



Planning Proposal

Rezoning and Minimum Lot Size Rankins Springs

Carrathool Council

Prepared by:

SLR Consulting Australia

SLR Project No.: 631.30921.00000-R01

28 January 2025

Revision: v0.5

Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
631.30921.00000-R01-v0.2	16 July 2023	Clare Brennock	Anna Kleinmeulman	DRAFT for client review
631.30921.00000-R01-v0.3 FINAL	6 August 2024	Clare Brennock	Anna Kleinmeulman	Carrathool Council
Amendments with DPHI comments (v4)	25 November 2024	Clare Brennock	Anna Kleinmeulman	
631.30921.00000-R01-v0.5	28 January 2025	Megan Lowe	Anna Kleinmeulman	

Basis of Report

This report has been prepared by SLR Consulting Australia (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Carrathool Council (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

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1.0 Introduction

This Planning Proposal (PP) report has been prepared on behalf of Carrathool Shire Council (Council) for the rezoning of land within the suburb of Rankins Springs NSW. The land subject to the PP (collectively known as 'the site') consists of developed and undeveloped as land identified in Table 1 below.

Table 1: Subject Site Lot, Section, and PO

Lot	Section	Plan		Lot	Section	Plan
1 – 14	15	DP758868		33	-	DP751690
1 – 18	16	DP758868		34	-	DP751690
1 – 18	17	DP758868		35	-	DP751690
1	27	DP758868		36	-	DP751690
1	-	DP909445		37	-	DP1088732
7306	-	DP1154199		84	-	DP751690
26	-	DP751690		85	-	DP751690
27	-	DP751690		86	-	DP751690
28	-	DP751690		87	-	DP751690
29	-	DP751690		88	-	DP751690
30	-	DP751690		89	-	DP751690
31	-	DP751690		90	-	DP751690
32	-	DP751690		112	-	DP751690

The PP seeks an amendment to the *Carrathool Local Environmental Plan 2012* (CLEP) in relation to the land described above, specifically amending the existing zoning of RU1 Primary Production to RU5 Village and R5 Large Lot Residential and amending the minimum lot size from 40ha to 2,000m² (land south of the Highway) and from 4,000m² to 1,000m² (land north of the Highway).

This proposal has been prepared in accordance with Section 3.33 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and in accordance with the Planning Proposal Preparation within the Department of Planning, Industry and *Environment's 'Local Environmental Plan Making Guideline'* (September 2022). (Now Department of Planning and Environment).

1.1 Site Analysis and Context

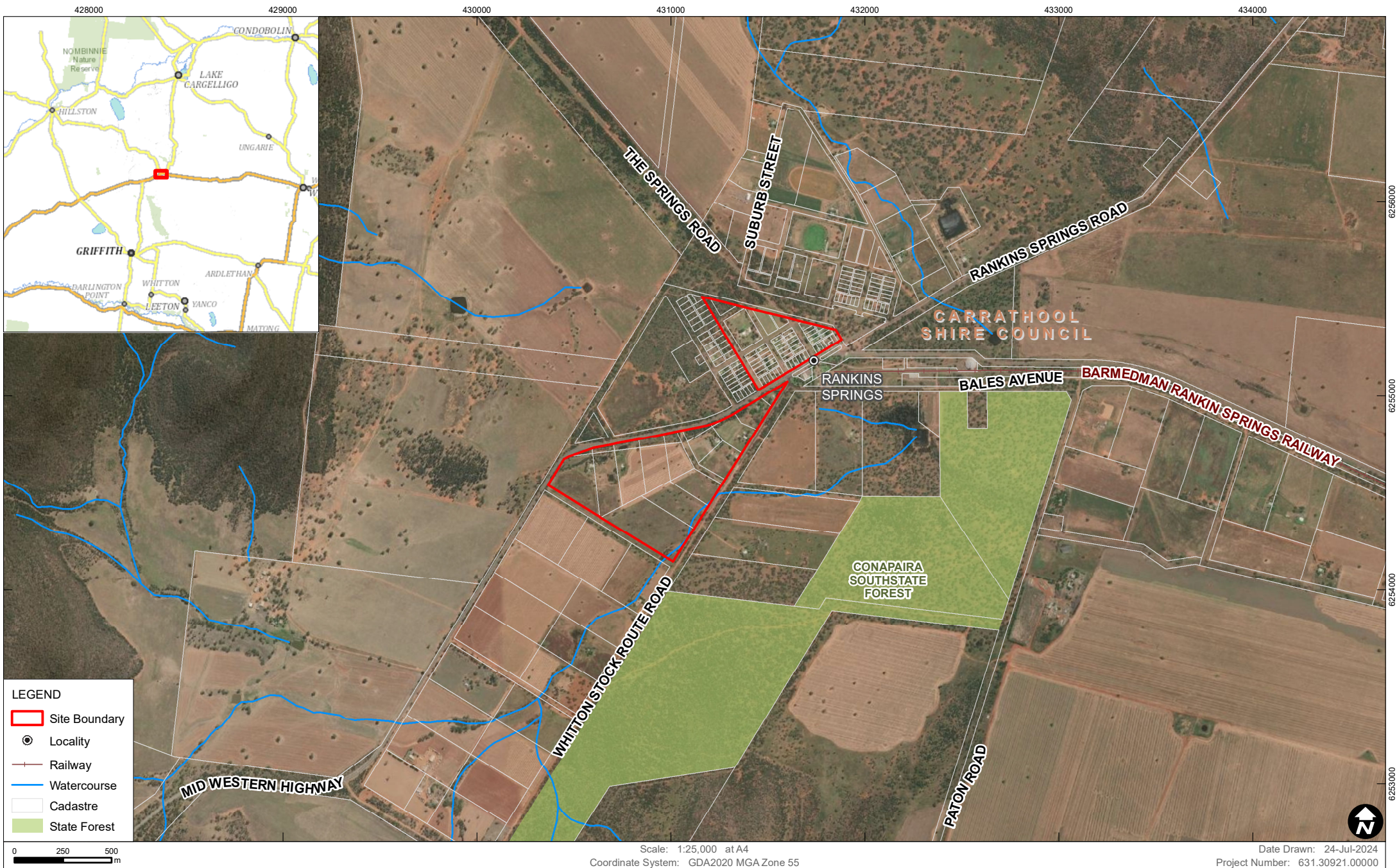
The subject site north of the Mid-Western Highway includes land that is developed and undeveloped, with scattered vegetation consisting of large trees, shrubs, and grasses. Development consists of low-density residential dwellings and associated structures and the Rankins Springs Public School. There are approximately 95 houses within the subject site and immediate surrounds. The subject site south of the Mid-Western Highway consists of rural properties with associated development such as rural dwellings, sheds, and fencing. The subject site is approximately 58.79 hectares (ha) in total size, bound by local streets including sealed and unsealed roads. Refer to Figure 1 and Figure 2 for the locality and site plan. Surrounding development includes:

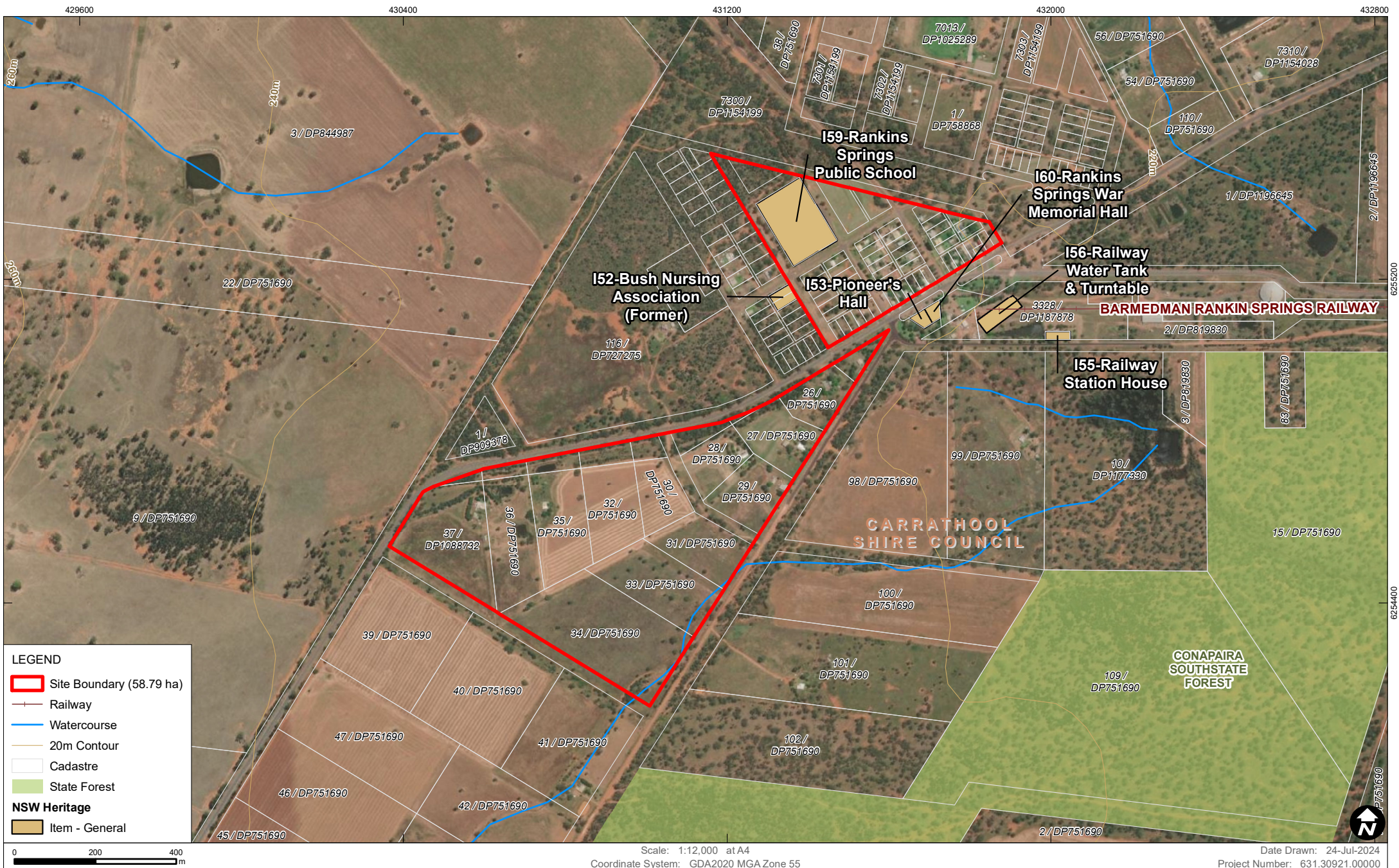
- Residential development consisting of Rankins Springs village to the north-east and east, in the form of single dwellings and ancillary structures.



- Rankins Springs Public School to the north-east (currently operating);
- Rankins Springs Police Station to the east (currently operating);
- Rankins Springs Train Station to the east;
- Rankins Springs Caravan Park (currently operating, Council owned);
- Large lot rural lands to the north, south, east, and west.







1.2 Site Constraints

Constraints of the site are identified in Table 2 below and Figures 3, 4 and 5 below.

Table 2: Site Constraints

Constraint	Affected
Flood	Yes (Figure 3)
Bushfire	Yes (Figure 4)
Acid sulphate soils	No
Riparian land / watercourse	No
Scenic protection	No
Terrestrial biodiversity	Yes (Figure 5)

Figure 3a Flood Planning Area (Catchment Simulation Solutions, Figure 56)

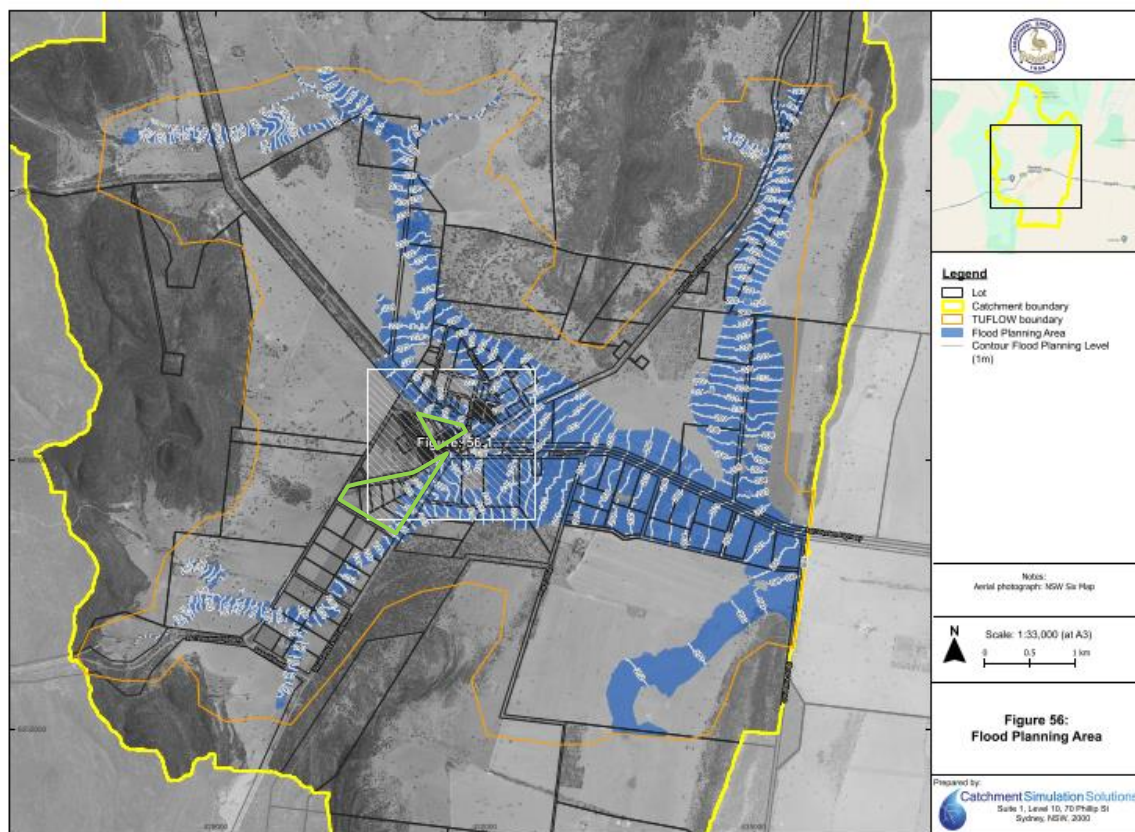


Figure 3b Flood Planning Area (Catchment Simulation Solutions, Figure 56-1)

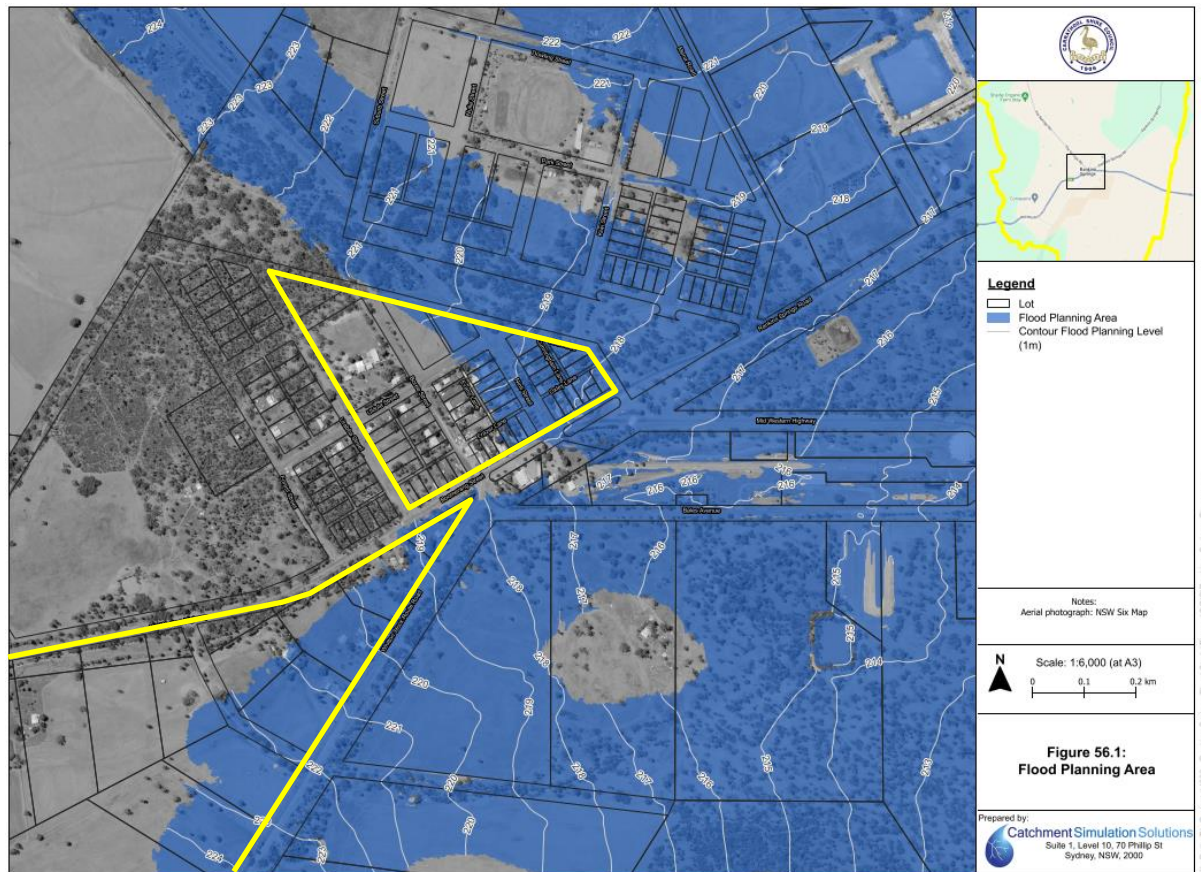


Figure 4 Bushfire Prone Land

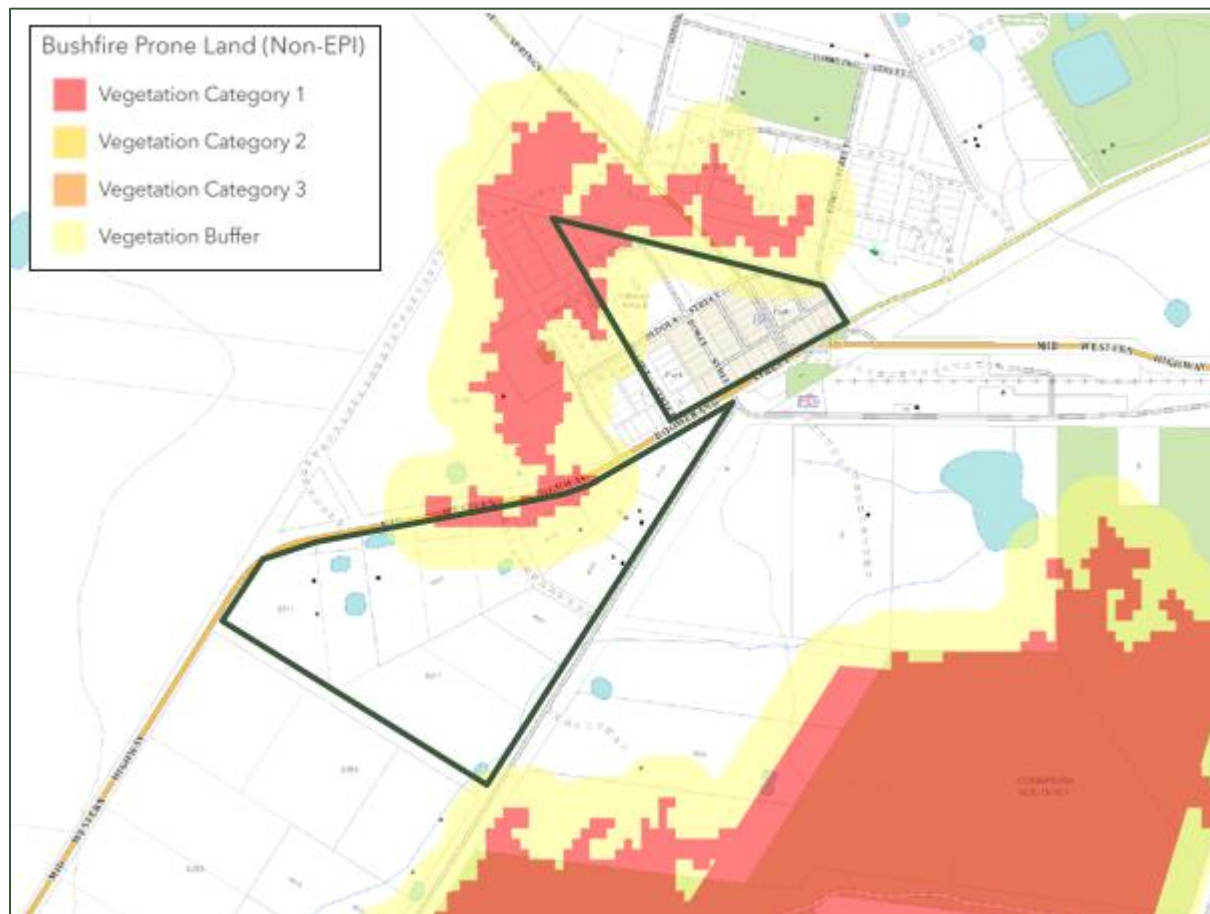


Figure 5 Crown Land



1.3 Flooding

A draft flood study was published by Catchment Simulation Solutions in June 2024, which documents the outcomes of investigations completed to quantify flood behaviour across Rankins Springs. It provides information on design flood discharges, levels, depths and velocities as well as hydraulic and flood hazard categories for a range of design floods.

Using a hydrologic computer model of the catchment draining through Rankins Springs as well as a two-dimensional hydraulic model, the flood behaviour across the study area was defined.

The models were used to simulate the design the 0.2 exceedances per year (EY), 10% annual exceedance probability (AEP), 5% AEP, 2% AEP, 1% AEP, 1 in 200 AEP and 1 in 500 AEP floods based upon the current *Australian Rainfall and Runoff – A Guide to Flood Estimation* publication. The Probable Maximum Flood (PMF) was also simulated. The following conclusions can be drawn from the results of the investigation:

- Flooding can occur from a variety of different storm and rainfall durations. The worst-case flooding most commonly occurs as a result of rainfall over a 1 hour to 24 hour period with the 6 hour storm being most commonly critical. Accordingly, flooding across the study area may be produced by relatively short, high intensity thunderstorms through to longer rainfall events.
- The flood modelling indicates that parts of Rankins Springs can be exposed to inundation during floods as frequent as the 0.2EY event. However, in events up to



and including the 1% AEP flood, water depths are most commonly less than 0.5 metres and peak velocities are contained below 1 metres/second. As a result, most of the habitable sections of town are only exposed to H1 hazard, indicating it would not pose a significant threat to buildings, people or vehicles.

- During the 1 in 500 AEP flood, water depths across parts of the town are predicted to approach 1 metre and more extensive areas are exposed to velocities of more than 1 metres/second. This includes the Mid Western Highway where significant lengths of the highway south-west and east of town would experience velocities or more than 1.5 metres/second.
- There is a large escalation in flood hazard during the PMF. This includes large portions of the town being exposed to velocities of more than 2 metres/second and peak depths of at least 1.5 metres. As a result, H5 hazard is predicted across a large portion of the town east of Boree Street. These hazard conditions would be unsafe for people and vehicles and have the potential to cause damage to buildings
- If a PMF was to occur, 42 properties are predicted to be inundated above floor level and 53 are predicted to be damaged externally. This would result in more than \$11 million worth of damage. The average annual flood damage cost for Rankins Springs was determined to be about \$50,000.
- A number of roadways in the area are predicted to be cut in events as frequent as the 0.2EY flood. This includes the Mid Western Highway, The Springs Road and Rankins Springs Road. Therefore, there is potential for major transportation links into and out of Rankins Springs to be cut, on average, once every couple of years.

Additional discussion of flooding and land use planning is provided in Section 4.3 below. Appendix E provides figures showing the flood hazard and flood function for both 1% AEP and PMF,

1.4 Heritage

There is one item of local heritage significance within the subject site, the subject site does not have any state significant items and is not in a heritage conservation area. There are several items of local significance within close proximity to the subject site (refer to Figure 2):

- Item I59 of local heritage significance 'Rankins Springs Public School' Lot 1, Section 27, DP 758868 (within the site);
- Item I52 of local heritage significance 'Bush Nursing Associated (Former)' Lots 11 & 12, Section 18, DP758868
- Item I53 of local heritage significance 'Pioneer's Hall' Lot 97, DP1154199;
- Item I55 of local heritage significance 'Railway Station House' Lot 1 DP809213;
- Item I56 of local heritage significance 'Water Tank & Turntable' part of Lot 3328, DP1187878; and,
- Item 60 of local heritage significance 'Rankins Springs War Memorial' Lot 97, DP1154199.

1.5 Supporting Information

Additional Information to support the PP is included at Appendix A - D and consists of the following supplementary items:



- Appendix A - AHIMS desktop investigations.
- Appendix B - Preliminary Biodiversity Report.
- Appendix C – Bushfire Threat Assessment.
- Appendix D – Preliminary Site Investigation.
- Appendix E – Additional Figures from Flood Study.



2.0 Objective and Intended Outcome

The objective of this PP is to amend the CLEP to rezone land within Rankins Springs from RU1 Primary Production to RU5 Village and R5 Large Lot Residential and amended the minimum lot size from 40ha / 4,000m² to 1,000m² and 40ha to 2,000m². The proposed amendments to the CLEP are to expand the Rankins Springs village to facilitate the development of residential dwellings and village type uses to support the local community.

There are approximately 95 residential dwellings within the subject site and immediate surrounds, with minimal options to purchase or rent housing in the area, specifically within the village that is not large rural property. The creation of additional residential and smaller lots will provide the opportunity for additional dwellings and to increase the population in a manageable way.



3.0 Explanation of Provision

3.1 Intended Provision

The objectives and intended purpose of this PP are to be achieved by undertaking the following amendments to the CLEP:

- Land Zoning Map - Sheet LZN_018A
 - Amending the zoning of a specified area as outlined in the Lot / DPs in Table 1 from RU1 Primary Production to RU5 Village and R5 Large Lot Residential for the purposes of residential development; and,
- Lot Size Map - Sheet LSZ_018A
 - Amending the minimum lot size of a specified area as outlined in the Lot / DPs in Table 1 from 40ha to 2,000m² and 4,000m² to 1,000m².

The land use table for RU5 Village and R5 Large Lot Residential is provided in Table 3 below.

Table 3: RU5 & R5 Land Use Table

Zone Objectives
RU5 Village
Objective of Zone
<ul style="list-style-type: none"> • <i>To provide for a range of land uses, services and facilities that are associated with a rural village.</i> • <i>To promote development in existing towns and villages in a manner that is compatible with their urban function.</i> • <i>To ensure there are opportunities for economic development.</i> • <i>To ensure the provision of business and retail based uses are grouped within and around existing activity centres.</i> • <i>To encourage tourist and visitor related development.</i>
Permitted Without Consent
<i>Environmental protection works; Home-based child care; Home businesses; Home industries; Home occupations; Roads; Water reticulation systems</i>
Permitted With Consent
<i>Air transport facilities; Airstrips; Amusement centres; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Centre-based child care facilities; Charter and tourism boating facilities; Commercial premises; Community facilities; Correctional centres; Crematoria; Depots; Dwelling houses; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Environmental facilities; Exhibition homes; Exhibition villages; Flood mitigation works; Freight transport facilities; Function centres; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Information and education facilities; Jetties; Liquid fuel depots; Local distribution premises; Marinas; Mooring pens; Moorings; Mortuaries; Neighbourhood shops; Oyster aquaculture; Passenger transport facilities; Places of public worship; Public administration buildings; Recreation areas; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Registered clubs; Research stations; Residential accommodation; Resource recovery facilities; Respite day care centres; Restricted premises; Schools; Service stations; Sewage treatment plants; Sex services premises; Signage; Storage premises; Tank-based aquaculture; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Water recreation structures; Water recycling facilities; Water supply systems; Wholesale supplies</i>
Prohibited



Zone Objectives
<i>Cellar door premises; Farm stay accommodation; Heavy industries; Rural workers' dwellings; Any other development not specified in item 2 or 3.</i>
R5 Large Lot Residential
Objectives of the zone
<ul style="list-style-type: none"> To provide residential housing in a rural setting while preserving, and minimising impacts on, environmentally sensitive locations and scenic quality. To ensure that large residential lots do not hinder the proper and orderly development of urban areas in the future. To ensure that development in the area does not unreasonably increase the demand for public services or public facilities. To minimise conflict between land uses within this zone and land uses within adjoining zones. To restrict the construction of new residential and other sensitive uses in flood prone areas.
Permitted With Consent
<i>Environmental protection works; Extensive agriculture; Home-based child care; Home businesses; Home industries; Home occupations; Roads; Water reticulation systems</i>
Permitted With Consent
<i>Building identification signs; Business identification signs; Dual occupancies; Dwelling houses; Group homes; Heliports; Kiosks; Neighbourhood shops; Oyster aquaculture; Pond-based aquaculture; Restaurants or cafes; Roadside stalls; Secondary dwellings; Take away food and drink premises; Tank-based aquaculture; Waste or resource transfer stations; Any other development not specified in item 2 or 4.</i>
Prohibited
<i>Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Backpackers' accommodation; Boat building and repair facilities; Car parks; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Dairies (pasture-based); Depots; Emergency services facilities; Entertainment facilities; Exhibition homes; Exhibition villages; Extractive industries; Farm stay accommodation; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Information and education facilities; Local distribution premises; Marinas; Mortuaries; Open cut mining; Passenger transport facilities; Port facilities; Public administration buildings; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Registered clubs; Research stations; Residential accommodation; Restricted premises; Rural industries; Service stations; Serviced apartments; Sex services premises; Signage; Storage premises; Vehicle body repair workshops; Vehicle repair stations; Warehouse or distribution centres; Waste or resource management facilities; Water treatment facilities; Wharf or boating facilities; Wholesale supplies</i>

3.1.1 Zoning

The proposed land zoning amendments are demonstrated in Figure 7 below.

It is proposed to rezone a portion of the site, which is currently Zoned RU1 Primary Production to RU5 Village (north of the Highway) and R5 Large Lot Residential (south of the Highway), to encourage further residential and village type development to support the existing village and surrounding primary production land.

Amending the zoning of the site is consistent with all statutory planning provisions, specifically under clause 1.3 of the EP&A Act, including the following:

- “(c) to promote the orderly and economic use and development of land,
(g) to promote good design and amenity of the built environment.”

The LEP also provides for the provision of a dedicated local centre within the LGA, with clause 1.2 stating the following:



“(b) to promote the orderly and economic use and development of land within Carrathool,

(e) to minimise land use conflicts and adverse environmental impacts.”

Currently, development permitted with consent and the minimum lot size under Zone RU1 Primary Production permits restrictive development types, as outlined below, that are not conducive to the provision of a dedicated village characterised by small businesses and community services and do not encourage development.

Zone RU1 Primary Production

2 Permitted without consent

Environmental protection works; Extensive agriculture; Farm buildings; Home-based child care; Home businesses; Home industries; Home occupations; Intensive plant agriculture; Roads; Water reticulation systems.

