PREPARED FOR:

ARCO TERRA PTY LTD

7 AUGUST 2026

NG REF: 3126-BAHRS SCRUB

ECOLOGY ASSESSMENT REPORT

RECONFIGURATION OF 381 WURAGA ROAD, BAHRS SCRUB, QLD (LOT 3 ON RP158376)



NEWGROUND

NEW GROUND | Gold Coast Evandale Place, Level 2, 142 Bundall Rd, Bundall Qld | Brisbane 84a Brunswick St, Fortitude Valley Qld | Mail Po Box 8857 Gold Coast Mc Qld 9726

TELEPHONE 07 5530 7283 **ABN** 31 146 671 481 NEWGROUND.COM.AU

REPORT TITLE	ECOLOGY ASSESSMENT REPORT
PROJECT	RECONFIGURATION OF 381 WURAGA ROAD, BAHRS SCRUB, QLD (LOT 3 ON RP158376)
CLIENT	ARCO TERRA PTY LTD
REPORT NO.	3126-BAHRS SCRUB-R-01-EAR

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The preparation of this report has been in accordance with the project brief provided by the client and has relied upon the information, data and results provided or collected from the sources and under the conditions outlined in the report.

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APPROVED BY	NELSON WILLS
POSITION	DIRECTOR
SIGNED	
DATE	7 AUGUST 2026

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Abbreviations

AHD	Australian height datum
API	Aerial photography interpretation
BoM	Bureau of Meteorology
CEEVNT	Critically Endangered, Endangered, Vulnerable, and Near Threatened as listed under the *NC Reg*
DCCEEW	Department of Climate Change, Energy, the Environment and Water (Commonwealth)
DETSI	Department of Environment, Tourism, Science and Innovation (Qld)
e.g.	For example
EH	Essential Habitat as defined by the VM Act
EP Act	*Environmental Protection Act 1994 (Qld)*
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)*
Etc.	etcetera
ha	Hectares
i.e.	That is
Koala Plan	*Nature Conservation (Koala) Conservation Plan 2017*
m	Metres
MLES	Matters of Local Environmental Significance
mm	Millimetres
MNES	Matters of National Environmental Significance
MSES	Matters of State Environmental Significance
NC (Animals) Reg	*Nature Conservation (Animals) Regulation 2020 (Qld)*
NC (Plants) Reg	*Nature Conservation (Plants) Regulation 2020 (Qld)*
NC Act	*Nature Conservation Act 1992 (Qld)*
Planning Act	*Planning Act 2016 (Qld)*
Planning Reg	*Planning Regulation 2017 (Qld)*
Planning Scheme	*Logan Planning Scheme 2015*
PMST	Protected Matters Search Tool
RE	Regional Ecosystem
TEC	Threatened Ecological Community
VM Act	*Vegetation Management Act 1999 (Qld)*
WoNS	Weed of National Significance

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Chapter 1: INTRODUCTION

1.1 Background

New Ground Environmental Pty Ltd ('New Ground') was engaged by Arco Terra Pty Ltd ('the client') to undertake an ecological site assessment concerning the proposed development of Lot 3 on RP158376 ('the site'). The site is 3.009 ha and is located at 381 Wuraga Road, Bahrs Scrub, Qld in the Logan City Council area (**APPENDIX A**).

The scope of works presented by this study has been prepared to address the ecological assessment and reporting requirements of the *Logan Planning Scheme 2015* and relevant State and Federal Government ecological planning policy. The key focus of the study was to identify areas of ecological significance within the site for the consideration of the client and Council in development design and assessment.

The proposed plan of development considered in this report is presented in **APPENDIX B**. The proposed development is reconfiguration of the site for urban purposes including the provision of an ecological corridor/retention area at the south (refer to **APPENDIX B**).

1.2 Objectives of the Study

The objectives of this report are to:

- Present the findings from a desktop and literature review of the ecological values of the site
- Assess and ground truth the ecological values pertinent to the site; in particular, the flora, fauna and vegetation communities found within the site with particular emphasis on prescribed matters that are of local, state or national environmental significance;
- Discuss the presence or expected presence of native flora and fauna species that are regulated under local, state and Commonwealth legislation;
- Describe and map vegetation communities and ecological features within the site that are regulated under relevant local, state and Commonwealth legislation; and
- Provide considerations concerning ecological values within the site to inform detailed project design works.

1.3 Outline of the Report

This report has been prepared in a format that is generally consistent with the relevant requirements of the *Logan Planning Scheme 2015* (Planning Scheme) (Logan City Council), *Vegetation Management Act 1999* (VMA), *Nature Conservation Act 1992* (NC Act), *Planning Act 2016* (Planning Act) and the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). This report is structured as follows:

- **Chapter 1:** Provides an introduction to the project, the subject study and the report;
- **Chapter 2:** Discusses the site locality, climate, bioregion, geology and topography of the site;
- **Chapter 3:** Outlines the methodology used for the desktop review and field study and discusses the limitations associated with this study;
- **Chapter 4:** Presents and discusses the results of the desktop review and the field survey;
- **Chapter 5:** Provides an overview of ecological impacts associated with the proposed development; and
- **Chapter 6:** Provides a summary conclusion and lists recommended actions in light of the findings of the subject study.

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Chapter 2: SITE CONTEXT

TABLE 2.1 below provides broad context around the subject site, identified as Lot 3 on RP158376.

TABLE 2.1: SITE CONTEXT

CONTEXT	DESCRIPTION
Bioregion	The site is located within the Southeast Queensland (IBRA) and is within the Burringbar - Conondale Ranges (Queensland Government, 2026)
Pre-development land use	An existing dwelling with associated ancillary structures is located in the south-eastern corner of the site, with the remainder of the site comprising native woody vegetation.
Soils and geology	Site elevation ranges from 36 to 68 AHD. The site has a west to southwestern aspect. (Queensland Government, 2026). According to the Surface geology (1:100,000) data layer of Queensland Globe (Queensland Government, 2026), the geology of the entire site is described as: N*eranleigh-Fernvale beds of the Devonian-Carboniferous; Predominately sedimentary rock characterised as – Mudstone, shale, arenite, chert, jasper, basic metavolcanic, pillow lava, conglomerate.* Based on the 'Pre-clear regional ecosystems' data layer of Queensland Globe (Queensland Government, 2026), the entire site is within Land Zone 11. Land zone 11 is described as *Metamorphosed rocks, forming ranges, hills and lowlands* (Wilson and Taylor, 2012).

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Chapter 3: METHODOLOGY

3.1 Desktop and Literature Review

TABLE 3.1 below presents the sources utilised during the environmental planning desktop and literature review. Data searches were conducted using a 5 km radial buffer around the central coordinates of Lot 3 on RP158376.

TABLE 3.1: DESKTOP AND LITERATURE REVIEW SOURCES

DATABASE/POLICY/LEGISLATION/GUIDELINE
LOCAL GOVERNMENT (*Logan Planning Scheme 2015*)
Zone maps: Emerging Community
Overlay maps: Zone and Precinct, Biodiversity, Bushfire Hazard, Wetlands and Waterways, Draft Logan Plan (Zone and Precinct, Bushfire, Environmental Significance, Waterway Corridors and Wetlands)
STATE GOVERNMENT
SPP Interactive Mapping System (DA)
WildNet (DETSI, 2026)
Vegetation management regional ecosystem and remnant map (DNRM, 2026)
Koala Plan Mapping (DETSI, 2024b)
Protected Plants Flora Survey Trigger Map (DETSI, 2023)
Queensland Waterways for Waterway Barrier Works (DPI, 2025)
FEDERAL GOVERNMENT
EPBC Act Protected Matters Search Tool (DCCEEW, 2026)

3.2 Field Assessment

Diurnal field investigations were undertaken by New Ground on 10 February 2026 using the methodology detailed in the following sections. The location of formal survey points undertaken during the field surveys is demonstrated in **APPENDIX A**. Formal surveys were supplemented with opportunistic observations and random meanders.

3.2.1 Vegetation Community Surveys

The vegetation community survey was conducted in accordance with industry best practice standards. It employed a methodology generally consistent with the established format detailed within *Methodology for Survey and Mapping of Regional Ecosystems and Vegetation Communities in Queensland, Version 7* (Neldner et al., 2023). The survey design emphasised the collection of vegetation community data using tertiary surveys.

Site selection was determined in the field based on perceived aerial photography patterns in vegetation composition and in response to variation in vegetation communities encountered during site traverses. Vegetation community data was collected from four (4) tertiary sites during the survey. At the survey site, data was collected from a 25-50 m radial plot (**APPENDIX A**). In general accordance with Neldner et al. (2022), at a minimum, the following data was collected from each survey site:

- Date and time;
- Location;
- In-field determination of the remnant status of the vegetation;
- Structural formation class using the modified Specht (1970) classification system (Neldner et al., 2023);
- Floristic composition and relative abundance data for the predominant species in the canopy, shrub and ground layers (tertiary sites).

3.2.2 Formal Fauna Habitat Assessment

Fauna habitat assessments were undertaken in conjunction with the Koala Spot Assessment Technique survey described in **Section 3.2.5**. Assessments were completed along a 50 x 10 m transect intersecting the KSAT plot.

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Three (3) formal habitat assessments were undertaken within the site (**APPENDIX A**). At a minimum, the following data was collected from each fauna habitat assessment site:

- Groundcover (estimated % cover);
- Leaf litter (estimated % cover);
- Crevices and ledges (abundance);
- Overhangs and caves (abundance);
- Nests (abundance);
- Small logs (abundance);
- Large logs (abundance);
- Logs with hollows (presence & size);
- Termite mounds (abundance);
- Mistletoe (abundance);
- Soil cracks (presence);
- Water features (type & presence); and
- Other (stags, senescing trees, tree hollows, soil features, etc.) (type & number).

3.2.3 Ecological Feature Surveys

Ecological features were recorded where encountered during the survey. We refer to habitat associations in this report as potential fauna habitat or breeding places and signs of fauna presence (tracks, scats and scratches). When habitat associations were encountered, a GPS point was taken to record the location and a description of the habitat was recorded. Fauna habitat types and signs that were recorded included:

- Scratch marks;
- Scats;
- Tracks;
- Orts;
- Nests;
- Aquatic features;
- Hollow logs and size of hollows (small: < 5 cm diameter; medium: 5-1 cm diameter; large: >10 cm diameter);
- Log piles; and
- Hollow-bearing trees/stags and size of hollows (small: < 5 cm diameter; medium: 5-1 cm diameter; large: >10 cm diameter).
- Schedule 1.2 of the Planning Scheme defines a Native Habitat Tree as '*A tree, whether dead or alive, that is indigenous to Australia:*
  - *with a trunk circumference of 220 cm or more measured at 1.3 metres above ground level; or*
  - *that contains a hollow.*'

3.2.4 Targeted Threatened Flora and Fauna Surveys

Targeted flora and fauna searches were undertaken for threatened species identified through the desktop review process. Searches were undertaken within areas that contain likely habitats for the target species. Survey effort was apportioned between the following survey techniques at the discretion of the ecologist:

- Diurnal active search, comprising investigation of potential habitat features (e.g. leaf litter, logs, rocks, peeling bark) and scanning vegetation canopies for fauna and inferential evidence of fauna presence (e.g. scratches, scats, tracks, diggings, shed skins, orts, nests, stick or mud nests and dreys); and
- Diurnal bird survey, with species being identified through either visual observation and/or call recognition.

Target species included:

- South-eastern Glossy Black-Cockatoo (*Calyptorhynchus lathami lathami*)
- Powerful Owl (*Ninox strenua*)
- Koala (*Phascolarctos cinereus*)
- Grey-headed Flying-fox (*Pteropus poliocephalus*)

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3.2.5 Koala Surveys

Koala Spot Assessment Technique (KSAT)

Koala scat searches were undertaken per the Koala Spot Assessment Technique (KSAT) adopted by Phillips and Callaghan (2011). This methodology involves searching the basal circumference of suitable Koala food trees for evidence of utilisation by the Koala in the form of koala scats. Within each formal KSAT plot, a 'centre tree' (a tree of any species with >10 cm DBH) was chosen, and along with this tree, an additional 29 trees (of any species >10 cm DBH) within a radial circumference of the centre tree were searched for koala scats. A total of 30 trees were, therefore, searched within each formal KSAT plot, and each tree was searched for 2 (two) person minutes or until a koala scat was found, whichever came first. The diameter of the searched area was variable, ranging between approximately 30m – 100m from the centre tree, depending upon the tree species and age classes (DBH). Three (3) formal KSAT surveys were undertaken within the site (**APPENDIX A**).

3.2.6 Disturbance Surveys

Formal disturbance data was recorded within a 50 x 50 m plot at each formal KSAT survey site and opportunistically during site traverses, at the discretion of the ecologist (**APPENDIX A**). At each disturbance survey site, frequency and severity were assessed and recorded for the following disturbance categories:

- Blade ploughing;
- Erosion;
- Fence lines;
- Fire breaks;
- Flooding;
- Grazing;
- Logging;
- Mechanical clearing;
- Prescribed burning;
- Thinning;
- Weed invasion;
- Clearing;
- Barriers/Fragmentation;
- Wildfire;
- Wind storm; and
- Vehicular track.

3.2.7 Opportunistic Flora and Fauna Searches

Site traverses were conducted on foot to maximise data collection across the range of vegetation and habitats. This facilitated a higher sampling resolution for the field survey and enabled greater site coverage by field ecologists, which increased the likelihood of detecting threatened species and potentially threatened species habitats.

3.2.8 Data Collection Protocol

All positional, quantitative, qualitative and photographic data was recorded using data capture software using proprietary electronic forms to record specific ecological data. Spatial accuracy of ± 3 m is generally achieved using the data capture process described.

3.2.9 Survey Limitations

Whilst a range of variation has been assessed throughout all vegetation communities encountered on-site, each community has not been investigated at a fine level of detail. For example, cryptic flora species that occur within the region that may only be detectable during their flowering period may not have been observed during the current survey period. Consequently, whilst a diversity of flora species has been recorded, the inventory of flora species compiled from the survey should not be considered an exhaustive list of flora species within the site.

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It should also be noted that the fauna component of the field survey was a rapid assessment that provides a 'snap-shot' of the species present and detectable at the site at the time of the survey. The ecological survey was undertaken in Summer 2026 and therefore does not account for the full range of seasonal habitat utilisation by, or detectability of, every fauna species that may utilise the site, nor does it account for the influence of weather during the preceding seasons or years upon the presence or detectability of fauna during the survey. Aquatic trapping surveys did not form part of the survey scope.

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Chapter 4: RESULTS

4.1 Desktop and Literature Review – Local Government Mechanisms

TABLE 4.1 below presents the results of the desktop review of the provisions of the *Logan Planning Scheme 2015* as they relate to the ecological planning context of the site and the proposed development (Matters of Local Environmental Significance) (MLES)).

TABLE 4.1: DESKTOP REVIEW OF MLES

CITY PLAN OVERLAY	DESIGNATION/ CLASSIFICATION	COMMENTS
Zone	The site is entirely within the Emerging Community Zone (**APPENDIX C**).	This zone is conducive to urban development of the site and is not principally focused on biodiversity/environmental purposes. As per Section 6.2.3.2 of the *Planning Scheme*, the purpose of the Emerging community zone is to: *a) identify land that is intended for an urban purpose in the future; and* *b) protect land that is identified for an urban purpose in the future from incompatible uses; and* c) *provide for the timely conversion of non-urban land to land for urban purposes.*
Biodiversity Areas: OM-02.01 Vegetation management areas	The site is predominantly mapped as a Secondary Vegetation Management Area (SVMA), with a small area of approximately 20 m^2 at the southern tip mapped as a Primary Vegetation Management Area (PVMA) (**APPENDIX C**). The vegetation management area linework is generally consistent with the site's regulated vegetation management mapping designation (refer to **Table 4.2**).	The purpose of Vegetation Management Areas is to ensure that '*Development protects and enhances native vegetation in the primary vegetation management area; and native trees and native habitat trees in the secondary vegetation management area*'. The proposed development requires an assessable clearing footprint of 19,222 m^2 within areas mapped as SVMA but does not encroach into any areas mapped as PVMA. Of this total, 1,709 m^2 is within the proposed APZ which is to be thinned (not clear-felled). The footprint of the existing dwelling on site (plus a 10 m buffer) along with a 3m fire control line along the site boundary is excluded from the total clearing extent to arrive at an assessable clearing footprint. Refer to **Section 5** for further discussion around development impacts on this theme. Accordingly, the proposed development triggers an assessment against the Biodiversity Areas Overlay Code under Section 8.2.2 of the *Planning Scheme*. Refer to **APPENDIX C** for an assessment of the proposed development against the Biodiversity Areas Overlay Code.
Biodiversity Areas: OM-02.02 Biodiversity corridors	The southern 5,500 m^2 of the site is mapped as Biodiversity Corridor. The site is not mapped as within a Koala Corridor or an Environmental management and conservation area (**APPENDIX C**).	The proposed development requires an assessable clearing footprint of 1,803 m^2 into areas mapped as Biodiversity Corridor. This total includes the proposed APZ which is to be thinned (not clear-felled) and excludes the existing dwelling on site (plus a 10 m buffer) along with a 3 m wide fire control line from the site boundary. The balance of the designated corridor is retained by the proposed development. Refer to **Section 5** for further discussion around development impacts on this theme. Refer to **APPENDIX C** for an assessment of the proposed development against the Biodiversity Areas Overlay Code.
Biodiversity Areas: OM-02.03 Locally significant vegetation types	There are no locally significant vegetation types mapped onsite (**APPENDIX C**).	Accordingly, the proposed development is not assessable against the benchmarks relating to locally significant vegetation types under the Biodiversity Areas Overlay Code.
Biodiversity Areas: OM-02.04 Matters of state and local significance	A Matters of local and state environmental significance line associated with a drainage feature extends approximately 30 m into the site from the western boundary. The site is predominantly mapped as Matters of local and state environmental significance, with a 390 m^2 area in the western portion mapped as only Matters of local environmental significance (**APPENDIX C**).	The proposed development requires an assessable clearing footprint of 18,784 m^2 into areas mapped as both Matters of Local and State Environmental Significance. This total includes the proposed APZ which is to be thinned (not clear-felled). The development footprint encroaches 219 m^2 into areas mapped as Matters of Local Environmental Significance only. Refer to **Section 5** for further discussion around development impacts on this theme. Refer to **APPENDIX C** for an assessment of the proposed development against the Biodiversity Areas Overlay Code

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TABLE 4.1: DESKTOP REVIEW OF MLES

CITY PLAN OVERLAY	DESIGNATION/ CLASSIFICATION	COMMENTS
OM-03.01 Bushfire hazard risk area	Portions of the northern and southern extents of the site are mapped as High Potential Bushfire Hazard. A portion of the southwestern area is mapped as Medium Potential Bushfire Hazard, with the balance of the site mapped as a Potential Impact Buffer (**APPENDIX C**).	A Bushfire Hazard Assessment and Management Plan (BMP) was prepared by New Ground (2026) for the proposed development. Refer to the BMP for further detail.
OM-14 Waterway corridors and wetlands trigger	There are no waterway corridors, wetlands or erosion prone area mapped onsite (**APPENDIX C**).	The proposed development will not trigger an assessment against the Waterway corridors and wetlands overlay code under Section 8.2.12 of the *Planning Scheme*.
Draft Logan Plan	The Draft Logan Plan is anticipated to take effect in late 2026. This assessment is provided for information only. The following mapping layers are noted to differ from the current Planning Scheme and may be relevant to the proposed development (**APPENDIX C**). Biodiversity Areas: - OM-05.02 - Vegetation Management Area: The southern portion of the site corresponding with the wildlife corridor is mapped as Primary Vegetation Management Area and the rest of the site is predominantly mapped as Secondary Vegetation Management Area. Tertiary Vegetation Management Area is mapped around the existing dwelling and along the northern site boundaries. - OM-05.04 - Matters of Local Environmental Significance (MLES): The entire site is mapped as MLES - OM-05.05 - Matters of State Environmental Significance (MSES): The site is predominantly mapped as MSES, excluding the area surrounding the existing dwelling and sections along the western and northern site boundaries. An MSES line associated with a drainage feature also traverses the site from the western boundary.	The Draft Logan Plan is not expected to introduce an increased level of ecological planning constraint to the proposed development beyond that associated with the current *Planning Scheme*.

4.2 Desktop and Literature Review – State Government Mechanisms

TABLE 4.2 below presents the results from the desktop review of Matters of State Environmental Significance (MSES) that relate to the subject site.

TABLE 4.2: DESKTOP REVIEW OF MSES

STATE ENVIRONMENTAL MATTER	DESIGNATION/DESCRIPTION	COMMENTS
Regional Ecosystem and Essential Habitat	The northern three-quarters of the site is predominantly mapped as RE12.11.5, while the southern one-quarter is mapped as RE12.11.24. Areas surrounding the existing dwelling, along sections of the western site boundary, and along the northern site boundary are mapped as non-remnant vegetation. Essential habitat is mapped within the southern one-quarter of the site and is associated with mapped Koala Habitat Area.	RE12.11.5 is described as *Corymbia citriodora subsp. variegata woodland to open forest +/- Eucalyptus siderophloia/E. crebra, E. carnea, E. acmenoides, E. propinqua on metamorphics +/- interbedded volcanics* (DETSI, 2024a). RE12.11.24 is described as *Eucalyptus carnea or E. tindaliae, Corymbia intermedia +/- E. siderophloia or E. crebra woodland on metamorphics +/- interbedded volcanics* (DETSI, 2024a). Refer to **Section 4.4** for ground-truthed vegetation community survey results.
Regulated vegetation	The site is predominantly mapped as RVM Category C - high-value regrowth vegetation, with the balance of the site surrounding the existing dwelling, along sections of the western site boundary, and along the northern site boundary are mapped as RVM Category X. The regulated vegetation mapping is associated with the Least Concern RE12.11.5 and RE12.11.24 mapped onsite.	The proposed development encroaches 19,395 m^2 into RVM category C areas. The proposed development does not trigger State referral for concurrence agency assessment in relation to regulated vegetation, pursuant to Schedule 10, Part 3 of the *Planning Reg*, as it is considered exempt clearing work. Schedule 21, Part 2, section 2(g)(ii) states that 'For freehold land, clearing vegetation—that is the following vegetation, if the clearing is for urban purposes in an urban area—regulated regrowth vegetation' is exempt clearing work, of which the Emerging

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TABLE 4.2: DESKTOP REVIEW OF MSES

STATE ENVIRONMENTAL MATTER	DESIGNATION/DESCRIPTION	COMMENTS
		Community zone is considered an Urban Area as per Section 6.2.3 of the *Planning Scheme*.
Koala Habitat Areas and Koala Planning Provisions	The southern one-quarter of the site is mapped as within a Koala Habitat Area (KHA). The site is however not mapped within a Koala Priority Area (KPA) or Identified Koala Broad-hectare Area (IBHA).	The proposed development encroaches 2,862 m^2 into KHA prior to considering exempted development (ED) allowances. An overview of the ED allowances within Schedule 24 of the *Planning Reg*, as they relate to the site, is provided below: Item (k) of the ED definition states that 'a total area on the premises of 500m^2 or less of 1 or more koala habitat areas being cleared of native vegetation' is exempted development. Additionally, Item (n)(vii) of the ED definition states that 'development that is or involves operational work that is the clearing of native vegetation in a koala habitat area if the clearing — is necessary for essential management' is exempted development. This particularly relates to the establishment of bushfire setbacks whereby in Schedule 24 of the *Planning Reg*, Part (a) of the essential management definition states that clearing native vegetation 'for establishing or maintaining a necessary firebreak to protect infrastructure, other than a fence, road or vehicular track, if the maximum width of the firebreak is equal to 1.5 times the height of the tallest vegetation next to the infrastructure, or 20m, whichever is the wider' is considered essential management. Lastly, Item (o)(i) of the ED definition states that 'development on a lot that is or involves operational work that is the clearing of native vegetation in a koala habitat area if — the clearing is necessary to establish a necessary fence, road or vehicular track on an existing lot' whereby Part (o)(iv)(B) states that 'the maximum width of the clearing for the fence, road or track is —for a lot that is 5ha or less—5m'. As discussed in **Section 5**, KHA clearing extents associated with the development could be deemed as Exempted Development noting that the Item n(vii) (essential management) clearing considered is that associated with dwellings on proposed allotments. Refer to **Section 5** for further discussion around impacts on this theme.
Protected Plants	The site is predominantly designated as High-Risk Area under the Protected Plants Flora Survey Trigger Map.	As presented by **Section 4.4**, protected plants were not recorded during New Ground surveys. However, the proposed development encroaches into areas mapped as High Risk on the Protected Plants Flora Survey Trigger Map and as such, the proposed development triggers the protected plants provisions of the *Nature Conservation (Plants) Regulation 2020*. A protected plant flora survey will be required, and if protected plant(s) are recorded within 100 m of the proposed disturbance footprint, a protected plant clearing permit must be obtained prior to clearing works. It is recommended that the protected plants flora survey is undertaken during the detailed design phase (operational works approvals phase).
Waterways for Waterway Barrier Works	The site is not designated as hosting a Queensland Waterway for Waterway Barrier Works.	The development does not propose works within a Waterway for Waterway Barrier Works and therefore does not trigger the associated permit requirements of the *Fisheries Act 1994*.
WildNet	A total of four (4) fauna species and 15 flora species, which are listed as Critically Endangered, Endangered, Vulnerable or Near Threatened (CEEVNT) were recorded in the WildNet database as potentially present within the site.	As discussed in **Section 4.4**, one (1) threatened species, the Koala (*Phascolarctos cinereus)* was recorded on site during surveys.

4.3 Desktop and Literature Review – Federal Government Mechanisms

TABLE 4.3 below presents the results from the desktop review of Matters of National Environmental Significance (MNES).

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TABLE 4.3: DESKTOP REVIEW OF MNES

NATIONAL ENVIRONMENTAL MATTER	DESIGNATION/DESCRIPTION	COMMENTS
Wetlands of International Importance (Ramsar)	The site is within 10 km of Moreton Bay (a Ramsar wetland) (**APPENDIX E**).	The proposed development is not anticipated to offer a significant impact upon Moreton Bay given the scale of development and distance between. Notwithstanding, stormwater impacts are to be managed in accordance with a Council-approved stormwater management plan in order to mitigate water quality/loading impacts on downstream receivers.
Listed Threatened Ecological Communities (TECs).	The search returned seven (7) TECs as likely to occur within 5km of the site area (**APPENDIX E**): • Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland • Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland • Lowland Rainforest of Subtropical Australia. • Poplar Box Grassy Woodland on Alluvial Plains. • Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland • Swamp Tea-tree (*Melaleuca irbyana*) Forest of South-east Queensland • White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland.	The mapped Regional Ecosystems onsite, RE12.11.5, RE12.11.24, RE12.11.25 are not associated with any TECs. No TECs were recorded on site during New Ground survey works.
Listed Threatened Species.	A total of 93 listed threatened species are potentially present within the subject site (**APPENDIX E**).	As discussed in **Section 4.4**, one (1) EPBC Act-listed threatened species, the Koala (*Phascolarctos cinereus*) was recorded on site. Development impacts on this species are discussed in **Section 5**, however in summary, the proposed development requires the removal of 1.83 ha of known koala habitat (excluding the proposed APZ which is to be subject to thinning only). Since the proposal requires a relatively small scale of koala habitat clearing, allowing for retention of 0.86 ha of the site's koala habitat resources (including a corridor of ~<100 m in width), it is questionable as to whether the development would constitute a referrable action under the EPBC Act. It is recommended that pre-referral discussions are held with National Environmental Protection Agency (NEPA) to explore this matter.
Listed Migratory Species.	A total of 38 listed migratory species are potentially present within the subject site (**APPENDIX E**).	As discussed in **Section 4.4**, no listed migratory species were recorded during the assessment. The site does not contain substantial wetlands and is unlikely to constitute an important area of habitat for listed migratory species. The proposed development is unlikely to result in a significant impact on a Federal-listed migratory species as per EPBC Act Policy 1.1.

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4.4 Field Survey Results

4.4.1 Vegetation Community Surveys

The vegetation community surveys identified that the study area comprises four (4) vegetation community associations.

TABLE 4.4 provides a summary of the vegetation community ground-truthing undertaken during the field survey. **APPENDIX F** presents a map of the ground-truthed vegetation community while **APPENDIX A** presents the location of survey sites, **APPENDIX G** presents flora and fauna species recorded during surveys, and **APPENDIX H** presents representative site photographs.

