DELEGATED REPORT

TO: Coordinator Planning & Building

FROM: Supervisor Planning & Building

DATE: 24 September 2025

APPLICATION DETAILS

APPLICATION		PREMISES	
APPLICATION NO:	OPW/25/0007		
RPD:	Lot 2 on RP747074	**ADDRESS:**	Kuranda Heights Road, Kuranda
APPLICANT:	Y Lovarco	**OWNER:**	Y Lovarco
ASSESSMENT MANAGER	Mareeba Shire Council	**DATE REFERRAL RECEIVED**	18 September 2025
TYPE OF APPROVAL:	Development Permit for Operational Works (Vegetation Clearing) assessable against the Mareeba Shire Council Planning Scheme 2016 - Environmental Significance Overlay and Hill and Slope Overlay		
PLANNING SCHEME:	Mareeba Shire Council Planning Scheme 2016		
ZONE:	Rural Residential zone		

ATTACHMENTS:
1. Site Plan
2. Ecological Assessment

THE SITE

The subject site is described as Lot 2 on RP747074 and is situated on Kuranda Heights Road, Kuranda. The site is irregular in shape with an area of 4.909 hectares and is zoned Rural Residential under the Mareeba Shire Council Planning Scheme 2016.

The site has approximately 345 metres of frontage to Kuranda Heights Road which is constructed to bitumen sealed standard. The site is unimproved and is almost completely covered in mature vegetation mapped as 'Wildlife Habitat' with the exception of a cleared powerline track through the property. The Hill and Slope Overlay also impacts the entire site, although the landowner has confirmed that the slope of the proposed clearance site does not exceed 9%.

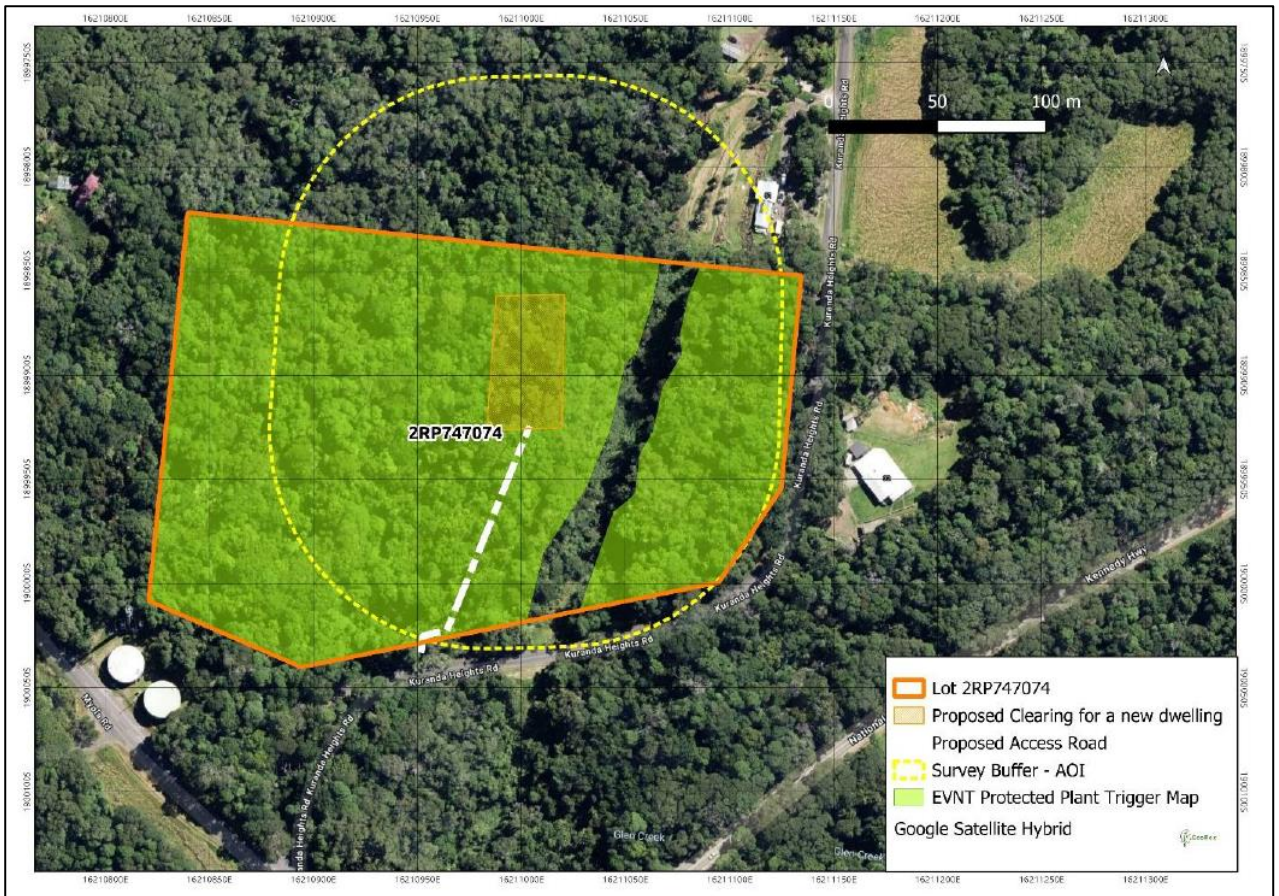
Map Disclaimer:
Based on or contains data provided by the State of Queensland (Department of Environment and Resource Management) (2009). In consideration of the State permitting use of this data you acknowledge and agree that the State gives no warranty in relation to the data (including accuracy, reliability, completeness, currency or suitability) and accepts no liability (including without limitation, liability in negligence) for any loss, damage or costs (including consequential damage) relating to any use of the data. Data must not be used for direct marketing or be used in breach of the privacy laws.

DESCRIPTION OF PROPOSED DEVELOPMENT

The landowner proposes to clear an area of approximately 2,000m^2 and access driveway for the siting of a dwelling and ancillary outbuildings.

The entire site is mapped as 'Wildlife habitat'.

An ecological assessment has been carried out and is included as **Attachment 2**. A plan showing the extent of the site to be cleared is shown below:



Map 2. The AOI extent and proposed clearing extent on lot 2RP747074.

MAREEBA SHIRE COUNCIL PLANNING SCHEME 2016

Zoning

The subject land is within the Rural Residential zone.

Relevant Codes:

8.2.4 Environmental significance overlay code

8.2.4.1 Application

(1) This code applies to assessing development where:
  (a) land the subject of development is affected by a constraint category identified on the **Environmental significance overlay maps (OM-004a-z)**; and
  (b) it is identified in the assessment benchmarks for assessable development and requirements for accepted development column of an assessment table in Part 5 of the planning scheme.

Note—Biodiversity and Water quality are appropriately reflected in Overlay Map 4 and is required to be mapped by State Government in response to Environment and Heritage State Interests.

8.2.4.2 Purpose

(1) The purpose of the Environmental significance overlay code is to identify and protect matters of environmental significance, which include matters of state environmental significance (MSES) as defined under the state planning policy.

The Environmental significance overlay code ensures that:

(a) waterways and high ecological significance wetlands are protected and enhanced to maintain ecosystem services and hydrological processes and provide aquatic habitat for flora and fauna; and
(b) the environmental values of regulated vegetation, wildlife habitat, protected areas and legally secured offset areas are protected and managed.

(2) The purpose of the code will be achieved through the following overall outcomes:
(a) the biodiversity values, ecosystem services and climate change resilience of areas of environmental significance are protected, managed, enhanced and rehabilitated;
(b) the biodiversity values of protected areas and legally secured offset areas are protected from development unless overriding community need is demonstrated;
(c) development is located, designed and managed to minimise the edge effects of development on areas of regulated vegetation and wildlife habitat;
(d) areas of regulated vegetation and wildlife habitat are managed to minimise biodiversity losses;
(e) development maintains, protects and enhances a regional network of vegetated corridors that assist in wildlife movement and contribute to the maintenance of habitat and biological diversity;
(f) development is appropriately setback from waterways and high ecological significance wetlands to minimise direct and indirect impacts on water quality and biodiversity; and
(g) riparian vegetation and vegetation associated with high ecological significance wetlands is protected and enhanced to improve water quality and natural ecosystem function.