3 Permitted with consent

Air transport facilities; Airstrips; Animal boarding or training establishments; Aquaculture; Bed and breakfast accommodation; Boat launching ramps; Boat sheds; Building identification signs; Camping grounds; Caravan parks; Cellar door premises; Cemeteries; Community facilities; Correctional centres; Depots; Dual occupancies; Dwelling houses; Eco-tourist facilities; Environmental facilities; Extractive industries; Farm stay accommodation; Flood mitigation works; Forestry; Freight transport facilities; Group homes; Heavy industrial storage establishments; Heavy industries; Helipads; Industrial training facilities; Information and education facilities; Intensive livestock agriculture; Jetties; Landscaping material supplies; Mooring pens; Moorings; Open cut mining; Recreation areas; Recreation facilities (major); Recreation facilities (outdoor); Research stations; Roadside stalls; Rural industries; Rural workers' dwellings; Sewerage systems; Timber yards; Transport depots; Truck depots; Veterinary hospitals; Water recreation structures; Water supply systems.

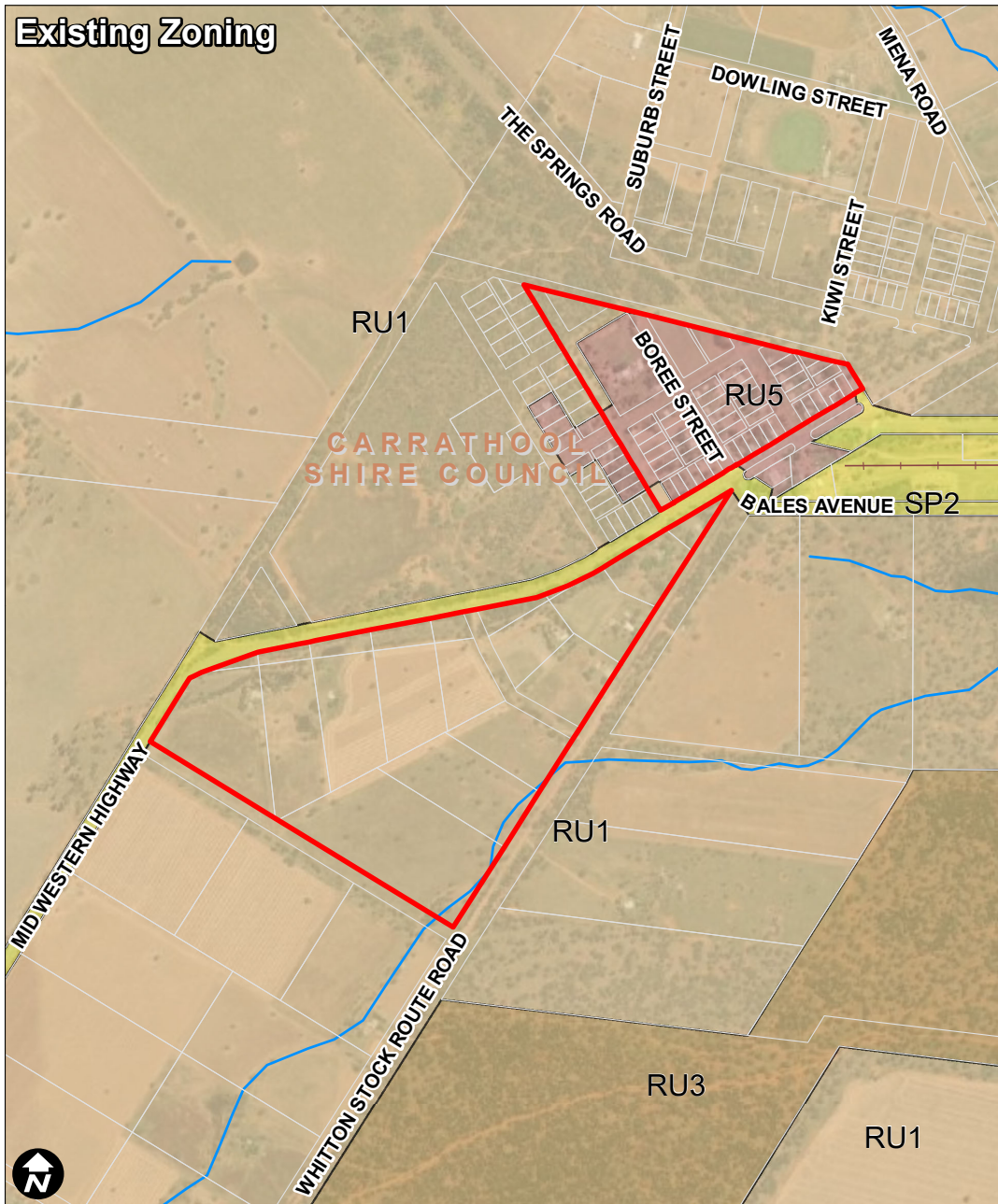
4 Prohibited

Any development not specified in item 2 or 3

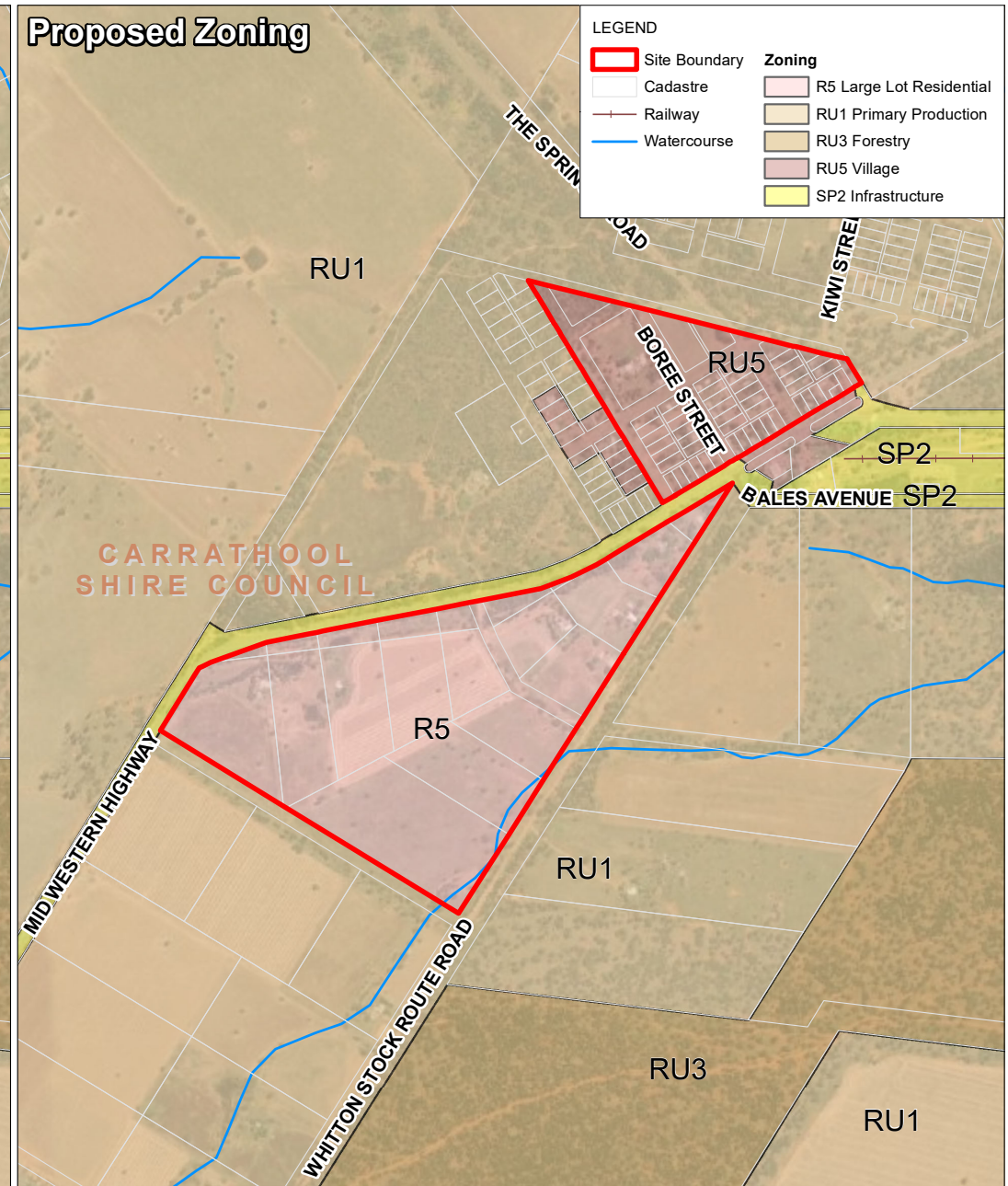
The primary intended outcome of the PP is to encourage additional population in the area including allowing for the redevelopment of the site for residential and village type purposes, with a lot size in keeping with the existing RU5 land within the Rankins Springs village and R5 zoned land within Carrathool.



Existing Zoning



Proposed Zoning



LEGEND

 Site Boundary	Zoning
 Cadastre	 R5 Large Lot Residential
 Railway	 RU1 Primary Production
 Watercourse	 RU3 Forestry
	 RU5 Village
	 SP2 Infrastructure



0 250 500
m

Scale: 1:15,000 at A4
Coordinate System: GDA2020 MGA Zone 55

Date Drawn: 24-Jul-2024
Project Number: 631.30921.00000



Data Source: Basedata NSW SS, 2022
Aerial imagery - 2021, Esri, Maxar, Earthstar Geographics, and the GIS User Community
NSW environmental planning instrument (EPI) © State Government of NSW and
Department of Planning and Environment 2022

ZONING PLAN
Rankins Springs

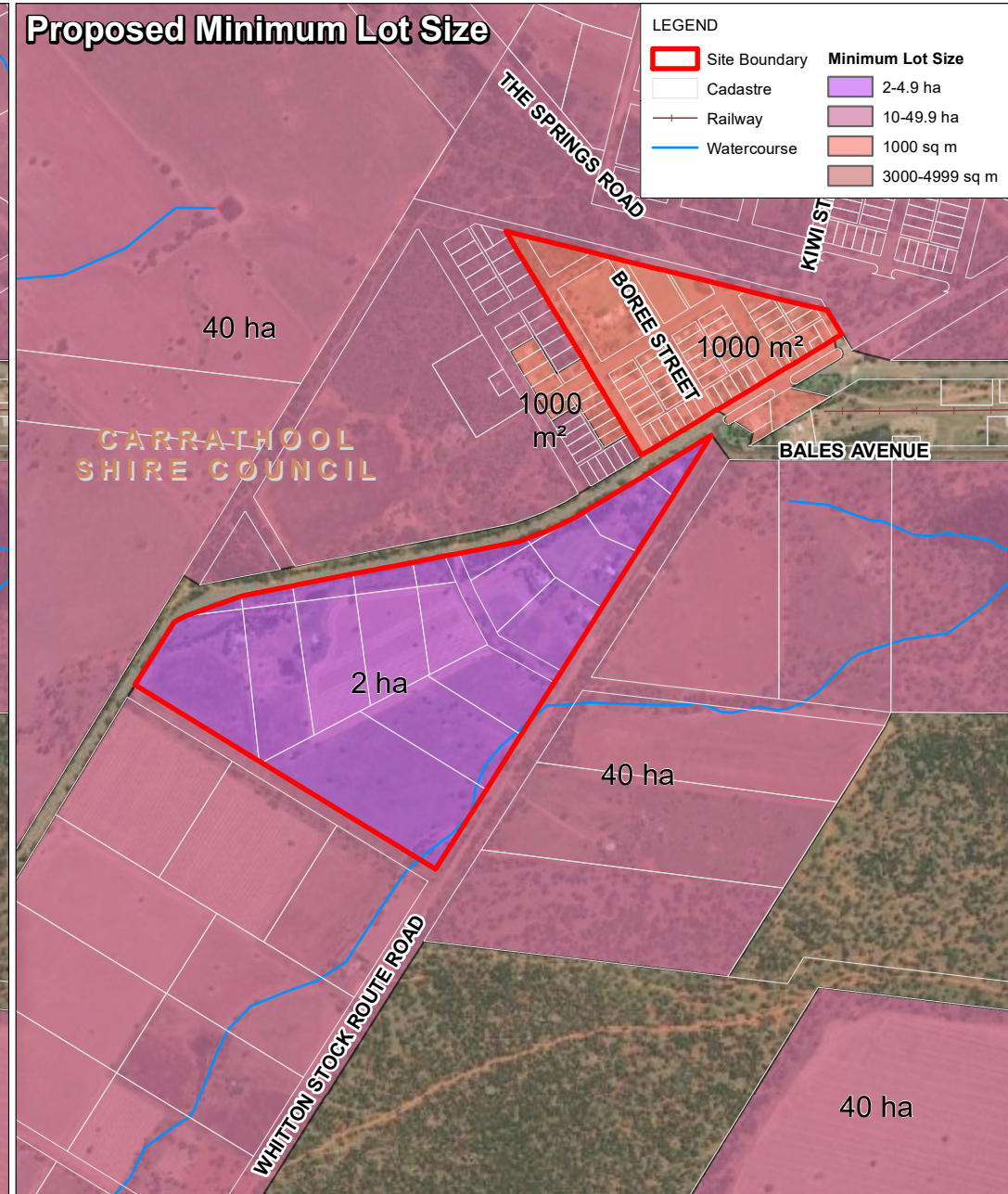
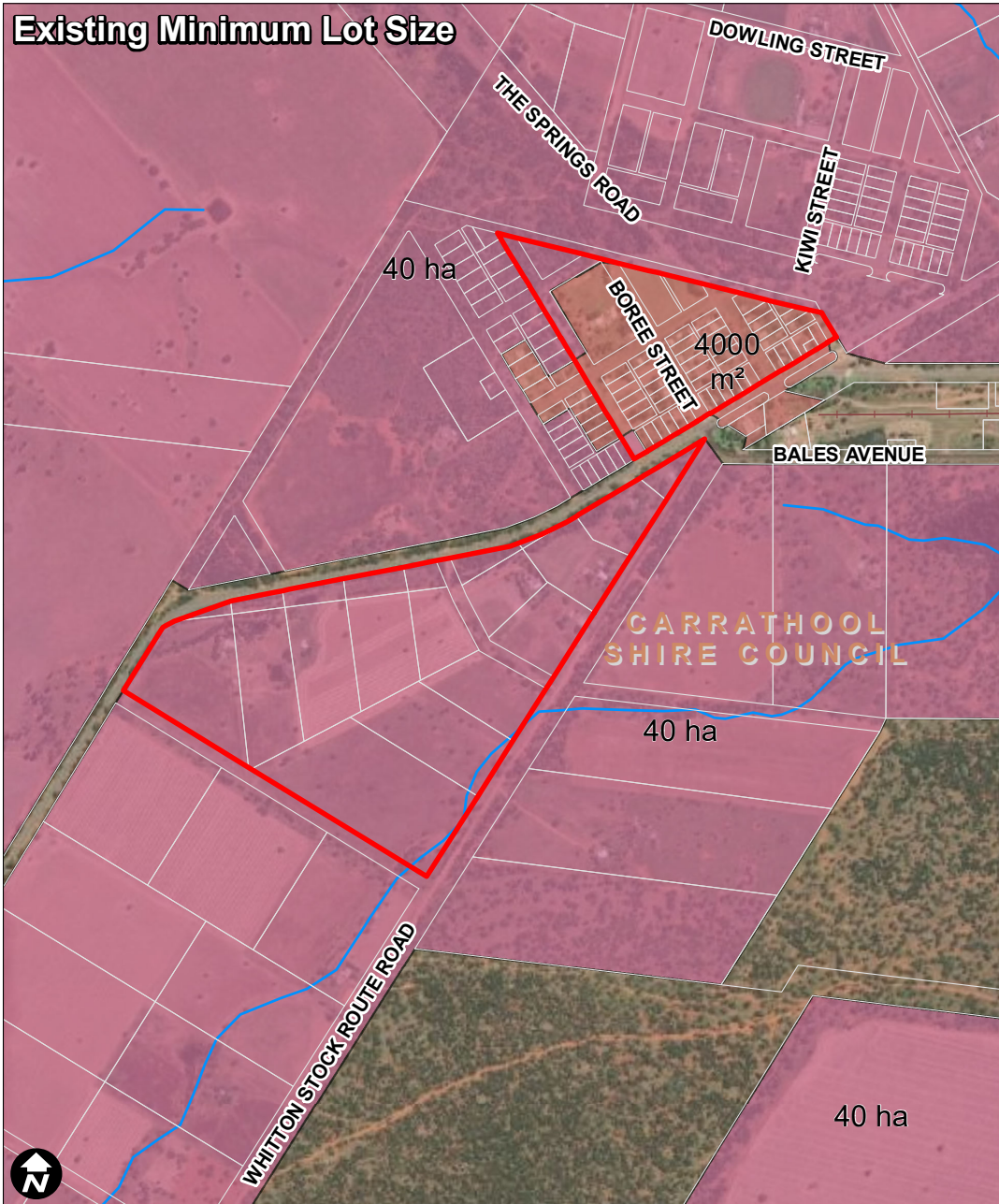
FIGURE 10

3.1.2 Lot Size

The proposed minimum lot size amendments are demonstrated in Figure 8 below.

It is proposed to amend the minimum lot size of the site, which is currently 40ha due to the RU1 zoning, to 2,000m² (for the R5 proposed zoned land) and 1,000m² (for the RU5 proposed zoned land) to be consistent with existing RU5 / R5 land. This minimum lot size amendment would ensure residential development and village development types can achieve outcomes that suit the surrounding village needs, without requiring lot amalgamation.





LEGEND

 Site Boundary	Minimum Lot Size
 Cadastre	 2-4.9 ha
 Railway	 10-49.9 ha
— Watercourse	 1000 sq m
	 3000-4999 sq m



Data Source: Basedata NSW SS, 2022
Aerial imagery - 2021, Esri, Maxar, Earthstar Geographics, and the GIS User Community
NSW environmental planning instrument (EPI) © State Government of NSW and
Department of Planning and Environment 2022

MINIMUM LOT SIZE PLAN
Rankins Springs

FIGURE 11

4.0 Justification: Strategic and Site-Specific Merit

Planning Proposal Preparation within the 'Local Environmental Plan Making Guideline' (2022) notes the following in regard to justification of the PP:

"For a planning proposal to proceed through Gateway determination, the Minister (or delegate) must be satisfied that the proposal has strategic and site-specific merit and that identified potential impacts can be readily addressed during the subsequent LEP making stages." (p.g 72)

Overall, the changes proposed to zoning and minimum lot size at the site cannot be achieved by any mechanism other than a PP, which has both strategic and site-specific merit, as the rezoning will reinforce the primacy of the Rankins Springs village, without greatly reducing land available for primary rural uses.

4.1 Section A – Need for Planning Proposal

Is the planning proposal a result of an endorsed LSPS, strategic study or report?

The PP as it applies to the site is not a direct result of a strategic study or report. However, the PP does reinforce the primacy of the Rankins Springs village within the Carrathool Local Strategic Planning Statement 2040 (2020). Specifically, the LSPS notes that "Council must preserve the elements that make the Shire an attractive place to live and visit, including the local environment and the distinct local character of the villages." This PP will contribute to achieving this outcome and the planning priorities below.

- *Planning Priority 2.2: Deliver well planned rural villages*

The PP supports the actions of priority 2.2 to make updates to the LEP to enable rural residential areas in proximity to the existing villages.

- *Planning Priority 3.1: Align local infrastructure delivered with planned growth*

The PP aims to rezone land within the existing village and in proximity to ensure appropriate services are available and where upgrades are required the wider village can benefit.

- *Planning Priority 3.2: Facilitate the growth of local health and education services*

The additional density in the village will allow for the longevity in social services such as education and health.

- *Planning Priority 4.1: Protect and celebrate our natural and cultural heritage*

The PP will not result in any negative outcomes for the existing heritage sites within and surrounding the subject area. Aboriginal heritage can be protected at the DA stage for individual developments to ensure any potential sites and areas are reviewed and protected.

- *Planning Priority 5.1: Protect area of high environmental value and significance*

A Preliminary Biodiversity Assessment is provided at Appendix B. A BDAR will be prepared at DA stage when required for individual DAs.

- *Planning Priority 5.2: Adapt to natural hazards and climate change*

A Bushfire Threat Assessment is provided at Appendix C and details the required APZs, which can be met.



Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

The PP is the most appropriate way of achieving the objective and intended outcomes. The alternative would be to amend the uses permissible within the current RU1 zone. However, this would create an inconsistent and potentially complex set of zoning controls and would still require a PP. Consequently, a rezoning is the best way of achieving the desired outcomes for the site.

4.2 Section B – Relationship to Strategic Planning Framework

Will the planning proposal give effect to the objectives and actions of the applicable regional or district plan or strategy (including any exhibited draft plans or strategies)?

Carrathool LGA is located within the Riverina Murray region and is included within the Riverina Murray Regional Plan 2041.

A collaboration activity (number 7) for Carrathool identified within the plan is to “respond to potential housing and economic impact and opportunities from the growth and development of Griffith,” (pg 34) which would be achieved through the rezoning of land at Rankins Springs to encourage residential redevelopment and encourage additional population within an existing village centre. Additional housing opportunities will result in greater benefit for the surrounding community, encouraging future opportunities for residential development to support industry employment opportunities and allowing aging in place from rural properties to stay in the area.

Additionally, the following general Directions outlined by the Riverina Murray Regional Plan 2041 are also addressed by the PP to ensure the protection of the Rankins Springs village:

- *Objective 1: Protect, connect, and enhance biodiversity throughout the region.*
- *Objective 2: Manage development impacts within the riverine environments.*
- *Objective 5: Ensure housing supply, diversity, affordability, and resilience.*
- *Objective 7: Provide for appropriate rural residential development.*
- *Objective 8: Provide for short-term accommodation.*
- *Objective 9: Plan for resilient places that respect local character.*
- *Objective 16: Support the visitor economy.*

Is the planning proposal consistent with a council LSPS that has been endorsed by the Planning Secretary or GSC, or another endorsed local strategy or strategic plan?

The PP aligns with the LSPS, as discussed in Section 4.1 above.

Is the planning proposal consistent with applicable State Environmental Planning Policies?

State Environmental Planning Policy (Resilience and Hazards) 2021

Due to the historical use of the subject site being for rural use there is potential for contamination to have occurred. State Environmental Planning Policy (Resilience and Hazards) 2021 will be required to be considered by Council for the appropriate use for residential purposes. It is considered that contamination can be considered at individual development application stage and remediation completed if required to meet the SEPP objectives:

Chapter 4 Remediation of land



4.1 Object of this Chapter

- 1 *The object of this Chapter is to provide for a Statewide planning approach to the remediation of contaminated land.*
- 2 *In particular, this Chapter aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment—*
 - a) *by specifying when consent is required, and when it is not required, for a remediation work, and*
 - b) *by specifying certain considerations that are relevant in rezoning land and in determining development applications in general and development applications for consent to carry out a remediation work in particular, and*
 - c) *by requiring that a remediation work meet certain standards and notification requirements.*

A Preliminary Site Investigation is provided at Appendix D. Further detailed investigations will be undertaken at DA stage when required.

Is the planning proposal consistent with any other applicable State and regional studies or strategies?

There are no other State or Regional studies or strategies relevant to the subject site.

Is the planning proposal consistent with applicable Ministerial Directions (s.9.1 directions)?

In accordance with Clause 9.1(2) of the EP&A Act, the Minister for Planning and Public Spaces issues directions for the relevant planning authorities to follow when preparing planning proposals (Ministerial Directions). These directions apply to planning proposals lodged with DPE on or after the date the particular direction issued and commenced.

This PP has utilised the updated Ministerial Directions that have commenced 10 November 2023, and relevant Directions have been assessed (refer to Table 4 below).

Table 4: Consistency of Planning with Relevant Section 9.1 Directions

Section 9.1 Direction	Consistency	Comment
Focus Area 1: Planning Systems		
1.1 Implementation of Regional Plans	Yes	The site is subject to the <i>Riverina Murray Regional Plan 2041</i> and is considered consistent with the Plan in regard to Objectives 5, 7, & 9. <ul style="list-style-type: none"> Objective 5: Ensure housing supply, diversity, affordability, and resilience. Objective 7: Provide for appropriate rural residential development. Objective 9: Plan for resilient places that respect local character.
1.3 Approval and Referral Requirements	Yes	The PP will allow the appropriate future use of the land and development applications.
Focus Area 3: Biodiversity and Conservation		
3.1 Biodiversity and Conservation	Yes	The PP subject area is identified as terrestrial biodiversity, due to the extent of the biodiversity mapping and the area of the subject land it is



Section 9.1 Direction	Consistency	Comment
		considered to be of minimal impact. A Preliminary Biodiversity Report is provided at Appendix B.
3.2 Heritage Conservation	Yes	The PP has considered the potential for future development resulting from rezoning to impact on items, places, buildings, works, relics, moveable objects or precincts of environmental heritage significance to the area. Section 1.4 outlines the heritage items within Rankins Spring, one of which is within the subject site (refer to Figure 2) The PP does not seek to make any changes to the heritage item.
Focus area 4: Resilience and Hazards		
4.1 Flooding	No	<p>The PP seeks to rezone land within the flood plan area for residential purposes. The flood study shows that during events up to and including the 1% AEP floodways are typically contained to formal watercourses and roadside swales. However, floodways do form across parts of the Mid Western Highway and around several buildings located east of the town. During the PMF, a significant portion of the town would fall within a floodway.</p> <p>Any future development would be subject to the LEP clauses (Clause 5.21 Flood Planning) at DA stage to assess impact on flood behaviours and incorporate measures to reduce risk to life and evacuation measures where required.</p> <p>Suggested Minimum freeboard would be adopted where required.</p>
4.3 Planning for Bushfire Protection	Yes	<p>Consultation with the Commissioner of the NSW Rural Fire Service will occur post gateway determination, as per the Direction. Appropriate APZs can be met and are identified in the Bushfire Threat Assessment at Appendix C.</p> <p>Early consultation was undertaken, and the following response was received:</p> <p>NSW Rural Fire Service</p> <p><i>The New South Wales Rural Fire Service (NSW RFS) has reviewed the proposal with regard to Section 4.4 of the directions issued in accordance with Section 9.1 of the Environmental Planning and Assessment Act 1979.</i></p> <p><i>Based upon an assessment of the information provided, NSW RFS raises no objections to the proposal subject to a requirement that future submissions include a Strategic Bush Fire Study by a suitably qualified consultant prepared in accordance with Chapter 4 of Planning for Bush Fire Protection 2019.</i></p>
4.4 Remediation of Contaminated Land	Yes	The historical use of the RU1 land has been for agricultural purposes, a use identified in Table 1 in the contaminated land planning guidelines. A Preliminary Site Investigation is provided at Appendix D.
Focus Area 5: Transport and Infrastructure		



Section 9.1 Direction	Consistency	Comment
5.1 Integrating Land Use and Transport	Yes	The PP is consistent with the principles of the 'Improving Transport Choice - Guidelines for planning and development' (DUAP 2001) as follows: <ul style="list-style-type: none"> Principle 1 – Concentrate in centres The PP seeks to rezone land to enable specific development in close proximity to the Rankins Springs train station, and Mid Western Highway, allowing access to wider employment opportunities.
5.2 Reserving Land for Public Purposes	Yes	The rezoning of the land identified does not include any land currently zoned for public use.
Focus Area 6: Housing		
6.1 Residential Zones	Yes	The PP aims to encourage residential development in a density appropriate for a village setting. Preserving the village and encouraging additional development to utilise existing established infrastructure and services within the immediate area, and ensuring residents maintain access to services within their area without the need to travel extensively to obtain services or goods. <p>The PP has been prepared to ensure the provision of housing within the suburb of Rankins Springs meets the needs of home buyers and investors within the area without the great reduction in available rural lands.</p>
Focus Area 9: Primary Production		
9.1 Rural Zones	No	The PP seeks to rezone land that is currently zoned for rural purposes to land zoned for village use. This is inconsistent with Direction 1(a). It is considered that the proposed rezoning <i>is of minor significance</i> and will not have a significant impact on available agricultural lands in the LGA. The addition of housing opportunities is considered to support the surrounding rural zones. <p>Carrathool is not listed as a local government area that Direction 1(b) applies to.</p>
9.2 Rural Lands	No	As outlined above the PP seeks to rezone existing rural lands and is inconsistent with the Direction. It is considered that the proposed rezoning <i>is of minor significance</i> and supports the implementation of the local strategic planning statement.

4.3 Section C – Environmental, Social and Economic Impact

Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

A Preliminary Ecology Assessment is provided at Appendix B and details the vegetation types and ecological communities within the site. No threatened species were observed during the preliminary site inspection and the likelihood of serious and irreversible impacts is considered very low. Further ecological investigations will be undertaken at DA stage, when required.



Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?

Environmental and infrastructure characteristics of the site have been considered in terms of potential impacts to matters of flooding, heritage, contamination, bushfire and visual amenity.

Flooding

As discussed in Section 1.3, a draft flood study was published by Catchment Simulation Solutions in June 2024.

Flood Planning Levels (FPLs) are an important tool in the management of flood risk and are derived by adding a freeboard to the “Defined Flood Event” (DFE). The FPLs can then be combined with topographic information to establish the Flood Planning Area (FPA), as shown on Figure 3. The FPL and FPA can then be used to assist in managing the existing and future flood risk by identifying land where flood-related development controls apply to ensure that new development is undertaken in such a way as to minimise the potential for flood impacts on people and property.

DFE for typical residential development should generally start with the 1% AEP flood and it was found in the flood study that the 1% AEP flood was considered appropriate to serve as the basis for the DFE without any additional control. However, it was noted that much of the study area is exposed to only shallow depths of inundation, low velocity flows and low flood hazard (i.e., no greater than H1) at the peak of the 1% AEP flood. Therefore, it was considered inappropriate to incorporate such areas into the DFE as it would introduce many properties into the FPA that are exposed to a negligible flood risk. In this regard, all areas exposed to a velocity depth product of less than 0.1 m²/s were excluded from the FPA calculations.

Freeboard is used to account for uncertainties when deriving the DFE. The flood study considered freeboard of 0.3 metres to be reasonable, consistent with the Hillston Floodplain Risk Management Study and Plan.

The 0.3m freeboard was added to the filtered 1% AEP water level results to produce an FPL grid. The FPL grid was combined with the digital elevation model to produce a FPA by extending the flood planning level grid laterally until it encountered higher terrain. The resulting FPA from the flood study is shown in Figure 3.

Further investigation on specific sites and the FPLs, including appropriately designed floor levels for developments proposed, can be undertaken for these sites at DA stage.

Non-Aboriginal Heritage

A desktop heritage assessment of the site was undertaken comprising a search of the:

- CLEP.
- State Heritage Register.
- Commonwealth Heritage List.
- EPBC Protected Matters Search Tool.
- Local heritage items located within the site are identified within Section 1.4.

It is not anticipated that future development of the site following the CLEP amendment would impact in any way on heritage matters due to the existing development within the site. Any future development within the site would be subject to relevant assessment requirements by Council and potentially managed through a site-specific development control plan (DCP).

No State listed heritage items or places are in the vicinity of the site.



Contamination

A desktop assessment and Preliminary Site Investigation (PSI) has been undertaken, refer to Appendix D. The site is not mapped as a contaminated site under the EPA Contaminated Land Record and is not in the vicinity of any scheduled activities under the POEO Act.

The *Contaminated Land Management Act 1997* (CLM Act) establishes a process for investigating and remediating land where contamination presents a “significant risk of harm” to human health or the environment. It applies to contamination which occurred before or after its commencement.

Council must consider contamination caused by past activities and potential contamination from spills and leaks in developing and managing land.

A search of the Environmental Protection Authority (EPA) Contaminated Land Record database was completed on 16 January 2023 and did not identify any sites within the shire of Carrathool or suburb of Rankins Springs.

A search of the Protection of the Environment Operations Act 1997 (POEO Act) public register was also completed on 16 January 2023 and identified 17 active Environment Protection Licence (EPL) records and 2 surrendered within the Carrathool LGA.

