH has been undertaking various post approval tasks such as compliance management, monitoring and reporting.

Currently discussion with relevant authorities such as DPHI and BCT around the Offset mechanism is occurring. Upper Hunter Holdings proposes to submit a potential mechanism for the offset to DPHI for consideration in October 2025.

Subject to approval of Mod 1, it is expected that construction of the haul road and intersection would commence during the current financial year. Construction activities will include an initial quarrying campaign to win material for road and intersection construction.

2.3. Figures

The following figures illustrate the approved development footprints, operational disturbance areas and offset areas.

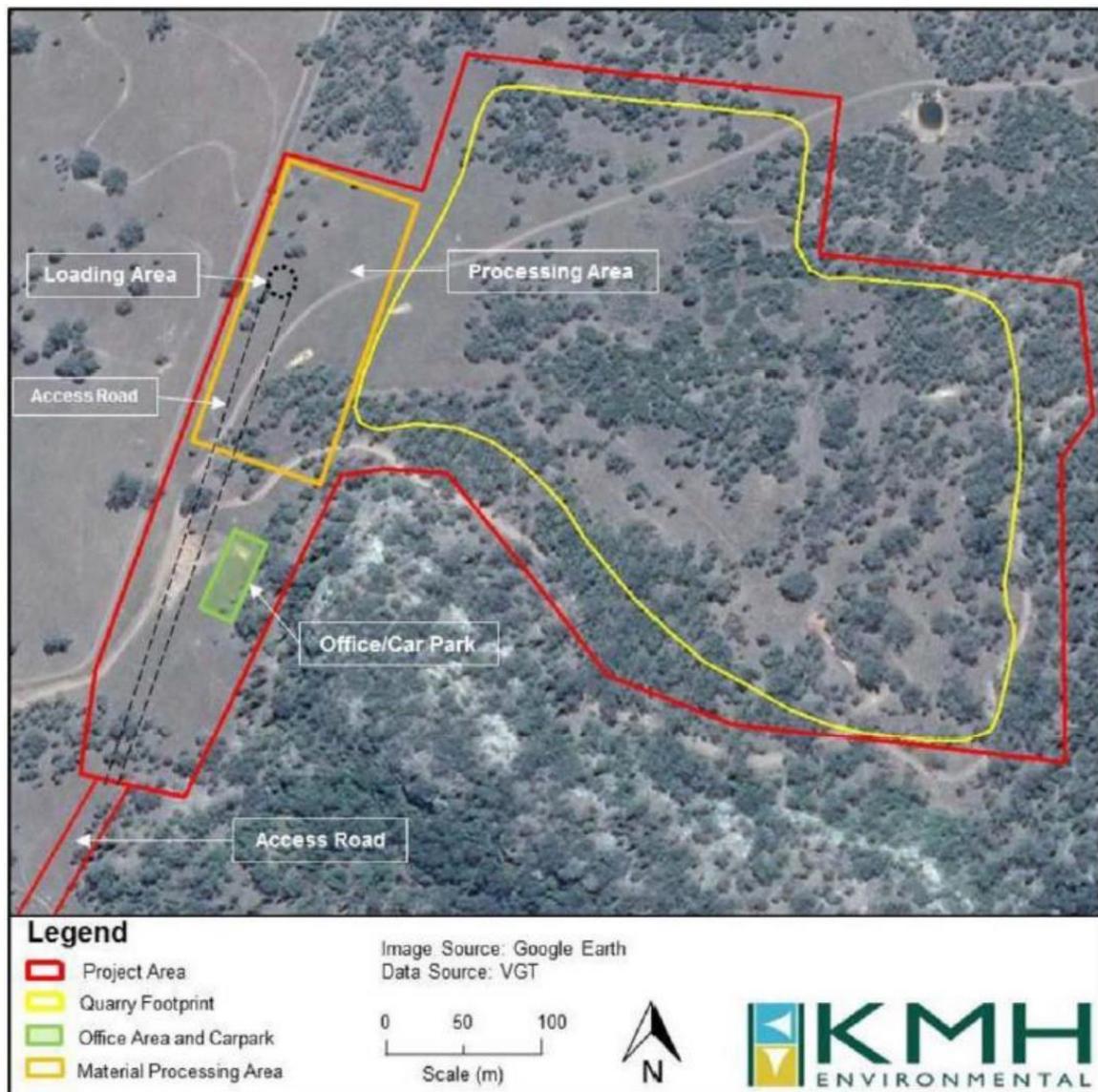


Figure 1. Development Layout

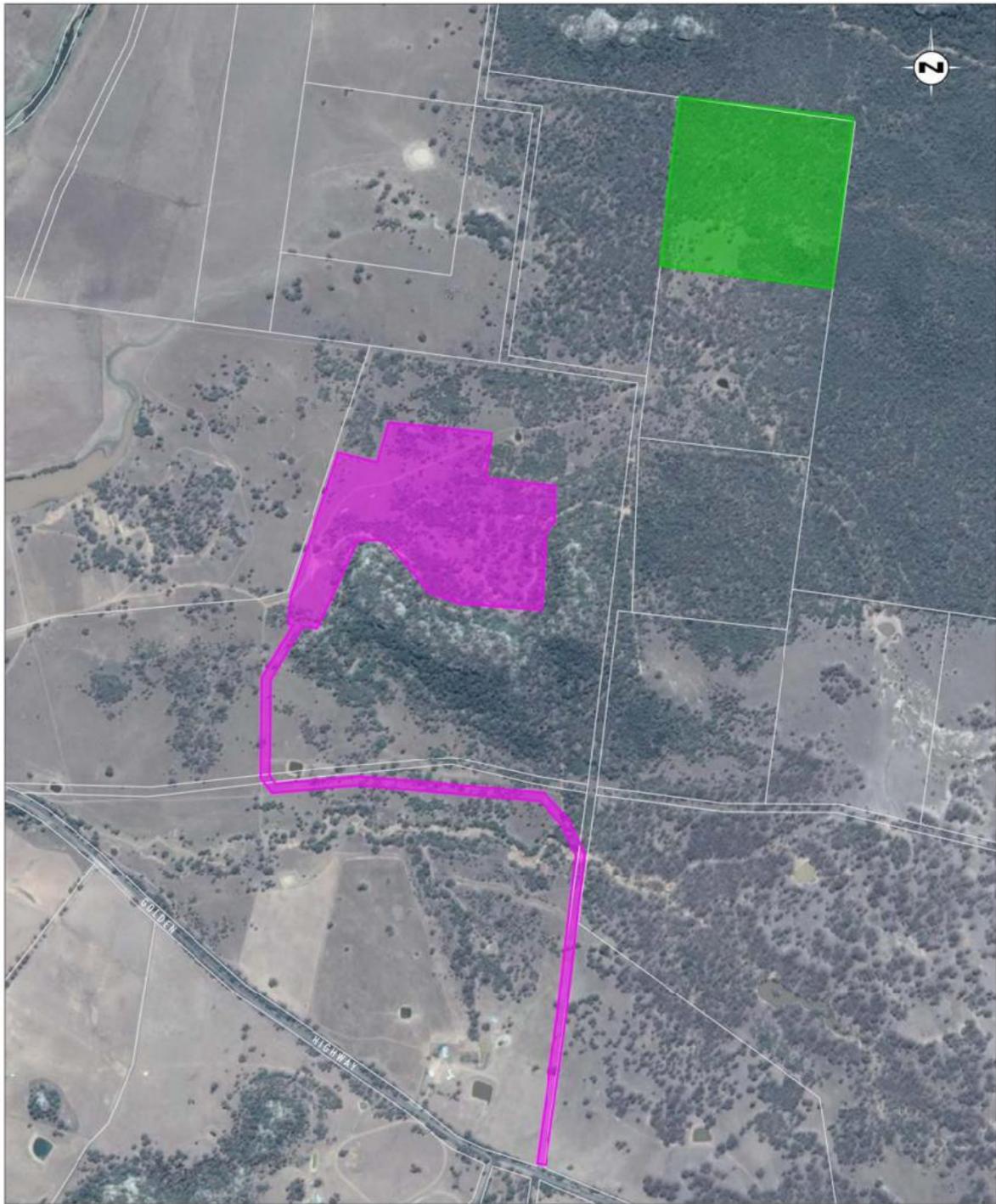


Image Source: Google Earth (2014)
Data Source: KMH (2014), Department of Lands (2009)