TABLE 4.4: VEGETATION COMMUNITY SURVEY RESULTS

T1	STRUCTURAL FORM	Open Forest
	ECOLOGICALLY DOMINANT LAYER	T1
	EMERGENT COVER DENSITY	15%
	EMERGENT HEIGHT RANGE	18-20 m
	EMERGENT VEGETATION DESCRIPTION	*Corymbia intermedia, Corymbia variegata*
	T1 COVER DENSITY	55%
	T1 HEIGHT RANGE	14-17 m
	T1 VEGETATION DESCRIPTION	*Corymbia variegata, Eucalyptus major, Eucalyptus carnea, Lophostemon confertus, Corymbia intermedia, Eucalyptus crebra.*
	T2 COVER DENSITY	40%
	T2 HEIGHT RANGE	8-12 m
	T2 VEGETATION DESCRIPTION	*Lophostemon confertus, Alphitonia excelsa, Jagera pseudorhus.*
	S1 HEIGHT RANGE	2-4 m
	S1 VEGETATION DESCRIPTION	*Acacia disparrima, Acacia concurrens, Acacia leiocalyx, Lantana camara*.*
	GROUNDCOVER HEIGHT RANGE	0.5 m
	GROUNDCOVER VEGETATION DESCRIPTION	*Entolasia stricta, Lomandra laxa, Aristida calycina, Ochna serrulata*.*
	OBSERVED RE	12.11.5
T2	STRUCTURAL FORM	Open Forest
	ECOLOGICALLY DOMINANT LAYER	T1
	EMERGENT COVER DENSITY	20%
	EMERGENT HEIGHT RANGE	19-21 m
	EMERGENT VEGETATION DESCRIPTION	*Eucalyptus major, Eucalyptus carnea, Eucalyptus dura.*
	T1 COVER DENSITY	50%
	T1 HEIGHT RANGE	15-18 m
	T1 VEGETATION DESCRIPTION	*Eucalyptus major, Eucalyptus carnea, Eucalyptus helidonica, Corymbia intermedia.*
	T2 COVER DENSITY	40%
	T2 HEIGHT RANGE	8-12 m
	T2 VEGETATION DESCRIPTION	*Lophostemon confertus, Alphitonia excelsa, Eucalyptus carnea, Corymbia intermedia.*
	S1 COVER DENSITY	30%
	S1 HEIGHT RANGE	5-7
	S1 VEGETATION DESCRIPTION	*Acacia sp.*
	GROUNDCOVER HEIGHT RANGE	*0.5 m*
	GROUNDCOVER VEGETATION DESCRIPTION	*Entolasia stricta, Aristida calycina, Lomandra laxa, Lomandra multiflora.*
	OBSERVED RE	12.11.24
T3	STRUCTURAL FORM	Open Forest
	ECOLOGICALLY DOMINANT LAYER	T1

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	T1 COVER DENSITY	55%
	T1 HEIGHT RANGE	19-21
	T1 VEGETATION DESCRIPTION	*Eucalyptus fibrosa, Eucalyptus tindaliae Eucalyptus dura.*
	T2 COVER DENSITY	40%
	T2 HEIGHT RANGE	15-18
	T2 VEGETATION DESCRIPTION	*Eucalyptus major, Corymbia. Intermedia, Eucalyptus carnea, Lophostemon confertus.*
	S1 COVER DENSITY	30%
	S1 HEIGHT RANGE	5-7 m
	S1 VEGETATION DESCRIPTION	*Acacia disparrima, Acacia concurrens, Acacia leiocalyx, Alphitonia excelsia, Lophostemon confertus.*
	GROUNDCOVER HEIGHT RANGE	1 m
	GROUNDCOVER VEGETATION DESCRIPTION	*Melichrus adpressus, Pultenaea villosa, Entolasia stricta, Lomandra confertiflora subsp. pallida.*
	OBSERVED RE	12.11.25
T5	STRUCTURAL FORM	Woodland
	ECOLOGICALLY DOMINANT LAYER	T1
	EMERGENT COVER DENSITY	15%
	EMERGENT HEIGHT RANGE	19 m
	EMERGENT VEGETATION DESCRIPTION	*Eucalyptus dura*
	T1 COVER DENSITY	45%
	T1 HEIGHT RANGE	14-18 m
	T1 VEGETATION DESCRIPTION	*Eucalyptus dura, Eucalyptus carnea, Corymbia variegata, Eucalyptus major Eucalyptus crebra.*
	T2 COVER DENSITY	30%
	T2 HEIGHT RANGE	8-10 m
	T2 VEGETATION DESCRIPTION	*Eucalyptus carnea, Eucalyptus major, Lophostemon confertus, Angophora leiocarpa Corymbia variegata.*
	S1 COVER DENSITY	30%
	S1 HEIGHT RANGE	5-7 m
	S1 VEGETATION DESCRIPTION	*Acacia leiocalyx*
	GROUNDCOVER HEIGHT RANGE	0.5 m
	GROUNDCOVER VEGETATION DESCRIPTION	*Lantana montevidensis*, Entolasia stricta.*
	OBSERVED RE	12.11.25

4.4.2 Fauna Habitat Assessment

The fauna habitat assessment recorded three (3) broad habitat types within the study area. Representative surveys were undertaken within the habitat type, and the survey locations are presented in **APPENDIX A**. **TABLE 4.5** presents a summary of the habitat survey results and a description of the microhabitat features recorded within the habitat type.

TABLE 4.5: FAUNA HABITAT ASSESSMENT SURVEY FINDINGS

K1H	HABITAT CONTEXT	Patch Adjacent to (within 75m of) Larger Contiguous Area
	FLOWERING OR FRUITING TREES	<25%
	HOLLOW-BEARING TREES	Absent
	HOLLOW-BEARING LOGS	Absent
	LEAF LITTER AND STICKS	51-75%
	VEGETATED GROUND COVER	26-50%
	DECORTICATING TREES OR LOGS	Present
	SMALL ROCKS 20CM	NA

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	MED ROCKS 20-50CM	NA
	LARGE ROCKS 50CM	NA
	ROCKY OUTCROPS	Absent
	CRACKING CLAYS	Absent
	CAVES	Absent
	MISTLETOE	Absent
	TERMITEMOUNDS	Absent
	AQUATIC HABITAT	Absent
	COMMENTS	*Allocasuarina sp.* present (5% CC, 2-3 m), some bearing cones, with no evidence of chewing.
K2H	HABITAT CONTEXT	Patch Adjacent to (within 75m of) Larger Contiguous Area
	FLOWERING OR FRUITING TREES	<25%
	HOLLOW-BEARING TREES	Present
	HOLLOW-BEARING LOGS	Absent
	LEAF LITTER AND STICKS	26-50%
	VEGETATED GROUND COVER	26-50%
	DECORTICATING TREES OR LOGS	Present
	SMALL ROCKS 20CM	<10% (very sparse)
	MED ROCKS 20-50CM	NA
	LARGE ROCKS 50CM	NA
	ROCKY OUTCROPS	Absent
	CRACKING CLAYS	Absent
	CAVES	Absent
	MISTLETOE	Absent
	TERMITEMOUNDS	Absent
	AQUATIC HABITAT	Absent
	COMMENTS	*Allocasuarina sp.* present (5% CC) with no cones.
K3H	HABITAT CONTEXT	Narrow Corridor
	FLOWERING OR FRUITING TREES	<25%
	HOLLOW-BEARING TREES	Present
	HOLLOW-BEARING LOGS	Absent
	LEAF LITTER AND STICKS	26-50%
	VEGETATED GROUND COVER	26-50%
	DECORTICATING TREES OR LOGS	Present
	SMALL ROCKS 20CM	<10% (very sparse)
	MED ROCKS 20-50CM	NA
	LARGE ROCKS 50CM	NA
	ROCKY OUTCROPS	Absent
	CRACKING CLAYS	Absent
	CAVES	Absent
	MISTLETOE	Absent
	TERMITEMOUNDS	Absent
	AQUATIC HABITAT	Absent
	COMMENTS	Very sparse *Allocasuarina sp.* (<5% CC, 1-2 m) with no cones.

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4.4.3 Fauna Breeding Place Features Survey

During the breeding habitat survey, four (4) records of potential breeding places were collected, all of which are considered native habitat tree through the presence of hollows. No trees with a circumference larger than 220 cm or other forms of breeding habitat were observed (**APPENDIX F**). **TABLE 4.6** below presents the findings.

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TABLE 4.6: FAUNA BREEDING PLACES SURVEY FINDINGS

X	Y	FEATURE NUMBER / MAP REFERENCE	FEATURE CATEGORY ^	BREEDING STATUS	COMMENTS	HABITAT TREE	WITHIN DISTURBANCE FOOTPRINT
153.1586518	-27.72367706	BP1	Hollow-bearing stag	Potential	1 x Hollow 0-5 cm	Yes	No
153.1585985	-27.72343519	BP2	Hollow-bearing stag	Potential	2 x Hollow 0-5 cm	Yes	Yes #
153.1589349	-27.72265843	BP3	Hollow-bearing tree	Potential	1 x 0-5 cm Hollow	Yes	Yes
153.1594889	-27.72158504	BP4	Hollow-bearing tree	Potential	1 x Hollow 10-15 cm, vertical angle	Yes	No

Notes:

- This breeding place feature is within the Asset Protection Zone (APZ) and can be retained.

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4.4.4 Flora and Fauna Surveys

A cumulative list of flora and fauna species recorded on-site during the field survey is provided in **APPENDIX G**. In summary, a total of 72 species of flora were recorded during the survey comprising:

- 56 species that are listed as Least Concern flora under the NC Act;
- Seven (7) species that are listed as Special Least Concern under the NC Act; and
- Nine (9) exotic species and/or environmental weeds (refer to **section 4.4.7**).

Threat-listed flora species were not recorded under the EPBC Act and/or NC Act.

A total of 17 fauna species were detected on site comprising:

- One (1) species (*Phascolarctos cinereus*) that is threat-listed under the EPBC Act and NC Act (refer **to TABLE 4.6**);
- 13 fauna species that are listed as Least Concern flora under the NC Act; comprising
  - 11 avifauna species;
  - One (1) mammal species; and
  - One (1) reptile species; and
- Three (3) fauna species that are exotic species (refer to **Section 4.4.7**); comprising
  - Two (2) avifauna species; and
  - One (1) mammal species.

4.4.5 Threatened Flora and Fauna Survey Results

Flora species listed as threat-listed under the EPBC Act and NC Act were not recorded during the field survey.

One (1) fauna species (*Phascolarctos cinereus*) listed as Endangered under the EPBC Act and NC Act was recorded indirectly through the detection of both scats and scratches (see **Section 4.4.6**)

4.4.6 Koala Searches and Habitat Values

The Koala (*Phascolarctos cinereus*) was identified indirectly during the surveys through the detection of both scats and scratches during the formal KSAT (**APPENDIX A**). Refer to **APPENDIX F** for the location of koala scat records and **APPENDIX H** for representative photographs. Raw koala survey data is presented in **APPENDIX I**.

KSAT Results

TABLE 4.7 summarises the results of KSAT surveys undertaken on the site. Activity levels were calculated for each survey site using the methodology associated with the KSAT methodology. Refer to **APPENDIX A** for KSAT survey site locations.

TABLE 4.7: KSAT SURVEY RESULTS

KSAT SITE	TREES WITH KOALA SCAT	ACTIVITY LEVELS BASED ON SCAT	ACTIVITY LEVEL CLASSIFICATION EAST COAST (MED –HIGH)#
K1	2	6.67%	Low
K2	0	0%	Nil
K3	3	10%	Low

Source: # - Phillips and Callaghan (2011)

As demonstrated in the table above, the activity levels based on the KSATs were determined to be 'Low' per Phillips and Callaghan (2011) and one (1) survey sites identified zero usage. Where found koala scats were found, activity levels ranged from 6.67% (two (2) trees with scats from 30 trees) to 10% (three (3) trees with scats).

The highest relative koala activity (10%) was recorded at KSAT K3, undertaken in site's north. KSAT K2 was undertaken in the central portion of the site, and zero (0)% usage was observed at the survey site. KSAT K1 was undertaken in the mapped Koala Habitat Area in the site's south, and the results demonstrated an activity level of 6.67%.

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4.4.7 Exotic Flora and Fauna Survey

During the field survey, nine (9) exotic flora species were recorded; three (3) flora species (*Asparagus plumosus*, Lantana camara*, Lantana montevidensis**) are listed as a restricted matter under the *Biosecurity Act 2014* and two (2) flora species (*Asparagus plumosus* * and *Lantana camara**) are listed as WoNS species. A cumulative list of non-native flora species recorded on-site during the field survey is provided in **APPENDIX G**.

Three (3) exotic fauna species were recorded onsite, of which none are invasive animal species under the *Biosecurity Act 2014*. A cumulative list of non-native fauna species recorded on-site during the field survey is provided in **APPENDIX G**.

4.4.8 Site Disturbance

A few disturbance types were recorded on site and are detailed in **TABLE 4.8** below with corresponding survey site locations presented in **APPENDIX A.**

TABLE 4.8: SITE DISTURBANCE ASSESSMENT SURVEY RESULTS

K1D	DISTURBANCE TYPE	Rubbish
	DISTURBANCE SEVERITY	Minor
	COMMENTS	Drink cans, chips wrappers, plastic bottles
	DISTURBANCE TYPE	Tracks
	DISTURBANCE SEVERITY	Minor
	COMMENTS	Indistinct access track characterised by small rocks and sparse groundcover.
K2D	DISTURBANCE TYPE	Weeds
	DISTURBANCE SEVERITY	Moderate
	COMMENTS	Weeds (30% PFC, 0.1-3 m) comprising *Lantana camara*, Lantana montevidensis*, Passiflora suberosa*, Passiflora subpeltata* Ochna serrulata*, Asparagus plumosus**. Weeds are denser towards the eastern edge of the study area.
	DISTURBANCE TYPE	Barrier
	DISTURBANCE SEVERITY	Minor
	COMMENTS	Old wire fence
K3D	DISTURBANCE TYPE	Logging
	DISTURBANCE SEVERITY	Minor
	COMMENTS	-
	DISTURBANCE TYPE	Rubbish
	DISTURBANCE SEVERITY	Minor
	COMMENTS	Scattered styrofoam
D1	DISTURBANCE TYPE	Weed Invasion
	DISTURBANCE SEVERITY	High
	COMMENTS	*Lantana camara*, Asparagus plumosus**

Overall, the site exhibited low levels of disturbance. Areas of comparatively greater disturbance were confined to the central portion of the site and were primarily associated with localised weed invasion. The site's northern and southern portions (beyond development footprint) were found to exhibit a lower severity of disturbance when compared to the site's central portion.

Additional disturbance features included low volumes of rubbish across the site, minor evidence of selective logging within the northern extent, the presence of a wire fence in the central portion, and a single indistinct access track within the southern portion of the site.

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4.4.9 Site Connectivity and Corridors

New Ground reviewed the site's role in local ecological connectivity. New Ground referred to desktop data layers (aerial imagery) through the review and field survey data documented in this report.

The site is bounded by Dairy Creek Road to the north, Gardiner Road to the east, and a recently developed urban residential area to the west. The site is predominantly undeveloped, containing an existing dwelling and associated structures in the south-eastern corner. Retained vegetation onsite forms part of a large a contiguous patch (>70 ha) that connects with vegetation extending from the southwest through to the southeast. This connectivity continues eastwards towards Wuraga Reserve and Bahrs Scrub Reserve, ~3 km from the site. Vegetation linkages also extend through rural residential areas to the southwest, connecting to Buccan Conservation Park (~2 km south of the site) and Plunkett Conservation Park (~5 km to the south).

The northern portion of the site adjoins the vegetated road reserve to the west, which includes a dam. This road reserve vegetation extends eastward toward rural residential lots beyond Niles Court, contributing to connectivity. Some connectivity also occurs to the north across Gardiner Road, where vegetation within the road reserve provides a limited linkage northwards through a corridor network between patches of residential settlement. However, this northern connectivity is more constrained than that to the south of the site, as it is ultimately fragmented by Logan River Road and denser urban development approximately 1.2 km north of the site.

Despite the surrounding urban matrix, the site forms part of a large contiguous patch of vegetation and provides a degree of landscape connectivity, offering linkages from the south to the north and west beyond the existing residential settlement.

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Chapter 5: IMPACTS AND MITIGATION

A summary of the potential ecological impacts and impact mitigation measures associated with the proposed development concept (**APPENDIX B**) is provided in the following section to guide development planning and assessment. Refer to **APPENDIX J** for Vegetation Clearing Extents Plan, which presents proposed clearing extents.

In summary, the proposed development will result in the clearing of:

- 4,429 m^2 of *Open Forest. Emergent (18-20 m, 15% CC) Corymbia intermedia and Corymbia variegata; T1 (14-17 m, 55% CC) of Corymbia variegata, Eucalyptus major and Eucalyptus carnea, with Lophostemon confertus, Corymbia intermedia and Eucalyptus crebra; T2 (8-12m, 40% CC) dominated by Lophostemon confertus, with Alphitonia excelsa and Jagera pseudorhus. Resembles RE12.11.5.*;
- 8,684 m^2 of *Open Forest. Emergent (19-21 m, 20% CC) Eucalyptus major, Eucalyptus carnea, with Eucalyptus dura; T1 (15-18m, 50% CC) of Eucalyptus major and Eucalyptus carnea, with Eucalyptus helidonica and Corymbia intermedia; T2 (8-12m, 40% CC) dominated by Lophostemon confertus, with Alphitonia excelsa, Eucalyptus carnea and Corymbia intermedia; S1 (5-7 m, 30% CC) Acacia spp. Resembles RE12.11.24.*; and
- 5,008 m^2 of *Open Forest. Emergent (19m, 15% CC) Eucalyptus dura; T1 (14-21 m, 50% CC) Eucalyptus fibrosa, Eucalyptus tindaliae, Eucalyptus dura, Eucalyptus carnea, scattered Corymbia variegata, Eucalyptus major and Eucalyptus crebra; T2 (15-18 m, 40% CC) Eucalyptus major, scattered Corymbia intermedia, Eucalyptus carnea, Lophostemon confertus, Angophora leiocarpa and Corymbia variegata; S1 (5-7 m, 30% CC) Acacia disparrima, scattered Acacia concurrens, Acacia leiocalyx, Alphitonia excelsia and Lophostemon confertus. Resembles RE12.11.25*.

The proposed development encroaches into Council mapped Biodiversity Areas, and State-mapped regulated vegetation and KHA. However, it allows for retention of koala habitat recorded onsite, including provision of a fauna corridor at the site's south.

Koala (*Phascolarctos cinereus*) was indirectly recorded on site based on the presence of scats and scratch marks. However, Allocasuarina species occur at very low abundance and very few hollow bearing trees were identified. Only one (1) tree (BP4 outside of development footprint, refer **Section 4.4.3**) contained a hollow potentially suitable for Glossy Black Cockatoo, and no hollows suitable for Powerful Owl were recorded. No Grey headed Flying Fox camps or roosts were identified on site during the assessment.

Indirect disturbances are also likely to result from the proposed development. These may include edge effects associated with increased light and noise, an increase in the abundance of domestic animals, and potential soil and hydrological impacts.

An Ecological Restoration Plan (**APPENDIX K**) has been prepared to guide the rehabilitation and long term management of retained areas in the southern portion of the site, with the aim of mitigating ecological impacts associated with the proposed development.

5.1 MLES

5.1.1 Vegetation Management Areas

As presented in **APPENDIX J**, the proposed development allows for the retention of 8,597 m^2 of the site's Vegetation Management Area, comprising 20 m^2 of Primary Vegetation Management Area (PVMA) and 8,577 m^2 of Secondary Vegetation Management Area (SVMA). These retained areas occur within the northern and southern portions of the site. The development, however, requires an assessable clearing footprint of 19,222 m^2 of SVMA or 69% of the mapped SVMA (this includes the APZ which is to be subject to thinning only).

The central portion of the study area is more heavily disturbed by weed invasion compared to the northern and southern portions of the site. As discussed in **TABLE 4.1**, the SVMA proposed for clearing is analogous to the portion of the site designated by the State as RVM Category C high-value regrowth vegetation. Ground truthed vegetation assessment confirmed that this area resembled regrowth RE12.11.5, RE12.11.24 and RE12.11.25, differing slightly from the State regional ecosystem mapping.

The proposed development will trigger offset requirements in accordance with *section 3.1 - Environmental offset standards* in *Planning scheme policy 3 - Environmental management,* where encroachment is mapped as a matter of local environmental significance and not both matters of local and state environmental significance; and offset requirements in accordance with the *Queensland Environmental Offset Policy* and the *Environmental Offsets Act,*

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where encroachment is mapped as both matters of local and state environmental significance as defined by Council Mapping. Namely, assessable clearing of SVMA will trigger an offset pursuant to the *Planning Scheme*.

It is noted that 4,920 m^2 will be designated as a rehabilitation area within retained vegetation to the south of the proposed development footprint to allow for the ongoing retention of an ecological corridor as well as refuge habitat.

5.1.2 Connectivity and Corridors

The proposed development will require encroachment into 1,803 m^2 (including the proposed APZ which is to be thinned only), and retention and rehabilitation of 3,586 m^2 of Council mapped Biodiversity Corridor. At the mapped corridor scale, this encroachment is not expected to substantially alter the functional value of the larger contiguous vegetation patch to the south, which will remain intact and continue to operate as the primary habitat area within the locality. Furthermore, the retained vegetated portion within the northern section of the site provides an opportunity for fauna movement around the fragmented rural residential landscape to the east, extending towards and beyond Niles Court and reconnecting with vegetated areas in the north of the site. This retained area is expected to maintain a degree of northward connectivity, though in a form that is narrower and less structurally continuous than the existing condition. Notwithstanding, it is understood that the retention area to the site's north will form part of a future Council road upgrade project footprint.

Overall, while encroachment into the Council mapped Biodiversity Corridor will occur, the large contiguous vegetation patch to the south will remain intact and functional at the local scale. Connectivity toward the north will be reduced; however, alternative pathways will remain via retained vegetation within the northern portion of the site. The impact is therefore considered to represent a moderate reduction in corridor function.

5.2 MSES

5.2.1 Threatened Flora

No threat-listed flora species were recorded as occurring on site. The proposed development is not deemed to offer a significant impact on protected flora habitats within the site's locality.

5.2.2 Threatened Fauna

The Endangered Koala (*Phascolarctos cinereus*) was indirectly recorded on site through the presence of scats and scratch marks. The proposed development will encroach into mapped Koala Habitat Area and is expected to result in impact to Koalas, primarily through the removal of foraging and sheltering habitat (see **Section 5.2.4** for further detail).

The site was not found to contain substantial habitat values for the South eastern Glossy Black Cockatoo or Powerful Owl, due to the absence of mature hollow bearing trees and the limited occurrence of *Allocasuarina* species on site. No Grey-headed Flying-fox roosts were recorded onsite. However, the site does host foraging habitat for the species.

5.2.3 Regulated Vegetation

The proposed development allows for the retention of 8,100 m^2 of RVM Category C vegetation and 20 m^2 of RVM Category B vegetation, primarily associated with the ground truthed vegetation resembling RE12.11.5, RE12.11.24 and RE12.11.25 on site. The development will require the modification of 19,395 m^2 of RVM Category C vegetation (including APZ which is to be thinned only) associated with ground truthed vegetation resembling RE12.11.5, RE12.11.24 and RE12.11.25 (refer to **APPENDIX J**). It is noted that the central portion of the development footprint was found to be moderately disturbed by weed invasion.

The proposal will involve modification of mapped Least Concern Category C regulated vegetation. A Least Concern status under the *Vegetation Management Regulation 2012* indicates that the vegetation type remains well represented within the bioregion. Notwithstanding this, the development will contribute to the cumulative loss of this vegetation type within the local area.

5.2.4 Koala Habitat Area

The proposed development will require the modification of 2,862 m^2 of Koala Habitat Area (KHA). The entirety of the KHA encroachment footprint could be interpreted as Exempted Development as defined by Schedule 24 of the *Planning Reg*. Namely, Exempted Development item k (one off 500 m^2 allowance) and item n(vii) (Essential Management – bushfire setback clearing). Item o(iv) allowances for a 5 m fence management clearing zone were

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also considered for existing (pre-reconfiguration) boundaries, however these are within bushfire setback (asset protection zone (APZ)) allowances of item n(vii) and the one off allowance of item k). Of note is that the APZs contemplated relate to proposed dwellings (refer **APPENDIX J**).

It is noted that the site occurs within a predominantly urban residential setting, with development extending from the northwest through to the east and recently developed residential lots immediately adjoining the western site boundary. The site is also bound by Wuraga Road and Dairy Creek Road, contributing to edge effects such as noise, lighting and increased risk of vehicle strike. These factors influence the current habitat condition and functional value of the site for Koalas. Land to the south of the site is designated as Emerging Community under the relevant planning framework, and further urban development within the locality can reasonably be anticipated. As such, habitat condition and landscape permeability within the broader area are likely to be subject to increasing development pressure over time.

5.3 MNES

Threatened Ecological Communities

The proposed activity will not result in the removal of vegetation analogous to any Threatened Ecological Community listed under the EPBC Act.

EPBC Flora and Fauna

No EPBC listed flora species were recorded onsite.

One (1) EPBC listed endangered fauna species, the Koala (*Phascolartos cinerues*) was recorded onsite. The proposed development is not deemed to offer a significant impact on the Koala as per the *Matters of National Environmental Significance Significant impact guidelines 1.1*.

As discussed under the MSES assessment, while the site supports suitable Koala food trees, the 3 ha site forms part of a larger, contiguous vegetation patch (>70 ha) to the south. Further, KSAT surveys documented by this report found a low level of activity at the site's north and south (generally beyond development footprint), with no activity recorded in the site's central (development footprint) portion (**Section 4.4.6**). Koala recorded on site are likely to utilise the site as a component of a broader home range extending across this larger habitat area, rather than the site functioning as an isolated or discrete sub population area. The proposed development requires the removal of 1.83 ha of known koala habitat (excluding the proposed APZ which is to be subject to thinning only). The proposal requires a relatively small scale of koala habitat clearing, allowing for retention of 0.86 ha of the site's koala habitat resources (including a corridor of ~<100 m in width). The proposed retention area is part of a larger connected vegetation patch to the site's south, west and east which will remain intact and available to support the local population. In this context, the loss of habitat within the site represents a localised reduction in available foraging and shelter resources, rather than a substantive reduction in the species' area of occupancy or fragmentation of the broader local population.

Accordingly, given the scale of the proposed impact, it is unclear whether NEPA would consider the proposed development likely to result in a significant impact under the *EPBC Act Significant Impact Guidelines 1.1*. As such, it is recommended that pre-referral discussions be held with NEPA to confirm whether an EPBC Act referral is required in relation to the proposed impact on koala habitat.

5.4 Other

5.4.1 Predation by Domestic Animals

Development of the site is likely to increase the number of domestic pets in the area and consequently increase the likelihood of domestic pets entering adjoining habitats. Consequently, pressures attributed to predation by domestic pets, particularly cats and dogs within the adjoining habitats are likely to be increased. Notwithstanding, given domestic dogs and cats are commonplace in the site's locality, the proposed development is unlikely to result in a significant increase in domestic fauna impacts on native fauna.

Notwithstanding, encounters with dogs can be significantly reduced by the provision of pet-exclusion fencing along areas adjoining retained vegetation (i.e. backyards) which ensures containment of dogs and exclusion of fauna (such as timber fencing without gaps between palings with support braces on the yard side).

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5.4.2 Fauna Mortality During Clearing and Construction

Clearing and associated earthworks may result in injury or mortality to fauna present at the time of disturbance. Construction activities, including trenching and excavation, also have the potential to cause harm through entrapment or habitat disturbance.

To minimise these risks, a pre clearing survey should be undertaken to identify any fauna species or habitat features requiring management. Clearing and earthworks are to be supervised by a licenced fauna spotter catcher to ensure the safe capture and relocation of fauna encountered during works.

All clearing is to be undertaken in accordance with an approved Vegetation Management Plan and a Fauna Management Plan. The Fauna Management Plan should incorporate species specific management measures, including koala management initiatives, to be implemented throughout clearing activities in a manner consistent with the *Nature Conservation Koala Conservation Plan 2017*.

5.4.3 Altered Hydrology

The removal of vegetation from the site, together with the introduction of impermeable surfaces, may alter infiltration and absorption and consequently has the potential to modify the local hydrological regime. The proposal does not require the filling of any water features and no encroachment into any waterways or wetlands will occur. Any changes in hydrology may influence downstream hydraulic loadings and water quality, with indirect impacts to be managed in accordance with an approved Stormwater Management Plan and Erosion and Sediment Control Plan.

5.4.4 Light and Noise Impacts

Anthropogenic lighting can impact foraging, breeding and movement patterns of native fauna (DTMR, 2000). The proposed development will result in an increased level of light and noise. Given the presence of existing urban development to the immediate west, formed bitumen public roadways supporting a moderate to high traffic environment to the north and east, and further urban development beyond those roads, the proposal is not expected to result in a significant increase in disturbance at the locality level.

5.4.5 Rubbish and Nutrients

Development of the site may increase the amount of rubbish being transported to adjacent areas. An increased level of nutrients being transported into adjacent areas may also result from the proposed development.

Litter, including food scraps, can provide opportunities for introduced species which can then create competition and predation pressures with native species in receiving areas. Similarly, nutrients can encourage the growth of exotic species which can change species composition of retained habitats and further provide opportunities for introduced flora species. The impact of exotic flora species may also be exacerbated through the use of exotic species in gardens/landscaped areas which can then spread into adjacent areas. Appropriate stormwater management, the use of local native species in landscaping features and prudent management of construction waste (packaging etc.) will assist in the management of this impact.

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Chapter 6: CONCLUSION AND RECOMMENDATIONS

6.1 Conclusions

This ecology report has been prepared to explore the ecological value of the site and potential impacts of future development within the site. Conclusions of this report are based on the desktop-based environmental constraints investigation and field survey results documented with this report.