No EPLs are within Rankins Springs.

The PSI recommends further investigations due to the historical agricultural use of the lands, detailed site investigation can be undertaken for specified sites at DA stage.

Visual

The site’s visual character is predominantly rural, with the majority of the subject site being vacant land historically used for rural purposes. Enabling village type development would continue the existing visual character of the village.

Has the planning proposal adequately addressed any social and economic effects?

Australian Bureau of Statistics (ABS) data for the state suburb of Rankins Springs during the 2021 Census identifies a population of 208 and a median age of 35.

The provision of zoning more suitable for a village would provide socioeconomic benefits for the broader community resulting from the maintenance of dedicated provisions where businesses and services are readily accessible and within walking distance of each other. Allowing for a variation in housing type encourages aging in place once retirement from rural properties. Additionally, maintaining a village assists in providing employment opportunities for a range of occupations within the locality, particularly for the identified growing industries of farming and renewable energy.

The provision of zoning more suitable for residential purposes to support the existing village and surrounding rural land would provide socioeconomic benefits relating to the maintenance of a dedicated village that is able to provide employment opportunities, key community services, and commercial premises for the locality. Restricting redevelopment within the site to single occupancy residential dwellings and village type uses will ensure essential businesses are able to operate and provide services to the community.

4.4 Section D – Infrastructure (Local, State and Commonwealth)

Is there adequate public infrastructure for the planning proposal?

It is not anticipated that the future development of the site following the CLEP amendment would place significant pressure or demand on existing public infrastructure within the immediate locality or broader region. The PP would result in additional lots to the existing



village and does not consist of substantial urban renewal or infill development. There is no staging proposed, as the village has capacity to service each lot and assumes the uptake of the lots will be market led.

Bore water suitable for human consumption is provided by Council to Rankins Springs and can be extended to the additional lots, with infrastructure to service additional lots already in place.

Utility providers would be consulted as part of any Gateway Determination to establish the existing and future capacity of the site to ensure appropriate residential capacity.

Aerated wastewater treatment systems are used in the existing dwellings and, future requirements will form part of a Section 68 application for individual developments.

4.5 Section E – State and Commonwealth Interests

What are the views of state and Commonwealth public authorities consulted in accordance with the Gateway determination?

The Gateway Determination will identify the relevant State and Commonwealth public authorities to be consulted as part of the PP.



5.0 Maps

The specific amendments to the LEP maps are included within this report in Section 2. A summary of the map to be amended under this proposal is detailed as follows:

Amendment to the following Carrathool LEP Zoning Map:

- 1 Land Zoning Map
- 2 Minimum Lot Size Map



6.0 Consultation

6.1 Agency Consultation

Table 5 shows the agencies that were contacted during preparation of the PP and their responses to date. Further consultation can be undertaken post gateway, where required.

Table 5 Agency Consultation

Agency	Comment
<p>Biodiversity and Conservation Division (BCD)</p> <p><u>Flooding</u></p> <p><i>Major flooding in this area in recent years has shown this area is flood prone. The Rankins Springs Flood Study (in preparation) will define the flood risks in this location. BCD recommends this proposal not be finalised until the flood study is complete and flood risks are understood.</i></p> <p><i>Prior to Gateway Determination, the proposal should be modified to respond to the flood study.</i></p>	<p>The Rankin Springs Flood Study Draft Report has been prepared, however is yet to be endorsed by Council.</p> <p>The draft report identifies the flood planning area (FPA) derived from the flood data. The FPA will impact a portion of the land proposed for rezoning and future residential development. Discussion within the report identifies that for events up to and including the 1% AEP flood, water depths are most commonly less than 0.5m and peak velocities are below 1m/s. As a result, most of the land to be rezoned is contained under the H1 hazard category and is generally safe during a 1% AEP flood.</p> <p>Land around watercourses will be likely subject to riparian corridors and incorporated into the blue green grid of future subdivision layouts.</p>
<p><u>Biodiversity</u></p> <p><i>The proposal will allow for future use and development that can be expected to result in clearing of native vegetation and indirect impacts on surrounding habitat. Threatened species and communities may be impacted.</i></p> <p><i>Given this, BCD recommends the proposal be informed by a biodiversity assessment that considers the impacts of all likely future development scenarios. This assessment should be undertaken by a qualified ecologist and apply the Biodiversity Assessment Method 2020 (BAM).</i></p> <p><i>Prior to Gateway Determination the proposal should be amended to respond the biodiversity assessment, including demonstrating measures to avoid, minimise and mitigate impacts to biodiversity.</i></p>	<p>A Preliminary Biodiversity Report is provided at Appendix B. The proposal has been amended post biodiversity report to exclude the lots in the western portion of the village (along Forest Street and Urabba Street) due to the clearing that would be required. These lots no longer are within the subject site.</p>
<p>Transport for NSW (TfNSW)</p> <p><i>The subject site has access and frontage to a number of classified roads, including the Mid Western Highway (HW6), The Springs Road (MR368) as well as Rankins Springs Road (MR371).</i></p> <p><i>In order to be consistent with Clause 2.119 of State Environmental Planning Policy (Transport and Infrastructure) 2021, Council should ensure that the planning proposal also includes measures to ensure that there are no additional access driveways created to the Mid Western Highway south-west of Forest</i></p>	<p>The additional lots will all be capable of achieving access off alternative road via existing lane ways, or through the subsequent subdivision plan post PP approval. Any future DA will have to comply with Clause 2.119.</p>



Agency	Comment
<p><i>Street (Lots 26-90 DP751690 as well as Lot 37 DP1088732).</i></p> <p><i>Lot south of the Highway should utilise local roads including Whitton Stock Route Road.</i></p> <p><i>Otherwise, TfNSW raises no objection to the subject planning proposal</i></p>	
<p>NSW Rural Fire Service</p> <p>The New South Wales Rural Fire Service (NSW RFS) has reviewed the proposal with regard to Section 4.4 of the directions issued in accordance with Section 9.1 of the <i>Environmental Planning and Assessment Act 1979</i>.</p> <p>Based upon an assessment of the information provided, NSW RFS raises no objections to the proposal subject to a requirement that future submissions include a Strategic Bush Fire Study by a suitably qualified consultant prepared in accordance with Chapter 4 of <i>Planning for Bush Fire Protection 2019</i>.</p>	<p>A Preliminary Bushfire Assessment is provided at Appendix C. RFS can be consulted further post Gateway.</p>
<p>Griffith Crown Lands</p> <p><i>Crown Lands objects to the rezoning of lots 98, 100 and 102 DP 751690 from RU1-</i></p> <p><i>Primary Production to R5 – Large Lot Residential, as it will have direct impact on existing licences for agriculture and grazing as Agriculture is Prohibited under the R5 zoning.</i></p>	<p>These lots were removed from the PP post correspondence with Crown Lands, they no longer for part of the subject site.</p>
<p><i>Crown lands have no objection to the proposed rezoning of the additional lots of Crown land and changes to minimum lots size within the areas proposed in the Zoning Plan.</i></p>	<p>Noted, no further comment required.</p>
<p><u><i>Please note the following points should be considered:</i></u></p> <p><i>Any proposal to rezone land to permit new subdivision area/s or land release areas where Crown Public road/s (formed or unformed) will be required to provide access, Council must accept transfer of control of such roads before approving any such proposal, regardless of the number of lots to be serviced.</i></p>	<p>Noted, no further comment required.</p>
<p><i>Asset Protection Zones (APZ's) and perimeter access roads that are required as part of any Bushfire protection scheme in any new subdivision/s, must be located within the property of the private subdivision land and not on any adjoining Crown land.</i></p>	<p>Noted, no further comment required.</p>
<p><i>Any proposed new subdivision area/s where essential public infrastructure (e.g., stormwater drainage channels, pipes or other utilities) is required to service a new subdivision should not propose to utilise any Crown public reserve/s for that purpose where such facilities do not accord with the declared public purpose.</i></p>	<p>Noted, no further comment required.</p>
<p><i>Any proposed rezoning should not utilise Crown land as buffer areas for example bush fire hazard reduction zones, visual impact relief and or open space to serve additional demands.</i></p>	<p>Noted, no further comment required.</p>



Agency	Comment
<i>Urban zones (residential, commercial or industrial) should not be given to freehold lands at the expense of Crown land with potential urban use e.g. Crown land with potential urban use should not be used as a public recreation or green space offset to intensified development on nearby freehold lands.</i>	Noted, no further comment required.
<i>Crown reserves that have the potential to be developed outside their current purpose (e.g. have commercial opportunities) be favourably reviewed in any rezoning proposals if the rezoning proposed is similar to existing zoning in the area to reflect highest and best use.</i>	Noted, no further comment required.
<i>Native Title has not been investigated over the Crown land lots and until such time as Native Title is determined, restrictions of the use of the land would apply under the Native Title Act 1993.</i>	Noted, no further comment required.
<i>Crown Roads are located within the Village and rezoning area. Crown Roads that have been constructed or are access to the lots included should be transferred to council for village use.</i>	Noted, no further comment required.
<p>Department of Primary Industries</p> <p><i>Strategic led planning can identify and manage potential land use conflicts between ongoing agricultural enterprises and non agricultural developments. Where there are no land use strategies providing guidance on non-agricultural land use developments on rural land, expansion of residential / large lot / rural residential developments could create land use conflicts and impacts on the viability of ongoing agricultural enterprises in the vicinity.</i></p> <p><i>However in this case DPI Ag notes that planning proposal is for lands:</i></p> <ul style="list-style-type: none"> <i>immediately adjacent to land currently zoned RU5 Village</i> <i>have access to appropriate levels of services and utilities</i> <i>of a small scale in the context of the Council area and,</i> <i>as no significant agricultural enterprises appear likely to be directly or indirectly impacted, DPI Ag has no further comment.</i> 	Noted, no further comment required.
<p>Griffith Local Aboriginal Land Council (LALC)</p> <p>-</p>	Several attempts were made to consult with the LALC, however no response was provided.



6.2 Public Consultation

The public exhibition period and the requirements for the PP will be outlined in the Gateway Determination. It is recommended that the PP be exhibited for 20 working days as the proposal is considered to be within the 'Standard' category as per the following description:

"A site-specific LEP amendment seeking a change in planning controls that are consistent with the existing strategic planning framework."

The community will be notified of the commencement of the exhibition period via a notice in a local newspaper and via a notice on Council's website. The notice will:

- Give a brief description of the objectives and intended outcomes of the PP.
- Indicate the land to which the PP applies.
- Details of where and when the PP can be accessed; and
- Details of a contact for the receipt of any submissions, as well the closing date for submissions.

During the exhibition period, the following material will be made available for inspection:

- The PP in the form approved for community consultation by the Gateway determination; and
- The Gateway determination.



7.0 Project Timeline

The anticipated timeframe for the completion of the PP (as per Table 6) will depend on the complexity of the matters, the nature of any additional information that may be required, and the need for additional agency and community consultation.

Table 6: Project Timeline

Stage	Timeframe
Consideration by Council	2 weeks
Council decision	6 weeks
Gateway determination	3 weeks
Pre-exhibition	2 weeks
Commencement and completion of public exhibition period	3 weeks
Consideration of submissions	2 weeks
Post-exhibition review and additional studies	5 weeks
Submission to the Department for finalisation (where applicable)	8 weeks
Gazettal of LEP amendment	8 weeks





Appendix A AHIMS

Planning Proposal

Rezoning and Minimum Lot Size Rankins Springs

Carrathool Council

SLR Project No.: 631.30921.00000-R01

Clare Brennock

10 Kings Road

New Lambton New South Wales 2305

Attention: Clare Brennock

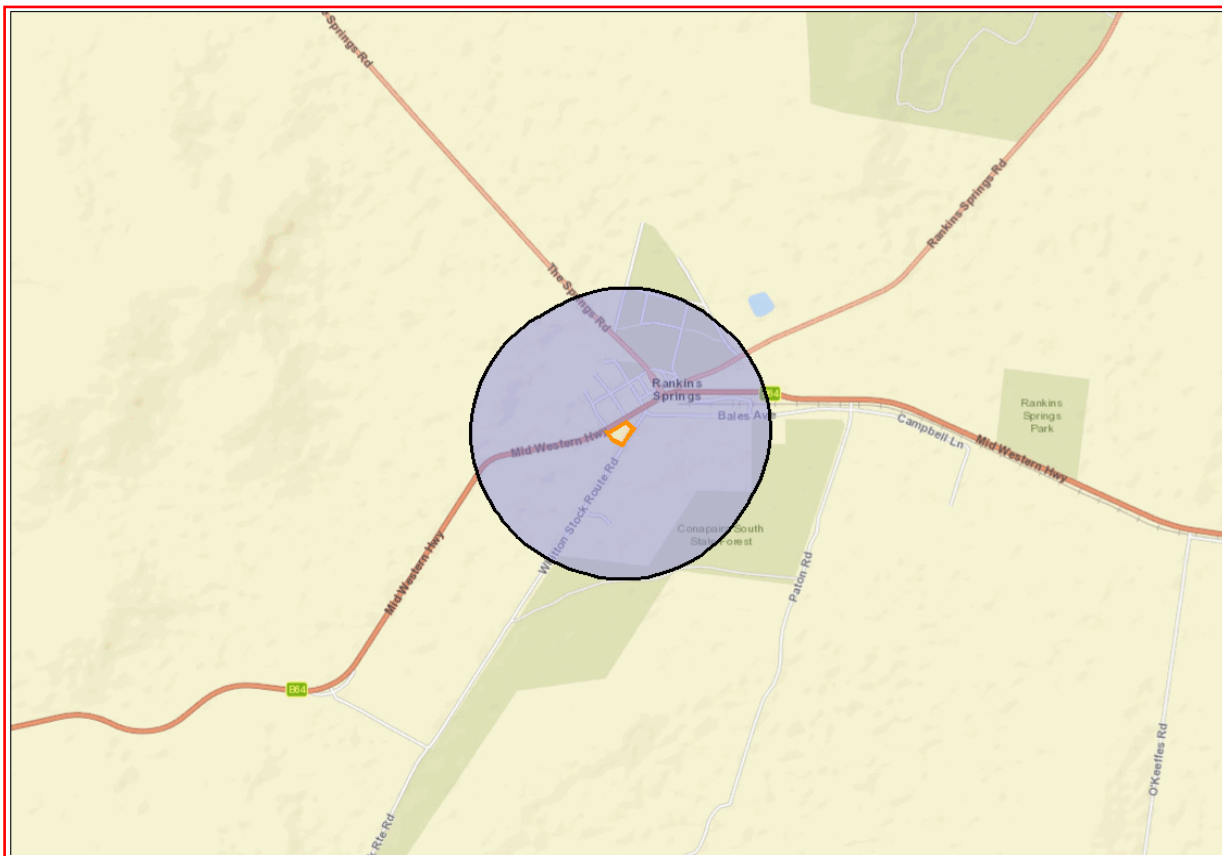
Email: cbrennock@slrconsulting.com

Date: 27 February 2023

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 26, DP:DP751690, Section : - with a Buffer of 1000 meters, conducted by Clare Brennock on 27 February 2023.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette \(https://www.legislation.nsw.gov.au/gazette\)](https://www.legislation.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Heritage NSW upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Heritage NSW and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.



Appendix B Preliminary Ecology Report

Planning Proposal

Rezoning and Minimum Lot Size Rankins Springs

Carrathool Council

SLR Project No.: 631.30921.00000-R01



AEP

BIODIVERSITY | BUSHFIRE | ARBORICULTURE

NEWCASTLE SYDNEY

Preliminary Biodiversity Report

Rankin Springs Rezoning Proposal, Rankin Springs, NSW



Prepared for: Carrathool Shire Council C/- SLR Consulting Pty Ltd

7 June 2024

AEP Ref: 3359

Revision: 01

Newcastle | Sydney

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Document Control

Document Name	Preliminary Biodiversity Report for Rankin Springs Rezoning Proposal, Rankin Springs, NSW
Project Number	3359
Client Name	Carrathool Shire Council C/- SLR Consulting Australia Pty Ltd
AEP Project Team	Jeremy Burrill Darcy Kilvert Joelan Sawyer Alessandro Roncolato

Revision

Revision	Date	Author	Reviewed	Approved
01	07/06/24	Jeremy Burrill	Darcy Kilvert	Jeremy Burrill

Distribution

Revision	Date	Name	Organisation
01	07/06/24	Jason Nicholson	Carrathool Shire Council

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Appendices

Appendix A - Preliminary Candidate Species List
Appendix B – Proposed Rezoning Plan
Appendix C - BOSET Report
Appendix D – Site Photographs

1.0 Introduction

Anderson Environment & Planning was commissioned by Carrathool Shire Council (the Client) courtesy of SLR Consulting Australia Pty Ltd (the proponent) for the production of a Preliminary Biodiversity Report for a proposed planning proposal within the Rankin Springs Precinct, 2669, NSW.

Anderson Environment & Planning (AEP) have undertaken investigations to provide due diligence relating to ecology considerations and constraints for the site. The assessment undertaken adheres to the approach outlined in the Biodiversity Assessment Method (BAM).

2.0 Site Summary

Table 1 provides a summary of the site characteristics and relevant legislation.

Table 1 – Site Summary





Detail	Comments
Address	Rankin Springs, NSW
Titles(s)	Lot 1 DP449022, Lot 7306 DP1154199, Lot 37 DP, 1088732, Lot 1 DP909445, Lots 1-2 DP846051, Lots 26-36, 84-90, 98-102, 112, DP751690, Lot 1/15-29/DP758868 Lot 2/15-29/DP758868, Lot 3/15-29/DP758868, Lot 4/16-29/DP758868, Lot 5/16-29/DP758868, Lot 6/15-29/DP758868, Lot 7/15-29/DP758868, Lot 8/15-29/DP758868, Lot 9/15-29/DP758868, Lot 10/15-29/DP758868, Lot 11/15-29/DP758868, Lot 12/15-29/DP758868, Lot 13/15-18/DP758868, Lot 14/15-18/DP758868, Lot 15/16-18/DP758868, Lot 16/16-18/DP758868, Lot 17/16-18/DP758868, Lot 18/16-18/DP758868.
Study Area (approx.)	Total Study Area approx. 131.31ha (refer Figure 1)
LGA	Carrathool Shire
Current Zoning	RU1- Primary Production RU5 – Village
Current Minimum Lot Size	RU1 – 40ha RU5 - 4000m ²
Proposed Minimum Lot Size	0.1ha & 2ha.
IBRA Region	Cobar Penneplain
IBRA Subregion	Lachlan Plains
NSW Landscapes	Burgooney Plains and Cocoparra Ranges and Foothills
Site Usage	The site serves multiple purposes, including residential and commercial infrastructure, as well as featuring numerous vacant lots.
<i>Biodiversity Conservation Act 2016 (BC Act)</i> <i>Biodiversity Conservation Regulation 2017 (BC Reg)</i>	Under the <i>BC Reg</i> , there are three (3) thresholds above which the NSW Biodiversity Offsets Scheme (BOS) is triggered and where a Biodiversity Development Assessment Report (BDAR) is required to accompany a Development Application (DA). The triggers as they apply to the site are as follows: <ul style="list-style-type: none"> <u>Area clearing threshold</u>: The minimum lot size for lands zoned as RU5 is 0.1ha, and for lands zoned RU5 it is 40ha. The area clearing threshold for minimum

Detail	Comments
	<p>lot sizes less than 1ha is 0.25ha and between 1ha – 40ha is 1ha. The proposed re-zoning will result in the same area clearing thresholds.</p> <ul style="list-style-type: none"> • <u>Biodiversity Values Map (BV Map)</u>. The BV Map identifies land with high biodiversity value that is particularly sensitive to impacts from development and clearing. Clearing BV mapped land triggers the BOS. The site does contain BV mapped land (See Attachment B); and • <u>Five-part test of significance</u>: Considering that a future rezoning proposal is likely to incur clearing such that either of the above thresholds would be exceeded, no further discussion is afforded to the potential for significant impacts to State and Commonwealth listed threatened entities. Such impacts would be assessed in a BDAR.
Important Habitat	A review of the Important Habitat Map (DPE 2023) indicates that the site is not mapped as containing Important Areas for Swift Parrot, Regent Honeyeater, Migratory Shorebird and Plains-wanderer.
Vegetation Mapping	<p>State Vegetation Type Mapping (SVTM 2023) identified vegetation within the Study Area as:</p> <ul style="list-style-type: none"> • PCT 82 - <i>Western Grey Box - Poplar Box - White Cypress Pine tall woodland on red loams mainly of the eastern Cobar Peneplain Bioregion</i> • PCT 105 - <i>Poplar Box grassy woodland on flats mainly in the Cobar Peneplain Bioregion and Murray Darling Depression Bioregion</i> • Non-native vegetation. <p>(refer Figure 2)</p>
Ground-truthed Vegetation	<p>Vegetation assessment identified two (2) Plant Community Types (PCT).</p> <p>The following areas have been determined</p> <ul style="list-style-type: none"> • PCT 82 – <i>Western Grey Box - Poplar Box - White Cypress Pine tall woodland on red loams mainly of the eastern Cobar Peneplain Bioregion</i> (18.59ha) • PCT 105 – <i>Poplar Box grassy woodland on flats mainly in the Cobar Peneplain Bioregion and Murray Darling Depression Bioregion</i> (17.64ha) <p>The remainder of the vegetation on site consists of exotic- dominated grassy vegetation and existing infrastructure approx. 95.08ha.</p> <p>PCTs are shown in Figure 3.</p>
Threatened Ecological Communities	<p>PCT 82 is associated with State and Federally Listed TECs:</p> <ul style="list-style-type: none"> • BC Act (Endangered): <i>Inland Grey Box Woodland in the Riverina, NSW South Western Slopes, Cobar Peneplain, Nandewar and Brigalow Belt South Bioregions</i> • EPBC Act (Endangered): <i>Grey Box (Eucalyptus microcarpa) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia</i>
Field Survey Effort	<p>On 13 and 14 June 2023, one (1) AEP ecologist attended and assessed the Study Area (refer Figure 4). Fieldwork included:</p> <ul style="list-style-type: none"> • Random meander flora surveys; • 6 x vegetation BAM Plots; and • Habitat assessment;
Habitat	Two hydrolines and numerous farm dams provide potential water habitat. Surveys also revealed some stags with small to medium-sized hollows, and abandoned sheds being present within the Study Area.
Threatened Species	The Carrathool Shire Area is host to several threatened species, with some species being mapped as occurring within or directly adjacent to the site including the Superb Parrot. No threatened species were observed during the preliminary site inspection.

Detail	Comments
<i>Water Management Act 2000</i> (WM Act)	<p>Relevant approvals are required under the WM Act for any controlled activities to be carried out within 40m of, on, or under waterfront land.</p> <p>Waterfront land includes the bed and bank of any river, lake, estuary or the edge of a frequently wet area and all land within 40 metres of the highest bank of the river, lake or estuary. Waterfront land is mapped as occurring within the Study Area (refer Figure 1 and 4).</p> <p>Desktop assessment indicates that there is a mapped first and third order streams that passes through the top eastern and western sites of the proposed rezoning development.</p> <p>During preliminary site inspection, it was confirmed that there were defining features of bed or bank. A third order stream is present within the eastern and western site, which would require a Vegetation Riparian Zone (VRZ) protection of 30m. One first order stream is present in the eastern most site, which would require a VRZ protection of 10m. Any proposed work within 40m of these streams will require a Controlled Activity Approval (CAA) to be supplied with the proposal.</p>
<i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act)	<p>Targeted survey for threatened species and the likely extent of impact would inform a final decision on whether an EPBC Act Referral is required.</p> <p>One federally listed TEC is associated with the PCT found on site: EPBC Act, CE: <i>Grey Box (Eucalyptus microcarpa) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia</i>.</p> <p>Detailed assessment as part of future biodiversity/ecological assessment would be required to confirm the presence or absence of Commonwealth listed species and or communities on site. Any proposal impacting federally listed TECs or species will require an EPBC referral.</p>
Bushfire Prone Land Mapping	<p>The site is within land mapped on the Bushfire Prone Land map, and contains 'Vegetation Category 1', 'and 'Vegetation Buffer'. A Bushfire Threat Assessment has been conducted alongside this Biodiversity Report.</p>

Disclaimer: While all reasonable care has been taken to ensure the information shown on this map is up to date and accurate, no guarantee is given that the information portrayed is free from error or omission. Please verify the accuracy of all information prior to use.

Legend

-  Study Area
-  Cadastre
-  Hydroline
-  Hydroarea



0 150 300 m

Note:
1. Boundaries are not survey accurate
2. Do not scale off the plan



AEP

Figure 1 - Site Map

Location: Rankin Springs 2669, NSW




Client: Carrathool Shire Council

Date: June 2024

AEP ref: 3359




Disclaimer: While all reasonable care has been taken to ensure the information shown on this map is up to date and accurate, no guarantee is given that the information portrayed is free from error or omission. Please verify the accuracy of all information prior to use.

Legend

-  Study Area
-  Cadastre
-  Hydroline



State Vegetation Type Mapping (DPE, 2023)

-  0 Not classified
-  105 Poplar Box grassy woodland on flats mainly in the Cobar Peneplain Bioregion and Murray Darling Depression Bioregion
-  82 Western Grey Box - Poplar Box - White Cypress Pine tall woodland on red loams mainly of the eastern Cobar Peneplain Bioregion

0 100 200 m

Note:
1. Boundaries are not survey accurate
2. Do not scale off the plan



AEP

Figure 2 - State Vegetation Type Mapping

Date: June 2024




Location: Rankin Springs 2669, NSW

Client: Carrathool Shire Council




AEP ref: 3359

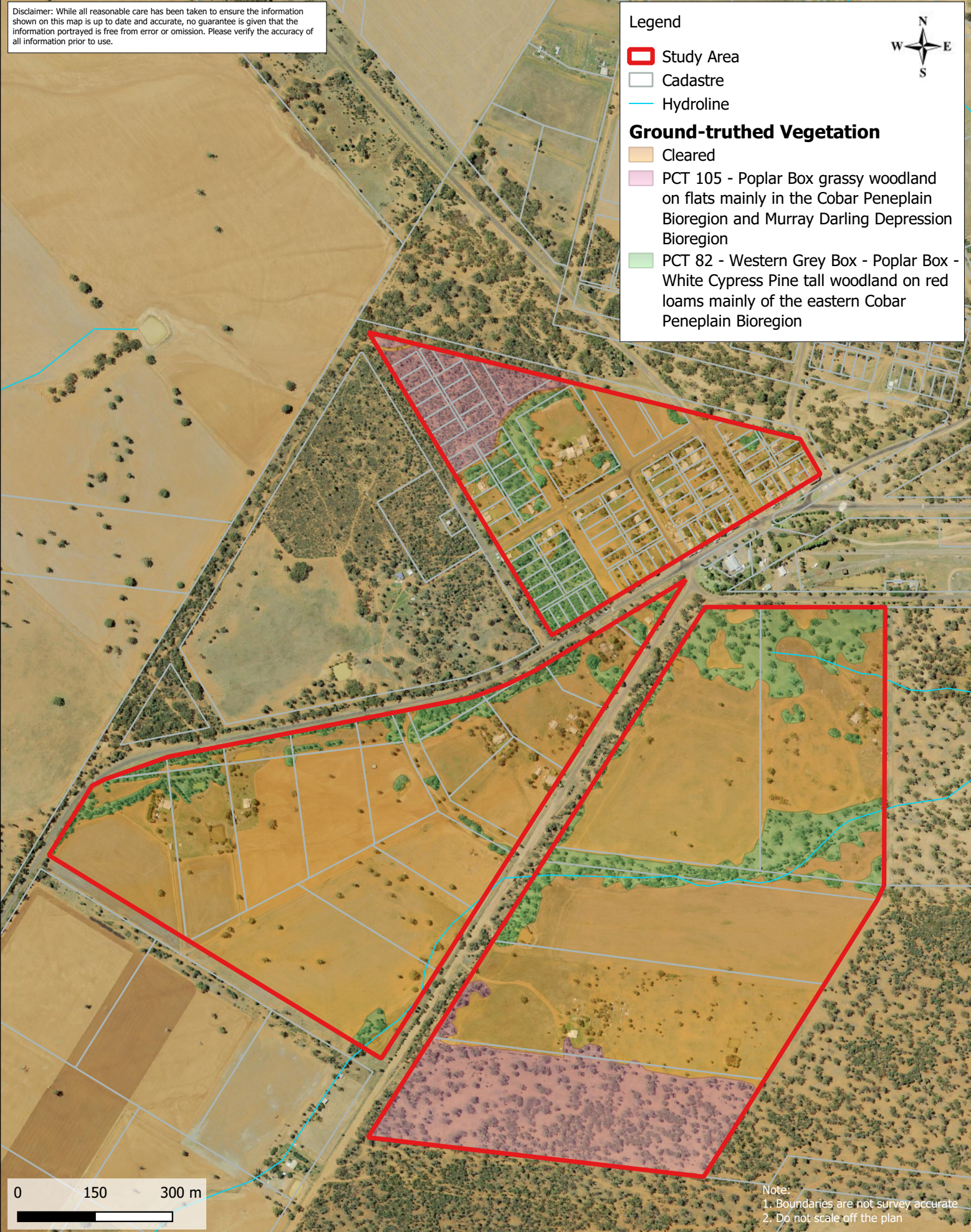
Disclaimer: While all reasonable care has been taken to ensure the information shown on this map is up to date and accurate, no guarantee is given that the information portrayed is free from error or omission. Please verify the accuracy of all information prior to use.

Legend

-  Study Area
-  Cadastre
-  Hydroline

Ground-truthed Vegetation

-  Cleared
-  PCT 105 - Poplar Box grassy woodland on flats mainly in the Cobar Peneplain Bioregion and Murray Darling Depression Bioregion
-  PCT 82 - Western Grey Box - Poplar Box - White Cypress Pine tall woodland on red loams mainly of the eastern Cobar Peneplain Bioregion



0 150 300 m

Note:
1. Boundaries are not survey accurate
2. Do not scale off the plan



AEP

Figure 3 - Ground-truthed Vegetation

Date: June 2024

Location: Rankin Springs, 2669, NSW

Client: Carrathool Shire Council

AEP ref: 3359

3.0 Literature Review

- Aerial Photograph Interpretation (API) of the site and surrounding locality;
- NSW Water Management (General) Regulation 2018 hydroline spatial data 1.0 (accessed February 2024);
- NSW State Vegetation Type Map (SVTM), (DPE, 2023);
- DPIE Important Habitat Mapping (2024);
- DPE BioNet Vegetation Classification website (accessed February 2024) (<https://www.environment.nsw.gov.au/NSWVCA20PRapp>); and
- DPE BioNet Threatened Biodiversity Profiles (accessed February 2024) (<https://www.environment.nsw.gov.au/AtlasApp>).
- In addition, database searches were carried out, namely:
 - Review of flora and fauna records held by the DPE BioNet Atlas of NSW Wildlife within 10km x 10km polygon around the site (February 2024); and
 - Review of flora and fauna records held by the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) Protected Matters Search within a 5km radius of the site (February 2024).

4.0 NSW Biodiversity Conservation Act 2016

The Rezoning Process

The making or amending of a Local Environment Plan (LEP) (i.e., a rezoning process) starts with a planning proposal for development. In most cases this is prepared by the local Council, often with funding and assistance from interested parties (i.e., the developer). The proposal is submitted to the NSW Department of Planning & Environment (DPE); this is called the “Gateway Process”.

The *Biodiversity Conservation Act 2016* (BC Act) does not change the process for making local environmental plans (LEPs) under the *Environmental Planning and Assessment Act 1979* (EP&A Act). The requirements for planning proposals (s3.33 EP&A Act) and consultation, including consultation with DPE concerning impacts on threatened species (s3.25 EP&A Act), remains the same. The legislation requires that planning proposals be designed to avoid and minimise impacts on areas of high environmental and biodiversity value, and include provisions to protect those values (e.g., environmental protection zones and minimum lot sizes).

