



PRELIMINARY SITE INVESTIGATION

PROPOSED REZONING

March 2024

Prepared For: Lisa Joel Investments Pty Ltd

**Lot 15 DP 1236885
40 The Tunnell Road
Billinudgel NSW**

HMC2024.667

RE: Lot 15 DP 1236885, 40 The Tunnell Road, Billinudgel NSW.

HMC Environmental Consulting Pty Ltd is pleased to present our report for a Preliminary Site Investigation for the abovementioned site.

We trust this report meets with your requirements. If you require further information, please contact HMC Environmental Consulting directly on the numbers provided.

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EXECUTIVE SUMMARY

BACKGROUND

A planning proposal is to be lodged to rezone the north-eastern portion (2574m²) of the large landholding (6.91 Ha) located at Lot 15 DP 1236885, 40 The Tunnell Road, Billinudgel NSW from a RU2 Rural Landscape zone to E4 General Industrial zone. The industrial zone would reflect the surrounding land use zoning along Lucky Lane.

The site has been filled over a period from 2016 to 2022 to achieve the final level building platform. A proposed storage/office building was approved (10.2022.219.1) for the site on 18 May 2023 showing the current levelled site area on the north-eastern part of the current landholding. A December 2023 survey plan shows the proposed industrial zoned land on a future 2541m² lot with a residual lot of 5.171 Ha.

To address potential site contamination associated with current and former land use, HMC Environmental Consulting (HMC) was commissioned by Ray Darney (Planner) on behalf of the proponent (Lisa Joel Investments Pty Ltd) to undertake the required investigation in accordance with *State Environmental Policy (Resilience and Hazards) 2021 (SEPP 2021)*.

A Preliminary Site Investigation (PSI) including a desktop assessment of available information, and a detailed site inspection was completed.

OBJECTIVES

The objectives of the Preliminary Site Investigation are to:

- Assess the current and former land use on the investigation area for potentially contaminating activities.
- Based on potentially contaminating activities associated with the current and former land use, assess the suitability of the investigation area for the proposed land use.

SCOPE OF WORKS

The scope of work undertaken during the investigation included the following:

- A desktop assessment of current and former land use on the site including search of available records.
- A detailed site inspection.
- Preparation of a Preliminary Site Investigation report including:
 - review of available land use history information, and results of the site inspection.
 - assessment of potentially contaminating activities, contaminants of potential concern (CoPC) and areas of concern (AoPC).
 - conclusions and recommendations including suitability of the northern part of the landholding for the proposed industrial rezoning, and need for further investigation or remediation.

CONCLUSIONS/RECOMMENDATIONS

The Preliminary Site Investigation conclusions are based on the information described in this report and Appendices and should be read in conjunction with the complete report, including Section 9 Limitations.

A planning proposal would rezone the north-eastern part of Lot 15 DP 1236885, 40 The Tunnell Road, Billinudgel NSW to general industrial to reflect the current approved land use, and the adjoining land use to the north. A review of available information, and a detailed site inspection did not record that any potentially contaminating activities have occurred on the site.

Based on the information presented, in relation to potential site contamination, Lot 15 DP 1236885, 40 The Tunnell Road, Billinudgel NSW, as shown in Appendix 1 & 2 of this report, is considered suitable for the proposed planning proposal.

Based on the information presented, in relation to potential site contamination associated with the current and former land use, no further investigation or remediation is required for the site of the planning proposal for Lot 15 DP 1236885, 40 The Tunnell Road, Billinudgel NSW, as shown in Appendix 1 & 2 of this report.

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ABBREVIATIONS/ ACRONYMS

ACM	Asbestos containing material
ANZECC	Australian and New Zealand Environment and Conservation Council
AoPC	Area of potential concern
ARMCANZ	Agricultural and Resource Management Council of Australia and New Zealand
AS	Australian Standard
ASC NEPM	National Environment Protection (Assessment of Site Contamination) Measure 1999 (amended 2013)
BLEP 2014	Byron Local Environmental Plan 2014
Client	Lisa Joel Investments Pty Ltd
CLM Act	<i>Contaminated Land Management Act 1997</i>
CoPC	Contaminant of Potential Concern
CSM	Conceptual site model
DQO	Data quality objective
DSI	Detailed Site Investigation
EIL	Ecological Investigation Level
EPA	Environment Protection Authority
HIL	Health Investigation Level
HMC	HMC Environmental Consulting
Investigation Area	Proposed 2574m ² area of north-eastern part of Lot 15 DP 1236885, 40 The Tunnell Road, Billinudgel NSW
mBGL	Metres below ground level
OEH	[NSW] Office of Environment and Heritage
PSI	Preliminary Site Investigation
Site	Lot 15 DP 1236885, 40 The Tunnell Road, Billinudgel NSW

1 INTRODUCTION

1.1 BACKGROUND

A planning proposal is to be lodged to rezone the north-eastern portion (2574m²) of the large landholding (6.91 Ha) located at Lot 15 DP 1236885, 40 The Tunnell Road, Billinudgel NSW from a RU2 Rural Landscape zone to E4 General Industrial zone. The industrial zone would reflect the surrounding land use zoning along Lucky Lane.

The site has been filled over a period from 2016 to 2022 to achieve the final level building platform. A proposed storage/office building was approved (10.2022.219.1) for the site on 18 May 2023 showing the current levelled site area on the north-eastern part of the current landholding. A December 2023 survey plan shows the proposed industrial zoned land on a future 2541m² lot with a residual lot of 5.171 Ha.

To address potential site contamination associated with current and former land use, HMC Environmental Consulting (HMC) was commissioned by Ray Darney (Planner) on behalf of the proponent (Lisa Joel Investments Pty Ltd) to undertake the required investigation in accordance with *State Environmental Policy (Resilience and Hazards) 2021 (SEPP 2021)*.

A Preliminary Site Investigation (PSI) including a desktop assessment of available information, and a detailed site inspection was completed.

1.2 PROJECT DESCRIPTION

A planning proposal is to be lodged to rezone part of the site located at Lot 15 DP 1236885, 40 The Tunnell Road, Billinudgel NSW. The proposed rezoning would change the designated land use within the Byron LEP 2014 from RU2 Rural Landscape to E4 General Industrial on an area of approximately 2574m² on the north-eastern corner of the large rural landholding. This land use change would then reflect the adjacent industrial E4 zone land use to the north:

For the purposes of this report, the *investigation area* is the 2574m² proposed industrial area.

1.3 OBJECTIVE OF THE INVESTIGATION

The objectives of the Preliminary Site Investigation are to:

- Assess the current and former land use on the investigation area for potentially contaminating activities.
- Based on potentially contaminating activities associated with the current and former land use, assess the suitability of the investigation area for the proposed land use.

1.4 SCOPE OF WORKS

The scope of work undertaken during the investigation included the following:

- A desktop assessment of current and former land use on the site including search of available records.
- A detailed site inspection.
- Preparation of a Preliminary Site Investigation report including:
 - review of available land use history information, and results of the site inspection.
 - assessment of potentially contaminating activities, contaminants of potential concern (CoPC) and areas of concern (AoPC).
 - conclusions and recommendations including suitability of the northern part of the landholding for the proposed industrial rezoning, and need for further investigation or remediation.