The elements of ecological value and ecological condition of the site identified by this study include:

- The site generally exhibits a low disturbance ecological condition, characterised as open forest vegetation communities with localised weed invasion concentrated within the central portion of the site. Native canopy species remain well represented across the site. The site's northern and southern portions are generally less disturbed than the central area within which the proposed development is concentrated.
- Three (3) distinct vegetation communities were recorded on site; Open Forest resembling regenerating RE12.11.5, Open Forest resembling regenerating RE12.11.24 and Open Forest resembling regenerating RE12.11.25.
- Four (4) potential fauna breeding places were recorded onsite; one (1) of which occur within the proposed development footprint (BP3, a hollow-bearing tree with recorded hollow diameter of <5cm).
- Threat-listed species of flora were not recorded onsite
- One (1) threat-listed species of fauna, the Koala (*Phascolarctos cinerues*), was recorded onsite.
- The site has low levels of weed incursion (with majority concentrated within the central portion of the site), including scheduled weeds under the *Biosecurity Act 2014*.
- The proposed development requires clearing of Council-mapped Biodiversity Areas, mainly Vegetation Management Areas and Biodiversity Corridor. Accordingly, an assessment against the relevant code has been undertaken. The development requires assessable clearing of 19,222 m^2 of Secondary Vegetation Management Area (SVMA); this area excludes fire control lines, existing dwelling footprint and associated 10 m asset protection zone consistent with Table 5.10.2.1.4 of the *Planning Scheme*.
- The proposed development will trigger offset requirements in accordance with *section 3.1 - Environmental offset standards* in *Planning scheme policy 3 - Environmental management*. Namely, the proposed encroachment into SVMA will trigger an environmental offset.
- The proposed development encroaches into State-mapped Regulated Vegetation; however, the clearing is considered exempt clearing work under Schedule 21 of the *Planning Reg*. As such, the proposed development is interpreted to not trigger State referral for concurrence agency assessment pursuant to Schedule 10 Part 3 of the *Planning Reg*.
- The proposed development encroaches into State mapped KHA to an extent interpreted as within the Exempted Development allowances of Schedule 24 of the *Planning Reg*. On this basis, State concurrence agency assessment of the proposal against the State Koala Planning triggers would not be triggered. It is noted that this interpretation is dependent on Council's determination regarding whether essential management clearing is considered consequential clearing, State Code 25 may be triggered pursuant to Schedule 10, Part 10 of the *Planning Reg*. Should Council determine that the clearing is consequential, an assessment against State Code 25 would apply.
- The proposed development encroaches into High Risk Areas under the Protected Plants Flora Survey Trigger Map. As such, the proposed development triggers the Protected Plants regulatory provisions of the *Nature Conservation (Plants) Regulation 2020*.
- The proposed development requires the removal of 1.83 ha of known koala habitat (excluding the proposed APZ which is to be subject to thinning only). The proposal requires a relatively small scale of koala habitat clearing, allowing for retention of 0.86 ha of the site's koala habitat resources including a corridor of ~<100 m in width). The proposed retention area includes part of a larger connected vegetation patch to the site's south, west and east which will remain intact and available to support the local population. In this context, the loss of habitat within the site represents a localised reduction in available foraging and shelter resources, rather than a substantive reduction in the species' area of occupancy or fragmentation of the broader local population.

  Notwithstanding the points above, it remains unclear whether NEPA would consider the proposed scale of koala habitat removal likely to result in a significant impact under the *EPBC Act Significant Impact Guidelines*

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1.1. Accordingly, it is recommended that pre-referral discussions be held with NEPA to confirm whether an EPBC Act referral is required.

In summary, the proposed development will result in the clearing of native vegetation within a site that is generally in a low disturbance ecological condition, with impacts concentrated within the more disturbed central portion where weed invasion is present. Works are to be undertaken in accordance with the recommendations outlined below in order to assist in mitigating development impacts.

6.2 Recommendations

The following recommendations are to guide the development feasibility assessment process.

- Seek advice from NEPA regarding whether referral under the EPBC Act is required in relation to the proposed clearing within State mapped KHA.
- It is recommended that a Construction Vegetation Management Plan and Fauna Management Plan be prepared in association with the future development of the site. This must include fauna (including koala management) initiatives to be applied through clearing works.
- Clearing should be undertaken in accordance with an approved Vegetation Management Plan and a Fauna Management Plan which includes fauna (including koala management) initiatives to be applied through clearing works consistent with the *Nature Conservation (Koala) Conservation Plan (2017)*.
- Any vegetation rehabilitation works are to be undertaken in accordance with an approved Ecological Restoration Plan.
- Lighting impacts fauna could be mitigated by orientating any lighting to the site's north, east and west away from the retained vegetation to the south of the site (where relevant).
- It is recommended that weed species identified, particularly scheduled pest plants are controlled.
- It is recommended that construction be undertaken in accordance with an approved stormwater management plan and an erosion sediment control plan.
- The detailed design phase of the project; namely earthworks extents and road placement should be undertaken with consideration of the ecological features identified by this report to minimise the extent of native vegetation clearance to the greatest extent possible.
- It is recommended that a pre-clearance survey is undertaken prior to the commencement of clearing activities to determine fauna breeding activity immediately before clearing. The pre-clearance survey should consist of a review of the breeding places documented by this report as well as a search for any additional breeding places.
- A suitably qualified Spotter-catcher(s) must be engaged to implement fauna management measures for the duration of clearing and dam dewatering activities. One (1) Spotter-catcher is required per machine directly involved with vegetation clearing/dewatering.
- Nest boxes could be installed within the rehabilitation area in order to offset the proposed loss of hollow resources.
- Provision of an environmental offset in accordance with the Planning Scheme Policy 3 of the Planning Scheme will be required to mitigate the proposed assessable clearing of native vegetation; namely SVMA.
- Works are to be undertaken in accordance with all relevant statutory approvals.

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APPENDIX A

Site Locality and Survey Sites Plan



Notes:

1. Figure indicative and not for construction purposes.

2. Formal survey sites supplemented with random meanders and opportunistic observations.

File: 3126-BahrsScrub-EAR-LocalitySurveySites-260619

SITE LOCALITY AND SURVEY SITES PLAN - LOT 3 ON RP158376

0 25 50 Meters

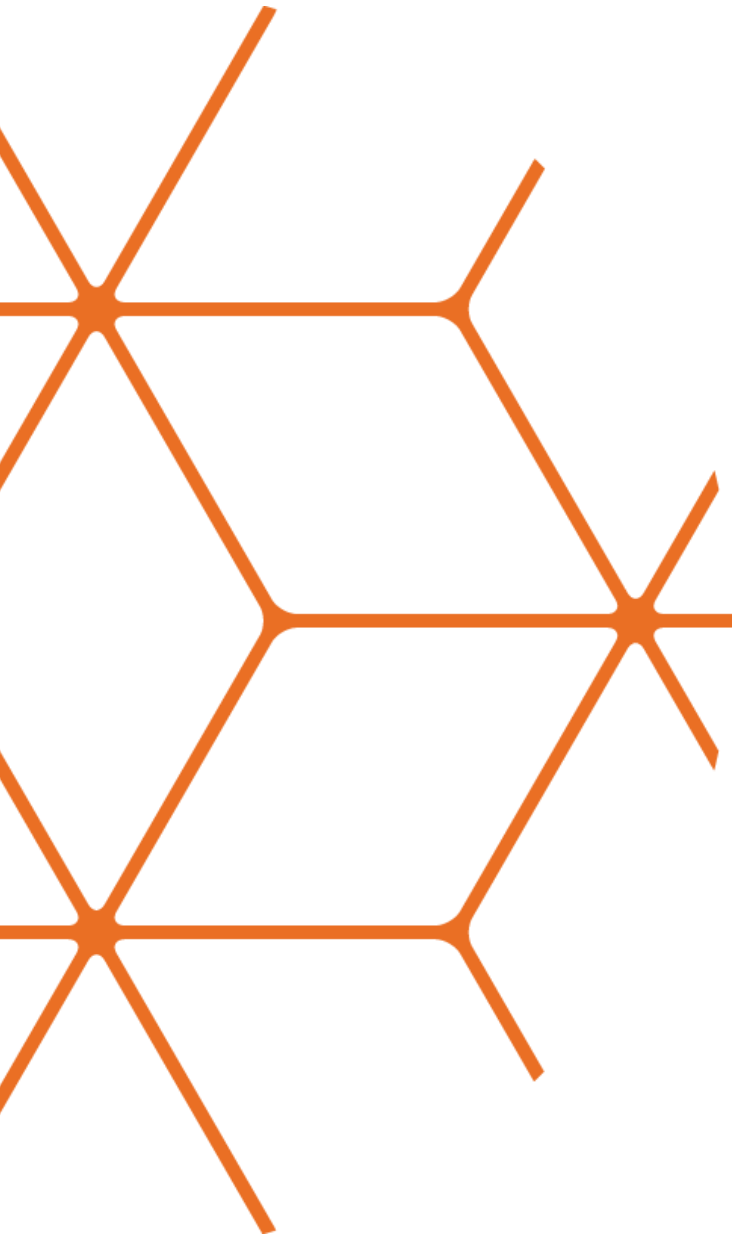
A3 Scale 1:1,100

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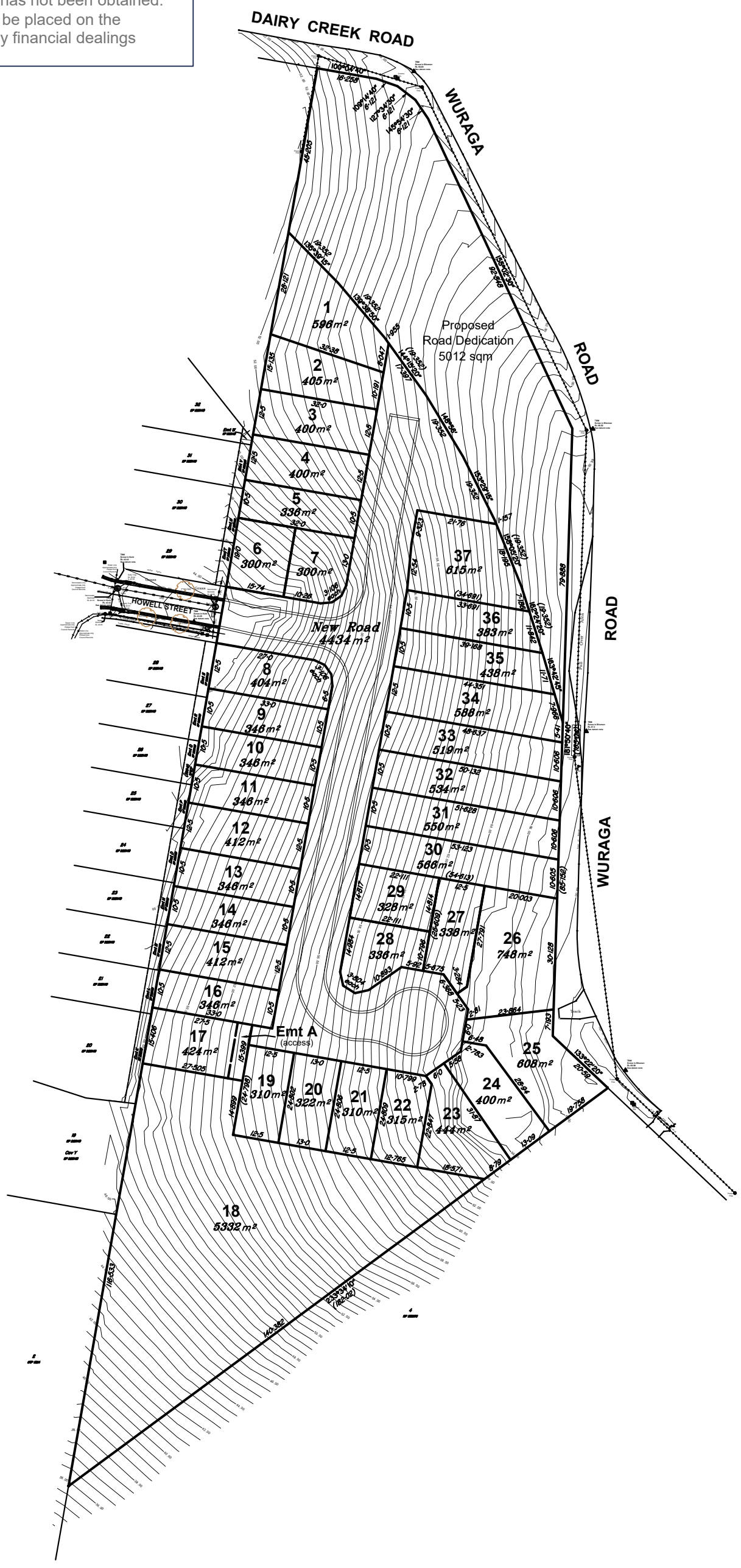
Sheet Number:	1 of 1
Project:	3126
Version:	1
Date:	19/06/2026
Sources:	Cadastral boundaries: QLD DCDB DNRME 2026 Aerial photo: NearMap 03/12/2025

APPENDIX B

Plan of Development



! This plan has been prepared as a proposed subdivision and should not be used for any other purpose.
The dimensions, areas and total number of lots shown hereon are subject to field survey and are also to the requirements of council and any other authority which may have requirements under any relevant legislation.
Certificate of Title for this site has not been obtained. Therefore, no reliance should be placed on the information on this plan for any financial dealings involving the land.



N

Scale 1:1250 – Lengths are in metres.

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190

REVISIONS			
15/07/26	Original Issue	PDR	A

SURVEYOR:
DRAWN: PDR
DATE: 15/07/2026
CHECKED: AJS

DATUM:
LEVEL DATUM: AHD Via CORS (PSM 150950 RL 48.64m)
HORIZ DATUM: MGA 2020 (Plane 1:1) Via CORS
COORD ORIGIN: MGA 2020 E 515714.499 N 6933562.662
MERIDIAN: 9°29' from RP 158376

CLIENT: ARCO TERRA PTY LTD

SITE: Proposed Lots 1-37
Cancelling Lot 3 on RP 158376
381 Wuraga Street, Bahrs Scrub

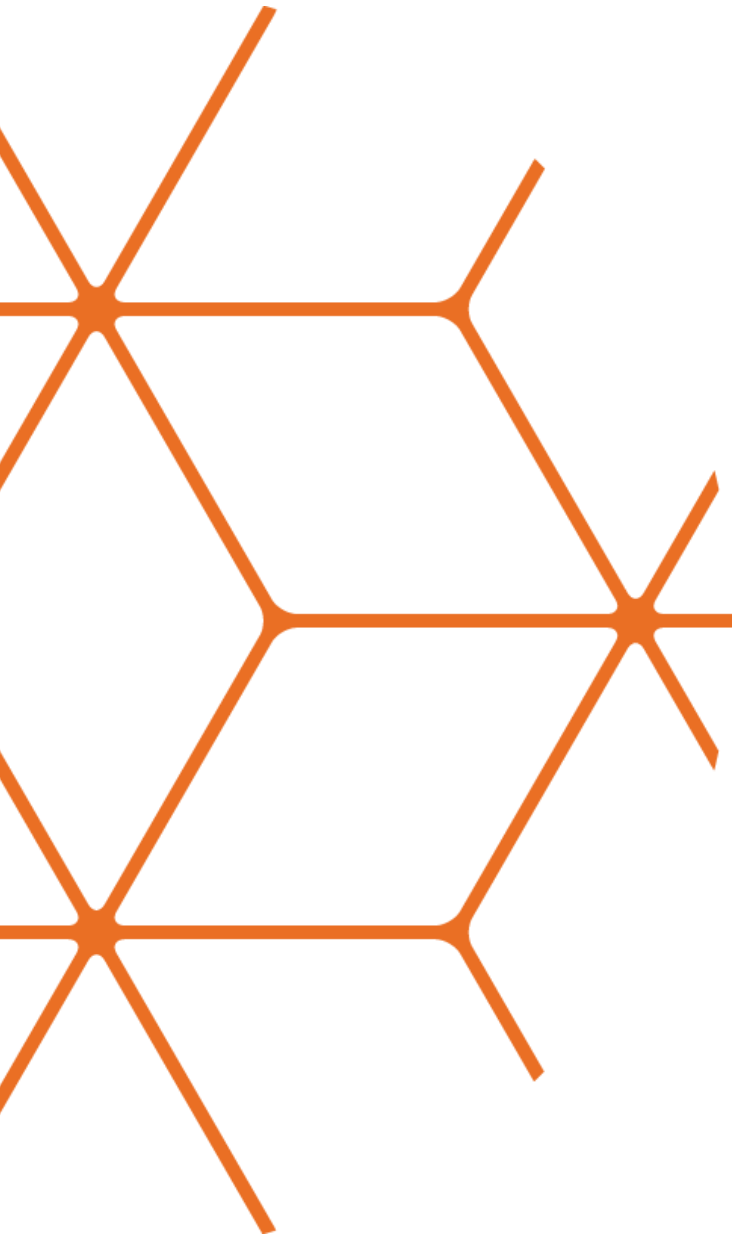
SCALE: 1:1250 (A3)
PLAN REF: 25345-P2-A

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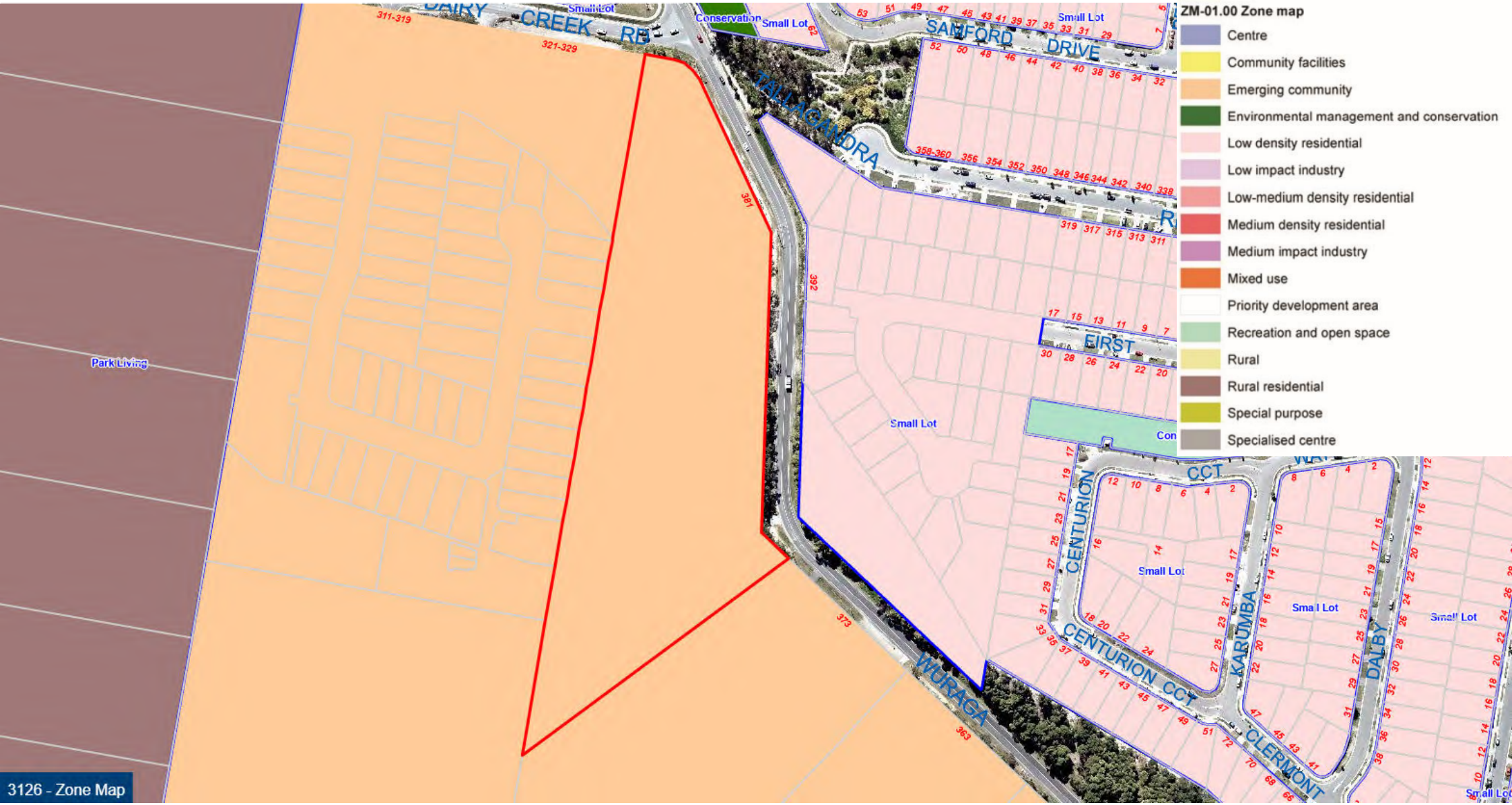
SUBDIVISION PROPOSAL PLAN

APPENDIX C

Desktop Assessment Results (Local Government Mechanisms)



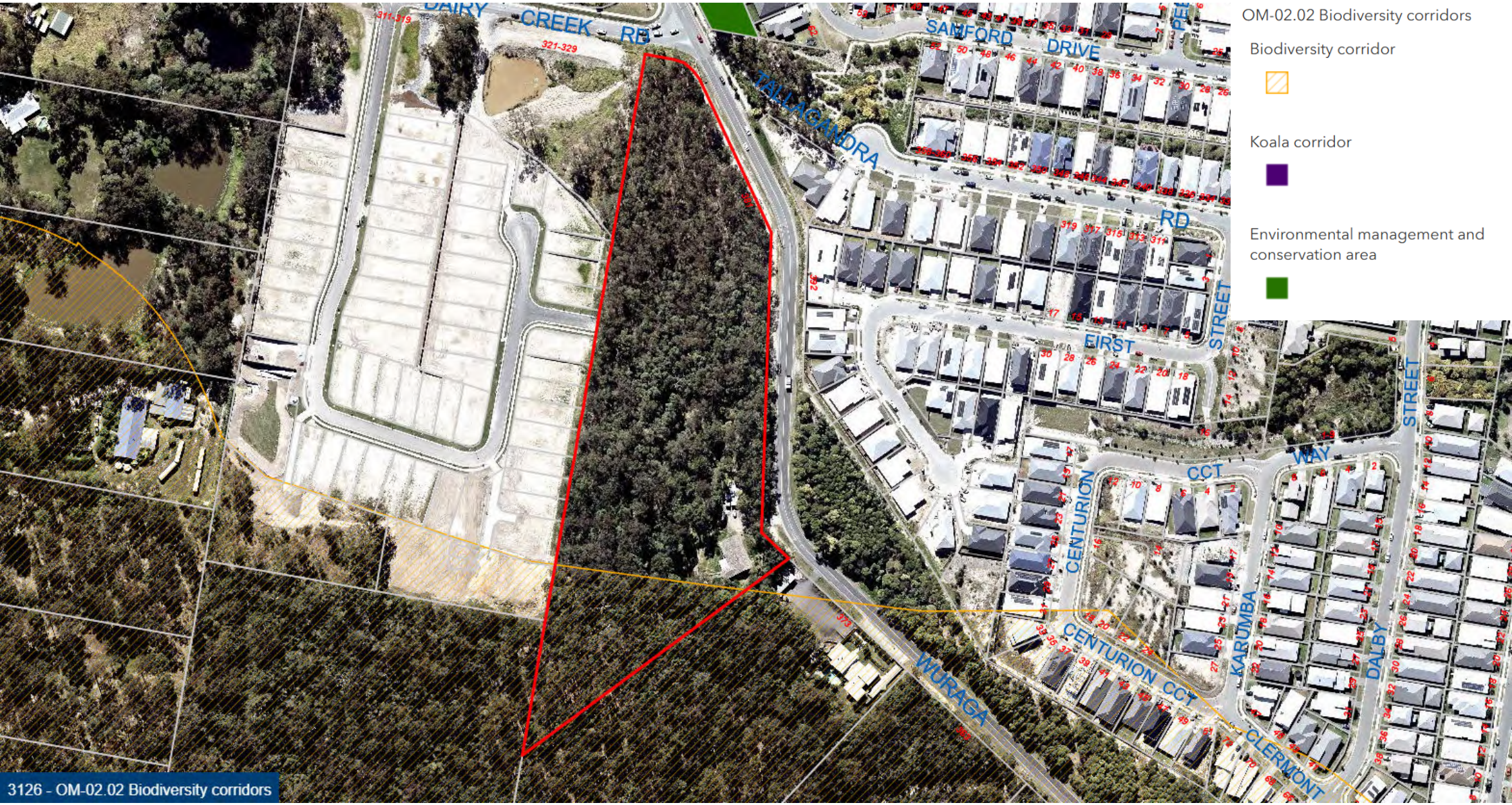
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Logan Planning Scheme 2015 V9.2 with TLPI 1/2024



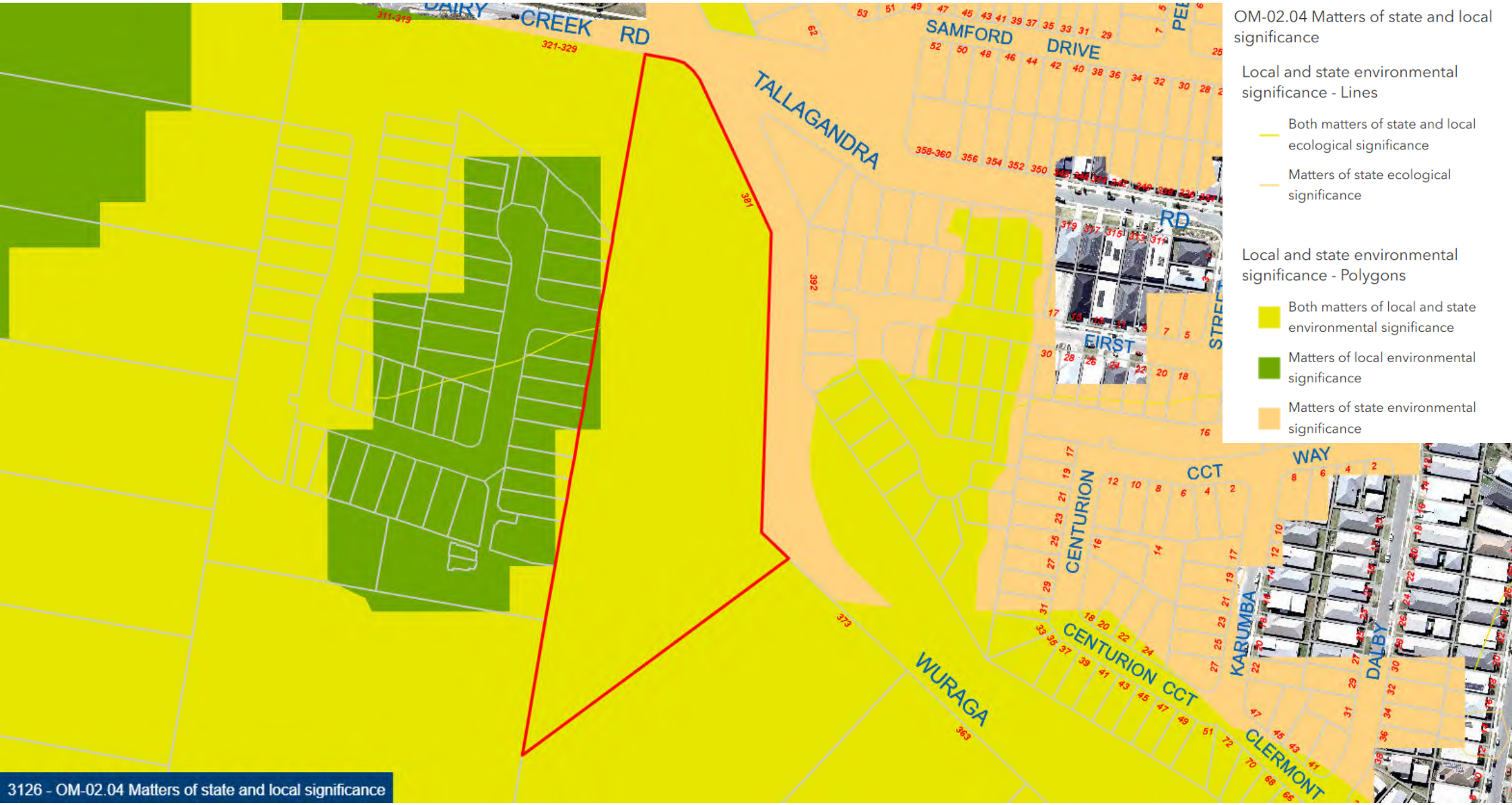
Logan Planning Scheme 2015 V9.2 with TLPI 1/2024



