



ENVIRONMENTAL OFFSET REPORT

**Lot 9 on RP97339
204-212 Park Ridge Road, Park Ridge**

**A Report Prepared for
Somerville Consultants**

AUGUST 2024

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Client Issue

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1 INTRODUCTION

1.1 Background

JWA Pty Ltd (JWA) have been engaged by Somerville Consultants to prepare an Environmental Offset Report in accordance with Planning Scheme Policy 3: Environmental Management of the Logan Planning Scheme (2015) for land at 204-212 Park Ridge Road, Park Ridge. This land is formally described as Lot 9 on RP97339 and is hereafter referred to as the 'subject site'. This Environmental Offset Report has been prepared to determine the quantum of biodiversity offsets required to ensure a net gain in native vegetation as a result of the proposed rezoning of the subject site.

A review of the relevant sections of Planning Scheme Policy 3 has revealed that the preparation of an "External Offset Report" will be applicable to the site and must include:

- a) *A description of the proposed development including:*
 - i. *the number and species of native trees to be cleared;*
 - ii. *the number and species of native habitat trees to be cleared;*
 - iii. *the area in square metres of primary vegetation management area to be cleared;*
- b) *The calculation for the external offset provided by the local government, using the methodology identified in:*
 - i. *section 3.1.9.3—Calculation for a financial settlement offset based on matters of local environmental significance (MLES) and calculated according to Appendix 6 - Financial settlement offset calculation methodology of the Queensland Environmental Offsets Policy; or*
 - ii. *section 1.9.5—Calculation for a financial settlement offset based on the ecological index of the land being impacted by development; or*
 - iii. *section 3.1.9.5—Calculation for a proponent driven offset;*
- c) *A site plan, map or survey plan of the subject land identifying:*
 - i. *the location of each native tree or native habitat tree to be cleared;*
 - ii. *the location of the area of primary vegetation management area to be cleared;*
- d) *A clearing plan describing the sequence in which clearing is to occur, as detailed in section 2.1.5.2—Clearing pattern/fauna flushing in this planning scheme policy;*
- e) *A draft infrastructure agreement between the local government and the proponent for a proposed development that outlines the obligations of the proponent.*

A description of the proposed impacts associated with the development, as required by points a) i - iii above are addressed in **SECTION 3**. A site plan, as required by point c) above, is provided also provided in **SECTION 3**.

Offset requirements, in accordance with point b) above, are addressed in **SECTION 4**.

A Clearing Plan and procedures for management of fauna during clearing works, as required by point d) above, are addressed in **SECTION 5**.

1.2 The Subject Site

The subject site is located at 204-212 Park Ridge Road, Park Ridge and is formally described as Lot 9 on RP97339. The site covers an area of approximately 4.07 ha (**FIGURE 1**).

The subject site is bound by rural residential land to the east and west. Residential development is currently under construction on land to the north. Park Ridge Road runs along the southern boundary.

The site is generally flat and slopes gradually downwards from south to north and from east to west. The majority of the site has been previously cleared, with occasional individual mature trees remaining in the cleared area. The cleared area is infested with a high diversity of weeds, with some native species also persisting. The northern and eastern portions of the site are vegetated. A house and associated infrastructure and lawns/gardens are present in the south of the site.

A recent aerial photograph showing the subject site is provided in **FIGURE 2**.

1.3 Planning Context

The subject site is located within the Logan City Council (LCC) Local Government Area (LGA) and is subject to the *Logan Planning Scheme (2015)*. The Subject site is zoned in the *Logan Planning Scheme 2015* as (**FIGURE 3**):

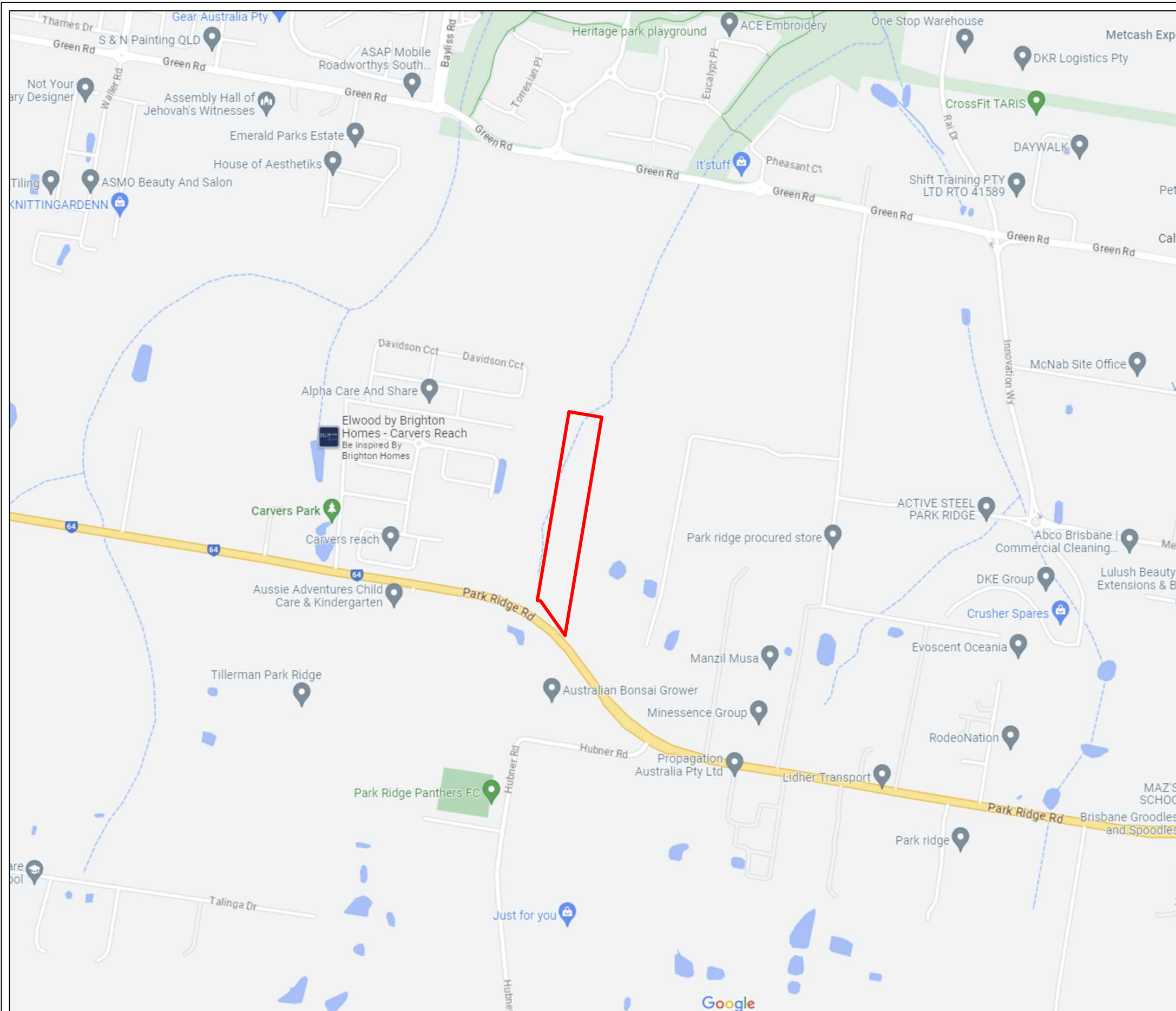
- Environmental Management and Conservation; and
- Recreation and Open Space.

The Environmental Significance Overlay map areas of the subject site as containing:

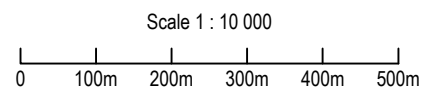
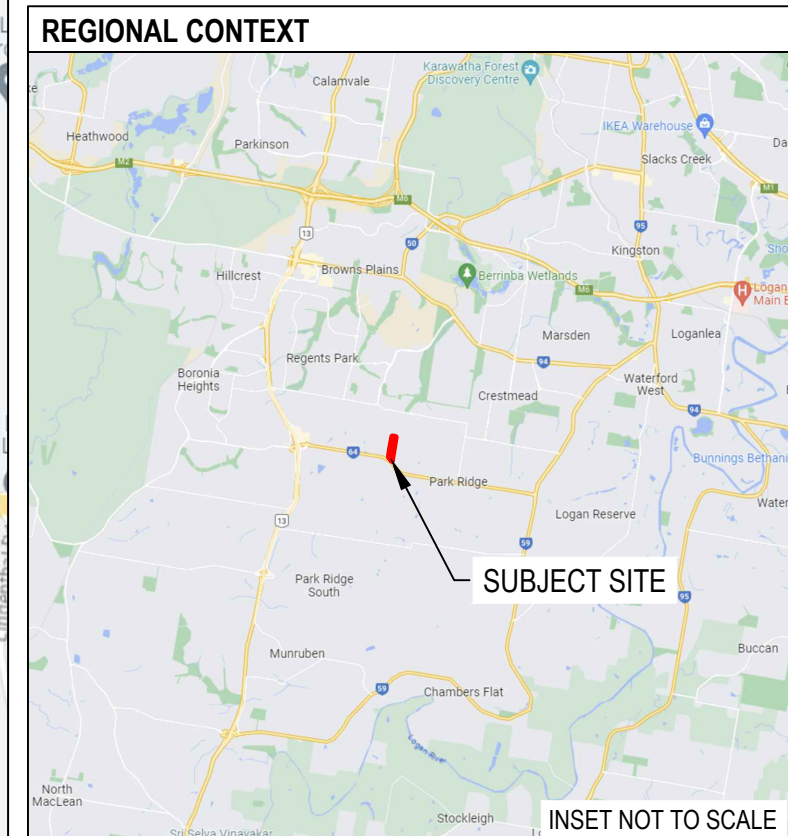
- Primary Vegetation Management Area (**FIGURE 4**);
- Secondary Vegetation Management Area (**FIGURE 4**);
- Biodiversity corridor (**FIGURE 5**);
- Environmental management and conservation area (**FIGURE 5**); and
- Matters of Local and State environmental significance (**FIGURE 6**).
 - local environmental significance; and
 - both matters of state and local environmental significance.