2 SITE INFORMATION

2.1 SITE IDENTIFICATION

Table 1 - Site Identification Summary

Street Address		40 The Tunnell Road, Billinudgel NSW
Allotment Description		Lot 15 DP 1236885
Allotment size		6.91 Ha
Local Government		Byron Shire
Parish		Billinudgel
County		Rous
Geographical Coordinates (MGA Zone 56)		Easting: -28.508528mE Northing: 153.529374mS (Approximate centre of site).
Zoning Byron LEP 2014		C2- Environmental Conservation C3- Environmental Management DM- Deferred Matter E4- General Industrial RU2- Rural Landscape
Land use - Existing		Vacant
Land use - Proposed		Proposed industrial rezoning
Site Services		Town water, sewer, mains electricity
Surround Land Uses	North	Commercial and industrial
	East	Uncleared bushland, rural living
	South	Pacific Motorway, uncleared bushland, residential
	West	Uncleared bushland, railway, rural living
Closest Sensitive Environment		An intermittent watercourse is located approximately 150m west of the subject site. Surface runoff would flow towards this watercourse which eventually discharges into Marshalls Creek to the North. There are endangered ecological communities and high environmental value vegetation areas located both on and off the landholding, bordering the proposed rezoning area to the west.

Table 2 – Site Characteristics

Topography	<p>The proposed rezoning location has been filled to meet final design levels.</p> <p>Landform: Alluvial plain Aspect: South-west Slope: Generally level Gradient: <3% Elevation: Approximately 1m-40m AHD across the landholding. Approximately 5m AHD across filled investigation area</p>	
Regional Geology	<p>Carboniferous Sedimentary Rocks A wide range of sedimentary rocks, including feldspar-rich sandstone, siltstone, mudstone, and conglomerate units.</p>	
Soil Landscape	<p>Imported fill has been placed across investigation area to meet design levels.</p> <p>Billinudgel (bi) landscape: Rolling hills on metamorphics of the Neranleigh-Fernvale Group. Soils:</p>	

	Deep, moderately well-drained Red Podzolic Soils on crests; moderately deep, moderately well-drained Yellow Podzolic Soils on slopes. Geology: Palaeozoic Neranleigh-Fernvale Group. Thinly bedded fissile shales, siltstones and sandstones with occasional more massive greywackes, volcanic tuffs, agglomerates, sandstones, and massive cobble conglomerates.
Australian Soil Classification	Kurosols (KU) Soils with strong texture contrast between A horizons and strongly acidic B horizons. Many of these soils have some unusual subsoil chemical features (high magnesium, sodium, and aluminium).
Regional Hydrogeology	Groundwater vulnerability is not mapped for the site. The groundwater gradient would be expected to follow the local topography, and flow away from the elevated areas to the south towards Marshalls Creek, approximately 700m north
Groundwater Database Search	The online NSW Office of Water groundwater mapping (http://allwaterdata.water.nsw.gov.au/water.stm) shows the nearest mapped registered groundwater bores is GW065689 & GW072045 located within 100m north of the site. The bores are registered for domestic use.

3 SITE HISTORY

3.1 OWNERSHIP

As of the search date, the property is currently owned by Lisa Joel Investments Pty Ltd. A review of the title information via the online Land and Property Information portal on 1 April 2023 provides the following information:

Table 3 – Property Ownership

Folio Description	Date of Folio	Search Date	Ownership Details
15/1236885	7/5/2021	30/1/2024	<i>Lisa Joel Investments Pty Ltd</i>

3.2 AERIAL PHOTOGRAPH INTERPRETATION

A summary of the reviewed historic aerial photography is shown in Table 4.

Table 4 – Historic Aerial Photography Summary

Year	Source	Comments	Areas of Potential Concern Yes/No
1961	NSW Government (Historical Imagery) ⁽¹⁾	The site appears to be generally clear of native vegetation, along with the surrounding area, with scattered patches of vegetation in the area. There are no visible intensive land uses or structures located on the site. There are two structures visible to the north of the site. The railway is visible to the west and Brunswick Valley Way to the east.	NO Investigation area (proposed development area and immediate surrounds) clear of any intensive land uses from
1965		Similar to 1961. No significant changes to the investigation area or the surrounding area noted.	
1978		Increased vegetation cover over the site and surrounding area to the north. The existing structures to the north of the site are no longer visible, however they may now be obscured by the	

		vegetation. Significant residential development is under structure to the east of Brunswick Valley Way.	1961 to present. Appears to have remained vacant with periods of vegetation cover.
1987		Significant increase in vegetation over the investigation area and surrounding areas.	
1990		Similar to 1987. No changes noted to the densely vegetated investigation area. Increased residential development is noted east of Brunswick Valley Way.	
1996		The investigation area, and the adjacent land to the north has been cleared of all vegetation. The industrial area has begun to be developed, with the existing roadways, including Lucky Lane, now existing. Scattered structures are noted in the industrial area.	
2009 - 2019	Google Earth	Vegetation re-growth has occurred over the site, with it now generally covered by mature vegetation. The Pacific Motorway has now been constructed adjacent east of the investigation area. The adjacent industrial area has now generally been developed with a number of structures existing along Lucky Lane.	
2019 - 2022		The site has now been cleared of vegetation. It appears that the site has also been filled and levelled. No permanent structures or land uses are noted for the site.	

- (1) <https://portal.spatial.nsw.gov.au/portal/apps/webappviewer/index.html?id=f7c215b873864d44bccddda8075238cb>

Table 5 – Statutory Searches

Search	Comment
NSW EPA Contaminated Land Public Record http://www.epa.nsw.gov.au/prclmapp/searchregister.aspx	No records (orders, notices) for the site were discovered.
Australian Department of Defence Unexploded Ordinance Contaminated Sites http://www.defence.gov.au/uxo/where_is_uxo/UXOSearch.asp?State=NSW	No UXO sites are located near the investigation area.
Cattle dip site locator http://www.dpi.nsw.gov.au/agriculture/livestock/health/specific/cattle/ticks/cattle-dip-site-locator	The nearest mapped cattle dip is the Hainsville South Dip (Lapsed) approximately 670m south of the site.

3.3 HISTORIC PARISH MAPS & TOPOGRAPHIC MAPS

A summary of the available historic parish and topographic mapping information is shown in Table 6.

Table 6 – Historic Parish and Topographic Map Summary

Search	Comment
Historic Billinudgel Parish Maps 1914, 1922, 1929, 1937, 1946 https://hlrv.nswlrs.com.au/	Maps do not record land use. Billinudgel parish maps 1914 to 1946 show the subject site as part of the larger historic portion 89 (97 acres). No changes were noted during the 1914-1946 period.
Topographic Maps ● Central Mapping Authority of NSW (1984), 1:25000 9640-4-N Brunswick Heads, Topographic Map	The property is mapped as a larger historic Lot 604 DP 240398. There are no structures or land uses mapped for the investigation area. The area is mapped as scattered timber.

<ul style="list-style-type: none">● NSW Land & Property Information (2017), 1:25000 9640-4N Brunswick Heads, GeoPDF Topographic Map	The existing lot boundaries are now mapped, as well as the adjacent Lucky Lane roadway. The investigation area is mapped as <i>open forest</i> , with no structures shown on the area. The adjacent industrial area to the north is mapped as <i>built-up area</i> .
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3.4 OWNER INTERVIEW

An interview was conducted by HMC with the current owner Lisa Joel on 30 January 2024. The information gathered is as follows:

- The property was purchased in March 2021 and a caravan was on the property.
- The property is currently being used as a storage hardstand area.
- There has been fill from Midges Quarry on hard stand.
- To the best of their knowledge there has never been any agricultural activities taken place on the site, nor the bulk storage of fuel and/or chemicals. There are no farm dumps or groundwater bores located on the site.

Byron Shire Council Approvals

A deferred commencement development approval (10.2022.291.1) for the following development was issued on 18 May 2023.

Truck Depot including Use of Existing Fill Material and 2.4m High front fence, and Construction of New Site Office Building.

It is noted Council has issued the approval for the use of the existing fill material for a truck depot. HMC has therefore not completed any further investigation of this material for the proposed industrial land use.

4 SITE INSPECTION

A site inspection was undertaken by Mark Tunks of HMC on 30.01.2024. The investigation area is accessed via Lucky Land to the north. There is gated gravel access onto the site. The area is currently a large vacant levelled hardstand area with bitumen ground cover over the site. The area is generally surrounded by dense vegetation. A driveway access to the remainder of the larger property is existing at the southern end of the investigation area. There are no structures located within the subject site, nor has it being used for anything other than storage.