0 200 400 600m
1:12 500

Legend

- Project Disturbance Area
- Biodiversity Offset Area

FIGURE 7.1
Project Disturbance Area and
Biodiversity Offset Area

File Name (A4): R01/3453_017.dgn
20150907 15.43

Figure 2. Project Disturbance Area and Biodiversity Offset Area

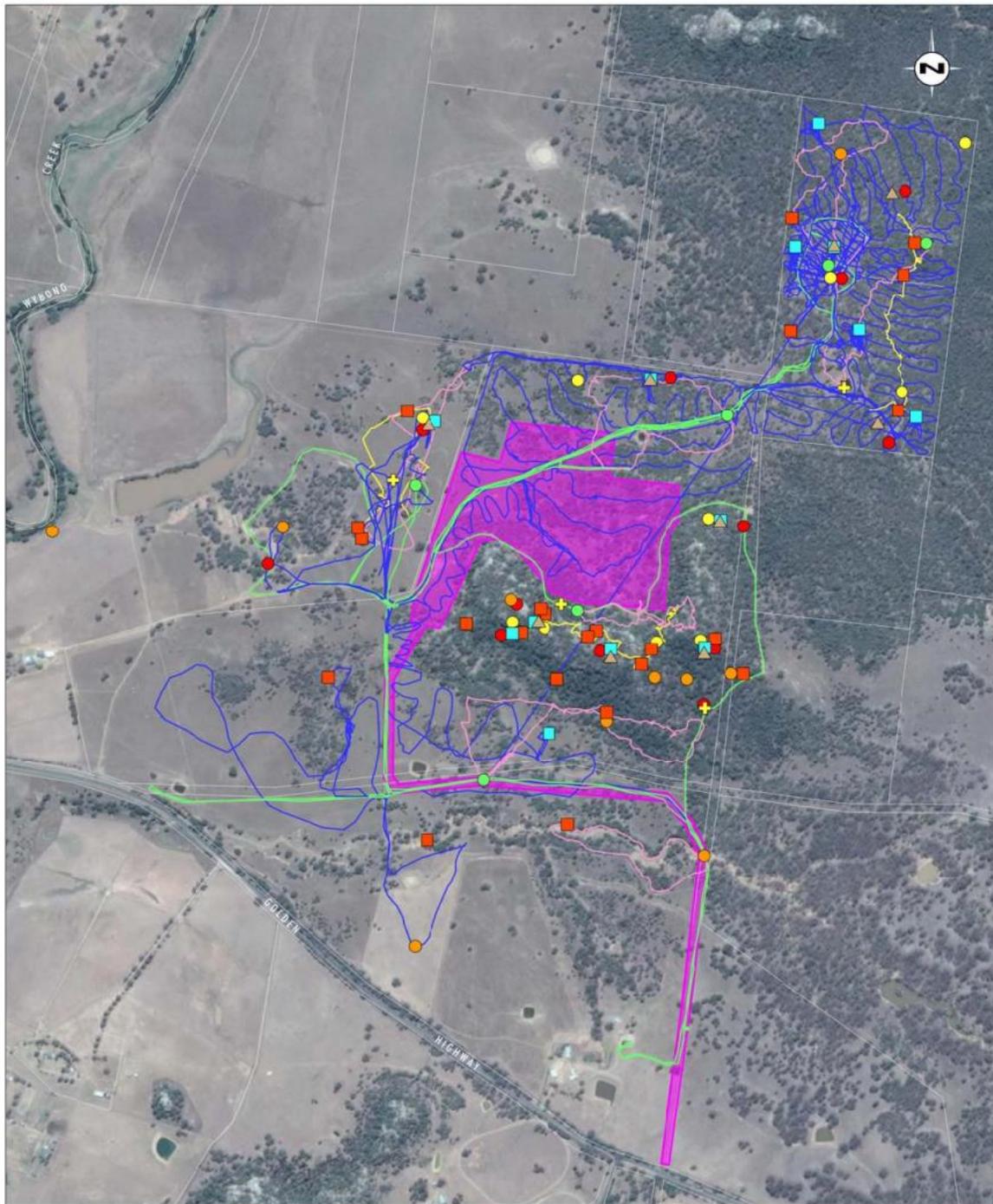


Image Source: Google Earth (2014)
 Data Source: KMH (2014), Department of Lands (2009)

0 200 400 600m
 1:12 500

- Legend**
- Project Disturbance Area
 - Driving Spotlight Transect
 - Hair Funnel Line
 - Threatened Flora Transect
 - Walking Spotlight Transect
 - Flora Quadrat & SEPP 44
 - Remote Camera
 - Diurnal Bird Survey
 - Diurnal Herpetological Survey
 - Habitat Assessment
 - Nocturnal Call-playback
 - Rapid Vegetation Assessment
 - Micro-bat Echolocation Recorder

FIGURE 3.1
 Terrestrial Flora and
 Fauna Survey Effort

File Name (A4): R01/3453_014.dgn
 20150910 11.04

Figure 3. Terrestrial Flor and Fauna Survey Effort

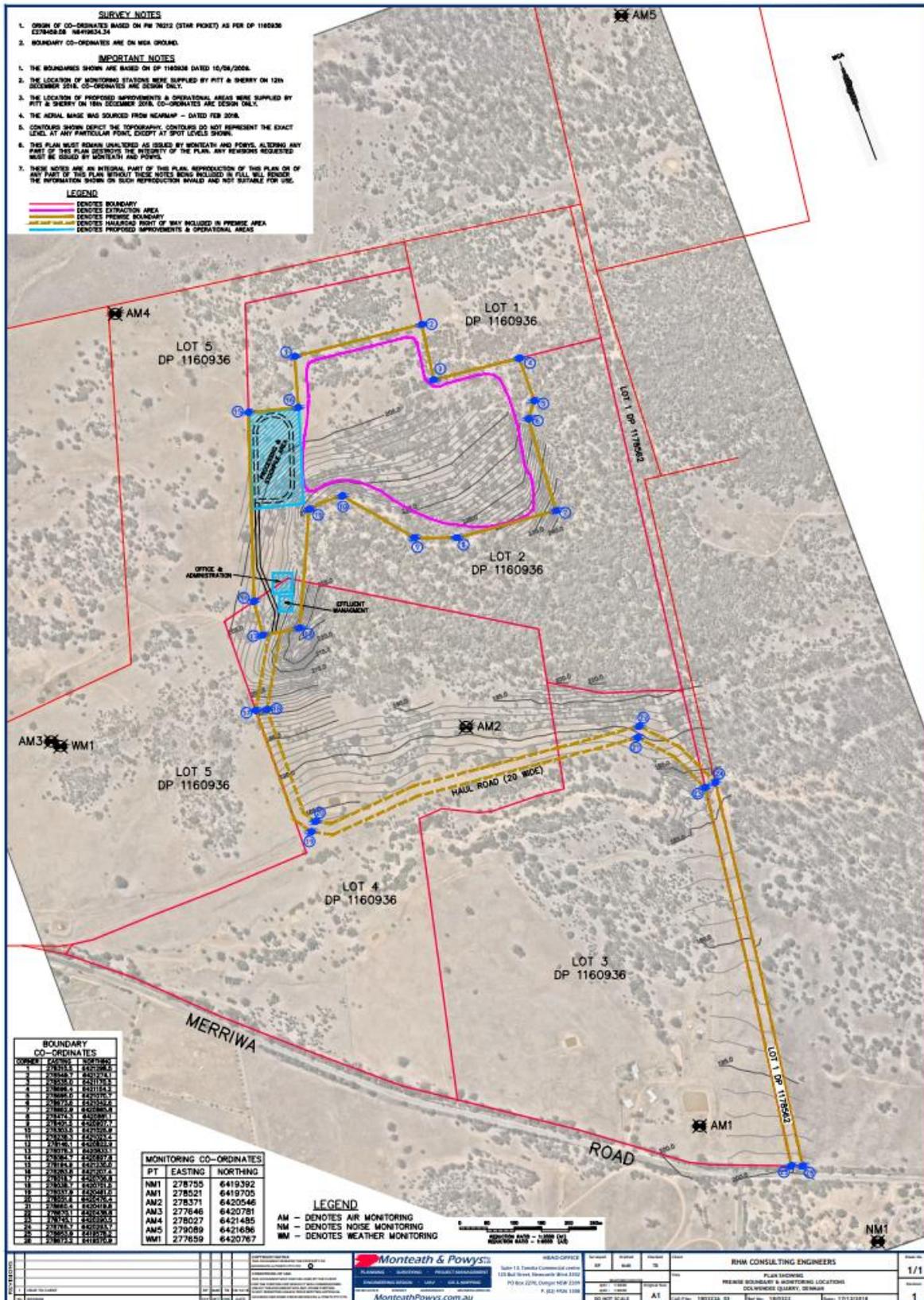


Figure 4. Development Site Survey

3.0. Performance Review

3.1 Condition 9, Schedule 5

To address each of the **Condition 9, Schedule 5** components please see below:

3.1.1 (a) describe the development (including any rehabilitation) that was carried out in the previous financial year, and the development that is proposed to be carried out over the current financial year;

Please see section 2 for full details, to summarise:

- Mod 1 (haul road relocation) and related studies have been occurring in the last financial year and current financial year. Mod1 is currently with DPHI pending a Response to Submissions
- Offset mechanism is being discussed with relevant authorities
- Management plans are being reviewed and updated as required
- IEA occurred and relevant action taken as needed
- Offset bond was lodged

3.1.2 (b) include a comprehensive review of the monitoring results and complaints records of the development over the previous financial year, which includes a comparison of these results against the:

- *relevant statutory requirements, limits or performance measures/criteria;*
- *requirements of any plan or program required under this consent;*
- *monitoring results of previous years; and*
- *relevant predictions in the documents listed in condition 2(a) of Schedule 2;*

During the previous financial year, no specific monitoring of works has occurred primarily due to the quarry not yet being operational and limited construction works have been undertaken to prepare for quarry commencement. Work to assess the condition of the site did occur in the previous financial year in relation of Mod 1. This has included a Biodiversity Development Assessment Report and Aboriginal Cultural Heritage Assessment Report. Specific surveys occurred for species such as *Diuris Tricolor*, which has been located and protected onsite through aspects of haul road redesign (Mod1) and fencing populations. Please see Mod1 on the major projects portal for further details. Additionally in September and October 2025 biodiversity monitoring occurred with a preclearance survey and baseline Ecological Management Module (EMM) (see Appendix B)

Management plans are being reviewed in preparation for a determination on Mod1, which is intended to change the layout of the haul road. The reviews and proposed modification have factored in proposed monitoring techniques and equipment. These are proposed to be submitted to DPHI for endorsement once prepared and the outcome Mod1 occurs.

3.1.3 (c) identify any non-compliance over the past calendar year, and describe what actions were (or are being) taken to ensure compliance;

DPHI issued a penalty notice on the 15/08/2025 for not securing the offset mechanism. This relates to Schedule 3, Condition 28 of the Development Consent. A Notice to Furnish Information and Records and a Show Cause Letter was issued to the Applicant on 1 July 2025 and 18 July 2025 respectively. As a result of the penalty notice, UHH has been granted until 15 August 2026 to make suitable arrangements to provide appropriate long-term security for the BOS, to the satisfaction of the Secretary. This matter is currently being discussed with DPHI and BCT.

3.1.4. (d) identify any trends in the monitoring data over the life of the development;

As quarry activity has not occurred, limited monitoring has been undertaken. From the data available no trends can be discerned. Please see Appendix B for biodiversity monitoring that has been undertaken.

3.1.5 (e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and

As the quarry has not been operational pending approval to relocate the haul road, minimal development has occurred. Actions largely relate to the Mod1 studies, revision of management plans and offset management activities.

As such, there are no discrepancies between predicted and actual impacts.

3.1.6 (f) describe what measures will be implemented over the current financial year to improve the environmental performance of the development.

Pending approval of Mod1 it is intended that the quarry would commence the construction phase this financial year, with the haul road constructed, management plans updated and approved as required. Management plans would be implemented to achieve required environmental performance. These will be updated to reflect the changes associated with Mod1 and any updated environmental assessments or recommendations.

3.2 Independent Environmental Audit results

Actions arising from the outcome of the site's first Independent Environmental Audit can be referenced in the Action Status Table provided in Appendix A.

4.0. Compliance Status

There was 1 non-compliance that resulted in compliance action during the reporting period.

The broader background to this is that no new works have been undertaken on the Dolwendee quarry or haul road area apart from general property maintenance and offset site management.