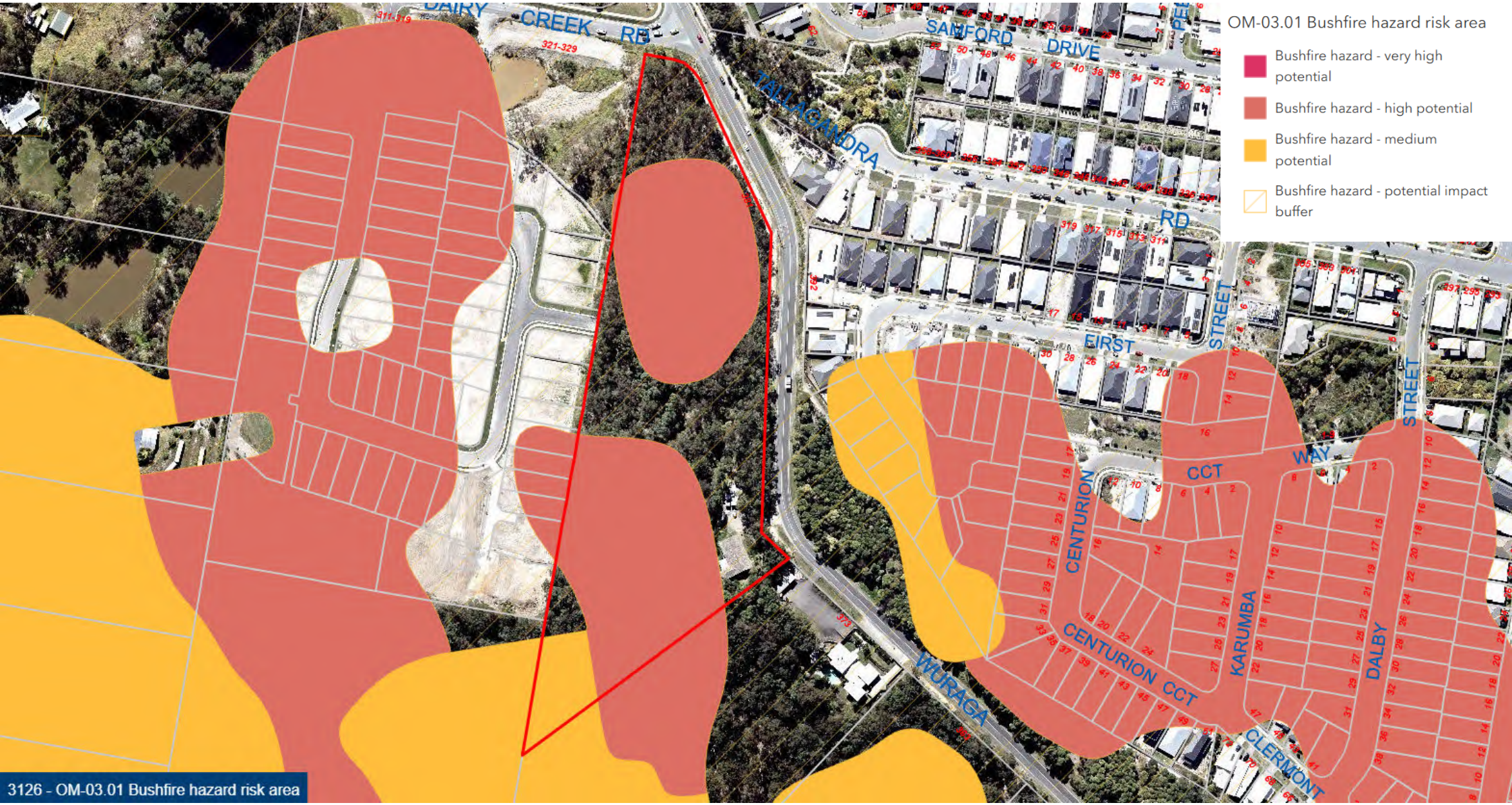
Logan Planning Scheme 2015 V9.2 with TLPI 1/2024



Logan Planning Scheme 2015 V9.2 with TLPI 1/2024



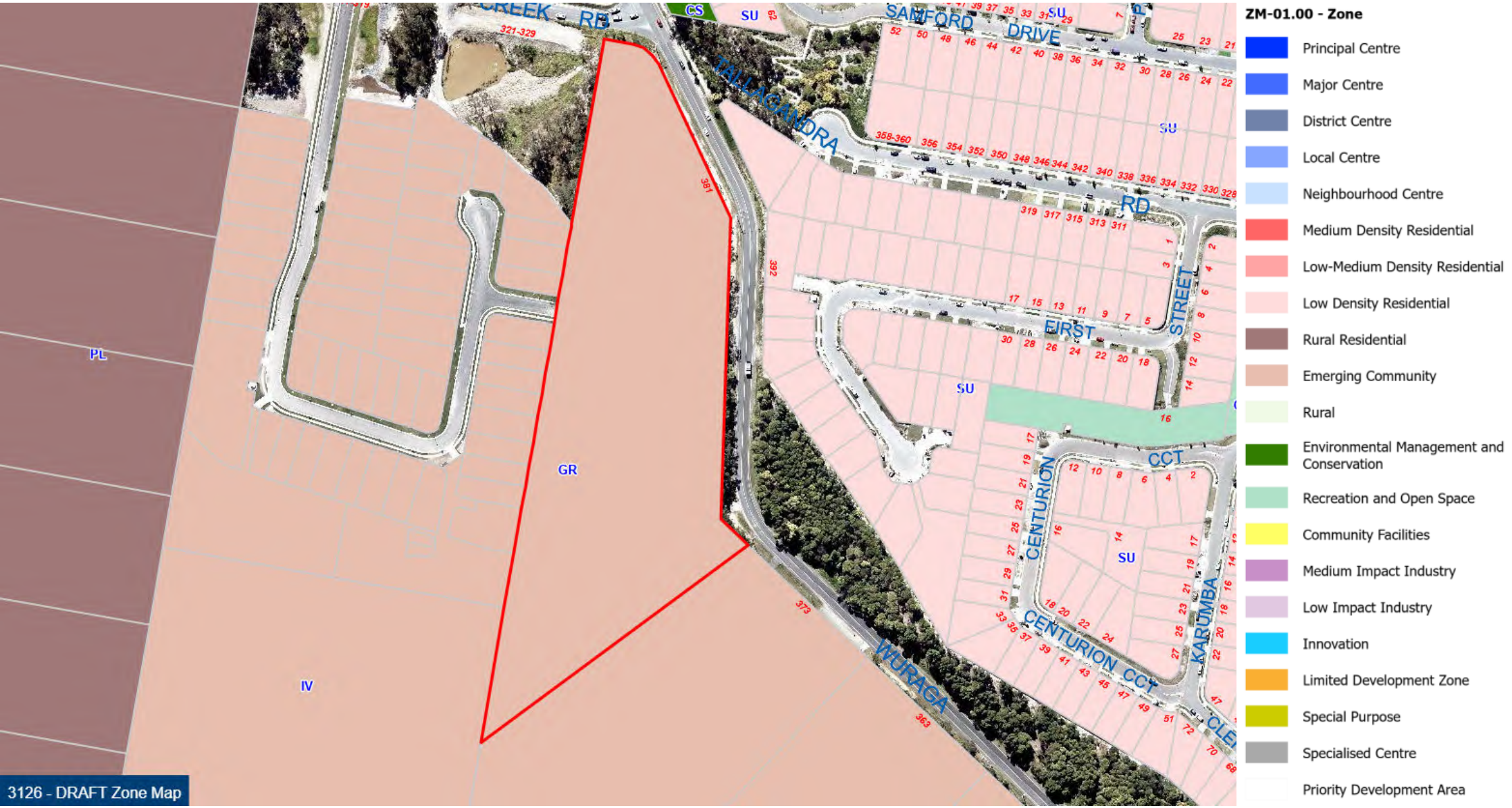
Logan Planning Scheme 2015 V9.2 with TLPI 1/2024



Logan Planning Scheme 2015 V9.2 with TLPI 1/2024



DRAFT Logan Plan

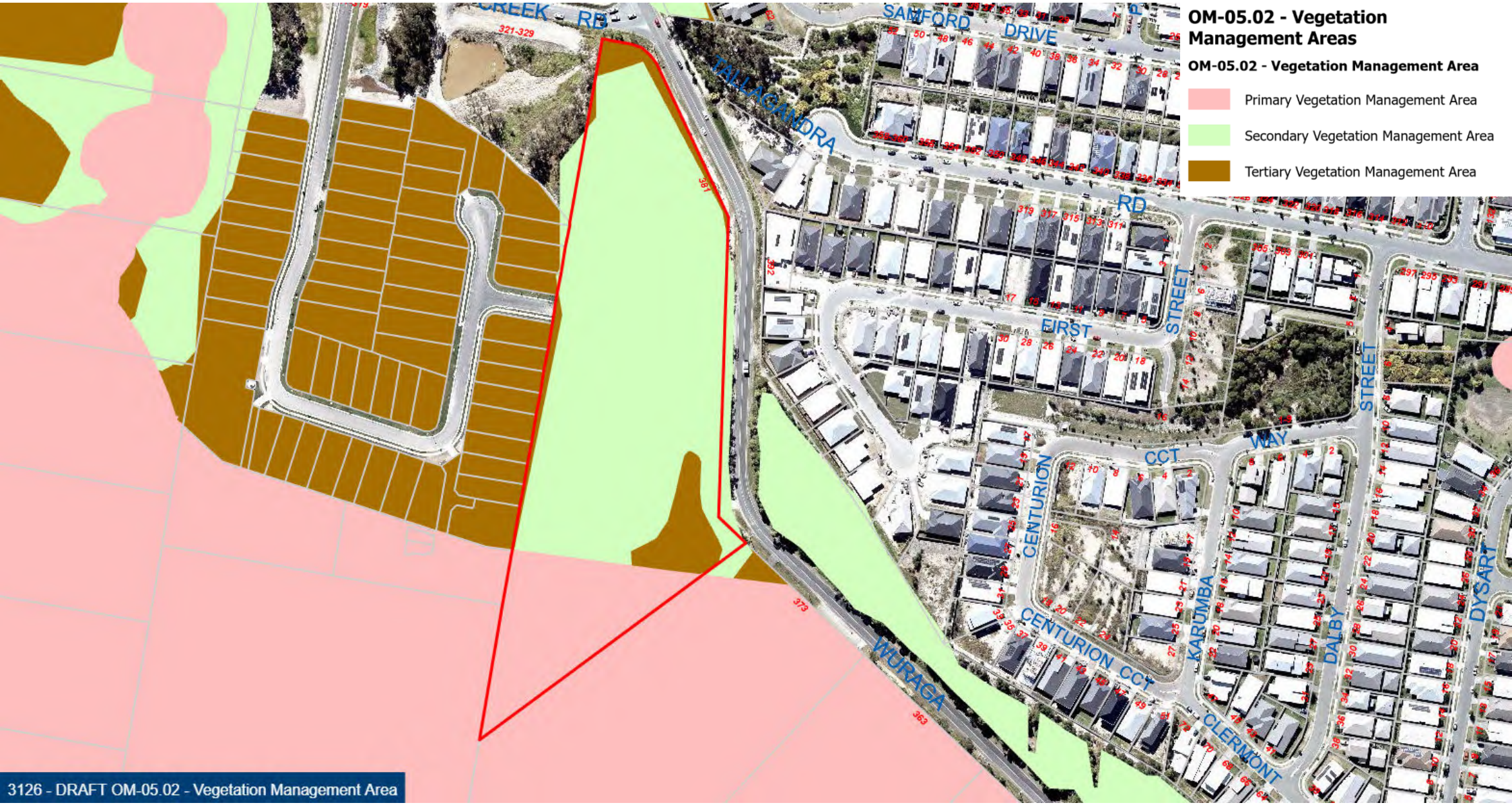



OM-04 Bushfire Overlay
OM-04.01 - Bushfire Risk Area
Very High Potential Bushfire Intensity Area
High Potential Bushfire Intensity Area
Medium Potential Bushfire Intensity Area
Bushfire Potential Impact Buffer
TALLAGANDRA
SAMFORD
DRIVE
RD
FIRST
STREET
CENTURION
CCT
WAY
KARUMBA
DALBY
DYSART
WURAGA
CLERMONT
3126 - DRAFT OM-04.01 - Bushfire Risk Area

DRAFT Logan Plan



DRAFT Logan Plan



DRAFT Logan Plan




OM-05.05 - Matters of State Environmental Significance
OM-05.05 - Matters of State Environmental Significance (Lines)
OM-05.05 - Matters of State Environmental Significance (Lines)
OM-05.05 - Matters of State Environmental Significance (Polygons)
OM-05.05 - Matters of State Environmental Significance (Polygons)
SAMFORD
DRIVE
TALLAGANDRA
RD
FIRST
STREET
CCT
WAY
CENTURION
CENTURION CCT
KARUMBA
DALBY
DYSART
WURAGA
CLERMONT
3126 - DRAFT OM-05.05 - Matters of State Environmental Significance

DRAFT Logan Plan



8.2.2 Biodiversity areas overlay code

8.2.2.1 Application

1. This code applies to accepted development (subject to requirements), compliance assessable and assessable development for which the Biodiversity areas overlay code is identified in the 'assessment benchmarks for assessable development and requirements for accepted development' column in Table 5.10.2.1 - Biodiversity areas overlay map OM-02.00 in Part 5 - Tables of assessment.
2. When using this code, reference should be made to section 5.3.2 - Determining the category of development and category of assessment and, where applicable, section 5.3.3. - Determining the requirements for accepted development and assessment benchmarks and other matters for assessable development located in Part 5 - Tables of assessment.

8.2.2.2 Purpose

1. The purpose of the code is to:
    a. connect biodiversity corridors;
    b. protect and enhance habitat values and ecosystem functions;
    c. protect scenic amenity values.
2. The purpose of the code will be achieved through the following overall outcomes:
    a. Development protects and enhances:
        i. habitat values and biodiversity corridors;
        ii. native vegetation in the primary vegetation management area;
        iii. native trees and native habitat trees in the secondary vegetation management area;
        iv. wildlife habitat and movement;
        v. landscape values.

8.2.2.3 Requirements for assessment

Part A - Requirements for accepted development (subject to requirements) and assessment benchmarks for assessable development

Table 8.2.2.3.1 - Biodiversity areas overlay code: accepted development (subject to requirements) and assessable development

Performance outcomes	Acceptable outcomes	Comments
For accepted development (subject to requirements) and assessable development		
Biodiversity corridors		
PO1 Development in a Biodiversity corridor identified on Biodiversity areas overlay map OM-02.02 is designed and located to: a. provide for habitat links; b. facilitate safe wildlife movement; c. facilitate wildlife refuge; d. enhance habitat values; e. rehabilitate degraded areas with native vegetation. Note - Compliance with this performance outcome is to be demonstrated by a detailed ecological assessment report prepared in accordance with Part 2 of Planning scheme policy 3 - Environmental management.	**AO1** Development is located outside a Biodiversity corridor identified on Biodiversity areas overlay map OM-02.02.	The proposed development will require encroachment into 1,803 m^2 (including the proposed APZ which is to be thinned only), and retention and rehabilitation of 3,586 m^2 of Council mapped Biodiversity Corridor. The disturbance extent is considered minor in the context of the overall corridor area, with the majority of the corridor retained in a contiguous state. Furthermore, the retained portion of the Biodiversity Corridor onsite will be managed as a rehabilitation area (refer to the Ecological Restoration Plan presented as APPENDIX K of the New Ground (2026) Ecology Assessment Report relating to the proposed development. The encroachment does not compromise the primary east west fauna conduit within the locality, as the substantial contiguous patch of native vegetation in the southern portion of the site continues to function as the main habitat linkage and movement pathway. Habitat connectivity and refuge values are therefore maintained, and the ecological function of the corridor is preserved. **Complies with PO1.**
Primary vegetation management area		

PO2 Development in the Primary vegetation management area identified on Biodiversity areas overlay map OM-02.01 is designed and located: a. to: i. protect the current extent of native vegetation; or ii. achieve a net gain of native vegetation; b. to rehabilitate degraded areas with native vegetation. Note - The Primary vegetation management area includes the locally significant vegetation identified on Biodiversity areas overlay map OM-02.03. Note - Compliance with this performance outcome is to be demonstrated by a detailed ecological assessment report [for section (a)(i)] and an environmental offset report [for section (a)(ii)] prepared in accordance with Part 2 of Planning scheme policy 3 - Environmental management.	**AO2.1** Development is located to avoid the need to clear any native vegetation in the Primary vegetation management area identified on Biodiversity areas overlay map OM-02.01, unless: a. if identified as a Matter of local environmental significance and not Both matters of local and state environmental significance on Biodiversity areas overlay map OM-02.04, an offset is provided in accordance with section 3.1 - Environmental offset standards in Planning scheme policy 3 - Environmental management; or b. if identified as Both matters of local and state environmental significance or Matter of state environmental significance on Biodiversity areas overlay map OM-02.04, an offset is provided in accordance with the Queensland Environmental Offset Policy and the *Environmental Offsets Act 2014* Note - Compliance with AO2.1(a) is to be demonstrated by an environmental offset report prepared in accordance with Part 2 of Planning scheme policy 3 - Environmental management. Note - For purposes of AO2.1(b) the Queensland Government has separate regulatory requirements for matters of state environmental significance. This is regulated by the State Department Assessment Provisions. Note - Where the native vegetation is identified as Both matters of Local and State environmental significance and no offset is required by the Queensland Government for the native vegetation identified as a matter of state environmental significance, development is located to avoid the need to clear the native vegetation.	The proposed development avoids the need to clear any native vegetation in the Primary Vegetation Management Area. **Complies with PO2.**

	AO2.2 Development rehabilitates degraded areas in accordance with the South East Queensland Ecological Restoration Framework.	
Secondary vegetation management area		
PO3 Development in the Secondary vegetation management area identified on Biodiversity areas overlay map OM-02.01 is designed and located to either: a. protect the current extent of native trees and native habitat trees; or b. achieve a net gain of native trees and native habitat trees. Note - Compliance with this performance outcome is to be demonstrated by a basic ecological assessment report [for paragraph (a)] and environmental offset report [for section (b)] prepared in accordance with Part 2 of Planning scheme policy 3 - Environmental management.	**AO3** Development is located to avoid the need to clear any native trees and native habitat trees in the Secondary vegetation management area identified on Biodiversity areas overlay map OM-02.01, unless: a. if clearing less than 10 native trees, compensatory planting is provided of: i. two trees of the same species for every native tree cleared in a secondary vegetation management area; ii. four trees of the same species for every native habitat tree cleared in a secondary vegetation management area; b. if identified as a Matter of local environmental significance and not Both matters of local and state environmental significance on Biodiversity areas overlay map OM-02.04, an offset is provided in accordance with section 3.1 - Environmental offset standards in Planning scheme policy 3 - Environmental management; or c. if identified as Both Matters of local and state environmental significance or	The proposed development requires assessable clearing of 19,222 m^2 within areas mapped as Secondary Vegetation Management Area (SVMA). The encroachment area includes 219 m^2 that is mapped as a Matter of local environmental significance only, and 18,784 m^2 that is mapped as both a Matter of local and state environmental significance. Accordingly, environmental offsets will be provided to mitigate assessable clearing of SVMA in accordance with *Section 3.1 Environmental offset standards* of *Planning Scheme Policy 3 Environmental management*, and in accordance with the *Queensland Environmental Offsets Policy* and the *Environmental Offsets Act*, as relevant. **Complies with PO3.**

	Matters of State environmental significance on Biodiversity areas overlay map OM-02.04, an offset is provided in accordance with the Queensland Environmental Offset Policy and the *Environmental Offsets Act* Note - Compliance with AO3(b) is to be demonstrated by an environmental offset report prepared in accordance with Part 2 of Planning scheme policy 3 - Environmental management. Note - For the purpose of AO3(c) the Queensland Government has separate regulatory requirements for matters of state environmental significance. This is regulated by the State Development Assessment Provisions. Note - Where the native vegetation is identified as a matter of state environmental significance and no offset is required by the Queensland Government for the native vegetation identified as a matter of state environmental significance, development is located to avoid the need to clear the native vegetation.	
Koala corridor		
PO4 Development in a Koala corridor identified on Biodiversity areas overlay map OM-02.02 is designed and located to protect and enhance koala habitat. Note - Compliance with this performance outcome is to be demonstrated by a detailed ecological assessment report	**AO4** Development: a. is located to avoid the need to clear any native vegetation in a Koala corridor identified on Biodiversity areas overlay map OM-02.02;	The development does not propose works within a Koala corridor. **Complies with PO4.**

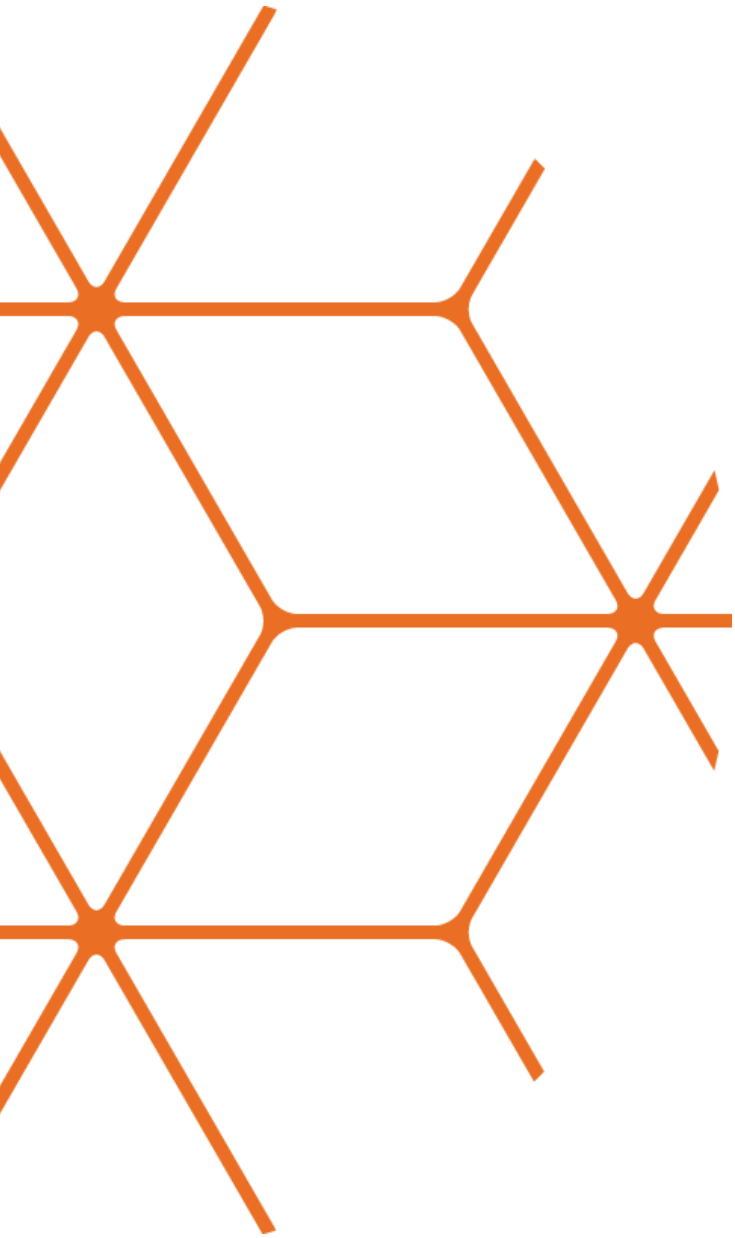
prepared in accordance with Part 2 of Planning scheme policy 3 - Environmental management.	b. in a Koala corridor identified on Biodiversity areas overlay map OM-02.02 rehabilitates degraded koala habitat values within the Koala corridor, in accordance with the South East Queensland Ecological Restoration Framework.	
Locally significant vegetation area		
PO5 Development in a Locally significant vegetation area identified on the Biodiversity areas overlay map OM-02.03 protects Melaleuca irbyana, vine forest, Gossia gonoclada and significant remnant vegetation areas from: a. encroachment; b. edge effects. Note - Compliance with this performance outcome is to be demonstrated by a detailed ecological assessment report prepared in accordance with Part 2 of Planning scheme policy 3 - Environmental management.	**AO5** Development is located outside of a Locally significant vegetation area as identified on Biodiversity areas overlay map OM-02.03.	The development does not propose works within a Locally significant vegetation area. **Complies with PO5.**
For assessable development		
Wildlife movement		
PO6 Development in a Biodiversity corridor or koala corridor identified on Biodiversity areas overlay map OM-02.02 provides for the safe movement of native fauna by: a. generating minimal additional night time traffic;	**AO6** Development in a Biodiversity corridor or koala corridor identified on Biodiversity areas overlay map OM-02.02 provides for the safe movement of native fauna through the implementation of:	The proposed development will be undertaken in accordance with an approved Construction Environmental Management Plan, incorporating measures to support the safe movement of native fauna within the mapped corridor. The development will operate within a low design speed environment to minimise the risk of injury or death to wildlife by vehicular traffic. It is also

b. minimising the risk of injury or death to wildlife by vehicular traffic; c. incorporating practices or measures to minimise disruption, injury or death during construction; d. providing that a road or accessway has a low design speed; e. providing fauna-friendly fencing. Note - Compliance with this performance outcome is to be demonstrated by a detailed ecological assessment report prepared in accordance with Part 2 of Planning scheme policy 3 - Environmental management.	a. the Queensland Government Fauna Sensitive Road Design Manual Volume 2: Preferred Practices; b. the Queensland Government Koala-sensitive Design Guideline.	not expected to generate significant additional night time traffic, and will implement construction phase controls to reduce disturbance and fauna mortality. Fauna friendly fencing will be provided where required to maintain permeability and facilitate safe movement for wildlife. **Complies with PO6.**
Locally significant Melaleuca irbyana buffer area		
PO7 Development within the Locally significant Melaleuca irbyana buffer area identified on Biodiversity areas overlay map OM-02.03 protects the Locally significant Melaleuca irbyana area identified on Biodiversity areas overlay map OM-02.03 from: a. edge effects; b. adverse changes to the local hydrology. Note - Compliance with this performance outcome is to be demonstrated by a detailed ecological assessment report prepared in accordance with Part 2 of Planning scheme policy 3 - Environmental management.	**AO7** Development within the Locally significant Melaleuca irbyana buffer area identified on Biodiversity areas overlay map OM-02.03 provides for a vegetated buffer within 50 metres of the Locally significant Melaleuca irbyana area identified on Biodiversity areas overlay map OM-02.03.	**N/A** The development does not propose works within a Locally significant *Melaleuca irbyana* buffer area.
Landscape values		
PO8 Development is designed and located to protect and enhance the landscape values of: a. a ridgeline; b. native vegetation.	**AO8** No acceptable outcome provided.	The proposed development layout has been designed to retain native vegetation within the northern and southern portions of the site. While clearing is required within the defined footprint, retained vegetated areas continue to contribute

		to the prevailing landscape character of the locality. **Complies with PO8.**
Lighting		
PO9 Development in a Biodiversity corridor or Koala corridor identified on Biodiversity areas overlay map OM-02.02 is designed to minimise adverse light impacts on native fauna.	**AO9** Lighting associated with development in a Biodiversity corridor or Koala corridor identified on Biodiversity areas overlay map OM-02.02: a. complies with the dark surrounds lighting levels in AS4282-1997 - Control of the obtrusive effects of outdoor lighting; b. is directed away from areas identified on Biodiversity areas overlay map OM-02.00.	The proposed development will implement lighting in accordance with the dark surrounds criteria of AS 4282-1997 *Control of the obtrusive effects of outdoor lighting*. Lighting will be designed and directed away from the southern vegetated areas and directed towards areas of urbanisation to minimise spill into adjoining habitat. **Complies with PO9.**

APPENDIX D

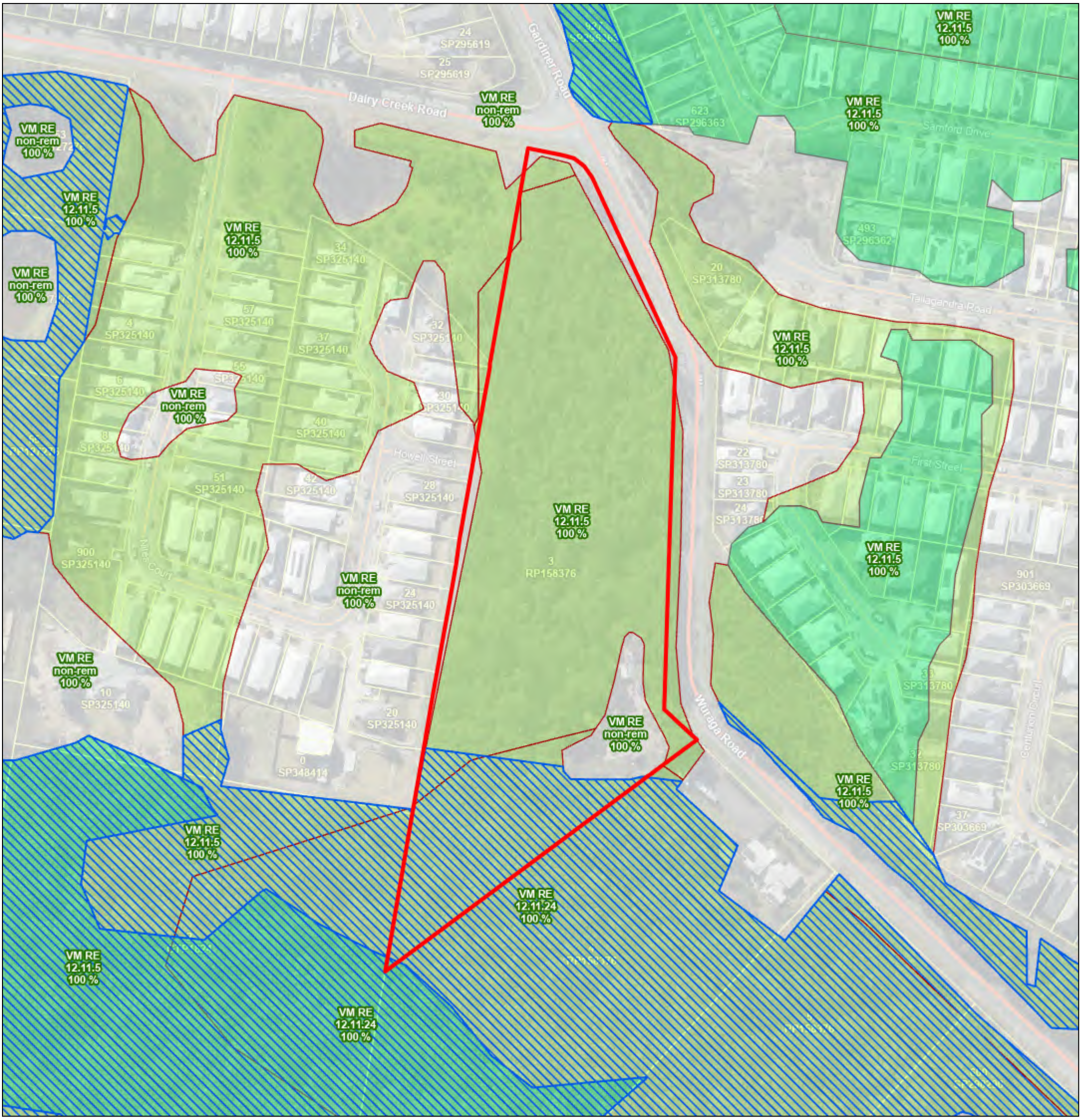
Desktop Assessment Results (State Government Mechanisms)