The Waterway Corridors and Wetlands Overlay map areas of the subject site as containing:

- Waterway corridor trigger (**FIGURE 7**); and
- Minor waterway (**FIGURE 7**).



LEGEND
 Subject Site



SOURCE: Google Maps
 SCALE: 1 : 10 000 @ A3
JWA PTY LTD
Ecological Consultants

CLIENT
 Mr Quyen Nguyen
 PROJECT
 Offset Assessment
 Lot 9 on RP97339
 210 Park Ridge Road, Park Ridge QLD
 Logan City Council LGA

FIGURE 1
 PREPARED: BW
 DATE: 24 July 2024
 FILE: Q12010_EA_20240724.dwg

TITLE
LOCALITY PLAN



LEGEND
[Red outline] Subject Site
[White outline] Cadastre

Scale 1 : 2500
0 20m 40m 60m 80m 100m

SOURCE: Metro Map Aerial dated 01/05/23
SCALE: 1 : 2500 @ A3
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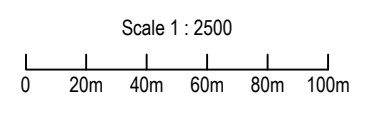
FIGURE 2
PREPARED: BW
DATE: 24 July 2024
FILE: Q12010_EA_20240724.dwg

TITLE
AERIAL
PHOTOGRAPH

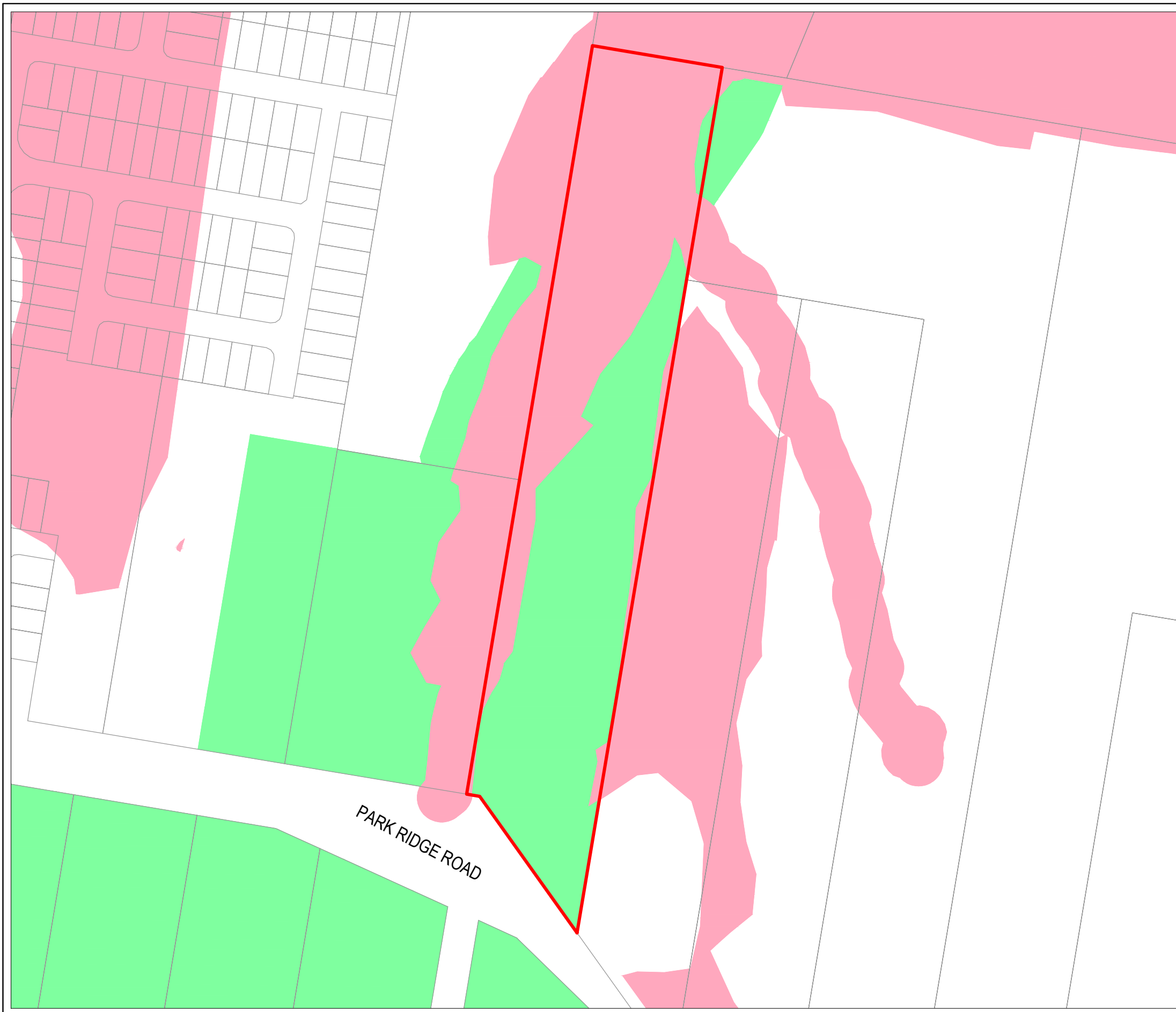


- LEGEND**
- Subject Site
 - Cadastre
 - LPS 2015 ZM-01.00 Zone Map**
 - Recreation and open space
 - Environmental management and conservation
 - Mixed use
 - Medium impact industry
 - Emerging community

PARK RIDGE ROAD

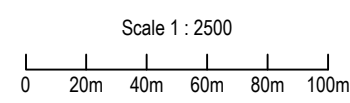


<p>SOURCE: Logan City Council Open Data - LPS 2015 v9.0 ZM-01.00 Zone Map</p> <p>SCALE: 1 : 2500 @ A3</p> <div style="border: 1px solid black; padding: 2px; text-align: center;"> <p><i>JWA PTY LTD</i> Ecological Consultants</p> </div>	<p>CLIENT Mr Quyen Nguyen</p> <p>PROJECT Offset Assessment Lot 9 on RP97339 210 Park Ridge Road, Park Ridge QLD Logan City Council LGA</p>	<p>FIGURE 3</p>	<p>TITLE</p> <p>ZONING MAP</p>
		<p>PREPARED: BW DATE: 24 July 2024 FILE: Q12010_EA_20240724.dwg</p>	



LEGEND

- Subject Site
- Cadastre
- LPS 2015 OM-02.01 Vegetation Management Areas**
- Primary vegetation management area
- Secondary vegetation management area



SOURCE: Logan City Council Open Data - LPS 2015 v9.0 OM-02.01 Vegetation Management Area
 SCALE: 1 : 2500 @ A3