Incident	Summary / condition	Action Proposed	Timing
1	<p>DPHI issued a penalty notice regarding offset mechanism securement.</p> <p>Related to this A Notice to Furnish Information and Records and a Show Cause Letter was issued to the Applicant on 1 July 2025 and 18 July 2025 respectively. Two breaches are referenced in these documents, Schedule 3, Condition 28 and Schedule 5, Condition 12. Schedule 5, Condition 12 was resolved without penalty.</p> <p>Relevant item - Schedule 3, Condition 28</p>	Secure offset mechanism as per ongoing discussions.	DPHI has allowed until August 2026 to secure the offset mechanism.

It should also be noted that an Independent Environmental Audit has been undertaken as per Schedule 5, Condition 10 of the Development Consent. Compliance actions arising from the IEA are outlined in Appendix A.

5.0. Incidents

A table of incidents received during the reporting period, see below.

Incident	Summary	Action Proposed
No incidents	-	-

6.0. Complaints

A table of complaints received during the reporting period, see below.

Total Number of Complaints Received	Number of Complainants	Location of Complaints	Nature of Complaints
No complaints			

There does not appear to be any emerging trend.

Appendix A – Action Status Table

Source	Condition of Consent Number	Action Proposed	Proposed Completion Date	Status	Action Completed
SSD 6519					
IEA 2024	S.2, C.4 (a)	The proponent will develop a website which includes project management documents approved by DPHI to be in place by 30 th June 2025 as per Schedule 5 Condition 12.	30 th June 2025	Website completed with all relevant information as per C.4 (a). On going maintenance by LF. See: https://www.dolwendequarry.com.au/	Completed
IEA 2024	S.2, C.12 (a)	UHH will put in place Maintenance records to confirm that all plant and equipment used at the site has been maintained in a proper and efficient condition will be retained for future periods as per Schedule 2, Condition 12 (a).	June 2025	LF has made a spreadsheet register of equipment contract/maintenance history and is being kept in the office on site. Comms LF.	Completed
IEA 2024	S.2, C.12 (b)	UHH will put in place Maintenance records to confirm that all plant and equipment used at the site has been maintained in a proper and efficient condition will be retained for future periods as per Schedule 2, Condition 12 (a).	30 th June 2025	LF has made a spreadsheet register of equipment contract/maintenance history and is being kept in the office on site. Comms LF.	Completed
IEA 2024	S.2, C.14 (b)	The proponent will provide a Detailed Survey Plan showing boundaries of approved Project extraction limits as per Schedule 2, Condition 14 (b) and will be made available by 30th June 2025.	31 st January 2026	Applicant completed Detailed Survey Plan showing boundaries of approved Project extraction limit 08/09/2025. Plans have been	

Source	Condition of Consent Number	Action Proposed	Proposed Completion Date	Status	Action Completed
				uploaded to the Development Planning Portal. See Figure 4.	
IEA 2024	S.3, C.5 (a)	The next revision of the NMP will coincide with the Mod 1 which will be prepared in consultation with the EPA as per their own recommendation and as per Schedule 3, Condition 5 (a).	31 st January 2026	NMP is currently being updated to address the recommendation from the IEA and the changes brought by MOD 1. Expected to be finalised by January 2026.	In Progress
IEA 2024	S.3, C.12 (a)	The next revision of the AQMP will coincide with the Mod 1 which will be prepared in consultation with the EPA as per Schedule 3, Condition 12 (a) and as per their own recommendation.	31 st January 2026	AQMP is currently being updated to address the recommendation from the IEA and the changes brought by MOD 1. Expected to be finalised by January 2026.	In Progress
IEA 2024	S.3, C.12 (c)	The Proponent will review, revise and update the AQMP as part of the Modification approval as per the 5-year EPL license recommendations. This updated version will include requirements under Schedule 3, Condition 12 (c) and any outstanding information identified by the Auditor as per comments in Section 3.5 <i>Non-Compliances During the Audit Period</i> Table 3 of the 2024 IEA dated April 2025. This information will include but is not limited to the	31 st January 2026	AQMP is currently being updated to address the recommendation from the IEA and the changes brought by MOD 1. Expected to be finalised by January 2026.	In Progress

Source	Condition of Consent Number	Action Proposed	Proposed Completion Date	Status	Action Completed
		following: Baseline data identified in the 2015 EIS A section that clearly describes the protocol for managing air quality impact minimisation during adverse meteorological conditions and extraordinary events.			
IEA 2024	S.3, C.13 (a)	The Proponent will confirm the compliance status of Mangoola Mine Met station for UHH usage and confirm as per Schedule 3, Condition 13 (a) by June 30th 2025.	31 st January 2026	In discussion with Mangoola Mine. This is yet to be resolved.	In Progress
IEA 2024	S.3, C.14	The Proponent will review, revise and update the AQMP as part of the Modification approval as per the 5-year EPL license recommendations. This updated version will include requirements under Schedule 3, Condition 14 and any outstanding information identified by the Auditor as per comments in Section 3.5 Non-Compliances During the Audit Period Table 3 of the 2024 IEA dated April 2025. This information will include but is not limited to the following: Project management documents that clearly describes reasonable and feasible GHG mitigation measure by June 30th 2025.	31 st January 2026	AQMP is currently being updated to address the recommendation from the IEA and the changes brought by MOD 1. Expected to be finalised by January 2026.	In Progress
IEA 2024	S.3, C.17 (d) (ii)	The project engineer asserts that erosion and sediment control structures for the Project are designed and maintained generally in accordance with the Blue Book and will notify this on future engineering plans.	31 st January 2026	Erosion and sediment control will be completed prior to commencement of operations. All engineering will always be in accordance with the blue book.	In Progress

Source	Condition of Consent Number	Action Proposed	Proposed Completion Date	Status	Action Completed
IEA 2024	S.3, C.17 (e)	The Proponent will review, revise the SWMP as part of the Modification approval as per the 5-year EPL license recommendations. This updated version will include requirements under Schedule 3, Condition 17 (e) and any outstanding information identified by the Auditor as per comments in Section 3.5 Non-Compliances During the Audit Period Table 3 of the 2024 IEA dated April 2025. This information will include but is not limited to the following: a Groundwater Management Plan by August 31 st 2025.	31 st January 2026	The SWMP will be revised and management plans produced prior to operations commencing. Operations will not commence until approval of Modification 1.	In Progress
IEA 2024	S.3, C.18 (a)	The Proponent will prepare a Construction Traffic Management Plan in consultation with council and Transport for NSW prior to the commencement of Project construction, to meet SSD 6519 requirements This will include requirements under Schedule 3, Condition 18 (a) and any outstanding information identified by the Auditor as per comments in Section 3.5 <i>Non-Compliances During the Audit Period</i> Table 3 of the 2024 IEA dated April 2025.	30 th September 2025	An improved Construction Traffic Management Plan is being drafted as of October 2025.	
IEA 2024	S.3, C.26 (c)	UHH will implement a procedure to regularly update the RAPs on ongoing implementation and compliance of the ACHMP as per Schedule 3, Condition 26 (c) by 30 th June 2025.	30 th June 2025	Consultation occurred in August of 2025 in relation to Mod 1. Development Application. A procedure to regularly update the RAPs is now in place. RAPs have been consulted on a revised ACHMP in September 2025. Comms LF.	Completed

Source	Condition of Consent Number	Action Proposed	Proposed Completion Date	Status	Action Completed
IEA	S.3, C.27	The proponent will commence implementing the BOS described in the EIS and shown conceptually in Appendix 5, as per Schedule 3, Condition 27 by the 31 st August 2025.	23 rd October 2025	<p>JM and AC (registered assessor) undertook EMM field studies on these dates, 18/09/2025 and 19/09/2025.</p> <p>JM surveyed impact sight and flagged hollows to be translocated to offset site on 18/09/2025.</p> <p>Weed analysis undertaken by AC 19/09/2025.</p> <p>See Appendix B.</p>	Completed
IEA 2024	S.3, C.28	UHH will make suitable arrangements to provide appropriate long-term security for the BOS as per Schedule 3, Condition 28 by 30 th June 2025.	31 st January 2026	<p>Applicant completed copy of correspondence with CHRP dated from 27/05/2025 to 19/06/25, indicating UHH attempts to resolve conservation area mentioned on title. As yet unresolved.</p> <p>Applicant received copy of receipt of offset bond payment 27/05/2025, Dep. ref. 4000003749.</p>	In Progress

Source	Condition of Consent Number	Action Proposed	Proposed Completion Date	Status	Action Completed
				Applicant is in communication with the department with achieving compliance with the BCT. See Appendix B.	
IEA 2024	S.3, C.31 (a)	It is recommended that the BRMP is prepared in consultation with OEH (now NSW Environment and Heritage).	17 th September 2021	This has been completed, though a revision is intended for Mod1. Approval documentation is on the Major Projects Dolwende page and the Dolwende Quarry website.	Completed
IEA 2024	S.3, C.31 (g)	Minimal disturbance has occurred to date. However, the proponent will retain evidence that environmental resources within the approved disturbance area are salvaged, including tree hollows, vegetative and soil resources, for beneficial reuse in the enhancement of the offset area or site rehabilitation for future operations as per Schedule 3, Condition 31 (g).	23 rd October 2025	See Appendix B, RE survey of flagging hollow bearing trees and hollow logs. However, minimal disturbance has occurred to date.	Completed
IEA 2024	S.3, C.31 (g)	The proponent will retain and records evidence of weed control measures as per Schedule 3, Condition 31 (g) for future operations.	23 rd October 2025	Applicant provided receipts on purchase of chemicals for weed control of the offset area, within the last 12 months.	Completed

Source	Condition of Consent Number	Action Proposed	Proposed Completion Date	Status	Action Completed
				The management of weeds on the offset site using chemicals is yet to be determined.	
IEA 2024	S.3, C.32 (a)	UHH to retain evidence of Bond payment as per Schedule 3, Condition 32 (a).	30 th June 2025	Applicant received copy of receipt of offset bond payment 27/05/2025, Dep. ref. 4000003749.	
IEA 2024	S.3, C.39 (a)	Bushfire risk within the offset area will be assessed as part of future weed management programs and noted in program records as per Schedule 3, Condition 39 (a).	23 rd October 2025	Bushfire and weed mitigation are already in place in the plan of management. No bushfire hazards have been identified relating to weeds. See EMM report, Appendix B.	Completed
IEA 2024	S.5, C.2 (a)	The Proponent will review, revise and update the AQMP as part of the Modification approval as per the 5-year EPL license recommendations. This updated version will include requirements under Schedule 5, Condition 2 (a) and any outstanding information identified by the Auditor as per comments in Section 3.5 Non-Compliances During the Audit Period Table 3 of the 2024 IEA dated April 2025. This information will include but is not limited to the	31 st January 2026	AQMP is currently being updated to address the recommendation from the IEA and the changes brought by MOD 1. Expected to be finalised by January 2026.	In Progress