Given that future development will result in biodiversity impacts that trigger the Biodiversity Offset Scheme (BOS), DPE recommends that biodiversity is assessed as part of the planning proposal using Stage 1 of the Biodiversity Assessment Method (BAM) (as a minimum). Application of the BAM by an accredited person will identify the biodiversity values present on the site. This information can be used to inform decisions to avoid and minimise impacts and will provide evidence of these efforts. It will also help to identify the biodiversity values that may require offsets for future development and this can be further considered in the plan making process. Completion of Stage 1 of the Biodiversity Assessment Method provides a solid foundation for the assessment of biodiversity impacts at the development application stage.

The Minister (or delegate) will decide whether the planning proposal can proceed, and /or whether further information is required to inform the decision-making process. This deliberation will normally include public consultation and agency consultation. Following any required amendments, the proposal is then publicly exhibited, and following review and consideration of public submissions a draft LEP is presented to the Minister for approval.

5.0 BOS approval pathway and production of a BDAR

Any development subsequent to re-zoning that would require clearing over 0.25ha will trigger entry into the BOS and require the production of a Biodiversity Assessment Report (BDAR) via application of the Biodiversity Assessment Methodology (BAM). This process will produce a candidate species list that will require survey. A preliminary candidate species list has been produced based off PCTs identified on site from BAM Plots undertaken during the field survey (see **Appendix A**).

The BDAR requires formalised assessment of biodiversity values present within the site (including via vegetation plots, surveys for potentially occurring threatened species, etc.), along with details of efforts made by the proponent to **avoid and minimise vegetation removal** and subsequently minimise impacts upon identified biodiversity (particularly threatened entities). Avoiding and minimising impacts to biodiversity must be clearly demonstrated within future rezoning plans.


Residual impacts are quantified after the avoid and minimise process is applied and, subject to conditions placed upon the proposal by the determining authority, offsets in the form of biodiversity credits that require retirement or purchase are calculated. This is based upon the vegetation type being removed and the threatened species that are likely to be impacted by the proposal.

Disclaimer: While all reasonable care has been taken to ensure the information shown on this map is up to date and accurate, no guarantee is given that the information portrayed is free from error or omission. Please verify the accuracy of all information prior to use.


Legend

 Study Area

 Cadastre

 Hydroline

Survey Effort

 BAM Plot

 BAM Transect

 Flora and Fauna Assessment



0 150 300 m

Note:
1. Boundaries are not survey accurate
2. Do not scale off the plan



AEP

Figure 4 - Survey Effort

Date: June 2024

Location: Rankins Springs 2669, NSW

Client: Carrathool Shire Council

AEP ref: 3359

Disclaimer: While all reasonable care has been taken to ensure the information shown on this map is up to date and accurate, no guarantee is given that the information portrayed is free from error or omission. Please verify the accuracy of all information prior to use.

Study Area

Hydroline

1500m Assessment Buffer

Black Falcon

Grey-crowned Babbler
(eastern subspecies)

Pink Cockatoo

South-eastern Hooded Robin

Southern Whiteface

Speckled Warbler

Spotted Harrier

Superb Parrot

Varied Sittella


N

E

S

W

Note:
1. Boundaries are not survey accurate
2. Do not scale off the plan



AEP

Figure 4 - BioNet Atlas Records

Date: June 2024

Location: Rankin Springs 2669, NSW

AEP ref: 3359

Client: Carrathool Shire Council

6.0 Avoid and Minimise

Sections 7 and 8 of the BAM provides a list of measures that need to be taken into consideration during project planning and design, to minimise impacts upon native vegetation, habitat and other prescribed biodiversity values. One of the overarching principles of the Biodiversity Offset Scheme is to avoid and minimise impacts to biodiversity within the development. At present, there is no detailed guidelines or quantification on what any adequate level of “Avoid & Minimise” is; it is a case-by-case consideration. In this instance, there are a number of factors that will need to be addressed to avoid and minimise impacts on biodiversity values.

Desktop and field assessment found that some areas of the site contain vegetation associated with both State and Federally Listed TECs (PCT 82). Within the site there are areas that appear to be more suitable for potential residential rezoning than others and avoidance of higher environmental value appear to be able to be achieved. Additionally, there is a riparian corridor within the eastern and western portions of the Study Area which will require corresponding VRZs.

Re-zoning will need to consider these features to ensure the impacts of future developments will avoid biodiversity values.

7.0 Serious and Irreversible Impacts

Any impacts upon a species or community listed as a ‘SAIL candidate species’ must be assessed for significance and, if deemed to be a SAIL, the decision maker cannot legally grant. This assessment is undertaken in light of any avoid and minimise measures that have been developed.

At this stage, no candidate species generated from the BAM- Calculator or vegetation communities found on site are SAIL candidate species. The likelihood of SAIL as a result of future rezoning is considered **very low**.

8.0 Approval Pathway Key Considerations

This assessment provides a broad overview of potential site constraints for the area considered for rezoning including:

- The re-zoning proposal must take into consideration ecological constraints, such as the presence of threatened ecological communities and riparian areas.
- Future development resulting from rezoning will likely require the production of a BDAR. Species that may require survey are provided in **Appendix A**. Seasonal surveys would be required within survey windows.
- A referral under the EPBC Act would be required if impacts to any EPBC Act listed species or community are proposed; and

We trust this information meets your requirements. Should you require any further details or clarification, please do contact the undersigned.

Kind regards,



Jeremy Burrill
Ecologist / Project Manager
0487 154 036
Anderson Environment & Planning

Appendix A - Preliminary Candidate Species List

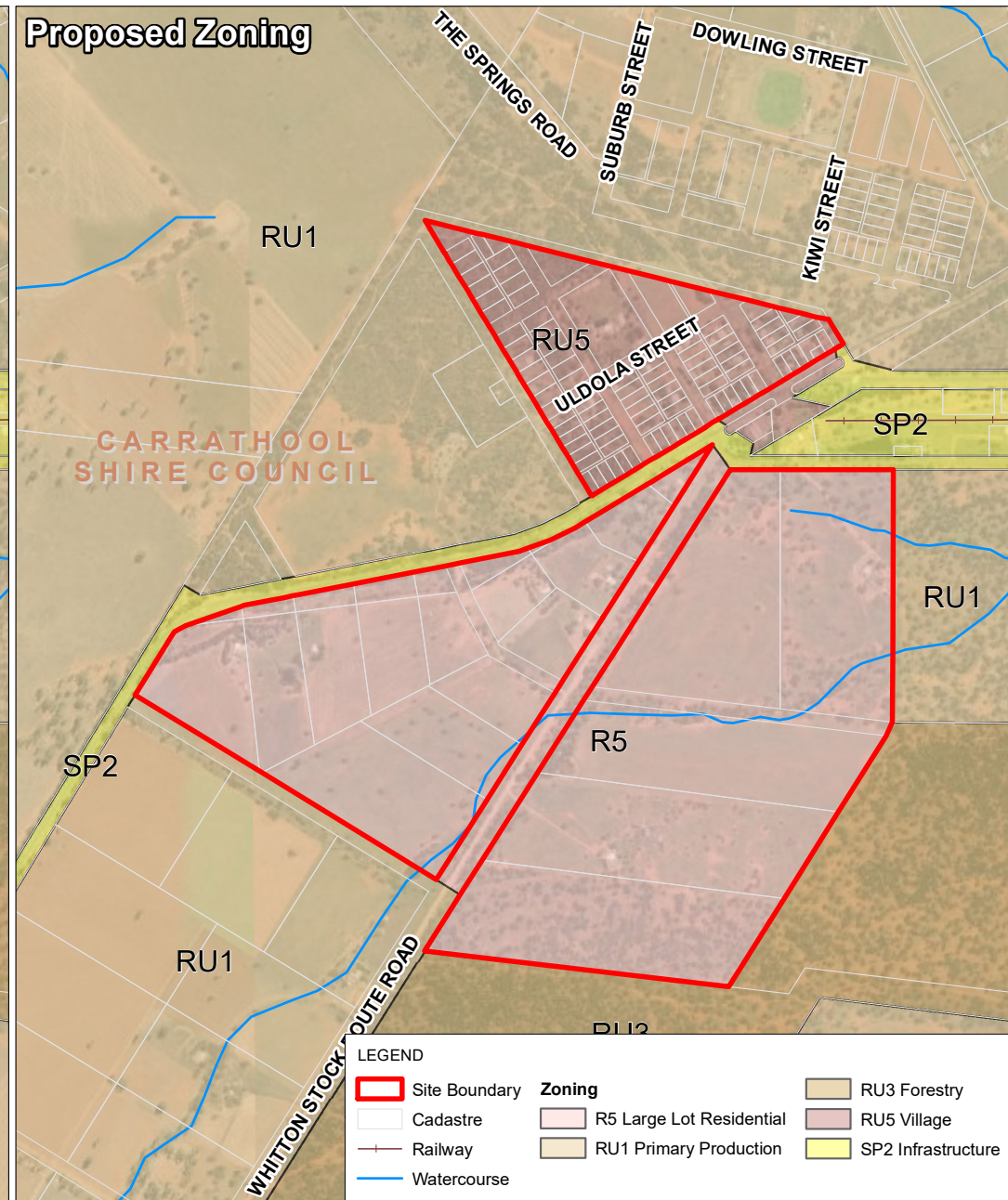
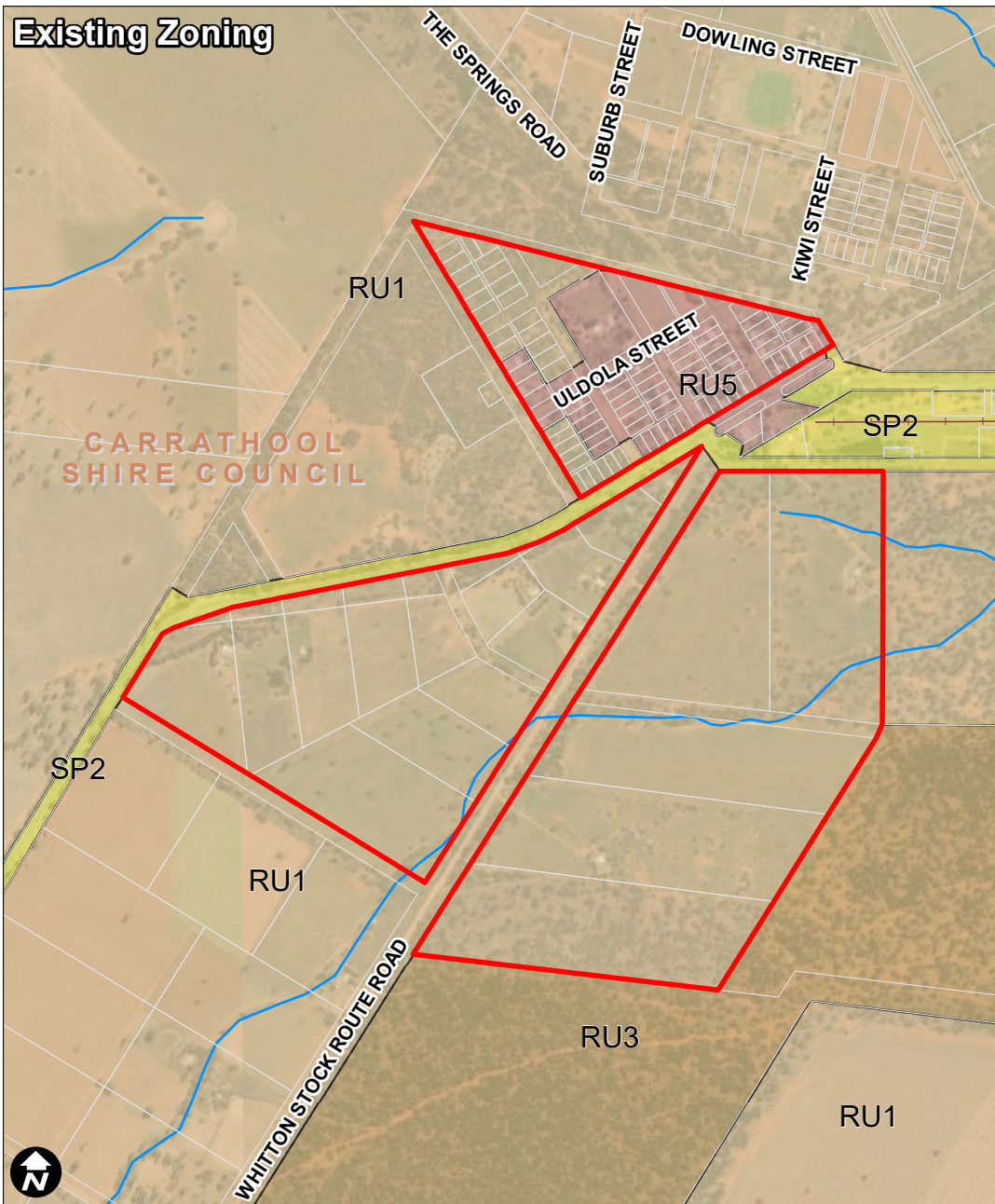
Preliminary Candidate Species List

A candidate species list generated from the BAM-C using BAM plot data collected from the site is outlined in the table below.

Scientific Name	Common Name	Survey Period	Habitat Preference	Likelihood of Occurrence
Flora				
<i>Austrostipa metatoris</i>	A spear-grass	Oct - Nov	Grows in sandy areas of the Murray Valley; habitats include sandhills, sand ridges, undulating plains and flat open mallee country, with red to red-brown clay-loam to sandy-loam soils. Associated species include <i>Eucalyptus populnea</i> , <i>E. intertexta</i> , <i>Callitris glaucophylla</i> , <i>Casuarina cristata</i> , <i>Santalum acuminatum</i> and <i>Dodonaea viscosa</i> .	Likely – no records identified, yet the site does contain suitable habitat.
<i>Austrostipa wakoolica</i>	A spear-grass	Oct – Dec	Grows on floodplains of the Murray River tributaries, habitats include open Cypress Pine Forest on low sandy range; and a low, rocky rise. Associated species include <i>Callitris glaucophylla</i> , <i>Eucalyptus microcarpa</i> , <i>Eucalyptus populnea</i> , <i>Austrostipa eremophila</i> , <i>Austrostipa drummondii</i> , <i>Austrodanthonia eriantha</i> and <i>Einadia nutans</i> .	Moderately Likely - Although no records have been found, the site exhibits suitable habitat, with a large number of associated species present.
<i>Diuris tricolor</i>	Pine Donkey Orchid	Sep - Oct	Disturbance regimes are not known, although the species is usually recorded from disturbed habitats. Associated species include <i>Callitris glaucophylla</i> , <i>Eucalyptus populnea</i> , <i>Eucalyptus intertexta</i> , Ironbark and Acacia shrubland. The understorey is often grassy with herbaceous plants such as Bulbine species.	Moderately likely - The presence of multiple associated species and disturbance in certain areas due to agriculture suggests potential suitability for this species on the site.
<i>Lepidium monoplocoides</i>	Winged Peppergrass	Sep - Dec	Occurs on seasonally moist to waterlogged sites, on heavy fertile soils, with a mean annual rainfall of around 300-500 mm. Predominant vegetation is usually an open woodland dominated by <i>Allocasuarina luehmannii</i> (Bulloak) and/or eucalypts, particularly <i>Eucalyptus largiflorens</i> (Black Box) or <i>Eucalyptus populnea</i> (Poplar Box). The field layer of the surrounding woodland is dominated by tussock grasses. Recorded in a wetland-grassland community comprising <i>Eragrostis australasicus</i> , <i>Agrostis avenacea</i> , <i>Austrodanthonia duttoniana</i> , <i>Homopholis proluta</i> , <i>Myriophyllum crispatum</i> , <i>Utricularia dichotoma</i> and <i>Pycnosorus globosus</i> , on waterlogged grey-brown clay.	Unlikely - While the site predominantly features Poplar Box vegetation, it does not constitute a wetland community and lacks the necessary vegetation.
<i>Swainsona murrayana</i>	Slender Darling Pea	Sep	The species has been collected from clay-based soils, ranging from grey, red and brown cracking clays to red-brown earths and loams. Grows in a variety of vegetation types including bladder saltbush, black box and grassland communities on level plains, floodplains and depressions and is often found with <i>Maireana</i> species. Plants have been found in remnant native grasslands	Unlikely - Despite suitable habitat on site, no species records have been located.
<i>Swainsona sericea</i>	Silky Swainson-pea	Sep - Nov	Found in Natural Temperate Grassland and Snow Gum <i>Eucalyptus pauciflora</i> Woodland on the Monaro. Found in Box-Gum Woodland in the Southern Tablelands and South West Slopes. Sometimes found in association with cypress-pines <i>Callitris</i> spp.	Unlikely - A single BioNet record exists over 5kms northwest from the Study Area. Suitable habitat not present within the Study Area.
Fauna				
Amphibians				
<i>Crinia sloanei</i>	Sloane's Froglet	Jul - Aug	It is typically associated with periodically inundated areas in grassland, woodland and disturbed habitats.	Unlikely – no records, however there is suitable habitat on site with riparian streams.
Aves				
<i>Ardeotis australis</i>	Australian Bustard	All Year	Mainly inhabits tussock and hummock grasslands, though prefers tussock grasses to hummock grasses; also occurs in low shrublands and low open grassy woodlands; occasionally seen in pastoral and cropping country, golf courses and near dams	Unlikely – No records exist within the locality and habitat is not presented within the site.
<i>Burhinus grallarius</i>	Bush Stone-curlew	All Year	Inhabits open forests and woodlands with a sparse grassy ground layer and fallen timber. Nests on the ground in a scrape or small bare patch.	Moderately likely - While it could potentially occur on the site, more suitable habitat for this species is found outside the Study Area, and there are no records indicating its presence near the site.
<i>Calyptorhynchus lathamii</i> - endangered population	Glossy Black-Cockatoo, Riverina population	All Year	In the Riverina, birds are associated with hills and rocky rises supporting Drooping Sheoak, but also recorded in open woodlands dominated by Belah (<i>Casuarina cristata</i>). Dependent on large hollow-bearing eucalypts for nest sites.	Unlikely – There is only one BioNet Record, located over 10km south of the Study Area. Suitable habitat not present with the Study Area.

<i>Climacteris affinis</i> - endangered population	White-browed Treecreeper population in Carrathool local government area south of the Lachlan River and Griffith local government area	All Year	Occurs in a range of semi-arid and arid tall shrublands and woodlands across the southern half of Australia. In NSW, the species occupies a variety of habitats including Mulga, Brigalow, Gidgee, Belah, Buloke and White Cypress. Forage arboreally in shrubs and on tree trunks and branches. It will also feed on the ground through litter and fallen branches and across bare ground.	Moderately likely - The site features suitable foraging habitat, characterised by a white cypress habitat.
<i>Haliaeetus leucogaster</i>	White-bellied Sea-Eagle	Jul - Dec	Habitats are characterised by the presence of large areas of open water including larger rivers, swamps, lakes, and the sea. Terrestrial habitats include coastal dunes, tidal flats, grassland, heathland, woodland, and forest (including rainforest). Breeding habitat consists of mature tall open forest, open forest, tall woodland, and swamp sclerophyll forest close to foraging habitat. Nest trees are typically large emergent eucalypts and often have emergent dead branches or large dead trees nearby which are used as 'guard roosts. Nests are large structures built from sticks and lined with leaves or grass.	Unlikely - A single record of this species exists 10km south of the site. Moreover, there were no substantially large bodies of water nearby, and no large stick nests were identified on the site. More suitable habitat is present elsewhere.
<i>Hamirostra melanosternon</i>	Black-breasted Buzzard	All Year	Lives in a range of inland habitats, especially along timbered watercourses which is the preferred breeding habitat. Also hunts over grasslands and sparsely timbered woodlands. Breeds from August to October near water in a tall tree. The stick nest is large and flat and lined with green leaves	Moderately likely - This species may use the site for hunting and breeding as suitable habitat is present, although no stick nests were identified within the Study Area.
<i>Hieraaetus morphnoides</i>	Little Eagle	Aug - Oct	Occupies open eucalypt forest, woodland or open woodland. Sheoak or Acacia woodlands and riparian woodlands of interior NSW are also used. Nests in tall living trees within a remnant patch, where pairs build a large stick nest in winter.	Unlikely – multiple records exist with the closest over 6kms southeast from the Study Area. While it may utilise the site for hunting, given the availability of more suitable nesting habitat elsewhere, its occurrence is unlikely.
<i>Lophochroa leadbeateri</i>	Major Mitchell's Cockatoo (pink cockatoo)	Sep - Dec	Inhabits a wide range of treed and treeless inland habitats, always within easy reach of water. Feeds mostly on the ground, especially on the seeds of native and exotic melons and on the seeds of species of saltbush, wattles and cypress pines. Nesting, in tree hollows, occurs throughout the second half of the year; nests are at least 1 km apart, with no more than one pair every 30 square kilometres.	Highly Likely - Multiple records indicate its presence within and around the Study Area. The site offers suitable foraging grounds, particularly with the presence of cypress pines.
<i>Lophoictinia isura</i>	Square-tailed Kite	Sep- Jan	Found in a variety of timbered habitats including dry woodlands and open forests. Shows a particular preference for timbered watercourses. In arid north-western NSW, has been observed in stony country with a ground cover of chenopods and grasses, open acacia scrub and patches of low open eucalypt woodland. Breeding is from July to February, with nest sites generally located along or near watercourses, in a fork or on large horizontal limbs.	Unlikely - No records found, with more suitable habitat located outside the Study Area.
<i>Polytelis swainsonii</i>	Superb Parrot	Sep - Nov	In the Riverina Superb Parrots nest in the hollows of large trees (dead or alive) mainly in tall riparian River Red Gum Forest or woodland. Superb Parrots nest in tree hollows with an entrance diameter of 6 cm or wider, and that are at least 3.5 m above the ground. May forage up to 10 km from nesting sites, primarily in grassy box woodland.	Likely - Multiple records indicate its presence within and around the Study Area. Suitable hollows found on site suggest potential utilisation for foraging.

Appendix B – Proposed Rezoning Plan



LEGEND

Site Boundary	Zoning	RU3 Forestry
Cadastre	R5 Large Lot Residential	RU5 Village
Railway	RU1 Primary Production	SP2 Infrastructure
Watercourse		

Date Drawn: 12-Apr-2023
Project Number: 631.30921.00000



Data Source: Basedata NSW SS, 2022
Aerial imagery - 2021, Esri, Maxar, Earthstar Geographics, and the GIS User Community
NSW environmental planning instrument (EPI) © State Government of NSW and
Department of Planning and Environment 2022

ZONING PLAN
Rankins Springs

FIGURE 10

Appendix C - BOSET Report

Biodiversity Values Map and Threshold Report

This report is generated using the Biodiversity Values Map and Threshold (BMAT) tool. The BMAT tool is used by proponents to supply evidence to your local council to determine whether or not a Biodiversity Development Assessment Report (BDAR) is required under [the Biodiversity Conservation Regulation 2017 \(Cl. 7.2 & 7.3\)](#).

The report provides results for the proposed development footprint area identified by the user and displayed within the blue boundary on the map.

There are two pathways for determining whether a BDAR is required for the proposed development:

1. Is there Biodiversity Values Mapping?
2. Is the 'clearing of native vegetation area threshold' exceeded?

Biodiversity Values Map and Threshold Report

Date of Report Generation		07/06/2024 2:00 PM
1. Biodiversity Values (BV) Map - Results Summary (Biodiversity Conservation Regulation Section 7.3)		
1.1	Does the development Footprint intersect with BV mapping?	no
1.2	Was <u>ALL</u> BV Mapping within the development footprint added in the last 90 days? (dark purple mapping only, no light purple mapping present)	no
1.3	Date of expiry of dark purple 90 day mapping	N/A
1.4	Is the Biodiversity Values Map threshold exceeded?	no
2. Area Clearing Threshold - Results Summary (Biodiversity Conservation Regulation Section 7.2)		
2.1	Size of the development or clearing footprint	1,545,333.8 sqm
2.2	Native Vegetation Area Clearing Estimate (NVACE) (within development/clearing footprint)	731,205.5 sqm
2.3	Method for determining Minimum Lot Size	LEP
2.4	Minimum Lot Size (10,000sqm = 1ha)	4,000 sqm
2.5	Area Clearing Threshold (10,000sqm = 1ha)	2,500 sqm
2.6	Does the estimate exceed the Area Clearing Threshold? (NVACE results are an estimate and can be reviewed using the Guidance)	yes
REPORT RESULT: Is the Biodiversity Offset Scheme (BOS) Threshold exceeded for the proposed development footprint area? (Your local council will determine if a BDAR is required)		yes

What do I do with this report?

- If the result above indicates the BOS Threshold has been exceeded, your local council may require a Biodiversity Development Assessment Report with your development application. Seek further advice from Council. An accredited assessor can apply the Biodiversity Assessment Method and prepare a BDAR for you. For a list of accredited assessors go to: <https://customer.lmbc.nsw.gov.au/assessment/AccreditedAssessor>.
- If the result above indicates the BOS Threshold has not been exceeded, you may not require a Biodiversity Development Assessment Report. This BMAT report can be provided to Council to support your development application. Council can advise how the area clearing threshold results should be considered. Council will review these results and make a determination if a BDAR is required. Council may ask you to review the area clearing threshold results. You may also be required to assess whether the development is “likely to significantly affect threatened species” as determined under the test in Section 7.3 of the *Biodiversity Conservation Act 2016*.
- If a BDAR is not required by Council, you may still require a permit to clear vegetation from your local council.
- If all Biodiversity Values mapping within your development footprint was less than 90 days old, i.e. areas are displayed as dark purple on the BV map, a BDAR may not be required if your Development Application is submitted within that 90 day period. Any BV mapping less than 90 days old on this report will expire on the date provided in Line item 1.3 above.

For more detailed advice about actions required, refer to the Interpreting the evaluation report section of the [Biodiversity Values Map Threshold Tool User Guide](#) .

Review Options:

- If you believe the Biodiversity Values mapping is incorrect please refer to our [BV Map Review webpage](#) for further information.
- If you or Council disagree with the area clearing threshold estimate results from the NVACE in Line Item 2.6 above (i.e. area of Native Vegetation within the Development footprint proposed to be cleared), review the results using the [Guide for reviewing area clearing threshold results from the BMAT Tool](#).

Acknowledgement

I, as the applicant for this development, submit that I have correctly depicted the area that will be impacted or likely to be impacted as a result of the proposed development.

Signature: _____

(Typing your name in the signature field will be considered as your signature for the purposes of this form)

Date: _____

07/06/2024 02:00 PM

Biodiversity Values Map and Threshold Tool

The Biodiversity Values (BV) Map and Threshold Tool identifies land with high biodiversity value, particularly sensitive to impacts from development and clearing.

The BV map forms part of the Biodiversity Offsets Scheme threshold, which is one of the factors for determining whether the Scheme applies to a clearing or development proposal. You have used the Threshold Tool in the map viewer to generate this BV Threshold Report for your nominated area. This report calculates results for your proposed development footprint and indicates whether Council may require you to engage an accredited assessor to prepare a Biodiversity Development Assessment Report (BDAR) for your development.

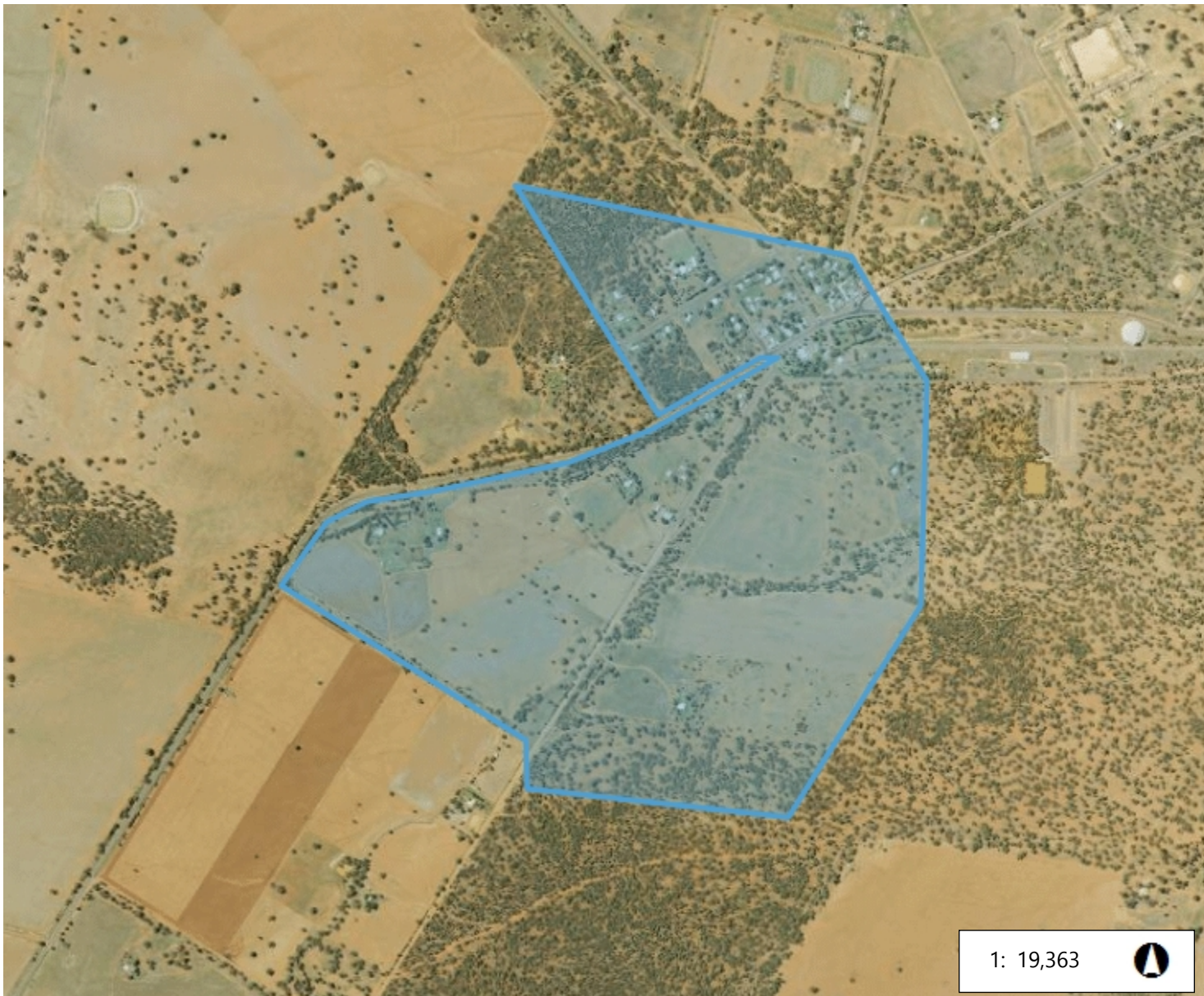
This report may be used as evidence for development applications submitted to councils. You may also use this report when considering native vegetation clearing under the State Environmental Planning Policy (Biodiversity and Conservation) 2021 - Chapter 2 vegetation in non-rural areas.

What's new? For more information about the latest updates to the Biodiversity Values Map and Threshold Tool go to the updates section on the [Biodiversity Values Map webpage](#).

Map Review: Landholders can request a review of the BV Map where they consider there is an error in the mapping on their property. For more information about the map review process and an application form for a review go to the [Biodiversity Values Map Review webpage](#).

If you need help using this map tool see our [Biodiversity Values Map and Threshold Tool User Guide](#) or contact the Map Review Team at map.review@environment.nsw.gov.au or on 1800 001 490.