With the landform modification (imported fill to meet design levels), there were no indications of any historic cropping on the investigation area, nor any historic structures or other intensive land uses.

4.1 SUMMARY OF SITE CONDITIONS

Table 7 provides a summary of observations during the site inspection.

4.2 SITE PHOTOGRAPHS

See Appendix 10

4.3 POTENTIAL CONTAMINANT SOURCES AND POTENTIAL OFF-SITE EFFECTS

A detailed desktop assessment, including a review of historic topographic mapping from 1984 and historic aerial photography from 1961 to present, has not recorded any intensive land use (i.e. Cropping) or other potentially contaminating activity across the investigation area.

No potential off-site effects likely to have impacted the subject property.

4.4 SITE LAYOUT

The details of the site inspections are shown in Table 7.

5 POTENTIAL AREAS OF ENVIRONMENTAL CONCERN

Table 7 - Site Features Indicating Potential Contamination

Features of Contamination	Comments
Disturbed, discoloured, or stained soil	No visible soil staining, No disturbed soil. Predominately bitumen ground cover.
Disturbed or distressed vegetation	None observed during the inspection
Surface water quality	No surface water existing on the subject site.
Agrichemical Storage/Use	None observed during the inspection
Other chemical/fuel storage	None observed during the inspection. Nil odours detected
Waste storage	1 x 240L General waste MGB and 1 x 240L co-mingled recyclables MGB
Asbestos Waste or Use in Structures	None observed on site
Fill from unapproved source	Imported fill previously approved for use as a truck depot (industrial land use)
Other	Nil

6 CONCEPTUAL SITE MODEL

Table 8 – Conceptual Site Model

POTENTIAL SOURCE	PATHWAY	EXPOSURE ROUTE	RECEPTOR	OUTCOME
Vacant Site	Surface water runoff	Chemical/sediment entering local water ways	Ecological receptors	No areas of concern identified. Site does not appear to have been subject to potentially contaminating activities or off-site impacts.
	Exposed surface soil	Dermal contact to exposed soil during earthworks, proposed infrequent use	Site worker, Occupier, Visitor	
	Atmospheric dispersion	Inhalation of soil exposed during earthworks and in exposed bare soil areas		
	Leaching to groundwater	Groundwater movement off-site to beneficial users or ecological receptors	Beneficial users/Ecological receptor	

7 DISCUSSION

The review of available information and a detailed site inspection indicated the investigation appeared to be partially cleared of vegetation prior to 1961. There were structures existing to the north of the site, however a review of historic aerial photography and topographic mapping did not show any intensive agricultural use or structures occurring on the site during the period 1961-2024. The landholding appeared to be under dense vegetation periodically during this time, with intermittent clearing. The investigation area was cleared prior to 2019, and the owner advises the imported fill used to level the investigation area was supplied by the local Midges Quarry. The site was covered with bitumen, and has been used as storage hardstand in the years since. In 2023 a deferred commencement approval was issued for use as a truck depot including use of existing fill material and 2.4m high front fence, and construction of new site office building.

8 CONCLUSIONS AND RECOMMENDATIONS

The Preliminary Site Investigation conclusions are based on the information described in this report and Appendices and should be read in conjunction with the complete report, including Section 9 Limitations.

A planning proposal would rezone the north-eastern part of Lot 15 DP 1236885, 40 The Tunnell Road, Billinudgel NSW to general industrial to reflect the current approved land use, and the adjoining land use to the north. A review of available information, and a detailed site inspection did not record that any potentially contaminating activities have occurred on the site.

Based on the information presented, in relation to potential site contamination, Lot 15 DP 1236885, 40 The Tunnell Road, Billinudgel NSW, as shown in Appendix 1 & 2 of this report, is considered suitable for the proposed planning proposal.

Based on the information presented, in relation to potential site contamination associated with the current and former land use, no further investigation or remediation is required for the site of the planning proposal for Lot 15 DP 1236885, 40 The Tunnell Road, Billinudgel NSW, as shown in Appendix 1 & 2 of this report.

9 LIMITATIONS

Any conclusions presented in this report are relevant to the site condition at the time of inspection and legislation enacted as at date of this report. Actions or changes to the site after time of inspection or in the future will void this report as will changes in relevant legislation.

The findings of this report are based on the objectives and scope of work outlined in Section 1. HMC Environmental has performed the services in a manner consistent with the normal level of care and expertise exercised by members of the environmental assessment profession. No warranties or guarantees expressed or implied, are given. This report does not comment on any regulatory issues arising from the findings, for which a legal opinion should be sought. This report relates only to the objectives and scope of work stated and does not relate to any other works undertaken for the client. The report and conclusions are based on the information obtained at the time of the assessment.

The site history and associated uses, areas of use, and potential contaminants were determined based on the activities described in the scope of work. Additional site information held by the client, regulatory authorities or in the public domain, which was not provided to HMC Environmental or was not sourced by HMC Environmental under the scope of work, may identify additional uses, areas of use and/or potential contaminants. The information sources referenced have been used to determine the site history.

Whilst HMC Environmental has used reasonable care to avoid reliance on data and information that is inaccurate and unsuitable, HMC Environmental is not able to verify the accuracy or completeness of all information and data made available. Further chemicals or categories of chemicals may exist at the sites,

which were not identified in the site history, and which may not be expected at the site. The absence of any identified hazardous or toxic materials on the subject land should not be interpreted as a warranty or guarantee that such materials do not exist on the site. If additional certainty is required, additional site history or desktop studies, or environmental sampling and analysis should be commissioned.

The results of this assessment are based upon site inspections and fieldwork conducted by HMC Environmental personnel and information provided by the client. All conclusions regarding the property area are the professional opinions of the HMC Environmental personnel involved with the project, subject to the qualifications made above. HMC Environmental assume no responsibility or liability for errors in any data obtained from regulatory agencies, information from sources outside of HMC Environmental, or developments resulting from situations outside the scope of this project.

10 SIGNATURE

This report has been prepared by Mark Tunks of HMC Environmental Consulting, a suitably qualified environmental consultant, in accordance with the NSW EPA (2020) *Consultants reporting on contaminated land – Contaminated land guidelines*. Note that HMC Environmental Consulting holds current Professional Indemnity Insurance to 4th August 2024.

.....


Mark Tunks
Principal

30 March 2024
Completion Date

11 REFERENCES

Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC guidelines) published by the Australian and New Zealand Environment and Conservation Council/National Health and Medical Research Council, January 1992

Hashimoto T.R & Troedson A.I. 2008 *Tweed Heads 1:100 000 and 1:25 000, Coastal Quaternary Geology Map Series*. Geological Survey of New South Wales, Maitland

Morand, D.T., Soil Landscapes of the Murwillumbah-Tweed Heads 1:100 000 Sheet, 1996

NEPC, 2013. National Environment Protection (Assessment of Site Contamination) Measure 1999 Schedule B (1) Guideline on the Investigation Levels for Soil and Groundwater, National Environment Protection Council Service Corporation, as amended 16 May 2013

NSW Environment Protection Authority (2020) Consultants reporting on contaminated land - Contaminated land guidelines

State Environmental Planning Policy (Resilience and Hazards) 2021

12 GLOSSARY

Conceptual site model (CSM) is a description of a site including the environmental setting, geological, hydrogeological and soil characteristics together with the nature and distribution of contaminants. Potentially exposed populations and exposure pathways are identified. Presentation is usually graphical or tabular with accompanying explanatory text.

Contamination means the condition of land or water where any chemical substance or waste has been added as a direct or indirect result of human activity at above background level and represents, or potentially represents, an adverse health or environmental impact.

