



GYDE

Structure Plan

Richmond Valley
Regional Job Precinct



Acknowledgment of Country

We acknowledge the Peoples of the Bundjalung Nation as Custodians and Traditional Owners of Country, and recognise the continuing connection to the land, waters and skies throughout Australia. We pay our respect to Aboriginal cultures, and to Elders past, present, and emerging.

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1. INTRODUCTION

1.1 Regional Job Precinct context

The NSW Government's Regional Job Precincts (RJP) Program, administered by the Department of Primary Industries and Regional Development (DPIRD), has identified Casino as having potential for growth in employment uses and is undertaking a series of actions to establish tailored solutions through the delivery of priority place-based or industry-based improvements to the NSW planning system.

The RJP program's focus in Casino is on facilitating change across the town's employment lands, aiming to leverage the strategic advantages of Casino, the Richmond Valley, and the wider North Coast Region. The NSW Government is working closely with Richmond Valley Council to plan for anticipated growth both within the local area and across the rest of the Local Government Area (LGA). Key long-term planning initiatives are as follows.

- **Richmond Valley Growth Management Strategy** (being prepared by Richmond Valley Council) to guide the growth of local housing and employment within the Richmond Valley LGA.
- **Casino Place Plan** (prepared as part of the RJP Program) to guide growth and place outcomes in and around the Casino town site and its identified growth areas.
- **Richmond Valley RJP Master Plan** (prepared as part of the RJP Program). The Master Plan will guide land use planning and place outcomes in the RJP employment lands and is supported by this Structure Plan.

The Richmond Valley RJP (the Precinct) is a 'clustered precinct' comprising three separate employment areas within the Casino town site. These are listed below and illustrated in Figure 1.

- Area 1 - Nammoona Industrial Precinct.
- Area 2 - Casino Food Co-op and Surrounds Precinct.
- Area 3 - Johnston Street Industrial Area and Surrounds Precinct.

The Richmond Valley RJP Action Plan (finalised in September 2021) confirmed the series of technical studies required to address pertinent planning considerations and inform the preparation of the Richmond Valley RJP Structure Plan.

The Structure Planning process for Richmond Valley RJP has been informed by a range of technical inputs. The findings and recommendations have been developed where possible in collaboration with other disciplines. It is acknowledged that some of the recommendations in this Structure Plan may not reflect all of the recommendations of technical reports, such as where they are out of scope for the RJP, conflict with other elements of the project or are proposed to be managed via an alternate mechanism. The technical inputs considered in the preparation of the Structure Plan are listed below:

- Regional Jobs Precinct Flood Impact Assessment (BMT 2024)
- Heritage Report (ERM 2024)
- Traffic and Transport Analysis Report (GHD 2024)
- Land Use Considerations Technical Report (Sherpa Consulting 2024)
- Air, Noise and Odour Technical Report (Todoroski Air Sciences 2024)
- Regional Job Precincts: Intermodal Feasibility Report (George Stanley Consulting 2024)

- Soils, Geology and Contamination Report (ERM 2024)
- Agricultural Land Assessment - Baseline Analysis Report (GHD 2024)
- Biodiversity Analysis Report (ERM 2024)
- Hydrogeology, Water Quality and Demand (GHD 2024)
- Utilities Infrastructure Analysis Report (GHD 2024)
- Bushfire Analysis Report (ERM 2024)

The extent of the Richmond Valley Regional Job Precinct investigation area is illustrated in Figure 1. This area has been the focus of significant technical investigation to confirm land use need and suitability for a range of future industrial uses.

Technical investigations have informed the recommended boundary of the RJP in each precinct Structure Plan. The RJP boundary previously included land south of the Bruxner Highway adjacent to Area 3. However, the outcomes of technical investigations highlighted the need for detailed investigations to confirm the suitability of that land for alternative uses. The boundary was adjusted to exclude this area pending further investigation.

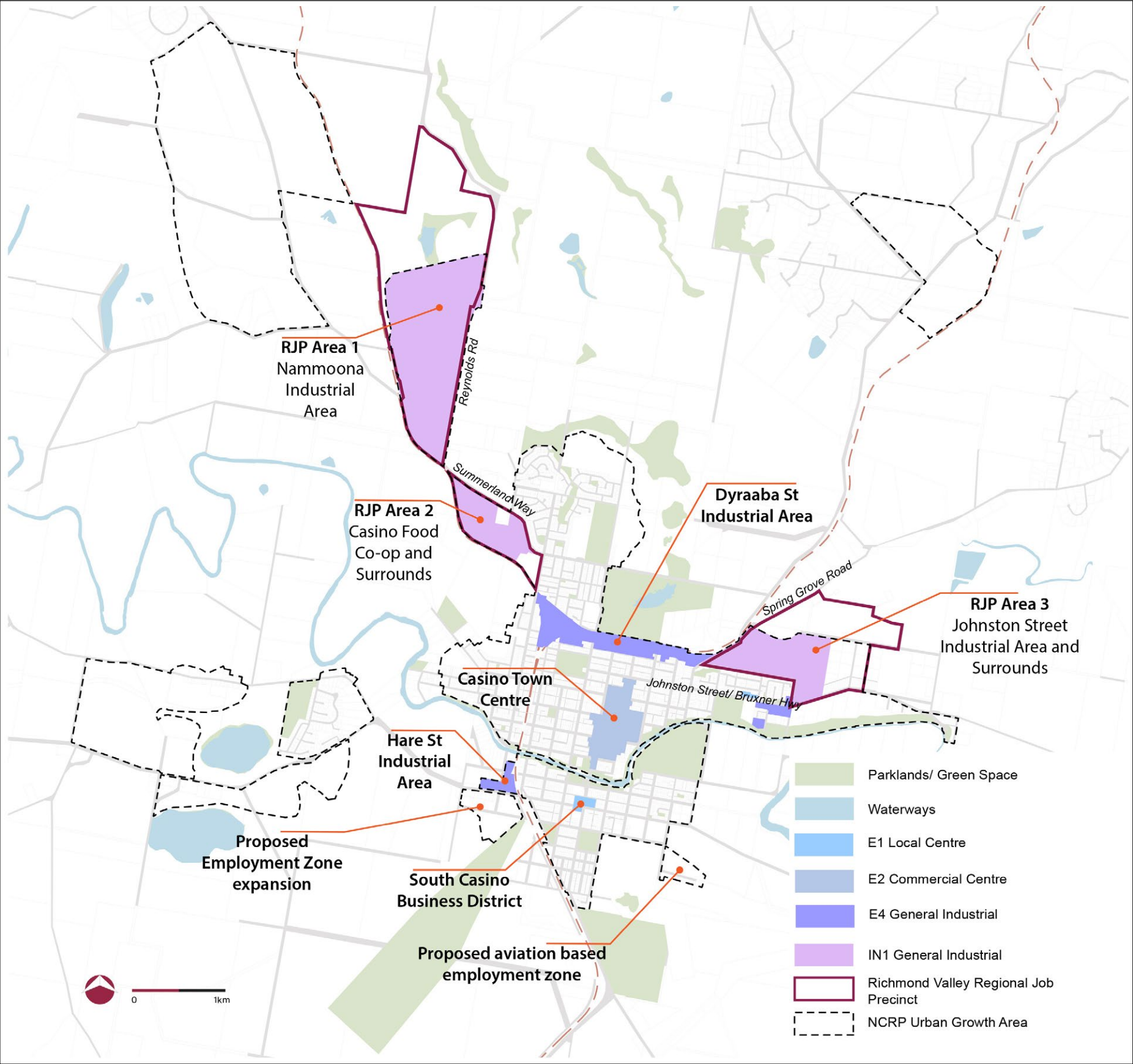


Figure 1. Richmond Valley RJP in the context of Casino's 'Key Employment Areas'



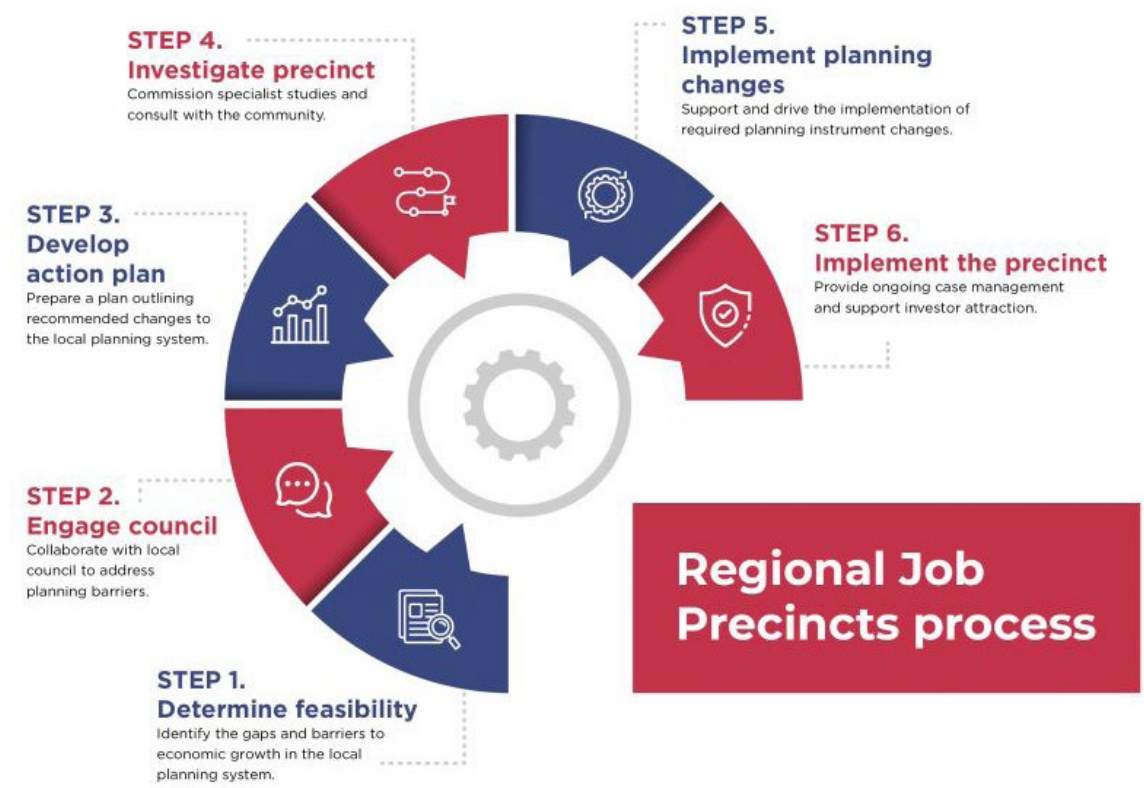
1.2 What is a Regional Job Precinct?

Regional Job Precincts (RJPs) are an extension of the NSW Government's Special Activation Precinct program, focused on providing planning support to help fast-track approvals to drive growth, investment and development opportunities within regional NSW.

RJPs use upfront strategic planning aligned with engine industries and strategic planning priorities to reduce investor uncertainty. Locations for the initial round of RJPs cover a diverse range of locations and regional investment opportunities including the Richmond Valley.

Development of this Structure Plan for the Richmond Valley RJP has followed a six step process tailored towards the needs of the Richmond Valley Local Government Area.

The Richmond Valley Regional Job Precinct will leverage opportunities and strengths in Richmond Valley's existing industries of agriculture, manufacturing and renewable energy.





1.3 Purpose and Objectives

The intent of this Structure Plan for the Richmond Valley RJP is to inform the development of the Master Plan and make recommendations for changes to local planning frameworks as they apply across the unique areas that comprise the Precinct.

The Structure Plan will deliver eight key objectives set out for the Richmond Valley RJP.

The RJP program has identified Richmond Valley as an immediate opportunity for action to drive local economic development and jobs creation and to overcome a number of planning impediments to streamline approval processes.

The RJP initiative focuses on delivering actions that can assist with streamlining development approvals through changes to the planning control framework. It is recognised that streamlining approvals is not always possible or appropriate, particularly for higher-impact uses that justifiably require a higher level of scrutiny to ensure risks are understood and suitably managed.

By reducing delays and simplifying planning processes, the Precinct will attract investment and diversify business opportunities, creating jobs for youth and a skilled and growing local workforce in Casino.

This Structure Plan does recognise the potential for higher impact uses to locate within the RJP, but these would rely on existing assessment pathways (e.g. Designated Developments) or separate approval measures (e.g. Environmental Protection Licenses).

For the avoidance of doubt, the RJP delivery actions will not involve streamlining or short-cutting approval pathways for these types of uses. Instead, it has identified locations within the RJP that are most likely to avoid or minimise conflicts between higher impact uses and sensitive receivers such as residential dwellings or public areas.