Source	Condition of Consent Number	Action Proposed	Proposed Completion Date	Status	Action Completed
		following: A section that clearly includes a contingency plan to manage any unpredicted impacts and their consequences.			
IEA 2024	S.5, C.2 (b)	The proponent will develop a Discharge Procedure as noted in Table 8 of the SWMP is developed prior to construction and a revision to the SWMP is made, in accordance with the requirements of Schedule 5, Condition 2 of SSD 6519.	31 st January 2026	AQMP is currently being updated to address the recommendation from the IEA and the changes brought by MOD 1. Expected to be finalised by January 2026.	In Progress
IEA 2024	S.5, C.3 (a)	The proponent notes that DPHI recently accepted the initial Annual Review and no strategic revision of strategies, plans and programs was flagged as necessary due to no significant activities occurring onsite except rudimentary ‘commencement of works’ steps. However, with more activity expected to occur in the second year of operation a revision of strategies, plans and programs will occur within 3 months of the submission of an Annual Review as per Schedule 5, Condition 3 (a).	31 st January 2026	No strategic revision of strategies, plans and programs was flagged as necessary due to no significant activities occurring onsite except rudimentary ‘commencement of works’ steps. However, with more activity expected to occur in the coming months, after the consent for the proposed Mod.1 is completed.	In Progress
IEA 2024	S.5, C.9	The proponent will format the Annual Reviews for Dolwendee Quarry in accordance to that of NSW Planning’s ‘Compliance Reporting Post Approval Requirements’ (May 2020).	October 2025	Formatting agreed and undertaken to as per this current report.	Completed

Source	Condition of Consent Number	Action Proposed	Proposed Completion Date	Status	Action Completed
IEA 2024	S.5, C.12 (a)	The proponent will develop a website as per Schedule 5, Condition 12 (a) in order to make the necessary Project information publicly available by 30th June 2025.	30 th June 2025	Website completed with all relevant information as per C.4 (a). Ongoing maintenance by LF. See: https://www.dolwendeequarry.com.au/	Completed
EPL 21293					
IEA 2024	C.G1.1	The proponent will keep a physical copy of the EPL at the premises once site operations commence.	31 st January 2026.	Physical copy of EPL will be at the premises once site operations commence. Site operations have not yet commenced.	In Progress
IEA 2024	C.L1.1	The proponent will ensure that maintenance work on Project sediment dams will be completed prior to commencement of Project operations, to ensure they will operate effectively.	31 st August 2025	Maintenance on sediment dams has been undertaken during the current period as part of general property maintenance.	Completed
IEA 2024	C.L5.1	Whilst minimal activity has occurred to date and that within scheduled hours, the proponent will retain evidence to confirm that all construction at the premises is conducted within approved times as per Condition L5.1.	23 rd October 2025.	Register has been prepared, noting scheduling out hours. Comms LF.	Completed

Source	Condition of Consent Number	Action Proposed	Proposed Completion Date	Status	Action Completed
IEA 2024	C.O2.1 (a)	No extraction plant on site as of date of inspection. Contractor Equipment used for initial EPL works were registered and insurance currency viewed. However, copies of compliance will be retained in future operations to confirm that all plant and equipment used at the site has been maintained in a proper and efficient condition as per Condition O2.1 (a).	23 rd October 2025.	Contractor equipment register of registration and insurance now in place. Comms LF.	Completed
IEA 2024	C.O2.1 (b)	No extraction plant on site as of date of inspection. Contractor Equipment used for initial EPL works were registered and insurance currency viewed. However, records will be retained in future operations to confirm that all plant and equipment used at the site is being operated in an efficient and proper manner as per Condition O2.1 (b).	23 rd October 2025.	Records noted in C.O2.1 (a) will be retained in future operations. Comms LF.	Completed
IEA 2024	C.M4.1	The proponent will operate a telephone complaints line for the Project and provide this number on the Project website as per Condition M4.1.	30 th June 2025	Telephone complaints line number provided on project website. See link, completed by 30 th June. https://www.dolwendequarry.com.au/	Completed
IEA 2024	C.M4.2	See response made in Condition M4.1 above.	30 th June 2025	Telephone complaints line number provided on project website. See link, completed by 30 th June. https://www.dolwendequarry.com.au/	Completed

Source	Condition of Consent Number	Action Proposed	Proposed Completion Date	Status	Action Completed
IEA 2024	C.M4.3	See response made in Condition M4.1 above.	30 th June 2025	Telephone complaints line number provided on project website. See link, completed by 30 th June. https://www.dolwendequarry.com.au/	Completed
IEA 2024	R1.7 (a), (b)	(a) It is recommended that a signed copy of the Annual Return is retained and signed by the licence holder (b) It is recommended that a signed copy of the Annual Return is retained and signed by a person approved in writing by the EPA to sign on behalf of the licence holder.		Signed copy of 2025 Annual Return retained and signed by the license holder. JM sighted signed copy 06/08/2025. LF to maintain a register.	Completed

Appendix B – Review of Biodiversity Offset Area Management 2025

Review of Biodiversity Offset Area Management 2025 - CONSENT: SSD 6519, LOT 1

This is notification of the measures that have been implemented at the offset site, in accordance generally with Condition 31 (g) of the above Consent for Dolwendee Quarry.

It should be noted that to date no clearing or works have been undertaken, apart from offset site maintenance, environmental surveys and land title surveys.

The general condition of the offset site is good, however, on recent field survey it was noted that attention to weed management and feral vertebrate control were matters for ongoing attention. This and other matters have been described in the baseline Ecological Management Module (EMM) undertaken in October 2025 (Appendix C).

The following table outlines measures that have been taken over the previous 24 months in relation to the Consent conditions and the guidelines of the Biodiversity Rehabilitation Management Plan.

Condition	Description	Comment
Biodiversity and Rehabilitation Management Plan		
31	<p>The Applicant must prepare a Biodiversity and Rehabilitation Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <p>Include a detailed description of the measures that would be implemented over the next 3 years (to be updated for each 3-year period following initial approval of the plan) including the procedures to be implemented for:</p>	
(g)	<p>1. Maximising the salvage of environmental resources within the approval disturbance area, including tree hollows, vegetative and soil resources, for beneficial reuse in the enhancement of the offset area or site rehabilitation</p>	<p>Pre-clearance surveys of the quarry excavation area were undertaken on the 18/09/2025. Hollows on the ground and hollow-bearing trees were marked with pink spray paint and flagging tape, indicating that these were suitable for salvage. Appropriate areas were then flagged throughout the offset site, where the salvaged</p>

		environmental resources will be transported to. As no clearing has been undertaken, soil resources and their beneficial reuse are yet to occur.
	2. Restoring and enhancing the quality of native vegetation and fauna habitat in the biodiversity offset and rehabilitation areas through assisted natural regeneration, targeted vegetation establishment and the introduction of fauna habitat features.	<p>No seed collection or targeted revegetation of native flora has occurred as strong natural regeneration has occurred since boundary fencing of the offset site (see EMM in Appendix D).</p> <p>Habitat features such as hollow logs are currently being stored on the farmland adjacent to the quarry site. These have been marked and along with the other environmental resources, will be transported to the offset site to act as additional fauna habitat features.</p> <p>(See Appendix A for pre-clearance letter).</p>
	3. Protecting native vegetation and fauna habitat outside the approved disturbance area onsite.	No works has occurred yet on approved disturbance areas or otherwise. Nevertheless, general farmland habitat has been maintained.
	4. Minimising the impacts on native fauna, including undertaking pre-clearance surveys for the quarry site, haul road and the supplementary water supply pipeline.	A pre-clearance survey of the quarry site has been conducted, and an ecologist will be present when clearing takes place. Any fauna captured during this event will be released onto the offset site. Pre-clearance surveys are yet to take place for the haul road and the supplementary water supply pipeline. These however will take place in accordance with the same procedures taken at the quarry disturbance site.
	5. Establishing vegetation screening to minimise the visual impacts of the site on surrounding receivers.	No construction works have begun on either the quarry or the haul road and as such no vegetation screening has been established as of yet.

	<p>6. Ensuring minimal environmental consequences for threatened species, populations and habitats, including for the quarry site, haul road and supplementary water supply pipeline.</p>	<p>No impacts have occurred as no construction has commenced.</p>
	<p>7. Avoiding and minimising the spread of Myrtle Rust, Phytophthora cinnamomic (Phytophthora) and Chytrid fungus.</p>	<p>No evidence of myrtle rust or phytophthora has been observed on the offset site or the surrounding areas. If contamination does occur, then an avoid and minimise approach will be undertaken.</p> <p>Staff and contractors are to be made aware of the signs of the diseases, all vehicles and equipment are to be cleaned before attending the site, clearance and rehabilitation are to be completed by experienced contractors, and chemical treatment and effective disposal of plants are to be undertaken if they are identified. If the diseases are found on the site, then it will be reported to the BCT.</p> <p>In the unlikely event that chytrid fungus is found in frogs on the site, then ecologists will liaise with Dolwende Quarry and report the issue to the BCT.</p>
	<p>8. Collecting and propagating seed.</p>	<p>No collection or propagation of seed has been undertaken to date due to strong results from natural regeneration since boundary fencing was erected on the offset site (refer to EMM, Appendix D). This will be monitored over the coming 12 months.</p>
	<p>9. Controlling weeds and feral pests.</p>	<p>UHH have purchased the necessary chemicals needed for weed control on the offset site. Company employees have undertaken weed management in the form of targeted chemical</p>

		<p>application, at least 3 times since commencement on the 29/10/23. This was completed over a period of 3 days with minimal wind disturbance (see receipt evidence, Appendix A, and photographs Appendix B). The main threatening weeds were controlled; however, ongoing control will be done for species such as tiger pear and fireweed.</p> <p>UHH have conducted targeted shooting of feral vertebrate pests on the offset site, mainly feral pigs. This has been done in accordance with the BRMP, where in shooting has occurred at a minimum of three times from October 2023 to October 2025. Feral pig populations are notoriously transient; however, numbers were reduced. There was evidence of pig rootings and this issue will be addressed in the coming 12 months.</p>
	10. Controlling erosion.	Some erosion was observed along ephemeral creek lines and plans are in place to address this in the coming 12 months.
	11. Managing bushfire risk.	Under the consent bushfire risk is mentioned under the context of weed management within the offset area. During the EMM fieldwork, the accredited assessor observed that fire management would not be the appropriate tool for weed control in the previous 24 months or the coming 12 months. This was due to the relatively low weed loading.