Investigation levels and **screening levels** are the concentrations of a contaminant above which further appropriate investigation and evaluation will be required. Investigation and screening levels provide the basis of Tier 1 risk assessment.

Multiple-lines-of-evidence approach is the process for evaluating and integrating information from different sources of data and uses best professional judgement to assess the consistency and plausibility of the conclusions which can be drawn.

Screening is the process of comparison of site data to screening criteria to obtain a rapid assessment of contaminants of potential concern.

Tier 1 assessment is a risk-based analysis comparing site data with investigation and screening levels for various land uses to determine the need for further assessment or development of an appropriate management strategy.

13 APPENDICES

See following pages



APPENDIX 1 - LOCATION MAPS





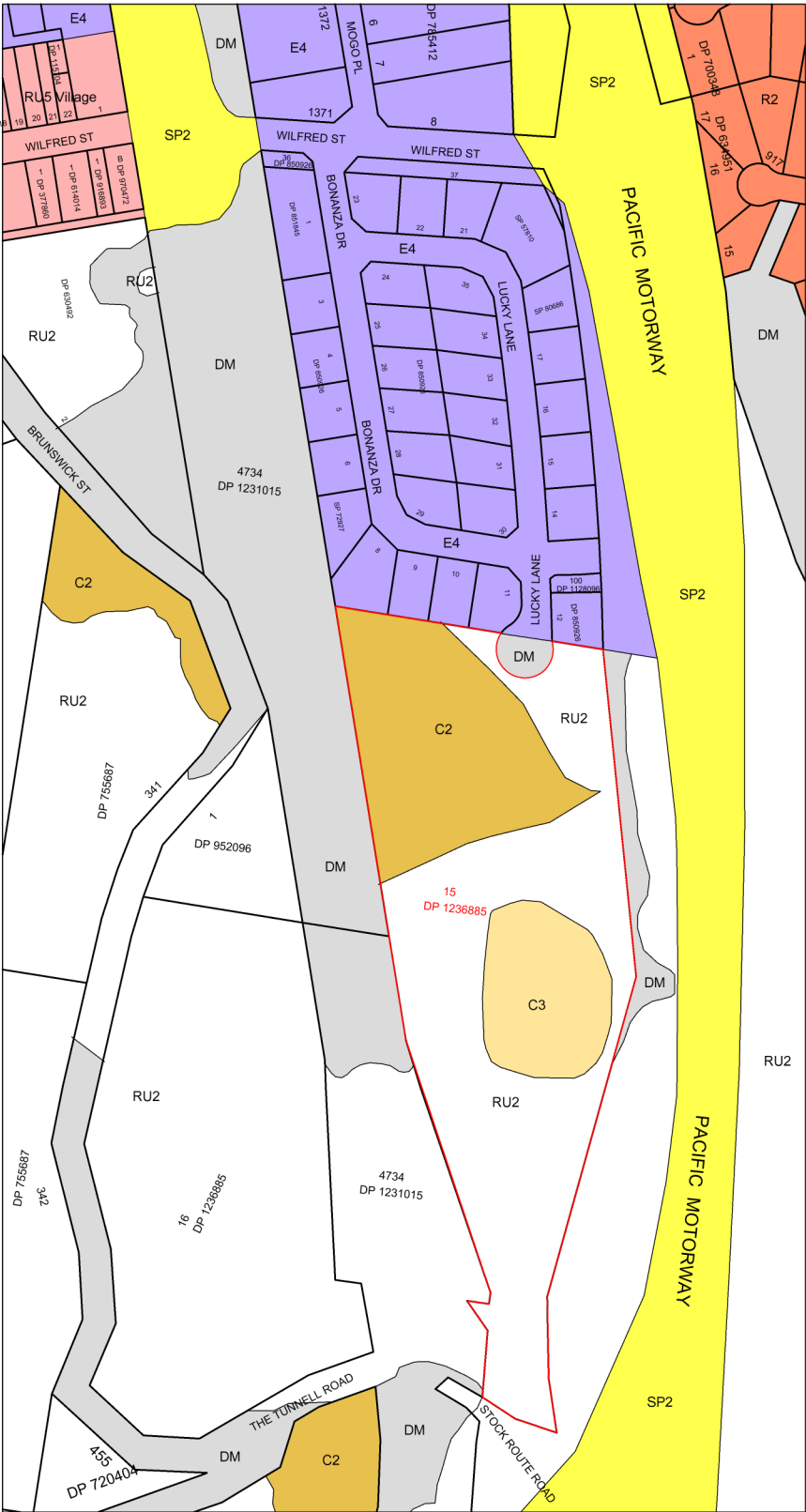
Figure 1 - Surrounding Area (Source: Nearmap, 2024)



Figure 2 – Subject Site (Source: Nearmap 2024)