8.2.4.3 Criteria for assessment

Table 8.2.4.3A - Environmental significance overlay code - For accepted development subject to requirements and assessable development

Performance outcomes	Acceptable outcomes	Complies	Comments
For accepted development subject to requirements and assessable development			
Regulated vegetation			
PO1 Vegetation clearing in areas mapped as 'Regulated vegetation' identified on the **Environmental Significance Overlay Maps (OM-004a-o)** is avoided unless: (a) it is demonstrated that the area does not support regulated vegetation as mapped; (b) the loss or reduction in regulated vegetation is for community infrastructure and associated access facilities that cannot be avoided; (c) wildlife interconnectivity is maintained or enhanced at a local and regional scale; and (d) the loss or reduction in regulated vegetation is minimised and any residual impacts are offset. Note—A supporting Ecological Assessment Report is prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports.	**AO1.1** No clearing of native vegetation is undertaken within areas of 'Regulated vegetation' identified on the **Environmental Significance Overlay Maps (OM-004a-o)**.	n/a	The subject site does not contain mapped regulated vegetation.

Performance outcomes	Acceptable outcomes	Complies	Comments
PO2 Development on sites adjacent to areas of 'Regulated vegetation' identified on the **Environmental Significance Overlay Maps (OM-004a-o)** protects the environmental significance of regulated vegetation and: (a) does not interrupt, interfere, alter or otherwise impact on underlying natural ecosystem processes such as water quality, hydrology, geomorphology and biophysical processes; (b) does not negatively impact the movement of wildlife at a local or regional scale; and (c) avoids noise, light, vibration or other edge affects, including weed and pest incursion on identified environmental values. Note—A supporting Ecological Assessment Report is prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports.	**AO2** Development (excluding roads, earthworks, drainage infrastructure and underground infrastructure) is not located within 20 metres of 'Regulated vegetation' areas identified on the **Environmental Significance Overlay Maps (OM-004a-o)**.	✔	The proposed development is not within 20 metres of mapped regulated vegetation.
Regulated vegetation intersecting a watercourse			
PO3 Vegetation clearing in areas mapped as 'Regulated vegetation intersecting a watercourse', identified as 'Waterway' and 'Waterway buffer' on the **Environmental Significance - Waterway Overlay Maps (OM-004p-z)** is avoided unless wildlife interconnectivity between habitats is maintained or enhanced at a local and regional scale, to the extent that migration or normal movement of significant species between habitats or normal gene flow between populations is not inhibited. Note—A supporting Ecological Assessment Report is prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports.	**Where within a 'Waterway buffer' on Environmental Significance - Waterway Overlay Maps (OM-004p-z)** **AO3.1** A minimum setback in accordance with **Table 8.2.4.3B** is provided between development and the top of the high bank of a 'Waterway' identified on the **Environmental Significance - Waterway Overlay Maps (OM-004p-z)**.	n/a	Not applicable.
	Where within a 'Waterway buffer' on Environmental Significance - Waterway Overlay Maps (OM-004p-z) **AO3.2** No clearing of native vegetation is undertaken within the minimum setback identified at **AO3.1**.	n/a	Not applicable.
Waterways and wetlands			

Performance outcomes	Acceptable outcomes	Complies	Comments
PO4 'High ecological significance wetlands' identified on the **Environmental Significance Overlay Maps (OM-004a-o)** and 'Waterways' on **Environmental Significance - Waterway Overlay Maps (OM-004p-z)** and are protected by: (a) maintaining adequate separation distances between waterways/wetlands and development; (b) maintaining and enhancing aquatic and terrestrial habitat including vegetated corridors to allow for native fauna (terrestrial and aquatic) movement; (c) maintaining waterway bank stability by minimising bank erosion and slumping; (d) maintaining water quality by providing buffers to allow filtering of sediments, nutrients and other pollutants; and (e) retaining and improving existing riparian vegetation and existing vegetation associated with a wetland. Note—A supporting Ecological Assessment Report is prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports.	**Where within a 'Waterway buffer' on Environmental Significance - Waterway Overlay Maps (OM-004p-z)** **AO4.1** A minimum setback in accordance with **Table 8.2.4.3B** is provided between development and the top of the high bank of a 'Waterway' identified on the **Environmental Significance - Waterway Overlay Maps (OM-004p-z)**.	n/a	Not applicable.
	Where within a 'High ecological significance wetland buffer' on Environmental Significance Overlay Maps (OM-004a-o) **AO4.2** A minimum buffer of 200 metres is provided between development and the edge of a 'High ecological significance wetland' identified on the **Environmental Significance Overlay Maps (OM-004a-o)**.	n/a	Not applicable.
	Where within a 'Waterway buffer' on Environmental Significance - Waterway Overlay Maps (OM-004p-z) or 'High ecological significance wetland buffer' on Environmental Significance Overlay Maps (OM-004a-o) **AO4.3** No stormwater is discharged to a 'Waterway' on **Environmental Significance - Waterway Overlay Maps (OM-004p-z)** or 'High ecological significance wetland' identified on the **Environmental Significance Overlay Maps (OM-004a-o)**. Note— An alternative outcome is required to demonstrate that the ecological impacts of stormwater discharge to a 'Waterway' or 'High ecological significance wetland' are mitigated in accordance with PO3 through appropriate stormwater management / treatment (where possible).	n/a	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
	Where within a 'Waterway buffer' on Environmental Significance - Waterway Overlay Maps (OM-004p-z) or 'High ecological significance wetland buffer' on Environmental Significance Overlay Maps (OM-004a-o) **AO4.4** No wastewater is discharged to a 'Waterway' on **Environmental Significance - Waterway Overlay Maps (OM-004p-z)** or 'High ecological significance wetland' identified on the **Environmental Significance Overlay Map (OM-004a-z)**. Note— A alternative outcome is required to demonstrate that the ecological impacts of wastewater discharge to a 'Waterway' or 'High ecological significance wetland' are mitigated in accordance with PO3 through appropriate wastewater management / treatment (where possible).	n/a	Not applicable.
For assessable development			
Wildlife Habitat			
PO5 Development within a 'Wildlife habitat' area identified on the **Environmental Significance Overlay Maps (OM-004a-o)**: (a) protects and enhances the habitat of Endangered, Vulnerable and Near Threatened (EVNT) species and local species of significance; (b) incorporates siting and design measures to protect and retain identified ecological values and underlying ecosystem processes within or adjacent to the development site; (c) maintains or enhances wildlife interconnectivity at a local and regional scale; and (d) mitigates the impact of other forms of potential disturbance (such as presence of vehicles,	**AO5** No acceptable outcome is provided	✔ Complies with PO5	Refer to the submitted Ecological Report (**Attachment 2**). The proposed clearing is not likely to compromise PO5. A condition will be attached to the approval ensuring that all cleared vegetation is mulched on-site and used for ground cover to prevent the spread of invasive weeds.

Performance outcomes	Acceptable outcomes	Complies	Comments
pedestrian use, increased exposure to domestic animals, noise and lighting impacts) to protect critical life stage ecological processes (such as feeding, breeding or roosting). Note—Development applications must identify any EVNT species or their habitats that may be affected by the proposal. In particular, applications are to identify and describe how the development avoids adverse impacts on ecological processes within or adjacent to the development area. Note—A supporting Ecological Assessment Report is prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports.			
Legally secured offset areas			
PO6 Development within a 'Legally secured offset area' identified on the **Environmental Significance Overlay Maps (OM-004a-o)** or other known Legally Secured Offset Area is consistent with the binding requirements of the offset and does not prejudice, undermine, or negatively impact the inherent ecological values, including all naturally occurring native flora, fauna and their habitat within the Legally Secured Offset Area. Note—A supporting Ecological Assessment Report is prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports.	**AO6** No acceptable outcome is provided.	n/a	Not applicable.
Protected areas			
PO7 Development within a 'Protected area' identified on the **Environmental Significance Overlay Maps (OM-004a-o)** is consistent with the values of the Protected Area and: (a) supports the inherent ecological and community values of the Protected Area asset; (b) maintains or enhances wildlife interconnectivity at	**AO7** No acceptable outcome is provided	n/a	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
a local and regional scale; and (c) does not prejudice, undermine, or negatively impact the inherent ecological values, including all naturally occurring native flora, fauna and their habitat within the Protected Area. Note—A supporting Ecological Assessment Report is prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports.			
Ecological corridors and Habitat linkages			
PO8 Development located: (a) in the Conservation zone, Emerging community zone, Recreation and open space zone, Rural zone or Rural residential zone; and (b) within an 'Ecological corridor' or a 'Habitat linkage' identified on the **Environmental Significance Overlay Maps (OM-004a-o)** does not compromise the provision of habitat connectivity of the corridor/linkage, having regard to: (a) the environmental values of the area of the site identified in the 'Ecological corridor' or 'Habitat linkage'; (b) the environmental values of adjoining and nearby land within the 'Ecological corridor' or 'Habitat linkage'; (c) the extent of any modification proposed to the natural environment including (but not limited to) vegetation and topography; (d) the location and design of proposed improvements that may impact on the functions of the 'Ecological corridor' or 'Habitat linkage' including (but not	**AO8** No acceptable outcome is provided	n/a	Not applicable.