Richmond Valley RJP Objectives

1. Promote opportunities to diversify the local and regional economy through employment and investment opportunities in the Regional Job Precinct, supporting the creation of new jobs and economic development opportunities
2. Strengthen and further diversify the Richmond Valley's existing employment base to support business collaboration and industry clustering and identify sub-precincts suitable for compatible land uses and industry types
3. Build on the existing agricultural strengths of the Richmond Valley's industries and supply chains to target and attract new agribusiness and manufacturing industries
4. Increase land supply and diversity of Casino's employment lands to create a range of best fit employment and industrial land use opportunities that are attractive to a wide range of new industries and businesses
5. Ensure that urban design and planning for future development protects and builds upon the visual qualities and scenic values of Casino and the wider Richmond Valley
6. Establish an achievable strategic planning vision for the Richmond Valley RJP
7. Improve and enhance the existing planning framework to facilitate accelerated decision-making, facilitate desired development outcomes and provide businesses with the certainty and confidence to expand and establish in the Richmond Valley RJP
8. Ensure that new industrial development can occur in harmony with Casino's environmental and biodiversity values
9. Facilitate a coordinated approach to the prioritisation, funding and delivery of new infrastructure to support ongoing growth

1.4 Methodology at a glance

Stage 1 Research and Context Analysis	Stage 2 Options Development Scenario Testing and Integration	Stage 3 Develop Structure Plan and Technical Studies	Stage 4 Public Exhibition	Stage 5 Final Master Plan
November 2021 – January 2022	January 2022 – April 2022	April 2022 – October 2023	February – March 2024	September – October 2024
<ul style="list-style-type: none">• Project inception meeting• Review background documents• Site inspections, field work and place familiarisation• Stakeholder engagement plan• Baseline investigations (technical team)• Workshop 1 (Preliminary assessment)• Integration analysis report	<ul style="list-style-type: none">• Develop 3 Preliminary Options• Workshop 2 Options Development - discussions with technical team• Refine 3 Preliminary Options• Workshop 3 (RJP Integration 1: Scenario Testing)• Workshop 4 (RJP Integration 2: Preferred Option)• Finalise preferred option• Technical investigations of preferred option	<ul style="list-style-type: none">• Structure Plan concept development and refinement• Council preparation of RJP Flood Impact Assessment• Collaboration with technical team and stakeholders• Prepare Draft Structure Plan• Project Control Group review• Refine Draft Structure Plan for exhibition	<ul style="list-style-type: none">• Preparation of engagement collateral• Community information sessions• Focus groups• Consider submissions• Confirm approach for refining and finalising the Structure Plan	<ul style="list-style-type: none">• Update structure plan post exhibition.

1.5 A collaborative Structure Planning Process

A series of collaborative workshops were conducted to help develop and refine the Structure Plan. The workshops included input from technical experts, and local and state government stakeholders.

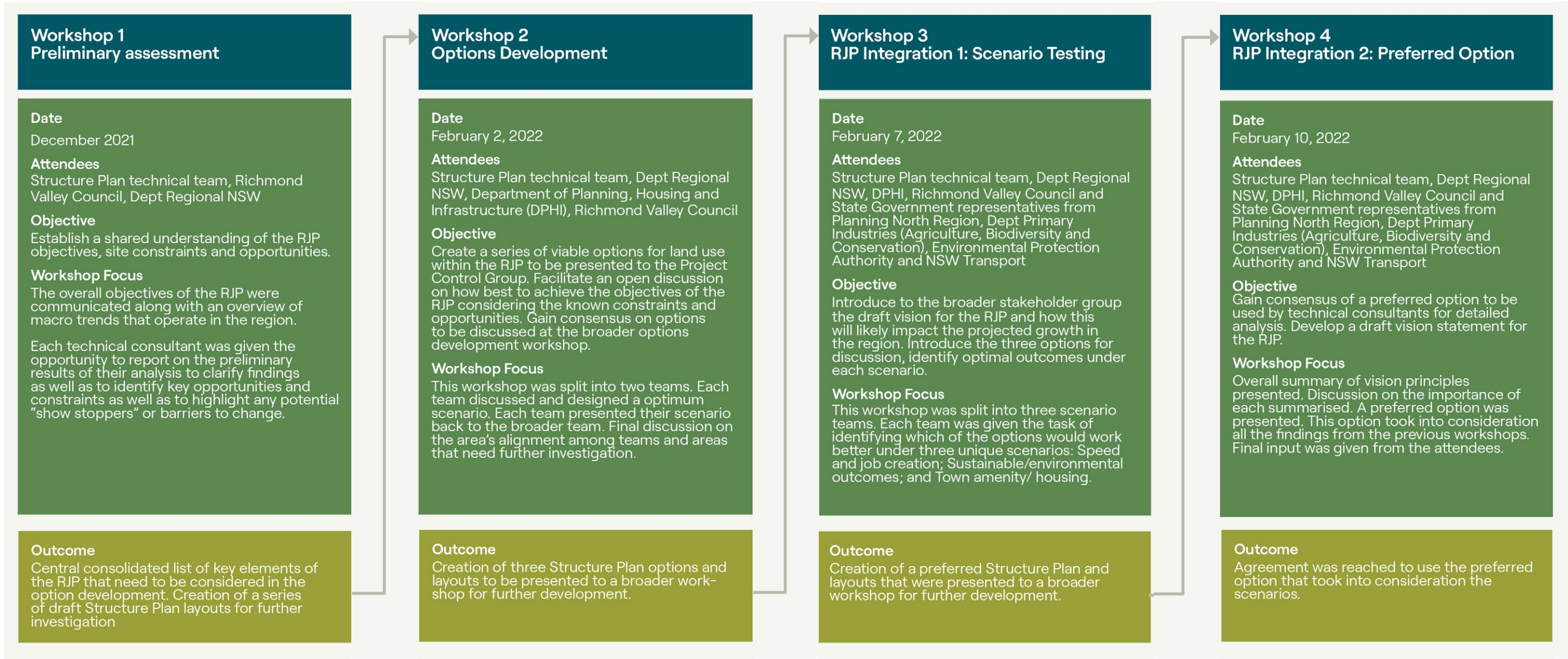
The workshops were designed to set the overall vision and objectives of the RJP. The workshops were focused around considering opportunities and constraints to identify workable outcomes and solutions for the Richmond Valley RJP.

Each successive workshop built off previous workshop outcomes to ensure that the options created were robust

and tested multiple times with input from a large group of experts and stakeholders.

A total of four online workshops were conducted over a three month period. At each workshop all technical consultants, Department of Primary Industries and Regional Development and Richmond Valley Council were present.

The final two workshops include a broader list of State Government attendees from the Project Control Group and were focused on options development scenario testing and refinement of a preferred option which was further revised in conjunction with the technical consultant team.



2. ECONOMIC CONTEXT

2.1 Why do we need a Regional Job Precinct?

The Richmond Valley seeks to strengthen its existing diverse employment base through the RJP initiative.

Casino is already the main employment centre for the Richmond Valley. The businesses in town are well-established and recognisable enterprises leveraging highly productive agricultural activities in the surrounding landscape.

Re-positioning the town's future employment offering as a RJP will catalyse opportunities to create new jobs in agriculture, manufacturing and renewable energy sectors. The precinct will assist with business diversification by identifying value-adding opportunities for existing industries and local producers.

All of regional NSW has been and will continue to be impacted by broader macro-economic conditions and the changing demand for industrial land.

The impacts of COVID-19, increased decentralisation and renewed interest in onshore production has put the spotlight on industrial property. The national market can be characterised by historically low supply, ongoing high demand and compressed yields due to high capital prices.

National industrial market vacancy is reaching close to 1% which is unmatched in modern history. This provides a strong foundation to support industrial growth.

Market Demand

Strong economic base with a diverse range of employment functions and a plurality of dominant industries.

Casino's comparative advantage over many regional towns is that it is not reliant on population-serving industries such as health care or education.

Agriculture and manufacturing provide a high value-add and support numerous small businesses and vertical processing of goods.

Casino's diverse economic base is reflected in the business composition, range of economic activity and strong absorption of industrial lands.

Business Composition

Dominant industries include 'agriculture, forestry and fishing' and 'manufacturing'.

These industries have a comparatively strong value-add with manufacturing estimated to return \$1.33 to the economy for every \$1 of input.

The strong base of agriculture and manufacturing provides opportunities to foster business and employment growth.

Economic Activity

There is a very diverse range of economic activity within the RJP. Over 58 unique economic activities occur in the area, ranging from bulk livestock feed, to glazing, tannery, macadamia meal to prefabrication of truss frames.

This diversity assists in mitigating market fluctuations as well as providing a robust and attractive base to support diverse industry clusters.

Vacancy

Based on combining the land use audit and the RJP boundary, there are approximately 52 hectares of vacant land zoned for employment in the RJP. When constraints as well as land designated for future uses are removed, there is only an estimated 15.3 hectares of vacant employment land in Casino. Of this 15.3 hectares, the majority (13.5 hectares) is earmarked for industrial subdivision in Reynolds Road at the south of the Nammoona precinct.

Derived market vacancy is less than 0.1% of the total zoned employment area. This critical market shortage and land use supply shows the demand to locate, which will likely place demand on unzoned land designated for employment.

The diverse economic activity, demand for employment lands and business composition support a case for demand for employment lands in Casino. Responding to areas of strong business growth will be critical.

2.2 Target Market

Maintaining the economic and employment diversity in Casino is a high priority, given the stability it provides the economy and local employment market. This is supported by continuing to attract agriculture and manufacturing businesses across a value-chain from design and planning to production, processing, modification, marketing and selling.

Other sectors that can support the core anchors will provide opportunities to diversify the economy and reduce reliance on a small number of industries.

At a broader macro-economic level, the race toward sustainability and rapid change in digital transformation will provide a basis for attracting new business and support and retain existing businesses.

Industry consolidation and the emergence of larger agriculture and agribusiness companies will likely impact land use, employment and economic reliance. The number of agribusinesses in Australia has contracted at an annual rate of 1.4%, from 203,100 in 2010 to 176,680 in 2020 as reported by IBISWorld within the 2020 Agribusiness in Australia Industry Report . This is despite a \$30 billion growth in the sector.

Casino fits this picture, with a total loss of 40 agriculture businesses between 2017 and 2020, including seven with a turnover greater than \$200,000 per annum. This is despite positive change in gross value of agricultural production (GVAP).

Further, there is a considerable push to innovate and take advantage of global supply chains. US Agtech investments are up 17% this year alone. Australia is expecting to follow suit as Agtech innovates, matures and spreads globally.

TARGET MARKET FOCUS 1:

Agriculture and Agribusiness

The Australian Agribusiness sector has grown from A\$249.6 billion in 2010 to A\$280.5 billion in 2020. The National Farmers Federation is expecting farm gate production to increase from \$61 billion in 2019 to \$100 billion in 2030.

Agribusinesses have been vertically integrating over the past decade. However, this can mean an inverse relationship between market output and employment. As a large agricultural production and processing hub, Casino is well placed to continue to benefit from the total market growth in Casino.

There are a number of megatrends impacting the Agriculture sector which have been derived from the National Farmers Federation, CSIRO Agrifutures and other industry publications. Casino is well placed to adapt, retain and attract new businesses that reflect these megatrends.

A snapshot of agriculture megatrends impacting Australia

- Increased regulation on economic social governance (ESG) reporting on emissions which is rapidly turning the agricultural manufacturing market into a race to sustainability and innovation.
- Dietary changes including greater Asian influence, increased meat replacements among younger consumers and provenance demands.
- Increased market accessibility coupled with increased logistics costs and pressures means the location of processing is becoming more cost sensitive.
- Rapid change in emerging markets (nut based dairy products, plant based cosmetics).
- By 2030, Australia should have preferential trade deals in place with Asia's five largest economies.
- A desire to improve food and product security and re-onshore production in critical materials.

Growth in Crop Production and Small Scale Agribusiness

In terms of agricultural production, in the Northern Rivers, there is extensive grazing which occupies nearly 200,000 hectares or 80% of the available agriculture area. Only 45,000 hectares are used for cropping, (~20%) of the land area, despite composing 46% of all businesses. A breakdown of the cropping land use and businesses, suggests there is considerable opportunity to further target growth in these sectors.

Production in Casino

There is emerging cropping and processing in and around Casino, especially in an arc over the north west of the town. This includes multiple vegetable cropping enterprises, aniseed, tea tree oil, biodynamic rice growing and milling, floriculture, olive production and some fruit production including blueberries. The location of different crops are mapped in Figure 2.

The demand for cropping was supported by stakeholder engagement which identified major benefits of low relative land cost, road access and production opportunities to expand in Casino.