3126 - Regional Ecosystem and Essential Habitat

Lot 3 on RP158376

27°43'13"S 153°9'23"E 27°43'13"S 153°9'42"E



27°43'29"S 153°9'23"E 27°43'29"S 153°9'42"E

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Queensland Government

Department of Natural Resources and Mines, Manufacturing, and Regional and Rural Development

3126 - Regional Ecosystem and Essential Habitat

Lot 3 on RP158376

Legend

Essential habitat map

Essential habitat map

Vegetation management regional ecosystem map labels

Category A or B area containing endangered

Category A or B area containing of concern

Category A or B area that is least concern

Category C or R area containing endangered

Category C or R area containing of concern

Category C or R area that is of least concern

Water

Non-remnant

Land parcel

Parcel

Land parcel - gt 1 ha

Parcel

Land parcel - gt 10 ha

Parcel

Vegetation management regional ecosystem - all

- Category A or B area containing endangered
- Category A or B area containing of concern
- Category A or B area that is least concern
- Category C or R area containing endangered
- Category C or R area containing of concern
- Category C or R area that is of least concern
- Water
- Non-remnant

Land parcel - gt 1000 ha

Parcel

Land parcel label

Land parcel label - gt 1 ha

Land parcel label - gt 10 ha

Land parcel label - gt 1000 ha

Places: Search Results

3RP158376

Green bridges

Bridges

Roads and tracks

- Motorway
- Highway
- Secondary
- Connector
- Local
- Restricted Access Road
- Mall
- Busway
- Bikeway
- Restricted Access Bikeway
- Walkway
- Restricted Access Walkway
- Non-vehicular Track
- Track
- Restricted Access Track
- Ferry
- Proposed Thoroughfare

Tunnels

Railway stations

Railways

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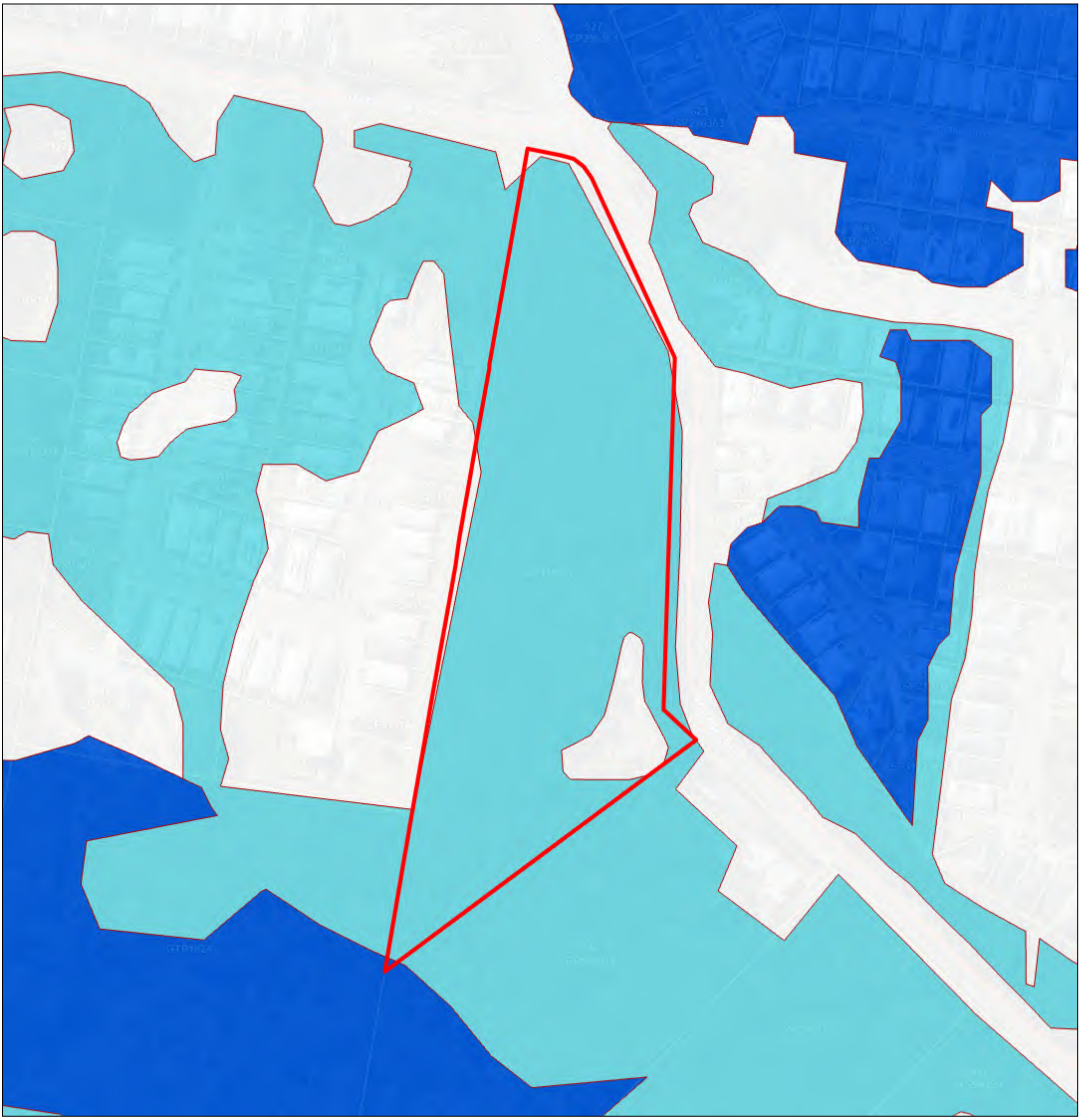
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3126 - Regulated Vegetation Map

Lot 3 on RP158376

27°43'13"S 153°9'23"E

27°43'13"S 153°9'42"E



27°43'29"S 153°9'23"E

27°43'29"S 153°9'42"E

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Queensland Government

Department of Natural Resources and Mines, Manufacturing, and Regional and Rural Development

3126 - Regulated Vegetation Map

Lot 3 on RP158376

Legend

RVM category A - vegetation offsets; compliance notices; VDecs

RVM category B - remnant vegetation

RVM category C - high-value regrowth vegetation

RVM category R - reef-regrowth watercourse vegetation

RVM category X - exempt clearing work on Freehold/Indigenous/Leasehold land

RVM water

RVM area not categorised

RVM - all

- Category A
- Category B
- Category C
- Category R
- Category X
- Water
- Not Categorised

Land parcel

- Parcel

Land parcel - gt 1 ha

- Parcel

Land parcel - gt 10 ha

- Parcel

Land parcel - gt 1000 ha

- Parcel

Land parcel label

Land parcel label - gt 1 ha

Land parcel label - gt 10 ha

Land parcel label - gt 1000 ha

Places: Search Results

- 3RP158376

Railway stations

Railways

Green bridges

Bridges

Tunnels

Roads and tracks

- Motorway
- Highway
- Secondary
- Connector
- Local
- Restricted Access Road
- Mall
- Busway
- Bikeway
- Restricted Access Bikeway
- Walkway
- Restricted Access Walkway
- Non-vehicular Track
- Track
- Restricted Access Track
- Ferry
- Proposed Thoroughfare

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3126 - Koala Plan Map

Lot 3 on RP158376

27°43'13"S 153°9'23"E

27°43'13"S 153°9'42"E



27°43'29"S 153°9'23"E

27°43'29"S 153°9'42"E

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Queensland Government

Department of Natural Resources and Mines, Manufacturing, and Regional and Rural Development

3126 - Koala Plan Map

Lot 3 on RP158376

Legend

Koala priority area

Core koala habitat area

Identified koala broad-hectare area

Locally refined koala habitat area

Land parcel

Parcel

Land parcel - gt 1 ha

Parcel

Land parcel - gt 10 ha

Parcel

Land parcel - gt 1000 ha

Parcel

Land parcel label

Land parcel label - gt 1 ha

Land parcel label - gt 10 ha

Land parcel label - gt 1000 ha

Places: Search Results

3RP158376

Roads and tracks

Motorway

Highway

Secondary

Connector

Local

Restricted Access Road

Mall

Busway

Bikeway

Restricted Access Bikeway

Walkway

Restricted Access Walkway

Non-vehicular Track

Track

Restricted Access Track

Ferry

Proposed Thoroughfare

Green bridges

Bridges

Tunnels

Railway stations

Railways

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3126 - Protected Plants Flora Survey Trigger Map

Lot 3 on RP158376

27°43'13"S 153°9'23"E

27°43'13"S 153°9'42"E



27°43'29"S 153°9'23"E

27°43'29"S 153°9'42"E

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Department of Natural Resources and Mines, Manufacturing, and Regional and Rural Development

3126 - Protected Plants Flora Survey Trigger Map

Lot 3 on RP158376

Legend

Protected plants trigger map

Land parcel

Parcel

Land parcel - gt 1 ha

Parcel

Land parcel - gt 10 ha

Parcel

Land parcel - gt 1000 ha

Parcel

Land parcel label

Land parcel label - gt 1 ha

Land parcel label - gt 10 ha

Land parcel label - gt 1000 ha

Places: Search Results

3RP158376

Green bridges

Bridges

Tunnels

Roads and tracks

Motorway

Highway

Secondary

Connector

Local

Restricted Access Road

Mall

Busway

Bikeway

Restricted Access Bikeway

Walkway

Restricted Access Walkway

Non-vehicular Track

Track

Restricted Access Track

Ferry

Proposed Thoroughfare

Railway stations

Railways

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3126 - Waterways for Waterway Barrier Works

Lot 3 on RP158376

27°43'13"S 153°9'23"E

27°43'13"S 153°9'42"E



27°43'29"S 153°9'23"E

27°43'29"S 153°9'42"E

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3126 - Waterways for Waterway Barrier Works

Lot 3 on RP158376

Legend

Queensland waterways for waterway barrier works

- Major (Tidal)
- Major
- High
- Moderate
- Low

Queensland waterways for waterway barrier works - tidal

- Major (Tidal)

Land parcel

- Parcel

Land parcel - gt 1 ha

- Parcel

Land parcel - gt 10 ha

- Parcel

Land parcel - gt 1000 ha

- Parcel

Land parcel label

Land parcel label - gt 1 ha

Land parcel label - gt 10 ha

Land parcel label - gt 1000 ha

Places: Search Results

- 3RP158376

Green bridges

Roads and tracks

- Motorway
- Highway
- Secondary
- Connector
- Local
- Restricted Access Road
- Mall
- Busway
- Bikeway
- Restricted Access Bikeway
- Walkway
- Restricted Access Walkway
- Non-vehicular Track
- Track
- Restricted Access Track
- Ferry
- Proposed Thoroughfare

Bridges

Tunnels

Railway stations

Railways

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WildNet Threatened Species List

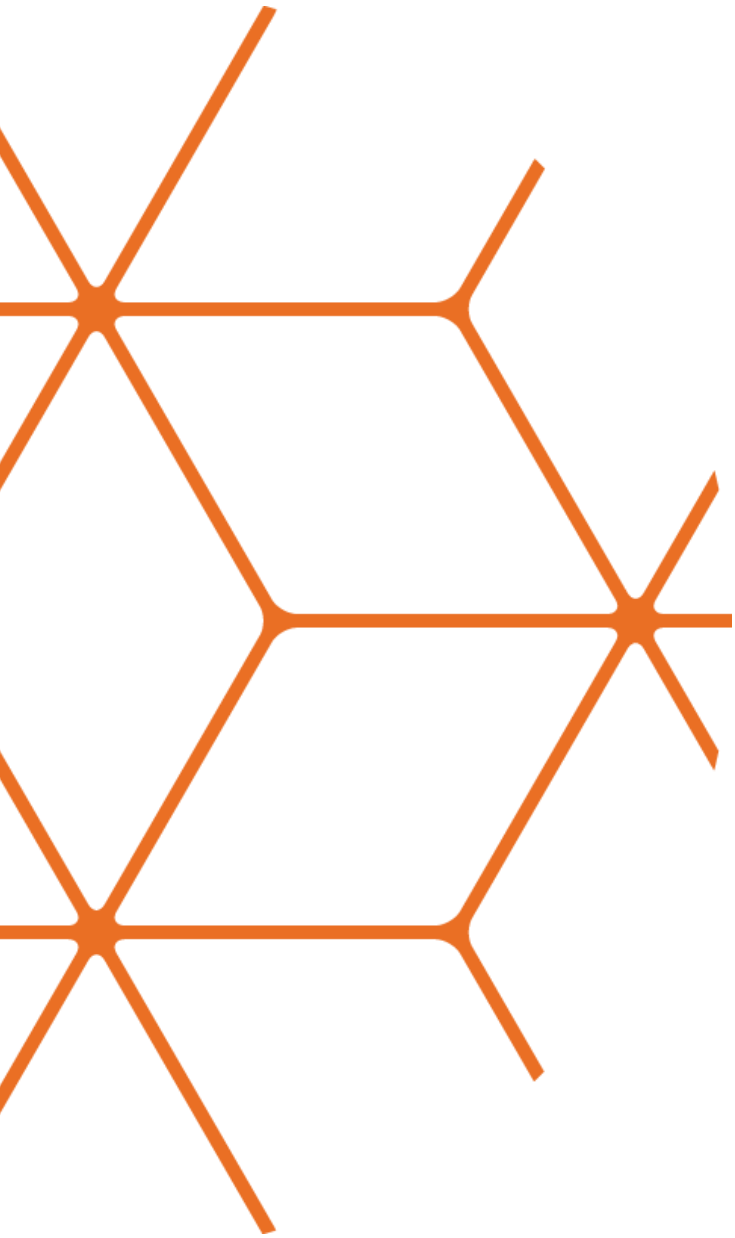
Lot 3 on RP158376

Distance: 5 km
Retrieved: 3 Feb 2026

WN Taxon ID	Kingdom	Class	Family	Scientific name	Common name	NCA status	EPBC status	Establishment	Sighting records	Specimen records	Sighting summary
22494	Animalia	Aves	Cacatuidae	*Calyptorhynchus lathami lathami*	glossy black-cockatoo (eastern)	V	V	QA	2	0	2
1107	Animalia	Aves	Strigidae	*Ninox strenua*	powerful owl	V		QA	5	0	5
860	Animalia	Mammalia	Phascolarctidae	*Phascolarctos cinereus*	koala	E	E	QA	889	0	889
962	Animalia	Mammalia	Pteropodidae	*Pteropus poliocephalus*	grey-headed flying-fox	C	V	QA	21	0	21
41645	Plantae	Equisetopsida	Apocynaceae	*Leichhardtia coronata*		V		NTQ	5	5	5
28906	Plantae	Equisetopsida	Euphorbiaceae	*Croton mamillatus*	Bahrs scrub croton	CR	CE	NTQ	5	5	5
11304	Plantae	Equisetopsida	Euphorbiaceae	*Fontainea venosa*		V	V	NTQ	11	11	11
41024	Plantae	Equisetopsida	Lamiaceae	*Coleus habrophyllus*		E	E	NTQ	1	1	1
17256	Plantae	Equisetopsida	Myrtaceae	*Eucalyptus curtisii*	Plunkett mallee	NT		NTQ	1	1	1
27386	Plantae	Equisetopsida	Myrtaceae	*Gossia gonoclada*		CR	E	NTQ	3	3	3
27387	Plantae	Equisetopsida	Myrtaceae	*Gossia hillii*		CR		NTQ	2	2	2
25952	Plantae	Equisetopsida	Myrtaceae	*Gossia punctata*		CR		NTQ	1	1	1
26403	Plantae	Equisetopsida	Myrtaceae	*Melaleuca irbyana*		E		NTQ	1	1	1
13406	Plantae	Equisetopsida	Myrtaceae	*Rhodamnia dumicola*	rib-fruited malletwood	E		NTQ	2	2	2
16746	Plantae	Equisetopsida	Proteaceae	*Macadamia integrifolia*	macadamia nut	V	V	NTQ	6	6	6
14603	Plantae	Equisetopsida	Sapindaceae	*Diploglottis campbellii*	small-leaved tamarind	E	E	NTQ	3	3	3
5210	Plantae	Equisetopsida	Sapotaceae	*Planchonella eerwah*		E	E	NTQ	2	2	2
29791	Plantae	Equisetopsida	Solanaceae	*Solanum mentiens*		E		NTQ	3	3	3
7608	Plantae	Equisetopsida	Symplocaceae	*Symplocos harroldii*	hairy hazelwood	NT		NTQ	3	3	3

APPENDIX E

Desktop Assessment Results (Federal Government Mechanisms)



EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 03-Feb-2026

Summary
Details
- Matters of NES
- Other Matters Protected by the EPBC Act
- Extra Information

Caveat
Acknowledgements

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	1
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	7
Listed Threatened Species:	93
Listed Migratory Species:	38

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at https://www.dcceew.gov.au/parks-heritage/heritage

A permit may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	46
Whales and Other Cetaceans:	2
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	3
Regional Forest Agreements:	None
Nationally Important Wetlands:	None
EPBC Act Referrals:	12
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Wetlands of International Importance (Ramsar Wetlands) [Resource Information]

Ramsar Site Name	Proximity	Buffer Status
Moreton bay	Within 10km of Ramsar site	In feature area

Listed Threatened Ecological Communities [Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.
Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status
Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland ecological community	Endangered	Community likely to occur within area	In feature area
Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland	Endangered	Community likely to occur within area	In feature area
Lowland Rainforest of Subtropical Australia	Critically Endangered	Community likely to occur within area	In feature area
Poplar Box Grassy Woodland on Alluvial Plains	Endangered	Community may occur within area	In buffer area only
Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions	Endangered	Community likely to occur within area	In feature area
Swamp Tea-tree (Melaleuca irbyana) Forest of South-east Queensland	Critically Endangered	Community may occur within area	In buffer area only
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	Critically Endangered	Community may occur within area	In feature area

Listed Threatened Species [Resource Information]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.
Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Anthochaera phrygia Regent Honeyeater [82338]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Ardenna grisea Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Calyptorhynchus lathami lathami South-eastern Glossy Black-Cockatoo [67036]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Climacteris picumnus victoriae Brown Treecreeper (south-eastern) [67062]	Vulnerable	Species or species habitat may occur within area	In feature area
Cyclopsitta diophthalma coxeni Coxen's Fig-Parrot [59714]	Critically Endangered	Species or species habitat may occur within area	In feature area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea antipodensis gibsoni Gibson's Albatross [82270]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Erythrotriorchis radiatus Red Goshawk [942]	Endangered	Species or species habitat likely to occur within area	In feature area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat known to occur within area	In feature area
Geophaps scripta scripta Squatter Pigeon (southern) [64440]	Vulnerable	Species or species habitat may occur within area	In feature area
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat may occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Limnodromus semipalmatus Asian Dowitcher [843]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Limosa lapponica baueri Nunivak Bar-tailed Godwit, Western Alaskan Bar-tailed Godwit [86380]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area	In feature area
Stagonopleura guttata Diamond Firetail [59398]	Vulnerable	Species or species habitat may occur within area	In feature area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Species or species habitat may occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Tringa nebularia			
Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area	In feature area
Turnix melanogaster			
Black-breasted Button-quail [923]	Vulnerable	Species or species habitat likely to occur within area	In feature area
FISH			
Epinephelus daemelii			
Black Rockcod, Black Cod, Saddled Rockcod [68449]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Maccullochella mariensis			
Mary River Cod [83806]	Endangered	Translocated population known to occur within area	In buffer area only
FROG			
Litoria olongburensis			
Wallum Sedge Frog [1821]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Mixophyes fleayi			
Fleay's Frog [25960]	Endangered	Species or species habitat may occur within area	In feature area
INSECT			
Argynnis hyperbius inconstans			
Australian Fritillary [88056]	Critically Endangered	Species or species habitat may occur within area	In feature area
MAMMAL			
Chalinolobus dwyeri			
Large-eared Pied Bat, Large Pied Bat [183]	Endangered	Species or species habitat may occur within area	In feature area
Dasyurus maculatus maculatus (SE mainland population)			
Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat likely to occur within area	In feature area
Orcaella heinsohni			
Australian Snubfin Dolphin [81322]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Petauroides volans](#)			
Greater Glider (southern and central) [254]	Endangered	Species or species habitat likely to occur within area	In feature area
[Petaurus australis australis](#)			
Yellow-bellied Glider (south-eastern) [87600]	Vulnerable	Species or species habitat likely to occur within area	In feature area
[Petrogale penicillata](#)			
Brush-tailed Rock-wallaby [225]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)](#)			
Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Endangered	Species or species habitat known to occur within area	In feature area
[Potorous tridactylus tridactylus](#)			
Long-nosed Potoroo (northern) [66645]	Vulnerable	Species or species habitat likely to occur within area	In feature area
[Pseudomys novaehollandiae](#)			
New Holland Mouse, Pookila [96]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Pteropus poliocephalus](#)			
Grey-headed Flying-fox [186]	Vulnerable	Roosting known to occur within area	In feature area
[Sousa sahulensis](#)			
Australian Humpback Dolphin [87942]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Xeromys myoides](#)			
Water Mouse, False Water Rat, Yirrkoo [66]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
PLANT			
[Arthraxon hispidus](#)			
Hairy-joint Grass [9338]	Vulnerable	Species or species habitat likely to occur within area	In feature area
[Baloghia marmorata](#)			
Marbled Balogia, Jointed Baloghia [8463]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Bosistoa transversa Three-leaved Bosistoa, Yellow Satinheart [16091]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Coleus habrophyllus listed as Plectranthus habrophyllus [91378]	Endangered	Species or species habitat known to occur within area	In feature area
Corchorus cunninghamii Native Jute [14659]	Endangered	Species or species habitat likely to occur within area	In feature area
Croton mamillatus Bahrs Scrub Croton [84796]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Cryptocarya foetida Stinking Cryptocarya, Stinking Laurel [11976]	Vulnerable	Species or species habitat may occur within area	In feature area
Cryptostylis hunteriana Leafless Tongue-orchid [19533]	Vulnerable	Species or species habitat may occur within area	In feature area
Cupaniopsis shirleyana Wedge-leaf Tuckeroo [3205]	Vulnerable	Species or species habitat may occur within area	In feature area
Dichanthium setosum bluegrass [14159]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diploglottis campbellii Small-leaved Tamarind [21484]	Endangered	Species or species habitat known to occur within area	In feature area
Endiandra floydii Floyd's Walnut, Crystal Creek Walnut [52955]	Endangered	Species or species habitat likely to occur within area	In feature area
Endiandra hayesii Rusty Rose Walnut, Velvet Laurel [13866]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Fontainea venosa [24040]	Vulnerable	Species or species habitat known to occur within area	In feature area
Gossia gonoclada Angle-stemmed Myrtle [78866]	Endangered	Species or species habitat known to occur within area	In buffer area only
Lepidium peregrinum Wandering Pepper-cress [14035]	Endangered	Species or species habitat may occur within area	In buffer area only
Macadamia integrifolia Macadamia Nut, Queensland Nut Tree, Smooth-shelled Macadamia, Bush Nut, Nut Oak [7326]	Vulnerable	Species or species habitat known to occur within area	In feature area
Macadamia tetraphylla Rough-shelled Bush Nut, Macadamia Nut, Rough-shelled Macadamia, Rough-leaved Queensland Nut [6581]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Notelaea lloydii Lloyd's Olive [15002]	Vulnerable	Species or species habitat may occur within area	In feature area
Owenia cepiodora Onionwood, Bog Onion, Onion Cedar [11344]	Vulnerable	Species or species habitat may occur within area	In feature area
Persicaria elatior Knotweed, Tall Knotweed [5831]	Vulnerable	Species or species habitat known to occur within area	In feature area
Phaius australis Lesser Swamp-orchid [5872]	Endangered	Species or species habitat may occur within area	In feature area
Planchonella eerwah Shiny-leaved Condoo, Black Plum, Wild Apple [17340]	Endangered	Species or species habitat known to occur within area	In feature area
Randia moorei Spiny Gardenia [10577]	Endangered	Species or species habitat likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Rhodamnia rubescens Scrub Turpentine, Brown Malletwood [15763]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Rhodomyrtus psidioides Native Guava [19162]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Samadera bidwillii Quassia [29708]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Sophora fraseri [8836]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thesium australe Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat may occur within area	In feature area
Vincetoxicum woollsii listed as Tylophora woollsii [40080]	Endangered	Species or species habitat may occur within area	In feature area
REPTILE			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Congregation or aggregation known to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Coeranoscincus reticulatus Three-toed Snake-tooth Skink [59628]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Delma torquata Adorned Delma, Collared Delma [1656]	Vulnerable	Species or species habitat may occur within area	In feature area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Eretmochelys imbricata			
Hawksbill Turtle [1766]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Furina dunmalli			
Dunmall's Snake [59254]	Vulnerable	Species or species habitat may occur within area	In feature area
Hemiaspis damelii			
Grey Snake [1179]	Endangered	Species or species habitat likely to occur within area	In feature area
Lepidochelys olivacea			
Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Species or species habitat known to occur within area	In buffer area only
Natator depressus			
Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
SHARK			
Sphyrna lewini			
Scalloped Hammerhead [85267]	Conservation Dependent	Species or species habitat likely to occur within area	In buffer area only

Listed Migratory Species			[Resource Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Apus pacificus			
Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Ardenna grisea			
Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Calonectris leucomelas			
Streaked Shearwater [1077]		Species or species habitat known to occur within area	In buffer area only
Diomedea antipodensis			
Antipodean Albatross [64458]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Phaethon lepturus White-tailed Tropicbird [1014]		Species or species habitat may occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Species or species habitat may occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Migratory Marine Species			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Congregation or aggregation known to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area	In buffer area only
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat may occur within area	In buffer area only
Lepidochelys olivacea Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Species or species habitat known to occur within area	In buffer area only
Mobula alfredi as Manta alfredi Reef Manta Ray, Coastal Manta Ray [90033]		Species or species habitat may occur within area	In buffer area only
Mobula birostris as Manta birostris Giant Manta Ray [90034]		Species or species habitat may occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Orcaella heinsohni Australian Snubfin Dolphin [81322]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Sousa sahulensis as Sousa chinensis Australian Humpback Dolphin [87942]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Migratory Terrestrial Species			
Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat known to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Motacilla flava](#) Yellow Wagtail [644]		Species or species habitat may occur within area	In buffer area only
Migratory Wetlands Species			
[Actitis hypoleucos](#) Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
[Calidris acuminata](#) Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area	In feature area
[Calidris ferruginea](#) Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
[Calidris melanotos](#) Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
[Charadrius leschenaultii](#) Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
[Gallinago hardwickii](#) Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat known to occur within area	In feature area
[Limnodromus semipalmatus](#) Asian Dowitcher [843]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Limosa lapponica](#) Bar-tailed Godwit [844]		Species or species habitat likely to occur within area	In buffer area only
[Numenius madagascariensis](#) Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
[Pandion haliaetus](#) Osprey [952]		Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Tringa nebularia			
Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area	In feature area

Other Matters Protected by the EPBC Act

Listed Marine Species			[Resource Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
Actitis hypoleucos			
Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Anseranas semipalmata			
Magpie Goose [978]		Species or species habitat may occur within area overfly marine area	In feature area
Apus pacificus			
Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Ardenna grisea as Puffinus griseus			
Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Bubulcus ibis as Ardea ibis			
Cattle Egret [66521]		Breeding likely to occur within area overfly marine area	In feature area
Calidris acuminata			
Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris ferruginea			
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Calidris melanotos](#) Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
[Calonectris leucomelas](#) Streaked Shearwater [1077]		Species or species habitat known to occur within area	In buffer area only
[Charadrius leschenaultii](#) Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
[Diomedea antipodensis](#) Antipodean Albatross [64458]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Diomedea antipodensis gibsoni as Diomedea gibsoni](#) Gibson's Albatross [82270]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Diomedea exulans](#) Wandering Albatross [89223]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Gallinago hardwickii](#) Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
[Haliaeetus leucogaster](#) White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
[Hirundapus caudacutus](#) White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
[Lathamus discolor](#) Swift Parrot [744]	Critically Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Limnodromus semipalmatus Asian Dowitcher [843]	Vulnerable	Species or species habitat may occur within area overfly marine area	In buffer area only
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat likely to occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area overfly marine area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area	In buffer area only
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area overfly marine area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Pachyptila turtur Fairy Prion [1066]		Species or species habitat likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area	In feature area
Phaethon lepturus White-tailed Tropicbird [1014]		Species or species habitat may occur within area	In buffer area only
Pterodroma cervicalis White-necked Petrel [59642]		Species or species habitat may occur within area	In feature area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area overfly marine area	In feature area
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Sterna striata White-fronted Tern [799]		Migration route may occur within area	In feature area
Symposiachrus trivirgatus as Monarcha trivirgatus Spectacled Monarch [83946]		Species or species habitat known to occur within area overfly marine area	In feature area
Thalassarche cauta Shy Albatross [89224]	Endangered	Species or species habitat may occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Thalassarche steadi](#) White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Tringa nebularia](#) Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Reptile			
[Caretta caretta](#) Loggerhead Turtle [1763]	Endangered	Congregation or aggregation known to occur within area	In buffer area only
[Chelonia mydas](#) Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
[Dermochelys coriacea](#) Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area	In buffer area only
[Eretmochelys imbricata](#) Hawksbill Turtle [1766]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
[Lepidochelys olivacea](#) Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Species or species habitat known to occur within area	In buffer area only
[Natator depressus](#) Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area	In buffer area only

Whales and Other Cetaceans			[Resource Information]
Current Scientific Name	Status	Type of Presence	Buffer Status
Mammal			
[Orcaella heinsohni](#) Australian Snubfin Dolphin [81322]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Sousa sahulensis](#) Australian Humpback Dolphin [87942]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Extra Information

State and Territory Reserves			[Resource Information]
Protected Area Name	Reserve Type	State	Buffer Status
Buccan	Conservation Park	QLD	In buffer area only
Edward Corbould Reserve and Retreat	Nature Refuge	QLD	In buffer area only
Plunkett	Conservation Park	QLD	In buffer area only

EPBC Act Referrals				[Resource Information]
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Logan and Gold Coast Faster Rail	2022/09439		Assessment	In buffer area only
Loganlea Station Relocation and Park 'n' Ride Expansion	2022/09348		Completed	In buffer area only
Controlled action				
Jacobs Well Airport	2004/1361	Controlled Action	Completed	In buffer area only
Not controlled action				
Bahrs Scrub residential community development, Qld	2013/6718	Not Controlled Action	Completed	In feature area
Clearance of approx 152ha of open forest vegetation for residential development at Mt Cotton Villag	2004/1592	Not Controlled Action	Completed	In buffer area only
GCCC Northern Wastewater Strategy and associated Reclaimed Water Scheme - Stage	2001/282	Not Controlled Action	Completed	In feature area
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
Loganlea to Jimboomba 110kV network upgrade, SE Qld	2013/7035	Not Controlled Action	Completed	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Logan River Marina	2003/1176	Not Controlled Action	Completed	In buffer area only
Prawn Aquaculture Enterprise Expansion	2001/294	Not Controlled Action	Completed	In buffer area only
Residential estate Bunker Rd	2005/2130	Not Controlled Action	Completed	In buffer area only
Woodlands Residential development (Villages 4 and 6, Waterford, Qld	2013/6828	Not Controlled Action	Completed	In buffer area only

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data is available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance on the contents of this report.