Biodiversity Values Map



983.7 0 491.83 983.7 Metres

WGS_1984_Web_Mercator_Auxiliary_Sphere

Legend

-  Biodiversity Values that have been mapped for more than 90 days
-  Biodiversity Values added within last 90 days
-  Native Vegetation Area Clearing Estimate (NVACE)
-  Development area selected by proponent

07/06/2024 02:00 PM

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

Imagery © Airbus DS/Spot Image 2016

© NSW Department of Customer Service, Basemaps 2019

© NSW Department of Planning and Environment

The results provided in this tool are generated using the best available mapping and knowledge of species habitat requirements.

This map is valid as at the date the report was generated. Checking the [Biodiversity Values Map viewer](#) for mapping updates is recommended.

Appendix D – Site Photographs



**Above: Stag tree located within native vegetation.
Below: Rankin Springs township.**





Above: BAM Plot within PCT 82.
Below: BAM Plot with exotic grassland.





Appendix C Bushfire Threat Assessment

Planning Proposal

Rezoning and Minimum Lot Size Rankins Springs

Carrathool Council

SLR Project No.: 631.30921.00000-R01



AEP

BIODIVERSITY | BUSHFIRE | ARBORICULTURE

NEWCASTLE SYDNEY

Bushfire Threat Assessment

Rankin Springs Planning Proposal, NSW



**Prepared for: Carrathool Shire Council C/- SLR
Consulting Australia Pty Ltd**

6 June 2024

AEP Ref: 3359

Revision: 01

Newcastle | Sydney

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Document Control

Document Name	Bushfire Threat Assessment for Rankin Springs Planning Proposal, NSW
Project Number	3359
Client Name	Carrathool Shire Council C/- SLR Consulting Australia Pty Ltd
AEP Project Team	Chris Wark Joelan Sawyer Alana Guest

Revision

Revision	Date	Author	Reviewed	Approved
01	6/06/24	Alana Guest	Chris Wark	Chris Wark

Distribution

Revision	Date	Name	Organisation
01	6/06/24	Jason Nicholson	Carrathool Shire Council

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Appendix

- Appendix A – Rankin Springs Precinct Boundary Photos
- Appendix B – CVs

1.0 Introduction

Anderson Environment & Planning was commissioned by Carrathool Shire Council (the proponent) courtesy of SLR Consulting Australia Pty Ltd to undertake a Bushfire Threat Assessment (BTA) to inform a Planning Proposal to rezone land within Rankin Springs.

The Planning Proposal will be assessed as per Division 3.2 of the Environmental Planning and Assessment Act 1979 (EP&A Act). As a result, Section 3.18 requires concurrence from the Rural Fire Service (RFS) to enable the planning proposal to proceed on Bushfire Prone Land. This report addresses the required heads of consideration relevant to obtaining concurrence from the RFS.

This report is specifically intended to assess the bushfire protection measures required by “Planning for Bushfire Protection 2019” (PBP) to provide direction for future development planning within the site.

For the purposes of referencing, this document should be referred to as:

Anderson Environment & Planning (2024). *Bushfire Threat Assessment Planning Proposal at Rankin Springs Planning Proposal, NSW*. Unpublished report for Carrathool Shire Council, June 2024.

2.0 Site Particulars

Table 1 – Site Particulars

Detail	Comments
Client	Carrathool Shire Council C/- SLR Consulting Australia Pty Ltd
Address	Rankin Springs, NSW
Title(s)	Lots 1-12/29/DP758868, Lot 1 DP909445, Lots 1 - 12/26/DP758868, Lot 1/27/DP758868, Lot 7306 DP1154199, Lots 1 – 18/18/DP758868 Lots 1 – 18/17/DP758868, Lots 1 – 18/16/DP758868, Lots 1 – 14/15/DP758868 Lots 26 – 37/DP751690, Lots 84 – 90 DP 751690, Lot 112 DP751690 Lots 98 – 102 DP571690
Subject Site	The Subject Site also known as the Planning Proposal Boundary comprises of all the lots listed above (refer Figures 1 & 2).
Study Area	The Study Area includes the Subject Site, the 100m slope assessment buffer, and the 140m vegetation assessment buffer (refer Figure 4).
LGA	Carrathool Shire
Zoning	RU1 – Primary Production RU5 - Village
Current Land Use	The site serves multiple purposes, including residential and commercial infrastructure, as well as featuring numerous vacant lots. Essentially encompassing the functions of a small town.
Surrounding Land Use	The Planning Proposal Boundary is bounded to the north, west and south west by land zoned as RU1 – Primary Production. To the east, land is categorised as RU3 – Forestry. To the north east land is zoned as SP2 – Classified Road and SP2 – Rail Facilities.
Regional Vegetation	State Vegetation Mapping (SVTM 2023) identified vegetation within the Subject Site as: <ul style="list-style-type: none"> • PCT 82 - <i>Western Grey Box - Poplar Box - White Cypress Pine tall woodland on red loams mainly of the eastern Cobar Peneplain Bioregion</i> • PCT 105 - <i>Poplar Box grassy woodland on flats mainly in the Cobar Peneplain Bioregion and Murray Darling Depression Bioregion</i> • Non-native vegetation.
Riparian Areas	Several mapped dams occur within the Subject Site. Additionally a mapped 3 rd order and 1 st order stream occur within the east and south west of the site.

Figure 1 depicts the extent of the Rankin Springs Planning Proposal overlain on an aerial photograph of the locality.

3.0 Proposed Development





The proposal is seeking to progress a rezoning process for the developable lands.

Figure 2 depicts the plan of proposed rezoning within the Planning Proposal Boundary.

Disclaimer: While all reasonable care has been taken to ensure the information shown on this map is up to date and accurate, no guarantee is given that the information portrayed is free from error or omission. Please verify the accuracy of all information prior to use.

Rankins
Springs

Legend

-  Subject Site
-  Cadastre
-  Hydroarea
-  Hydroline



Note:
1. Boundaries are not survey accurate
2. Do not scale off this plan



AEP

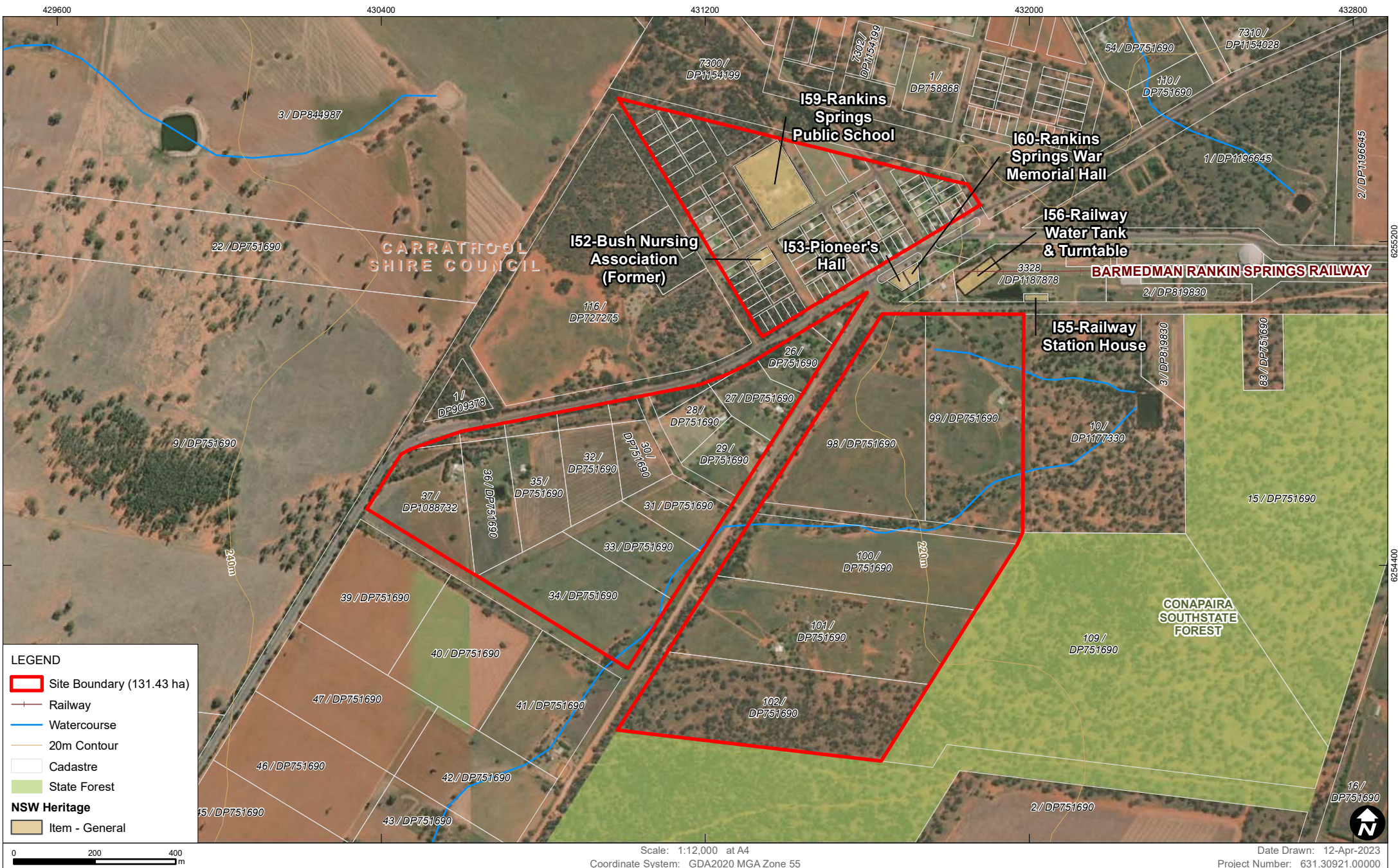
Figure 1 - Site Location

Location: Rankin Springs, NSW

Client: Carrathool Shire Council

Date: May 2024

AEP Ref: 3359



4.0 Bushfire Hazard Assessment

4.1 Bushfire Prone Land Mapping

Examination of the Bushfire Prone Land (BPL) Mapping (NSW Planning Portal) confirms that parts of the site are mapped as “Vegetation Category 1” and “Vegetation Buffer” as shown in **Figure 3**. This designation has triggered the need for this assessment as part of the Planning Proposal submission.

4.2 Vegetation and Slope Analysis

The Rankin Springs Planning Proposal and surrounds occur within the Carrathool Shire, with existing vegetation subsequently classified with a Fire Danger Index (FDI) of 80 as NSW Rural Fire Service (2017) NSW Local Government Areas FDI.

Vegetation present within the 140m surrounding the Planning Proposal Boundary and slope assessment under hazard vegetation within 100m of the Planning Proposal Boundary are shown in **Table 2** and **Figure 4**.

Asset Protection Zones (APZ) have been provided in the table below for residential purposes to correspond with Bushfire Attack Level (BAL) BAL – 29. An existing primary school (Rankin Springs Primary School) is located in the north of the Subject Site. As such, Special Fire Protection Purpose (SFPP) APZ has been assessed for any other development that requires special protection, which occurs when the occupants of the building may be more vulnerable to bushfire attack and may require extra consideration (e.g., schools, child care centres, hospitals etc.).

Table 2 – Hazard Vegetation and Slope Assessment

Aspect	Hazard Vegetation (140m)	Slope (100m)	Residential APZ (m)	SFPP APZ (m)
North	Woodland	Upslope/flat	11	42
North	Managed Rural Land	N/A	N/A	N/A
North East	Woodland	Upslope/flat	11	42
North East	Managed Rural land / Infrastructure	N/A	N/A	N/A
East	Woodland	Upslope/flat	11	42
South	Woodland	Upslope/flat	11	42
South East	Woodland	Upslope/flat	11	42
South West	Grassland	Upslope/flat	10	36
South West	Woodland	Upslope/flat	11	42
West	Woodland	Upslope/flat	11	42
West	Managed Rural land	N/A	N/A	N/A
North West	Woodland then Managed Rural Land	Upslope/flat	11	42


Appendix A contains photos showing the vegetation types within the 140m vegetation assessment buffer around the Planning Proposal Boundary.

Disclaimer: While all reasonable care has been taken to ensure the information shown on this map is up to date and accurate, no guarantee is given that the information portrayed is free from error or omission. Please verify the accuracy of all information prior to use.


Rankins
Springs

Legend

 Subject Site

 Cadastre

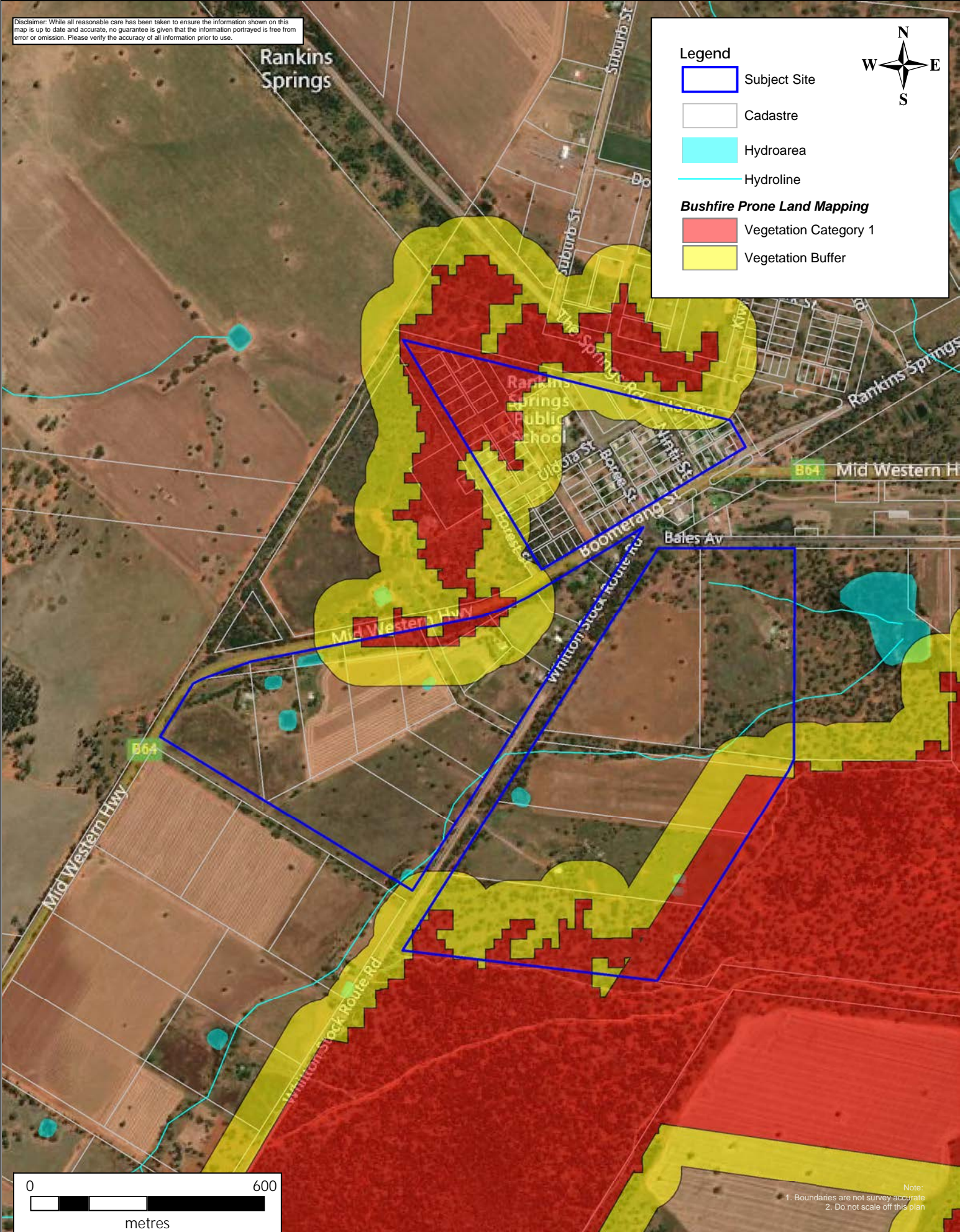
 Hydroarea

 Hydroline

Bushfire Prone Land Mapping

 Vegetation Category 1

 Vegetation Buffer



0 600
metres

Note:
1. Boundaries are not survey accurate
2. Do not scale off this plan



AEP

Figure 3 - Bushfire Prone Land Map

Location: Rankin Springs, NSW

Client: Carrathool Shire Council

Date: May 2024

AEP Ref: 3359

4.3 Planning for Bushfire Protection 2019

Planning for Bush Fire Protection 2019 aims to provide an assessment and review process for proposed development within NSW on land identified as bush fire prone to minimise the risk of bush fires to life and property.

Section 4.2 and Table 4.2.1 within the PBP (2019) outline the bush fires issues and assessment considerations for a strategic development proposal. **Table 3** outlines these components and assessment as relates to the Planning Proposal Boundary.

Table 3 - Bushfire Issues and Strategic Assessment

Issue	Detail	PBP 2019 Considerations	AEP Assessment
Bush fire landscape assessment	A Bush fire landscape assessment considers the likelihood of a bush fire, its potential severity and intensity and the potential impact on life and property in the context of the broader surrounding landscape.	The bush fire hazard in the surrounding area, including: <ul style="list-style-type: none"> • Vegetation • Topography • Weather 	<p>The site and surrounds occur within the Carrathool Shire, with existing vegetation subsequently classified with a Fire Danger Index (FDI) of 80.</p> <p>All retained on-site vegetation associated with the VRZ protection area and other vegetation within 140m of the site has been subject to this assessment as per PBP guidelines:</p> <ul style="list-style-type: none"> • North-west, west, north and south-west – Managed Rural Land • South, south-east, east, north-east, north, north-west, west and south-west – Woodland • South-west and north-east – Grassland
		The potential fire behaviour that might be generated based on the above.	Canopy fire may occur in the retained land to the north, east, south east, south and west.
		Any history of bush fire in the area.	The most recent wildfire occurred in 2008, approx. 15km north of the Subject Site. There is additional fire history located within the Cocopara Nature Reserve approx. 15km south, the most recent of which occurred in 2007, all other bushfires in the area are over 20 years old.
		Potential fire runs into the site and the intensity of such fire runs.	A canopy fire is most likely to occur from the south, south-east and east while the fire run from the north and north-east is likely to be limited by other development. Grass fires could occur from the west and south west.
		The difficulty in accessing and suppressing a fire, the continuity of bush fire hazards or the fragmentation of landscape fuels and the complexity of the associated terrain.	<p>The proposal has ample space to provide the required APZs, perimeter roads and hydrants.</p> <p>The closest fire station to the Subject Site is the Fire and Rescue NSW Yenda Fire Station located 60km south (40 minutes) followed by the NSW Rural Fire Service in Griffith approx. 63km (45 minutes) south.</p>
Land use assessment	The land use assessment will identify the most	The risk profile of different areas of the development layout based on the above landscape study.	Slope Analysis

Issue	Detail	PBP 2019 Considerations	AEP Assessment
	appropriate locations within the masterplan area or site layout for the proposed land uses.		<p>From the map presented in Figure 4, it is apparent that the site is predominantly flat in all directions. Examination of slope class to relevant hazard areas reveals:</p> <ul style="list-style-type: none"> • North – upslope/flat • East – upslope/flat • South – upslope/flat • West – upslope/flat <p>Asset Protection Zones</p> <p>Asset Protection Zones (APZs) for this site are provided above in Table 2. Required APZs for residential development and special fire protection development are included for this proposal. APZs are to be managed as Inner Protection Areas (IPAs) with management summarised below (refer to PBP 2019 for detailed management).</p> <ul style="list-style-type: none"> • up to 15% canopy cover; • 2-5m minimum canopy separation; • no shrubs at the base of trees; • shrub cover under 10%; and • grasses kept to no more than 100mm in height.
		The proposed land use zones and permitted uses.	Given the above assessment the proposed large lot residential and village zoning is deemed suitable within the Planning Proposal Boundary.
		The most appropriate siting of different land uses based on risk profiles within the site (i.e., not locating development on ridge tops).	The risk profile throughout the site is fairly similar. Rankin's Springs Public school is already present and the fire risk to the school will be decreased by the development due to the removal of hazard vegetation. Other areas within the proposed rezoning are generally uniform in nature. There is potential for a riparian area to be present through the middle of the eastern rezoning block though this is likely to increase risk to a minimal extent given the likely large lots in that location.
		The impact of the siting of these uses on APZ provision.	APZ provision is unlikely to be affected given the large lot zoning (R5) proposed around the riparian area. All other areas have proposed roads around the areas proposed for

Issue	Detail	PBP 2019 Considerations	AEP Assessment
			residential lots which, should contain most of the required APZ.
Access and egress	A study of the existing and proposed road networks both within and external to the masterplan area or site layout.	The capacity for the proposed road network to deal with evacuating residents and responding emergency services, based on the existing and proposed community profile.	<p>Future development would be serviced via the existing accessways including Mid-Western Highway, Boomerang Street, Bales Avenue, Forest Street and Whitton Stock Route Road. It is likely that a number of these roads would require upgrading to meet the standards required by the RFS for public roads.</p> <p>As per Figure 2 shows there is adequate area for perimeter roads to provide the 8m wide carriage way required, along with any additional area for parking etc outside of the carriageway width.</p> <p>The Subject Site is of sufficient size to provide suitable refuge areas in the event of a catastrophic fire / event.</p> <p>Future, specific development applications (DA) within the Subject Site will be assessed by the RFS to ensure suitable emergency evacuation procedures can be catered for.</p> <p>Where required, at DA stage, emergency evacuation plans with associated refuge points within and outside the Subject Site should be prepared in accordance with Rural Fire Services Emergency Evacuation Guidelines.</p>
		The location of key access routes and direction of travel.	The Midwestern Highway would provide the key access point through the development, while additional roads would require upgrading to allow them to act as suitable access roads.
		The potential for development to be isolated in the event of a bush fire.	Given the likely number of road connections into and out of the precinct it is unlikely that in the event of a fire the Planning Proposal Boundary would become isolated.
Emergency services	An assessment of the future impact of new development on emergency services.	Consideration of the increase in demand for emergency services responding to a bush fire emergency including the need for new stations/ brigades.	The Subject Site is located approximately 40 minutes away from the nearest local fire station, and given the likely increase in residents it has been determined that the planning proposal to rezone the land would increase the demand on fire vehicles and emergency timeframes.
		Impact on the ability of emergency services to carry out fire suppression in a bush fire emergency.	There is ample space for the site to be accessed via a perimeter road, therefore it has been determined that this

Issue	Detail	PBP 2019 Considerations	AEP Assessment
			would provide suitable access to undertake suppression activities if required.
Infrastructure	An assessment of the issues associated with infrastructure and utilities.	The ability of the reticulated water system to deal with a major bush fire event in terms of pressures, flows, and spacing of hydrants.	It is expected that future development would be serviced by a reticulated water supply system extended from existing and proposed residential areas. The reticulated water supply and street hydrant access will need to be delivered in accordance with AS 2419.1–2021.
		Life safety issues associated with fire and proximity to high voltage power lines, natural gas supply lines etc.	It is expected that power lines would be installed underground in road reserves.
Adjoining land	The impact of new development on adjoining landowners and their ability to undertake bush fire management.	Consideration of the implications of a change in land use on adjoining land including increased pressure on BPMs through the implementation of Bush Fire Management Plans.	The planning proposal is likely to reduce the risk of bushfire to the adjoining land, given the area proposed for residential zoned land will be managed, therefore, reducing the risk of grass fires into the adjoining residential development to the north.

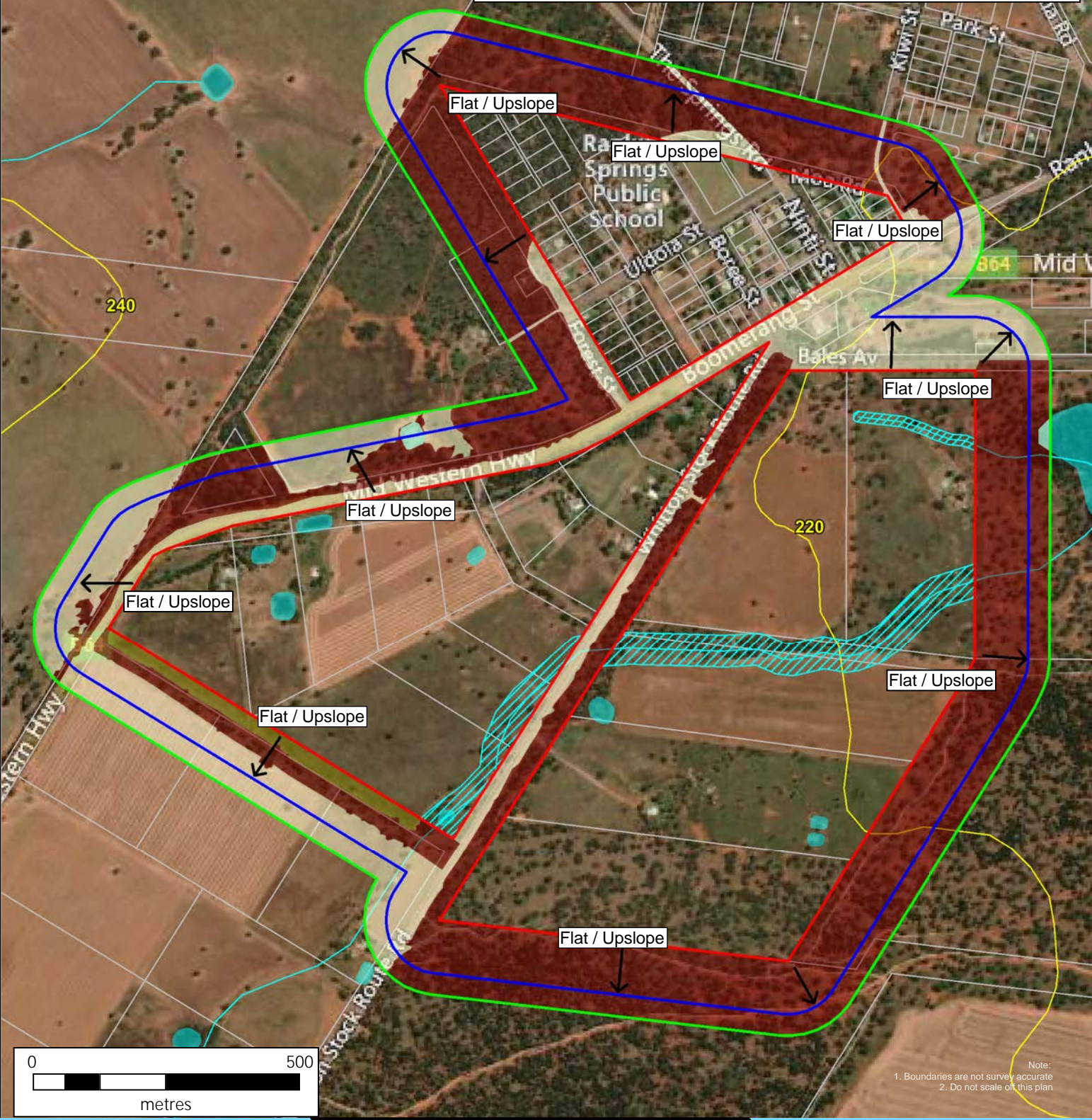
Disclaimer: While all reasonable care has been taken to ensure the information shown on this map is up to date and accurate, no guarantee is given that the information portrayed is free from error or omission. Please verify the accuracy of all information prior to use.

Legend

- Subject Site
- Cadastre
- Hydroarea
- Hydroline
- 140m Hazard Vegetation Assessment
- 100m Slope Assessment








Hazard Vegetation

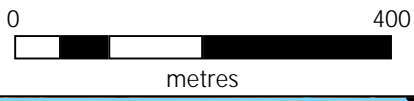
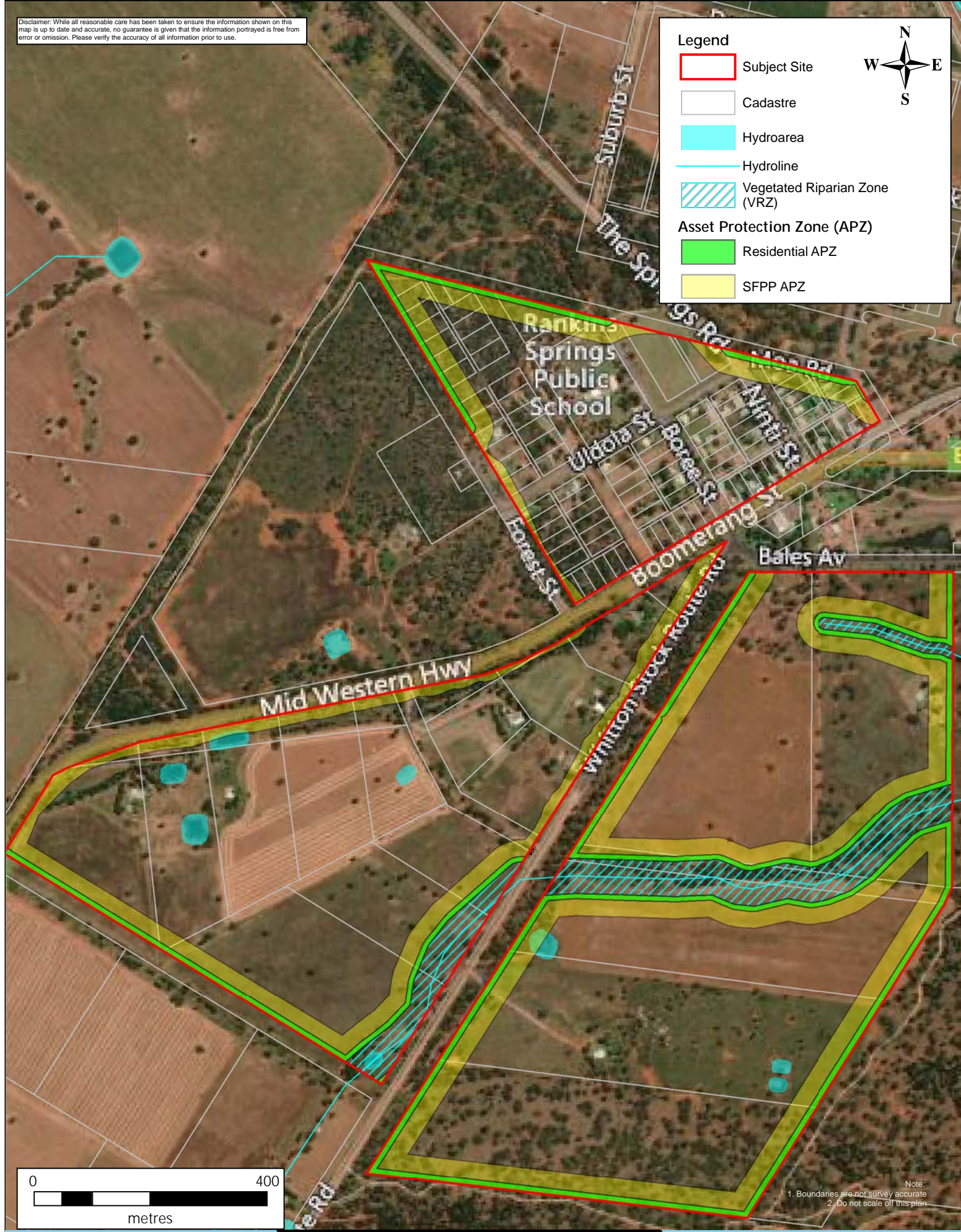
- Woodland Hazard
- Grassland Hazard
- Managed Grassland / Infrastructure
- Vegetated Riparian Zone (VRZ)



Disclaimer: While all reasonable care has been taken to ensure the information shown on this map is up to date and accurate, no guarantee is given that the information portrayed is free from error or omission. Please verify the accuracy of all information prior to use.