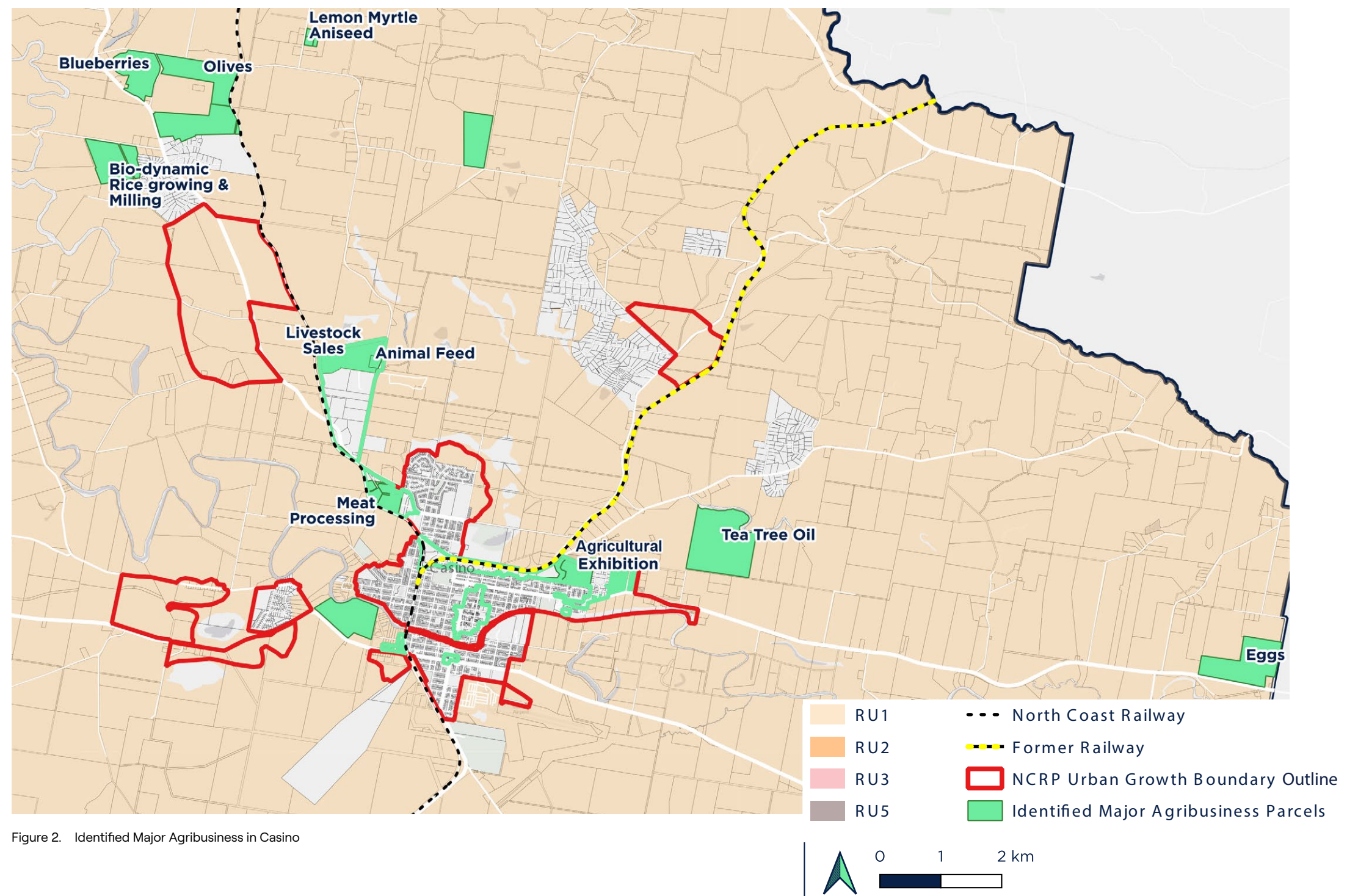


Figure 2. Identified Major Agribusiness in Casino

TARGET MARKET FOCUS 2:

Manufacturing

The economic performance of manufacturing in Australia appears to have mixed fortunes.

Manufacturing in particular is projected to grow in terms of net revenue and exports yet continue with a slight downward trend in employment. Casino appears to be bucking this trend, showing growth in manufacturing with a net change of 11 new manufacturing businesses from 2017 – 2020.

Manufacturing is the largest employer in Richmond Valley as well as the largest value-add to the economy. The sector is diverse and has tight inter-relationships with other services such as repair, servicing and business support functions. The diversity of manufactured products and scale, provides for strong servicing systems. The sector in Casino has a strong food processing cluster, however, also has considerable product manufacturing and component engineering. An example of the range of manufacturing within the RJP at present is shown below.

Building on these strengths is a key priority for the RJP.

Megatrends for Manufacturing in Australia Relevant to Manufacturing in Casino

- Product manufacturing such as food, apparel and furniture makes up over 50% of all products constructed in Australia with creative components in the process and marketing a major area.
- There is an increasing understanding of the creative supply chain which links manufacturing and industrial uses related to the creative sector to event spaces, performance areas and related.
- The past decade has seen increasing demand for smaller artisanal products, which is having a considerable impact on food production, beverage production and small scale manufacturing.
- Resource scarcity has meant there is an increasing importance of product life-cycle and the need for more servicing for both consumer and industrial products.
- The impact on employment is not necessarily job loss, rather employment shift to creation, design, research and other high technical skills. There is evidence it is actually increasing employment.

ABATTOIR	HIDE TANNERY	MACADAMIA MEAL	METAL FABRICATION
BULK LIVESTOCK FEED	METAL FABRICATION AND STEEL SALES	PALLET MANUFACTURING	PREFABRICATED TRUSS AND FRAMES
JOINTING MANUFACTURING (Connecting, fixing, lifting and anchoring solutions)	FOOD PRODUCTION	SHADE STRUCTURE MANUFACTURER	TIMBER CHEMICAL TREATMENT

Figure 3. Major Manufacturing Businesses

2.3 Industrial supply and demand

The following sections identify the approximate total quantum of industrial land requirements for Casino.

It considers suitability of existing industrial land supply across the LGA and conditions driving demand for industrial land in different locations and different typologies.

The following approach was used to consider demand against supply was undertaken to methodically derive a future demand range and suitability against current supply.

Key elements of approach to consider demand against supply

1. Macro-economic industrial market and forecast
2. Regional industrial market and economic considerations
3. Current supply and market conditions in Casino
4. Projection of future demand and scenario testing
5. Consideration of need against current planning

2.4 Macro-Economic Conditions

The impacts of COVID-19, increased decentralisation and renewed interest in onshore production has put the spotlight on industrial property. The national market can be characterised by historically low supply, ongoing high demand and compressed yields due to high capital prices.

- National industrial market vacancy is reaching close to 1% which is unmatched in modern history in Australia¹
- One of the biggest growth sectors is last mile storage and in inbound and outbound regional delivery centres (CBRE)²
- The impact of e-commerce and logistics boom has brought forward demand levels in 2021/22, placing significant demand for decentralised warehouse space (outside major capitals)³
- The growing urgency among businesses to find (or expand) their industrial spaces is now evident in the market data, (Colliers)⁴
- Leasing take-up volumes, which are currently running 31 per cent above their long-run averages on the east coast, while pre-leasing activity for new buildings grew by 11 per cent in the 12 months to October 2021 (Colliers)⁵

1 CBRE Asia Pacific Real Estate Outlook 2021
2 Ibid.
3 Knight Frank Australian Industrial Review - November 2021
4 Colliers – Regional Spotlight Industrial Second Half 2021
5 Ibid.

The macro economic conditions look positive for 2022 and for the short term onwards with pronounced benefit to regional Australia and associated industry growth and diversification

- The disruption to global supply chains has also caused a resurgence of local, on-shore manufacturing, the report noted, with such job numbers now above pre-pandemic levels due to strong job growth on the eastern seaboard.⁶
- The 2022 outlook for Australia's industrial property market looks stronger than ever, with an estimated \$50 billion worth of capital seeking investments, according to Colliers.⁷
- Expected consumer confidence and return to stronger economic growth, expected to be over 4% in 2022⁸.
- The changes are disproportionately benefiting regional Australia, which goes against a long running trend. Industrial investments in regional hubs such as Wollongong, Newcastle, Geelong and the Gold Coast are outperforming those in booming capital-city markets.⁹
- Capital cities generated prime rental growth of only 1.2 per cent last financial year compared with 8.3 per cent for big regional centres on the east coast.¹⁰

6 Australia & New Zealand Property Journal – Strong out look for Australian industrial property with \$50b seeking deals
7 Colliers op. cit.
8 RBA Australian economic outlook 2022
9 Colliers op. cit.
10 Commercial Real Estate Industrial rents & values rising faster than in capital cities (2022)

2.5 Regional Demand for Employment Land

The economic decentralisation which has been expedited since COVID-19 is delivering economic growth to regional economies promoting new industry and demand for employment land. Further, population growth is creating more demand for people serving industries and local service needs, further creating demand for employment generating floorspace.

- Almost 45,000 Australians (net) moved to regional locations from capital cities over the past year, especially Sydney and Melbourne. This represents a record level of internal migration to regional areas and is more than double the rate recorded in 2019.¹¹
- A significant investment in transport infrastructure will reshape the demand drivers for industrial land in non-metropolitan markets. There is approximately \$80 billion in transport projects in the pipeline across regional east coast markets.¹²
- Capital city economies shrunk by 0.7% in 2020 while regional Australia grew by 1.0% over the same period, and it was the first time since 2015 that it outperformed the capital cities.¹³
- From an occupier perspective, there has been a shift in location preferences for some businesses as they seek warehouse space outside of the major capital cities. A more decentralised workforce, easier access to the national highway network and cheaper floorspace are key drivers.

11 Colliers op. cit.
12 RBA op. cit.
13 Commercial Real Estate Industrial rents & values rising faster than in capital cities (2022)

The economic growth in regional economies is being reflected in demand for regional employment land with lower vacancy as compared to major metropolitan markets. In many regional markets the vacancy is well below 3%, emphasising very low market elasticity.

Colliers note that enquiry data across regional centres has placed pressure on demand for warehouse space, with a large share of warehouse demand coming from occupiers currently located elsewhere.

In most cases, future supply of warehouse space is limited in regional centres, and the heightened demand for space over the past 18 months has placed significant downward pressure on warehouse vacancy rates. Nationally, the capital city warehouse vacancy rate measures 3.5%, while for many regional markets, vacancy rates are well under this at 2.0-3.0%, which has placed upward pressure on warehouse rental values.¹⁴ This has significant implications for freight and logistics opportunities in the RJP.

2.6 Local Demand for Employment Land

In Casino, the total available industrial land supply can be broken down as follows¹⁵: Refer Figure 4.

- Approximately 275 ha of total industrial land potential.
- Approximately 120 ha of total vacant land potential when potential land use limitations (154.9ha) are removed.
- Approximately 52 ha of vacant land within zoned area
- Approximately 0.2 ha of market available land.

¹⁴ Commercial Real Estate Industrial rents & values rising faster than in capital cities (2022)
¹⁵ Information sourced from multiple datasets, including RVC land audit



Figure 4. Possible Vacancy in Casino and the RJP

Current status: 275ha of total industrial zoned land

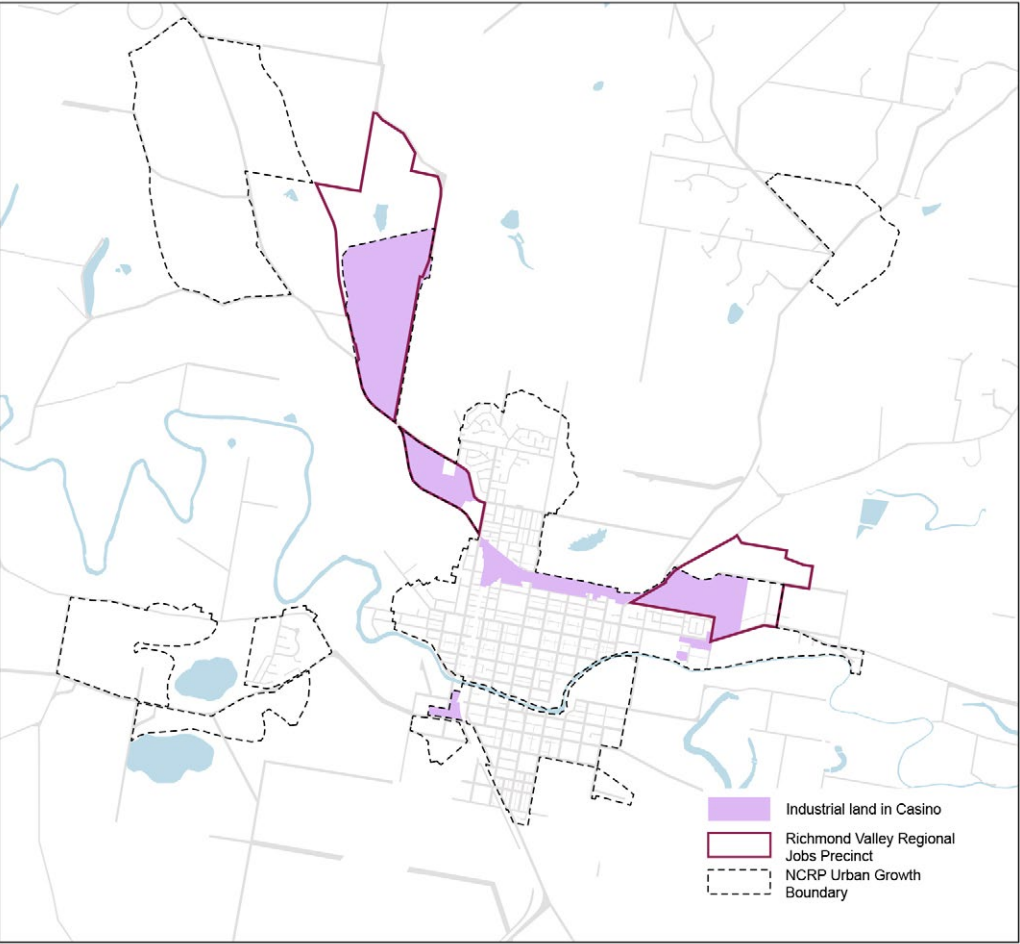


Figure 5. Industrial zoned land comprising Casino's employment lands

Of that land:

- 47ha outside the RJP
- 228ha inside the RJP

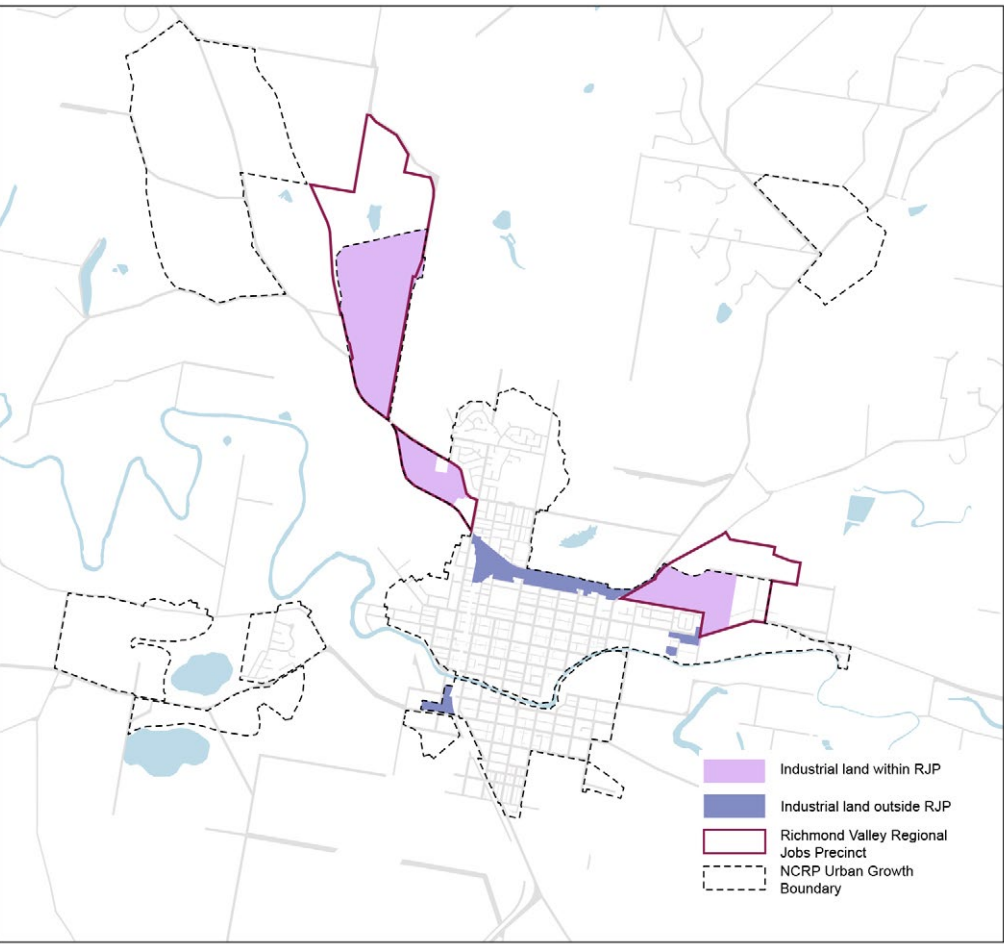


Figure 6. Industrial zoned land within and outside of the RJP

There are a number of active and possible land use limitations which could further reduce supply within the existing zoned employment land.

This includes the approved Casino Rail Freight Terminal site and potential for sale of Lot 320 (within Area 3) to the east of the sewage treatment plant for an intensive agricultural facility. While the 'earmarking' of these potential future uses may impact supply, their catalytic impacts and contribution to diversification and growth is acknowledged.

Within the RJP at present, there is a general discrepancy between vacant serviced land and commercially available land.

In December 2021 there were only two properties for sale/lease with a combined floor area of 660sqm and one property for sale with a floor area of 585sqm.¹⁶

Applying a 50% site buffer to incorporate land area, a approximate land area of approximately 1,868sqm is currently on the commercial market. This effectively means a derived market (commercially available) vacancy is less than 0.1% of the total zoned employment area.

¹⁶ Realestate.com.au & realcommercial.com.au – available industrial leasing's and sales (December 2021)

2.7 Supply Requirements

To generate a baseline quantum of future possible need, we have extrapolated the five year change in business count in ‘manufacturing’ and ‘transport, postal and warehousing’.

Given the very strong macro-economic conditions for industrial uses, the strongest regional economy in decades and the ongoing decentralisation and population growth in the Northern Rivers, it is reasonable to assume that the same growth could be achieved over the next 20 years to 2041.

Based on a rate of 15 new businesses in these sectors over each 5 years to 2041, this would lead to a total of 60 new businesses over a 20 year time period (3 per annum on average).

There are different floorspace and lot requirements to reflect a balance of industrial growth which reflects current industrial patterns and future attraction.

As such it is assumed that 75% of new industrial businesses (45 in total) would be small scale on a land area of approximately 4,000sqm. This is derived from the average current lot size of small scale industrial (Johnston Street Precinct) as well as the proportion of current small businesses of the approximate total of 67%. Given the proliferation of smaller scale businesses the likely proportion has been increased from 67% to 75%.

The same benchmarks have been considered for larger industrial uses which are estimated to comprise up to 25% of businesses (15 in total or 0.75 per annum) . The derived land area has been drawn from an average of current in use businesses and is in the order of 5.95 ha.

Applying these rates and benchmarking 40% for infrastructure (external to the sites), the total derived land areas are 24.8 ha for small scale and 119.1 ha for large scale. This is a total of 143 ha industrial land.

An applied 30% buffer to account for market elasticity or a major large single industry land deal generates a total of 187 ha of total considered demand. This figure represents a benchmark and aspirational projection and it should be considered as such and not as a definite projection of derived demand.

Against the total potential industrial area, this is 68% of the gross total of 274.8 ha.

If constraints and potential land use limitations are removed, it drives a shortfall of 67.1 ha.

It is worth noting that this is being relatively conservative on projections and is assuming business growth in industrial sectors will be consistent with 2016-2021 trends.

If any major industrial use or significant land holding for a purpose was to absorb a large land holding this could further reduce available supply. The outcomes of the Regional Jobs Precinct Flood Impact Assessment (BMT 2024) identify constraints relating to overland flow, which will limit the usability of some land in Area 3. It should be noted that there could also be withdrawals from the market and any significant land holding withdrawal could increase vacancy.

As such, there is benefit in ensuring an elastic supply to adapt to as yet unknown future circumstances and also noting that growth is likely to continue beyond 2041.

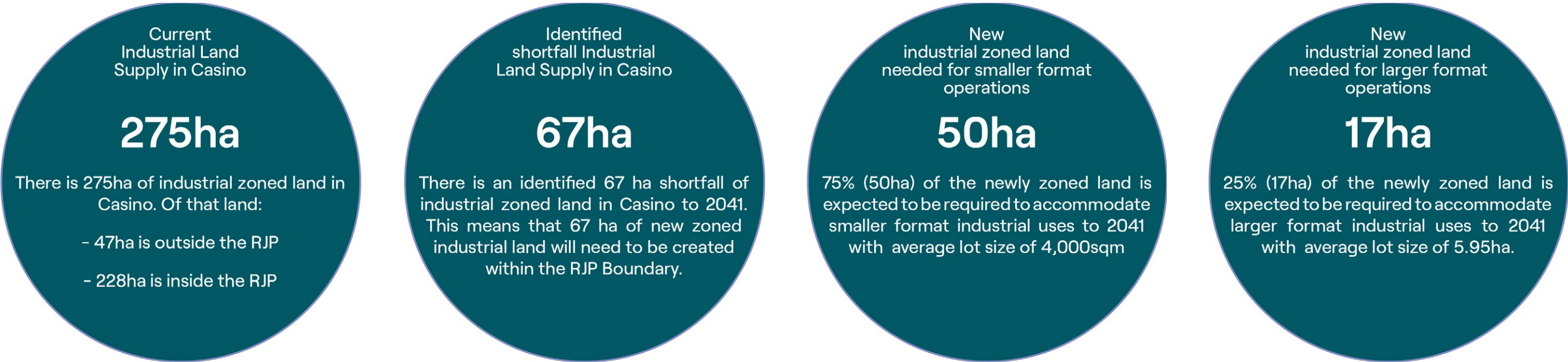
Impact of the Northern Rivers floods

The recent Northern Rivers floods, and particularly the impact on the community of Lismore, has changed settlement patterns around the region.

Lack of temporary housing in Lismore has seen flood-affected residents dispersed throughout the region, seeking available rentals and employment opportunities and establishing new community connections.

Prior to the flood, there were strong ties between the Richmond Valley and Lismore for employment, with more than 2,300 workers travelling between the two centres each day for work. Availability of flood-safe lands in Casino and surrounds is expected to attract increasing demand for residential and commercial development in the coming years. While it is too early to predict the final impacts of resettlement, it is important to consider these factors when planning for growth in the Richmond Valley.

2.8 Summary of key economic considerations for RJP Structure Plan



This Structure Plan adds approximately 87ha of new industrial land within the RJP. While this figure is almost 20% higher than the 67ha calculated as needed for the next 20 years, the additional land provides a buffer if (for example) a large industry consumes more land than anticipated, or take up is faster than projected. The additional area will also provide a suitable flexibility to enable the evolution of lot mix across the RJP to cater for actual demand. It also allows for additional growth beyond the 20 year horizon where suitable land for industrial purposes is limited due to flooding constraints. This calculation also assumes that existing industrial land uses remain the same. Constraints relating to overland flow will limit the usability of some land in Area 3, requiring additional elasticity to ensure that there is sufficient usable employment land to satisfy projected demand.

It is noted that economic analysis does not factor in potential locational advantages of Casino’s employment land in relation to flood levels. While some areas of the RJP are flood affected, there is a significant area of land in the RJP not affected by flooding. Additional flexibility beyond the projected 67 ha of additional industrial zoned land will create opportunities for industries outside of flood affected areas across the North Coast Region. This additional land will also assist in offsetting the significant area of E3 Productivity Support proposed in Area 3. While E3 zoned land will enhance the diversity of business and employment opportunities, it does reduce the total amount of general and heavy industrial land on offer.

3. PLANNING CONTEXT

3.1 Unique Opportunity

The Richmond Valley RJP is in the Casino town site, approximately 717km north of Sydney and 228km south of Brisbane at the convergence of:

- **Bruxner Highway**, which is a state route that serves as the east-west link between the Northern Rivers coast at Ballina to the Northern Tablelands at Tenterfield.
- **Summerland Way**, which is a state route that serves as a north-south link between Grafton and the Queensland border, where it continues as National Route 13 to Brisbane, and
- **North Coast railway line**, with north-south connections between Sydney and Brisbane.
- **Northern Rivers Rail Trail**, the eastward connection via the decommissioned Murwillumbah railway line is planned to be converted to a rail trail. This is expected deliver a range of positive economic effects related to increased visitation and tourism.

There is potential for a direct link to the Pacific Motorway via MR145 (Casino-Woodburn Road).

The Richmond River, which rises in the Great Dividing Range and flows over 237km before reaching the South Pacific Ocean near Ballina, bisects the town.

There is a well-established specialised cluster of agricultural and food manufacturing businesses within Casino, along with a variety of other traditional and niche industries.

The Richmond Valley RJP presents a unique opportunity to activate several locations within a specialised industry cluster by fostering new and emerging businesses, facilitating interaction between operators, centralising labour and resources, and generating economies of scale (lower costs and improve efficiency) across all locations.

The importance and economic relevance of industrial areas outside of the RJP, or other businesses within the township of Casino, that are not identified within the RJP boundary are not discounted by this Structure Plan. The RJP boundary simply serves to highlight where initiatives will be targeted to streamline or de-risk future planning approvals in line with investment attraction prospects.



Figure 7. Richmond Valley RJP's strategic advantage at the nexus of the NSW, the Northern Rivers and South Eastern Queensland (source Google Maps)



3.2 Statutory Planning

3.2.1. Richmond Valley Local Environmental Plan 2012

The Richmond Valley Local Environmental Plan 2012 (RVLEP 2012) provides the statutory planning framework for development across Casino and the wider Richmond Valley. The aims of RVLEP 2012 are:

- to protect and promote the use and development of land for arts and cultural activity, including music and other performance arts,
- to encourage the proper management, development and conservation of natural and man-made resources,
- to support and encourage social and economic benefits within Richmond Valley,
- to ensure that suitable land for beneficial and appropriate uses is made available as required,
- to manage appropriate and essential public services, infrastructure and amenities for Richmond Valley,
- to minimise the risk of harm to the community through the appropriate management of development and land use.