Performance outcomes	Acceptable outcomes	Complies	Comments
limited to) buildings, structures, fences, lighting, vehicle movement areas and infrastructure services; and (e) the ability for the 'Ecological corridor' or 'Habitat linkage' to be enhanced to improve ecological connectivity. Note—A supporting Ecological Assessment Report prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports may be appropriate to demonstrate compliance with PO8.			

Table 8.2.4.3B - Setback and buffer distances from waterways

Stream order	Setback and buffer from waterways
1	10 metres from top of high bank
2-4	25 metres from top of high bank
5 or more	50 metres from top of high bank

Note—The steam order of a 'waterway' is to be determined on a case by case basis.

8.2.8 Hill and slope overlay code

8.2.8.1 Application

(1) This code applies to assessing development where:
- (a) land the subject of development is located within a 'Hill and slope area' identified on the **Hill and slope overlay maps (OM-008a-o)**; and
- (b) it is identified in the assessment benchmarks for assessable development and requirements for accepted development column of an assessment table in Part 5 of the planning scheme.

Note—Natural hazards are appropriately reflected in Overlay Maps 3, 6 and 8 and are required to be mapped by State Government in response to Hazard and Safety State Interests.

8.2.8.2 Purpose

(1) The purpose of the Hill and slope overlay code is to ensure the ongoing stability of land within a hill and slope area to prevent risk to people or property.

(2) The purpose of the code will be achieved through the following overall outcomes:
- (a) Development is located to avoid sloping land where practical; and
- (b) Development on sloping land maintains slope stability and does not increase the potential for erosion or landslide.

8.2.8.3 Criteria for assessment

Table 8.2.8.3 – Hill and slope overlay code - For assessable development

Performance outcomes	Acceptable outcomes	Complies	Comment
For assessable development			
Slope stability			

Performance outcomes	Acceptable outcomes	Complies	Comment
PO1 Where clearing of vegetation, building work or filling or excavation occurs on land within a 'Hill and slope area' identified on the **Hill and slope overlay maps (OM-008a-o)**, a geotechnical report is prepared in accordance with Planning Scheme Policy 5 - Preparation of Geotechnical Reports that demonstrates: (a) the long term stability of the development site; (b) development will not be adversely affected by landslide activity originating on sloping land above the development site; and (c) development will not adversely affect other property outside the development site through landslide activity or alterations to surface or groundwater.	**AO1** No acceptable outcome is provided.	n/a	The proposed clearance area is mapped as Hill and slope area, however the landowner has confirmed that the clearance area does not achieve a slope of 15% or greater, having a slope of just 9%. Accordingly, assessment against PO1 is not applicable.
PO2 Development is designed and located to ensure that the use can appropriately function in the 'Hill and slope area' identified on the **Hill and slope overlay maps (OM-008a-o)** having regard to: (a) the nature and scale of the proposed use; (b) the gradient of the land; (c) the extent of land disturbance proposed; (d) stormwater discharge and its potential for erosion.	**AO2.1** Development for a Child care centre or Educational establishment is not located on land in a 'Hill and slope area' identified on the **Hill and slope overlay maps (OM-008a-o).**	n/a	Not applicable.
	AO2.2 Development is not located on land with a gradient of greater than 25%.	✔	Slope is not greater than 25%.
	AO2.3 No lot less than 2,000m^2 is created in a 'Hill and slope area' identified on the **Hill and slope overlay maps (OM-008a-o).** Note – Where a minimum lot size of less than 2,000m^2 applies under the Reconfiguring a lot code, the lot size requirements of the Hill and slope overlay code prevail.	n/a	Not applicable.
Community infrastructure and essential services			

Performance outcomes	Acceptable outcomes	Complies	Comment
PO3 Community infrastructure and essential services located within a 'Hill and slope area' identified on the **Hill and slope overlay maps (OM-008a-o)** are able to function effectively during and immediately after landslide events.	**AO3** No acceptable outcome is provided.	n/a	Not applicable. Community infrastructure and essential services are not being proposed.

OFFICER'S RECOMMENDATION

That in relation to the following:

APPLICATION		PREMISES	
APPLICANT:	Y Lovarco	**ADDRESS:**	Kuranda Heights Road, Kuranda
DATE LODGED	18 September 2025	**RPD:**	Lot 2 on RP747074
TYPE OF APPROVAL	Development Permit		
PROPOSED DEVELOPMENT	Development Permit for Operational Works (Vegetation Clearing) assessable against the Mareeba Shire Council Planning Scheme 2016 - Environmental Significance Overlay and Hill and Slope Overlay		

and in accordance with the Planning Act 2016, as amended, the applicant be notified that the application for operational works is:

Approved subject to the following:

(A) APPROVED DEVELOPMENT: Development Permit for Operational Works (Vegetation Clearing) assessable against the Mareeba Shire Council Planning Scheme 2016 - Environmental Significance Overlay and Hill and Slope Overlay

(B) APPROVED PLANS:

Plan/Document Number	Plan/Document Title	Prepared by	Dated
Map 2	The AOI extent and proposed clearing extent on lot 2RP747074	EcoRex	1/07/2025
Report Number 06/07/2025	Matters of Environmental Significance – Lot 2RP747074, Kuranda	EcoRex	6/07/2025

(C) ASSESSMENT MANAGER'S CONDITIONS (COUNCIL)

1. The extent and location of operational works (clearing) carried out on the site, including the location of the access driveway must be generally in accordance with that shown on the approved plan/s.

2. Where possible, all vegetation cleared on-site must be mulched or wood chipped for reused as ground cover on-site to help stop the spread of invasive weeds in the disturbed area.

3. Prior to any clearing occurring on land with a slope exceeding 15%, a detailed erosion and sediment control plan must be submitted to Council for review and approval prior to clearing works commencing.

3. No further assessable clearing can be carried out on the site without prior Council approval.

(E) RELEVANT PERIOD

When approval lapses if development not started (s.85)

- Two (2) years (starting the day the approval takes effect).

(F) OTHER NECESSARY DEVELOPMENT PERMITS AND/OR COMPLIANCE PERMITS

- Nil

Date Prepared: *24 September 2025*

DECISION BY DELEGATE

DECISION

Having considered the Officers report detailed above, I approve, as delegate of Council, the application subject to the conditions listed in the report.

Dated the 24TH day of SEPTEMBER 2025

BRIAN MILLARD
COORDINATOR PLANNING & BUILDING

MAREEBA SHIRE
AS DELEGATE OF THE COUNCIL

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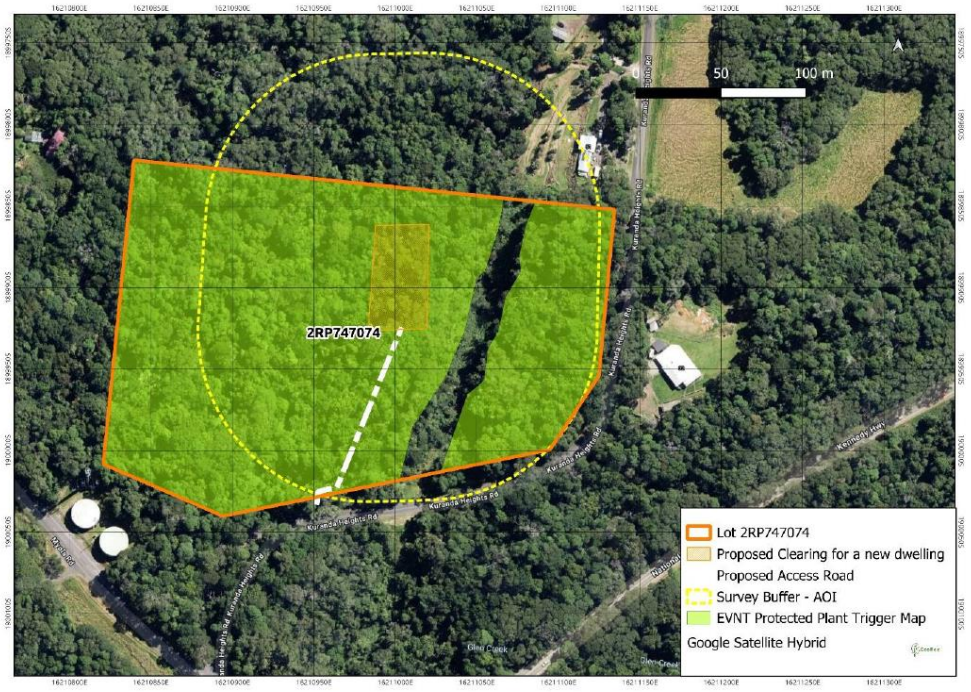

Map 2. The AOI extent and proposed clearing extent on lot 2RP747074.