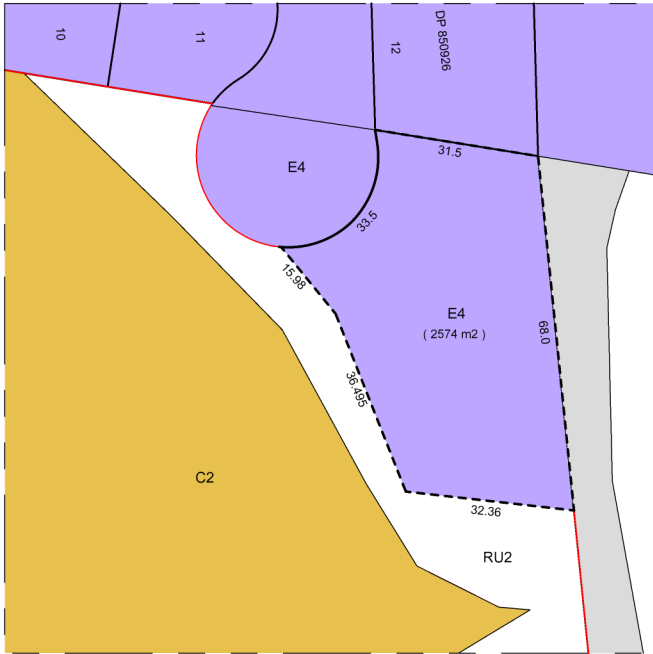


APPENDIX 2 - SITE PLAN PROPOSED DEVELOPMENT

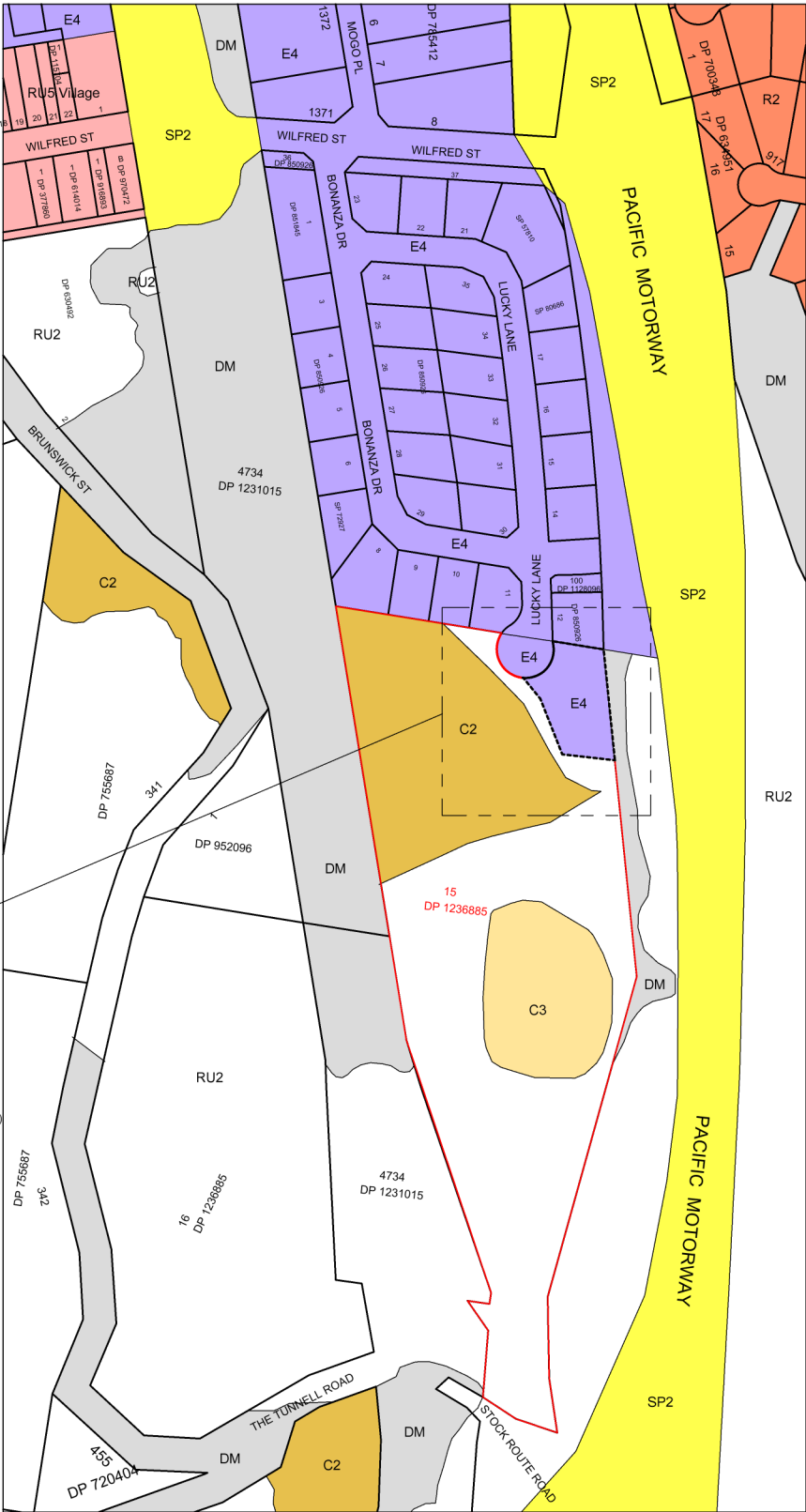


Existing Zoning
Scale A

- Land Zoning Legend**
- RU2 Rural Landscape (Blank White Colour)
 - C2 Environmental Conservation
 - C3 Environmental Management
 - DM Deferred Matter
 - E4 General Industrial
 - R2 Low Density Residential
 - RU5 Village
 - SP2 Infrastructure
- Subject Property Lot 15 DP 1236885
- - - Subject Property Rezoning Area



Larger Proposed Rezoning Detail



Proposed Zoning
Scale A

SDS Civil Ref: JN2230 Survey Datum: AHD / MGA Survey Source: Bennett + Bennett

<div>SDS Civil Enterprises</div> <div>A.B.N. 56 656 467 255</div> <div>461 Hinterland Way, Knockrow NSW</div> <div>m 0438 725 414 e peterw@sdscivil.com.au</div>	<div>IMPORTANT NOTES</div> <div>1. Verify and locate all dimensions and levels PRIOR to performing any works.</div> <div>2. Ensure DBYD enquiries are made to locate current service information.</div> <div>3. Pothole or service locator of any underground services before performing works.</div> <div>4. Drawing may not be modified or used by others without approval of SDS Civil Enterprises.</div> <div>© Copyright SDS Civil Enterprises</div>	Rev	Date	Amendment	<div>SCALE</div> <div>0 20 40 60 80 100</div> <div>Scale A</div> <div></div> <div>Mr P Williams B.Eng (Civil)</div>	PROJECT	Industrial Rezoning	ADDRESS	40 The Tunnell Road Billinudgel	DATE	Feb 2024	REV
		A				CLIENT	Lisa Joel Investments Pty Ltd	LAND	Lot 15 DP 1236885	DRAWING PURPOSE	Planning Proposal	
		B				DRAWING DETAILS	Existing and Proposing Zoning		DRAWING NUMBER	PP - 01		
		C										
				D					APPROVED			



APPENDIX 3 - GEOLOGY AND SOIL LANDSCAPE



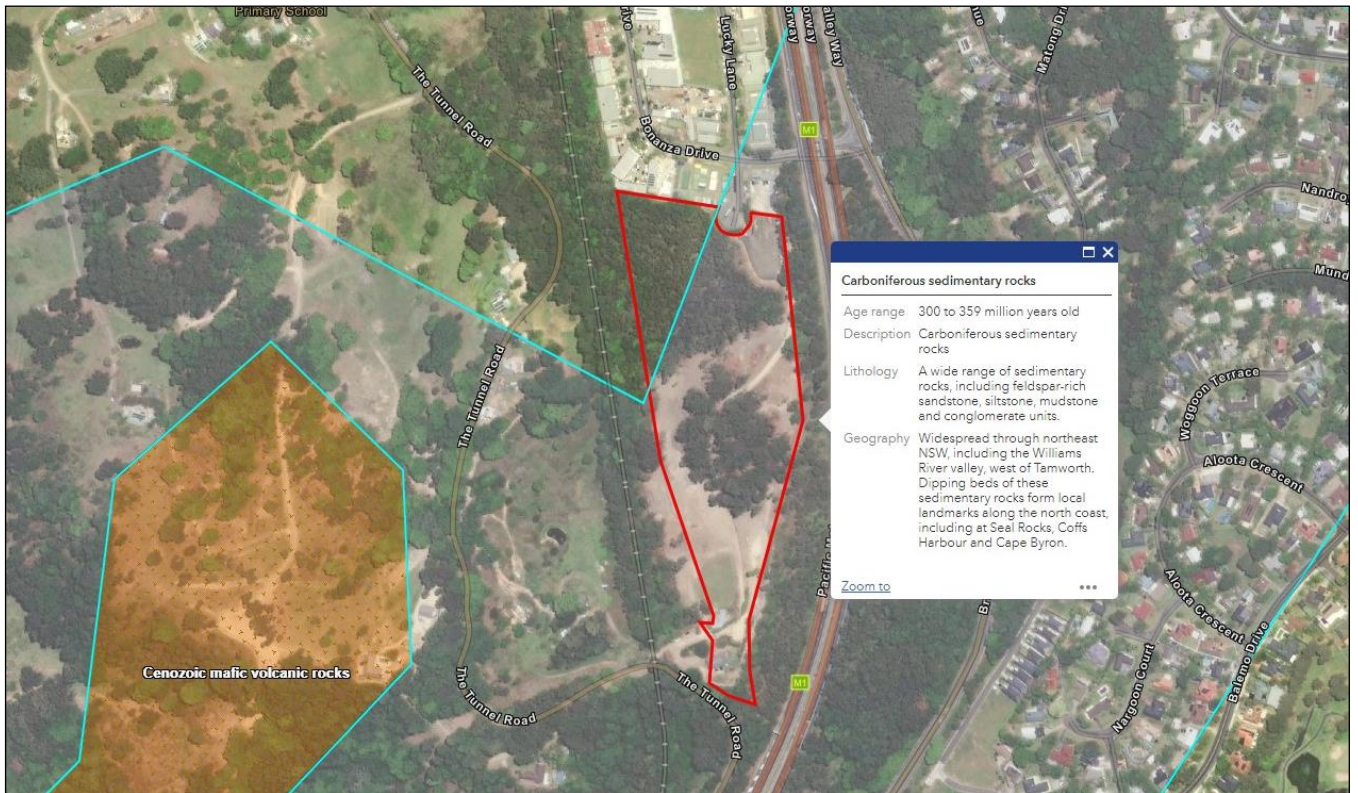


Figure 3 - Geology Map (Source: Geoscience Australia)