RVLEP 2012 sets the land use permissibility across the Richmond Valley Local Government Area (LGA). All industrial zones in the RJP are zoned IN1 General Industrial in which the following objectives and land use permissibility applies:

1 Objectives of zone

- To provide a wide range of industrial and warehouse land uses.
- To encourage employment opportunities.
- To minimise any adverse effect of industry on other land uses.
- To support and protect industrial land for industrial uses.
- To enable development that is associated with, ancillary to, or supportive of, industry or industrial employees.

2 Permitted without consent

Nil

3 Permitted with consent

Depots; Freight transport facilities; Funeral homes; Garden centres; General industries; Hardware and building supplies; Heavy industrial storage establishments; Industrial training facilities; Landscaping material supplies; Light industries; Neighbourhood

shops; Oyster aquaculture; Places of public worship; Roads; Rural supplies; Tank-based aquaculture; Take away food and drink premises; Timber yards; Vehicle sales or hire premises; Warehouse or distribution centres; Any other development not specified in item 2 or 4

4 Prohibited

Airstrips; Amusement centres; Bee keeping; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Centre-based child care facilities; Commercial premises; Community facilities; Eco-tourist facilities; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Function centres; Health services facilities; Heavy industries; Highway service centres; Home-based child care; Home businesses; Home occupations; Home occupations (sex services); Information and education facilities; Moorings; Pond-based aquaculture Recreation facilities (outdoor); Registered clubs; Residential accommodation; Respite day care centres; Restricted premises; Schools; Tourist and visitor accommodation

Employment Zone Reform

Local Governments across NSW including Richmond Valley are required to translate existing LEPs to reflect the new employment zone amendments. In general, this will involve a translation from B and IN zones to the new E zones.

Part 2 Clause 6 of the Standard Instrument (Local Environmental Plans) Order 2006 provides for continuation of existing business and industrial zones for the land identified as "Land subject to Richmond Valley Regional Jobs Precinct Process" on the Richmond Valley Local Environmental Plan 2012 Land Zoning Map. As such the land zoning in the RJP has not transitioned to the new E zones.

Areas outside of the RJP have been transitioned to the new E zones. Any zoning recommendations of the Structure Plan will be consistent with the employment zones described under the Standard Instrument.

3.2.2. Richmond Valley Development Control Plan

The Richmond Valley Development Control Plan 2021 (DCP) complements the RVLEP 2012 with development controls and assessment criteria.

The plan aims to protect and sustain the Richmond Valley’s natural environment and provides detailed development controls which aim to facilitate quality development, protect neighbourhood amenity and maintain environmental quality.

Industrial development in Casino is guided by Part C of the DCP, which is based on the premise that industrial areas are essential to supporting economic productivity, providing employment and spaces for land uses requiring larger lots and buildings and in some cases separation from other sensitive land uses.

The DCP acknowledges that industrial areas require careful consideration to ensure the development is functional, positively contributes to the streetscape of the area and minimises adverse impacts upon the surrounding area.

3.2.3. Proposed Planning Framework

For land within the Richmond Valley RJP, the land use recommendations set out in Sections 7, 8, 9 and 10 of this Structure Plan will inform:

- amendments to zoning and development standards under the RVLEP 2012 to allow for a diverse range of industrial uses to grow and locate in Casino.
- updates to the DCP to establish the necessary development objectives and controls at the precinct scale to deliver the vision for the RJP, and provide guidance to manage impacts of industrial development.
- updates to contributions planning to support funding and delivery of identified infrastructure and transport upgrades.

The proposed planning framework will seek to establish suitable mechanisms to facilitate orderly business growth and investment development for the Casino, Richmond Valley and wider North Coast Region through a streamlined planning approval process. The planning framework is geared towards encouraging target industries (freight and logistics, agribusiness and manufacturing) that will benefit from Casino’s strategic location relative to major Australian markets, international gateways, national rail and road transport corridors.

3.2.4. Assessment and Approval Processes

Development within the Richmond Valley RJP will be assessed and determined through approval pathways that are intended to facilitate development that is aligned with the RJP vision and this Structure Plan:

Exempt Development

Exempt development applies to low impact land uses and must comply with the development standards under the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 and Part 3 of the RVLEP 2012. Clause 3.1 of the RVLEP 2012 defines development considered to be exempt development and states the requirements for exempt development as listed in Schedule 2.

Complying Development

Complying development is granted through the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008. Clause 3.2 of the RVLEP 2012 defines development considered to be complying development and states the requirements for complying development as listed in Schedule 3.

Development Applications

Future development that does not fall within exempt or complying development will require development consent and will be assessed against the provisions of the RVLEP 2012 and DCP.

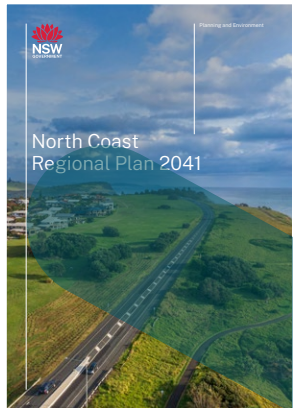
Designated Development

Designated Development applies to future development of certain high impact (e.g. likely to generate pollution) or development that is located in or near an environmentally sensitive area under the Environmental Planning and Assessment Regulation 2021 (EP&A Regulation).

State Significant Development

The state significant development pathway set out under the State Environmental Planning Policy (Planning Systems) 2021 streamlines planning assessment processes for the assessment of major projects, which are deemed to have state significance due to the size, economic value or potential impacts of the proposal.

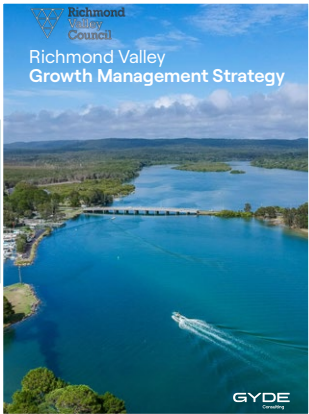
Strategic line of sight



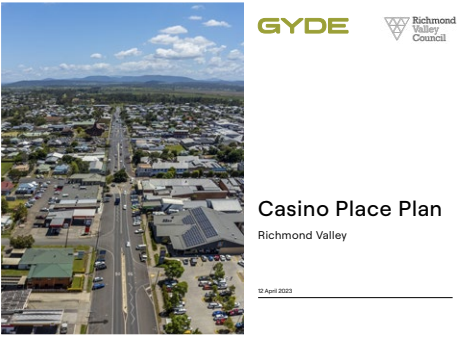
North Coast Regional Plan 2041
Updates the planning priorities relevant to each LGA in the North Coast Regional Plan Area, which includes Richmond Valley



Local Strategic Planning Statement: Beyond 20-20 Vision
Provides direction in relation to implementing the outcomes of the North Coast Regional Plan



Richmond Valley Growth Management Strategy
Sets the LGA-wide directions for land use planning, taking a broad view of issues like employment, housing, and environmental protection across full range of rural to urban contexts.



Casino Place Plan
Sets the township-level directions for how we manage growth and change, recognising the RJP is likely to lead to much higher and different growth rates than previously predicted.



Richmond Valley RJP Structure Plan
Puts detail on what happens for the three key areas that make up the RJP boundary, based on several detailed technical studies



Richmond Valley RJP Master Plan
Promotes the development of employment opportunities for the RJP with a focus on growth in agribusiness, manufacturing circular economy and renewable energy

3.3 Strategic Planning

The Richmond Valley RJP Structure Plan has taken into consideration and aligns with the following key strategic documents, which are further discussed in the following sections.

This Structure Plan will inform and support the Richmond Valley RJP Master Plan. This will assist Richmond Valley Council in implementing the vision and principles encompassed across the broader strategic framework.

When implemented, the Master Plan (informed by this Structure Plan) will inform updates to the RVLEP 2012, updates to contributions planning and the DCP.



3.3.1. North Coast Regional Plan 2041

The North Coast Regional Plan 2041 (NCRP) came into effect in December 2022. It will guide the NSW Government’s land-use planning priorities and decisions over the next 20 years.

The NCRP provides an overarching framework to inform subsequent and more detailed land-use plans such as Council’s Local Strategic Planning Statement.

The NCRP recognises opportunities for Casino to leverage its status as a Regional Job Precinct to continue to expand new employment and housing opportunities. As the largest settlement in the Richmond Valley and a focal point for the region’s beef industry the NCRP identifies Casino as a growing centre for manufacturing and food production industries.

Collaboration Activity 3 aims to support the development of the Richmond Valley Regional Job Precinct to create a hub focused on high-value agriculture, food processing, manufacturing, distribution, and renewable energy under the leadership of the Department of Primary Industries and Regional Development.

Housing supply, access to jobs integration of land use and transport, active transport, and protection of environmental assets and renewable energy are key themes supported by the NCRP.

This Structure Plan responds to and will assist Richmond Council in meeting the objectives of the NCRP and aligning with the Local Government Narratives identified for the Richmond Valley in the context of the wider North Coast Region.

The plan also provides updated principles to vary urban growth boundaries including:






- Consistency with relevant Policies and strategies.
- Availability of infrastructure.
- Minimising impacts to environment and heritage.
- Avoiding risk (e.g. flood, bushfire).
- Minimising hypothetical for land use conflict.
- Justification for any land use change associated with important farmland.

Given that some areas of the RJP are identified as Regionally Significant (Important) Farmland, there is a need to consider the specific criteria for varying Important Farmland as outlined in the box below:

Criteria for varying Important Farmland

Is contiguous with an existing urban zone and the need and justification is supported by a sound evidence base addressing agricultural capability and sustainability and is either for:

- a minor adjustment to ‘round off an urban boundary’, or
- if demonstrated through a Department approved local strategy that no other suitable alternate land is available, and if for housing, that substantial movement has been demonstrated toward achieving required housing delivery and infill targets within existing urban growth area boundaries.

Local Government Narratives – Key Themes	
Regional Priorities 	Expand the local agricultural industries and tourism Leverage the new Regional Job Precinct to continue to expand new employment and housing opportunities
Liveable and Resilient 	Improve water quality and security Support environmentally sustainable development that is responsive to climate change and natural hazards. Retain and protect local biodiversity
Productive and Connected 	Deliver new and diverse employment opportunities Protect the ongoing viability of important farmland Support the RJP with a focus on food production, manufacturing and alternative energy.
Housing and Place 	Deliver new housing in appropriate locations Enhance the variety of housing options available -ensuring adequate supply Retain and support the unique character of local towns and villages
Smart, Connected and Accessible (Infrastructure) 	Foster stronger connections and alignment with the Northern Rivers subregion. Grow agricultural and freight links to South East Queensland. Improve access to reliable broadband and telecommunications services.

Relevant North Coast Regional Plan 2041 Objectives

The NCRP Objectives are listed below with objectives that are relevant to this structure plan coloured green:

- 1: Provide well located homes to meet demand
- 2: Provide for more affordable and low cost housing
- 3: Protect regional biodiversity and areas of high environmental value
- 4: Understand, celebrate and integrate Aboriginal culture
- 5: Manage and improve resilience to shocks and stresses, natural hazards and climate change
- 6: Create a circular economy.
- 7: Promote renewable energy opportunities
- 8: Support the productivity of agricultural land
- 9: Sustainably manage and conserve water resources
- 10: Sustainably manage the productivity of our natural resources
- 11: Support cities and centres and coordinate the supply of well-located employment land
- 12: Create a diverse visitor economy
- 13: Champion Aboriginal self-determination
- 14: Deliver new industries of the future
- 15: Improve state and regional connectivity
- 16: Increase active and public transport usage
- 18: Plan for sustainable communities
- 19: Public spaces and green infrastructure support connected and healthy communities
- 20: Celebrate local character