ATTACHMENT 2

EcoRex Report Number 06/07/2025

Matters of Environmental Significance – Lot 2RP747074, Kuranda.

Prepared for Mr Yves Lovarco.

This report has been based upon the conditions encountered during the investigation and on the best available information. The accuracy of the advice provided in this report may be limited by reasonably unforeseeable errors or misgivings in searchers and information reviewed.

This report does not constitute legal advice and is open to third party and government official interpretation of legislation and may thus be modified and adapted to this regard.

Plant names follow those listed in the Census of the Queensland Flora. Non-native species are denoted by an asterisk (*) and are generally included under the comments field.

EcoRex, 174 Harvey Rd, Redlynch, 4870 Queensland
Mobile 0499784030 e-mail: johan@ecorex.com.au

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6 July 2025

Contents

1. Introduction

The owner of Lot 2RP747074 (1), has engaged EcoRex to undertake a survey and report on Matters of Environmental Significance (MES) that may constrain his proposed development application (DA) with the Mareeba Shire Council (MSC) to clear a section of the lot for a driveway and new dwelling – the Area of Interest (AOI) (Map 2).

The lot is located on the western outskirts of Kuranda, Queensland – on the corner of Myola Rd and Kuranda Height Road, Queensland.

1. The AOI in relation to local landmarks and the town of Kuranda.

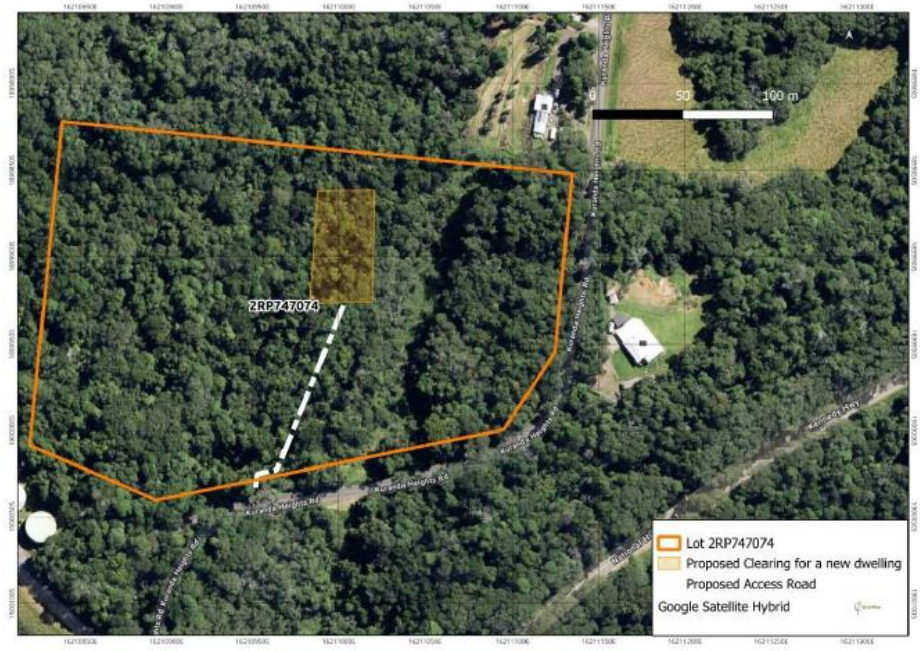
1.1. Background.

The aim of the proposed DA is to construct a house pad (±2,200 m^2) and entrance driveway. The development footprint is proposed to be limited to essential clearing for residential access and construction only as the owner wishes to retain the ambiance of a rainforest around the new dwelling.

The proposed works are intended to proceed as a single-stage development, with construction anticipated to commence in 2025.

1.2. Scope.

Investigate and report on all MES that could constrain the proposed DA with MSC and any other potential assessing authority.



Map 2. The AOI and relevant clearing proposals for the DA.

2. Methodology.

The survey methodology follows the accepted sequence of Desktop survey followed by a Site Investigations.

2.1. Desktop Review.

A review of databases and information relating to the following open sources of information (OSINF) list was undertaken as a desktop assessment. The results of these searches and reviews of information assist with gaining a better understanding of the ecology and broader landscape of the survey area.

The following databases and sources of information were reviewed:

- Regional Ecosystem mapping. The most recent version of the DES's remnant regional ecosystem (REDD) vegetation mapping (version 13.1, May 2024) was used to provide an indication of the status and location of remnant vegetation, of the project site.
- Wildlife Online database of flora. This database holds records of plants and animals that have been either sighted or collected within a given radius of the site (a search parameter can be prescribed which limits the search area to a given radius around a central point).
- Protected Matters database of Matters of National Environmental Significance (MNES). This database applies a range of bio-models to predict the presence of species of flora and fauna,

and other matters of NES as cited under the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act).

- HERBRECS database of plant records. This database provides confirmed records of plant collections made within a specified area, of which voucher specimens are held by the Environmental Protection Agency's (EPA) Queensland Herbarium. Data from this source provides useful information on the known location of rare and threatened species and expedites targeted surveys for such plants in the field as well as being a valuable source of what plant taxa are generally present on site or nearby.
- Atlas of Living Australia is a centralized searchable database for locally and regionally recorded fauna and flora.
- Literature review. A range of scientific papers and other literature were reviewed for each taxon potentially expected within the survey area.
- Far North Queensland Regional Organisation of Councils (FNQROC).

All database searches were undertaken using a standard 2km buffer surrounding the Project area, using the approximate central point of the site (Latitude: -16.82033° Longitude: 145.62568°) or Lot and Plan search (2RP747074).

Data for purely estuarine, oceanic, and pelagic marine taxa is not evaluated for this terrestrial site.

An initial likelihood assessment of species potentially occurring in the project area was conducted prior to this field assessment, based on the results of any initial field surveys, current state vegetation mapping and database records.

Likelihood assessments were undertaken using the known distribution and preferred habitat of the species and the identification of these habitat values from data base searches. The criteria used to assess the likelihood of threatened species occurring within the survey area is presented in Table 1 below.

Table 1. Assessment criteria used to evaluate taxa flagged as potentially occurring on site.

Likelihood	Definition
Known	Taxon was positively identified and recorded in the survey area during a previous field assessment; previous records of occurrence within the project area.
Likely	There are known records within the nearby surrounding area and suitable habitat exists on site.
Potentially	Known records occur within the surrounding area, but habitat in the survey area is sub-optimal, marginal, or degraded.
Unlikely	Habitat in the survey area might be suitable or marginal; however no known records of the taxon exist within the surrounding area.
Very Unlikely	Obligate habitat taxa with no suitable habitat on site
None	E.g., Obligate marine taxa not expected in a terrestrial environment

2.2 Flora and Vegetation Field Survey.

The AOI was visited on several occasions between 7 June and 27 June 2025. Visits were conducted for such purposes as is required for the survey of vegetation communities, and other mandatory survey requirements as mandated by the Nature Conservation Act (1992) and EPBC Act (1999).

2.2.1. Vegetation Communities.

Vegetation communities discernible in the field were surveyed using the methodology for recording quaternary type information as defined by the 'Methodology for Survey and Mapping of Regional Ecosystems and Vegetation Communities in Queensland' (Nelder et al. 2012).

2.2.2. Endangered, Vulnerable and Near Threatened (EVNT) Flora.

EVNT flora, if observed in the field was catalogued and positions recorded in the field within the AOI.

2.2.3. Survey Timing.

The survey timing was undertaken within the potential flowering/fruiting period for all conservation significant flora and other species. Flowering and fruiting data were acquired directly from The Atlas of Living Australia (ALA, 2025) or online herbarium record labels (HERBRECS).

2.2.4. Flora Species Identification.

All conservation significant taxa and other flora involved are very well known to the investigators as local flora and easily distinguishable and identifiable even when not in flower or fruiting. When in doubt, taxa are cross referenced and identified using standard keys used in professional identification and compared to electronic copies of the TYPE specimens and an EcoRex proprietary electronic field herbarium.

2.3. Fauna Field Survey Methodology.

The AOI comprises a well-structured remnant forest, contiguous with adjacent low-density residential areas, riparian zones, the town of Kuranda and native regrowth vegetation, forming a mosaic of transitional habitats between forested, residential and pasture environments.

Given the structural complexity and connectivity of these habitats, the site presents excellent potential for supporting diverse vertebrate fauna. However, a fauna trapping program was deemed unnecessary due to the non-intrusive nature of the investigation and the primary objective of habitat quality assessment. Data collection was performed exclusively through passive, observational, and low-impact methods consistent with the *Terrestrial Vertebrate Fauna Survey Guidelines for Queensland* (DES, 2018) and informed by the best practice methodologies outlined in Thompson and Thompson (2017).