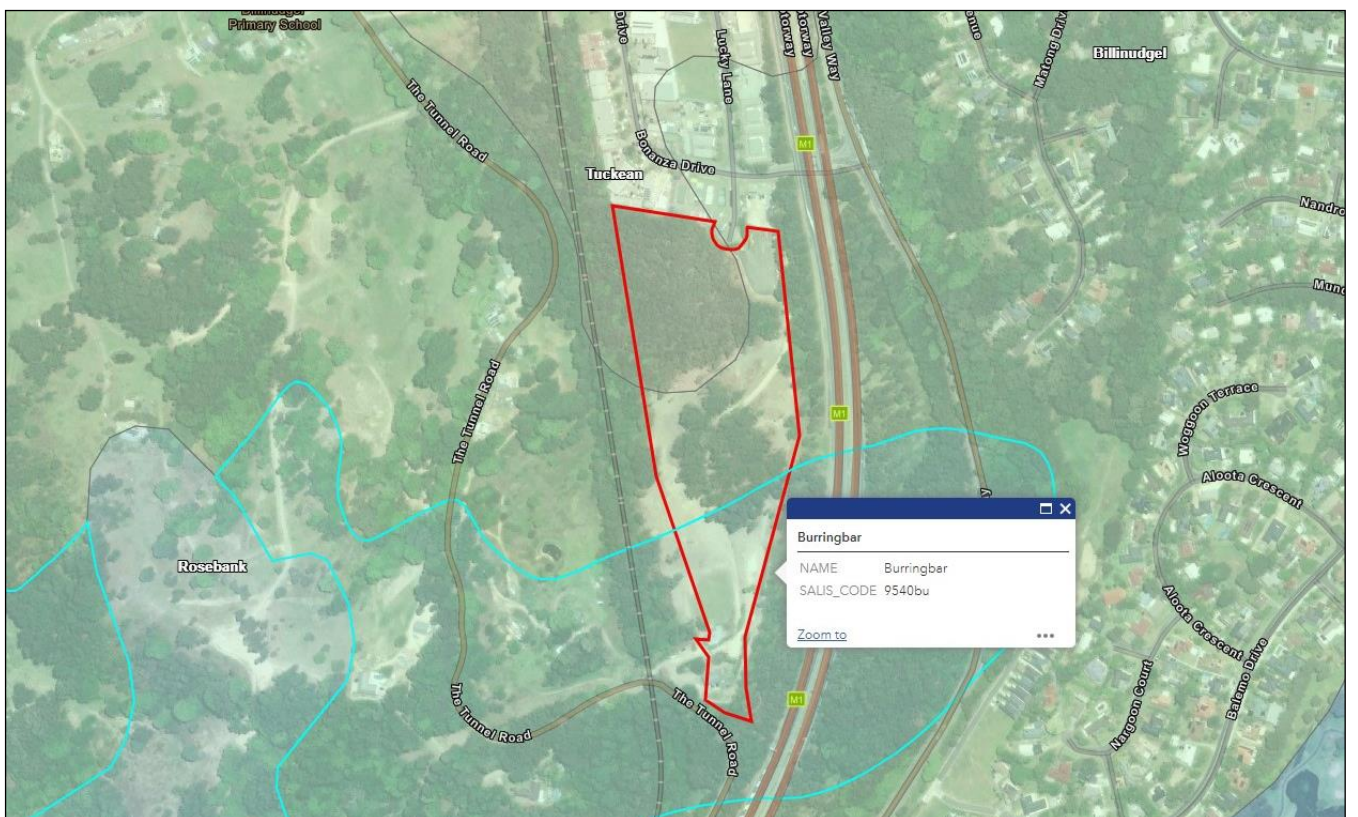


Figure 4 - Soil Landscape (Source: eSPADE NSW)



APPENDIX 4 - LICENSED GROUNDWATER BORES

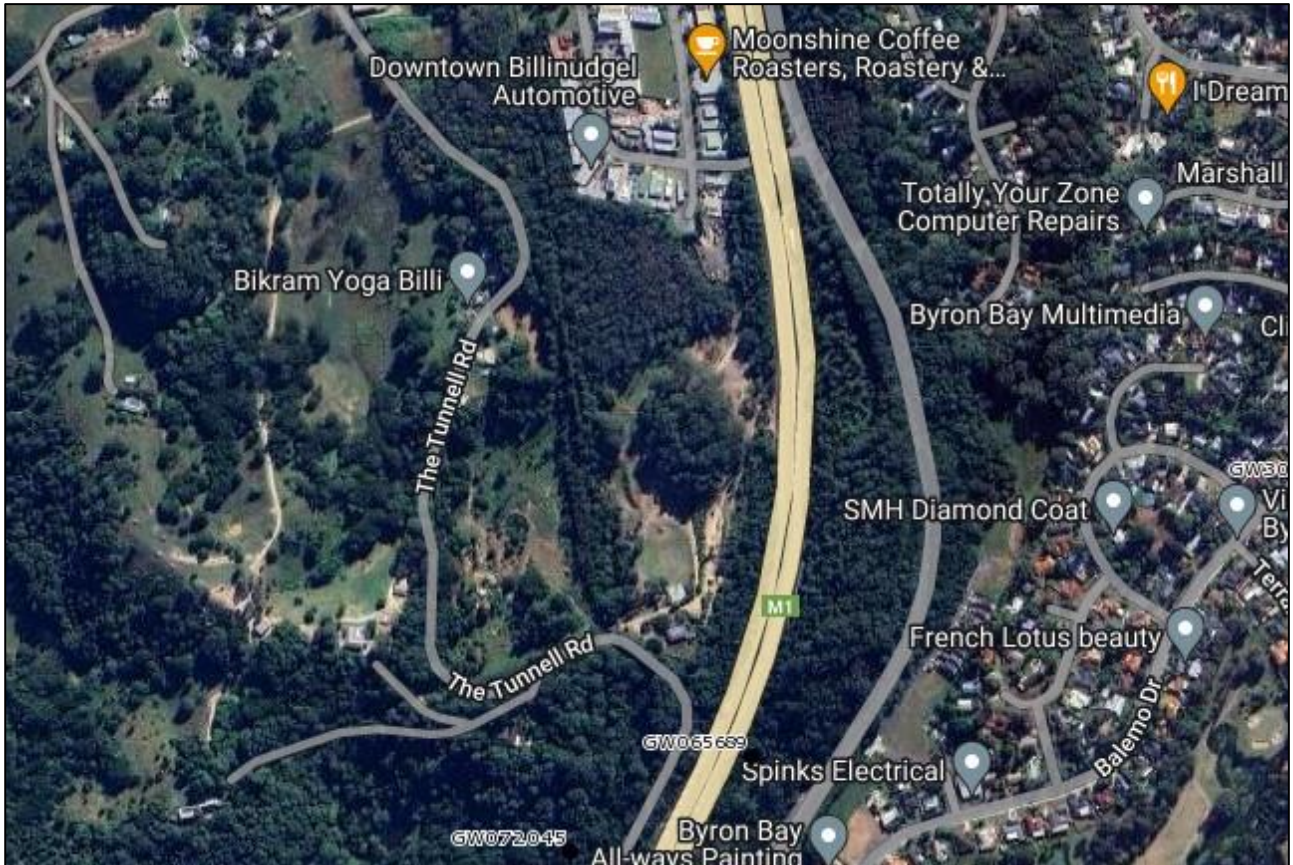


Figure 5 – Groundwater Bore Locations (Source: <http://allwaterdata.water.nsw.gov.au/water.stm>)

APPENDIX 5 - CATTLE DIP SITES



Figure 6 – Cattle Dip Location (Source: DPI NSW)