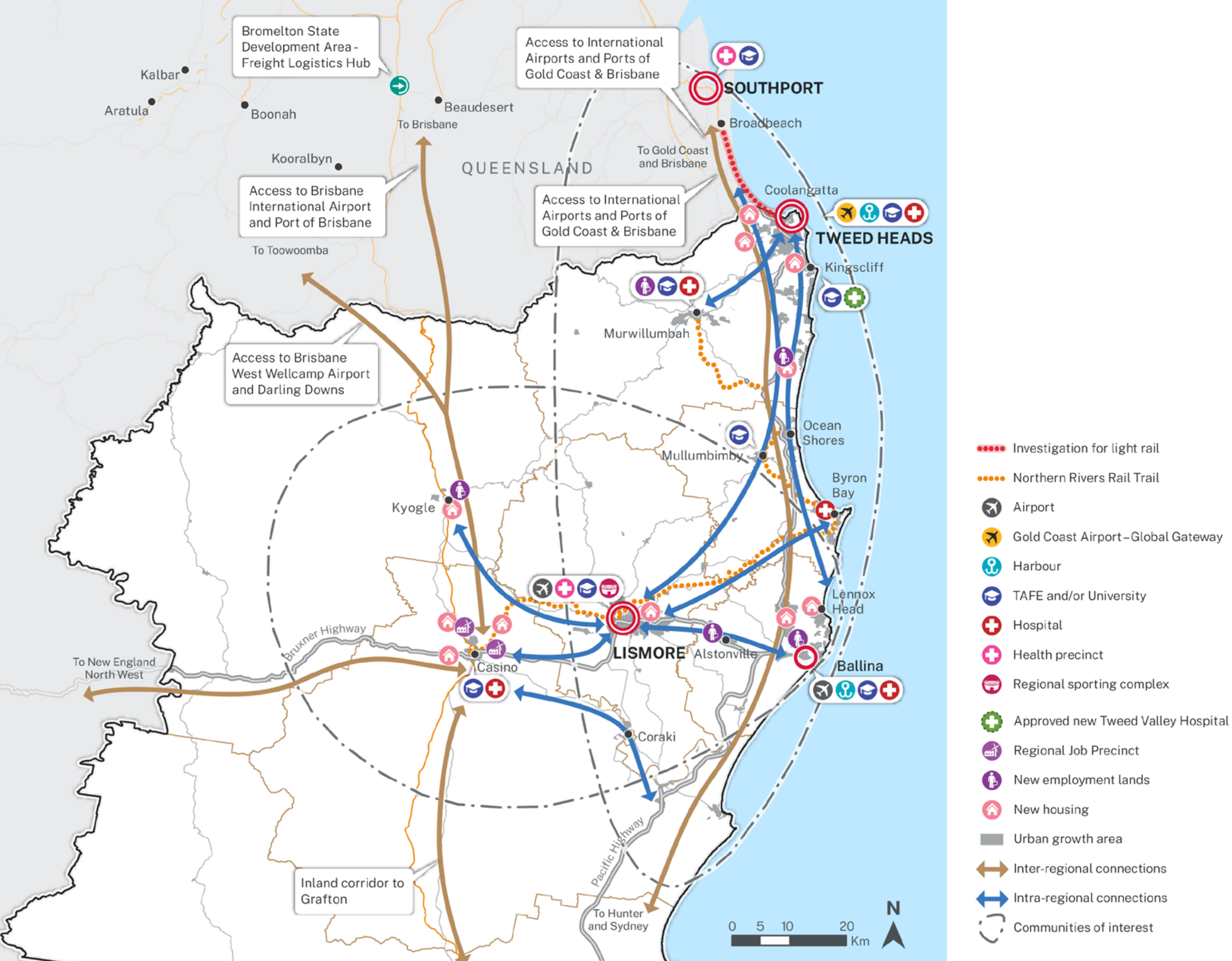


Figure 9. North Coast Regional Plan 2041 - Northern Rivers Subregional Plan (source DPHI)

3.3.2. Local Strategic Planning Statement: Beyond 20-20 Vision

The Richmond Valley Council Local Strategic Planning Statement: Beyond 20-20 Vision (LSPS) outlines the Richmond Valley Council's planning priorities and strategic directions. It aims to establish a vibrant and sustainable future for the Richmond Valley and investigates the unique attributes of the local area, and its community values. It provides a basis for decision making and shaping of land use patterns over the next 20 years.

The Statement is primarily informed by the North Coast Regional Plan 2036 (NCRP) and Richmond Valley Council's Community Strategic Plan (CSP), as well as having regard to a range of State, regional and local plans, policies and strategies.

The LSPS notes Casino's economic strengths in agriculture having a strong focus on beef, dairy, timber, sugar cane, and recent expansion into broad acre cropping for soy beans and tea tree. Several food manufacturing industries, associated with local and regional primary production, contribute significantly to the region's economy and employment.

A key recommendation of the LSPS is the preparation of a Local Growth Management Strategies to sustainably grow the region's population, and investigate new and innovative ways to accommodate projected population growth. This Structure Plan has been prepared in conjunction with the Richmond Valley Growth Management Strategy.

Table 1 outlines how the Structure Plan will align with the LSPS's Themes, Priorities and Actions.

Table 2. Response to LSPS Themes, Priorities and Actions

LOCAL STRATEGIC PLANNING STATEMENT: BEYOND 20-20 VISION PLANNING THEMES AND PRIORITIES	
LSPS Themes, Priorities and Actions	Structure Plan Response
Theme 1—Our Community - Connecting People and Places	
Planning Priority 1 Have well planned and designed space to grow	
1.1 Prepare Local Growth Management Strategies to sustainably grow the region's population, and investigate new and innovative ways to accommodate projected population growth	This Structure Plan will directly deliver on the principles and vision set out in the Richmond Valley Growth Management Strategy
1.5 Deliver robust and accessible towns and communities with well planned, maintained and functional public spaces	This Structure Plan supports active transport, connectivity and the implementation of Council's Pedestrian Access and Mobility Plan
Planning Priority 2 Align development, growth and infrastructure	
2.1 Partner with the State government and developers to deliver local infrastructure in a timely manner to meet the demands of future projected growth	Prioritisation and coordination of infrastructure delivery to achieve recommended outcomes are included in this Structure Plan
2.2 Review Council's Developer Contributions Plans	Indicative costs for infrastructure delivery are included to inform updates to Council's Developer Contributions Plans
2.4 Update Council's Integrated Water Cycle Management Strategy (IWCM) to ensure the community is serviced with a reliable long term drinking water supply	Ensuring long term supply of drinking water has been a key consideration in the preparation of this Structure Plan
2.5 Develop and implement strategies to reduce Land Use Conflict with essential infrastructure, significant extractive resources, agricultural lands, and road and rail networks	The future of Casino's employment lands has been considered in conjunction with detailed analysis of impacts and buffers relating to existing and potential sensitive receivers such as residential lands and dwellings and other sensitive uses
2.7 Further the design and construction of the Northern Rivers Rail Trail including integrating it with the cycleway/pedestrian network	The visual impacts relating to the arrival experience along the Northern Rivers Rail Trail has been considered in the planning of Area 3
2.8 Provide a safe integrated traffic, cycle and pedestrian network	This Structure Plan has been prepared in conjunction with a transport management strategy to facilitate safe and integrated movement. It supports active transport, connectivity and the implementation of Council's Pedestrian Access and Mobility Plan
Planning Priority 3 Improve the delivery of planning services	
3.2 Continuously improve the efficiency and effective delivery of Council planning services, especially through its Development Concierge Service and delivery of fact sheets	This Structure Plan aims to provide greater certainty in relation to planning outcomes to support greater efficiency and effective delivery of outcomes
3.3 Develop engagement protocols in collaboration with the Aboriginal community to ensure appropriate engagement is done with knowledge holders during planning processes	This Structure Plan has involved engagement with the Aboriginal community to inform detailed understanding of Aboriginal heritage
Theme 2—Our Environment - Looking After our Environment	
Planning Priority 4 Look after our environment	
4.1 Work collaboratively in partnership with the community, State and local governments to improve the health of the Richmond Valley environment	This Structure Plan has utilised a collaborative and consultative approach between State and local governments to enhance environmental outcomes
4.5 Review the Richmond Valley Local Environmental Plan 2012 Environmental Overlay Maps and provisions to ensure they are current, and effective given new legislation such as the Coastal Management Act and Biodiversity Conservation Act may have created duplicate development assessment processes	The technical basis underpinning this Structure Plan will assist Council in considering the currency of existing controls under the Richmond Valley Local Environmental Plan 2012
Planning Priority 5 Create resilient communities	
5.1 Reduce risks to development and the environment from natural hazards, including projected effects of climate change, by identifying, avoiding and managing vulnerable areas and known hazards	This Structure Plan has been prepared with consideration of available data in relation to risks associated with flooding and bushfire.

LOCAL STRATEGIC PLANNING STATEMENT: BEYOND 20-20 VISION PLANNING THEMES AND PRIORITIES	
LSPS Themes, Priorities and Actions	Structure Plan Response
5.2 Incorporate Climate Change considerations into Council's plans and strategies	Climate change has been considered in the Structure Planning process. Supporting technical studies have considered climate change in modelling future needs
5.4 Review and expand on flood studies to ensure modelling is current, fit for purpose, and incorporate climate change, AR&R (2019), and significant changes to the floodplain such as construction of the Pacific Motorway	The recommended outcomes in the Structure Plan include consideration for the Regional Jobs Precinct Flood Impact Assessment (BMT 2024), and advice provided by by Council concurrently with the preparation of the Structure Plan.
Planning Priority 6 Celebrate our heritage	
6.1 Ensure Aboriginal objects and places are protected, managed and respected in accordance with legislative requirements and the wishes of Aboriginal communities	Aboriginal heritage is a key consideration for Structure Planning. Aboriginal archaeological surveys have been undertaken for the RJP as part of investigations to inform preparation of the Structure Plan. Consultation is being undertaken with local Aboriginal communities.
6.2 Collaborate with local Aboriginal communities to undertake a Local Aboriginal Heritage Study, and adopt appropriate measures from the study into planning strategies and local plans to protect Aboriginal heritage	
Theme 3—Our Economy – Growing our Economy	
Planning Priority 7 Protect productive agriculture land and significant resources	
7.1 Ensure Council's planning provisions accommodate the changing needs for agriculture, manufacturing and emerging agribusiness and agritourism opportunities	The fundamental aim of the Structure Plan is to establish a planning framework that will support agriculture, manufacturing and emerging agribusiness and agritourism sectors. Consultation with NSW Department of Primary Industries (DPI) Agriculture has informed this Structure Plan.
7.2 Work with DPI-Agriculture to map and protect significant agricultural farmland from inappropriate and conflicting land uses, and fragmentation	The RJP boundary includes some areas identified as important farmland. Any recommendations for alternative uses on such land are to be justified in accordance with the relevant criteria provided for within the North Coast Region Plan.
7.3 Avoid creating land use conflict which could impact upon the future viability of productive rural lands, including significant farmland, and significant mineral and extractive resources	Land use compatibility has been a key consideration in the preparation of this Structure Plan.
7.4 Partner with the State government to support the local agricultural sector and associated value-adding food processing/production industries	This Structure Plan is an example of local and state government collaboration to support the local agricultural sector and associated value-adding food processing/production industries.
Planning Priority 8 Diversify the range of services and employment options	
8.1 Undertake an LEP Health Check, including a review of Land Use permissibilities, to support the growth of a diverse regional economy and to facilitate new economic activity	A primary aim of this Structure Plan is to consider potential amendments to the RVLEP 2012 to support and establish attractive diverse opportunities for industry and employment.
8.2 Prepare a Local Growth Management Strategy for future commercial and industrial areas, including opportunities to capitalise on freight and logistics transport routes in the area	This Structure Plan aligns with and will assist in implementing the outcomes of the Richmond Valley Growth Management Strategy.
8.5 Encourage the establishment of new manufacturing and rural industries to support local processing of primary products and to diversify the employment market	This Structure Plan provides a basis for the diversification of industrial land use to support a wide range of industries including manufacturing and downstream agricultural processing.
8.7 Partner with the State government to grow agricultural and freight links along the Pacific Highway, Summerland Way, Bruxner Highway, and North Coast Railway, including an intermodal freight facility at Casino	This Structure Plan aims to support the feasibility of the Casino Rail Freight Terminal and rail oriented industries in Narmoon. Consultation has been undertaken with TfNSW to maintain the viability of key regional roads and highways.
8.8 Partner with key stakeholders to deliver new and diversified employment opportunities, and employment lands	A primary aim of this Structure Plan is to deliver new and diversified employment opportunities, and employment lands. This is underpinned by a highly collaborative process between State Government and Richmond Valley Council.



3.3.3. Richmond Valley Growth Management Strategy

The Richmond Valley Growth Management Strategy was adopted in April 2023 and seeks to guide the sustainable management of urban growth within the Richmond Valley LGA. It allows for the delivery of a range of urban land options for residential, large lot residential and employment land that will meet the future demand of population growth and job creation.

The GMS responds to a number of changes that have occurred since that time to reshape the future of the region. These include:

- The Richmond Valley Regional Job Precinct initiative – with plans to create an additional 600+ jobs in Casino and surrounds;
- Increased housing pressure from the tree-change exodus to regional NSW, prompted by the COVID-19 pandemic; and
- The impacts of catastrophic flooding throughout the Northern Rivers in March 2022.

These events have shifted the way the regional economy functions and the way communities in the region inter-connect. The GMS recognises this profound and permanent change and the need for a planning response.

The Structure Plan has been developed to align with the Vision and Principles set out under the Richmond Valley Growth Management Strategy (refer Figure 10).