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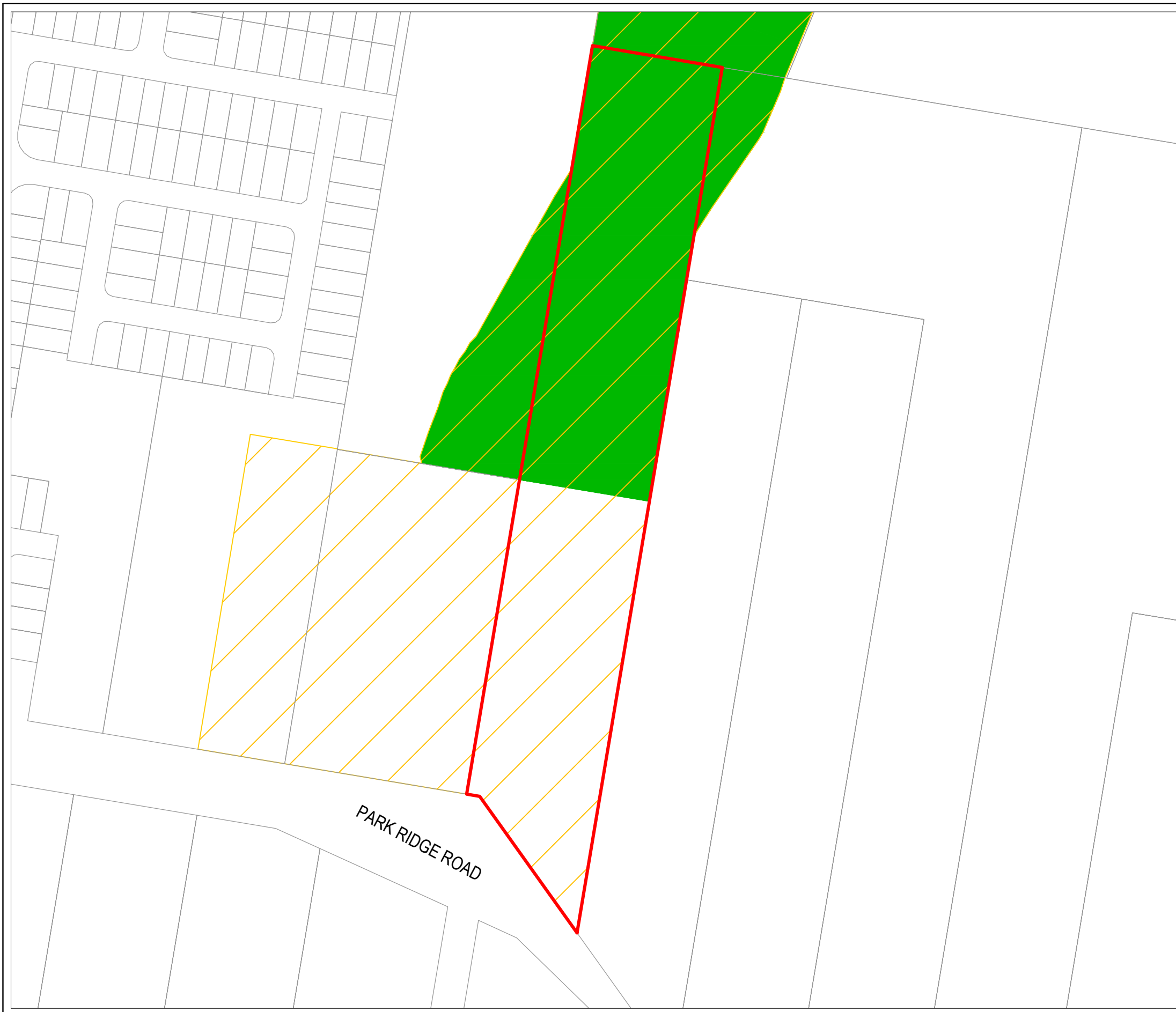
PROJECT
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 Logan City Council LGA

FIGURE 4

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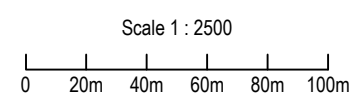
TITLE

LPS 2015 VEGETATION MANAGEMENT AREAS



- LEGEND**
- Subject Site
 - Cadastre
 - LPS 2015 OM-02.02 Biodiversity Corridors
 - Biodiversity corridor
 - Environmental management and conservation area

PARK RIDGE ROAD



SOURCE: Logan City Council Open Data - LPS 2015 v9.0 Biodiversity corridor, Env. management & conservation area

SCALE: 1 : 2500 @ A3

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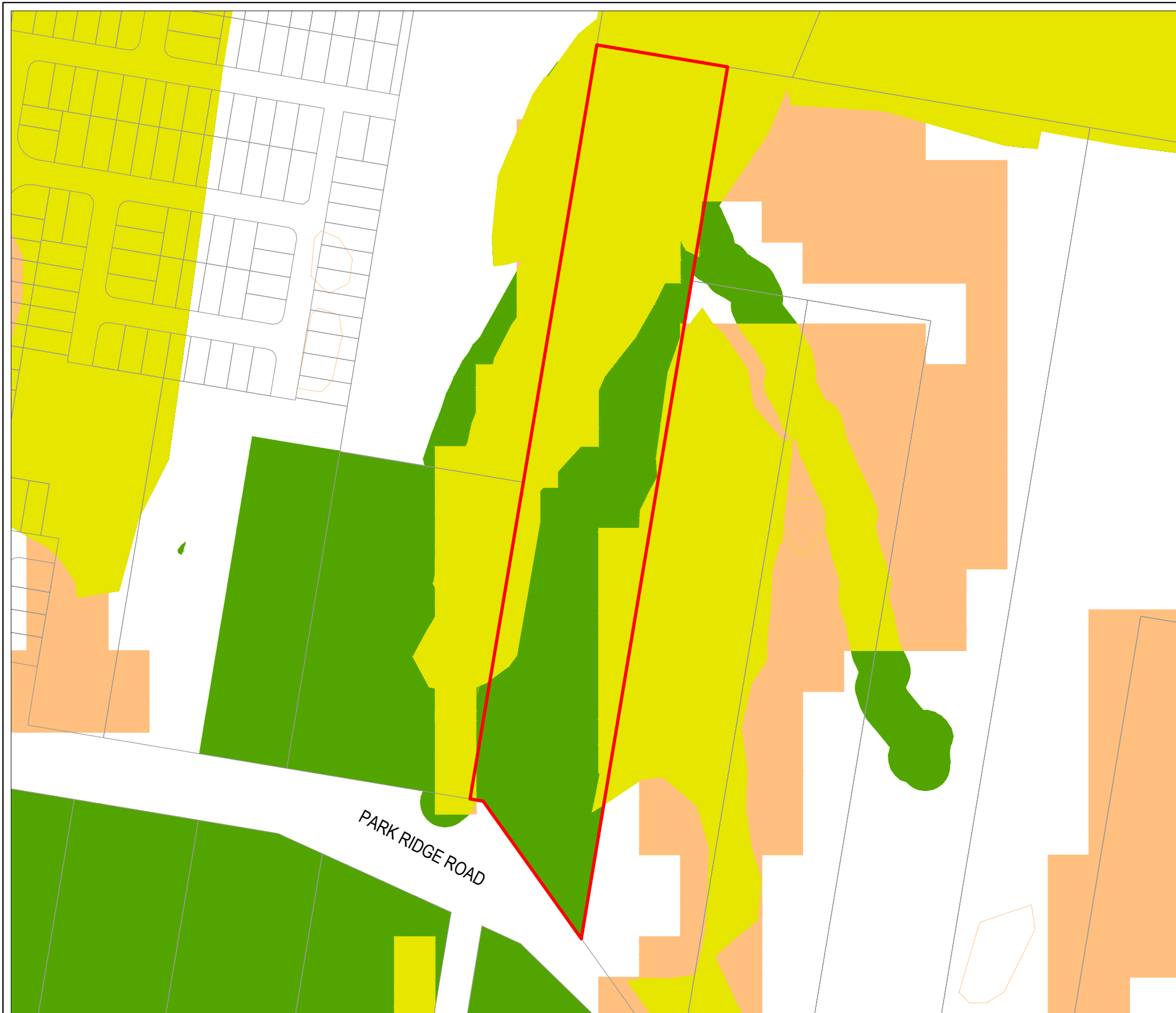
PROJECT
Offset Assessment
Lot 9 on RP97339
210 Park Ridge Road, Park Ridge QLD
Logan City Council LGA

FIGURE 5

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DATE: 24 July 2024
FILE: Q12010_EA_20240724.dwg

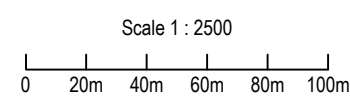
TITLE

LPS 2015
BIODIVERSITY
CORRIDORS



- LEGEND**
- Subject Site
 - Cadastre
 - LPS 2015 OM-02.04 Matters of State and Local Significance**
 - Both matters of local and state environmental significance
 - Matters of local environmental significance
 - Matters of state environmental significance

PARK RIDGE ROAD



SOURCE: Logan City Council Open Data - LPS 2015 v9.0 Local and state environmental significance - Polygons & Lines
 SCALE: 1 : 2500 @ A3
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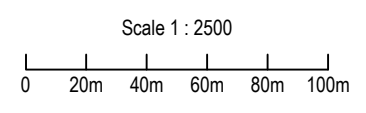
FIGURE 6
 PREPARED: BW
 DATE: 24 July 2024
 FILE: Q12010_EA_20240724.dwg

TITLE
**LPS 2015
 MATTERS OF STATE &
 LOCAL SIGNIFICANCE**



- LEGEND**
- Subject Site
 - Cadastre
 - LPS 2015 OM-14.01 Waterways
 - Minor waterway

PARK RIDGE ROAD



<p>SOURCE: Logan City Council Open Data - LPS 2015 v9.0 OM-14.01 Waterways</p> <p>SCALE: 1 : 2500 @ A3</p> <div style="border: 1px solid black; padding: 2px; text-align: center;"> <p><i>JWA PTY LTD</i> Ecological Consultants</p> </div>	<p>CLIENT Mr Quyen Nguyen</p> <p>PROJECT Offset Assessment Lot 9 on RP97339 210 Park Ridge Road, Park Ridge QLD Logan City Council LGA</p>	<p>FIGURE 7</p>	<p>TITLE</p> <p>LPS 2015 WATERWAYS</p>
		<p>PREPARED: BW DATE: 24 July 2024 FILE: Q12010_EA_20240724.dwg</p>	

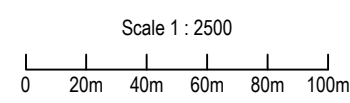
It is noted that site assessments have revealed the Waterway Corridors and Wetlands Overlay mapping to be inaccurate. Waterways on the site are actually comprised of a constructed farm dam and associated overland flow path that would likely convey water intermittently after rainfall events. The flow path has been formalised through historic earthworks/drainage works. An additional constructed drain occurs just offsite along the northern portion of the eastern site boundary.