APPENDIX 6 - HISTORICAL AERIAL PHOTOGRAPHY





Figure 7- Historical Aerial 1961 (NSW Spatial Services Historical Imagery <https://portal.spatial.nsw.gov.au>)



Figure 8 - Historical Aerial 1965 (NSW Spatial Services Historical Imagery <https://portal.spatial.nsw.gov.au>)



Figure 9 - Historical Aerial 1978 (NSW Spatial Services Historical Imagery <https://portal.spatial.nsw.gov.au>)



Figure 10 - Historical Aerial 1987 (NSW Spatial Services Historical Imagery <https://portal.spatial.nsw.gov.au>)



Figure 11 - Historical Aerial 1990 (NSW Spatial Services Historical Imagery <https://portal.spatial.nsw.gov.au>)



Figure 12 - Historical Aerial 1996 (NSW Spatial Services Historical Imagery <https://portal.spatial.nsw.gov.au>)



Figure 13 - Historical Aerial 2009 (Google Earth)



Figure 14 - Historical Aerial 2015 (Google Earth)



Figure 15- Historical Aerial 2019 (Google Earth)



Figure 16 - Current Aerial 2023 (Nearmap)



APPENDIX 7 - HISTORIC PARISH MAPS





Figure 17 – 1914 Billinudgel Parish Map Extract (<http://hlrv.nswlrs.com.au/pixel.htm>)



Figure 18 - 1922 Billinudgel Parish Map Extract (<http://hlrv.nswlrs.com.au/pixel.htm>)



Figure 19 – 1929 Billinudgel Parish Map Extract (<http://hlrv.nswlrs.com.au/pixel.htm>)

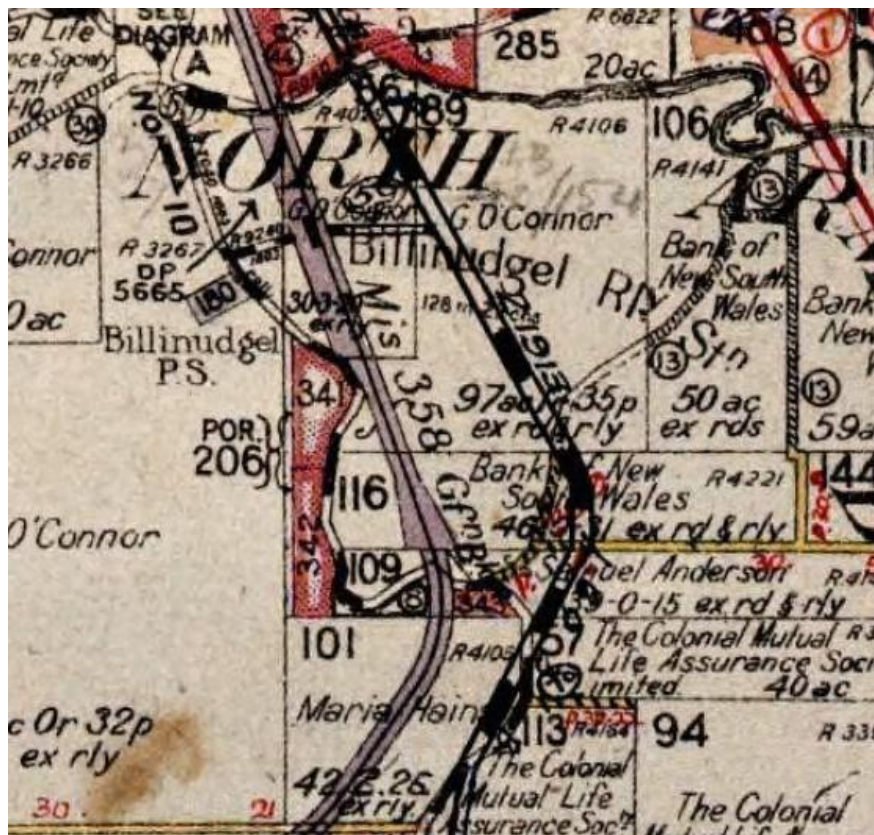


Figure 20 – 1937 Billinudgel Parish Map Extract (<http://hlrv.nswlrs.com.au/pixel.htm>)

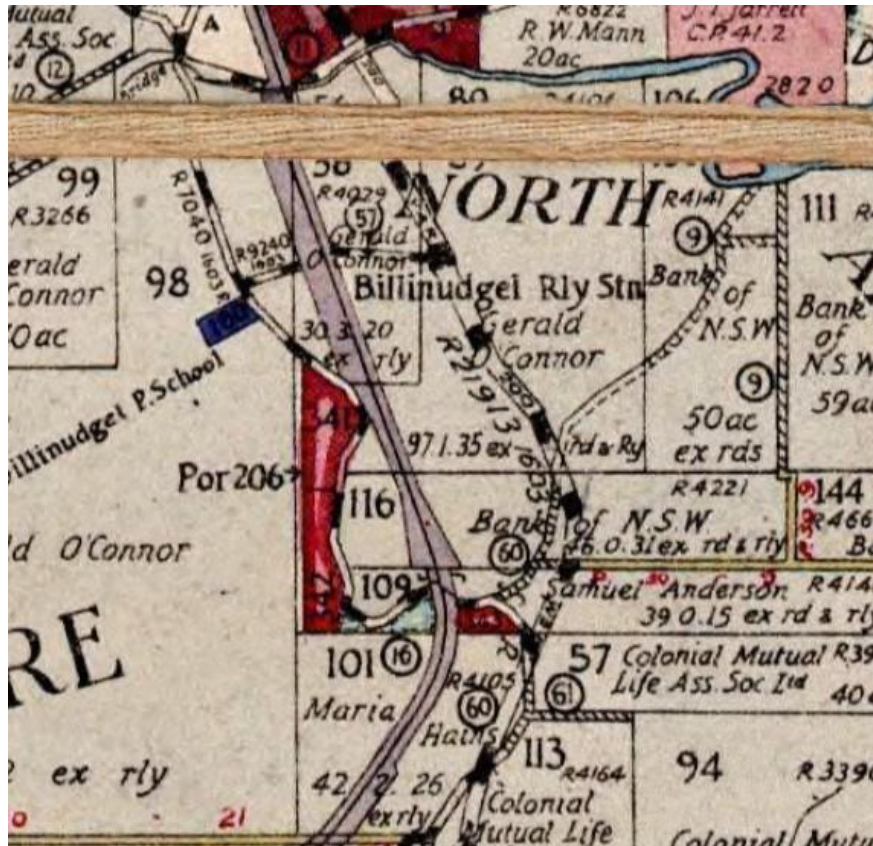


Figure 21 – 1946 Billinudgel Parish Map Extract (<http://hlrv.nswlrs.com.au/pixel.htm>)