Legend

-  Subject Site
-  Cadastre
-  Hydroarea
-  Hydroline
-  Vegetated Riparian Zone (VRZ)
- Asset Protection Zone (APZ)**
 -  Residential APZ
 -  SFPP APZ



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Figure 5 - Residential and SFPP APZs

Location: Rankin Springs, NSW

Client: Carrathool Shire Council

Date: May 2024

AEP Ref: 3359

5.0 Other Considerations

The following analysis applied to the Planning Proposal Boundary in reference to environmental features present.

Table 4 – Other Site Constraints

Item	Comments
Riparian Corridors	Two hydrolines have been ground-truthed and a 30m and 10m Vegetated Riparian Zone (VRZ) have been applied for the land subject to the Planning Proposal. The hazard vegetation is associated with parts of the riparian corridors that would be protected and potentially regenerated.
State Environmental Planning Policy (Resilience and Hazards) 2021	N/A
State Environmental Planning Policy (Biodiversity Conservation) 2021	A Preliminary Biodiversity Report accompanies this BTA
Areas of geological interest	None present.
Environmental protection zones or steep lands (>18°)	No environmental protection zones or steep lands have been identified within proximity to the Planning Proposal Boundary.
Land slip or flood prone areas	None present.
National Parks estate or various other reserves	Planning Proposal Boundary is not located in proximity to National Parks or other reserves.
Threatened species matters	A Preliminary Biodiversity Report accompanies this BTA
Aboriginal Heritage	None known to be present.

5.1 Bush Fire Emergency Management

Although the Planning Proposal is not at the detailed design phase, consideration also needs to be applied Bush Fire Emergency Management and how the proposal has considered principles, strategies and outcomes that could be considered or adopted in the event of a catastrophic bushfire event.

Understanding bushfires and potential hazards requires planning and consideration of hazard vegetation, slopes and fire behaviour, these elements have been reviewed above. The development of Planning Proposal generally requires the preparation of a Chapter within the Councils Development Control Plan, specifically for the Subject Site. To ensure the land within the Subject Site can be managed appropriately in the event of any level of bush fire from low hazard Advice to catastrophic the following key items which need to be incorporated within the DCP are;

- All development must apply appropriate APZs;
- All development within appropriately zoned land will provide perimeter roads and internal roads that meet the requirements of NSW RFS PBP, 2019.
- Prohibit dead ends;
- All developments must provide, or link to, dual access points onto existing public roads to ensure multiple entry and exit points can be used if one or more is blocked in the event of an emergency;
- No perimeter roads or private access roads through forested vegetation.
- Provision of reticulated water to all land within the Subject Site;

- All land zone for residential development must provide building envelopes within lots with a maximum BAL rating of 29.
- Provision of multiple refuge areas within the Study Area within BAL 12.5 or less. It is considered that the proposal has ample space for on-site refuges within the Subject Site and the proposal is in close proximity to the nearby town, where an off-site refuge could be utilised.
- For on-site refuges future DAs would need to consider, but not be limited to;
 - Refuges should be able to accommodate all occupants away from the effects of the bushfire;
 - On-site refuge should be away from bushland and unlikely to be impacted by a bush fire;
 - Refuge buildings should be constructed in such a manner that minimises bush fire attack with appropriate APZs;
 - Refuge buildings should be maintained to ensure there is no combustible material stored near or in close proximity to the building that will increase bushfire risk;
- For off-site refuge future DAs would need to consider;
 - Location;
 - Transportation arrangements to refuge shelters;
 - The time it takes to move occupants from the premises to another location is the MINIMUM time required to evacuate safely. It is recommended that evacuation is used as the primary method.
 - Size and capacity of the refuge; and
 - Availability of a facility nearby.
- Further to this the route towards the refuge would also need to consider transportation routes to ensure that movements are restricted from passing through bush fire affected areas or areas that may be affected by an approaching bushfire;
 - The planning proposal is located within predominantly cleared areas and, as discussed above, should provide suitable APZ, perimeter roads and multiple access and egress points to ensure safe movements to refuge buildings and evacuation in the event of a bush fire;

In addition to the above, as per the Rural Fire Services “Development Planning: A guide to developing a Bush Fire Emergency Management and Evacuation Plan”, key facilities that are likely to require a Bush Fire Emergency Management and Action Plan to ensure safe sheltering and or evacuation in the event of a bush fire emergency are predominantly associated with at risk developments. As per the guidelines;

At risk developments are facilities that regularly have a large number of occupants that may rely on others for their wellbeing or be unfamiliar with the local area. As such a greater degree of planning and coordination is required to ensure occupants safety. In the event of a bush fire, a Bush Fire Emergency Management and Evacuation Plan will outline what actions are to occur and arrangements for relocation.

Key at risk developments that must consider evacuation plans typically include facilities referred to as Special Fire Protection Purpose (SFP) development, which include;

- School;
- Child care centres;
- Hospitals;
- hotel, motel or other tourist accommodation;

- *a building wholly or principally used as a home or other establishment for mentally incapacitated persons;*
- *seniors housing within the meaning of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004;*
- *a group home within the meaning of State Environmental Planning Policy No 9—Group Homes; and*
- *a retirement village.*

Other development types that may need to consider a Bush Fire Emergency Management and Evacuation Plan include commercial/industrial, multiple occupancy (land sharing) and community title estates.

At DA stages it is a requirement that these types of facilities prepare and implement Bush Fire Emergency Management and Actions Plans which would detail specific requirements associated with the safe sheltering and evacuation of these facilities in the event of an emergency.

6.0 Conclusion

Investigations undertaken for this Bushfire Threat Assessment report have revealed that the Planning Proposal will be affected by Woodland vegetation in all directions and Grassland vegetation to the south west.

Required Asset Protection Zones have been derived and applied to the site and assessment has included the likely rehabilitation of the Vegetated Riparian zone for the third and first order stream within the Subject Site. Existing and future hazards associated with the bushland in all directions will result in the need to provide appropriate APZs, with the proposal having adequate space to accommodate the required APZs within the Subject Site. It is considered that the APZ encroachments are unlikely to prohibit a building envelope to be positioned to allow building to BAL-29 standards and SFPP requirements on any proposed lots where the APZ is located noting that there is a school already present.

The Subject Site is of a size that it has space to provide suitable refuge areas in the event of a catastrophic fire / event. Suitable access / egress could be provided off Mid-Western Highway, Boomerang Street, Bales Avenue and via the existing internal road network in the north. Whitton Stock Route Road would also be able to provide a public access road however it and other roads would likely require upgrades to provide suitable access / egress. It is considered that there is nothing that would stop the upgrading of these roads and that when complete access and egress arrangements are appropriate. Given the distance to the nearest Fire Station and the increase in population that would likely result it is recommended that consideration be given to adding a Rural Fire Station or similar to reduce deployment times, which are currently 40+ minutes.

Development applications (DA) within the Study Area will be assessed by the RFS to ensure suitable emergency evacuation procedures can be catered for. Where required, at DA stage emergency evacuation plans with associated refuge points within and outside the Subject Site should be prepared in accordance with Rural Fire Services Emergency Evacuation Guidelines.

A reticulated water supply system from established residential areas is expected to service the site, and street hydrant access will need to be delivered in accordance with AS2419.1 – 2021.

It is considered that the planning proposal has enough area such that any future proposed development could include standard residential or SFPP bushfire protection measures, principally APZs, perimeter roads and relevant construction standards to comply with PBP 2019 and AS 3959. When applied, these measures should provide adequate protection to life and property within any proposed developments in the event of a bushfire occurring in the immediate locality.

As such, it is considered that the Planning Proposal is able to meet the required objectives and principles of PBP 2019. However, it can never be guaranteed that the site and residents and property therein will not at some stage be affected by a bushfire event.

7.0 References

NSW Government (1979). Environment and Planning & Assessment Act 1979. NSW Government, Sydney.

NSW Government (2013). Rural Fires Regulation 2013. NSW Government, Sydney.

NSW Government (2013). Rural Fires Act 1997. NSW Government, Sydney.

NSW Government (2021). Planning Portal. www.planningportal.nsw.gov.au. Accessed May 2024

NSW Government (2023). NSW Rural Fire Service. NSW Government, Sydney.

NSW Office of Environment and Heritage (OEH) (2019). Planning for Bushfire Protection. NSW Rural Fire Service / NSW Department of Planning, Sydney.

Standards Australia (2018) AS-3959 Construction of Buildings in Bushfire-Prone Areas. Standards Australia, Sydney. November 2018

Standards Australia (2021), AS-2419.1:2021 Fire Hydrant Installations – Part 1: System Design, Installation and Commissioning. Standards Australia, September 2021.

Appendix A – Rankin Springs Precinct Boundary Photos



Above: Looking north across managed grassland and woodland.

Below: Looking north-east across sealed roads into managed grassland and woodland.





Above: Looking north-west showing woodland hazard with unsealed road, then managed rural land on far right in distance.

Below: Looking east across woodland hazard.





Above: Looking south east across unsealed road to woodland hazard.

Below: Looking south – woodland hazard with unsealed road access.





Above: Looking south west – looking along Mid Western Highway with managed rural land on left side of the road and woodland hazard on the right.

Below: Looking west – woodland hazard along Mid Western Highway.



Appendix B – CVs

CHRIS WARK

Project Manager

Profile Summary

Chris has been with AEP since 2018 and works as a Senior Ecologist along with managing the Bushfire team within AEP. He has been involved in ecology for the past 15 years both in the UK and Australia undertaking a diverse range of terrestrial fauna surveys. Chris has a detailed knowledge of environmental and bushfire legislation and approvals pathways associated with both.

Chris' special interests and expertise include microbat roost investigations, ultrasonic survey and call identification, camera trapping for cryptic fauna, nocturnal survey of arboreal mammals.

With these skills and interests Chris leads the microbat and bushfire team at AEP and is involved in management of diverse range of projects across AEP including Biodiversity Assessments, Stewardship Site Assessments, Ecological Assessments, Clearing Methods Statements, Management Planning and Bushfire Threat Assessments.

Academic Qualifications

- Graduate Certificate in Bushfire Protection (2023)
- Diploma of Conservation and Land Management (2017)
- Bachelor of Teaching (Secondary School), University of Technology, NSW (2008)
- Bachelor of Science Hons (Ecology and Zoology), University of Sydney (2004)
- Bachelor of Science (Cell Biology and Biochemistry), University of Newcastle (2000)

Training, Licences and Professional Memberships

- NSW Class C Driver's Licence
- QLD WHS General Construction Induction (White Card)
- First Aid (Provide First Aid HLTAID011)
- Advanced Microbat Call Analysis Workshop
- Experienced 4wd operator
- GIS Mapping and training courses (ArcGIS, QGIS and Mapinfo)
- BTO Ringers association - expired
- CIEEM (Chartered Institute of Ecology and Environmental Management) - expired



Professional Experience

Senior Ecologist and Bushfire Manager Anderson Environment & Planning Newcastle NSW	2018 – Present
Ecological Consultant Applied Ecology Ltd Cambridge UK	2013 - 2017
Laboratory and Field Technician Cygnet Potato Breeders Cambridge UK	2012
Secondary School Teacher Taylors College Waterloo Sydney	2009 - 2011
Research Assistant and University Tutor Biological Sciences, University of Sydney Sydney NSW	2005 - 2007

Relevant Project Experience

Ecological Surveys

- Fauna survey including bird and reptile survey, spotlighting, koala habitat and SAT assessment, microbat emergence and return surveys along with transect surveys;
- Trapping and translocation work with mammals, reptiles, and amphibians;
- Camera trapping, acoustic detection, and call playback surveys;
- Vegetation quadrats and transects to identify flora species presence and abundance;
- Targeted vegetation transects for cryptic species;
- Brush-tailed Rock-wallaby habitat survey and macropod scat identification;
- Audio lure surveys including track and carnivore scat identification.

Ecological Assessment

- Fauna survey and identification utilising camera traps and audio technology
- Microbat survey, call analysis and ID
- GIS mapping and analysis
- Land conservation management
- Ecological field survey, covering terrestrial flora and fauna
- Arid zone ecology and feral cat management

Ecological Monitoring

- Ecological field survey, covering terrestrial flora and fauna, to inform the production of Ecological Reports within NSW and the UK;
- Assessment of sites using the Biodiversity Assessment Method (BAM) for the production of Biodiversity Assessment Reports (BDAR);



- Assessment of development proposals against the provisions of the EPBC Act, Koala Plans of Management, SEPP 44 and SEPP Koala Habitat Protection, Coastal Management SEPP and other associated legislative requirements;
- Analysis and reporting of microbat species relating to conservation and development within Australia and the UK.

Additional Project Experience

- Bushfire Threat Assessment analysis and reporting for Subdivision, State Significant Development (SSD), Infill, General residential, Special Fire Protection Purpose and Planning Proposal developments.
- GIS analysis and mapping for ecological reports, bushfire threat assessments, stewardship reporting and monitoring, management planning and development pathway planning and constraints assessment.

ALANA GUEST

Project Lead

Profile Summary

Alana has worked with AEP since 2022 in the role of Ecologist and has gained experience in a variety of environmental work, including targeted flora and fauna field surveys, reporting, and data management. She has competence in wildlife handling of Long-nosed Bandicoots, Bush Rats, and Brown Antechinus including microchipping of said species.

Alana has managed and implemented a Wildlife / Ecological Management Plan at North Head Sanctuary since commencement in November 2023, to monitor threatened species including the Critically Endangered Ecological Community, Eastern Suburbs Banksia Scrub and the Endangered Population of Long-nosed Bandicoots (*Perameles nasuta*). Additionally, she has implemented monitoring of biodiversity and threats at North Head through targeted bird, reptile, amphibian, mammal (including microbats) and invertebrates surveys, and feral predator and bushfire monitoring.

Alana's interest areas include camera trapping for cryptic fauna, targeted fauna trapping surveys of threatened species for population estimates and genetic diversity analysis, microbat call analysis and nocturnal surveys for arboreal mammals, nocturnal birds and amphibians.

Academic Qualifications

- Bachelor of Science, Biology major and Bachelor of Arts, History major and Ancient History minor – University of Newcastle, 2022

Training, Licences and Professional Memberships

- NSW Class C Driver's Licence
- WHS NSW Construction Induction White Card
- First Aid (Provide First Aid HLTAID011)
- CPR (Provide Cardiopulmonary resuscitation HLTAID009)
- Working with Children's Check
- Micro-Workshop: Basics of Bat Calls, 2023
- Australian Association of Bush Regenerators Grass Identification Workshop, 2023
- Bat Call Analysis Workshop: Bat Detection for Beginners & Intermediate/Advanced Call Analysis, 2024
- Microchip Training Workshop (provided by Taronga Zoo's Institute of Science and Learning), 2024

Professional Experience

Ecologist / Project Lead - North Head	2023 – Present
Anderson Environment & Planning Sydney NSW	
Ecologist	2022 – 2023
Anderson Environment & Planning Newcastle NSW	



Relevant Project Experience

Ecological Surveys

- Targeted Long-nosed Bandicoot cage trapping surveys in North Head, Manly in coordination with National Parks and Wildlife Services (NPWS) (2024 - present);
- Targeted Bush Rat, Brown Antechinus and Eastern Pygmy-possum Elliott trapping survey in North Head, Manly (2023 - present);
- Targeted Koala surveys via completion of Spot Analysis Techniques, various sites across NSW (2022 - 2023);
- Targeted threatened orchid and ground cover surveys via 5m transects, various sites across NSW (2022 - 2023);
- Targeted threatened shrub surveys via 10m transects, various sites across NSW (2022 - 2023);
- Targeted threatened tree surveys via 10m transects, various sites across NSW (2022 - 2023);
- Targeted microbat surveys and call analysis via ultrasonic recorders (Anabat), various sites across NSW (2022 - present);
- Camera trapping surveys for ground and arboreal species, various sites across NSW (2022 - present);
- Diurnal bird surveys, various sites across NSW (2022 - present);
- Targeted threatened frog surveys via spotlighting and call playback, various sites across NSW (2022 - present);
- Targeted nocturnal surveys for threatened forest owls via spotlighting, stagwatching, and call playback, various sites across NSW (2022 - 2023);
- Hollow Bearing Tree Assessment, various sites across NSW (2022 - 2023).

Ecological Assessment

- Bushfire Threat Assessment Reports: various sites across NSW (2023 - present);
- Ecological Assessment Reports: various sites across NSW (2022 - 2023);
- Streamlined Biodiversity Development Assessment Reports: various sites in Sydney Region and Newcastle and the Greater Hunter Region (2023);
- Biodiversity Development Assessment Reports: various sites in Central Coast Region, Newcastle and the Greater Hunter Region and Northern Rivers Region (2023).

Ecological Monitoring

- Camera trap monitoring at Biodiversity Stewardship Agreement in Blueys Beach;
- Biodiversity monitoring targeting the Critically Endangered Ecological Community, Eastern Suburbs Banksia Scrub and the Endangered Population of Long-nosed Bandicoots (*Perameles nasuta*) at North Head.

JOELAN SAWYER

Senior Ecologist

Profile Summary

Joelan works with AEP in the Role of Senior Ecologist, Joelan Specialises in botany with experience focused in the Greater Sydney area and along the NSW coastline. He is proficient in performing flora and fauna surveys, plant identification and taxonomy, GIS, and reporting for biodiversity and impact assessments. He also has in-depth knowledge of the NSW legislative pathways, namely the Biodiversity Conservation Act 2016 and the associated Biodiversity Assessment Method (BAM). Joelan is an accredited assessor. Accreditation No. BAAS23016

Academic Qualifications

- Bachelor of Science (Biology), The University of Western Sydney, completed September 2018
- BAM Assessor; accreditation number: BAAS23016.

Training, Licences and Professional Memberships

- NSW Class C Driver's Licence
- WHS NSW Construction Induction White Card
- First Aid (Provide First Aid HLTAID011)

Professional Experience

Senior Ecologist Anderson Environment & Planning Sydney NSW	2023 – Present
Ecologist Anne Clements & Associates	2017 - 2023
Nursery Worker / Horticulturalist Wingham Nursery & Florist	2015 - 2017

Relevant Project Experience

Ecological Surveys

- Flora
 - Targeted surveys for *Dichanthium setosum* in the Hunter Region;
 - Targeted surveys for *Tetratheca glandulosa* and *Hibbertia procumbens* on the Somersby Plateau;
 - Targeted surveys for *Eucalyptus benthamii*, *Dillwynia tenuifolia* and *Grevillia juniperina*, Western Sydney;
 - Targeted surveys for *Genoplesium baueri*, and *Grammitis stenophylla* Northern Sydney;
- Fauna
 - Spot Analysis Techniques surveys: Muswellbrook, Gunnedah, Scone, Bermagui, Blue Mountains, Western Sydney;
 - Targeted surveys for Cumberland Plain Land Snail, Western Sydney;

- Targeted surveys for Broad Headed Snake, Cattai;
- Targeted surveys for Striped Legless Lizard and Pink Tailed Legless Lizard, Muswellbrook;
- Targeted surveys for Green and Golden Bell Frog, Eastern Suburbs, Sydney;
- Bushfire
 - Bushfire vegetation inspection and assessment in accordance with PBP 2019, various sites;
- Arboriculture
 - Waste recycling facility, 120 trees assessed, West Gosford;
 - Industrial development, 140 trees assessed, Stanmore Park;
 - Commercial development, 80 trees assessed, Marsden Park;

Ecological Assessment

- BAM assessment for Biodiversity Development Assessment Reports;
 - Sandstone quarry extension, Cattai;
 - Aged care housing, Bermagui;
 - Residential development, Pleasure Point;
 - Solar Farm, Stubbo;
 - Eco cabins, Colo;
 - Farm building and agricultural infrastructure, Richmond;
 - Mountain bike track, Delrio, Webbs Creek;
 - Aged care housing, Mollymook;
 - Hunter Gas Pipeline project, Hunter region;
- Accredited assessor for Landscaping Material Supply Facility Biodiversity Development Assessment Report, Greendale;
- BAM assessment and PCT for Ecological Assessment Reports;
 - Horse stabling development, Clarendon;
 - Great southern walk accommodation, Illawarra Escarpment;
 - Rezoning for Carrathool Shire Council at Merriwagga and Rankin Springs;
 - Biodiversity assessment of various Sydney Water assets, Greater Sydney;
 - Biodiversity assessment of Newcastle Councils bushland assets, Newcastle;
 - Biodiversity assessment of Penrith Councils assets at St Marys industrial area;

Ecological Monitoring

- Vegetation monitoring on VMP lands;
 - St Narsai Assyrian Christian College, Horsley Park;
 - Residential development, Cooranbong;
 - Sandstone Quarry restoration, Red Hill Reserve, Beacon Hill;
- Publications
 - Sawyer, J. (2021). *Achieving resilient biodiversity offsets on reconstructed landforms* [Poster Presentation]. Ecological Society of Australia 2021 "Symposium: Practitioners collaborating to restore and rewild landscapes" Darwin, Australia



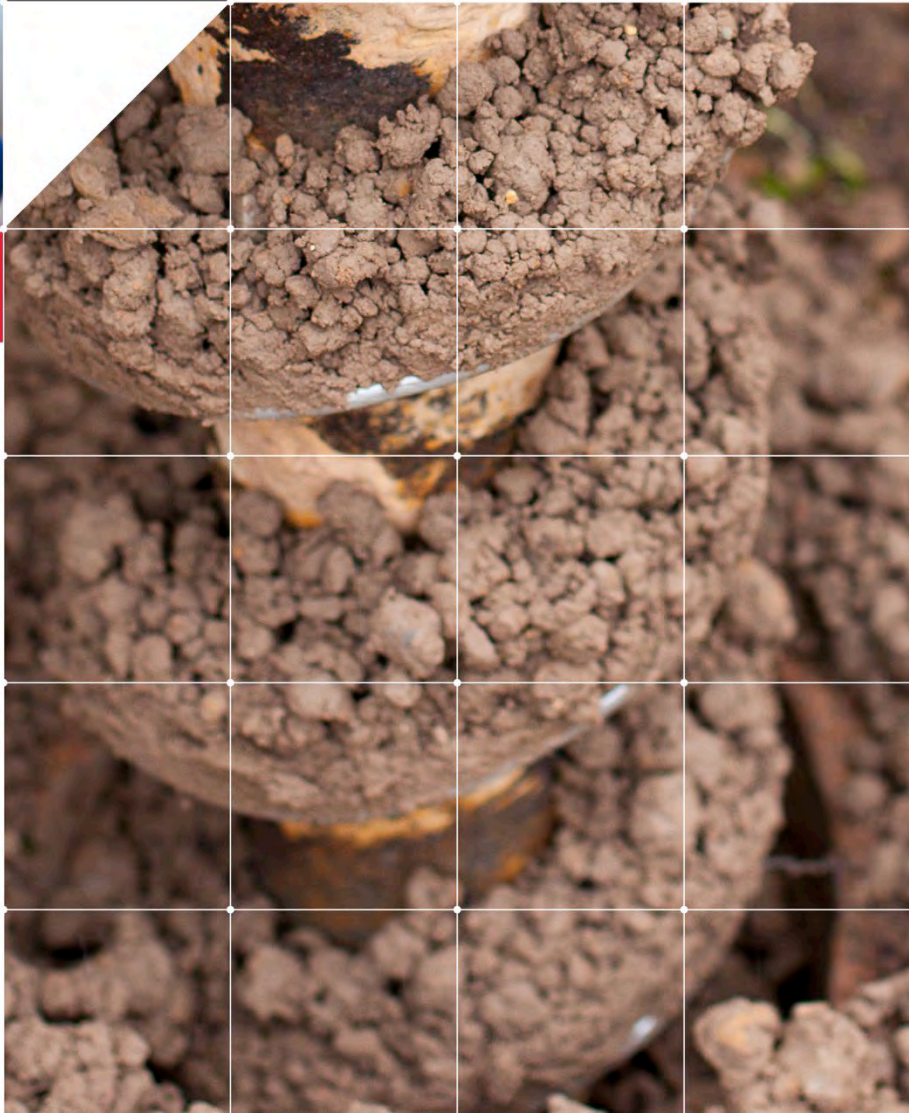
Appendix D Preliminary Site Investigation

Planning Proposal

Rezoning and Minimum Lot Size Rankins Springs

Carrathool Council

SLR Project No.: 631.30921.00000-R01



RANKINS SPRINGS NSW 2669

**PRELIMINARY SITE
INVESTIGATION**

**FOR THE
PROPOSED REZONING OF LAND**

JANUARY 2024

REPORT NO: 9761

DM McMahon Pty Ltd

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Report type

Preliminary Site Investigation
For the proposed rezoning of land

Site address

Rankins Springs NSW 2669

Report number

9761

Prepared for

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1.0 Executive summary

DM McMahon Pty Ltd (McMahon) conducted this Preliminary Site Investigation (PSI) at the request of Carrathool Shire Council for the proposed rezoning of land at Rankins Springs NSW 2669. The rezoning includes specifically amending the existing zoning of RU1 Primary Production and RU5 Village to R5 Large Lot Residential and RU5 Village and amending the minimum lot size from 40ha to 2ha (land south of the highway) and from 40ha/4,000m² to 1,000m² (land north of the highway).

The 135ha rezoning area (the site) began development after construction of the railway line in 1923 with farming blocks offered for sale in 1925. The site currently contains a mix of undeveloped and developed land including buildings of local heritage significance. A map of the site investigated as part of this PSI and the proposed rezoning map can be seen in **Attachment A**.

The issue of potential contamination is required to be considered whenever a planning proposal is presented to a planning authority where the new use may increase risk from contamination if it is present. Therefore, the purpose of this investigation is to provide Carrathool Shire Council and the planning authority with a statement of site suitability for the proposed land use and recommendations for further investigation, assessment, and site management if required.

The scope of work includes:

- A desktop study used to collect basic site information and identify the site characteristics.
- A detailed site inspection to complement the findings of the desktop study and site history and to identify any additional relevant site information.
- From the information collected, develop a conceptual site model detailing the potential contamination source-pathway-receptor linkages.
- Provide a preliminary assessment of site contamination and contaminants of potential concern.
- Conduct a risk assessment for site suitability regarding potential contamination and the proposed development.
- Identify the data gaps in the assessment of site contamination.
- Provide recommendations for further investigation.

Findings of the investigation include:

- The desktop study found the site was developed from 1923 following the completion of the railway line, which terminated in Rankins Springs. Rankin Springs is a small village which services the surrounding area.
- The site inspection complemented the desktop study and found the following sources of potential contamination that may materially affect future development of the site:
 - Potential pesticide residue from agricultural use and weed management.
 - Hazardous building materials in existing houses and services.
 - Hazardous building materials from demolished buildings.
 - Septic systems.

- Fuel storage at the service station and former garages.
 - Fuel and oil leaks and spills from machinery maintenance and repairs.
 - Fill material from an unknown source.
 - Asphalt which may contain coal tar or asbestos.
- A conceptual site model was developed and found the above potential contamination sources can pose a risk to future site users (mainly through dermal contact, ingestion, or inhalation of contaminated fibres, soils and/or vapours during development and occupation) and will require further investigation.
- These potential contamination sources do not preclude the rezoning of the site given further investigation and site management is undertaken during development.
- Based on the findings of the PSI, further investigation and assessment is required as soil contamination is potentially present and the information available is insufficient to enable an appropriate level of risk assessment. Investigations should identify the nature of the potential contamination and delineate its lateral and vertical extent to a sufficient degree that appropriate site management strategies can be devised, if required.

This executive summary and the findings of this PSI are subject to the recommendations in **Section 8.0** and limitations as stated in **Section 9.0**. A protocol for unexpected finds as outlined in **Section 10.0** has also been developed as part of this risk assessment framework if additional potential contamination sources are identified during planning or development.

2.0 Objectives

The objective of this investigation is to:

- Provide information regarding potential contamination on site.
- Provide a factual record of the works completed and results.
- Undertaking a risk assessment for health risk to future site users and the environment.
- Provide a statement of site suitability or recommendations for further investigation and/or site management.
- To prepare the PSI in general accordance with the relevant guidelines and legislation, namely:
 - NSW EPA, Consultants Reporting on Contaminated Land: Contaminated Land Guidelines, (2020).
 - State Environmental Planning Policy (Resilience and Hazards) 2021.
 - National Environment Protection (Assessment of Site Contamination) Measure (NEPM), (2013).

3.0 Scope of work

The scope of work includes the following:

- Review the available information regarding historical, current, and proposed land use of the site and surrounds.
- Review the environmental setting of the site and surrounds.
- Assess the potential contamination sources and contaminants of potential concern.
- Assess the potential contamination source-pathway-receptor linkages from the contaminants of potential concern, environmental setting, and land use.
- Develop a conceptual site model to assess potential contamination risk from the source-pathway-receptor linkages.
- Provide recommendations for further investigation.

4.0 Site identification

The site identification and details are as follows.

- Address: Rankins Springs NSW 2669.
- Real property description: Multiple.
- Development area centre co-ordinate: 431568E 6255079N MGA GDA z55.
- Property size: 135ha (total development area).
- Owner: Multiple.
- Local Government Area: Carrathool Shire Council.
- Current zoning: RU1 Primary Production and RU5 Village.
- Proposed zoning: R5 Large Lot Residential and RU5 Village.
- Present use: Mixed use including residential, commercial and items of historical significance.
- Development Application reference: Not known.

5.0 Site history

From research of the available resources, the following site history is offered.

Historical owners and occupiers

Land grants were given in Rankins Springs from 1925. Due to the size of the site, historical owners and occupiers of individual titles are multiple.

Council records

Due to the size of the site, individual records from Council were not obtained.

EPA records

There are no records on the Contaminated Land Record Database for the site or adjacent properties pertaining to Preliminary Investigation Orders, Declaration of Significantly Contaminated Land, Approved Voluntary Management Plans, Management Orders, Ongoing Maintenance Orders, Repeal Revocation or Variation Notice, Site Audit Statement, or Notice of Completion or Withdrawal of Approved VMP. The site or adjacent properties have not been “notified” to the EPA on the list of NSW Contaminated sites as of December 2023.

Internet search

- The Wyalong Advocate and Mining, Agriculture and Pastoral Gazette (NSW) February 1923. Rankins Springs. Work on the Rankins Springs terminus is nearing completion. The opening of the train service is a boon to settlers.
- The Wyalong Advocate and Mining, Agriculture and Pastoral Gazette (NSW) August 1923. Rankins Springs. We can now boast of a township, inasmuch that we have a store opened at Rankins Springs.
- The Wyalong Advocate and Mining, Agriculture and Pastoral Gazette (NSW) July 1926. Rankins Springs Hotel Sergeant Sykes deposed: I am stationed at Hillston and am Licensing Inspector for the Licensing District of Hillston. [...] The village of Rankins Springs at the head of the railway, is growing fairly rapidly. There is a population of about 120 in the village. There are a number of buildings there and others are being erected including a public hall, garage, baker's shop and store. I think the requirements of that district justifies a hotel, but I think the hotel should be in the village. [...] John James Baxter deposed: [...] I am the owner of the Rankins Springs Hotel. I agree with Sergeant Sykes that the hotel should be at the head of the line. If the Board decides not to de-license the hotel and thinks the hotel should be at the head of the line, I am prepared to erect a new hotel building there. I have purchased allotments in the village opposite the siding. [...] John Hannon deposed: I am a grazier residing at Erigolia, near Rankins Springs. [...] I think it would be more suitable to have the hotel at the head of the line. It was thought when the hotel was built that the line would come there, as it was the most suitable place for a siding.
- The Wyalong Advocate and Mining, Agriculture and Pastoral Gazette (NSW) November 1926. New School for Rankins Springs. Dear Sir – following on my letter of the 19th ultimo, I desire to advise you that I have approved of the invitation of fresh tenders for the erection of the proposed new school building at Rankins Springs.