1.4 The Proposed Development

It is proposed to lodge a revised DA with LCC to rezone the unconstrained area of the site within the Recreation and Open Space Zone - Recreation Parks Precinct to Mixed Use and the balance of the subject site to Environmental Management and Conservation Zone. A proposed rezoning layout is provided in **FIGURE 8**. It is considered for the purposes of this Environmental Offset Report that the proposed Mixed Use Area will be cleared to allow for future development and that the Environmental Management and Conservation Area will be retained.



- LEGEND**
- Subject Site
 - Cadastre
 - Proposed Zoning Plan**
 - Environmental Management & Conservation Area (2.757ha)
 - Mixed Use (1.318ha)



SOURCE: Somerville Consultants -
Proposed Zoning Plan Issue 4 dated 01/05/24
(Ref: 4786-04.dwg)
SCALE: 1 : 2500 @ A3

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Ecological Consultants

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Lot 9 on RP97339
210 Park Ridge Road, Park Ridge QLD
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FIGURE 8

PREPARED: BW
DATE: 29 August 2024
FILE: Q12010_EA_20240829.dwg

TITLE
**PROPOSED
ZONING
PLAN**

2 EXISTING SITE VALUES

2.1 Introduction

A survey of the proposed impact area and surrounding land was completed by one (1) senior ecologist on the 9th August 2023 to determine the values present.

Areas of native vegetation within the mapped Primary and Secondary Vegetation Management Area to be impacted by the proposed rezoning and future development were identified. Where native trees or native habitat trees occurred within Secondary Vegetation Management Areas at a density of less than one tree per 10 m², these trees were located by hand held GPS and identified to species level. Tree height (m), diameter at breast height (DBH) and canopy spread (m) were also recorded. Potential fauna habitat trees (i.e. hollows, fissures and/or other suitable roosting/nesting places for arboreal marsupials, hollow-nesting bird species or microchiropteran bats) were noted.

2.2 Vegetation Communities

2.2.1 Background

Four (4) distinct vegetation communities (VC's) were observed. Their location and extent are identified in **FIGURE 9** and each is briefly described below.

2.2.2 VC1: Mid tall open forest (*Melaleuca quinquenervia*, *Eucalyptus tereticornis*, *Eucalyptus siderophloia*, *Eucalyptus robusta*) to 22m

2.2.2.1 Location and Extent

This VC occurs in the northern portion of the subject site and extend south along the western site boundary. It covers a total area of approximately 1.67 ha.

2.2.2.2 Structure & Composition

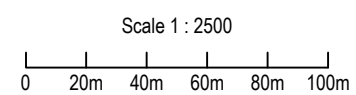
The canopy of this open forest community is generally comprised of a mixture of Broad-leaved paperbark (*Melaleuca quinquenervia*), Queensland blue gum (*Eucalyptus tereticornis*), Grey ironbark (*E. siderophloia*) and Swamp mahogany (*E. robusta*) up to 20m in height. There are also scattered occurrences of Pink bloodwood (*Corymbia intermedia*) and Swamp box (*Lophostemon suaveolens*) (**PLATE 1**).

The midstorey is generally comprised of scattered shrubs including Black wattle (*Acacia concurrens*), Brush ironbark wattle (*A. disparrima*), Brisbane golden wattle (*Acacia fimbriata*) and Coast banksia (*Banksia integrifolia*). There are also clumps of Lantana* (*Lantana camara*) present.

The groundcover is comprised of a mixture of native grasses and sedges, and common agricultural weeds and exotic grasses. It is noted that a small farm dam and associated drainage line occurs within this VC.



- LEGEND**
- Subject Site
 - Cadastre
 - Koala scat
 - Natural Drainage Path
- Vegetation Communities**
- VC1: RE12.3.11
 - VC2: Regrowth (RE 12.9-10.4)
 - VC3: Grassland with scattered trees
 - VC4: Lawn/gardens/exotic vegetation
 - Dam



SOURCE: JWA Site Investigations; 28 South Environmental - JER Attachments 2 & 5 (2013) Metro Map Aerial dated 01/05/23

SCALE: 1 : 2500 @ A3

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FIGURE 9

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TITLE

VEGETATION
COMMUNITIES



Plate 1 - example of VC1 on the subject site

2.2.3 VC2: Regrowth (*Melaleuca quinquenervia*, *Eucalyptus seeana*, *Corymbia intermedia*) to 15m

2.2.3.1 Location and Extent

Patches of regrowth vegetation occur in the central portion of the subject site and cover a total area of approximately 0.66 ha.

2.2.3.2 Structure & Composition

The canopy of this open forest community is generally comprised of a mixture of Broad-leaved paperbark (*Melaleuca quinquenervia*), Queensland blue gum (*Eucalyptus tereticornis*) and Grey ironbark (*E. siderophloia*) up to 20m in height. There are also scattered occurrences of Pink bloodwood (*Corymbia intermedia*) and Swamp box (*Lophostemon suaveolens*) (PLATE 2).

The midstorey is generally absent with the exception of scattered Brush ironbark wattle. The groundcover is comprised of a mixture of native grasses and sedges, and common agricultural weeds and exotic grasses.



Plate 2 - example of VC2 on the subject site

2.2.4 VC3: *Grassland with scattered trees*

2.2.4.1 Location and Extent

This VC occurs within the southern half of the subject site and cover a total area of approximately 1.21 ha.

2.2.4.2 Structure & Composition

The canopy of this community is generally comprised of scattered trees including Broad-leaved paperbark, Queensland blue gum, Narrow-leaved red gum and Pink bloodwood. The midstorey is generally absent with the exception of scattered Brush ironbark wattle. The groundcover is comprised of a mixture of native grasses and sedges, and common agricultural weeds and exotic grasses (**PLATE 3**).



Plate 3 - example of VC3 on the subject site

2.2.5 VC4: Lawn/gardens/exotic vegetation

2.2.5.1 Location and Extent

This VC occurs in the southern portion of the subject site, in the vicinity of the existing residential dwelling, and covers a total area of approximately 0.52 ha.

2.2.5.2 Structure & Composition

This community consists primarily of planted garden species such as the slash pine (*Pinus elliottii*) within a garden/lawn setting (**PLATE 4**).



Plate 4 - example of VC4 on the subject site.

2.3 Tree Survey

A native tree is defined within the *Logan Planning Scheme (2015)* as:

A tree, whether dead or alive, that is indigenous to Australia:

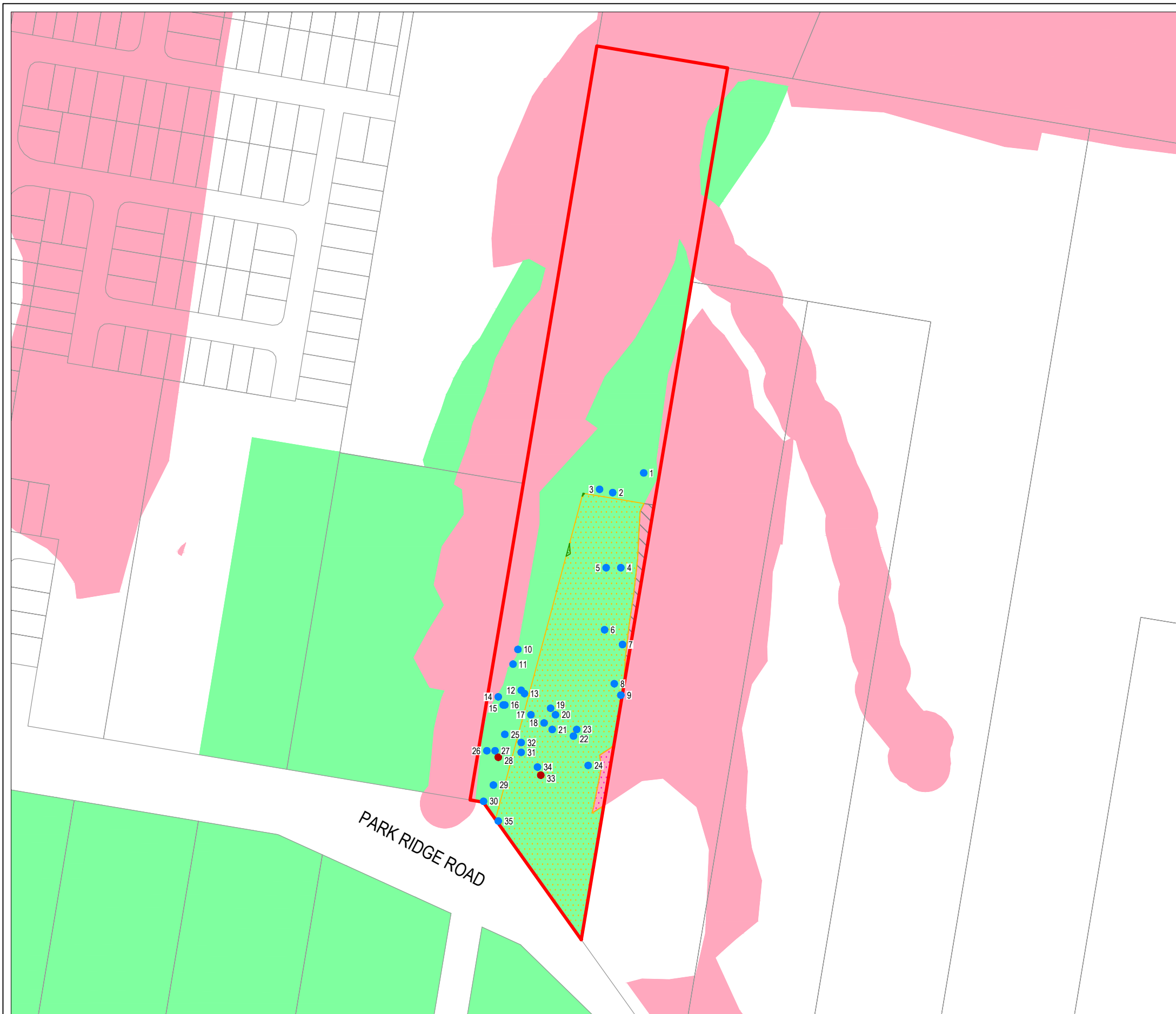
- *greater than four metres in height; or*
- *with a trunk circumference of 31.5 cm or greater measured at 1.3 metres from the ground.*

A native habitat tree is defined within the *Logan Planning Scheme (2015)* as:

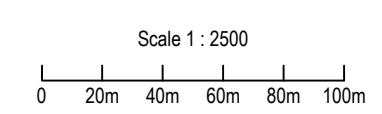
A tree, whether dead or alive, that is indigenous to Australia:

- *with a trunk circumference of 220 cm or more measured at 1.3 metres above ground level; or*
- *that contains a hollow.*

A total of thirty-three (33) native trees and two (2) native habitat trees were recorded within and adjacent to the impact area (i.e. proposed Mixed Use Area) within the mapped Secondary Vegetation Management Areas (**FIGURE 10**). Tree details are provided in **TABLE 1**.



- LEGEND**
- Subject Site
 - Cadastre
- Proposed Impacts**
- Impact area within primary vegetation management area
 - Impact area within secondary vegetation management area where trees are less than 1 tree per 10m²
 - Impact area within secondary vegetation management area where trees are greater than 1 tree per 10m²
 - Impact area subject to offsets under the QLD Environmental Offsets Policy for a Matter of State Ecological Significance
- Tree Survey**
- Native habitat tree
 - Native non-habitat tree
- LPS 2015 OM-02.01 Vegetation Management Areas**
- Primary vegetation management area
 - Secondary vegetation management area



<p>SOURCE: JWA; Somerville Consultants - Proposed Zoning Plan Issue 4 dated 01/05/24; LCC Open Data - LPS 2015 v9.0 OM-02.01</p> <p>SCALE: 1 : 2500 @ A3</p> <p style="text-align: center;"><i>JWA PTY LTD</i> Ecological Consultants</p>	<p>CLIENT Mr Quyen Nguyen</p> <p>PROJECT Offset Assessment Lot 9 on RP97339 210 Park Ridge Road, Park Ridge QLD Logan City Council LGA</p>	<p>FIGURE 10</p>	<p>TITLE</p> <p>IMPACT ON LPS 2015 VEGETATION MANAGEMENT AREAS</p>
		<p>PREPARED: BW DATE: 24 July 2024 FILE: Q12010_EA_20240724.dwg</p>	

TABLE 1
NATIVE TREES RECORDED WITHIN THE IMPACT AREA

Tree No.	Common name	Botanical Name	Height	DBH	Canopy radius	Habitat Tree	Retain/Remove
1	Qld blue gum	<i>Eucalyptus tereticornis</i>	10m	65cm	4m	-	Retain
2	Broad-leaved paperbark	<i>Melaleuca quinquenervia</i>	4m	8cm	1m	-	Retain
3	Broad-leaved paperbark	<i>Melaleuca quinquenervia</i>	13m	40cmx2 + 30cmx4 + 15cmx3	5m	-	Retain
4	Rusty gum	<i>Angophora leiocarpa</i>	4m	6cm	1m	-	Remove
5	Narrow-leaved red gum	<i>Eucalyptus seeana</i>	9m	30cm	3m	-	Remove
6	Narrow-leaved red gum	<i>Eucalyptus seeana</i>	10m	26cm	3m	-	Remove
7	Narrow-leaved red gum	<i>Eucalyptus seeana</i>	7m	16cm	2m	-	Remove
8	Broad-leaved paperbark	<i>Melaleuca quinquenervia</i>	5m	15cm	1m	-	Remove
9	Black wattle	<i>Acacia leiocalyx</i>	6m	27cm	4m	-	Remove
10	Broad-leaved paperbark	<i>Melaleuca quinquenervia</i>	12m	24cm + 10cmx3	4m	-	Retain
11	Broad-leaved paperbark	<i>Melaleuca quinquenervia</i>	15m	54cm + 45cm	6m	-	Retain
12	Broad-leaved paperbark	<i>Melaleuca quinquenervia</i>	14m	39cm + 14cm	4m	-	Retain
13	Pink bloodwood	<i>Corymbia intermedia</i>	21m	66cm	7m	-	Retain
14	Swamp box	<i>Lophostemon suaveolens</i>	7m	15cm	1m	-	Retain
15	Broad-leaved paperbark	<i>Melaleuca quinquenervia</i>	7m	14cmx2 + 8cmx2	3m	-	Retain
16	Swamp box	<i>Lophostemon suaveolens</i>	8m	22cm	2m	-	Retain
17	Broad-leaved paperbark	<i>Melaleuca quinquenervia</i>	10m	30cm	3m	-	Remove
18	Broad-leaved paperbark	<i>Melaleuca quinquenervia</i>	8m	12cmx4	2m	-	Remove
19	Pink bloodwood	<i>Corymbia intermedia</i>	19m	81cm	7m	-	Remove
20	Narrow-leaved red gum	<i>Eucalyptus seeana</i>	10m	16cmx2	2m	-	Remove
21	Broad-leaved paperbark	<i>Melaleuca quinquenervia</i>	9m	26cm	2m	-	Remove
22	Pink bloodwood	<i>Corymbia intermedia</i>	9m	23cm	3m	-	Remove
23	Pink bloodwood	<i>Corymbia intermedia</i>	10m	31cm	4m	-	Remove

Environmental Offset Report - 204-212 Park Ridge Road, Park Ridge

Tree No.	Common name	Botanical Name	Height	DBH	Canopy radius	Habitat Tree	Retain/Remove
24	Pink bloodwood	<i>Corymbia intermedia</i>	15m	52cm	7m	-	Remove
25	Broad-leaved paperbark	<i>Melaleuca quinquenervia</i>	16m	41cmx3	7m	-	Retain
26	Broad-leaved paperbark	<i>Melaleuca quinquenervia</i>	14m	30cmx2 + 15cm	4m	-	Retain
27	Broad-leaved paperbark	<i>Melaleuca quinquenervia</i>	6m	39cm + 25cm	4m	-	Retain
28	Narrow-leaved red gum	<i>Eucalyptus seeana</i>	22m	75cm	6m	Yes	Retain
29	Broad-leaved paperbark	<i>Melaleuca quinquenervia</i>	13m	38cm + 24cm	5m	-	Retain
30	Broad-leaved paperbark	<i>Melaleuca quinquenervia</i>	17m	42cmx5 + 35cm + 22cmx4	10m	-	Retain
31	Narrow-leaved red gum	<i>Eucalyptus seeana</i>	16m	39cm	4m	-	Remove
32	Narrow-leaved red gum	<i>Eucalyptus seeana</i>	13m	27cm	3m	-	Remove
33	Scribbly gum	<i>Eucalyptus racemosa</i>	24m	109cm	9m	Yes	Remove
34	Black wattle	<i>Acacia leiocalyx</i>	10m	32cm	5m	-	Remove
35	Broad-leaved paperbark	<i>Melaleuca quinquenervia</i>	5m	25cm + 18cm	4m	-	Remove

3 IMPACTS OF THE PROPOSED DEVELOPMENT

3.1 Introduction

The proposed rezoning will allow for future clearing of native vegetation within primary and secondary vegetation management areas to allow for development. In order to calculate a suitable offset in accordance with Planning Scheme Policy 3 of the *Logan Planning Scheme (2015)*, this section provides the relevant impact details for the following items:

- Area (m²) of primary vegetation management areas to be cleared;
- Native trees to be cleared in the secondary vegetation management areas;
- Native habitat trees to be cleared in the secondary vegetation management areas; and
- Other native vegetation in the secondary vegetation management areas to be cleared.