Appendix A: Letters and Receipt Evidence

Receipt 1: Nutrien Ag Solutions weed control chemical receipt



TAX INVOICE

152 Racecourse Rd
Rutherford NSW 2320

Nutrien Ag Solutions Limited
ABN 73 008 743 217

F 02 4932 4133

www.nutrienagsolutions.com.au



0174294967197

DELIVERED TO:
Customer Collected

United Pastoral P/L
PO Box 69
DENMAN NSW 2328

Invoice Date	06 Jun 2025	Invoice Number	912773302
Sales Person	Nigel	Customer PO Number	
Account Number	70513466	Total Due:	\$ 528.00
Enquiries about this invoice		Due Date:	25 Jul 2025
T 02 4932 7811 F 02 4932 4133			

Article Description	Issued Quantity	UoM	Unit Price (GST excl)	Total \$ (GST excl)	GST \$	Total \$ (GST incl)
* SIPC SLEDGE 5L	1.0	BO	\$480.00	\$480.00	\$48.00	\$528.00
				\$480.00	\$48.00	\$528.00

* These items are taxable supplies.

All purchases of non-returnable containers which fall under the drumMUSTER scheme have a charge of 6.6 cents per litre/kilogram (GST inclusive) included in the price.

Total Due (incl GST): \$ **528.00**

Due Date: **25 Jul 2025**

Invoice Number 912773302

Customer PO Number

8-19 3-48 1-4294967197/70513466

All terms and conditions that apply to Nutrien sales can be found at www.nutrienagsolutions.com.au. Please check the updated terms and conditions prior to making a purchase. By continuing to make purchases from us you agree to the terms and conditions applicable at the time of your purchase. Unless another rate applies to your Nutrien Ag Solutions Limited account, Nutrien Ag Solutions Limited will charge interest on overdue amounts at 18% per annum.

Receipt 2: Nutrien Ag Solutions weed control chemical receipt



TAX INVOICE

152 Racecourse Rd
Rutherford NSW 2320

Nutrien Ag Solutions Limited
ABN 73 008 743 217

F 02 4932 4133

www.nutrienagsolutions.com.au

DELIVERED TO:
Customer Collected



0174294867197

United Pastoral P/L
PO Box 69
DENMAN NSW 2328

Invoice Date	06 Jun 2025	Invoice Number	912773360
Sales Person	Nigel	Customer PO Number	
Account Number	70513466	Total Due:	\$ 1,328.64
Enquiries about this invoice		Due Date:	25 Jul 2025
T 02 4932 7811 F 02 4932 4133			

Article Description	Issued Quantity	UoM	Unit Price (GST excl)	Total \$ (GST excl)	GST \$	Total \$ (GST incl)
* NUFA NAIL 600EC 1L	1.0	BO	\$277.85	\$277.85	\$27.79	\$305.64
* NUFA AMICIDE ADVANCE 700 20L	1.0	DR	\$190.00	\$190.00	\$19.00	\$209.00
* SIPC ECOPAR FORTE 40SC 2.5L	2.0	BO	\$370.00	\$740.00	\$74.00	\$814.00
				\$1,207.85	\$120.79	\$1,328.64

* These items are taxable supplies.

All purchases of non-returnable containers which fall under the drumMUSTER scheme have a charge of 6.6 cents per litre/kilogram (GST inclusive) included in the price.

Total Due (incl GST): \$ 1,328.64

Due Date: 25 Jul 2025

Invoice Number 912773360

Customer PO Number

E-48 P-48 1-4204971467031046

All terms and conditions that apply to Nutrien sales can be found at www.nutrienagsolutions.com.au. Please check the updated terms and conditions prior to making a purchase. By continuing to make purchases from us you agree to the terms and conditions applicable at the time of your purchase. Unless another rate applies to your Nutrien Ag Solutions Limited account, Nutrien Ag Solutions Limited will charge interest on overdue amounts at 15% per annum.

Receipt 3: Tax invoice for feral vertebrate pest and weed control



TAX INVOICE

Upper Hunter Holdings Pty Limited - Dolwende Quarry
770 Merriwa Rd
HOLLYDEEN NSW 2328
AUSTRALIA

Invoice Date 1 Sep 2025
Invoice Number INV-4590
Reference Maintenance works for period 1 March to 31 August 2025 Bio Offset area Lot 1
ABN 45 139 401 399

United Pastoral Pty Ltd t/a Hollydene Wines
3483 Golden Highway
JERRYS PLAINS NSW 2330
or
PO Box 69
DENMAN NSW 2328
(02) 6576 4021

Description	Quantity	Unit Price	GST	Amount AUD
Undertake feral animal control including foxes, wild dogs, Indian mynah birds and rabbits	6.00	1,100.00	10%	6,600.00
Undertake Noxious weed and plant control including spraying and removal				
Labour and Equipment (fixed monthly price \$1000 as agreed) Chemicals (see invoices attached)				
Nutrien Ag Inv 912773302	1.00	528.00	10%	528.00
Nutrien Ag Inv 912773360	1.00	1,328.64	10%	1,328.64
Denman Rural Inv 140557	1.00	154.99	10%	154.99
		INCLUDES GST 10%		782.88
		TOTAL AUD		8,611.63

Due Date: 15 Sep 2025

United Pastoral Pty Ltd
BSB: 062 813
ACC: 1043 2849

SWIFT CODE - CTBAAU2S

Thank You.
Email remittance: emma@hollydeneestate.com



PAYMENT ADVICE

To: United Pastoral Pty Ltd t/a Hollydene Wines
3483 Golden Highway
JERRYS PLAINS NSW 2330
or
PO Box 69
DENMAN NSW 2328
(02) 6576 4021

Customer	Upper Hunter Holdings Pty Limited - Dolwendee Quarry
Invoice Number	INV-4590
Amount Due	8,611.63
Due Date	15 Sep 2025
Amount Enclosed	

Enter the amount you are paying above

Receipt 4: Chemicals for weed control receipt



Denman Rural Pty Ltd

ABN: 54 629 387 051
38 Ogilvie Street
Denman
NSW 2328
Ph: (02) 6547 2204 Fx: (02) 6547 2886

Tax Invoice

Date: 26 Feb 2025 01:23 PM
Invoice No: 140557

Account: UNITEDPASTIAC

Bill To:	UNITED PASTORAL PTY LTD P.O.Box 69 DENMAN NSW 2328 Australia ABN: 45 139 401 399
----------	---

Pho (02) 6576 4021 Reference 2nd Reference
Wayne

Product Code	Description	Qty.	Price	Discount	Value
21198	GLYPHOSATE 540K 20L	1	155.00		155.00

Return Policy Summary:

Ownership of the goods remain with Denman Rural until full payment is made; Goods can be returned within 7 days of purchase if unused and in original condition; No claims will be accepted after 7 days, and we do not offer exchanges or refunds for change of mind. For damaged or faulty items, please contact us within 7 days for a replacement or refund.

GST: 14.09
Total Due: 155.00
Tendered: 0.00

Account: UNITEDPASTIAC (UNITED PASTORAL PTY LTD)
Invoice No : 140557
Served By: MARSHA SHIBBLE
Denman Rural Pty Ltd BSB: 082-845 ACC:15531 1698

Outstanding: 155.00

* Indicates Item Excludes GST

Letter 1: Letter to owner informing of completion of pre-clearance survey at quarry site

RestoreAG.

*Credit Brokers | Biodiversity | Environmental
Regenerative Agriculture | Renewables*

24 September 2025

Dear Gary,

RE: DA (Lot 6 DP 1160936) - Vegetation Pre-Clearing Survey

This is notification that the vegetation preclearing survey on the above allotment was completed on the 18/09/25, by accredited assessor Andrew Carty and myself. The survey included the marking of several Narrow-leaved Iron Barks (*Eucalyptus crebra*) with pink marking tape and pink spray paint. The marked trees all presented hollows. A number of hollow logs that are likely habitat were also marked, along with some wombat burrows.

As per Section 3 Condition 31(g) of the consent, an ecologist will need to be on site to supervise the soft-felling of the trees and hollows on the ground. The proper procedures will be followed during this process, allowing the ecologist to inspect each marked tree and hollow right after they have been soft-felled or before removal. The soft-felled trees must be left where they fell for 48 hours to ensure that any fauna that may be missed during the supervision have the chance to move on before work continues. We will need to further discuss the removal of wombat burrows when the time comes to commence earthworks for the quarry.

Please contact me if you require any further information.