- The Wyalong Advocate and Mining, Agriculture and Pastoral Gazette (NSW) June 1927. Rankins Springs. Rankins Springs is at present without a butcher and as a result there is no meat and residents suffer hard times. We should be thankful that we have a baker and a grocer. [...] Bricks are now to be made here and it is stated that there are prospects of a new brick hotel to the very near future.
- The West Wyalong Advocate (NSW) February 1929. Land Sale at Rankins Springs. At a sale of Crown lands held at Rankins Springs recently, comprising town blocks, conducted by Mr. W Richardson, Barmedman Crown Land Agents. 30 blocks were offered, 18 of which were sold at prices ranging from £20 to £60. Demand for land is increasing daily in the Rankins Springs district which is good augury for its future development.
- Government Gazette of the State of NSW (Sydney) May 1936 Issue 83 *Public Hospital Acts 1929-1934*. Centre of the NSW Bush Nursing Association Incorporated. Rankins Springs – The Rankins Springs Bush Nursing Hospital.
- Government Gazette of the State of NSW (Sydney) Nov 1937 Issue 83 *Public Hospital Acts 1929-1936*. I, [Lieutenant- Governor of the State of New South Wales] close the Rankins Springs Bush Nursing Hospital on the 19th day of November 1937.
- Daily Examiner (Grafton) June 1939 – Hotel destroyed by fire. Early on Thursday morning a fire broke out in the Canatarta Hotel at Rankins Springs, which completely destroyed the building causing damage to the extent of £15,000. The outbreak was not discovered until the fire had spread to a sports club adjoining. Owing to the town not having a water supply, the townsfolk could do nothing to save the hotel and club.
- Government Gazette of the State of NSW (Sydney) June 1939 Issue 86 *Factories and Shops Acts 1912-1936*. I, [governor of the State of New South Wales] constitute the area within a radius of five miles from the Rankins Springs Post Office to be a shopping district to be known as the Shopping District of Rankins Springs.
- The Hillston Spectator and Lachlan River Advertiser (NSW) March 1950. Rankins Springs School. Rankins Springs has been reclassified a 4th class school from the beginning of this year and an assistant teacher has been appointed. The school building contains only one room and it is necessary to provide a second class room as early as possible. It was reported to me [the Minister of Education] that the closed school building at Caranya is not likely to be again required for use on its present site and would be quite suitable for transfer and re-erection at Rankins Springs. I have therefore authorised the transfer of this closed school building as quickly as resources will permit.
- The Riverine Grazier (Hay) November 1953. Departmental restriction on kerbside pumps. In relation to reference to a pump at a bakery in Rankins Springs on the highway, the Minister stated that this was the replacement of a single pump with a dual pump and that at the time there was no garage in the locality selling petrol.
- The Canberra Times (ACT) December 1982 – Rankins Springs, a township that is hanging on to life. With the advent of better roads and the lure of better shopping in Griffith, Rankins Springs has been pared back to essential services. According to Mrs Dulcie Wood, people rely less that before on the township for services. The butcher has closed. The bakery in which Mrs Wood worked after she arrived 20 years ago is no more. Even her Post Office has undergone big changes. Once it contained a busy manual telephone exchange. Two years ago, that went automatic. Now Mrs Wood deals with email and runs a Commonwealth bank agency.

- Conapaira Hotel Facebook page.
 - Intro. Owned and run by Jono and Nic and their tribe of boys since December 2021. Everyone Welcome!!
 - Photograph and comment – History – One of the first things non local people ask when they come in is why is the pub so new? They are surprised when they hear it burnt down and was rebuilt.
 - Midstate Trading Fuel Station Rankins Springs Facebook page. Intro. Fuel station in Rankins Springs. Midstate Trading Pty Ltd.
- Rankins Springs Community Group Facebook page. Photograph. The photographs shows a map of land which includes the site and the heading reads 'Auction Sale. Town and suburban lots. Crowns Lands. At Rankins Springs on Wednesday 24th June 1925'.
- Rankins Springs Community Group Facebook page. Photograph and comment by Explored Visions by GD. 'Around Rankins Springs NSW. Former Campbell's General Store also sold takeaway food and still has the old Ampol fuel bowser out the front. Adjoining to the right is the former Casey's store'. Comment by Sandra Sandford: 'It used to be a bakery'.
- Rankins Springs Community Group Facebook page. Photograph and comment by Kate Parsons. 'Baker shop when owned by Clarrie Wood'. The photograph shows the bakery with a sign on the building reading 'C.W Wood. Baker. Shell'. A dual pump fuel bowser can be seen out the front.
- carrathool.nsw.gov.au –
 - Rankins Springs is at the foot of Mount Conapaira between Goolgowi and West Wyalong. The village is on the Mid Western Highway near the eastern boundary of Carrathool Shire and is approx. 6 hours from Sydney or Melbourne and just over 30 minutes from Griffith. The village is known for its birdlife with designated bird hides strategically located around the area. There is also a pub, general store, post office, caravan park, motel, service station and gallery.
 - The original Rankins Springs village was established in 1870 as a service centre for surrounding farms on a site about 10 kilometres north west from the present location, all that marks this site are the ruins of the grand hotel in the middle of a valley. The village moved to its present site in 1923, following the construction of the rail line from West Wyalong. The railway closed in 2004. Rankins Springs also has a well-maintained recreation ground and a nine-hole golf course. Cocoparra National Park is located approximately 45 kilometres south from Rankins Springs towards Griffith, and provides the opportunity for bushwalking, picnicking, nature study and photography.
- rankinspr-p.schools.nsw.gov.au - Opened in January 1926, Rankins Springs Public School's first classes were conducted in a room leased from a local landowner before moving to the local public hall. The school moved from the local hall to its current location in February 1928. Since this time, two buildings have been built and one has been relocated to Rankins Springs Public School from a nearby school upon its closure giving us two classrooms, a library and a teacher resource room. In recent years further grants from the federal and state governments and donations from P&C have been used to upgrade facilities including extending the

administration area, internal and external repainting of buildings, refurbishing the library and the addition of covered walkways, shade sails and a COLA.

- Rankins Springs, NSW. Heritage Marker 1 of 6. The Emergence of the Town. Conapaira Station, which encompassed the sites of the old and new townships of Rankins Springs covering an area of 48,000 acres, was first taken up in 1858. [The name] Rankin was firstly applied to a permanent spring that the Rankin family found, and then to the settlement seven kilometres north of the present town. M&H Stitt held the run adjacent to the spring; they excavated a dam, built a hut and later erected a hotel that was licenced. Edward Nichols erected a store, inn and kitchen in 1869 and in 1875 the post office was opened. In 1881, 2,560 acres were reserved for a town site but of course was never proceeded with. The village as it is today proclaimed in 1925 with the first land sales in June later that year.
- Rankins Springs, NSW. Heritage Marker 3 of 6. Infrastructure Progression. In 1923 the railway line from Sydney via Temora opened, terminating at the Whitton Stock Route. The settlement, which had been at the old Rankins Springs Hotel since 1869, moved to its present site and within a few years had stores, a butcher and bakers' shop, garage, stock and station agencies and wheat buyers. [...] With the improvements of roads and vehicles, rail services declined and ceased in the 1970's except for the movement of grain.
- Rankins Springs, NSW. Heritage Marker 5 of 6. Recreation and Leisure. The original Rankins Springs Hotel was situated on the Whitton Stock Route north of the present town near the spring firstly referred to as Rankins Springs. The hotel shifted to the site of the railway terminus in 1923, when the Baxter family, who owned Conapaira Station at the time erected a two-storey brick building, known from then on as the Conapaira Hotel. This hotel was badly damaged after it was built and again in 1938. On both occasions bar service was continued immediately in makeshift premises until the building was restored. However, when fire struck the present building in 1996 the licence was taken away and the town left without a hotel. The Conapaira Hotel was reopened on 16th November 2002.
- Rankins Springs, NSW. The Rankins Springs Progress Association information boards.
 - Rankins Springs was once a thriving hub for the surrounding farmland. The Railway opened in 1923 which provided transport for all essential goods and passengers. The Primary School opened in 1926 and several small schools also started in the surrounding districts. Throughout the years, many shops have opened in 'the Springs' and many have closed either voluntarily or by fire. At different times two boarding houses, four garages, one blacksmith, two butcher shops, numerous stores and cafes, a billiard parlour, a baker shop and paper shop, a farm machinery dealer and a hotel all competed for business. Rural electricity was connected to the town in 1965 and was extended to the farms over a period of time. In 1951, a stock and domestic water supply from Myall Park was laid into town and surrounding farmlands.
 - 2021 saw the connection of potable water to the village.
 - 2023 sees a primary school with 31 students and the Riverina Children's Activity Van Preschool which visits twice per week. The Conapiara Hotel, motel, Rankins Springs General Store/post office, Wally's Junk Art Gallery,

Midstate Trading service station and Rankins Springs Motors mechanical repairs.

Previous reports

SLR Consulting Australia Pty Ltd (2023) Draft Planning Proposal. Rezoning and minimum lot size Rankins Springs. Ref: 631.30921.00000-R01.

- This Planning Proposal (PP) report has been prepared on behalf of Carrathool Shire Council (Council) for the rezoning of land within the suburb of Rankins Springs, NSW.
- The land subject to the PP (collectively known as the site) consists of developed and undeveloped land within the Rankins Springs village.
- Subject site lots, section and DP: Lots 1-14 Section 15 DP758868, Lots 1-18 Section 16 DP758868, Lots 1-18 Section 17 DP758868, Lots 1-18 Section 18 DP758868, Lots 1-12 Section 26 DP758868, Lot 1 Section 27 DP758868, Lots 1-12 Section 29 DP758868, Lot 1 DP909445, Lot 7306 DP1154199, Lots 26-37 DP751690, Lots 84, 85, 87-102 DP751690 and Lot 112 DP 751690.
- This seeks an amendment in relation to the land described above, specifically amending the existing zoning of RU1 Primary Production and RU5 Village to R5 Large Lot Residential and RU5 Village and amending the minimum lot size from 40ha to 2ha (land south of the highway) and from 40ha / 4,000m² to 1,000m² (land north of the highway).
- The site north of the Mid-Western Highway includes land that is developed and undeveloped, with scattered vegetation consisting of large trees, shrubs and grasses. Development consists of low-density residential dwellings and associated structures and the Rankins Springs Public School. The site south of the Mid-Western Highway consist of rural properties with associated development such as rural dwellings, sheds, and fencing.
- The site is approximately 135 hectares (ha) in total size, bound by local streets including sealed and unsealed roads.
- There are two items of heritage significance within the subject site:
 - Item I52 of local heritage significance 'Bush Nursing Associated (former)' Lots 11 & 22, Section 18, DP758868.
 - Item I59 of local heritage significance 'Rankins Springs Public School' Lot 1, Section 27 DP758868.
- The identified heritage items would remain as part of this PP.
- The objective of this PP is to amend the CLEP to rezone a portion of land within Rankins Springs from RU1 Primary Production to RU5 Village and R5 Large Lot Residential and amended the minimum lot size from 40ha and 4,000m² to 1,000m² and 2ha. The proposed amendments to the CLEP are to expand the Rankins Springs village to facilitate the development of residential dwellings and village type uses to support the local community.
- It is proposed to rezone a portion of the site, which is currently zoned RU1 Primary Production to RU5 Village (north of the highway) and R5 Large Lot Residential (south of the highway) to encourage further residential and village type development to support the existing village and surrounding primary production land.

- Currently, development permitted with consent and the minimum lot size under Zone RU1 Primary Production permits restrictive development types that are not conducive to the provision of a dedicated village characterised by small businesses and community services and do not encourage development.
- The primary intended outcome of the PP is to encourage additional population in the area including allowing for the redevelopment of the site for residential and village type purposes, with a lot size to facilitate development within the RU5 land within the Rankins Springs village.
- It is proposed to amend the minimum lot size of the site, which is currently 40ha due to the RU1 zoning to 40ha (for the R5 proposed zoned land), and 1,000m² (for the RU5 proposed zoned land) to be consistent with existing RU5 / R5 land. This minimum lot size amendment would ensure residential development and village development types can achieve outcomes that suit the surrounding village needs, without requiring lot amalgamation.
- Due to the historical use of the site being for rural use there is a potential for contamination to have occurred. State Environmental Planning Policy (resilience and Hazards 2021) will be required to be considered by Council for the appropriate use for residential purposes. It is considered that contamination can be considered at individual development application stage and remediation completed if required.
- No state listed heritage items or places are located in the vicinity of the site.
- A desktop assessment of the subject site and surrounding properties was undertaken. The site is not mapped as a contaminated site under the EPA Contaminated Land Record and is not in the vicinity of any scheduled activities under the POEO Act.
- A search of the EPA Contaminated Land Record database was completed on 16 January 2023 and did not identify any sites within the shire of Carrathool or suburb of Rankins Springs.
- No NSW EPA Environmental Protection Licences are within Rankins Springs.
- Bore water suitable for human consumption is provided by Council to Rankins Springs and can be extended to the additional lots. Septic tanks are used throughout the village, with no existing plans to upgrade sewer or water infrastructure.

Aerial photographs and satellite images

McMahon observed the following from a review of the available aerial photography.

1966 – The village can be seen. It consists of some residential dwellings and the main street which fronts what is now the Mid Western Highway. Businesses along the main street include the Conapaira Hotel, Blue Bird café, the former butcher, and the former garage/workshop. Two buildings can be seen at the site of the current service station. The Rankins Springs Public School can be seen to the north of the main street and the Bush Nursing Association can be seen to the south west of the school. Some rural dwellings and farm dams can be seen to the south of the Mid Western Highway. Trees cover most of the area in the east of the site. The closed Rankins Springs railway line can be seen adjacent to the site. The site is surrounded by the Jimberoo National Park to the north and west, Conapaira South State Forest to the south and agricultural land to the east.

1973 – The buildings at the service station site appear to have been removed. Trees have been cleared in the east of the site, south of the highway.

1987 – The motel and the service station appear to have been built along the main street. A large shed has been built at the rear of the service station, to the north. More residential dwellings have been built. Additional buildings can be seen at the school. More rural dwellings have been built south of the highway.

1991 – No change from 1987.

2013 – More residential dwellings have been built. Trucks and cars can be seen at the shed to the north of the service station. Animal yards can be seen to the south of the school. More rural dwellings have been built south of the highway. Some rubbish can be seen on a rural property in the south east corner of the site.

2015 – No change from 2013

2022 – The building of the former butcher along the main street has been partially demolished. Shade sails and a covered outdoor learning area (COLA) have been erected at the school. A small orchard has been cultivated at one of the rural properties south of the highway.

The aerial photographs and satellite images can be seen in **Attachment B**.

6.0 Site condition and surrounding environment

McMahon notes the following observations of the site condition as part of this PSI.

- The site is a mix of developed and undeveloped land within the small rural village of Rankins Springs in the Carrathool Shire. The development area consists of mostly residential land to the north and rural land to the south of the Mid-Western Highway. The closed Barmedman-Rankins Springs railway line terminates to the east of the site. The Rankins Springs landfill is located approximately 4km to the north east of the site. The site is surrounded by the Conapaira South State Forest and agricultural land.
- There are approximately 95 houses which are primarily made of fibrous sheeting and weatherboard cladding or brick veneer, mostly built prior to 1966. The houses are likely to contain asbestos and possibly lead paint. Rankins Springs uses a Common Effluent Disposal system that conveys treated effluent from individual houses to central evaporation ponds, approximately 500m east of the site.
- Most houses were dilapidated however the yards were mostly tidy. Cars, oil drums, tyres and some rubbish were observed in some of the yards and on some vacant blocks.
- The main street fronting the Mid Western Highway consists of the Conapaira Hotel, Rankins Springs general store, Rankins Springs motel, the former butcher, Blue Bird café (closed), Wally's Junk Art Gallery (former garage/workshop site), the post office (closed) and Midstate Trading service station. An old kerbside fuel bowser exists in front of the former general store (which was a bakery prior to that). Some rubbish was dumped around the old bowser at the time of inspection.
- The former butcher building is derelict, likely clad with asbestos containing material (ACM). The Blue Bird café appears to be brick with a rusted steel and timber awning and is in fair condition.
- Wally's Junk Art Gallery consists of a slab on grade steel shed with junk art pieces in a fenced yard to the east of the shed. An above ground fuel tank was visible in the yard, but it is not clear if it is from the former garage/workshop or has been brought on site for art purposes. No bowzers or breather pipes were identified.
- The post office is made of timber and corrugated iron. The front façade is painted pressed metal designed to look like bricks. The paint may be lead paint.
- The Midstate Trading service station consists of the service station building and unleaded and premium unleaded petrol bowzers fronting the highway, an unleaded 91 petrol bowser to the west of the building and a diesel bowser to the north west of the service station building. A large shed with a Midstate Trading sign is to the north of the diesel bowser. Some rubbish, a small forklift, LPG gas bottles and toilet block are to the north of the main service station building. The site surface around the diesel and unleaded 91 bowzers is mostly a gravel/asphalt hardstand. The site surface around the unleaded and premium unleaded bowzers is concrete in good condition with no major staining.
- Other former commercial buildings in the main street appear to be made of fibrous sheeting likely to contain ACM, with a brick or weatherboard façade.
- There are two items of local heritage significance including the Rankins Springs Public School and the former Bush Nursing Association, both located north of the highway.

- The Rankins Springs Public School opened in 1926 and is likely to contain ACM in its buildings and services and may contain lead paint.
- The former Bush Nursing Association building has been disused for some time and is likely to contain ACM in its buildings and services and may contain lead paint.
- A steel slab on grade shed for the Rankins Springs Bushfire Brigade is to the south of the service station, fronting the Mid Western Highway.
- The site south of the Mid Western Highway consists mostly of rural properties and vacant agricultural land. Areas of concern include a small orchard, rudimentary animal yards, and a laydown area consisting of old vehicles, tyres, fuel/oil drums and fencing materials.
- The site also includes a police station, a playground, three churches and the Urabba Street Reserve.

A map of the site features and areas of concern can be seen in **Attachment C**.

Site photographs can be seen in **Attachment D**.

A summary of the site environmental setting is as follows.

Topography

The site lies on an east trending footslope of the Cocoparra Range running to an aeolian plain at an elevation range of approximately 240m to 210m AHD.

Vegetation

The site is a mix of developed and undeveloped land, with grassed vacant lots across the site. The houses and yards across the site are typical of a rural village with small houses and large sheds on larger lots of land. House lots are typically grassed with small to no gardens.

Natural Resources Sensitivity

A search of the Carrathool Local Environment Plan (2012) found the site is not mapped as being in a natural resource sensitivity area for riparian lands and waterways, groundwater vulnerability or terrestrial biodiversity.

Weather

The average rainfall for Rankins Springs is around 400mm per annum, with the wettest months being June, October, and November. Rankins Springs is characterised by cold wet winters and hot dry summers.

Hydrology

The nearest named waterway is Cocoparra Creek located around 8km the south of Rankins Springs. Cocoparra Creek is disintegrated from the wider catchment. The site is not mapped as being in a flood planning area.

Soil

Soils are typically Quaternary aeolian and residual red brown to brown clayey, silty to fine-grained sand and silty clay. Soils may include some residual alluvium; quartz sand sheets commonly with carbonate; local clay, calcrete, laterite, silcrete, silt, and colluvium.

Geology

The local geology is Cainozoic aeolian sand plains, Quaternary residual deposits, and Devonian sandstone associated with the Jimberoo Formation.

Hydrogeology

There are no registered groundwater bores on site however nearby low yielding aquifers exist at deep depths (>30m) in the underlying geology.

Carrathool Shire Council provides and maintains reticulated potable water supplies to Rankins Springs. The Rankin Springs potable water supply scheme was constructed in 2018. The scheme draws its water from a bore and via a Murrumbidgee Irrigation channel and is taken to the Rankins Springs Water Treatment Plant where reverse osmosis and an ultrafiltration treatment process is used to treat the raw water before it is provided to the township.

7.0 Conceptual site model

A conceptual site model is a representation of site-related information regarding contamination sources, receptors and exposure pathways between those sources and receptors and is presented and follows.

Summary

The site is a mix of developed and undeveloped land and has remained relatively unchanged in the available aerial photographs from 1966. Chemicals associated with historical agricultural pesticide use and current weed management may have accumulated in the soil. Hazardous building materials are likely to exist in the existing and demolished houses and in services across the site. Rankins Springs is serviced by a Common Effluent Disposal system that conveys treated effluent from individual houses to a central evaporation pond. Fuel storage exists at the current service station and the old kerbside bowser along the main street. Fuel storage is possible at the former garage/workshop (now Wally's Junk Art Gallery). Fuel and oil leaks and spills from machinery maintenance and repairs are possible across the site. Other potential contamination sources include perfluorinated and polyfluorinated substances (PFAS) from firefighting equipment at the NSW Rural Fire Service Rankins Springs Bushfire Brigade; the small orchard, rudimentary animal yards and laydown area at various rural properties south of the highway; and asphalt from roads across the site. Coal tar and asbestos were commonly used in asphalt up until the 1980s. Off-site sources of contamination include the Rankins Spring landfill located 4km east of the site, the former Conapaira sheepyards approximately 3km to the south west of the site and the central evaporation ponds located approximately 500m east of the site. Receptors include future construction workers, future residential site users, and the environment. Pathways are mainly from soil disturbance and the release of asbestos fibres during development and occupation. Short to medium-term soil contact is likely for future construction workers, and long-term soil contact is possible for future occupants.

Potential and known sources of contamination

- Persistent agricultural chemicals.
- Hazardous building materials.
- Septic systems.
- Fuel storage.
- Fuel and oil leaks and spills.
- Fill material from an unknown source.
- Perfluorinated and polyfluorinated substances (PFAS) from firefighting equipment.
- Asphalt containing coal tar and asbestos.
- Offsite contamination sources include the Rankins Springs landfill, former sheepyards and the central evaporation ponds.

List of contaminants of potential concern

From the potential contamination sources, the Contaminants of Potential Concern (COPCs) are as follows:

- Pesticides.
- Heavy metals.

- Lead paint.
- Asbestos from buildings, underground services, fill material and asphalt.
- Coal tar.
- Hydrocarbons.
- Polycyclic aromatic hydrocarbons.
- Solvents.
- Phenols.
- PFAS.

Mechanism of contamination

The mechanism of contamination is predominantly top-down vertical and lateral migration into soil. The mechanism of asbestos contamination is from the release of fibres from asbestos containing material during disturbance.

Potentially affected environmental media

- Soil.
- Vapour.
- Air.
- Surface water.
- Groundwater.

Consideration of spatial and temporal variations

Temporal and spatial variation in potential contamination is possible. Temporal variation of asbestos is unlikely unless the asbestos is disturbed, and fibres are released.

Actual or potential exposure pathways

- Direct skin contact with soil for future construction workers, and future on-site users.
- Inhalation and/or ingestion of fibres, soil, vapour, and dust.
- Direct surface water contact.
- Groundwater ingestion.

Human and ecological receptors

- Construction workers.
- Future on-site users.
- Future landscaping and associated ecological receptors at the occupation stage.
- Domestic groundwater users.
- Down gradient ecological receptors.

Frequency of exposure

- Construction workers are assessed to be a short-term exposure risk.
- Future on-site users are assessed to have a long-term exposure risk.
- Future groundwater users are a medium to long-term exposure risk.
- Ecological receptors are assessed to be a medium to long-term exposure risk.

Source pathway receptor linkage assessment

Based on the past uses, it is assessed that contamination from the identified potential contamination sources may be present at the site. If elevated concentrations of contaminants were identified then they could present potential health risks to construction workers or future site occupants (through dermal contact, ingestion, or inhalation of contaminated fibres, soils and/or vapours), if not adequately investigated, assessed, and managed during development. Contamination from off-site sources is unlikely owing to the distance from and relative incline of the site, although groundwater contamination is possible.

Discussion of multiple lines of evidence

A 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, NEPM (2013). Definitive information concerning the sources of potential contamination on site is satisfactory therefore the risk assessment relies heavily on the information provided by this PSI and will be supplemented by further investigation.

8.0 Conclusions and recommendations

This investigation met the objective of investigating and assessing potential contamination and providing a statement of site suitability for the proposed land use and recommendations for further investigation, assessment, and site management.

Based on the findings of the PSI, it is concluded that contamination is potentially present and the information available is insufficient to enable an appropriate level of site-specific risk assessment for future development. As such further investigation and assessment is required.

The lack of quantitative contamination data in this PSI is considered to not preclude the rezoning of the site but the PSI provides the basis for more detailed investigations.

This PSI also provides the framework for developing an Environmental Management Plan by identifying the potential contamination sources, potentially impacted media, contamination transport mechanisms, and contaminants of potential concern.

A protocol for unexpected finds as outlined in **Section 10.0** has also been developed as part of this risk assessment framework if additional potential contamination sources are identified prior to or during the development.

This executive summary and the findings of this PSI are subject to the limitations as stated in **Section 9.0**.

9.0 Limitations and disclaimer

DM McMahon Pty Ltd has prepared this report in accordance with the usual care and thoroughness of the consulting profession for the use of Carrathool Shire Council and only those third parties who have been authorised by DM McMahon Pty Ltd to rely on this report.

The information contained in this report has been extracted from field and laboratory sources believed to be reliable and accurate. DM McMahon Pty Ltd does not assume any responsibility for the misinterpretation of information supplied in this report. The accuracy and reliability of recommendations identified in this report need to be evaluated with due care according to individual circumstances. It should be noted that the recommendations and findings in this report are based solely upon the said site location and conditions at the time of assessment. The results of the said investigations undertaken are an overall representation of the conditions encountered. The properties of the soil, vapour and groundwater within the location may change due to variations in ground conditions outside of the assessed area. The author has no control or liability over site variability that may warrant further investigation that may lead to significant design and land use changes.

10.0 Unexpected findings

If any unconsolidated, odorous, stained, or deleterious soils, or suspect bonded/friable/fibrous asbestos containing material, fuel tanks, or septic systems are encountered during any further excavation, suspected historical contaminating activities are encountered, or conditions that are not alike the above descriptions, the site supervisor should be informed, the work stopped, and this office be contacted immediately for further evaluation by an appropriately qualified environmental consultant. The unexpected findings may trigger the need for more investigation and assessment dependant on the scope and context of the unexpected finding.

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12.0 Attachments

A. Site location and proposed rezoning map	2 pages
B. Aerial photographs	8 pages
C. Site features and areas of concern	3 pages
D. Site photographs	14 pages



Attachment A : *Site location and proposed rezoning map*

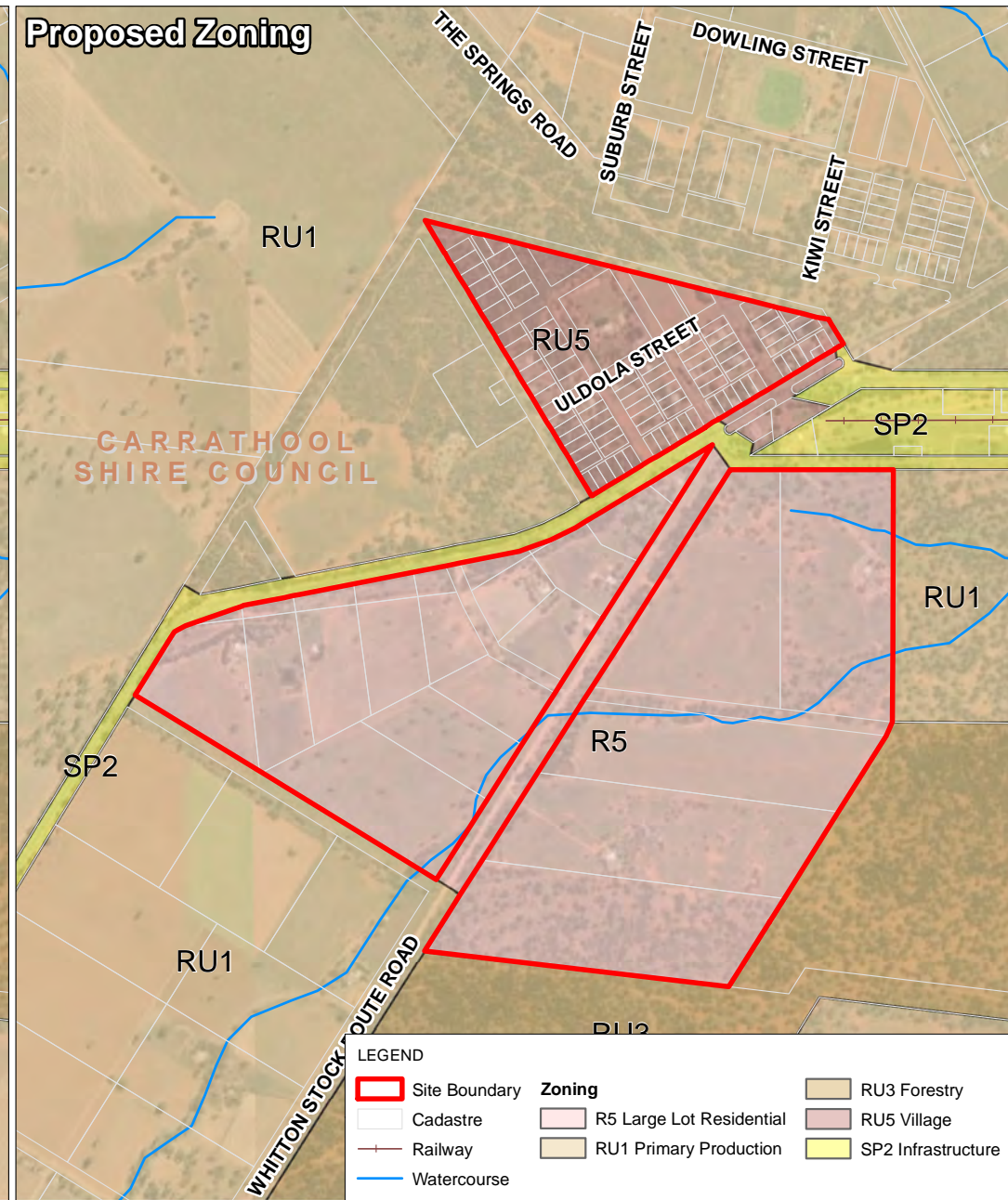
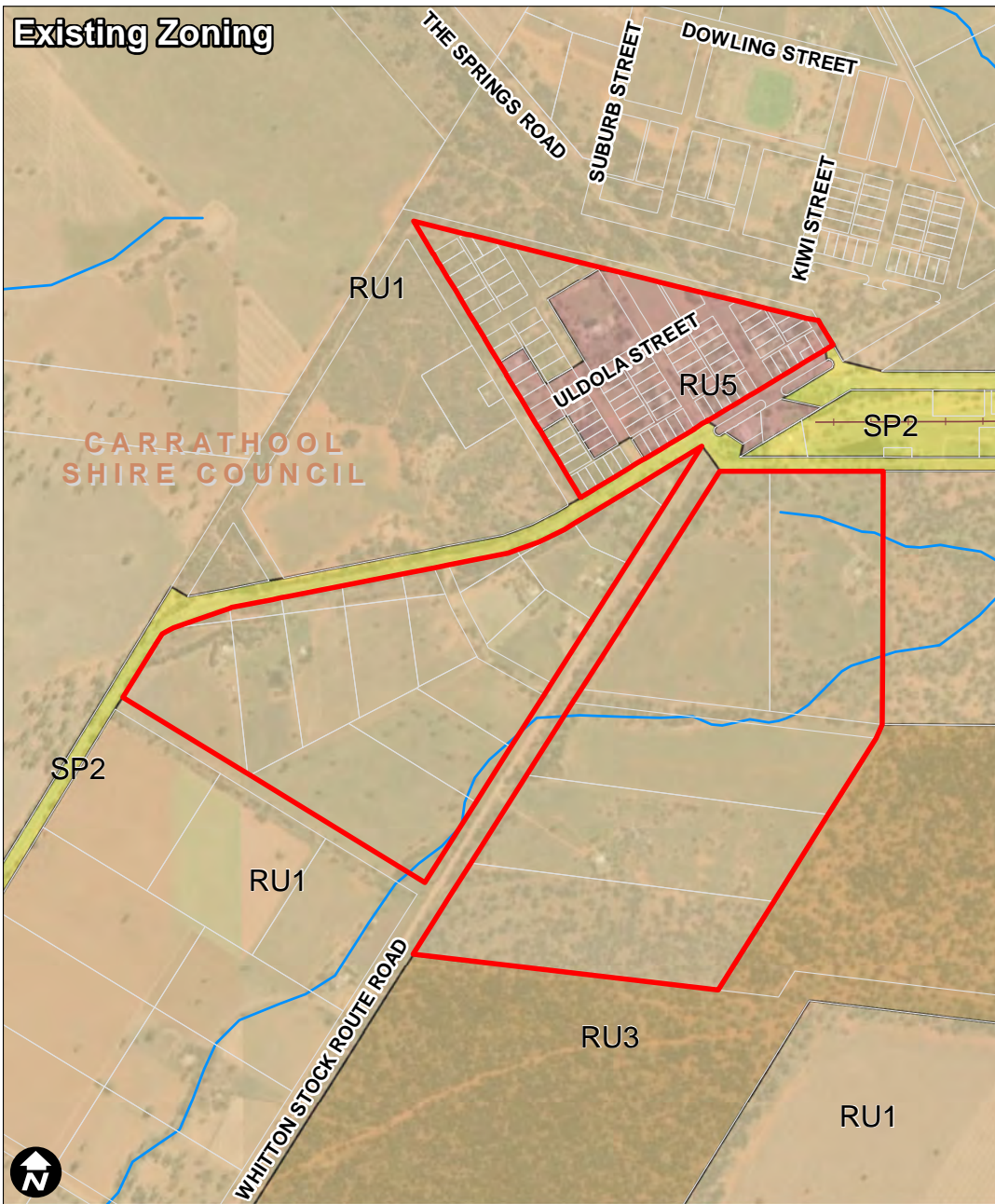
Rankins Springs NSW 2669