3.2 Area to be Cleared in the Primary Vegetation Management Area

A total of 0.02 ha of primary vegetation management areas will be impacted by the proposed development (FIGURE 10).

3.3 Native Trees to be Cleared in the Secondary Vegetation Management Area

The number and species of each native tree (as defined within the Logan Planning Scheme 2015) to be cleared was determined where native trees occurred within the mapped Secondary Vegetation Management Area at a density of less than one tree per 10 m².

In total, eighteen (18) native trees will be removed as a result of the proposed rezoning. Details of native trees to be removed are provided in TABLE 1 and shown in FIGURE 10.

3.4 Native Habitat Trees to be Cleared in the Secondary Vegetation Management Area

The number and species of each native habitat tree (as defined within the Logan Planning Scheme 2015) to be cleared was determined where native trees occurred within the mapped in the Secondary Vegetation Management Area at a density of less than one tree per 10 m².

In total, one (1) native habitat tree will be removed as a result of the proposed rezoning. This native habitat tree will require offsetting. Details of the native habitat tree to be removed are provided in TABLE 1 and shown in FIGURE 10.

3.5 Other Native Vegetation in the Secondary Vegetation Management Area to be Cleared

Approximately, 0.001 ha of additional vegetation mapped in the Secondary Vegetation Management Area where the number of trees occur at a density of one native tree per 10m² or greater is proposed to be removed as a result of the proposed development (**FIGURE 10**).

4 OFFSET REQUIREMENTS

4.1 Introduction

It is understood that the proponent wishes to provide an environmental offset in accordance with Planning Scheme Policy 3 of the Logan Planning Scheme (2015) via a financial settlement (infrastructure agreement).

Section 3.1.9.1 of the Planning Scheme Policy 3 outlines the following principles of calculating a financial offset. Offsets are calculated:

- *in the primary vegetation management area, on a per square metre basis of native vegetation cleared;*
- *in the secondary vegetation management area:*
 - *as the number of native trees and native habitat trees cleared; or*
 - *on a per square metre basis where the number of trees are at a density of one native tree per 10 m² or greater.*

Note: where a native tree is not offset as a restoration offset, a financial settlement offset will be charged at the rate of 10m² of offset land per tree.

Note: where a native habitat tree is not offset as a restoration offset, a financial settlement offset will be charged at the rate of 20m² of offset land per native habitat tree.

4.2 Offset Calculation

In accordance with the relevant requirements of Planning Scheme Policy 3, the required financial offset has been based on matters of local environmental significance (MLES) and calculated according to Appendix 6 - Financial settlement offset calculation methodology of the Queensland Environmental Offsets Policy.

The Queensland Government financial settlement offset calculator was utilised to determine the offset requirements for impacts on MLES identified in Biodiversity areas overlay map OM-02.04 and determined by the ecological index of the land as follows:

- MLES 1: land with an environmental index of 1 to 12;
- MLES 2: land with an environmental index of 13 to 22;
- MLES 3: land with an environmental index of 23 to 32;
- MLES 4: land with an environmental index of 33 to 62.

The ecological index is an average value representing the ecological significance of the area. The higher the ecological index, the higher the ecological significance of the area - therefore attracting a higher financial settlement offset amount. The environmental index was calculated by importing a .kml file of the impact area into the Logan PD Hub. An Environmental Offset Estimate Report (**APPENDIX 1**) is then generated which includes an average environmental index of the site.

In addition, a per tree financial offset is required for the removal of scattered trees in the Secondary Vegetation Management Area where the density of the trees is less than one tree per 10 m² as follows:

- Native tree = \$134.78 per tree; and
- Native habitat tree = \$269.56 per tree.

4.3 Results

The average environmental index of the impact area on the subject site is 13.444315 (APPENDIX 1). Therefore, MLES 2 applies to the site.

A summary of the financial offset requirements of the proposed development is provided in TABLE 2 below. It has been determined that a financial offset of \$13,745.60 is required for the proposed development.

**TABLE 2
SUMMARY OF OFFSET REQUIREMENTS**

Environmental Matter	Impact	Offset Calculation	Subtotal
Native vegetation (in the Primary Vegetation Management area and in the Secondary Vegetation Management Area where the density of trees is greater than one tree per 10 m ²)	0.021 ha	Average ecological index of site = 13.444315	\$11,050.00
Native tree (in the Secondary Vegetation Management Area where the density of the trees is less than one tree per 10 m ²)	18 trees	\$134.78 per tree	\$2,426.04
Native habitat tree (in the Secondary Vegetation Management Area where the density of the trees is less than one tree per 10 m ²)	1 tree	\$269.56 per tree	\$269.56
TOTAL			\$13,745.60

5 CLEARING PLAN AND FAUNA MANAGEMENT

As required by Section 2.1.5.2 - Clearing pattern/fauna flushing of Planning Scheme Policy 3 of the Logan Planning Scheme (2015), a clearing plan describing the sequence in which clearing is to occur is provided in **FIGURE 11**.

Compliance with Section 2.1.5.2 of the Planning Scheme Policy also requires that:

1. Clearing within each individual area is to occur in accordance with the requirements and sequencing listed on a clearing plan, ensuring native animals are flushed towards the safe haven of larger retained areas of remnant bushland and away from adjoining roads and areas of existing development.
2. A clearing plan is to be undertaken using the following principles:
 - a) clearing occurs once a spotter/catcher gives sign off that the site is clear of native fauna identified as present on the site;
 - b) clearing commences in areas of least connectivity and directs fauna towards retained areas; and
 - c) clearing is sequenced to ensure adequate time for fauna to relocate towards retained areas.

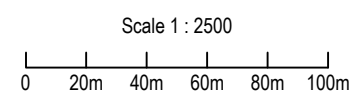
Additional fauna management recommendations to ensure the most suitable ecological outcome and to ensure that possible impacts on native fauna species are minimised are as follows:

1. All contractors and their employees are to be aware of their obligations under this Management Plan. A spotter catcher shall be present at the pre-start meeting or safety induction to outline the requirements during construction.
2. The contractor will provide access to equipment that may be required by the spotter-catcher (e.g. Cherry picker, chainsaw) as well as qualified operators.
3. Tree clearing shall be completed in accordance with the clearing plan (**FIGURE 11**) to ensure that the operational direction of clearing works shall be completed in a manner that ensures maximum fauna movement away from operational works towards retained habitat.
4. Electric and/or barbed fencing must not to be utilised within or adjacent to the construction area.
5. The Queensland *Nature Conservation Act 1992* and *Nature Conservation (Animals) Regulation 2020* provide guidelines for the rehabilitation of fauna whose habitat has or is about to be destroyed by human activities or natural disasters.
6. Prior to clearing operations, habitat trees or other habitat features shall be identified using flagging tape or similar method by a spotter catcher. Habitat trees are defined as those trees that provide suitable refuge and nesting resources for arboreal and avian fauna. These include hollow-bearing trees and trees with fissures, termitaria, etc. Larger, old growth trees are also considered to be habitat trees as they are likely to provide greater amounts of foraging resources, cover,



LEGEND

- Direction of Clearing
- Subject Site
- Cadastre
- Proposed Zoning Plan**
- Proposed Impact Area - Mixed Use Zone (1.318ha)



SOURCE: JWA; Somerville Consultants -
Proposed Zoning Plan Issue 4 dated 01/05/24;
LCC Open Data - LPS 2015 v9.0 OM-02.01
SCALE: 1 : 2500 @ A3

JWA PTY LTD
Ecological Consultants

CLIENT
Mr Quyen Nguyen
PROJECT
Offset Assessment
Lot 9 on RP97339
210 Park Ridge Road, Park Ridge QLD
Logan City Council LGA

FIGURE 11

PREPARED: BW
DATE: 24 July 2024
FILE: Q12010_EA_20240724.dwg

TITLE

**DIRECTION OF
CLEARING**

and a high number of potential hollows. Dead (stag) trees are also regarded as important habitat trees as they provide roosting and nesting resources.