These include:

- Bio acoustic survey.
- Visual diurnal surveys.
- Scat identification.

- Checking surrounding roads, paths, and tracks for incidental roadkill.

Physical observations on the presence of fauna were also done in conjunction with the Flora and, Vegetation Survey.

Specific fauna identified in the desk top review as potential Matters of National Environmental Significance (MNES) or Matters of State Environmental Significance (MSES), were targeted.

Remote surveillance survey sites were established, representing the confluence of waterways or well-developed remnant and regrowth vegetation or remnant riparian regions.

Each remote surveillance site consisting of:

- an ultrasonic (Anabat Swift, Titley Scientific) passive detector,
- an acoustic (Anabat Chorus, Titley Scientific) passive detector,
- Six random placed unbaited infrared wildlife cameras.

Bio acoustic survey data was analysed using Anabat Insight (Titley Scientific) and Kaleidoscope analyses software (Wildlife Acoustics) and compared to an EcoRex proprietary animal vocalization data base or for unidentified bird calls compared against a CornellLab Birdsong database.

3. Desktop Survey Results and Analysis.

3.1. AOI Site Description and Terrain Information.

The whole lot is approximately 4.9 hectares in size and nearly completely covered by remnant vegetation ubiquitous to the Kuranda area and Macalister Range.

3.1.2. Bioregion.

The AOI falls within the Wet Tropics Bioregion (Bioregion 7) and specifically the Macalister sub region.

3.1.3. Surface Geology, Soils and Land zone.

The AOI falls within Qld Land zone 11, which consists of metamorphosed rocks, forming folded ranges, hills and lowlands.

Metamorphosed rock layers can be interspersed with sedimentary un-metamorphosed layers including mudstones and Graywacke. Primarily lower Permian and older sedimentary formations which are generally moderately to strongly deformed. Includes low- to high-grade and contact metamorphics such as phyllites, slates, gneisses of indeterminate origin and serpentinite, and interbedded volcanics.

Soils are mainly shallow, gravelly Rudosols and Tenosols, with Sodosols and Chromosols on lower slopes and gently undulating areas. Soils are typically of a skeletal, very low, low to moderate fertility with a poor ground and shrub vegetation cover and very low carrying capacity after clearing.

These nutrient poor soils can be very evident in road cuttings and batters and contrast strongly against soils derived from intrusive geologies in the area and have very low herbivorous higher fauna carrying capacity due to the low nutrient levels.

3.1.4. Catchment Area.

The AOI falls within the catchment of the Barron River which terminates on the Coral Sea Coast just north of Cairns International Airport.

3.1.5. Terraine and Relief.

The AOI relief shows a moderately steep relief, especially towards creek lines. The colluvial movement of upper soils in the surrounding higher areas and downward nutrient flow being obvious along lower lying creek and water flow lines.

3.1.6. Climate.

Kuranda and the AOI, experiences only mild variations in temperature and its seasons consist of a dry season and a wet season. Temperatures seldom rise above 31°C or rarely drop below 20°C.

3.1.7. Local Government Area.

The AOI falls within the Local Government Area (LGA) of Mareeba Shire Regional Council (MSC).

3.2. Matters of State Environmental Significance (MSES).

All MSES potentially applicable to the AOI and a 2 km buffer extent is presented in Table 2.

Table 2. Summary of MSES present within the AOI.

Category	Area	Proportion
1a Protected Areas - estates	0 ha	0.00%
1b Protected Areas - nature refuges	0 ha	0.00%
1c Protected Areas - special wildlife reserves	0 ha	0.00%
2 State Marine Parks - highly protected zones	0 ha	0.00%
3 Fish habitat areas (A and B areas)	0 ha	0.00%
4 Strategic Environmental Areas (SEA)	0 ha	0.00%
5 High Ecological Significance wetlands on the Map of Queensland	0 ha	0.00%
6a High Ecological Value (HEV) wetlands	0 ha	0.00%
6b High Ecological Value (HEV) waterways	0 km	Not applicable
7a Threatened (endangered or vulnerable) wildlife	4.57 ha	93.30%
7b Special least concern animals	4.57 ha	93.30%
7c i Koala habitat area - core (SEQ)	0 ha	0.00%
7c ii Koala habitat area - locally refined (SEQ)	0 ha	0.00%
8a Regulated Vegetation - Endangered/Of concern in Category B (remnant)	0 ha	0.00%
8b Regulated Vegetation - Endangered/Of concern in Category C (regrowth)	0 ha	0.00%
8c Regulated Vegetation - Category R (GBR riverine regrowth)	0.06 ha	1.20%
8d Regulated Vegetation - Essential habitat	4.57 ha	93.30%
8f Regulated Vegetation - within 100m of a Vegetation Management Wetland	0 ha	0.00%

Category	Area	Proportion
9a Legally secured offset areas - offset register areas	0 ha	0.00%
9b Legally secured offset areas - vegetation offsets through a Property Map of Assessable Vegetation	0 ha	0.00%

3.2.1. State Biodiversity Corridors.

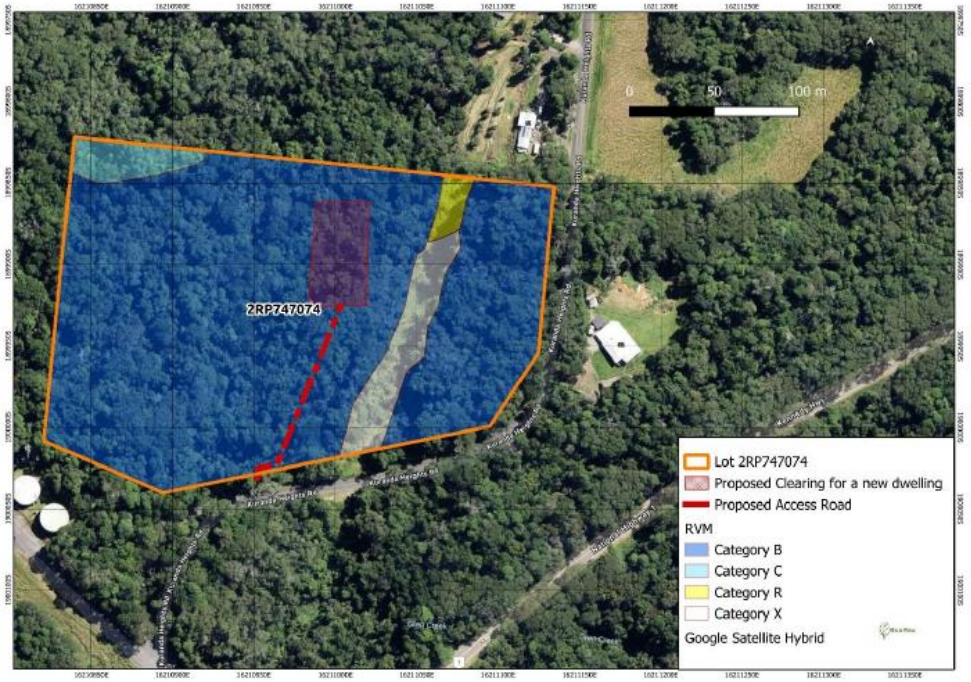
The AOI and whole of Kuranda township, also falls within a 3 km buffer of the centre line of a declared biodiversity corridor that extends along the Macalister Range.

3.2.2. Regulated Vegetation Mapping (RVM).

A summary of vegetation categories on the AOI as regulated by the Vegetation Management Act (1999) is listed in Table 3and depicted in Map 3

Table 3. Regulated Vegetation extent on the lot.

Vegetation category	Extent (ha)
Category B	4.43
Category C	0.14
Category R	0.06
Category X	0.27
Total	4.9



Map 3. RVM for the AOI.

The greater part of the property and proposed clearing areas fall within Category B vegetation.