Preliminary Site Investigation
Report No. 9761
Google Earth image 2022

Legend

Boundary





LEGEND

Site Boundary	Zoning R5 Large Lot Residential	RU3 Forestry
Cadastre	RU1 Primary Production	RU5 Village
Railway	SP2 Infrastructure	
Watercourse		

Date Drawn: 12-Apr-2023
Project Number: 631.30921.00000



Data Source: Basedata NSW SS, 2022
Aerial imagery - 2021, Esri, Maxar, Earthstar Geographics, and the GIS User Community
NSW environmental planning instrument (EPI) © State Government of NSW and
Department of Planning and Environment 2022

ZONING PLAN
Rankins Springs

FIGURE 10



Attachment B : *Aerial photographs and satellite images*

Rankins Springs NSW 2669

Preliminary Site Investigation
Report No. 9761
NSW DSC image 1966

Legend

Boundary



Rankins Springs NSW 2669

Preliminary Site Investigation
Report No. 9761
NSW DSC image 1973

Legend

Boundary



Rankins Springs NSW 2669

Preliminary Site Investigation
Report No. 9761
NSW DSC image 1987

Legend


Boundary



Rankins Springs NSW 2669

Preliminary Site Investigation
Report No. 9761
NSW DSC image 1991

Legend

 Boundary



Rankins Springs NSW 2669

Preliminary Site Investigation
Report No. 9761
Google Earth image 2013

Legend

Boundary



600 m

Rankins Springs NSW 2669

Preliminary Site Investigation
Report No. 9761
Google Earth image 2015

Legend


Boundary



Rankins Springs NSW 2669

Preliminary Site Investigation
Report No. 9761
Google Earth image 2018

Legend

 Boundary



Google Earth

Image © 2023 Airbus
Image © 2023 CNES / Airbus

600 m

Rankins Springs NSW 2669

Preliminary Site Investigation
Report No. 9761
Google Earth image 2022

Legend

Boundary






Attachment C : *Site features and areas of concern*

Rankins Springs NSW 2669

Preliminary Site Investigation
Report No. 9761
Google Earth image 2022

Legend


 Boundary



Rankins Springs NSW 2669

Preliminary Site Investigation
Report No. 9761
Google Earth image 2022

Legend

 Boundary



Rankins Springs NSW 2669

Preliminary Site Investigation
Report No. 9761
Google Earth image 2022

Legend


Boundary



Rankins Springs NSW 2669

Preliminary Site Investigation
Report No. 9761
Google Earth image 2022

Legend

 Boundary





Attachment D : *Site photographs*



Photograph 1: Typical house in Rankins Springs.



Photograph 2: Typical house in Rankins Springs.



Photograph 3: Typical yard in Rankins Springs.



Photograph 4: Typical yard in Rankins Springs.



Photograph 5: Typical undeveloped land in Rankins Springs.



Photograph 6: Typical undeveloped land in Rankins Springs.



Photograph 7: Conapaira Hotel. Photograph taken facing north west.



Photograph 8: Rankins Springs general store. Photograph taken facing north.



Photograph 9: Rankins Springs motel. Photograph taken facing north.



Photograph 10: Former butcher. Photograph taken facing north west.



Photograph 11: Blue Bird cafe. Photograph taken facing north.



Photograph 12: Wally's Junk Art Gallery. Photograph taken facing north.



Photograph 13: Art pieces in the yard at Wally's Junk Art Gallery. The above ground tank can be seen in the centre of the background (to the right of the blue police box). Photograph taken facing north west.



Photograph 14: Post office. Photograph taken facing north west.



Photograph 15: Old kerbside bowser at the front of the former general store/former bakery.
Photograph taken facing north.



Photograph 16: Midstate Trading service station. Photograph taken from the Mid Western Highway, facing north.



Photograph 17: Midstate Trading service station. The unleaded 91 petrol bowser and the toilet block can be seen in the middle of the photograph. The diesel bowser, forklift, gas bottles and the Midstate Trading shed are on the left. Photograph taken from Boree Street, facing east.



Photograph 18: Rankins Springs Public School. Photograph taken facing west.



Photograph 19: Steel slab on grade shed for the NSW Rural Fire Service Rankins Springs Bushfire Brigade. Photograph taken facing north west.



Photograph 20: Typical entry gate at a rural property south of the highway. Photograph taken facing west.



Photograph 21: Rudimentary yards at a rural property south of the highway. Photograph taken facing south.



Photograph 22: Small orchard at a rural property south of the highway. Photograph taken facing west.



Photograph 23: Farm shed typical of rural properties in Rankins Springs. Photograph taken facing west.



Photograph 24: St. Kevins Catholic Church. Photograph taken facing north.



Photograph 25: St Luke's Anglican Church. Photograph taken facing west.



Photograph 26: Rankins Springs Uniting Church. Photograph taken facing north west.



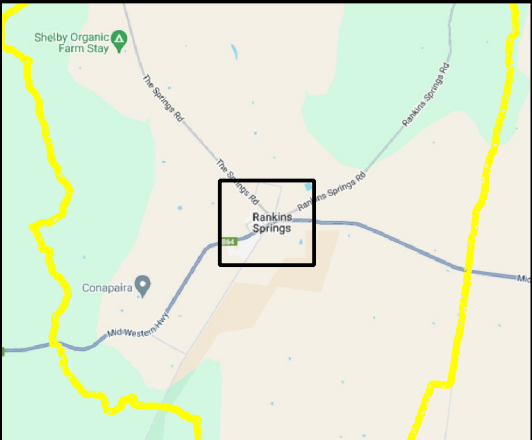
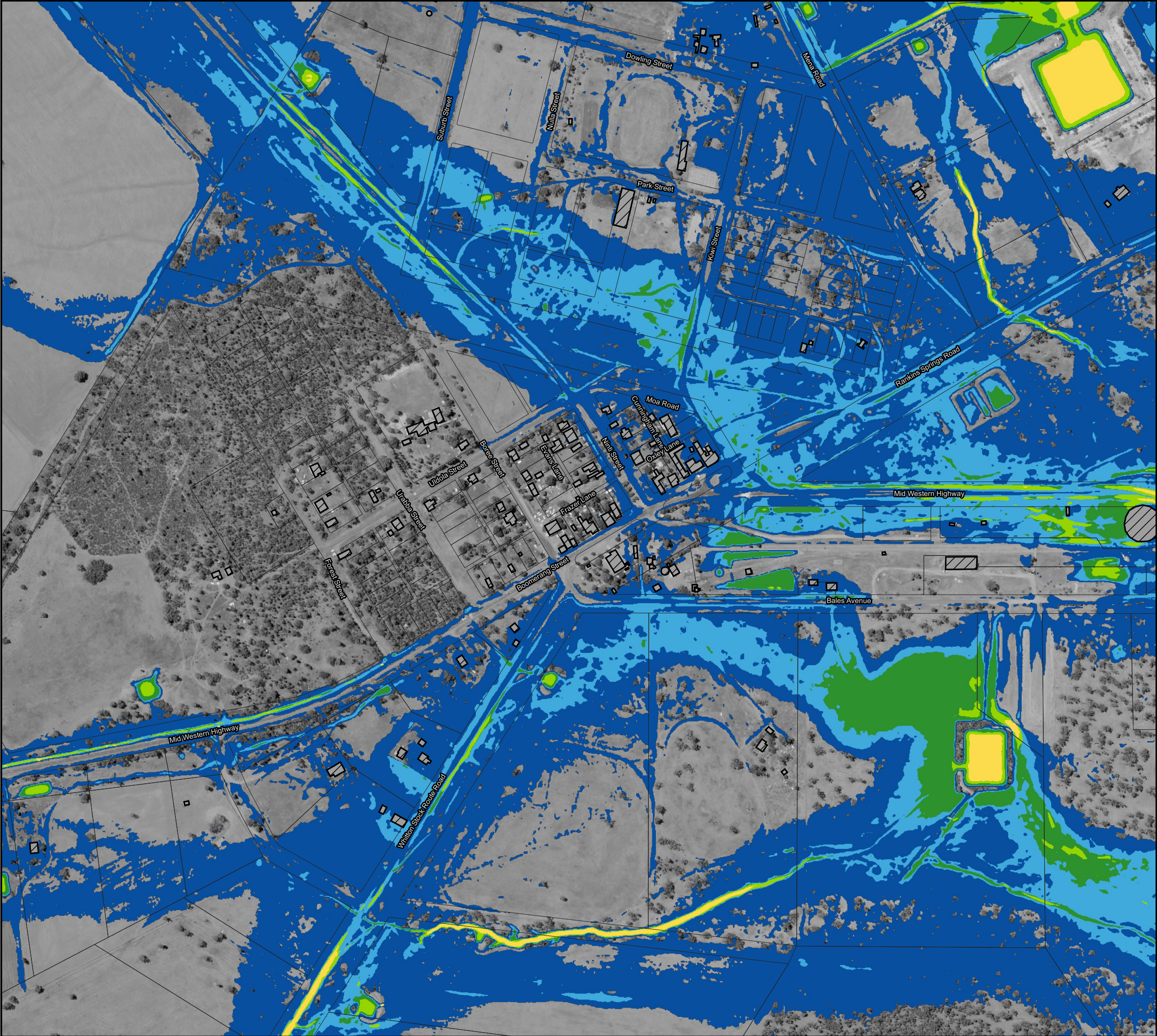
Appendix E Rankins Springs Flood Study Additional Figures

Planning Proposal

Rezoning and Minimum Lot Size Rankins Springs

Carrathool Council

SLR Project No.: 631.30921.00000-R01



Legend

- Lot
- Building

Hazard Categories

- H1 - Generally safe
- H2 - Unsafe for small vehicles
- H3 - Unsafe for vehicles, children and elderly
- H4 - Unsafe for people and vehicles
- H5 - Unsafe for people and vehicles
Buildings require special design
- H6 - Unsafe for people and vehicles
All buildings vulnerable to failure

Notes:
Aerial photograph: NSW Six Map

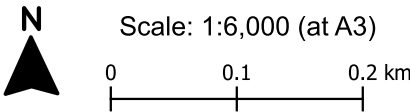
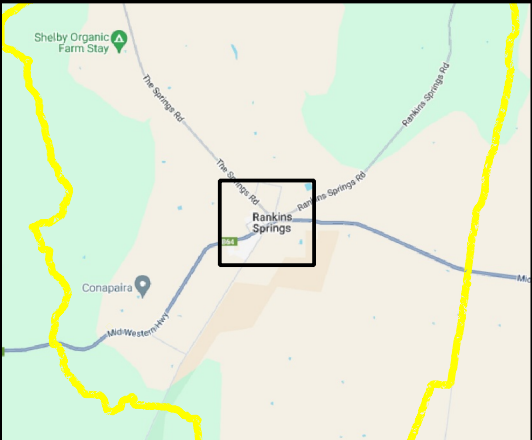
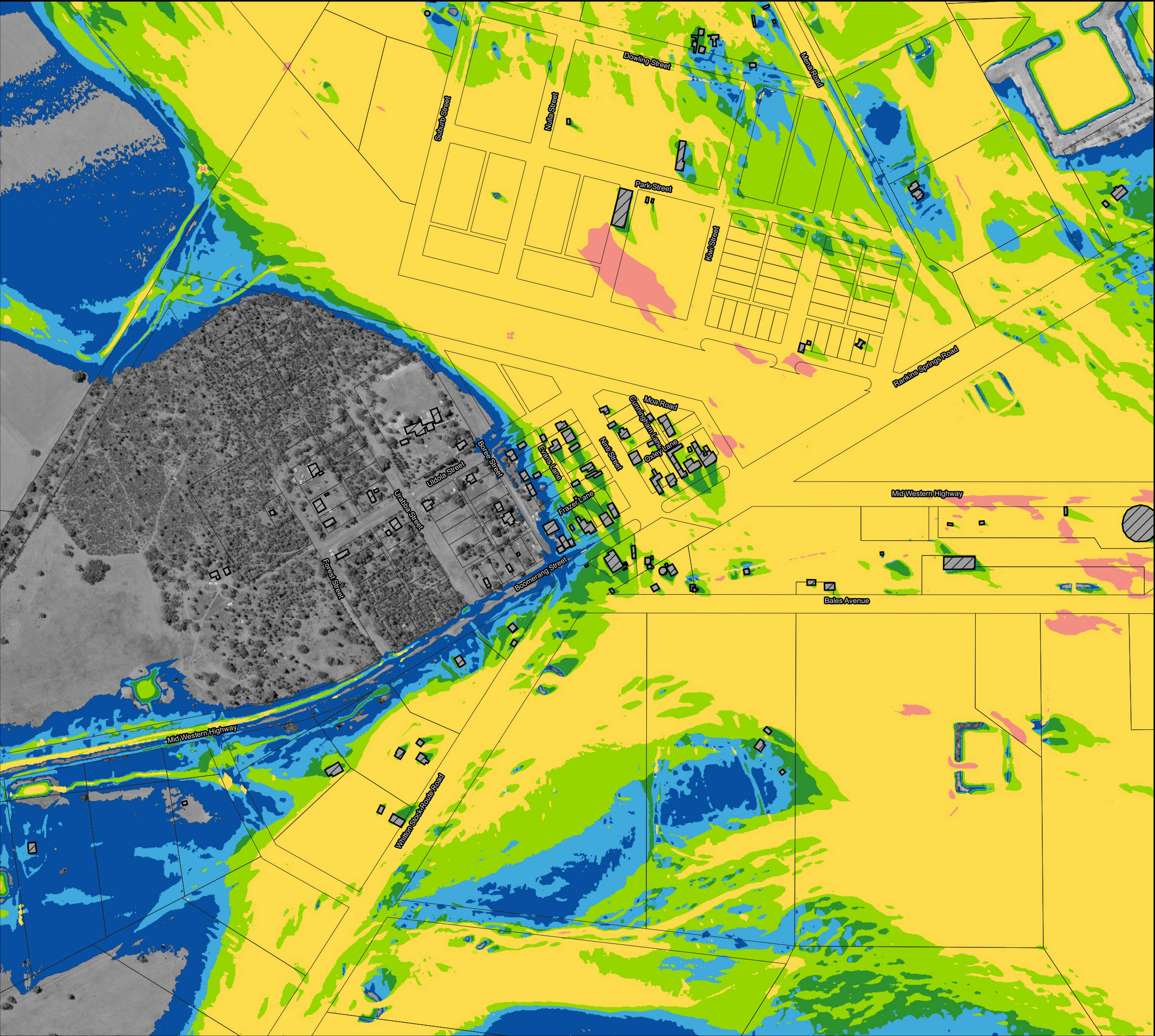


Figure 35.1:
**Flood Hazard for the 1% AEP
Flood**

Prepared by:
Catchment Simulation Solutions
Suite 1, Level 10, 70 Phillip St
Sydney, NSW, 2000



Legend

- Lot
- Building

Hazard Categories

- H1 - Generally safe
- H2 - Unsafe for small vehicles
- H3 - Unsafe for vehicles, children and elderly
- H4 - Unsafe for people and vehicles
- H5 - Unsafe for people and vehicles Buildings require special design
- H6 - Unsafe for people and vehicles All buildings vulnerable to failure

Notes:
Aerial photograph: NSW Six Map



Scale: 1:6,000 (at A3)

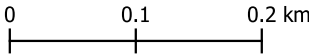


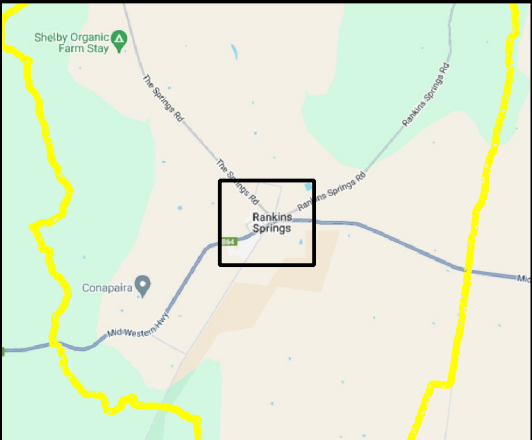
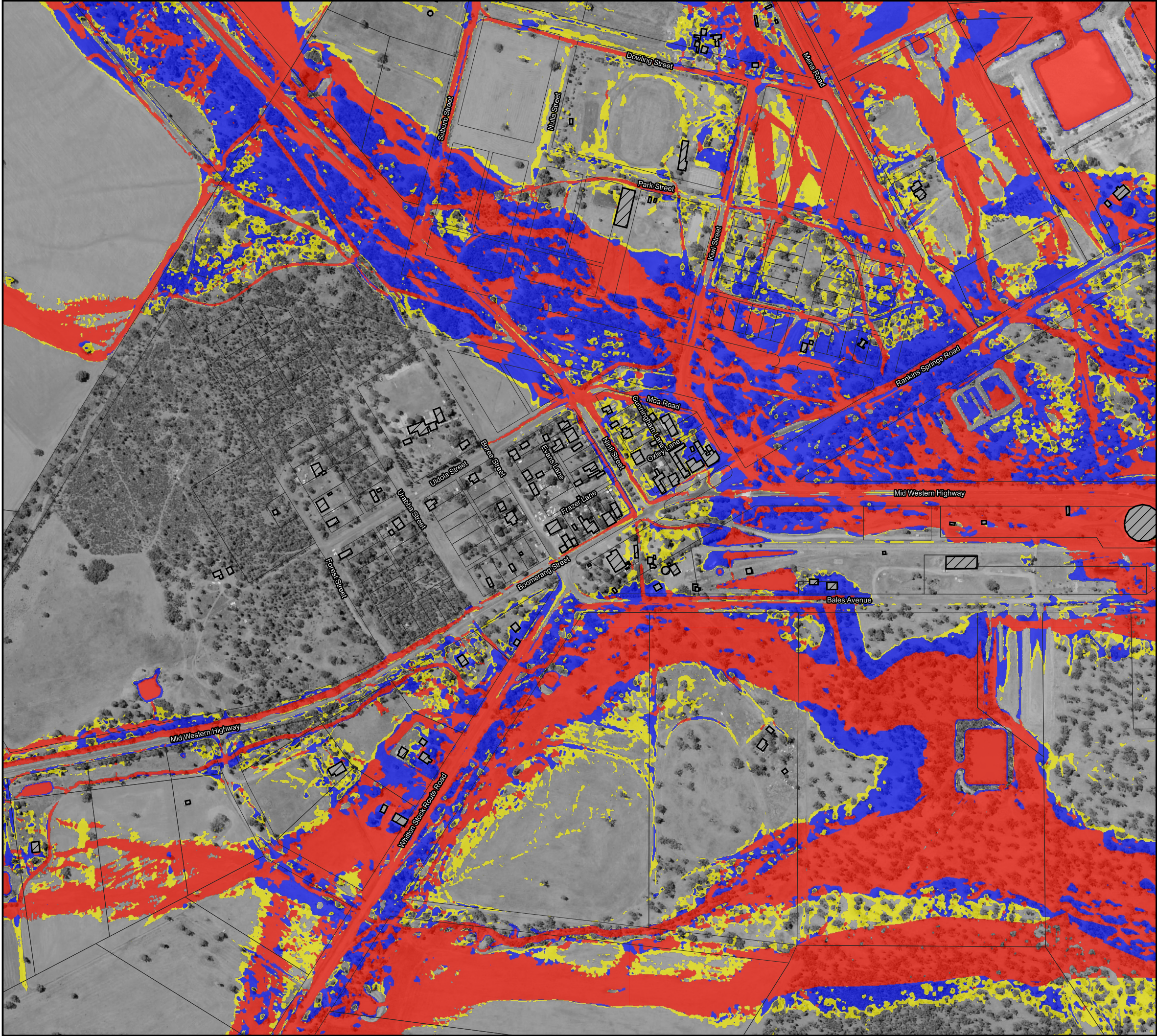
Figure 36.1:
Flood Hazard for the PMF

Prepared by:



Catchment Simulation Solutions

Suite 1, Level 10, 70 Phillip St
Sydney, NSW, 2000



Legend

- Lot
- Building

Flood Function Categories

- Floodway
- Flood Storage
- Flood Fringe

Notes:
Aerial photograph: NSW Six Map

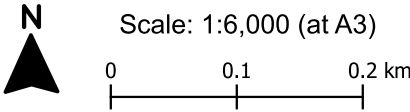
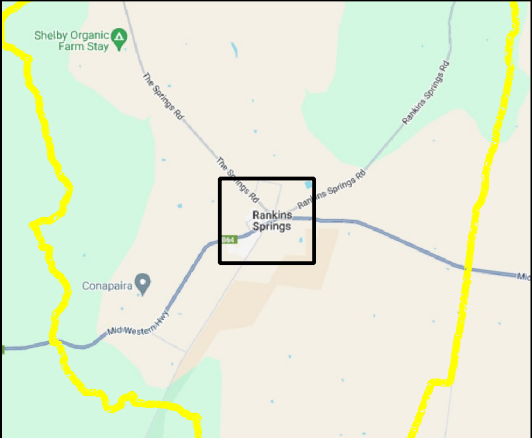
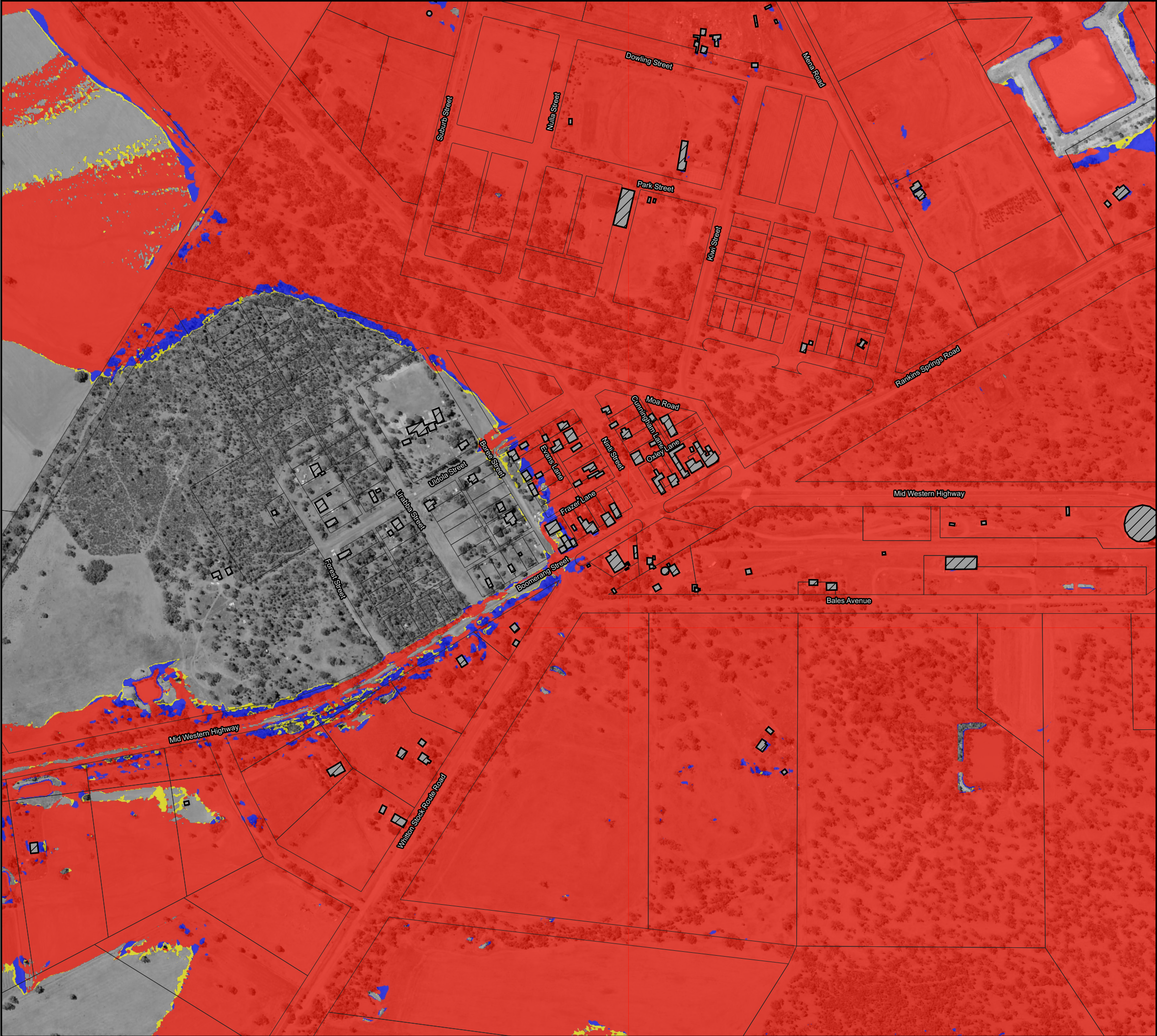


Figure 38.1:
Flood Function Categories for
the 1% AEP Flood

Prepared by:
Catchment Simulation Solutions
Suite 1, Level 10, 70 Phillip St
Sydney, NSW, 2000



Legend

- Lot
- Building

Flood Function Categories

- Floodway
- Flood Storage
- Flood Fringe

Notes:
Aerial photograph: NSW Six Map



Scale: 1:6,000 (at A3)

0 0.1 0.2 km

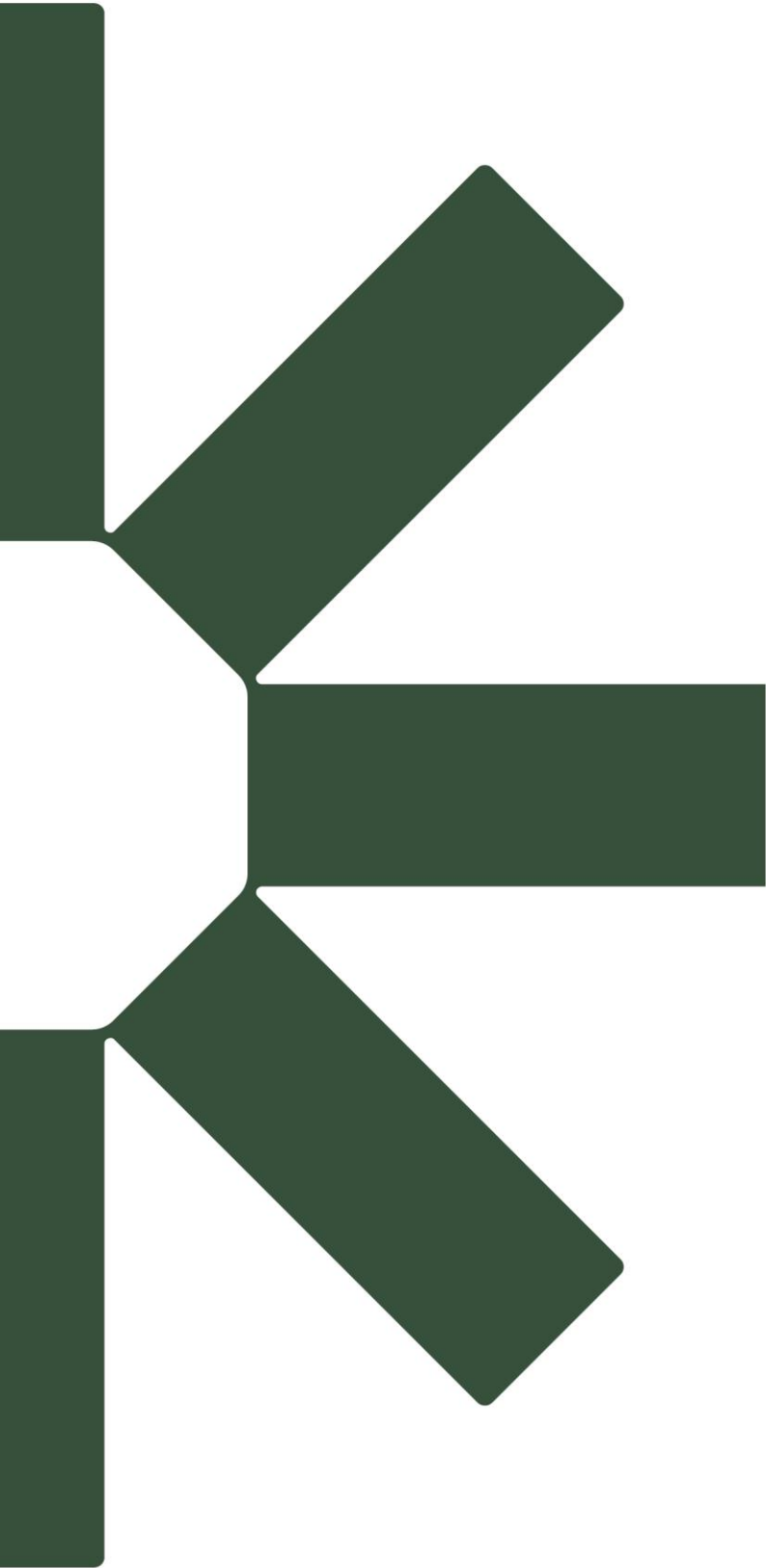
**Figure 39.1:
Flood Function Categories for
the PMF**

Prepared by:



Catchment Simulation Solutions

Suite 1, Level 10, 70 Phillip St
Sydney, NSW, 2000



Making Sustainability Happen