7. A pre-clearing spotter catcher report shall be provided to Council prior to clearing which will detail any relevant observations made on site including the presence of habitat trees.
8. Immediately prior to any clearing operations and during the felling of any identified habitat trees, an appropriately qualified (i.e. accredited by QPWS for capture and release) spotter catcher shall be present to inspect the trees and relocate remaining fauna.
9. All trees to be removed are to be inspected by the qualified spotter catcher for denning or nesting animals immediately prior to clearing. Special attention should be given to habitat features suitable for fauna that may be within nesting season at the time of clearing.
10. Immediately prior to tree removal, an appropriately qualified spotter catcher shall attempt to “flush out” any denning or nesting animals. This may involve hitting target trees with a sledgehammer.
11. Following felling, a second inspection of the relevant trees shall be carried out to relocate fauna disturbed by the clearing process or remaining within the felled timber to a suitable location. The relocation sites should include public lands located in close proximity to the subject site, should be well vegetated and adjoin significant areas of retained habitat. Where denning hollows are not available, nocturnal animals (i.e. bats, gliders, etc.) should be released at dusk.
12. Any injured animals requiring treatment or euthanasia shall be immediately removed and taken to an appropriately qualified veterinary surgeon. Contact details for the nearest veterinary clinics are provided below.

Park Ridge Animal Hospital
3626-3632 Mount Lindesay Highway,
Park Ridge QLD 4125
Ph: (07) 3800 1378

Kanteena Park Veterinary Clinic
3688 Mount Lindesay Highway,
Park Ridge QLD 4125
Ph: (07) 3297 1005

Marsden Veterinary Surgery
Cnr Chambers Flat Rd and Browns Plains Rd,
Marsden QLD 4132
Ph: (07) 3200 6045

Any animals requiring support or rehabilitation other than vet assistance will be taken to a qualified wildlife carer or wildlife centre.

13. Following the completion vegetation clearing, any capture and release records will be supplied to QPWS in accordance with their licensing conditions. A copy of these records, if requested, shall be supplied to Council.
14. A post clearing Fauna Spotter Report shall be provided to the clearing contractor and Council Ecologist within two weeks of completion of clearing activities.

6 SUMMARY AND CONCLUSIONS

JWA Pty Ltd (JWA) have been engaged by Somerville Consultants to prepare an Offset Assessment in accordance with Planning Scheme Policy 3: Environmental Management of the Logan Planning Scheme (2015) for land at 204-212 Park Ridge Road, Park Ridge. This land is formally described as Lot 9 on RP97339. This Offset Assessment has been prepared to determine the quantum of biodiversity offsets required to ensure a net gain in native vegetation as a result of the proposed rezoning and associated potential future development within the proposed Mixed Use Area.

The subject site is mapped as containing primary and secondary vegetation management areas on the Vegetation Management Areas Overlay Map (OM-02.01) of the Logan Planning Scheme (2015). The proposed rezoning will allow for the clearing of native vegetation within the mapped primary and secondary vegetation management area within the proposed Mixed Use Area.

An assessment of the impacts of the proposed development on native vegetation and offsetting requirements in accordance with Planning Scheme Policy 3 under the *Logan Planning Scheme (2015)* has been completed. It is understood that the proponent wishes to provide an environmental offset via a financial settlement (infrastructure agreement). It has been determined that a financial offset of **\$13,745.60** is required for the proposed development.

As required by Planning Scheme Policy 3, a site plan detailing the location of native vegetation to be impacted and a clearing plan describing the sequence in which clearing is to occur, has been provided. Additional fauna management recommendations to ensure the most suitable ecological outcome and to ensure that possible impacts on native fauna species are minimised have also been included.

APPENDIX 1: ENVIRONMENTAL OFFSET ESTIMATE REPORT

Your Environmental Offset Estimate Report

IMPORTANT NOTICE

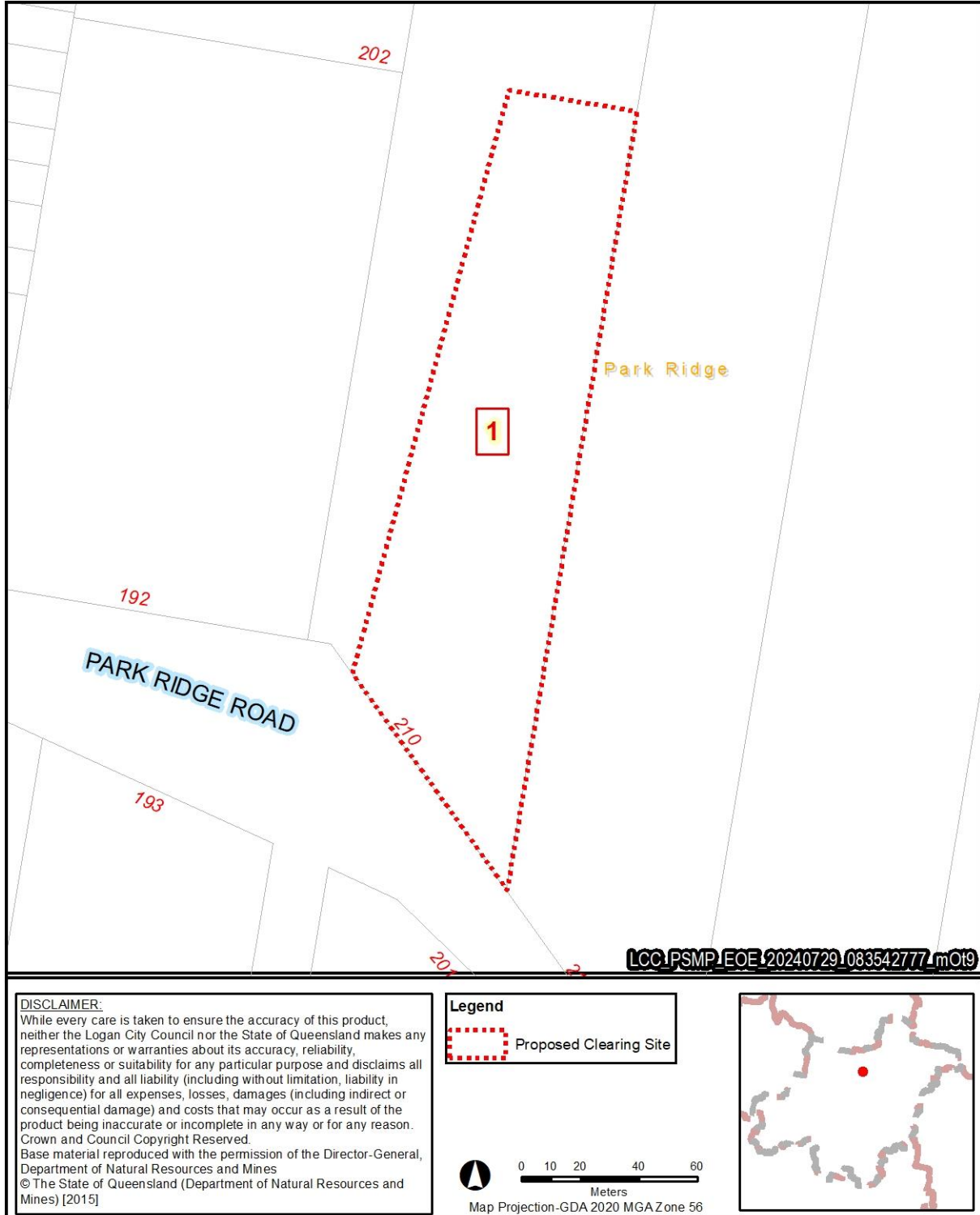
If you are proposing development that requires the clearing of vegetation, please contact Council to obtain further advice on (07) 3412 3412 or via email: Council@logan.qld.gov.au. Do not rely solely on the offset estimation report below.

City of Logan - Planning and Development

Environmental Offset Estimate Report

Proposed Clearing Site: The area(s) you submitted online using the [Logan PD Hub](#) is shown in the Proposed Clearing Site Map below.

Request Received: 29/07/2024 08:35 AM



Environmental Offsets

Financial settlement offsets are calculated under the Logan Planning Scheme 2015 to offset the unavoidable clearing of protected native vegetation required as a result of development.

An environmental offset is an action such as planting trees or a payment made by the property owner to compensate for the environmental impacts of their development - usually associated with clearing [protected vegetation](#).

The Logan Planning Scheme 2015 (in [Planning Scheme Policy 3 - Environmental management](#)) identifies three types of environmental offsets:

- restoration offsets;
- proponent driven offsets;
- financial settlement offsets.

This report only addresses the costs of a financial settlement offset. You may also like to consider a restoration offset or a proponent driven offset. To find out more please visit logan.qld.gov.au/vegetationprotection.