3.2.3. Property Map of Assessable Vegetation (PMAV).

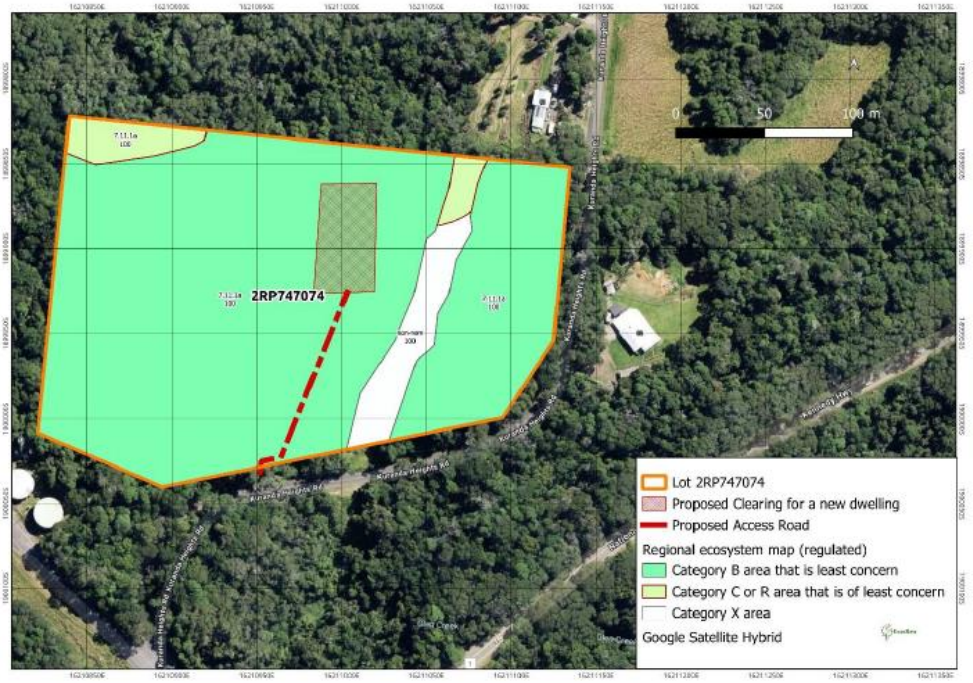
There is no Property Map of Assessable Vegetation (PMAV) on this property.

3.2.4. Regional Ecosystems (RE's).

A single RE is mapped for the AOI (Map 4) and is described in Table 4.

Table 4. RE's of the AOI.

Regional Ecosystem	VMA Status	Extent (Ha)	Short Description	Biodiversity Classification	% of AOI
7.11.1a	No concern at present	4.43	Simple to complex mesophyll to notophyll vine forest on moderately to poorly drained metamorphics (excluding amphibolites) of moderate fertility of the moist and wet lowlands, foothills, and uplands. Not a Wetland. 7.11.1a Mesophyll vine forest. Lowlands and foothills on metamorphics. Very wet and wet rainfall zones.	No Concern	90.34
Non-remnant	None	0.48	None	None	9.70



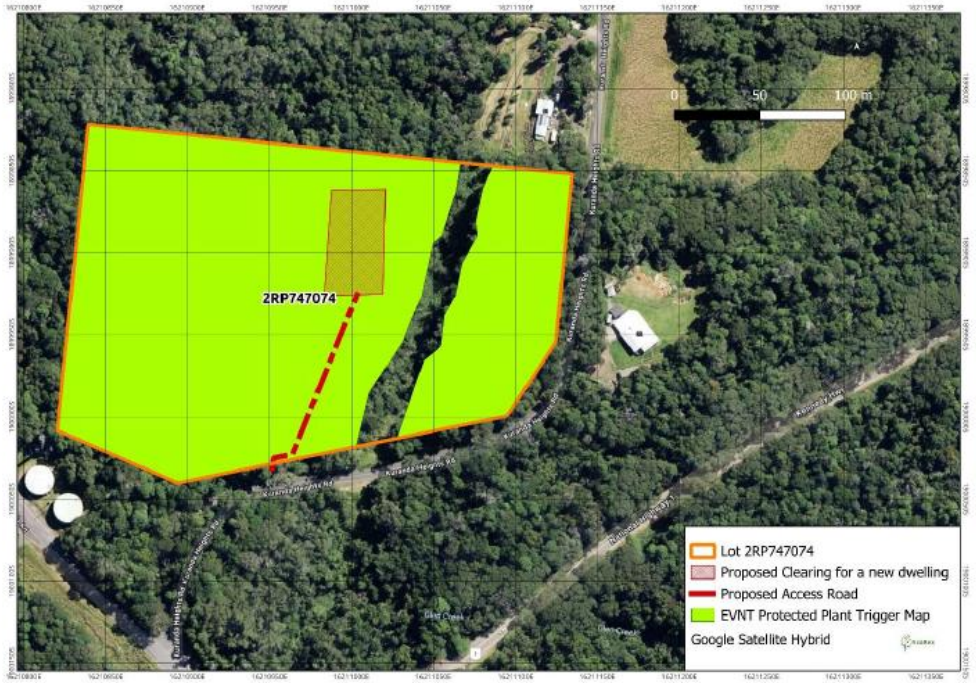
Map 4. Regional Ecosystem mapping for the AOI.

3.2.5. EVNT Protected Plant Trigger Mapping.

The AOI contains an area (Map 5) that mandates that a statutory protected plant survey for Endangered, Vulnerable and Near Threatened (EVNT) flora must be done under the jurisdiction of

the Department of Environment, Tourism, Science, Technology and Innovation (DETSI), by a suitably qualified individual as prescribed by the Queensland Nature Conservation Act (1992).

An EVNT Flora Survey conducted in the survey period, did not find any EVNT Flora within the AOI, and is reported on elsewhere for DETSI.



Map 5. EVNT Flora Survey Trigger Map for the AOI.

3.2.6. Endangered, Vulnerable and Near Threatened (EVNT) Flora.

Queensland NCA (1992) listed EVNT flora that could potentially occur within the AOI and designated Protected Flora trigger area in Map 5, is listed and assessed against the criteria of Table 1 in Table 5 below.

Flora Matters of State Environmental Significance as highlighted by MSES searches that may occur within the AOI.

Table 5. Potential EVNT Flora that may occur within the AOI.

Taxon	NCA 1992 Status	Potential for Occurrence
Archontophoenix myolensis	Endangered	Likely
Linospadix palmerianus	Near Threatened	Likely
Rhodamnia spongiosa	Critically Endangered	Likely
Rhodomyrtus pervagata	Endangered	Likely
Rhodomyrtus canescens	Endangered	Likely

Archontophoenix myolensis is a rare palm species endemic to the Kuranda region and is known from only a few verified collection and observation events. It has not been recorded within the Area of Interest (AOI), but a single specimen has been recorded approximately 2 km from the AOI, and the species has been documented in the broader locality across five distinct records between 1976 and 2010. These include multiple preserved specimens housed by the Australian Tropical Herbarium (ATH) in 1976, and additional records from the Queensland Herbarium (BRI) in 1993 and 1996, as well as photographic observations in 2010 (ALA, 2025). This species typically inhabits well-shaded, moist rainforest gullies and is often overlooked due to its morphological similarity to the more widespread *Archontophoenix alexandrae*.

Linospadix palmerianus, commonly known as the walking stick palm, is a small, clustering palm endemic to northeastern Queensland. It typically inhabits the understory of upland and mountain rainforests, thriving at elevations between 300 and 1,600 meters, particularly on granite and metamorphic substrates. While traditionally considered confined to the Mts. Bartle Frere and Bellenden-Ker ranges, recent data indicates a potential broader distribution.

Rhodamnia spongiosa is a small to medium-sized rainforest tree, typically attaining heights of 10–12 metres, and is known from three discrete populations in Queensland: south-eastern Queensland, the Atherton Tablelands, and Iron Range. This taxon is taxonomically incompletely known, with observable morphological variation between individuals from each of the three regions. Although multiple occurrence records exist across its range, the species is considered highly localised, with plants occurring only sporadically within suitable habitat. Growth rates are extremely slow, and recruitment is limited. Like many species within the Myrtaceae family, *Rhodamnia spongiosa* is highly susceptible to Myrtle Rust (*Austropuccinia psidii*). Modelling suggests that for several *Rhodamnia* taxa, the current individuals may represent the last of their species unless effective management actions are implemented.

Rhodomyrtus canescens is a small to medium-sized rainforest tree endemic to Queensland, typically reaching heights of 10–12 metres. It is known from three discrete populations: south-eastern Queensland, the Atherton Tablelands, and the Iron Range. While there are no documented records of this species in the immediate vicinity of Kuranda, multiple verified occurrences have been recorded in the Cairns region. This taxon is taxonomically incompletely known, with observable morphological variation between individuals from each of the three regions. Although multiple occurrence records exist across its range, the species is considered highly localised, with plants occurring only sporadically within suitable habitat. Growth rates are extremely slow, and recruitment is limited. Like many species within the Myrtaceae family, *Rhodomyrtus canescens* is highly susceptible to Myrtle Rust (*Austropuccinia psidii*).