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions when time permits.

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded breeding sites; and
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

-Office of Environment and Heritage, New South Wales
-Department of Environment and Primary Industries, Victoria
-Department of Primary Industries, Parks, Water and Environment, Tasmania
-Department of Environment, Water and Natural Resources, South Australia
-Department of Land and Resource Management, Northern Territory
-Department of Environmental and Heritage Protection, Queensland
-Department of Parks and Wildlife, Western Australia
-Environment and Planning Directorate, ACT
-Birdlife Australia
-Australian Bird and Bat Banding Scheme
-Australian National Wildlife Collection
-Natural history museums of Australia
-Museum Victoria
-Australian Museum
-South Australian Museum
-Queensland Museum
-Online Zoological Collections of Australian Museums
-Queensland Herbarium
-National Herbarium of NSW
-Royal Botanic Gardens and National Herbarium of Victoria
-Tasmanian Herbarium
-State Herbarium of South Australia
-Northern Territory Herbarium
-Western Australian Herbarium
-Australian National Herbarium, Canberra
-University of New England
-Ocean Biogeographic Information System
-Australian Government, Department of Defence
Forestry Corporation, NSW
-Geoscience Australia
-CSIRO
-Australian Tropical Herbarium, Cairns
-eBird Australia
-Australian Government – Australian Antarctic Data Centre
-Museum and Art Gallery of the Northern Territory
-Australian Government National Environmental Science Program
-Australian Institute of Marine Science
-Reef Life Survey Australia
-American Museum of Natural History
-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania
-Tasmanian Museum and Art Gallery, Hobart, Tasmania
-Other groups and individuals

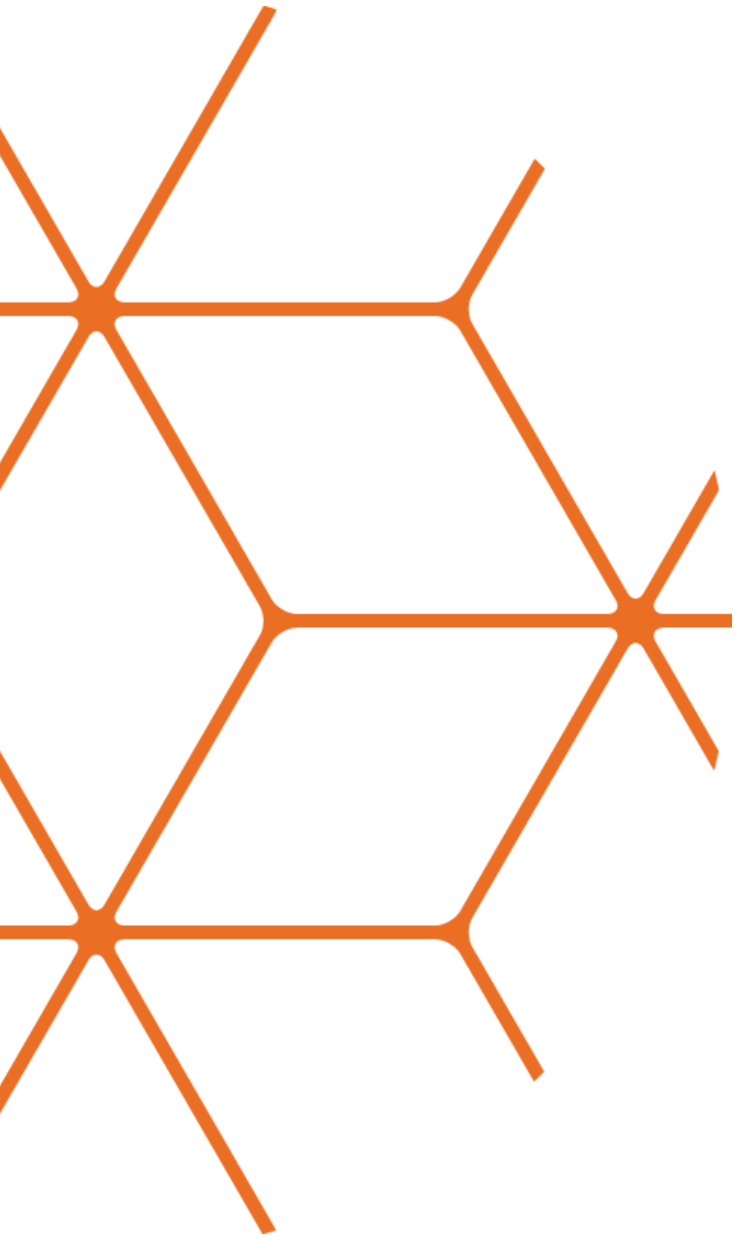
The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the Contact us page.

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Department of Climate Change, Energy, the Environment and Water
GPO Box 3090
Canberra ACT 2601 Australia
+61 2 6274 1111

APPENDIX F

Ecological Features Plan



Subject site

KSAT survey Koala scat record location

Fauna Breeding Place

Hollow-bearing stag

Hollow-bearing tree

Ground-truthed Vegetation Community

Open Forest. Emergent (18-20 m, 15% CC) Corymbia intermediaand Corymbia variegata; T1 (14-17 m, 55% CC) of Corymbia variegata, Eucalyptus majorand Eucalyptus carnea, with Lophostemon confertus, Corymbia intermediaand Eucalyptus crebra; T2 (8-12m, 40% CC) dominated by Lophostemon confertus, with Alphitonia excelsaand Jagera pseudorhus. Resembles RE12.11.5.

Open Forest. Emergent (19-21 m, 20% CC) Eucalyptus major, Eucalyptus carnea, with Eucalyptus dura; T1 (15-18m, 50% CC) of Eucalyptus majorand Eucalyptus carnea, with Eucalyptus helidonicaand Corymbia intermedia; T2 (8-12m, 40% CC) dominated by Lophostemon confertus, with Alphitonia excelsa, Eucalyptus carneaand Corymbia intermedia; S1 (5-7 m, 30% CC) Acacia spp. Resembles RE12.11.24.

Open Forest. Emergent (19m, 15% CC) Eucalyptus dura; T1 (14-21 m, 50% CC) Eucalyptus fibrosa, Eucalyptus tindaliae, Eucalyptus dura, Eucalyptus carnea, scattered Corymbia variegata, Eucalyptus major and Eucalyptus crebra; T2 (15-18 m, 40% CC) Eucalyptus major, scattered Corymbia intermedia, Eucalyptus carnea, Lophostemon confertus, Angophora leiocarpaand Corymbia variegata; S1 (5-7 m, 30% CC) Acacia disparrima, scattered Acacia concurrens, Acacia leiocalyx, Alphitonia excelsia and Lophostemon confertus. Resembles RE12.11.25.

Cleared area hosting a dwelling house and ancillary structures. Resembles non-remnant.

Dairy Creek Road
Samford Drive
Tallagandra Road
Howell Street
Niles Court
Wuraga Road
First Street
K3 (Tree 23)
BP4
K3 (Tree 5)
K3 (Tree 6)
BP3
K1 (Tree 9)
BP2
K1 (Tree 23)
BP1
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Lot 3 RP158376
Lot 2 GTP1824
Lot 4 RP158376
Lot 5 RP158376

Note:
Figure indicative and not for construction purposes.

File: 3126-BahrsScrub-EAR-EcologicalFeatures-260728

ECOLOGICAL FEATURES PLAN - LOT 3 ON RP158376

0 25 50 Meters

A3 Scale 1:1,250

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| T: 07 5530 7283 E: info@newground.com.au

Sheet Number:	1 of 1
Project:	3126
Version:	1
Date:	28/07/2026
Sources:	Cadastral boundaries: QLD DCDB DNRME 2026 Aerial photo: NearMap 03/12/2025

APPENDIX G

Site-wide Flora and Fauna Species List

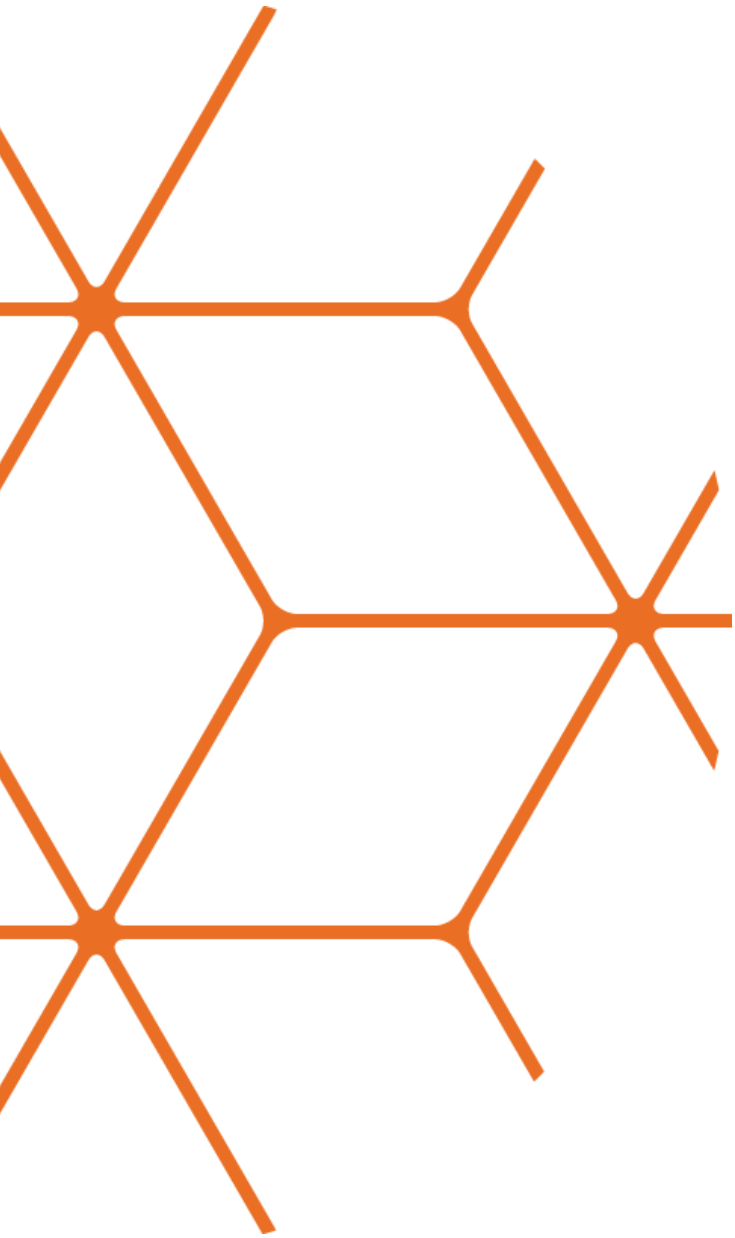


TABLE 1: FLORA SPECIES RECORDED DURING SURVEY

SPECIES NAME	COMMON NAME	NCA STATUS	EPBC STATUS	ESTABLISHMENT
Acacia concurrens	Curracabah	C	-	NTQ
Acacia disparrima	Southern Salwood	C	-	NTQ
Acacia fimbriata	Brisbane Golden Wattle	C	-	NNQ
Acacia implexa	Lightwood	C	-	NTQ
Acacia leiocalyx	Black Wattle	C	-	NTQ
Allocasuarina littoralis	Black She-Oak	C	-	NTQ
Alphitonia excelsa	Soap Tree	C	-	NTQ
Amyema conspicua	Showy Mistletoe	C	-	NTQ
Angophora leiocarpa	Rusty Gum	C	-	NTQ
Aristida calycina	Dark Wiregrass	C	-	NTQ
*Asparagus plumosus** C3, WoNS	Feathered Asparagus Fern	-	-	NAQ
Brachychiton acerifolius	Flame Tree	SL	-	NTQ
Cheilanthes sieberi	Poison Rock Fern	C	-	NTQ
Chrysopogon fallax	Golden Beard Grass	C	-	NTQ
Clematicissus opaca	Small-Leaved Native Grape	C	-	NTQ
Commelina ensifolia	Scurvy Grass	C	-	NTQ
Corymbia intermedia	Pink Bloodwood	C	-	NTQ
Corymbia variegata	Spotted Gum	C	-	NTQ
Cyanthillium cinereum	Little Ironweed	C	-	NTQ
Cymbopogon refractus	Barbed-Wire Grass	C	-	NTQ
Davallia solida	Hare's Foot Fern	C	-	NTQ
Dianella caerulea	Blue Flax Lily	C	-	NTQ
Dianella longifolia	Pale Flax Lily	C	-	NTQ
Digitaria parviflora	Small-Flowered Finger Grass	C	-	NTQ
Dipodium variegatum	Blotched Hyacinth Orchid	SL	-	NTQ
Dodonaea triquetra	Large-Leaved Hop Bush	C	-	NTQ
Drynaria rigidula	Basket Fern	SL	-	NTQ
*Dypsis decaryi**	Triangle Palm	-	-	NAQ
Entolasia stricta	Wiry Panic	C	-	NTQ
Eucalyptus carnea	Broad-Leaved Red Ironbark	C	-	NTQ
Eucalyptus crebra	Narrow-Leaved Red Ironbark	C	-	NTQ
Eucalyptus dura	Blue-Leaved Ironbark	C	-	NTQ
Eucalyptus fibrosa	Broad-Leaved Red Ironbark	C	-	NTQ
Eucalyptus helidonica	Helidon Ironbark	C	-	NTQ
Eucalyptus major	Mountain Grey Gum	C	-	NTQ
Eucalyptus propinqua	Small-Fruited Grey Gum	C	-	NTQ
Eucalyptus resinifera	Red Mahogany	C	-	NTQ
Eucalyptus tereticornis	Forest Red Gum	C	-	NTQ
Eucalyptus tindaliae	Queensland White Stringybark	C	-	NTQ
Eulophia picta	Painted Hyacinth Orchid	SL	-	NTQ
Eustrephus latifolius	Wombat Berry	C	-	NTQ
Galactia tenuiflora	Milk Pea	C	-	NTQ
Geitonoplesium cymosum	Scrambling Lily	C	-	NTQ
Glycine cyrtoloba	Native Soybean	C	-	NTQ

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TABLE 1: FLORA SPECIES RECORDED DURING SURVEY

SPECIES NAME	COMMON NAME	NCA STATUS	EPBC STATUS	ESTABLISHMENT
Grevillea robusta	Southern Silky Oak	C	-	NTQ
Hibbertia stricta	Upright Guinea Flower	C	-	NTQ
Jacksonia scoparia	Dogwood	C	-	NTQ
*Lantana camara** C3, WoNS	Lantana	-	-	NAQ
*Lantana montevidensis** C3	Creeping Lantana	-	-	NAQ
Lobelia purpurascens	White Root	SL	-	NTQ
Lomandra confertifolia subsp. pallida	Pale Mat Rush	C	-	NTQ
Lomandra laxa	Broad-Leaved Matrush	C	-	NTQ
Lomandra multiflora	Many-Flowered Mat Rush	C	-	NTQ
Lophostemon confertus	Brush Box	C	-	NTQ
Melichrus adpressus	Large Nectar-Heath	C	-	NTQ
*Ochna serrulata**	Mickey-Mouse Plant	-	-	NAQ
Panicum simile	Similar Panic	C	-	NTQ
Parsonsia brisbanensis	Broad-Leaved Monkey Vine	C	-	NTQ
Parsonsia straminea	Monkey Rope	C	-	NTQ
*Passiflora suberosa**	Corky Passion Flower	-	-	NAQ
*Passiflora subpeltata**	White Passion Flower	-	-	NAQ
Persoonia cornifolia	Broad-Leaved Geebung	C	-	NTQ
*Pinus elliottii**	Slash Pine	-	-	NAQ
Podolobium scandens	Netted Shaggy-Pea	C	-	NTQ
Pomax umbellata	Pomax	C	-	NTQ
Pseuderanthemum variabile	Pastel Flower	C	-	NTQ
Pultenaea villosa	Hairy Bush Pea	C	-	NTQ
Schizaea dichotoma	Branched Comb Fern	SL	-	NTQ
Trema tomentosa var. aspera	Native Peach	C	-	NTQ
*Urochloa decumbens**	Signal Grass	-	-	NAQ
Wikstroemia indica	Tie Bush	C	-	NTQ
Xanthorrhoea johnsonii	Grass Tree	SL	-	NTQ

TABLE 2: FAUNA SPECIES RECORDED DURING SURVEY

SPECIES NAME	COMMON NAME	NCA STATUS	EPBC STATUS	ESTABLISHMENT
*Acridotheres tristis**	Common Myna	-	-	II
Cacatua sanguinea	Little Corella	C	-	QAI
Coracina novaehollandiae	Black-Faced Cuckoo-Shrike	C	-	QAI
Corvus orru	Torresian Crow	C	-	QAI
Cracticus torquatus	Grey Butcherbird	C	-	QA
Dacelo novaeguineae	Laughing Kookaburra	C	-	QA
Entomyzon cyanotis	Blue-Faced Honeyeater	C	-	QAI
*Felis catus**	Cat	-	-	II
*Gallus gallus**	Red Junglefowl	-	-	II
Gerygone olivacea	White-Throated Gerygone	C	-	QAI
Grallina cyanoleuca	Magpie-Lark	C	-	QAI

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TABLE 2: FAUNA SPECIES RECORDED DURING SURVEY

SPECIES NAME	COMMON NAME	NCA STATUS	EPBC STATUS	ESTABLISHMENT
Lampropholis delicata	Dark-Flecked Garden Sunskink	C	-	QA
Macropus sp.	Wallaby	C	-	QA
Manorina melanocephala	Noisy Miner	C	-	QA
Phascolarctos cinereus	Koala	E	E	QA
Rhipidura albiscapa	Grey Fantail	C	-	QAI
Trichoglossus moluccanus	Rainbow Lorikeet	C	-	QA

NOTES

* - Introduced species

C1, C2, C3 – Respectively Category 1, 2 or 3 restricted matter under the *Biosecurity Act 2014* (Qld)

WoNS – Weed of National Environmental Significance

NCA - Status under the Nature Conservation Act 1992

- EX: Extinct
- PE: Extinct in the wild
- CR: Critically endangered
- E: Endangered
- V: Vulnerable
- NT: Near threatened
- C: Least concern
- SL: Special least concern
- I: International
- P: Prohibited

EPBC - Status under the Environment Protection and Biodiversity Conservation Act 1999

- EX: Extinct
- XW: Extinct in the wild
- CE: Critically endangered
- E: Endangered
- V: Vulnerable
- CD: Conservation dependent

Flora Establishment

- NTQ: Native to Queensland
- NAQ: Naturalised inn Queensland
- XU: Exotic (Unknown)

Fauna Establishment

- Q: Queensland endemic - naturally occurs in Queensland
- QA: Intranational - naturally occurs in Queensland and interstate
- QAI: Not endemic to Australia - naturally occurs in Queensland, interstate and overseas
- QI: Regional endemic - naturally occurs in Queensland and overseas
- VA: Vagrant (Intranational) - normally occurs interstate
- VI: Vagrant (International) - normally occurs overseas
- VU: Vagrant (Unknown)
- IA: Introduced (Intranational) - naturalised from interstate
- II: Introduced (International) - naturalised from overseas
- IU: Introduced - unknown origin
- U: Unknown endemicity - native

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APPENDIX H

Site Photographs

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PHOTO NO. 1 – OPEN FOREST ASSOCIATED WITH FORMAL HABITAT SITE H1.

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PHOTO NO. 2 – OPEN FOREST ASSOCIATED WITH FORMAL HABITAT SITE H2.

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PHOTO NO. 3 – KOALA SCAT RECORDED AT KSAT SITE K1 TREE 9.

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PHOTO NO. 4 – SCRATCHES RECORDED AT KSAT SITE K2 TREE 19.

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PHOTO NO. 5 – WIRE FENCING AND WEEDS OBSERVERED AT FORMAL DISTURBANCE SITE K2D.

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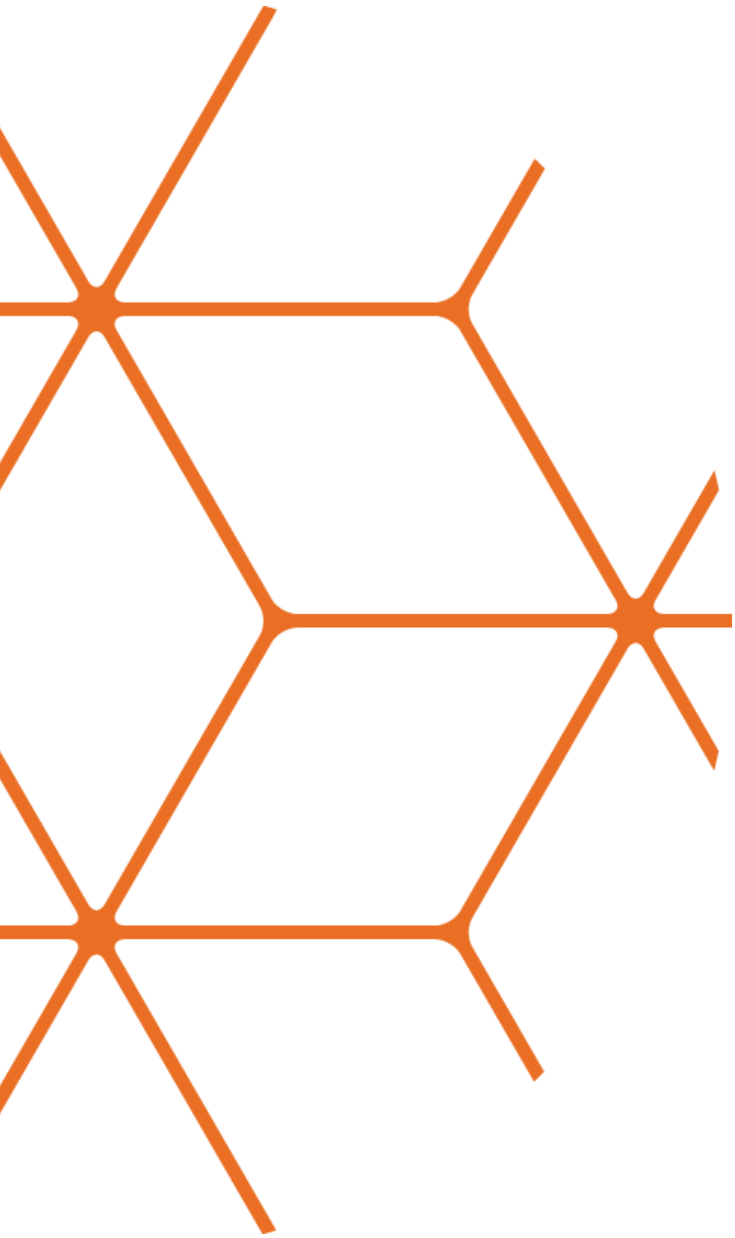


PHOTO NO. 6 – WEED INVASION ASSOCIATED WITH DISTURBANCE SITE D1.