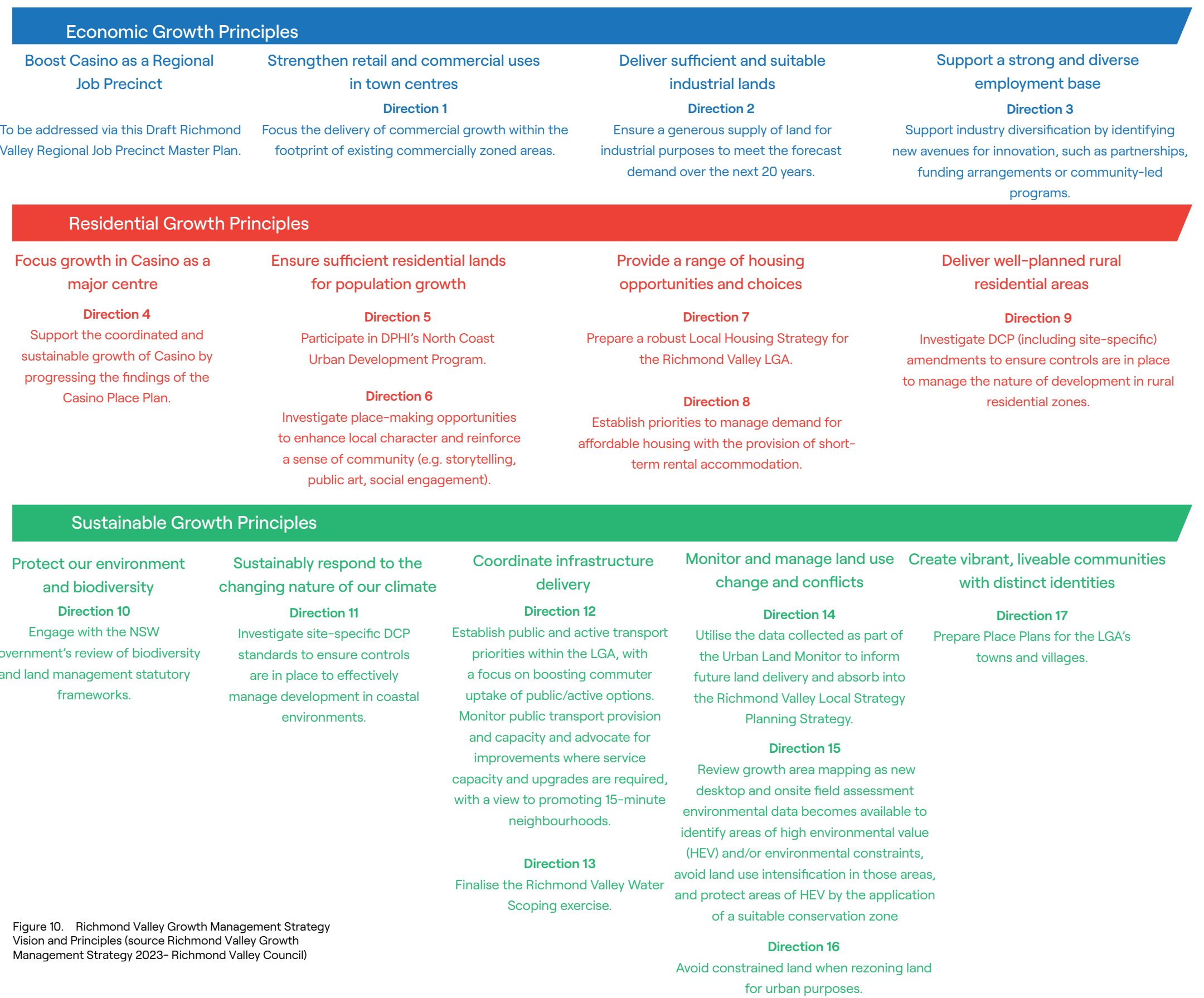


Figure 10. Richmond Valley Growth Management Strategy Vision and Principles (source Richmond Valley Growth Management Strategy 2023- Richmond Valley Council)



3.3.4. Casino Place Plan

The Casino Place Plan was prepared in conjunction with this Structure Plan and the Master Plan to guide planning for population and employment growth in Casino. The plan was adopted in April 2023 and explore opportunities to create connected and vibrant centres within the town and diversify housing supply.

The role of the Place Plan is largely complementary to this Structure Plan and the Master Plan, as it defers any planning for the Richmond Valley RJP to the Structure Plan, and seeks to guide the evolution of Casino resulting from projected growth and the flow on effects of the RJP.

The Place Plan identifies part of the RJP in the **North West Priority Growth Corridor**, which encompasses:

- Area 1 Nammoona Industrial Precinct;
- Area 2 Casino Food Co-op and Surrounds Precinct; and
- South Fairy Hill residential investigation area.

Refer Figure 11.

The Priority Growth Corridor is recognised for its significant potential and interrelationship between population and employment growth. It highlights the importance of a coordinated, consolidated and efficient approach to infrastructure delivery in what is poised to become Casino's premier growth area.

The key directions of the Place Plan which this Structure Plan seeks to align with are outlined as follows:

Casino Place Plan Directions

Direction 1: Support business and employment growth

Direction 2: Increase housing supply and diversity

Direction 3: Reinforce Casino Town Centre as the heart of the Richmond Valley

Direction 4: Enhance Casino's liveability and tourism experience

Direction 5: Connect and meaningfully engage with the Richmond River

Direction 6: Move people and business safely, efficiently, and comfortably

Direction 7: Foster resilience, reduce risk and adapt to changing climate

Direction 8: Secure adequate water supply and wastewater treatment capacity

Direction 9: Protect and enhance Casino's scenic landscapes and views

Direction 10: Collaborate with Aboriginal communities and protect Aboriginal objects and places

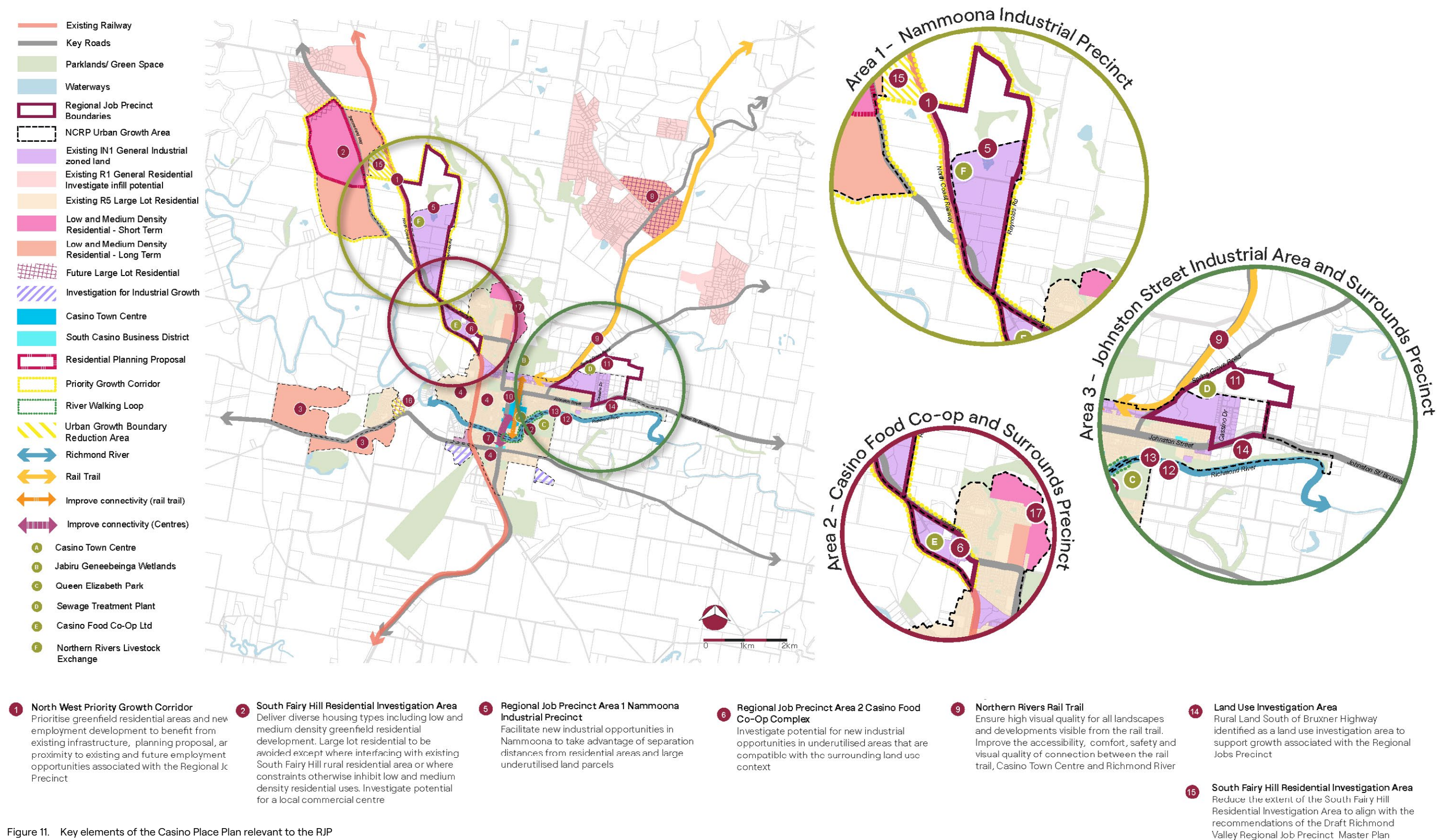


Figure 11. Key elements of the Casino Place Plan relevant to the RJP

4. VISION FOR THE RICHMOND VALLEY RJP

4.1 Vision

The Richmond Valley is set to become the North Coast Region's leader in agribusiness and industry, as partnerships align through the Richmond Valley precinct to deliver employment, housing, specialised learning and skills development, and new opportunities to invest.

With a proud tradition of agriculture and industry, the Richmond Valley precinct will become a resourceful, adaptable, and attractive place for business. It will become the agribusiness, manufacturing, alternate waste treatment and renewable energy hub for the region.

Located close to key road and rail links and on the doorstep of emerging markets, the Richmond Valley precinct will give existing and new businesses the confidence they need to commit to a long-term future in Casino.



4.2 Vision Principles

The vision is based on the following principles which outline the key focus areas for Structure Planning in the Richmond Valley RJP.

Create jobs

- Maximise growth and job opportunities for the RJP
- Support existing business and facilitate new investment in job creation ventures

Deliver long-term benefits to existing and future communities

- Create a precinct that attracts investment, improving the quality of life for the people of Casino and Richmond Valley
- Protect, promote and enhance 'liveability' or 'well-being' of communities
- Encourage sustainable and inclusive economic growth to enhanced job opportunities for the local community
- Facilitate interaction between operators to improve efficiency and generate economies of scale
- Incorporate local Aboriginal knowledge into planning and design for new places

Reflect the uniqueness of Casino and the Richmond Valley

- Leverage local expertise in Agribusiness and food manufacturing
- Promote Casino and Richmond Valley as a place of opportunity
- Maintain and enhance Casino's amenity and regional significance

Deliver sustainable solutions that enhance environmental outcomes

- Protect, promote and enhance key biodiversity assets
- Avoid, mitigate and manage risk associated with flood and bushfire
- Protect the health of key water resources
- Support the establishment of circular economies through industry co-location opportunities, and development of new business opportunities
- Create a precinct that attracts investment in a sustainable way
- Facilitate development that reflects the principles of the NSW Circular Economy Policy Statement: Too Good To Waste (NSW Government, 2019), NSW Waste and Sustainable Materials Strategy 2041 and Net Zero Plan Stage 1: 2020-2030

5. STRUCTURE PLAN

The Richmond Valley RJP Structure Plan encompasses three distinct areas of the Casino town site. These areas are separate and subject to unique contextual considerations. As such there is a need for this Structure Plan document to step through analysis, findings and Structure Plan recommendations separately in each area.

The recommendations of this Structure Plan will establish a range of complementary land uses that contribute to the shaping of industry and employment across the precinct as a whole. While the RJP is not a single contiguous area of employment land, it is important that the Richmond Valley RJP is considered in its entirety as a precinct.

The overarching Structure Plan in Figure 12 broadly outlines the recommended land use outcomes of this Structure Plan to highlight key interrelationships across the precinct. Subsequent sections outline the key contextual considerations, and land use and infrastructure recommendations for the following individual areas in greater detail.

- Area 1: Nammoona Industrial Precinct.
- Area 2: Casino Food Co-op and Surrounds Precinct.
- Area 3: Johnston Street Industrial Area and Surrounds Precinct.

Rural

Areas that are highly constrained and/or superfluous to the current employment land supply needs will be retained under their existing controls through this RJP initiative but could be activated through other processes (e.g Development Application) noting that the RU1 Primary Production zone permits a range of employment oriented uses that may be of benefit to the RJP (e.g rural industries/ Intensive plant agriculture).

Conservation

Areas of high environmental value will be conserved, protected and enhanced in line with the broader environmental and scenic values of Casino and the wider Richmond Valley.

Council Operations

Council's critical operations including the landfill and waste transfer site and Northern Rivers Livestock Exchange will be maintained and continue to operate and expand and diversify as required. Land that is surplus to Council's needs will take advantage of industrial zoning to support employment growth and diversity.

Grow and Diversify Industry

Existing and future industrial zoned areas will benefit from a greater zoning diversity that will provide greater potential for a wider range of industrial and employment uses in 'best fit' locations. This will facilitate a range of lot sizes suitable for a diverse range of low, moderate and higher impact industries that suitably respond to sensitivities of local context, while also facilitating opportunities for industrial symbiosis and circular economy principles.

Opportunity Sites

Unique land uses that either don't fit well elsewhere in the RJP or have synergies with the specialised complex, or the vision and principles of the RJP. These sites will be retained under their existing controls through this RJP initiative, but unsolicited proposals would be welcome. Council will take a merit-based approach and consider streamlined approval pathways where necessary to facilitate new business or industry ventures with clear economic and public benefits with minimal potential for land use conflict.