Rhodomyrtus pervagata, commonly known as ironwood is a small to medium-sized rainforest tree endemic to northeastern Queensland. It typically grows in and on the margins of coastal and sub-coastal rainforests, from the Windsor Tablelands south to the Paluma Range National Park, preferring soils derived from granite or basalt. *Rhodomyrtus pervagata* has been recorded in various locations across its range. The species is known to favour disturbance and is a characteristic component of rainforest regrowth.

3.2.7. Conservation Significant Fauna.

Results from a data base search for potential EVNT Fauna that may occur within the AOI is assessed in Table 6 against the criteria in Table 1.

The nearby historical record of *Litoria dayi* is associated with a location described only as "20 miles west of Cairns." This imprecise spatial reference carries a low georeferencing confidence level, limiting its utility in accurately inferring current presence or habitat suitability within the Area of Interest (AOI).

Litoria myola, a cryptic and range-restricted species endemic to the Kuranda region, and has only been reliably recorded further north of the AOI, primarily within the Warril Creek and Myola localities. To date, there are no verified records of *L. myola* occurring outside this known range. Due to its morphological similarity to *Litoria serrata*, this species is susceptible to misidentification by non-specialists.

Erythrura trichroa (Blue-faced parrot finch), is a small finch associated with clearings in rainforests and marshy bogs with grassy edges in and around rainforests. It has also been recorded in gardens near such habitat. There are no recent verifiable records of this species from the Kuranda area.

Kuranda is well known for the presence of Cassowary and there is some potential for this species to occur or traverse the AOI. Cassowaries require very large home ranges and will persist in areas, such as Kuranda where locals feed the birds.

Table 6. Potential EVNT fauna that may occur within the AOI.

Taxon ID	Taxon	NCA 1992 Status	Potential for Occurrence in the AOI
579	*Litoria dayi*	Vulnerable	Unlikely
31630	*Litoria myola*	Critically Endangered	Unlikely
1087	*Casuarius casuarius*	Endangered	Potentially
1378	*Erythrura trichroa*	Near Threatened	Unlikely

3.2.8. Essential Habitat

Essential habitat mapping is indicated only for Cassowaries and covers the whole extent of Category B vegetation within the AOI.

3.3. Matters of National Environmental Significance.

The EPBC MNES search tool results are presented in Table 7 below.

Table 7. EPBC MNES search results.

Matters of National Environmental Significance	Presence nearby
Threatened Ecological Communities (TEC's)	1
Listed Threatened Species	35
Listed Migratory Species	3

3.3.1. Threatened Ecological Communities

A search for Threatened Ecological Communities as Vegetation MNES, brought to light the potential presence of two EPBC listed Threatened Ecological Communities (TEC's).

1. Broad leaf tea-tree (*Melaleuca viridiflora*) woodlands in high rainfall coastal north Queensland.
2. Lowland tropical rainforest of the Wet Tropics.

Known RE's from the AOI and comparative equivalents of mapped regional ecosystems to TEC's are shown in Table 8.

Table 8. Comparative equivalents of Threatened Ecological Communities.

Threatened Ecological Community	EPBC Status	Qld Regional Ecosystem Equivalents	Known Site Regional Ecosystems	Likelihood of Occurrence
Broad leaf tea-tree (*Melaleuca viridiflora*) woodlands in high rainfall coastal north Queensland	Endangered	7.3.8a-d., 7.5.4g., 8.3.2a., 8.5.2c., 8.5.6.	7.11.1a	None
Lowland tropical rainforest of the Wet Tropics	Endangered	Components relevant to Regional Ecosystems occurring on landform 11 RE7.11.1 (a, c); 7.11.2 (a); 7.11.23 (a, b); 7.11.3 (a) below 80 m ASL.	7.11.1a (above 80 m ASL)	None

Although the site is mapped as having a Regional Ecosystem associated with Lowland Tropical Rainforests of the Wet Tropics, the site lies at an altitude (320 m ASL to 380 m ASL) that is much higher than the required elevation that is below 80 m ASL to be classified as Lowlands. Site altitude thus precludes this TEC to be present.

None of the listed TEC's occur on site.

3.3.2. EPBC Listed Threatened Flora.

EPBC listed flora highlighted from the EPBC search tool are listed in Table 9 and analysed against the criteria in Table 1.

Table 9. Flora Matters of Environmental Significance as highlighted by the EPBC search tool for the AOI.

Taxon	EPBC Status	Habitat	Flowering/Fruiting time	Likelihood of Occurrence
Alloxylon flammeum	Vulnerable	Forest	February onwards	Unlikely
Archontophoenix myolensis	Endangered	Forest Ravines	May onwards	Likely
Canarium acutifolium	Vulnerable	Forest	February onwards	Unlikely
Coleus gratus	Vulnerable	Forest	All year	Unlikely

Taxon	EPBC Status	Habitat	Flowering/Fruiting time	Likelihood of Occurrence
Diplazium cordifolium	Vulnerable	Rain Forest	Wet season	Unlikely
Diplazium pallidum	Endangered	Rain Forest	Wet season	Unlikely
Leichhardtia araujacea	Critically Endangered	Forest/Woodland	January onwards	Unlikely
Myrmecodia beccarii	Vulnerable	Coastal Forest	Year round (peak in October)	Very Unlikely
Phaius pictus	Vulnerable	Swamps	February onwards	Very Unlikely
Phalaenopsis rosenstromii	Endangered	Gallery Forest	February onwards	Unlikely
Phlegmariurus filliformis	Endangered	Forest	February onwards	Unlikely
Polyphlebium squarrosus	Critically Endangered	Forest	February onwards	Unlikely
Phlegmariurus tetrastichoides	Vulnerable	Forest	February onwards	Unlikely
Polyphlebium endlicherianum	Endangered	Rock pavements	February onwards	Unlikely
Vappodes lithocola	Endangered	Rock pavements	February onwards	Unlikely
Zeuxine polygonoides	Vulnerable	Forest	February Onwards	Unlikely

Except for *Archontophoenix myolensis,* already discussed under MSES, all these taxa can be excluded based on their very narrow habitat requirements.

3.3.3. EPBC Listed Threatened Fauna.

A list of fauna considered for presence within the AOI is provided in Table 10. Most of the taxa are unlikely to occur due to a lack of suitable habitat, or the site not being core habitat. Some of the records are old and inaccurate and just state Kuranda and may be from further north, south or in the hinterland. The most likely taxa to occur on Site are listed with an asterisk.

Table 10. Fauna of National Significance which are considered for potential occurrence on Site.

Taxon	EPBC Status	Likelihood of Occurrence
*Casuarius casuarius**	Endangered	Potentially
Calidris canutus	Vulnerable	Very Unlikely
Calidris ferruginea	Critically Endangered	Very Unlikely
Dasyurus hallucatus	Endangered	Potentially
*Dasyurus maculatus gracilis**	Endangered	Potentially
Hipposideros semoni	Vulnerable	Very Unlikely
Macroderma gigas	Vulnerable	Unlikely
Mesembriomys gouldii rattoides	Vulnerable	Very Unlikely
Petauroides minor	Vulnerable	Unlikely
Phascolarctos cinereus	Endangered	Very Unlikely
Pteropus conspicillatus	Endangered	Very Unlikely
Rhinolophus robertsi	Vulnerable	Potentially
Saccolaimus saccolaimus nudicluniatus	Vulnerable	Potentially
Litoria nyakalensis	Critically Endangered	Unlikely

Taxon	EPBC Status	Likelihood of Occurrence
Litoria myola	Critically Endangered	Unlikely
Litoria dayi	Vulnerable	Unlikely
Melanotaenia eachamensis	Endangered	Very Unlikely
Tyto novaehollandiae kimberli	Vulnerable	Very Unlikely
Varanus mertensi	Endangered	Very Unlikely

3.3.4. EPBC Listed Migratory Species.

Non marine migratory fauna species considered for occurrence within the AOI are listed in Table 11.

None of the fauna species are considered to have any likelihood of occurring within the AOI due to narrow habitat requirements for mostly expansive water nearby and shallow flats for wading.

Table 11. Listed migratory Fauna of National Significance which were considered for potential occurrence within the AOI.

Taxon	EPBC Status	Likelihood of Occurrence
Cuculus optatus	Migratory	Unlikely
Hirundapus caudacutus	Vulnerable Migratory	Unlikely
Hirundo rustica	Migratory	Unlikely
Motacilla flava	Migratory	Unlikely
Actitis hypoleucos	Migratory	Unlikely
Calidris acuminata	Vulnerable Migratory	Unlikely
Calidris canutus	Vulnerable Migratory	Unlikely
Calidris ferruginea	Critically Endangered Migratory	Unlikely
Calidris melanotus	Migratory	Unlikely
Charadrius leschenaultii	Vulnerable Migratory	Very Unlikely
Gallinago harwickii	Vulnerable Migratory	Unlikely
Numenius madagascariensis	Critically Endangered Migratory	Unlikely
Pandion haliaetus	Migratory	Unlikely
Tringa nebularia	Endangered Migratory	Unlikely

3.4. Matters of Local Environmental Significance.

Most of the Matters of Local Environmental Significance have already been dealt with in the preceding sections as MSES and MNES.