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APPENDIX I

Raw KSAT Data



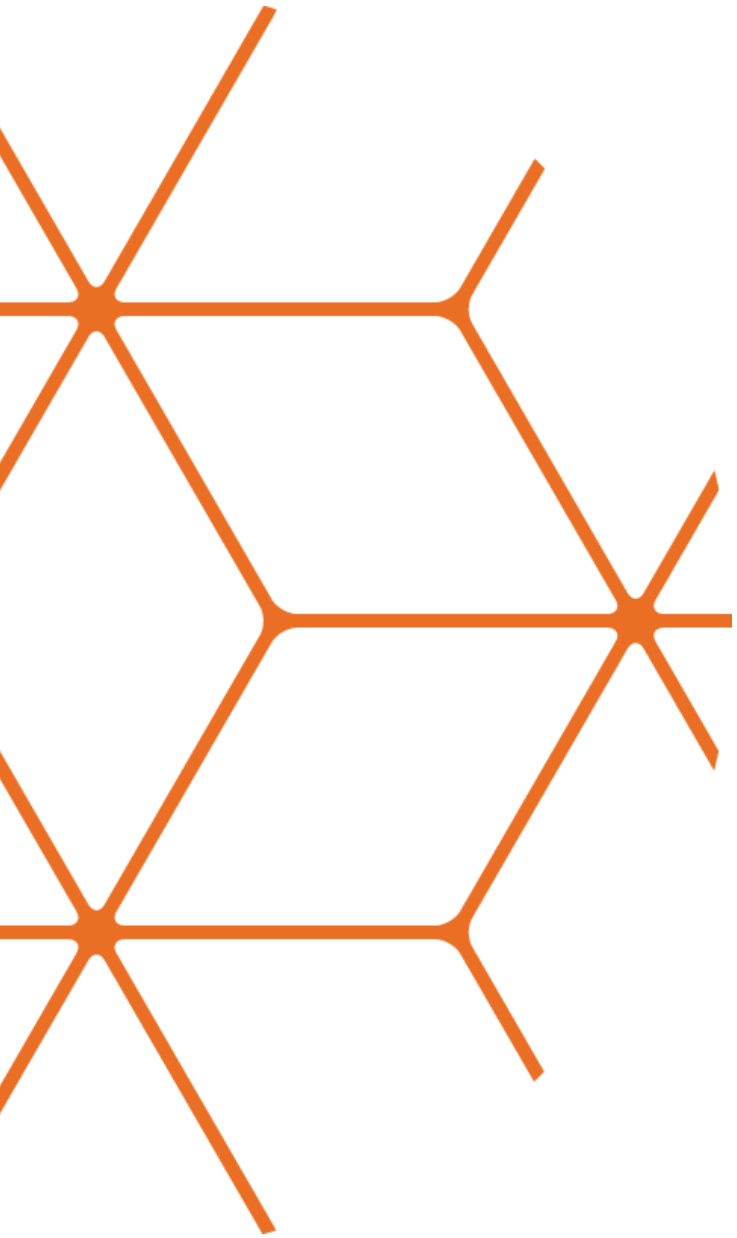
Site ID	Tree No.	Species	DBH1 (cm)	No. Stems	Scat found	Koala sign	Distance from centre tree (m)	Notes/Sample Taken
K1	1	*Eucalyptus carnea*	46					
K1	2	*Eucalyptus major*	16			Scratches		
K1	3	*Corymbia intermedia*	10					
K1	4	*Lophostemon confertus*	10					
K1	5	*Corymbia intermedia*	40					
K1	6	*Lophostemon confertus*	15					
K1	7	*Lophostemon confertus*	10					
K1	8	*Lophostemon confertus*	11					
K1	9	*Lophostemon confertus*	12		Scat found			
K1	10	*Eucalyptus carnea*	58					
K1	11	*Lophostemon confertus*	13					
K1	12	*Eucalyptus carnea*	19					
K1	13	*Acacia disparrima*	15					
K1	14	*Eucalyptus major*	13			Scratches		
K1	15	*Eucalyptus major*	12					
K1	16	*Lophostemon confertus*	13					
K1	17	*Lophostemon confertus*	16					
K1	18	*Corymbia intermedia*	15					
K1	19	*Lophostemon confertus*	14					
K1	20	*Corymbia intermedia*	18	2				
K1	21	*Eucalyptus major*	19			Scratches		
K1	22	*Lophostemon confertus*	10					
K1	23	*Eucalyptus carnea*	18		Scat found	Scats		
K1	24	*Lophostemon confertus*	11					
K1	25	*Eucalyptus carnea*	61	4				
K1	26	*Corymbia citriodora*	21					
K1	27	*Alphitonia excelsia*	11					
K1	28	*Alphitonia excelsia*	11					
K1	29	*Eucalyptus major*	17					
K1	30	*Eucalyptus carnea*	51				20	

Site ID	Tree No.	Species	DBH1 (cm)	No. Stems	Scat found	Koala sign	Distance from centre tree (m)	Notes/Sample Taken
K2	1	*Eucalyptus major*	35			Scratches		
K2	2	*Lophostemon confertus*	38	2				
K2	3	*Eucalyptus dura*	12					
K2	4	*Lophostemon confertus*	31					
K2	5	*Lophostemon confertus*	16					
K2	6	*Lophostemon confertus*	13					
K2	7	*Lophostemon confertus*	25	2				
K2	8	*Corymbia intermedia*	10					
K2	9	*Lophostemon confertus*	31	2				
K2	10	*Lophostemon confertus*	18				19	
K2	11	*Lophostemon confertus*	27					
K2	12	*Lophostemon confertus*	12					
K2	13	*Lophostemon confertus*	20					
K2	14	*Lophostemon confertus*	23	2				
K2	15	*Lophostemon confertus*	18					
K2	16	*Corymbia intermedia*	12					
K2	17	*Lophostemon confertus*	42					
K2	18	*Corymbia intermedia*	20					
K2	19	*Eucalyptus major*	40					
K2	20	*Lophostemon confertus*	16					
K2	21	*Lophostemon confertus*	13					
K2	22	*Lophostemon confertus*	13					
K2	23	*Corymbia intermedia*	22					
K2	24	*Eucalyptus carnea*	28					
K2	25	*Corymbia citriodora*	11					
K2	26	*Eucalyptus major*	25					
K2	27	*Alphitonia excelsia*	14					
K2	28	*Alphitonia excelsia*	14					
K2	29	*Alphitonia excelsia*	17					
K2	30	*Eucalyptus carnea*	51					

Site ID	Tree No.	Species	DBH1 (cm)	No. Stems	Scat found	Koala sign	Distance from centre tree (m)	Notes/Sample Taken
K3	1	*Angophora leiocarpa*	18					
K3	2	*Eucalyptus dura*	31					
K3	3	*Corymbia citriodora*	14					
K3	4	*Lophostemon confertus*	11					
K3	5	*Lophostemon confertus*	13		Scat found			
K3	6	*Eucalyptus major*	31		Scat found	Scratches		
K3	7	*Eucalyptus crebra*	14					
K3	8	*Eucalyptus major*	22					
K3	9	*Eucalyptus carnea*	13					
K3	10	*Lophostemon confertus*	13					
K3	11	*Corymbia intermedia*	25	2				
K3	12	*Lophostemon confertus*	13					
K3	13	*Eucalyptus crebra*	10					
K3	14	*Eucalyptus major*	27				20	
K3	15	*Eucalyptus carnea*	20					
K3	16	*Eucalyptus carnea*	29	2				
K3	17	*Eucalyptus carnea*	26					
K3	18	*Eucalyptus carnea*	15					
K3	19	*Corymbia intermedia*	14					
K3	20	*Eucalyptus carnea*	12					
K3	21	*Eucalyptus carnea*	29					
K3	22	*Eucalyptus crebra*	26					
K3	23	*Eucalyptus major*	12		Scat found			
K3	24	*Corymbia intermedia*	11					
K3	25	*Corymbia intermedia*	32	4				
K3	26	*Eucalyptus dura*	18					
K3	27	*eucalyptus dura*	17					
K3	28	*Corymbia citriodora*	19					
K3	29	*Eucalyptus major*	23					
K3	30	*Eucalyptus dura*	25					

APPENDIX J

Vegetation Clearing Extents Plans



Subject site

Proposed development footprint

Proposed development footprint (APZ)

Fauna Breeding Place

Hollow-bearing stag

Hollow-bearing tree

Ground-truthed Vegetation Community

Open Forest. Emergent (18-20 m, 15% CC) Corymbia intermediaand Corymbia variegata; T1 (14-17 m, 55% CC) of Corymbia variegata, Eucalyptus majorand Eucalyptus carnea, with Lophostemon confertus, Corymbia intermediaand Eucalyptus crebra; T2 (8-12m, 40% CC) dominated by Lophostemon confertus, with Alphitonia excelsaand Jagera pseudorhus. Resembles RE12.11.5. (Remove 4,429m² | Retain 858m²)

Open Forest. Emergent (19-21 m, 20% CC) Eucalyptus major, Eucalyptus carnea, with Eucalyptus dura; T1 (15-18m, 50% CC) of Eucalyptus majorand Eucalyptus carnea, with Eucalyptus helidonicaand Corymbia intermedia; T2 (8-12m, 40% CC) dominated by Lophostemon confertus, with Alphitonia excelsa, Eucalyptus carneaand Corymbia intermedia; S1 (5-7 m, 30% CC) Acacia spp. Resembles RE12.11.24. (Remove 8,684m² | Remove (APZ) = 584m² | Retain 3,380m²)

Open Forest. Emergent (19m, 15% CC) Eucalyptus dura; T1 (14-21 m, 50% CC) Eucalyptus fibrosa, Eucalyptus tindaliae, Eucalyptus dura, Eucalyptus carnea, scattered Corymbia variegata, Eucalyptus major and Eucalyptus crebra; T2 (15-18 m, 40% CC) Eucalyptus major, scattered Corymbia intermedia, Eucalyptus carnea, Lophostemon confertus, Angophora leiocarpaand Corymbia variegata; S1 (5-7 m, 30% CC) Acacia disparrima, scattered Acacia concurrens, Acacia leiocalyx, Alphitonia excelsia and Lophostemon confertus. Resembles RE12.11.25. (Remove5,008m² | Remove (APZ) = 951m² | Retain 4,358m²)

Cleared area hosting a dwelling house and ancillary structures. Resembles non-remnant. (Remove 1,659m² | Remove (APZ) 174m² | Retain 0m²)

Dairy Creek Road
Samford Drive
Tallagandra Road
Howell Street
Niles Court
Wuraga Road
First Street
BP1
BP2
BP3
BP4

Notes:

1. Figure indicative and not for construction purposes.

2. The APZ has been calculated as per the New Ground Bushfire Hazard Assessment and Management Plan.

3. APZ on Lot 18 is to be ongoingly managed under as part of an Environmental Protection Zone (EPZ) with a discontiguous canopy. Clear-felling is not deemed required.

File: 3126-BahrsScrub-EAR-VEG-CLEAR-EcologicalFeatures-260728

VEGETATION CLEARING EXTENTS PLAN - ECOLOGICAL FEATURES - LOT 3 ON RP158376

0 25 50 Meters

A3 Scale 1:1,250

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Sources:	Cadastral boundaries: QLD DCDB DNRME 2026 Aerial photo: NearMap 03/12/2025

Subject site

Fire control line

Existing house and 10m buffer

Asset Protection Zone (APZ) (minimum distance setback for BAL-29 conditions)

Vegetation Management Area

Primary (Assessable clearing 0m² | Retain 20m²)

Secondary (Assessable clearing 19,222m² | Retain 8,577m²)

Dairy Creek Road

Howell Street

Niles Court

Wuraga Road

Samford Drive

Tallagandra Road

First Street

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37

Notes:

1. Figure indicative and not for construction purposes.

2. The APZ has been calculated as per the New Ground Bushfire Hazard Assessment and Management Plan New Ground (2026). Bushfire Hazard Assessment and Management Plan - 381 Wuraga Rd, Bahrs Scrub Qld.

3. APZ on Lot 18 is to be ongoingly managed under as part of an Environmental Protection Zone (EPZ) with a discontiguous canopy. Clear-felling is not deemed required. Total APZ area = 1709m²

4. Consistent with Table 5.10.2.1.4 of the Planning Scheme, existing dwelling footprint + 10m from the existing dwelling are excluded from the Assessable Clearing footprint.

5. Fire Control Line (3m wide from lot boundary) is acceptable development as per Table 5.10.2.1.4 of the Planning Scheme.

File : 3126-BahrsScrub-EAR-VEG-CLEAR-VegetationManagementArea-260728

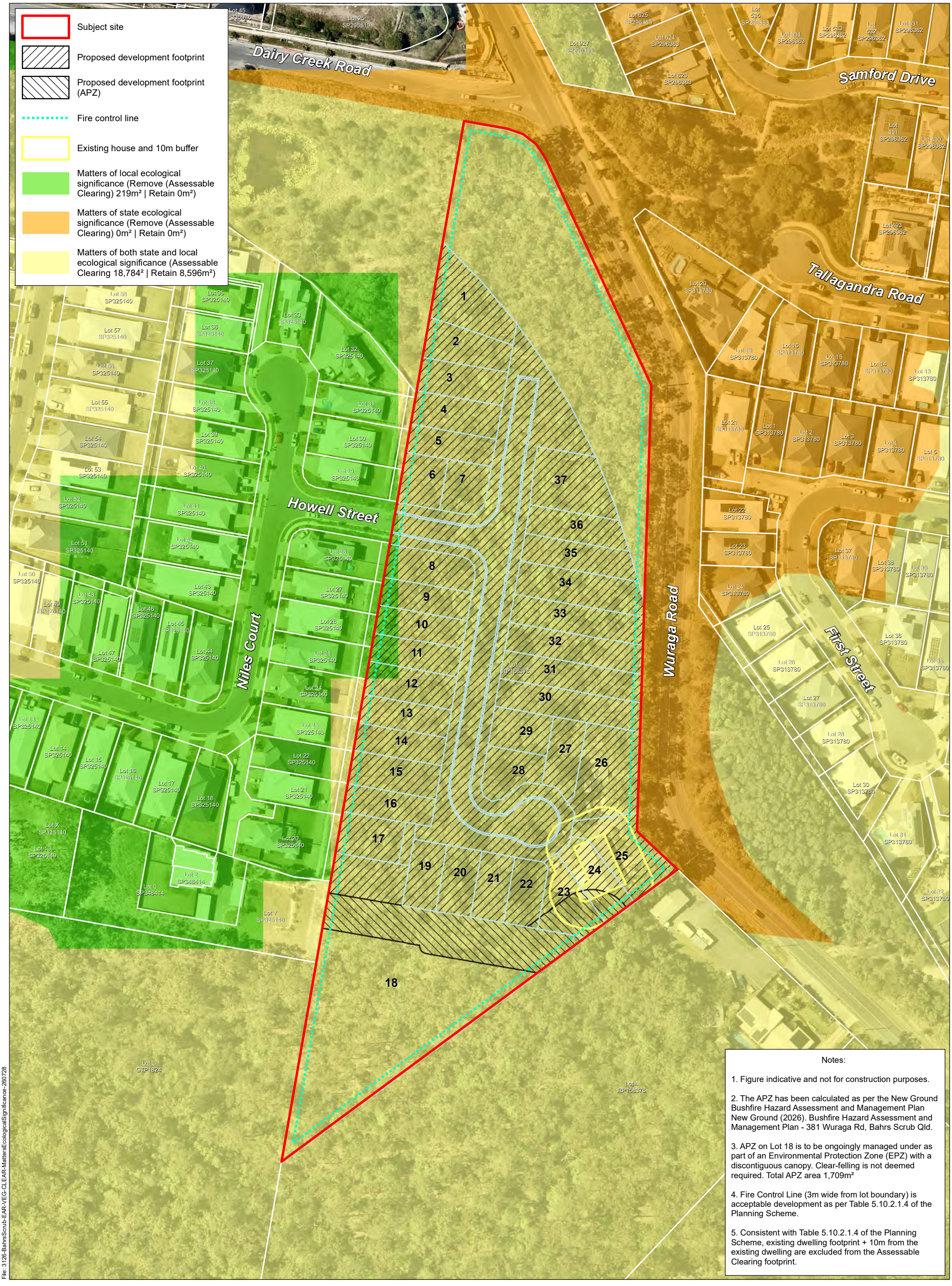
VEGETATION CLEARING EXTENTS PLAN - VEGETATION MANAGEMENT AREA - LOT 3 ON RP158376

0 25 50 Meters

A3 Scale 1:1,250

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Date:	28/07/2026
Sources:	Cadastral boundaries: QLD DCDB DNRME 2026 Aerial photo: NearMap 03/12/2025 Vegetation Management Area: Logan Planning Scheme 2015 v9.2 TLPI No.1 2024



Notes:

1. Figure indicative and not for construction purposes.

2. The APZ has been calculated as per the New Ground Bushfire Hazard Assessment and Management Plan New Ground (2026). Bushfire Hazard Assessment and Management Plan - 381 Wuraga Rd, Bahrs Scrub Qld.

3. APZ on Lot 18 is to be ongoingly managed under as part of an Environmental Protection Zone (EPZ) with a discontiguous canopy. Clear-felling is not deemed required. Total APZ area 1,709m²

4. Fire Control Line (3m wide from lot boundary) is acceptable development as per Table 5.10.2.1.4 of the Planning Scheme.

5. Consistent with Table 5.10.2.1.4 of the Planning Scheme, existing dwelling footprint + 10m from the existing dwelling are excluded from the Assessable Clearing footprint.

File: 3126-BahrsScrub-EAR-VEG-CLEAR-MattersEcologicalSignificance-260728

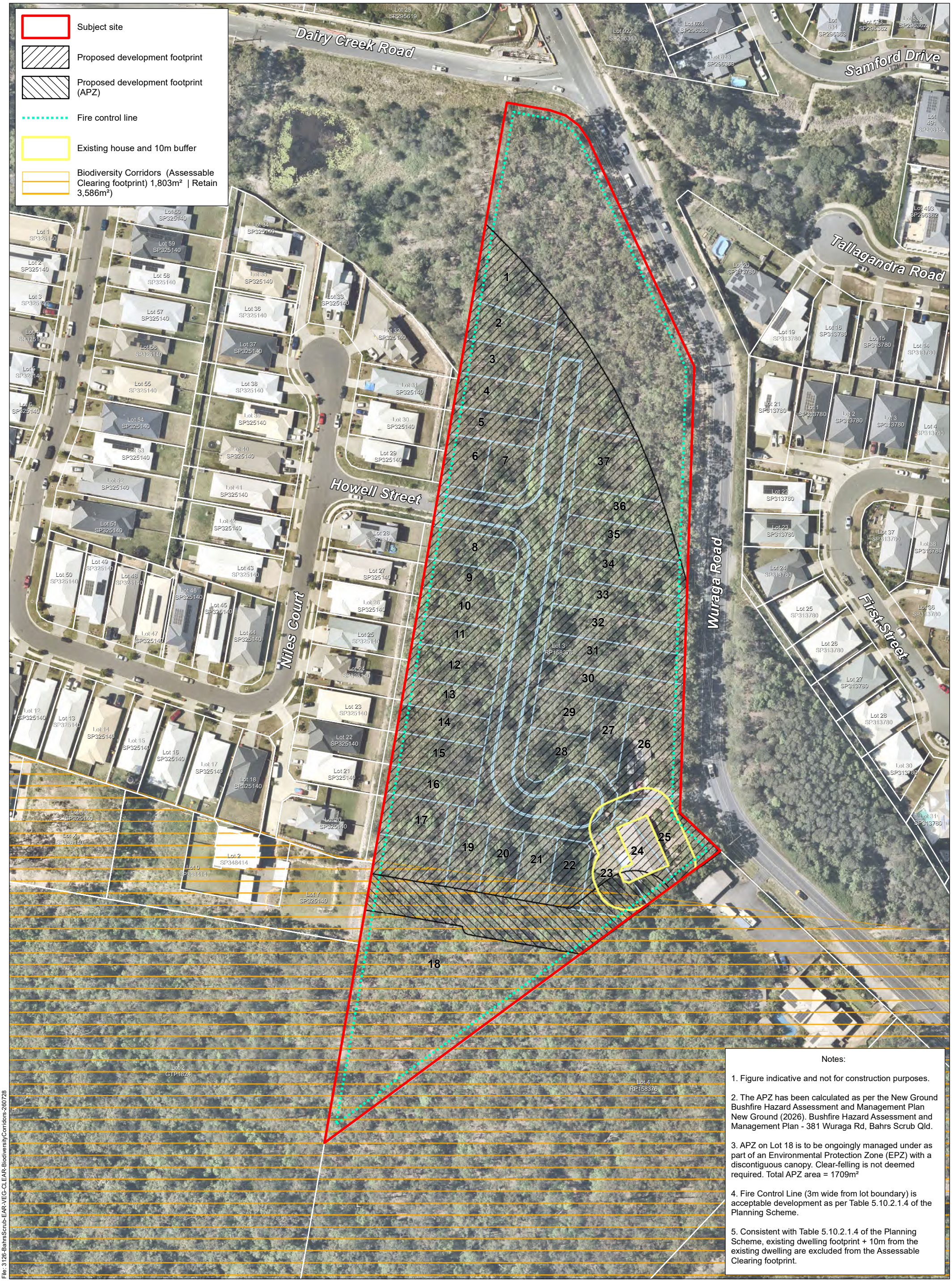
VEGETATION CLEARING EXTENTS PLAN - MATTERS OF STATE AND LOCAL SIGNIFICANCE - LOT 3 ON RP158376

0 25 50 Meters

A3 Scale 1:1,250

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Version:	1
Date:	28/07/2026
Sources:	Cadastral boundaries: QLD DCDB DNRME 2026 Aerial photo: NearMap 03/12/2025 Matters of state and local significance: Logan Planning Scheme 2015 v9.2 TLPI No.1 2024



Notes:

1. Figure indicative and not for construction purposes.

2. The APZ has been calculated as per the New Ground Bushfire Hazard Assessment and Management Plan New Ground (2026). Bushfire Hazard Assessment and Management Plan - 381 Wuraga Rd, Bahrs Scrub Qld.

3. APZ on Lot 18 is to be ongoingly managed under as part of an Environmental Protection Zone (EPZ) with a discontiguous canopy. Clear-felling is not deemed required. Total APZ area = 1709m²

4. Fire Control Line (3m wide from lot boundary) is acceptable development as per Table 5.10.2.1.4 of the Planning Scheme.

5. Consistent with Table 5.10.2.1.4 of the Planning Scheme, existing dwelling footprint + 10m from the existing dwelling are excluded from the Assessable Clearing footprint.

File: 3126-BahrsScrub-EAR-VEG-CLEAR-BiodiversityCorridors-260728

VEGETATION CLEARING EXTENTS PLAN - BIODIVERSITY CORRIDOR - LOT 3 ON RP158376

0 25 50 Meters

A3 Scale 1:1,250

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Project:	3126
Version:	1
Date:	28/07/2026
Sources:	Cadastral boundaries: QLD DCDB DNRME 2026 Aerial photo: NearMap 03/12/2025 Biodiversity Corridors: Logan Planning Scheme 2015 v9.2 TLPI No.1 2024

Subject site

Proposed development footprint

Proposed development footprint (APZ)

Regulated Vegetation Management

Category B area (Remove 0m² | Retain 20m²)

Category C area (Remove 19,395m² | Retain 8,100m²)

Category X area (Remove 2,093m² | Retain 477m²)

Dairy Creek Road

Samford Drive

Tallagandra Road

Howell Street

Niles Court

Wuraga Road

First Street

Lot 45 SP239976

Lot 25 SP295619

Lot 927 SP296363

Lot 625 SP296363

Lot 624 SP296363

Lot 623 SP296363

Lot 535 SP296363

Lot 534 SP296363

Lot 533 SP296362

Lot 532 SP296362

Lot 531 SP296362

Lot 491 SP296362

Lot 490 SP296362

Lot 493 SP296362

Lot 20 SP313780

Lot 19 SP313780

Lot 16 SP313780

Lot 15 SP313780

Lot 14 SP313780

Lot 13 SP313780

Lot 21 SP313780

Lot 1 SP313780

Lot 2 SP313780

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Lot 4 SP313780

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Lot 16 SP325140

Lot 15 SP325140

Lot 14 SP325140

Lot 13 SP325140

Lot X SP325140

Lot 10 SP325140

Lot Y SP325140

Lot 3 RP158376

Lot 4 RP158376

Lot 2 SP348414

Lot 0 SP348414

Lot 2 GTP1624

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 33 32 34 35 36 37

Notes:

1. Figure indicative and not for construction purposes.

2. The APZ has been calculated as per the New Ground Bushfire Hazard Assessment and Management Plan.

3. APZ on Lot 18 is to be ongoingly managed under as part of an Environmental Protection Zone (EPZ) with a discontiguous canopy. Clear-felling is not deemed required. Total APZ area = 1709m²

File: 3126-BahrsScrub-EAR-VEG-CLEAR-RegulatedVegetationManagement-260728

VEGETATION CLEARING EXTENTS PLAN - REGULATED VEGETATION MANAGEMENT - LOT 3 ON RP158376

0 25 50 Meters

A3 Scale 1:1,250

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Sheet Number:	1 of 1
Project:	3126
Version:	1
Date:	28/07/2026
Sources:	Cadastral boundaries: QLD DCDB DNRME 2026 Aerial photo: NearMap 03/12/2025 Regulated Vegetation Management © State of Queensland (Department of Resources), 2024



Notes:

1. Figure indicative and not for construction purposes.

2. The APZ has been calculated as per the New Ground Bushfire Hazard Assessment and Management Plan New Ground (2026). Bushfire Hazard Assessment and Management Plan - 381 Wuraga Rd, Bahrs Scrub Qld.

3. APZ on Lot 18 is to be ongoingly managed under as part of an Environmental Protection Zone (EPZ) with a discontiguous canopy. Clear-felling is not deemed required.

File: 3126-BahrsScrub-EAR-VEG-CLEAR-KHA-260728

VEGETATION CLEARING EXTENTS PLAN - KHA - LOT 3 ON RP158376

0 25 50 Meters

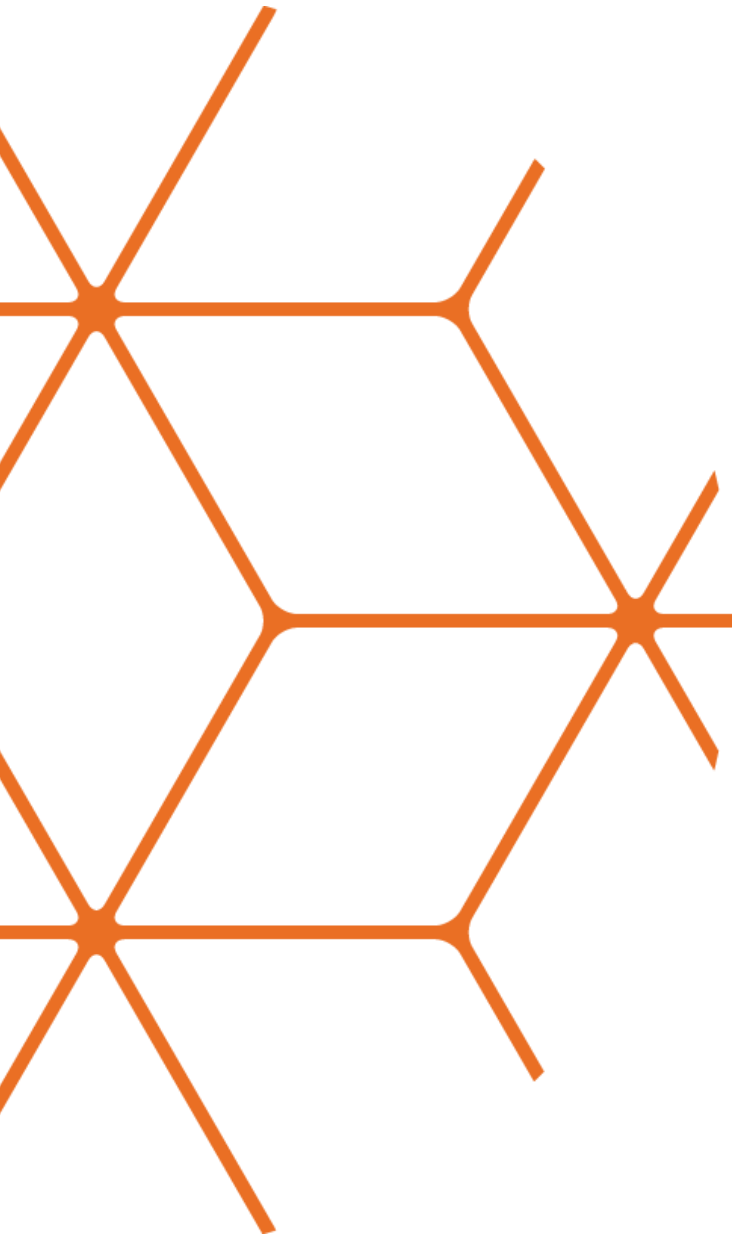
A3 Scale 1:1,000

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Sheet Number:	1 of 1
Project:	3126
Version:	1
Date:	28/07/2026
Sources:	Cadastral boundaries: QLD DCDB DNRME 2025 Aerial photo: NearMap 03/12/2025 Koala Habitat Areas © State of Queensland (Department of Environment and Science), 2023

APPENDIX K

Ecological Restoration Plan



Subject site

Proposed development footprint

Proposed development footprint (APZ)

Fauna exclusion / dog containment fencing

Where fenced, fauna friendly fencing to be used

Rehabilitation management area

Unit 1 (1,334m²)

Unit 2 (1,444m²)

Unit 3 (2,142m²)

Dairy Creek Road

Samford Drive

Tallagandra Road

Howell Street

Niles Court

Wuraga Road

First Street

Indicative location of rehabilitation area maintenance gate access

Notes:

1. Figure indicative and not for construction purposes.

2. The APZ has been calculated as per the New Ground Bushfire Hazard Assessment and Management Plan New Ground (2026). Bushfire Hazard Assessment and Management Plan - 381 Wuraga Rd, Bahrs Scrub Qld.

File: 3126-BahrsScrub-EAR-EcologicalRestoration-260728

ECOLOGICAL RESTORATION PLAN - LOT 3 ON RP158376

0 25 50 Meters

A3 Scale 1:1,250

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Sheet Number:	1 of 6
Project:	3126
Version:	1
Date:	28/07/2026
Sources:	Cadastral boundaries: QLD DCDB DNRME 2026 Aerial photo: NearMap 03/12/2025

Ecological Restoration Principles

Overarching Objectives:

- Improve the resilience of the **Rehabilitation Management Unit 1** through weed management and targeted supplementary groundcover planting to maintain the area as an Asset Protection Zone (APZ). Primary consideration here is for canopy within the APZ to be managed as discontiguous with <15% canopy cover.
- Improve the resilience of **Rehabilitation Management Unit 2** through weed management and targeted supplementary planting to maintain, enhance, and resemble Regional Ecosystem 12.11.24.
- Improve the resilience of **Rehabilitation Management Unit 3** through weed management and targeted supplementary planting to maintain, enhance, and resemble Regional Ecosystem 12.11.25.
- Direct rehabilitation works to accord with the *South East Queensland Restoration Framework: Manual (2012)* and the relevant procedures and specifications set out by the *Logan Planning Scheme 2015.*
- Enhance and maintain the rehabilitation area for urban fauna movement conduit and refuge habitat recourses.

Restoration Approach

- Assisted Natural Regeneration – The rehabilitation area, Rehabilitation Management Unit 2 and Unit 3, are analogous to remnant RE12.11.24 and RE12.11.25 respectively, with generally intact canopy, shrub and ground strata. An assisted natural regeneration (ANR) approach to rehabilitation area will be applied since ANR is appropriate where the community appears largely healthy, functioning and broadly reminiscent of the target regional ecosystem (Chenoweth EPLA and Bushland Restoration Services, 2012). In such areas, it is likely there is a viable native seed bank present, and seed will also be able to reach the site via natural distribution vectors from nearby areas. The main issues limiting native plant regeneration and impacting ecological function in such areas is competition from non-native flora for light, nutrients, space and water. Accordingly, restoration works will be focussed on strategic weed control (including supplementary planting as required), which will allow for the native vegetation to regenerate and improve resilience to disturbance.