Regards,

Jack Morrow

Ecologist

RestoreAg Pty Ltd

jackmorrow@restoreag.com.au

M +61403069161

Appendix B: Photos



Photo 1: Pig Control



Photo 2: Pig Control



Photo 3: Pig Control



Photo 4: Pig Control



Photo 6: Rabbit Control



Photo 7: Rabbit Control



Photo 8: Prickly Pear Control



Photo 9: Prickly Pear Control



Photo 10: Prickly Pear Control



Photo 11: Tiger Pear Control



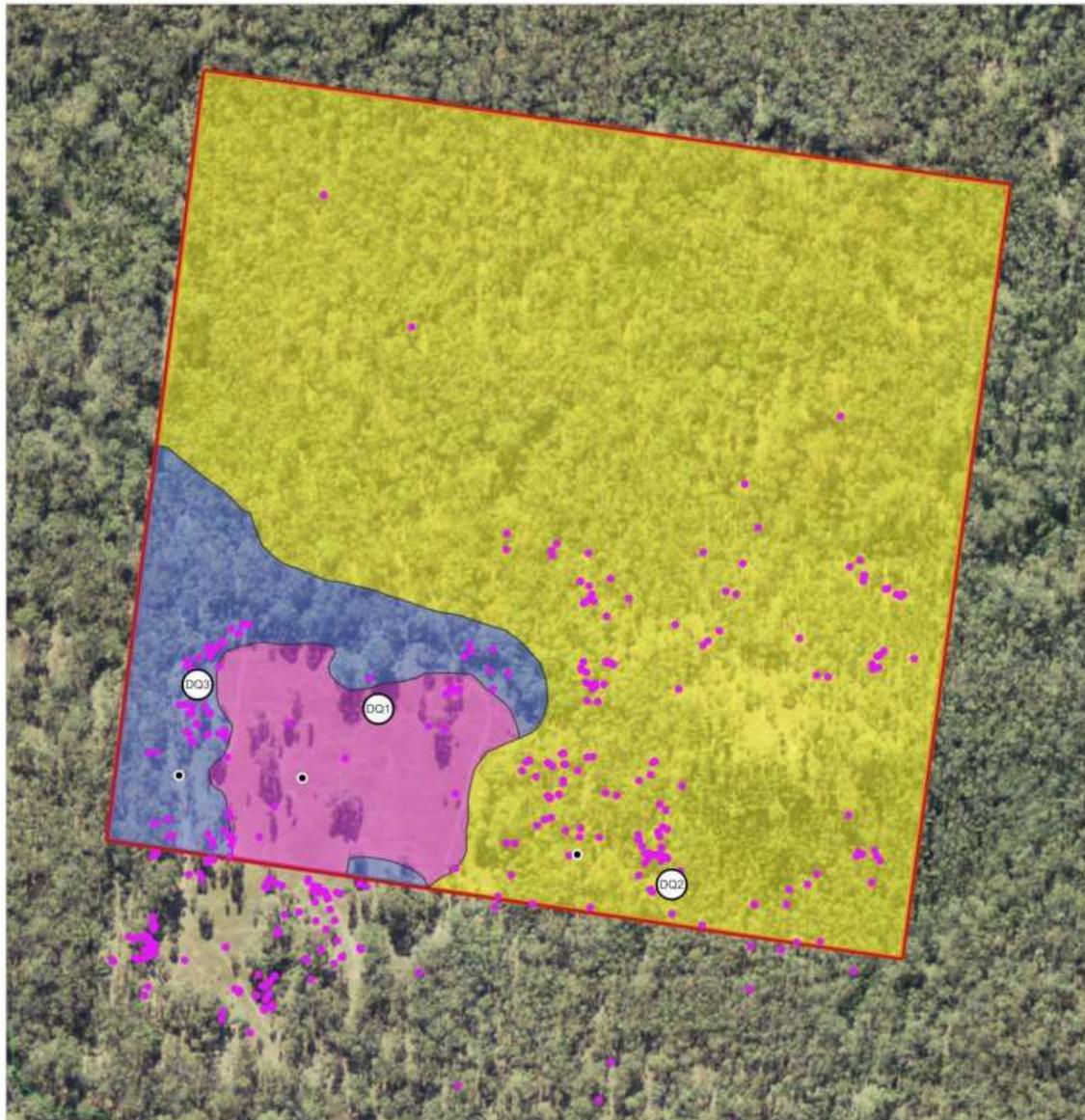
Photo 12: Tiger Pear Control



Photo 13: Tiger Pear Control

Appendix C: Maps

Figure 1: Ecological Monitoring Module monitoring plots within the offset site.



Legend

 Dolwendee Quarry Biodiversity Offset

Monitoring plot locations

 Start

 End

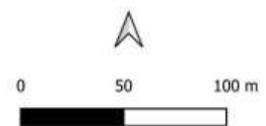
Vegetation Zones

 3314_DNG

 3314_Intact

 3431_Intact

 Pine Donkey Orchid (*Diuris tricolor*) records

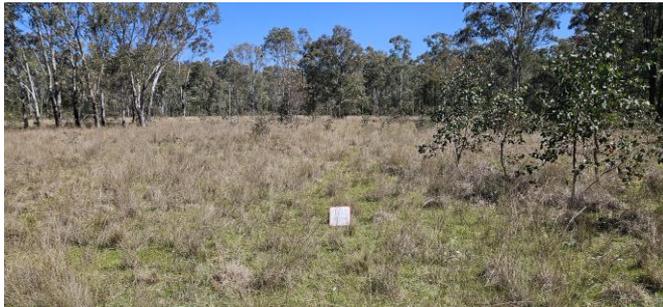


eco|path
CONSULTING

Figure 2: Monitoring Plot Locations - Dolwendee Quarry Biodiversity Offset

Appendix D: Ecological Monitoring Module Report

**Dolwende Quarry Biodiversity Offset
Ecological Monitoring
Baseline Surveys - September 2025
Summary Report**



Prepared for RestoreAg Pty Ltd

15 October 2025

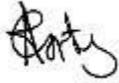
RestoreAG.

**DOLWENDEE QUARRY BIODIVERSITY OFFSET
ECOLOGICAL MONITORING
BASELINE SURVEYS – SEPTEMBER 2025**

Summary Report

Report and spatial products developed for:
RestoreAg Pty Ltd
59 Letchworth Pde
Balmoral 2283

Prepared by:



Andrew Carty

Director / Principal Botanist
EcoPath Consulting Pty Ltd
T 0428 792 620
EcoPathConsulting@bigpond.com
ABN: 54 648 488 546

Cover photos: Monitoring location Plot DQ1 (top left), Dwyer's Snake (*Suta dwyeri*) on site (middle left), monitoring location Plot DQ2 (bottom left) and Pine Donkey Orchid (*Diuris tricolor*) (right portrait frame).

Authors and contributors

Feature	Dolwendee biodiversity offset site	Task performed
Andrew Carty	Principal Botanist BAM Accredited Assessor (BAAS20021)	Author, field data collection
Jack Morrow	Ecologist	Field data collection

CONTENTS

1. Introduction	3
1.1 <i>Background</i>	3
1.2 <i>Project scope</i>	3
1.3 <i>Dolwende Biodiversity Offset</i>	4
2. Methods	6
2.1 <i>Monitoring plan</i>	6
2.2 <i>Collect field data</i>	7
2.3 <i>Data analysis</i>	8
3. Results.....	9
3.1 <i>Monitoring plots</i>	9
3.2 <i>Baseline monitoring results</i>	11
Floristics.....	11
Vegetation Cover	11
Stem classes.....	12
Threatened flora species	12
Introduced weed species	13
4. Conclusions and Recommendations	14
5. References and Bibliography	15
APPENDIX – photographic record	16

1. INTRODUCTION

1.1 Background

RestoreAg Pty Ltd commissioned Ecopath Consulting Pty Ltd to undertake ecological monitoring at Dolwende Quarry Biodiversity Offset site (the site).

The site is proposed as an offset for the Dolwende Quarry, supporting similar habitats, threatened species and Threatened Ecological Communities as those found on the Dolwende Quarry Site as detailed in the Ecological Assessment (Umwelt 2015) for the project.

Subsequently a Biodiversity and Rehabilitation Management Plan was developed for the Dolwende Quarry by Integrated Environmental Management Australia (2021), which list some key management activities including stock exclusion, weed control, vertebrate pest management, revegetation (if required) and ecological baseline monitoring.

This summary report provides a brief description of methods and results of the ecological baseline monitoring conducted during September 2025.

1.2 Project scope

The scope includes desktop assessment, establishment of monitoring locations, photo monitoring points including installation of permanently marked plots, field monitoring surveys to collect the required data and prepare a summary report including maps and photographs. The project scope includes:

- Desktop assessment to determine the required number of monitoring points and background of the site.
- Establish monitoring locations and photo monitoring points including installation of permanently marked plots
- Field monitoring surveys to collect the required data from the minimum number of plots, using the EMM Monitoring Survey 123 App.
- Prepare a draft summary report for the monitoring including maps and photographs
- Finalise and submit data to the BCT through the Survey 123 App.

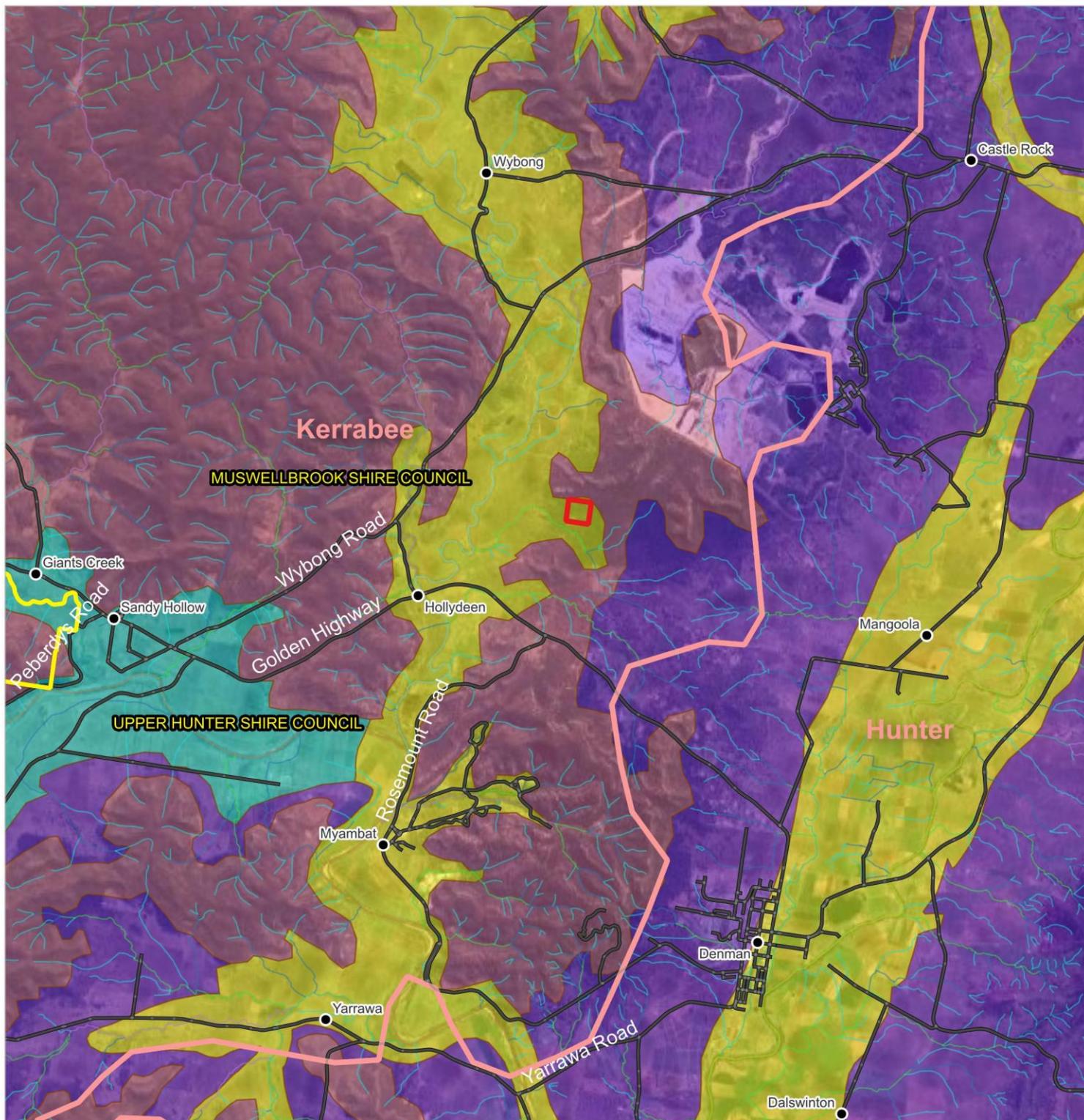
1.3 Dolwendeë Biodiversity Offset

The Dolwendeë biodiversity offset site is in the Upper Hunter valley region, approximately seven kilometres (km) north-west of Denman and 20 km south-west of Muswellbrook. It is around 16 hectares in area and is located on the same property as the Dolwendeë Quarry. The major features of the Dolwendeë biodiversity offset are listed in Table 1-1.