APPENDIX 8 - HISTORIC TOPOGRAPHIC MAPS

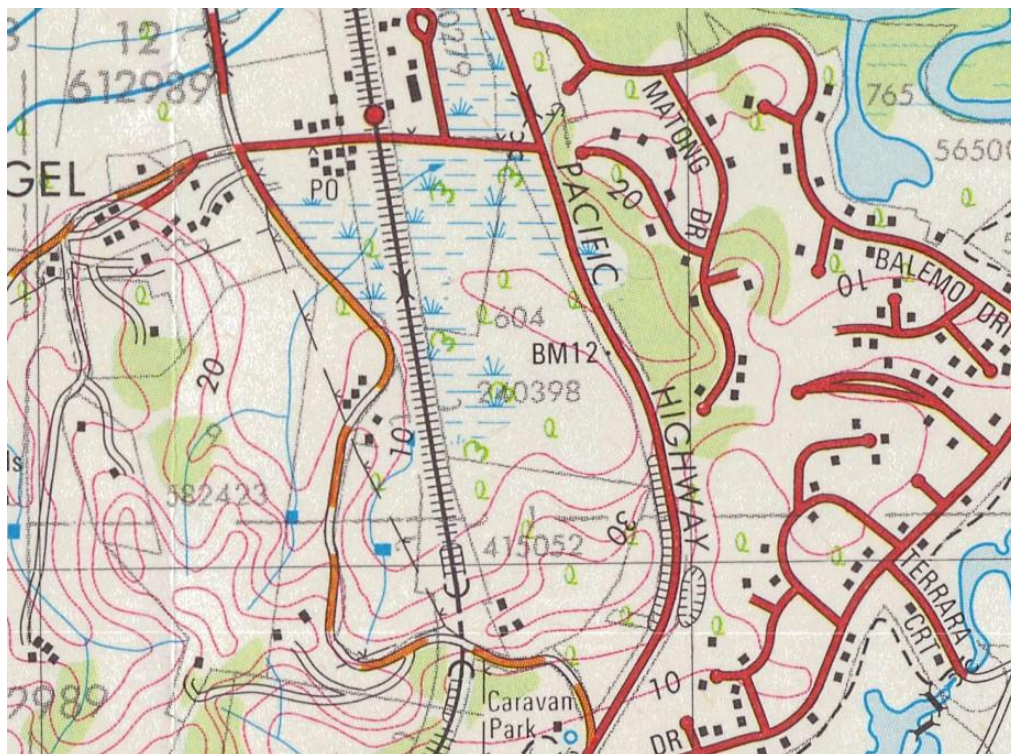


Figure 22 – 1984 Brunswick Topographical Map extract.

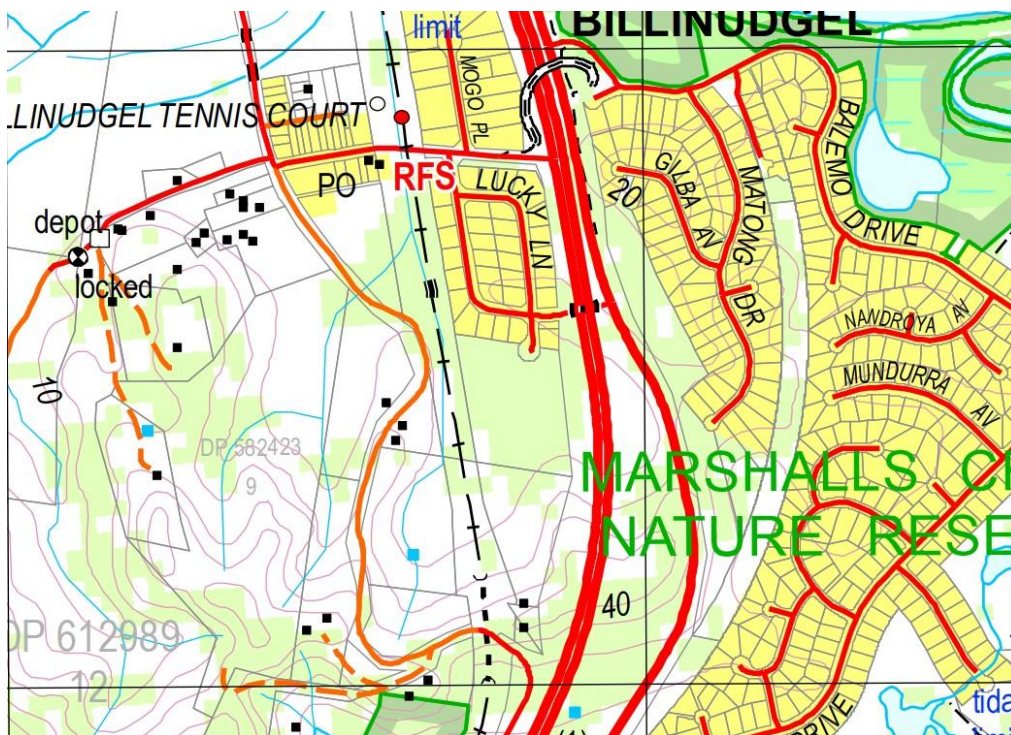


Figure 23 – 2017 Brunswick Topographical Map extract.

APPENDIX 9 - ZONE MAPPING

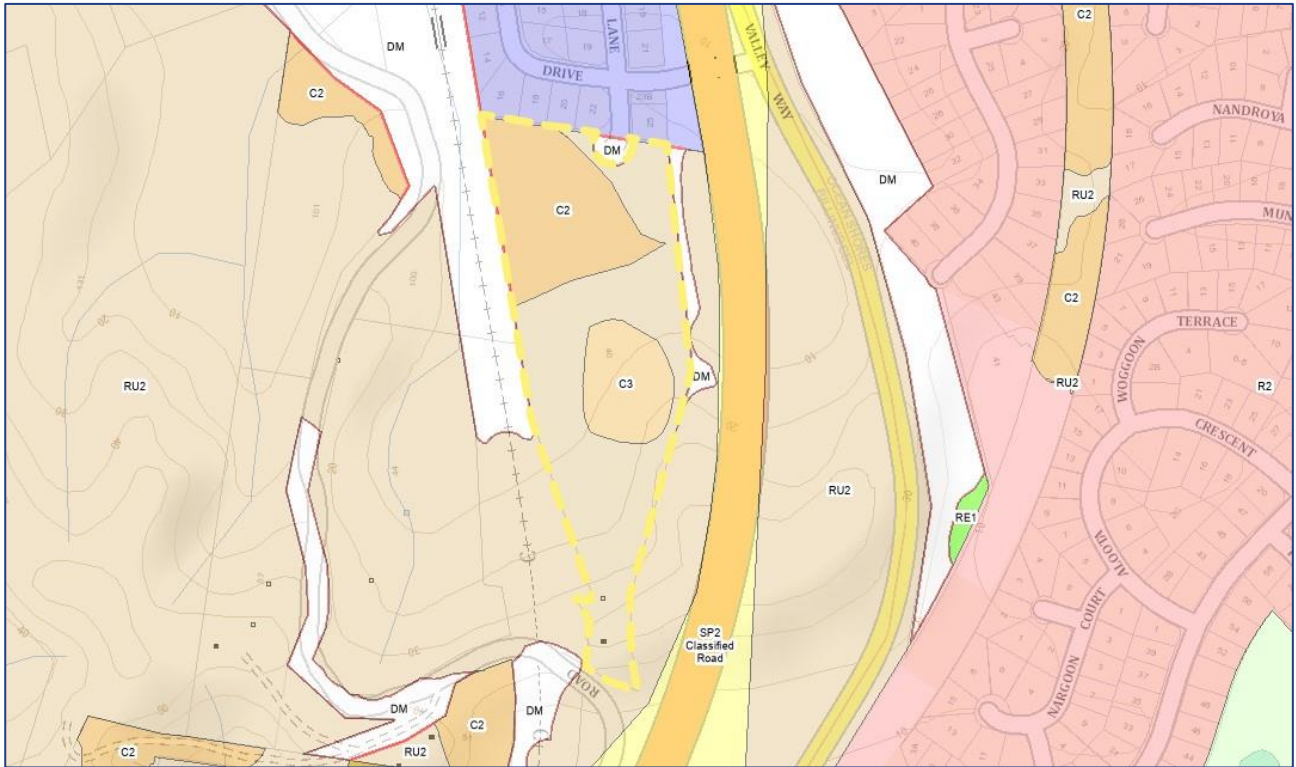


Figure 24 – NSW Legislation Zone Plan

(Source: <http://www.legislation.nsw.gov.au/maintop/view/inforce/epi+177+2014+cd+0+N>)



APPENDIX 10 - PHOTOGRAPHIC LOG



Photo No. 3	Date
	30.01.2024
Description: View towards the gated driveway access from Lucky Lane to the north.	



Photo No. 4	Date
	30.01.2024
Description: View of the existing driveway access to the remainder of the property to the south of the investigation area.	