Target (Pre-clearing) Regional Ecosystem/Outcome

- Rehabilitation Management Unit 2 and Unit 3 treatments are focussed on maintaining and restoring elements of the ground-truthed RE12.11.24 and RE12.11.25 respectively recorded during site inspection.
- RE12.11.24 – *Eucalyptus carnea or E. tindaliae, Corymbia intermedia woodland +/- E. crebra or E. siderophloia, Eucalyptus resinifera, Eucalyptus major, E. helidonica, Angophora woodsiana, C. trachyphloia, E. microcorys, Corymbia citriodora subsp. Variegata, C. henryi. Occurs on Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics usually at altitudes <300 metres. Not a Wetland. (BVG1M: 9g).*
- RE12.11.25 – *Corymbia henryi and/or Eucalyptus fibrosa subsp. fibrosa woodland. Other frequently occurring canopy species may include Eucalyptus crebra, E. carnea, E. tindaliae, E. siderophloia, C. citriodora subsp. variegata, Angophora leiocarpa, E. acmenoides, E. helidonica, E. propinqua, C. intermedia and E. seeana. Rarely includes patches of E. dura. Usually occurs on low hills, hills and footslopes of mountains in near coastal areas on Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics. Not a Wetland. (BVG1M: 10b).*

Rehabilitation Works Process Overview

- Rehabilitation Areas are to be subject to the following works process:
  - Pre-start meeting with Council officer(s) and rehabilitation contractor
  - Initial weed control in accordance with the directives of this rehabilitation plan
  - Planting or supplementary planting (including necessary soil preparation works) to improve resilience against weed incursion
  - Follow up weed treatment
  - Follow up rehabilitation and monitoring works
  - Off maintenance meeting with Council officer(s) and rehabilitation contractor

Planting Density and Species Selection

- Target species density for Rehabilitation Area is to accord with the Queensland Herbarium's Biocondition Benchmarks for Regional Ecosystem Condition Assessment for RE12.11.24 and RE12.11.25 ('Biocondition Benchmarks') (Queensland Herbarium, 2019)/ Technical Description for RE12.11.24 and RE12.11.25 (Queensland Herbarium, 2012). Supplementary planting is to be undertaken with this end in mind in accordance with the density considerations of *South East Queensland Restoration Framework: Manual* (Chenoweth EPLA and Bushland Restoration Services, 2012).
- **TABLE 1** and **TABLE 2** of this Plan presents the density target for each stratum of RE12.11.24 and RE12.11.25 respectively, to assist in monitoring and adaptive management of rehabilitation works. Planting density will be variable and determined by the extent of clearings in each stratum uncovered following initial weed control works.
- Supplementary planting efforts are to focus on densification of shrub and ground layers where the soil seed bank is not sufficient in plant regeneration. In these cases, supplementary planting is advisable to improve resilience from weed incursion.
- Species selection and placement should be overseen by a suitably qualified bush regenerator in accordance with **TABLES 3 to 6** of this Plan, which are condensed from the RE12.11.24 and RE12.11.25 Technical Description.
- Local provenance stock is to be utilised. Planting species diversity should at least achieve the following:
  - >2 of the Dominant species for each stratum presented in **TABLES 3 to 6**
  - >2 of the Associated species for each stratum presented in **TABLES 3 to 6**.
  - At least 1 preferred canopy/sub-canopy species for Management Units 2 and 3.
- Given variability in stock availability, species can be selected from the Queensland Herbarium's Technical Description for each respective RE in the event that the species presented in **TABLES 3 to 6** are not available to the extent required to achieve the above-prescribed minimum species diversity. Notwithstanding, it is suggested that pioneer species are favoured. All species substitutions must be approved in writing by Logan City Council (LCC).

Soil Preparation

- Topsoil should be tested by contractor prior to installation of plantings to determine whether soil improvement measures are required prior to works. Where existing topsoil requires addition of a soil improving agent, soil is to meet AS4419-2003 – Soils for Landscaping and Garden Use.
- In the event that soil material or other growing media is required to be imported, soil test results must be approved by the Project Superintendent prior to import. Soil must meet AS4419-2003 prior to import.
- All growing media must be lightly compacted (to avoid creation of air pockets in profile) and placed in layers <200mm deep with <85% compaction.

Planting Notes

- Plant species and planting holes are to be randomly distributed to avoid creating areas/rows of monoculture.
- Plant set out, planting and maintenance works are to be undertaken in general accordance with the *South East Queensland Restoration Framework: Manual* (Chenoweth EPLA and Bushland Restoration Services, 2012) and in consideration of the microhabitat preferences of species to be planted.
- Holes for each planting should be at least 2 times the width and 1.5-2 times the height of the planting pot size.
- Slow-release fertiliser is to be placed around the rootball of each planting.
- Tree guards are to be installed to protect plantings as required (i.e. subject to level of herbivore attack).

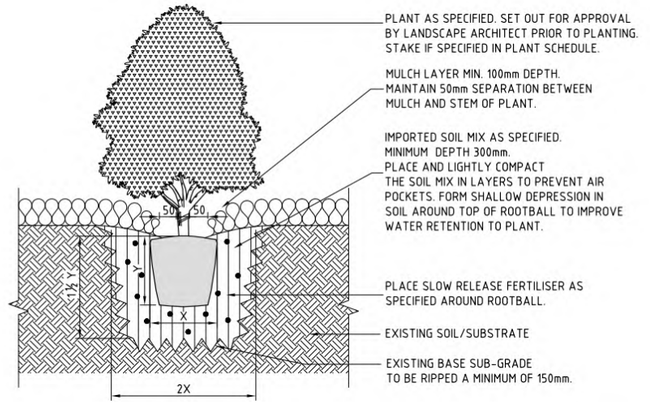


PLATE 1. TYPICAL PLANTING SECTION (ADAPTED FROM CITY PLAN (2016))

- Erosion prone areas to be appropriately stabilised. Where erosion/scour occurs throughout the maintenance period for rehabilitation area, an alternative solution to prevent erosion/scour may be required which must be agreed with Council.
- Wood chip mulch can be used in a 1m radius around new plantings. Mulch must be >100mm deep and should be an organic mulch (i.e., forest litter, pine bark mulch). Broad-blanket application of mulch is not recommended since this may impede natural regeneration/damage native ground layer.
- Mulch should be 50-100mm from the stem of the planting.

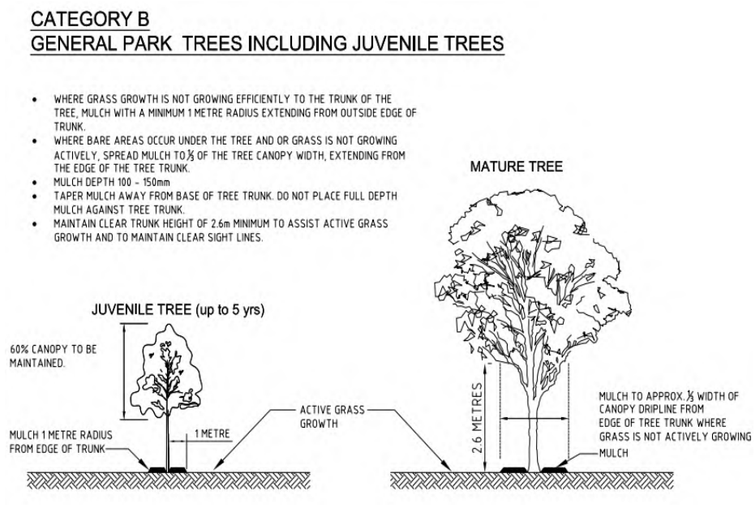


PLATE 2. TREE MULCHING PLACEMENT DETAIL (ADAPTED FROM CITY PLAN (2016))

Weed Management

- Weed control methods are to be undertaken in accordance with the *South East Queensland Restoration Framework: Manual* (Chenoweth EPLA and Bushland Restoration Services, 2012). Refer to **TABLE 7** for a selection of target weeds recorded on site.
- Weed species scheduled under the *Biosecurity Act 2014* as well as weed species that may form a barrier to koala movement across the ground or impede natural regeneration/resilience of potential koala habitat are to form the focus of weed control works.
- Herbicides are to be applied in accordance with the *South East Queensland Restoration Framework: Manual* (Chenoweth EPLA and Bushland Restoration Services, 2012). Persons applying herbicides must be qualified/supervised in accordance with the *Agricultural Chemicals and Distribution Control Act 1996*. Application rates are to accord with those specified on registered product labels or on an Australian Pesticides and Veterinary Medicines Authority-issued off-label permit as applicable.
- Large woody weeds are to be removed on a case-by-case basis depending on habitat function and invasiveness. Further, staged removal of large woody weeds may be preferable in maintaining ground-shading through early stages of rehabilitation works. Trees supporting habitat features may be retained/stagged where appropriate. Generally, tree stumps/roots are to be retained for bank stability.

Fire Ant Management Requirements

- Queensland Government has imposed movement controls to prevent fire ant spread. These controls apply to individuals and commercial operators. There are Penalties for non-compliance.
- Restrictions are in place on moving soil, turf, potted plants, mulch, baled hay/straw, animal manures, and mining/quarry products.
- Obligation to report fire ant sightings within 24 hours under the Biosecurity Act 2014.
- Action may be required to treat fire ant nests, with penalties for inaction.
- The subject site is located in Fire Ant Biosecurity Zone 2. As such, a Biosecurity Instrument Permit may be needed for moving material from the site.
- For more information and obligations, visit: https://www.fireants.org.au/stop-the-spread/movement-advice-tool and https://www.fireants.org.au/stop-the-spread

Fauna Friendly Fencing

- The aim of fencing on the site is to allow for native fauna movement through the Rehabilitation Area while excluding fauna from the balance site (development area) and to assist in the separation of native faun from domestic dogs; that may potentially be kept on the balance site.
- Where fencing is to be installed at the eastern and western boundaries of the rehabilitation area, the design of such fencing must meet specifications for fauna-friendly fencing (as defined by the Koala Sensitive Design Guideline (DES, 2020)).
- Pet-exclusion fencing/Koala-exclusion fencing (as defined by the Koala Sensitive Design Guideline (DES, 2020)) is to be installed along the northern boundary of the rehabilitation area, with the inclusion of a koala-exclusion maintenance access gate at the interface between the proposed building envelope of Lot 17 and the rehabilitation area. The intention is to reduce the likelihood of interactions between domestic dogs and native fauna.
- Fauna friendly fencing examples include:
  - Fencing that is raised off the ground by a minimum of 300mm such as post and rail fencing
  - Gaps in fencing should be less than 60mm so that koala can climb over yet not get caught in the fence;
  - Fencing that uses rails/slats with gaps of >15mm between vertical slats and >20mm between horizontal rails;
  - Chain wire fencing (without barbed wire/sharp surfaces)
  - Timber fencing/gate without gaps between palings (posts and supports should be on the dog containment/exercise area side) of the fence;
- Climbable timber posts or logs can be retrofitted to assist koalas in moving over unclimbable/exclusion fencing. Simple solution is a post (>125mm diameter) leaning against fence at an angle (minimum distance of 400mm between base of log and bottom of fence)
- Exclusion fencing examples include:
  - Timber fencing/gate without gaps between palings (posts and supports should be on the dog containment/exercise area side) of the fence;
  - Fence or top of unclimbable section >1.5m above ground level;
  - Fencing/gate fitted with a smooth surface (e.g. perspex, smooth metal along the top 600 mm of the fence/gate including posts and supports (on the fauna exclusion side); and
  - Wire fencing with a floppy top of at least 600mm in width that falls in the direction that koala would attempt to climb the fence.

Habitat Resources

- Hollow logs removed during development site preparation works are to be placed within the Rehabilitation Area at the direction of the project QPWS-licenced Fauna Spotter Catcher.

Works Planning, Access, Maintenance and Monitoring

- Rehabilitation works are to be undertaken by an appropriately qualified contractor. Relevant qualifications may include a TAFE Certificate in Conservation Land Management/Natural Area Restoration or a university degree in a related field such as Ecology.
- Access to rehabilitation area is to be via the maintenance access gate located at the interface between the proposed building envelope of Lot 17 and the rehabilitation area.
- Refer to **TABLE 8** of this plan for summarised milestones and maintenance schedule.
- A Rehabilitation monitoring report is to be provided to LCC's development services ecologist following the 12 month active maintenance period.
- Rehabilitation monitoring is to be undertaken by an appropriately qualified and experienced ecologist or independent (i.e., not involved with rehabilitation works on the site) bushland regenerator.
- A monitoring results report is to be submitted to Council six monthly during the On Maintenance Period or otherwise as per approval conditions.
- A pre-start inspection is required prior to commencement of works with the nominated Council officer and rehabilitation contractor present at minimum.
- An establishment inspection may be required (at Council's discretion) following initial weed control works and installation of plantings.

Key Performance Indicators

- >90 % survival of plantings.
- Replacement planting required where survival of plantings <90%.
- Ongoing management to be coordinated by approval holder during a 2 year on-maintenance period.
- Defects identified through monitoring to be rectified by the approval holder.
- <10% cover of environmental weed species.
- 0% cover of declared (under *Biosecurity Act 2014*) weed species.
- Area free of rubbish, debris, dead and dying trees (unless fallen and identified as being retained for ecological reasons such as fauna habitat resources).

TABLE 1: REHABILITATION MANAGEMENT UNIT 2 - VEGETATION COVER TARGETS BY STRATA (RE12.11.24)

ATTRIBUTE	CANOPY	SUB-CANOPY	SHRUB	GROUND
Average height (m)	22.5	9.9	2.3	0.6
Cover (%)	43.5	10.6	8.6	46
Stem density/ha (average)	244	605	1627	-

Source: Ryan, T.S (2012). Technical Descriptions of Regional Ecosystems of Southeast Queensland & Queensland Herbarium (2019).

Works in Rehabilitation Management Unit 2 to minimum plant density of:

- 1 ground cover per 1 m^2
- 1 shrub per 5 m^2
- 1 canopy/sub-canopy per 10 m^2

TABLE 2: REHABILITATION MANAGEMENT UNIT 3 - VEGETATION COVER TARGETS BY STRATA (RE12.11.25)

ATTRIBUTE	CANOPY	SUB-CANOPY	SHRUB	GROUND
Average height (m)	21.7	9.2	2.3	0.5
Cover (%)	42.9	7.3	4.2	34.4
Stem density/ha (average)	264	426	709	-

Source: Adapted from Ryan, T.S (2012). Technical Descriptions of Regional Ecosystems of Southeast Queensland & Queensland Herbarium (2019).

Works in Rehabilitation Management Unit 3 to minimum plant density of:

- 1 ground cover per 1 m^2
- 1 shrub per 10 m^2
- 1 canopy/sub-canopy per 10 m^2

TABLE 3: REHABILITATION MANAGEMENT UNIT, UNIT 2 & UNIT 3 GROUND STRATUM PLANTING PALETTE – RE12.11.24 & RE12.11.25

SCIENTIFIC NAME	COMMON NAME	HABIT
DOMINANT SPECIES		
Cymbopogon refractus	barbed wire grass	Ground cover to 1 m
Dichelachne micrantha	Shorthair Plumegrass	Ground cover to 1 m
Entolasia stricta	Wiry Panic	Ground cover to 1.5 m
Eremochloa bimaculata	Poverty Grass	Ground cover to 1 m

TABLE 3: REHABILITATION MANAGEMENT UNIT, UNIT 2 & UNIT 3 GROUND STRATUM PLANTING PALETTE – RE12.11.24 & RE12.11.25

SCIENTIFIC NAME	COMMON NAME	HABIT
Imperata cylindrica	Cogon grass	Ground cover to 2 m
Themeda triandra	Kangaroo grass	Ground cover to 1.5 m
ASSOCIATED SPECIES		
Aristida calycina	Dark Wiregrass	Ground cover to 0.5 m
Capillipedium spicigerum	Scented Top Grass	Ground cover to 1.5 m
Digitaria parviflor	Small-Flowered Finger Grass	Ground cover to 1.5m
Lepidosperma laterale	Variable Swordsedge	Ground cover to 1 m
Microlaena stipoides	Weeping Grass	Ground cover to 1 m
Panicum effusum	Hairy Panic	Ground cover to 1 m

TABLE 4: REHABILITATION MANAGEMENT UNIT 2 & UNIT 3 SHRUB STRATUM PLANTING PALETTE - RE12.11.24 & RE12.11.25

SCIENTIFIC NAME	COMMON NAME	HABIT
DOMINANT SPECIES		
Acacia concurrens	Black Wattle	Tree to 10 m
Acacia disparrima subsp. disparrima	Hickory Wattle	Shrub to 4 m
Allocasuarina torulosa	Forest Oak	Tree to 25 m
Alphitonia excelsa	Red Ash	Tree to 20 m
Jacksonia scoparia	Dogwood	Shrub to 4 m
Lophostemon confertus	Brush Box	Tree to 30 m
ASSOCIATED SPECES		
Acacia falcata	Sickle Wattle	Shrub to 4 m
Acacia fimbriata	Fringed Wattle	Shrub to 5 m
Acacia leiocalyx	Early Black Wattle	Tree to 10 m
Allocasuarina littoralis	Black She Oak	Tree to 15 m

TABLE 5: REHABILITATION MANAGEMENT UNIT 2 SUB-CANOPY & CANOPY STRATUM PLANTING PALETTE – RE12.11.24

SCIENTIFIC NAME	COMMON NAME	HABIT
DOMINANT SPECIES		
Allocasuarina torulosa	Forest Oak	Tree to 25 m

TABLE 5: REHABILITATION MANAGEMENT UNIT 2 SUB-CANOPY & CANOPY STRATUM PLANTING PALETTE – RE12.11.24

SCIENTIFIC NAME	COMMON NAME	HABIT
Corymbia intermedia	Pink Bloodwood	Tree to 30 m
Eucalyptus carnea #	Broad-leaved White Mahogany	Tree to 25 m
Eucalyptus crebra	Narrow-leaved Ironbark	Tree to 30 m
Eucalyptus siderophloia	Grey Ironbark	Tree to 30 m
Eucalyptus tindaliae #	Tindal's Stringybark	Tree to 30 m
Lophostemon confertus	Brush Box	Tree to 30 m
Lophostemon suaveolens	Swamp Box	Tree to 20 m
ASSOCIATED CANOPY SPECIES		
Angophora leiocarpa	Smooth-barked Apple	Tree to 20 m
Corymbia citriodora subsp. variegata	Spotted Gum	Tree to 40 m
Eucalyptus microcorys	Tallowwood	Tree to 40 m
Eucalyptus propinqua	Grey Gum	Tree to 30 m
Eucalyptus tereticornis	Forest Red Gum	Tree to 35 m
Lophostemon suaveolens	Swamp Box	Tree to 20 m

Note: # - Indicates a preferred species.

TABLE 6: REHABILITATION MANAGEMENT UNIT 3 SUB-CANOPY & CANOPY STRATUM PLANTING PALETTE – RE12.11.25

SCIENTIFIC NAME	COMMON NAME	HABIT
DOMINANT SPECIES		
Allocasuarina torulosa	Forest Oak	Tree to 25 m
Corymbia citriodora subsp. variegata	Spotted Gum	Tree to 40 m
Eucalyptus fibrosa subsp. fibrosa #	Red Ironbark	Tree to 30 m
Eucalyptus carnea	Broad-leaved White Mahogany	Tree to 25 m
Eucalyptus crebra	Narrow-leaved Ironbark	Tree to 30 m
Eucalyptus siderophloia	Grey Ironbark	Tree to 30 m
Eucalyptus tindaliae	Tindal's Stringybark	Tree to 30 m
Lophostemon confertus	Brush Box	Tree to 30 m
ASSOCIATED SPECIES		
Corymbia intermedia	Pink Bloodwood	Tree to 30 m
Eucalyptus propinqua	Grey Gum	Tree to 30 m
Eucalyptus seeana	Narrow-leaved Red Gum	Tree to 30 m
Eucalyptus tereticornis	Forest Red Gum	Tree to 35 m
Lophostemon suaveolens	Swamp Box	Tree to 20 m

Note: # - Indicates a preferred species.

New Ground flora condition surveys of the rehabilitation area identified a number of environmental weeds onsite. Control methods for each are outlined in **TABLE 7**. A suitably qualified bush regenerator should ultimately determine the most appropriate approach to weed control in consideration of site-specific factors at the time of works and the objectives of this rehabilitation plan.

TABLE 7: PREDOMINANT TARGET WEEDS AND CONTROL METHODS

TARGET WEED	CONTROL METHOD
Climbing Asparagus Fern *(Asparagus plumosus)*	**Physical Control:** By hand – Seedlings and small plants can be hand pulled. A knife or trowel can help ease the plant out of the ground. Remove all roots, including the crown, or the plant can regrow. This option is best used in soft soil like sand or loam or when soil is moist. Crowning – This method involves digging out the entire crown that sits just below the surface of the soil so the plant cannot grow. Cut stems off to get to the crown. Use a knife or sharp trowel to cut away all the roots that are attached to the crown. Pull out the crown using a mattock or trowel and dispose of crown appropriately. Slashing – Slashing or cutting the stems and leaves can stop new fruit from forming and create access for other control methods. Slashing should be combined with others control methods for effective, long-term control. If plants are fruiting, slashing should be avoided as it will spread the seeds. **Chemical control:** Spot spraying – Spray plants that are actively growing. Apply the herbicide mix to all of the foliage. Cut stump – Cut the stems as close to the ground as possible. Apply herbicide to the remaining stems and to all of the crown within 15 seconds. Fluroxypyr 200 g/L (Various products). Rate: 500 mL per 100 L of Water. Comments: Spot spray mid-June to late August. Glyphosate 360 g/L (Various products). Rate: 200 mL per 10 L of water plus 10 mL non-ionic surfactant. Spot spray application, best done between flowering and berries forming. For use in urban bushland, native forests and coastal reserves. **Source:** https://weeds.dpi.nsw.gov.au/Weeds/Climbingasparagusfern#control
Lantana (*Lantana camara*)	**Physical Control:** Hand pulling can work on small infestations, isolated plants and in steep areas that machinery cannot access. The best time is after rain when soil is moist. Small plants less than 2 m can be sprayed at any time of the year as long as they are actively growing. **Chemical Control:** 2,4-D 300 g/L + Picloram 75 g/L- Rate: 650 mL per 100 L of water. High volume spot spray. Thoroughly wet foliage and soil around the base of plant during March to May. Fluroxypyr 200 g/L - Rate: 500 mL or 1.0 L per 100 L of water. Spray actively growing bushes from October to April. Use lower rate on seedlings or bushes to 1.2 m high, higher rate on bushes over 1.2 m. Glyphosate 360 g/L (splatter gun) -Rate: 1 part per 9 parts water. Spray actively growing plants with full foliage. Avoid summer stress. **Source:** https://weeds.dpi.nsw.gov.au/Weeds/Lantana#control

TABLE 7: PREDOMINANT TARGET WEEDS AND CONTROL METHODS

TARGET WEED	CONTROL METHOD
Lantana (*Lantana montevidensis*)	**Physical Control:** Hand pulling or digging out plants is useful for small infestations or isolated plants. It is also useful in steep areas that machinery cannot access. **Chemical Control:** Dichlorprop 600 g/L (Lantana 600®). Rate: 1 L per 200 L of water. Comments: Spray: completely wet all leaves and stems. For best results spray when flowering. Fluroxypyr 200 g/L (Various products). Rate: 500 mL per 100 L of water. Comments: Spray when flowering. **Source:** https://weeds.dpi.nsw.gov.au/Weeds/Creepinglantana#control
Ochna *(Ochna serrulata)*	**Physical Control:** For young seedlings hand pulling is generally the most successful method of control. Take care not to break the tap root. Larger individuals may need to be grubbed out with a mattock. **Chemical Control:** One product, Starane Advanced, containing 333 g/L fluroxpyr is registered for control of ochna in Queensland. Application rate: 600ml/100L water – Foliar spray of plants <2m high 600ml/10L water – Low abundance of plants <1m high 2.1L/100L diesel – Basal bark spray plants <2m high and 10cm basal diameter. **Source:** https://www.daf.qld.gov.au/plants/weeds-pest-animals-ants/weeds/a-z-listing-of-weeds/photo-guide-to-weeds/mickey-mouse-plant-or-ochna?a=65779



PHOTO 1. REHABILITATION AREA

TABLE 8: MILESTONES AND MAINTENANCE SCHEDULE FOR REHABILITATION WORKS LOT 3 ON RP158376

PHASE	TASK	TIMING	FREQUENCY	MAINTENANCE MONITORING	PERFORMANCE INDICATOR
Phase 1	Pre-works planning (i.e. order plant tube stock, tree guards and stakes and erosion control planning etc.).	>2-3 months before site preparation.	A single event.	Works undertaken in accordance with project approval conditions	• Source from local provenance plant stock. • Pre-start/on-maintenance inspections to be organised with Logan City Council • Works undertaken in accordance with project approval conditions
Phase 2	Site preparation (including Demarcation of Rehabilitation Areas), erosion control mechanisms and Initial weed control event.	Primary weed control event should occur before the initial planting installation.	Follow up weed control should occur quarterly for the first year, bi-annually for the second year until the end of maintenance period.	Maintenance visits are concurrent with each subsequent weed control event. Maintenance events should monitor the prevalence and diversity of weeds present. This information should be used to determine if the weed control methods need updating in order to adapt to changing conditions, such as the invasion by new weed species. Maintenance should also assess the health of plantings and determine if additional plantings are required. Additional plantings are required when the survival rate drops below 90%.	• Soil is suitably prepared for planting. • Monitor and treat with intent to achieve <10% weed cover by end of on-maintenance period. • Invasive weeds controlled within 1m diameter of plantings (<10% cover).
Phase 3	Install plants	After the site preparation has been completed.	A single event.	Maintenance visits are concurrent with each weed control event. Maintenance events will monitor the health and growth of plantings. This information should be used to determine if additional work is required, such as weed control, water or fertilising, or if additional plantings are needed to replace dead plants. Additional plantings are deemed necessary when the survival rate of plantings drops below 90% (at end of maintenance period).	• >90% survival rate of plantings. • Planting a diversity of at least three (3) of the dominant species (including one preferred species) and three (3) of the associated species for each stratum as per **TABLES 3 to 6**. • Supplementary planting is to increase upon existing density in each stratum to achieve plant density targets of **TABLES 1 to 2**. • Slow release fertiliser applied at time of planting. • Tree guards installed to protect plantings from desiccation and herbivores (as required) • Plant species to be randomly distributed to emulate regional ecosystem (see **TABLES 3 to 6** for planting palette).
Phase 3	Erosion Control Works	Immediately prior to installing plants	Initially before planting and ongoing (to be determined by restoration practitioner).	Maintenance and monitoring are to occur with each visit. Reapplication is only to occur if determined necessary by the restoration practitioner.	• Performance is indicative by the level of weed suppression and stabilisation of the ground stratum. • Mulch is not to be applied to areas with high possibility of washing away during high rainfall events. In this case, an alternative stabilisation mechanism should be used such as jute matting or geotextile fabric.
Phase 3	Water plants	Commencing on the same day as planting (including replacement plantings).	To be determined by restoration practitioner, as a guide, water twice a week for the initial week, then weekly for four weeks and then monthly for the following three months. Required watering frequency may change depending on prevailing weather conditions.	Maintenance and monitoring will occur initially with each watering event for the first 3 months and then concurrently with each weed control event. Monitoring will determine if watering frequency should be increased or decreased.	• Plantings show no signs of water stress. • At the end of the watering regime, the plantings are established and don't require additional watering. • Monitor with intent to achieve >90% survival rate of installed plants by end of maintenance period.
Phase 4	Follow up weed treatment and maintenance – treat weeds throughout rehabilitation area. Arrange On Maintenance inspection with LCC at practical completion of works.	After phase 3 is complete.	Once every 3 months for the first 12 months, then bi-annually for the second year. Greater frequency of ongoing management activities may be required subject to condition of rehabilitation area.	Maintenance visits across the site are concurrent with each weed control event. Maintenance events will monitor the health and growth of plantings. This information should be used to determine if additional work is required, such as weed control, water or fertilising, or if additional plantings are needed to replace dead plants. Additional plantings are deemed necessary when the survival rate of plantings drops below 90%.	• Plantings show no signs of stress. • Monitor and systematically treat weeds with intent to achieve <10% exotic cover by end of maintenance period.
Monitoring	Reporting – monitoring and results, any adaptive management changes and general recommendations. Arrange Off Maintenance inspection with LCC at the end of the 12 month maintenance period.	Each monitoring event and report is to be documented.	Annual monitoring reporting for the 2 year on-maintenance period.	-	• Monitoring reports to include: » Monitoring results and progress toward achieving RE 12.11.24 and RE12.11.25 benchmark goals of **TABLES 1 to 2**; » Report any adaptive management changes made to the implementation, maintenance and monitoring schedule; » Estimated rates of survival of plantings; » Estimated rates of weed cover; » Any new issues or impediments to the success of restoration works; and » Recommendations regarding the ongoing management of the rehabilitation area. • Off-maintenance meeting to be arranged with Council 2 years after commencement of works.