Table 1-1 Dolwendeë Quarry biodiversity offset site

Feature	Dolwendeë biodiversity offset site
Address	Golden Highway, Wybong
Lot/DP	Lot 2 DP 1160936
Local Government Area	Muswellbrook Shire Council
Offset type	A funded Conservation Agreement (CA)
Bioregion	Sydney Basin
Subregion	Kerrabee
Mitchell Landscape	Upper Hunter Channels and Floodplain
Geology	Newcastle Coal Measures and Widden Brook Conglomerate
Threatened Ecological Communities (TECs)	Central Hunter Grey Box – Ironbark Woodland in the NSW North Coast and Sydney Basin Bioregions Listed as an Endangered Ecological Community (EEC) under the <i>Biodiversity Conservation Act 2016</i> (BC Act)
Threatened species	Pine Donkey Orchid (<i>Diuris tricolor</i>) has been recorded on the offset site with up to 247 individuals being recorded in the past (Umwelt Pty Ltd 2015). Known to provide habitat for Speckled Warbler and potential habitat for a minimum of 13 additional threatened fauna species.

The location of the Dolwendeë biodiversity offset site including the distribution of IBRA subregions and Mitchell Landscapes is displayed in Figure 1.



Legend

- Dolwendee Quarry Biodiversity Offset
- Sydney Basin IBRA bioregion subregions
- Local Government Areas (LGAs)
- Places

Mitchell Landscape boundaries

- Central Hunter Foothills
- Goulburn River Channels and Floodplains
- Lees Pinch Foothills
- Upper Hunter Channels and Floodplain



Figure 1: Location Map – Dolwendee Quarry Biodiversity Offset

2. METHODS

This section describes the monitoring requirements according to the Biodiversity Conservation Trust (BCT) EMM Monitoring Module (BCT 2021) and the Operational Manual (BCT 2024) for the Dolwendee biodiversity offset site.

2.1 Monitoring plan

The available information has been used to develop a monitoring plan based on the available information from previous surveys (Umwelt 2015) and the Biodiversity and Rehabilitation Management Plan (IEMA 2021). The key features of the biodiversity offset and the proposed monitoring approach is listed in Table 2-1.

Table 2-1 Key factors determining the monitoring approach

Item	Monitoring approach
Funded Conservation Agreement	High priority for BCT monitoring to be undertaken (Table 1 of the Operational Manual (BCT 2024)).
Management Intensity	Moderate management intensity has been assigned to the site, based on the site not being subject to active restoration measures or high-risk grazing activities or any other higher intensity management actions (refer to Section 2.2.1 of the Operational Manual (BCT 2024)). The monitoring categories for the site (Table 3 of the Operational Manual (BCT 2024)) would be: <ul style="list-style-type: none"> • C for intact vegetation zones; and • B/C for areas of Derived Native Grassland (DNG)
Monitoring prescriptions	All monitoring prescriptions will be included as listed in Table 4 of the Operational Manual (BCT 2024) apart from biomass enclosures and dung counts. The items to be monitored on the site include: <ul style="list-style-type: none"> • Full Floristic • Tree Stems • Vegetation cover (point-intercept cover) • Soil function
Minimum number of plots	One monitoring plot location per vegetation zone is required on the site. As per Table 5 of the Operational Manual (BCT 2024) with the site having a moderate management intensity and monitoring category of B or C.
Plant Community Types	Umwelt (2015) describes two PCTs as occurring on the site which have now been superseded with a revised PCT classification. The PCTs previously recorded include: PCT 618 White Box x Grey Box - red gum - Rough-barked Apple grassy woodland on rich soils on hills in the upper Hunter Valley (equivalent to revised PCT 3314?) PCT 1691 Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter (EEC) (equivalent to revised PCT 3431)
Vegetation Zones	Three vegetation zones have been delineated on the site (Umwelt 2015) and have been adapted to equivalent revised PCTs comprising: <ul style="list-style-type: none"> • 1: 3431_Intact • 2: 3314_Intact • 3:3314_DNG
Threatened flora species	One threatened flora species the Pine Donkey Orchid (<i>Diuris tricolor</i>) has been recorded on the offset site with up to 247 individuals being recorded in the past (Umwelt Pty Ltd 2015). Ecological monitoring surveys will target the flowering period of this species (early September to late October)

All plots are permanently marked using two star picket posts (1,650 millimetres) with a cap and high visible tape, erected at the 0 metre and 50 metre points on the midline transect, with the bearing from the 0m post recorded. Waypoints were recorded at the 0 metre and 50 metre post location.

2.2 Collect field data

Field surveys were undertaken 18 and 19 September 2025. Field data was collected using the Survey123 App for BAM floristics, vegetation cover, stem counts and soil function. These surveys are described below in Table 2-2.

Table 2-2 Survey methods for field data collection

Method	Survey attributes
BAM floristics	<ul style="list-style-type: none"> • Three permanent, full floristic plots (20x20 metre) established. • All flora species are recorded within the plot, full scientific name (Genus, species, and subspecific epithet if known). • Estimated percentage foliage cover of each species with individuals rooted in or overhanging the plot. Cover should be recorded in decimals if less than 1% (0.1, 0.2, 0.3...), or whole numbers up to 5% (1, 2, 3...), or to the nearest 5% where greater than 5% cover (5, 10, 15...). • Estimated abundance of each species, using the following intervals: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 2000, 3000, etc. • Whether the species is native, exotic, or high threat exotic.
Vegetation cover	<ul style="list-style-type: none"> • Vegetation cover was assessed along the central 50 metre transect within the 20x50 metre plot at 0.5 metre intervals. • Two cover assessments one 'lower stratum' and one 'upper strata' were recorded at each of 100 points (i.e. 200 data points). • For each intercept assessment, one of the following categories should be recorded: <ul style="list-style-type: none"> • Native vascular plant (living) • Exotic vascular plant (living) • Litter (lower stratum only) • Cryptogram (lower stratum only) • Log / standing dead / coarse woody debris • Rock / water (lower stratum only) • Bare ground (lower stratum only) / no intercept (upper strata only) • For the lower stratum, at each point, cover category is assessed based on the material intercepting the vertical line between the ground and one metre height. • For the upper strata, at each point, two values are recorded: cover category, assessed based on the first material intersecting a vertical line upwards from one metre height at

Method	Survey attributes
	each point; and which sub-stratum the intercept occurs within either 1-3 metre, 3-5 metre, or >5 metre height.
Stem Counts	<ul style="list-style-type: none"> Counts of the total number of trees with stems originating within the 20x50 metre plot, for each species separately, by stem size class. Trees comprise all species allocated to the tree growth form group. Tree stem size should be measured at 1.3m above ground height (diameter at breast height over bark or DBH). For stems less than 1.3 metre high, stem diameter at ground level should be used instead of DBH. DBH classes are: <1 cm, 1-5 cm, 5-9 cm, 10-19 cm, 20-29 cm, 30-49 cm, 50-79 cm, and >80 cm DBH.
Soil function	<ul style="list-style-type: none"> Soil functions attributes were recorded within five 1x1 metre quadrats along the central 50metre transect at the 5, 15, 25, 35 and 25 metre mark. The attributes recorded comprise: plant foliage cover, plant basal cover, litter cover, litter depth, litter origin, litter incorporation, cryptogram cover, erosion severity, deposited materials, surface roughness, surface resistance, crust stability and soil texture.
Photo points	<ul style="list-style-type: none"> Two photos are to be taken at each vegetation integrity plot during each resurvey event from either end of the central 50 metre transect. A photo-board has been included with the plot identification and date clearly displayed.

2.3 Data analysis

The collected data was submitted to the Biodiversity Conservation Trust (BCT) through the Survey123 App. A quality check of the data was undertaken by the BCT and an export of the data provided in spreadsheet workbook format. Biodiversity Conservation Trust (BCT).

This is the first monitoring event and so will comprise the baseline data for comparison against future monitoring events. Data analysis of baseline data is limited to some basic statistics provided in the results section. Data analysis between monitoring datasets will be undertaken following future monitoring events.

3. RESULTS

This section summarises the results of the monitoring to be used as the baseline data for the ecological monitoring including a photographic record.