Financial settlement offsets paid to Council are used exclusively to purchase and rehabilitate degraded land in strategic locations to achieve benefits such as:

- ✓ replacing environmental values lost during development (e.g. protected vegetation and wildlife habitat areas);
- ✓ increasing and improving habitat;
- ✓ connecting isolated areas of vegetation within biodiversity corridors;
- ✓ supporting environmental initiatives to restore the health of our rivers and wetlands;
- ✓ increasing our City's greenspaces and eco-friendly recreation areas.

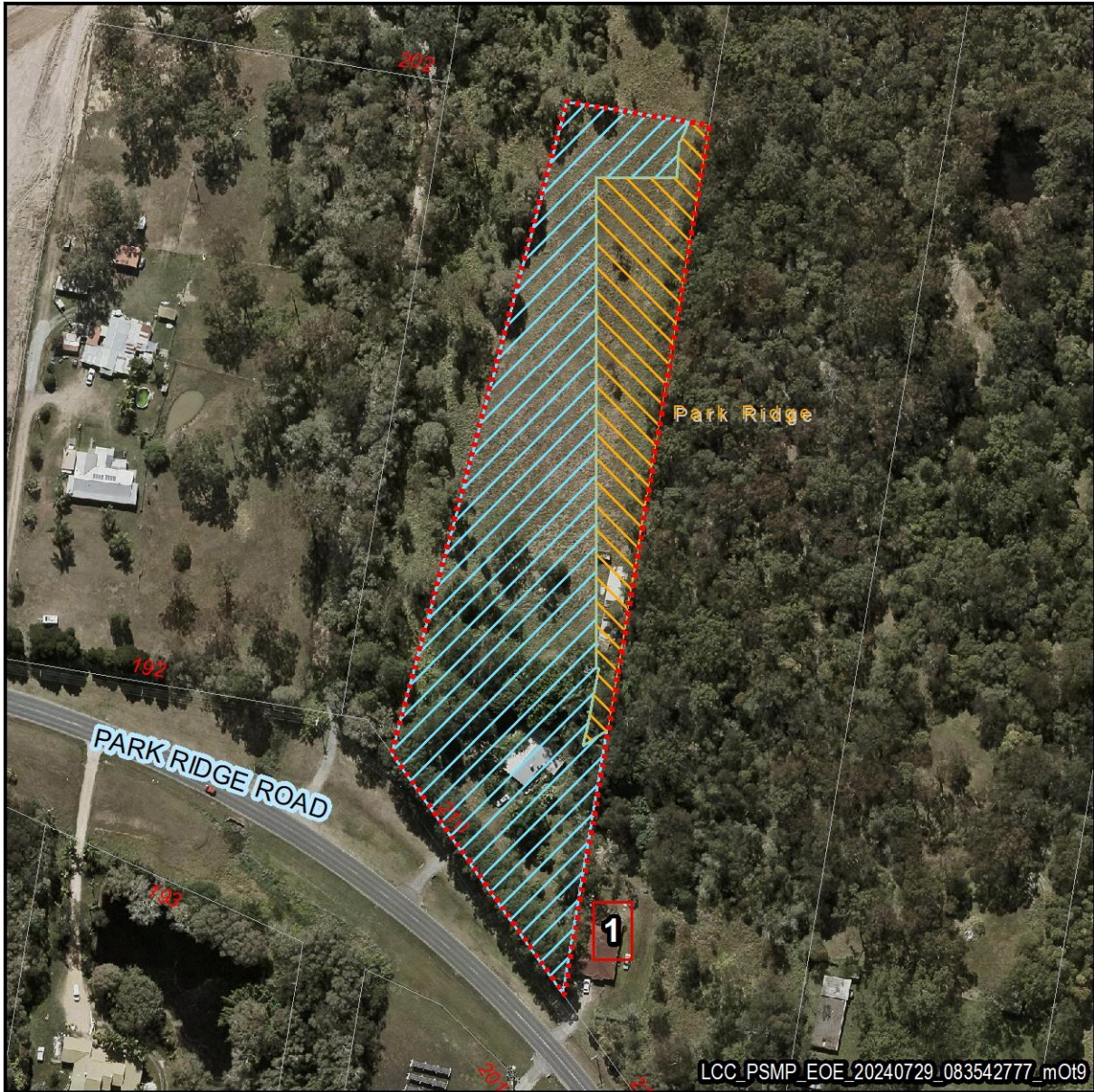
Important Information about this Estimate Report

This report:

- is a tool to assist with your planning and development enquiries and does not form part of the Logan Planning Scheme 2015;
- provides an estimate only and does not represent a formal quotation or an invoice for payment;
- is current only at the date of generation, and is subject to change - a new estimate should be obtained prior to making decisions or lodging development applications;
- provides general information only, of which Council does not warrant the accuracy, completeness or currency. Council accepts no responsibility for, or in connection with, any loss or damage suffered as a result of any inaccuracies, errors or omissions, or your reliance on this information.

Your Environmental Offset Map

The proposed clearing site submitted to Council is shown and numbered in red. The areas subject to environmental offsets are shown in orange and/or blue.

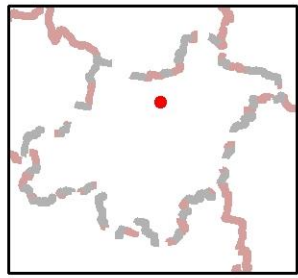


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Legend

- Proposed Clearing Site
- Authority
- State (MSES) and Local (MLES)
- Local (MLES)

0 10 20 40 60
Meters
Map Projection-GDA 2020 MGA Zone 56



Further information about the areas identified as being subject to environmental offsets is enclosed in the [Proposed Clearing Site - Ecological Significance and Values Map](#), which

contains detailed maps from [Figure 3.1.10.1 - Ecological Significance of the Logan Planning Scheme 2015](#). This information is used to determine the ecological value of the areas that are a Matter of Local Environmental Significance (MLES) which are subject to an environmental offset (shown in blue on the map above).

Financial Settlement Offset

The estimated financial settlement offset amount, shown in Table 1 below, is determined from the ecological values of the proposed clearing site, and is calculated according to section 3.1.9.3 of [Planning Scheme Policy 3 - Environmental management](#).

Please note that according to the [Biodiversity Areas Overlay Map OM - 02.04](#) your proposed Clearing Site includes a Matter of State Environmental Significance (MSES).

The Queensland Government has separate regulatory requirements for MSES. This is regulated by the State Development Assessment Provisions. The Queensland State Government is responsible for managing MSES and you will need to contact the Department of Environment and Heritage Protection (13 74 68) regarding your proposed Clearing Site.

Where the native vegetation is identified as both as a MLES and as a MSES and no offset is required by the Queensland Government for the native vegetation identified as a MSES, development must:

- be located to avoid the need to clear the native vegetation; or
- achieve a net gain of native vegetation.

Table 1: Estimate of financial settlement offset amount. (- Ref:LCC_PSMP_EOE_20240729_083542777_mOt9)

<i>Proposed Clearing Site Part</i>	Area (square metres)	Ecological Index*	Estimated Offset Amount
1: MLES-1	8,407.05266995493548	7.999926	\$50,232.98
1: MLES-2	35.82170827870934	19.133556	\$428.08
1: MLES-3	4,700.80509988018639	23.137859	\$84,263.34
<i>Total</i>	13,143.67947811383056	13.444315	\$134,924.40

*The 'Ecological Index' is an average value representing the ecological significance of the area. The higher the ecological index, the higher the ecological significance of the area - therefore attracting a higher financial settlement offset amount. Council seeks to encourage development in areas with a lower ecological significance to minimise environmental impacts.

Primary and Secondary Vegetation Management Areas

The Vegetation Management Area includes Primary and Secondary Vegetation Management Areas. If the area identified as being subject to an environment offset contains single or scattered trees in the Secondary Vegetation Management Area and the density of the trees is less than one tree per 10m², Council may accept an offset based on a count of native trees and native habitat trees (see Table 2 below). This may be less expensive than the estimate of the financial settlement offset amount presented in this report.

Native trees or native habitat trees may also be present in the proposed clearing site that have not been identified as subject to an environmental offset. These trees will incur an additional offset cost (see Table 2 below).

Table 2: Estimated cost of individual trees as part of a financial settlement offset (where appropriate).

Tree	Cost per tree
Native Tree	\$134.78
Native Habitat Tree	\$269.56

For more information about these trees and applicable fees go to:

www.logan.qld.gov.au/vegetationprotection

More Information

You can learn more about environmental offsets using our [Vegetation Protection webpage](#), or by contacting Council on the details below.

Phone:	(07) 3412 3412
Email:	environment@logan.qld.gov.au
Online:	www.logan.qld.gov.au/vegetationprotection
In person:	Logan City Council - City Administration Centre 150 Wembley Road Logan Central QLD 4114