The AOI is located in the Far North Queensland Regional Landscape and Rural Residential Area and is zoned Rural Residential under the Mareeba Shire Council Planning Scheme.

This zoning permits dwelling houses as accepted or code assessable development, provided that key planning criteria such as setbacks, vegetation retention, bushfire hazard mitigation, and slope stability are met.

Accordingly, the proposed development within the AOI aligns with the intent of the Planning Scheme and is not considered inconsistent with the zoning provisions, provided that environmental considerations are addressed during vegetation clearing and the siting of the building pad.

4. Field Survey Results.

4.1. Field Survey Synopsis.

The field survey found:

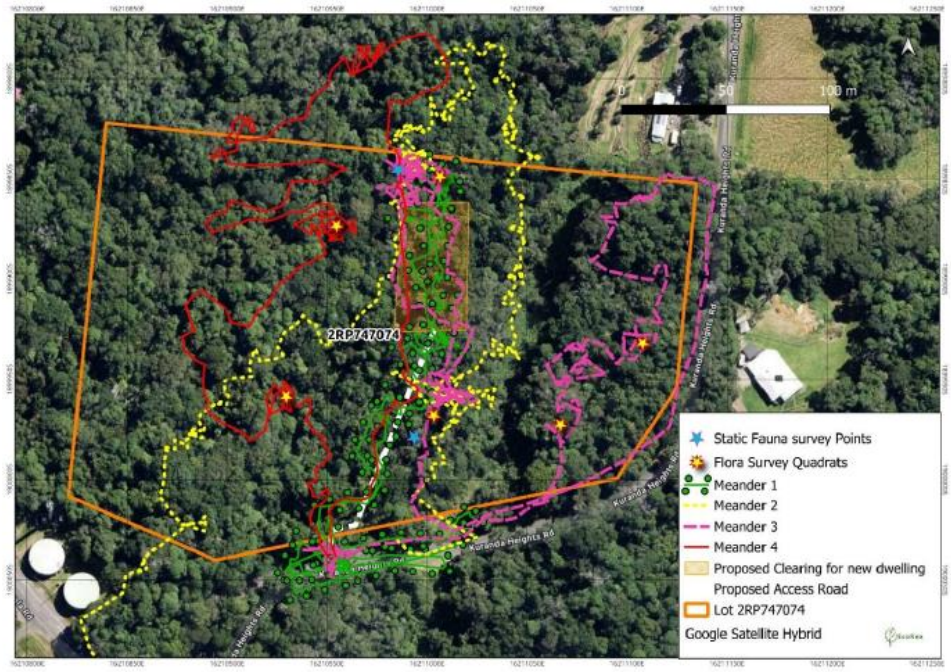
- No incongruence with the existing vegetation mapping for the AOI.
- No incongruence with the mapped regional ecosystems for the AOI.
- No EVNT flora within a 100-meter buffer zone of the proposed clearing areas.
- No EVNT fauna present within the survey period and no evidence for resident EVNT fauna was found within the AOI.

4.2. Survey Effort.

The combined survey effort within the Area of Interest (AOI) is illustrated in Table 12and Map 6

Table 12. Survey effort.

Survey Type	Number	Time
EVNT survey meanders	Four	Four Days
Camera Traps	Eight	Eight Days Seven Nights
Ultrasonic Bat Detectors	Two	Eight Days Seven Nights
Bio acoustic Monitors	Two	Eight Days Seven Nights



Map 6. Combined survey extent.

Targeted flora and fauna surveys were undertaken between 7 June and 27 June 2025, with a focus on detecting EVNT species.

4.3. Endangered Vulnerable and Near Threatened (EVNT) Flora.

The survey did not find any EVNT flora.

4.4. Vegetation.

The access road and proposed new dwelling site falls completely within the VMA mapped Category B vegetation and an example of the vegetation structure and general dominant species composition is given in Table 13.

4.5. Fauna.

4.5.1. Endangered Vulnerable and Near Threatened Fauna.

No presence of EVNT fauna was found on site.

4.5.2. Fauna Breeding Places.

No evidence of fauna breeding places was found within the proposed clearing area or proposed entrance road route. No other fauna breeding places were observed within the AOI.

5. Discussion.

5.1. Flora and Vegetation.

The vegetation of the AOI and lot is as described by the state vegetation mapping and consists of typical vegetation and flora of the Macalister Range and aligned to that of RE 7.11.1 and is characterised by various non characterizing Notophyll trees of no particular dominance and high variety of lianas, including *Calamus* species, *Smilax* sp., *Austrosteensia* sp., *Hibbertia scandens*, *Tetracera* sp. and the ubiquitous *Flagellaria indica.*

5.2. Fauna.

Fauna is typical of the surrounding forest fauna and common species observed and recorded included the Red-legged Pademelon (*Thylogale stigmatica*), Giant White-tailed Rat (*Uromys caudimaculatus*), common birds including Orange-footed Scrubfowl *(Megapodius reinwardt*), Emerald Dove (*Chalcophaps indica*) and Victoria's Rifle Bird (*Ptiloris victoriae*).

No reptiles or amphibians were physically recorded except for audible calls along the creek that belong to the Mottled Barred Frog (*Mixophyes coggeri*) a common species around Kuranda creeks.

Table 13. Example of vegetation observed within the AOI.

Representing Flora Quadrats (Map 6**Error! Reference source not found.**):			
Structural Information			
Tier	Species Composition	Height (m)	Cover %
T1	*Alstonia scholaris, Elaeocarpus bancroftii, Endiandra palmerstoni, Syzygium kuranda, Castanospermum australe*	15-25	60-80
T2	*Guoia lassioneura, Polyscias australiana, Melicope elleryana, Syzygium cryptophlebium, Acacia cinncinata*	6-15	50-60
Lianas	*Calamus australis, Calamus motti, Calamus radicalis, Tetracera nordtiana, Austrosteensia stipularis*		
S1	*Benstonia monticola, Alstonia muelleriana, Pittosporum rubignosum, Cryptocarya mackinoniana,*	3-6	60-80
S2	*Benstonia monticola, Gardenia ovularis, Gahnia sieberiana, Linospadix microcaryus*	1-3	40-50
G1	*Oplismenus compositus, Taenitis pinnata, Balanophora fungosa, Apostasia wallichii, Leptaspis banksii*	0.5-1	10-15

6. Development Impact Assessment.

The proposed clearing of Category B vegetation will trigger an assessment of the development by the State Assessment and Referral Agency (SARA).

The proposed development will result in the clearing of a small area of remnant vegetation within the AOI, which is currently classified as of no concern at present by the VMA (1999) and a biodiversity classification of no concern at present

There are no Fauna or Flora species present that are classified as Endangered, Vulnerable or Near Threatened.

The development footprint does not directly encroach on critical riparian zones or wetlands.

7. Conclusion.

The field survey results indicate that the proposed development will not significantly impact on any MNES or MSES within the AOI.

7.1. Rural Residential Zoning.

- Under Mareeba Shire Council's scheme, a dwelling house is typically accepted development in the Rural Residential Zone, provided it complies with all applicable codes.
- These may include:
    - Bushfire hazard overlays,
    - Effluent disposal requirements,
    - Setbacks and building envelopes.

The zoning does not override state vegetation regulations.

7.2. Clearing of Category B Vegetation.

From – VMA, Schedule 21 – Exempt Clearing Work, *Part 2, Table 1*:

- Item 1 allows clearing on freehold land for necessary built infrastructure, including a dwelling house, where:
    - The clearing is reasonably necessary,
    - The total area cleared is less than 2 hectares, and
    - It's not in a mapped area of significant concern (e.g., koala, wetland, reef catchment).

It thus appears that bar any unforeseen other rulings, the development proposal should be acceptable within the limits provided to EcoRex by the owner.

8. Recommendations.

Based on the survey results, a recommendation to mitigate potential environmental impacts would be to limit vegetation clearing to the essential area required for the development footprint.

8.1. Disposal of cleared vegetation.

Cleared vegetation should preferably be disposed of by tub grinding where practically possible and the resultant mulch used on site to cover exposed earth around the building pad to prevent erosion and weed growth.

Burning of cleared trees should be limited to areas where it is not practically possible to use a tub grinder or similar and ashes returned to the environment when cold or safe to do so. These actions will limit further loss of nutrients from the surrounding topsoil.

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