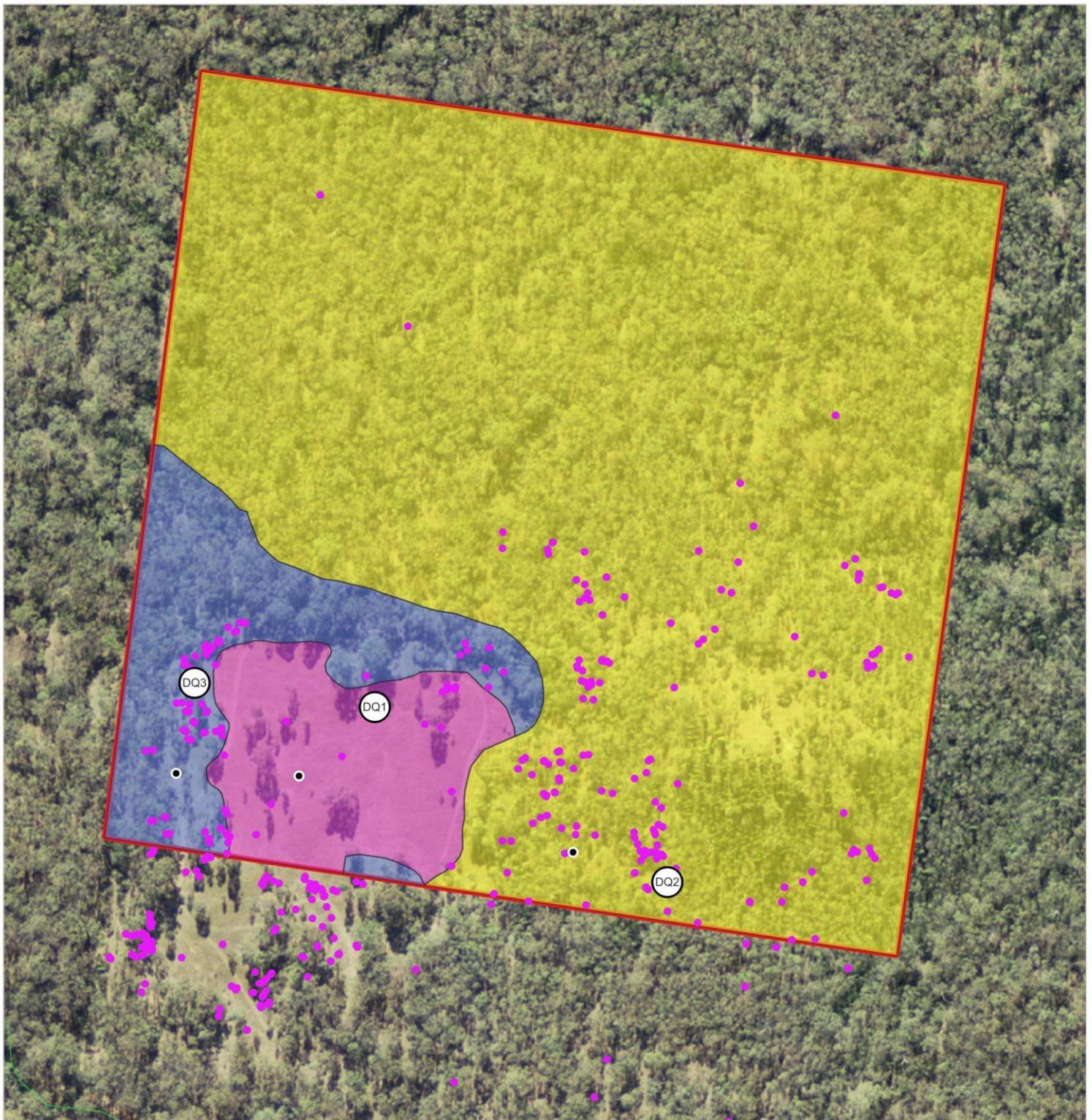
3.1 Monitoring plots

A total of three monitoring point locations has been established, one in each zone of the offset site. The monitoring plots established at the Dolwendee biodiversity offset in Table 3-1.

Table 3-1 Monitoring plots

Plot ID	Date	Bearing	Easting Start	Northing Start	Easting End	Northing End	PCTID	Veg Zone	<i>Diuris tricolor</i>	Purpose
DQ1	18/09/2025	235	279067	6421731	279029	6421698	3314	3314 DNG	No	Baseline
DQ2	19/09/2025	317	279216	6421638	279170	6421655	3431	3431 Intact	Yes	Baseline
DQ3	19/09/2025	206	278981	6421741	278971	6421696	3314	3314 Intact	Yes	Baseline

The location of the monitoring plots including vegetation zones/PCTs and threatened flora are displayed in Figure 2.



Legend

 Dolwendee Quarry Biodiversity Offset

Monitoring plot locations

 Start

 End

Vegetation Zones

 3314_DNG

 3314_Intact

 3431_Intact

 Pine Donkey Orchid (*Diuris tricolor*) records



0 50 100 m



Figure 2: Monitoring Plot Locations - Dolwendee Quarry Biodiversity Offset

3.2 Baseline monitoring results

The results of the baseline monitoring are discussed below including floristics, vegetation cover, stem classes, and threatened flora species.

Floristics

The results of floristic surveys undertaken within the 20x20 metre plot are summarised below in Table 3-2 including counts of species with each growth form and the sum of cover for the species within each growth form.

Table 3-2 Summary of floristic data collected

Plot ID	Count Tree	Count Shrub	Count Grass	Count Forb	Count Fern	Count Other	Cover Tree %	Cover Shrub %	Cover Grass %	Cover Forb %	Cover Fern %	Cover Other %	Cover HTW %
DQ1	1	0	4	11	1	1	5	0	32	7	1	0.1	6.1
DQ2	3	7	7	18	1	2	10.5	46.5	24.9	5.6	0.4	0.2	0.5
DQ3	3	4	8	14	1	1	26.5	4.5	42.2	3.4	1	0.2	0.5

Vegetation Cover

The results of point intercept vegetation cover assessment undertaken along the central 50 metre transect within each 20x50 metre plot are summarised below in Table 3-3.

Table 3-3 Summary of point intercept vegetation cover assessment

Plot ID	Lower Native %	Lower Exotic %	Lower Litter %	Lower Cryptogram %	Lower Bare %	Upper 1-3 m %	Upper 3-5 m %	Upper +5 m %
DQ1	47	43	9	0	1	0	0	0
DQ2	53	14	15	11	7	19	5	19
DQ3	38	15	44	0	3	8	15	50

Stem classes

The results of stem class assessment undertaken within the 20x50 metre plots are summarised below in Table 3-4 comprising number of stems for each species within each of the specified DBH ranges.

Table 3-4 Summary of stem class assessment

Species	DBH < 1 cm	DBH 1-5 cm	DBH 5-9 cm	DBH 10-19 cm	DBH 20-29 cm	DBH 30-49 cm	DBH 50-79 cm	DBH > 80 cm
DQ1								
<i>Eucalyptus tereticornis</i>	70	90	0	0	0	0	0	0
DQ2								
<i>Allocasuarina luehmannii</i>	0	5	0	3	1	0	0	0
<i>Eucalyptus crebra</i>	18	8	6	12	5	0	0	0
DQ3								
<i>Allocasuarina luehmannii</i>	24	28	6	5	2	0	0	0
<i>Eucalyptus crebra</i>	4	1	2	3	0	0	0	0
<i>Eucalyptus tereticornis</i>	1	6	6	7	2	4	0	0
<i>Notelaea microcarpa</i>	0	1	0	0	0	0	0	0

Threatened flora species

One threatened flora species Pine Donkey Orchid (*Diuris tricolor*) has been recorded on site and was recorded in two of the monitoring plots (DQ2 and DQ3). Some individuals were still budding (not in full flower) and it is likely that additional individuals are present within all plots including Plot DQ1. The number and location of Pine Donkey Orchid in the 20x20 metre plot is provided in Table 3-5, comprising number of stems in each 10x10 metre quarter of the plots (the orientation for left and right refers to facing the plot from the 0 metre mark).

Table 3-5 Pine Donkey Orchid (*Diuris tricolor*)

Plot ID	Right side 0-10 metre	Right side 10-20 metre	Left side 0-10 metre	Left side 10-20 metre	Total
DQ1	0	0	0	0	0
DQ2	3	7	0	0	10
DQ3	0	0	0	1	1

Introduced weed species

Introduced weed species recorded on site in the monitoring plots are listed below in Table 3-6, including identification of high threat weeds and cover recorded in each plot. High Threat Weeds should be targeted for removal and ongoing management as a priority.

Table 3-6 Introduced Weed Species

Scientific Name	Common Name	High Threat Weed	Cover (%)		
			DQ1	DQ2	DQ3
<i>Briza minor</i>	Shivery Grass		3		
<i>Conyza canadensis var. canadensis</i>	Canadian Fleabane		0.1		0.1
<i>Facelis retusa</i>	Annual Trampweed		6		0.1
<i>Gamochaeta spp.</i>	Cudweed			0.1	0.1
<i>Gomphocarpus fruticosus</i>	Narrow-leaved Cotton Bush		0.1		
<i>Hypochaeris radicata</i>	Catsear		35	3	10
<i>Lysimachia arvensis</i>	Scarlet Pimpernel		15	1	0.5
<i>Medicago polymorpha</i>	Burr Medic		0.1		
<i>Opuntia aurantiaca</i>	Tiger Pear	Yes	0.1		
<i>Opuntia stricta</i>	Common Prickly Pear		0.1	0.1	
<i>Parentucellia latifolia</i>	Red Bartsia		0.1		
<i>Paronychia brasiliiana</i>	Chilean Whitlow Wort		0.1		
<i>Petrorhagia nanteuillii</i>	Proliferous Pink		0.5		
<i>Richardia brasiliensis</i>	Mexican Clover		0.1	0.1	0.1
<i>Romulea minutiflora</i>	Small-flowered Onion Grass		0.1		
<i>Romulea rosea var. australis</i>	Onion Grass	Yes	3		
<i>Senecio madagascariensis</i>	Fireweed	Yes	3	0.5	0.5
<i>Sida rhombifolia</i>	Paddy's Lucerne				0.1
<i>Sonchus oleraceus</i>	Common Sowthistle			0.1	0.1
<i>Taraxacum officinale</i>	Dandelion		0.1		
<i>Verbascum virgatum</i>	Twiggy Mullein		0.1		
<i>Vulpia spp.</i>	Rat's-tail Fescue			0.1	
		SUM TOTAL	67%	5%	12%

4. CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations for the monitoring project have been established:

- Three monitoring locations have been established in accordance with the EMM Monitoring Module (BCT 2021) and the Operational Manual (BCT 2024).
- The site is in relatively good condition apart from the areas of DNG which support a higher abundance of exotics, although mainly limited to minor pasture weeds.
- Pine Donkey Orchid (*Diuris tricolor*) has been recorded at some of the monitoring locations and future monitoring events should target the flowering time for this species (September-October).
- Surveys were undertaken in early spring, and species richness and composition recorded in floristic plots will vary seasonally, with additional species being visible or identifiable during summer/autumn.
- Weed species should be controlled on site and native regeneration facilitated where possible, the flowering and seed-set of annual weeds should be suppressed and any high threat weeds removed.
- Weed control activities should be avoided or highly targeted to specific weeds during spring (September to November) to avoid inadvertently impacting Pine Donkey Orchid plants.
- Damage from feral pigs was observed on site and ongoing control of pigs and other feral animal species is required.

5. REFERENCES AND BIBLIOGRAPHY

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APPENDIX – PHOTOGRAPHIC RECORD



Plot DQ1 – wide angle (taken 0m mark on central 50 metre transect)



Plot DQ1 – Start (0m mark on central 50 metre transect)



Plot DQ1 – End (50m mark on central 50 metre transect)



Plot DQ2 – wide angle (taken 0m mark on central 50 metre transect)



Plot DQ2 – Start (0m mark on central 50 metre transect)



Plot DQ2 – End (50m mark on central 50 metre transect)



Plot DQ3 – wide angle (taken 0m mark on central 50 metre transect)



Plot DQ3 – Start (0m mark on central 50 metre transect)



Plot DQ3 – End (50m mark on central 50 metre transect)



Please contact me if you require any further information.

Kind regards,

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