Specialised Complex

As the largest employment centre in Casino, the Food Co-op will retain its current zoning which will enable the existing operation to grow and diversify. Careful consideration will be given to the compatibility of new land uses with the Food Co-op's operations as well as in response to the amenity of nearby sensitive residential uses.

Catalyst Industries

These areas are reserved for projects that will deliver enhanced economic development outcomes or where additional support or partnerships with government will be prioritised. In Area 2, State-owned land provides the opportunity for new developments oriented towards specialised learning and skills development. In Area 3, recent investments in electricity upgrades are intended to enable the development of an Intensive Agricultural Hub on Council-owned land.

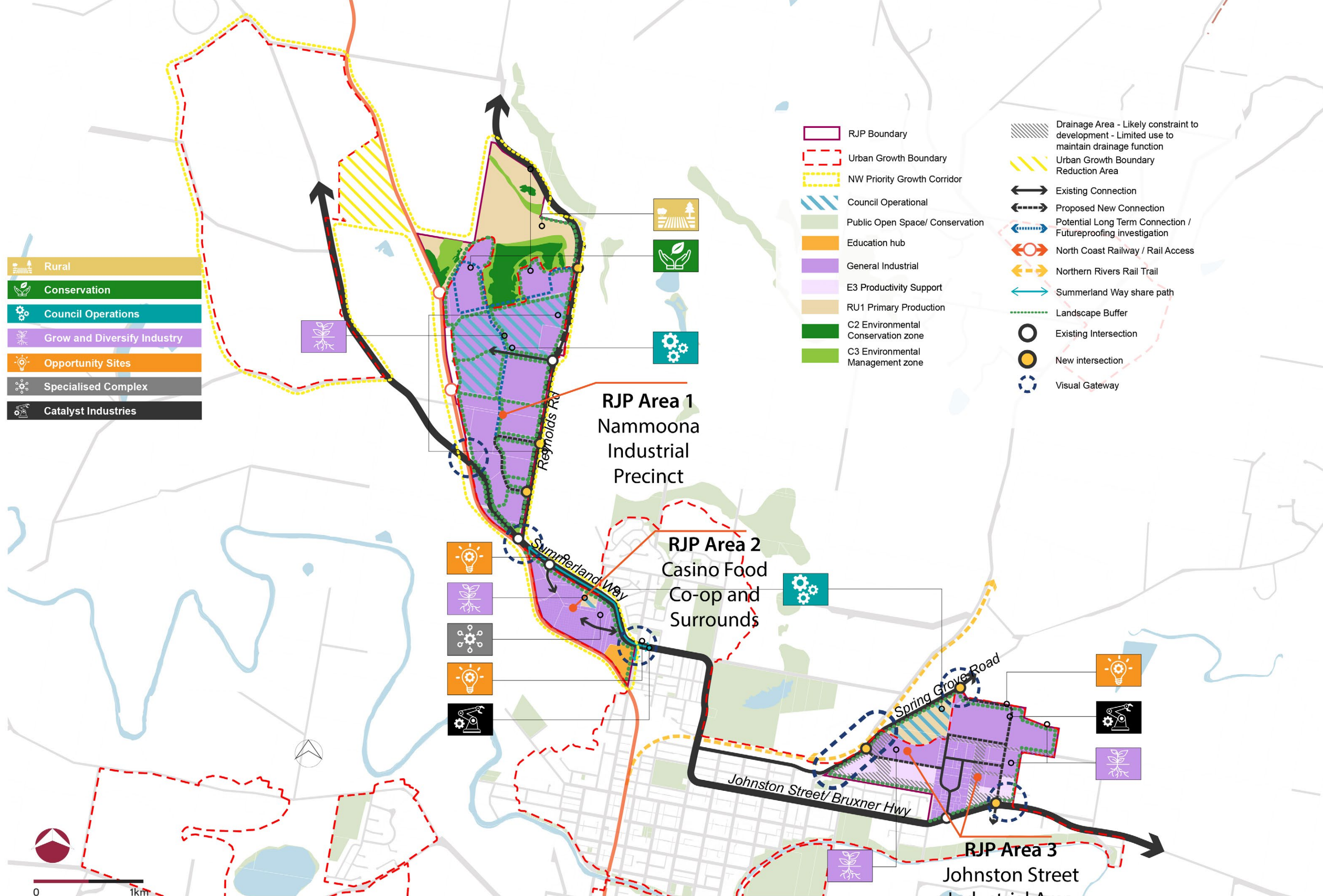


Figure 12. RJP Structure Plan

6. DEVELOPMENT CRITERIA AND PERFORMANCE PRINCIPLES

The following development criteria and performance principles have been informed by technical investigations underpinning this structure plan.

Future developments within the Richmond Valley RJP will be considered in terms of their alignment with the relevant criteria. This intended to ensure that new development in the RJP responds appropriately to environmental and sustainability values, is adequately supported by transport and infrastructure and achieves the desired place outcomes.

Environment and Sustainability	
Agricultural Lands	Flood Risk
<ul style="list-style-type: none">Projects in Area 3 have the potential to impact important farmland or existing agricultural operations. The following principles will be applied when considering new projects to support the ongoing viability of surrounding agricultural land and enterprises. Where directly adjoining Important Farmland or existing agricultural operations:<ul style="list-style-type: none">Development Applications must be accompanied by a Plan of Management identifying how the following issues arising from surrounding agricultural activities will be mitigated through on-site measures: odour, noise, dust, lights, visual amenity, effluent management, chemical use and spray drift, and weed management.Landscape plans for new projects must include measures to minimise bio-security risks to adjoining agricultural lands, including details for fencing, effluent management, and weed management.Development proposals should be prepared in consultation with adjoining agricultural operators.Ensure proposed development within the RJP considers satisfactory mitigation of potential impacts from existing surrounding agricultural land uses.	<ul style="list-style-type: none">The Richmond Valley Flood Study will inform detailed planning and development outcomes.Future land use and development is to avoid or appropriately manage and mitigate flood impacts in accordance with the recommendations of the Regional Jobs Precinct Flood Impact Assessment (BMT 2023).
Soils, Geology, and Contamination	
<ul style="list-style-type: none">Contaminated land will be managed in accordance with the NSW contaminated land management framework and relevant legislation during planning and development, including the <i>State Environmental Planning Policy (Resilience and Hazards) 2021</i>, <i>Contaminated Land Management Act 1997</i> and the <i>Environment Planning and Assessment Act 1979</i>.	<div>Hydrogeology Water Quality Demand</div> <ul style="list-style-type: none">Ensure that sustainable water supply infrastructure is available to service water demand from development in the RJP or that adequate arrangements have been made to make them available when required.Ensure that appropriate storm water drainage measures are employed to minimise adverse impacts on waterways and the water quality within the Casino water catchment area.Monitor capacity and align water supply and waste water treatment capacity within the RJP with growth as it occurs.Extend sewerage system (or network) in Nammoona and connect with the existing STP.Employ Waster Sensitive Urban Design principles for all new development incorporating storm water capture and recycling.Ensure appropriate storm water drainage measures are employed to minimise adverse impacts on adjacent land uses both on and off-site. Particular consideration is required for impacts on residential areas adjacent to Area 3 in this regard.

Environment and Sustainability

Air, Noise and Odour

- Establish buffers and avoid development of higher impact industries adjacent to sensitive land uses where noise, odour and air quality are likely to result in land use conflict
- Limit higher noise impact industries to locations at or above the 95dBA/ha maximum attenuated sound power level. This is a key issue for Area 1 - Nammoona Industrial Area.
- Where noise, odour and air quality generating industries are proposed, employ contextually appropriate mitigation measures including: mitigation at the source; mitigation along the path between source and receiver; and mitigation at the receiver.
- Scheduled activities under the *Protection of the Environment Operations Act 1997* will not be permitted as complying development in the RJP.
- Higher intensity industrial uses in the RJP requiring an environment protection licence will be subject to site-specific assessment by the EPA through integrated or state significant development pathways.
- Any proposal to develop industrial uses near existing odour-intensive industry will need to consider possible effects on workers.

Land Use Compatibility

- Minimise impacts of industrial activity on the amenity of sensitive residential uses that are in proximity to, and likely to be affected by noise, odour and air quality issues.
- Protect existing operations from inappropriate or unmanageable encroachment of sensitive uses.
- Maintain suitable buffers to reduce potential for major hazard, avoid risk and minimise potential for cumulative impacts and effects on amenity of sensitive uses.
- Establish appropriate land use permissibility for industrial activities aligning the level of impact with the ability to manage effects.
- Undertake initial site investigations to carefully consider site suitability for any new industrial development from inception including a Preliminary Hazard Assessment for development proposals in Area 2.

Biodiversity

- The avoid, minimise, offset hierarchy will be applied to all future development projects in line with relevant legislation. The requisite investigations may identify considerations in addition to those detailed in this Structure Plan.
- Considerations to avoid and minimise impacts to biodiversity impacts on areas with designated conservation values mapped in Figure 29 must be addressed in all development proposals.
 - > Development within areas mapped as High Constraint (i.e. High Environmental Value) on Figure 29 should be avoided. These relate to the wetland vegetation in the northern portion of Area 1. Assessments must clearly identify impacts expected during all stages of development and validate buffer areas suited to the nature of the development.
 - > Development within areas mapped as Moderate Constraint (i.e. Medium Environmental Value) on Figure 29 collectively contain assets important to support protected species such as Southern Myotis or Koala, as well as threatened ecological communities that are already fragmented within the landscape. Assessments should retain or enhance existing patches and relevant connections within the surrounding landscape to ensure an ecologically viable outcome.
- Future development in Area 1 – Nammoona should consider opportunities to connect areas of biodiversity value in areas of biodiversity significance.
- Landscaping plans for new projects in all areas should include measures to enhance the biodiversity values of cleared landscapes and development areas, including through the re-use of natural items cleared during development as micro-habitats, incorporation of local native species in new plantings, and constructed wetlands, where warranted.

Environment and Sustainability

Bushfire Risk

- Asset Protection Zones are to be provided and managed to prevent the spread of a fire within the precinct in accordance with the requirements of Planning for Bush Fire Protection 2019 to result in a Bushfire Attack Level of BAL 29 or lower to all future building envelopes that are being assessed as complying development. Where referral to NSW Rural Fire Service is required Asset Protection Zones should be managed and maintained to result in a Bushfire Attack Level of BAL 12.5 or lower (not BAL 29, BAL 40 or BAL FZ).
- All landscaping is to comply with Planning for Bush Fire Protection 2019 and relevant environmental approvals required under the NSW Biodiversity Conservation Act 2016 and/or Commonwealth Environment Protection and Biodiversity Conservation Act 1999.

Transport and Infrastructure

Rail freight

- Locate rail dependent industries and land uses where they stand to benefit from co-location with freight rail facilities or rail accessibility and support development of efficient intermodal supply chains.

Traffic and Transport

- Monitor road and intersection capacity and align delivery of upgrades to meet industrial growth.
- Improve active and public transport networks to benefit access to the RJP.
- Maintain traffic sight lines and avoid new traffic access points near the existing rail level crossing on Summerland Way

Utilities | services | infrastructure

- Monitor infrastructure servicing and capacity and align delivery of upgrades to meet industrial growth.
- Establish a wastewater network to facilitate growth in Nammoona.
- Ensure adequate water supply and waste water processing capacity to service the needs of growing industry.
- Provide a co-ordinated approach to contributions planning for essential infrastructure.

Place and Landscape

Aboriginal Cultural Heritage

- Works within the boundaries of SU1 must proceed in accordance with the conditions of Aboriginal Heritage Impact Permit (AHIP) C0001253. Confirmation from the AHIP holder regarding the current status of the AHIP and the completion of salvage excavation and surface collection conditions would be required prior to ground disturbing works in this area.
- Further archaeological survey of Inspection Area 1 would be required to assess the potential of the Investigation Area to contain Aboriginal heritage values.
- Aboriginal archaeological test excavation would be required in areas of Potential Archaeological Deposit (PAD) with the potential to be subject to harm as part of future land uses. Test excavation would be required to be undertaken to support any future AHIP applications across the relevant landscape.
- Ongoing consultation and involvement of the Aboriginal stakeholders will be required for any future Aboriginal heritage investigation.
- A management policy should be developed for any conservation areas which overlap with identified heritage constraints. Procedures should incorporate mechanism to ensure the preservation of heritage values in these zones.
- Options to incorporate Aboriginal heritage values into design of public spaces within the Richmond Valley RJP should be considered. Future development should also be encouraged to consider mechanisms to incorporate recognition of Aboriginal culture into design and operations.
- Where unrecorded Aboriginal heritage objects are found during future works, Chance Find Procedure set out in Section 15.3 of the Heritage Report (ERM 2024) should be followed.

Historic Heritage

- Future proposed development in the south western portion of Area 2 Food - Coop which abuts the Casino Railway Station and Yard Group will require management and mitigation of potential visual impacts.
- Where individual development within the Stage 1 industrial subdivision in Nammoona visually impacts the Nammoona Lawn Cemetery to a significant degree, a SoHI would be required to provide advice on the visual impacts and management measures.

Landscape | Scenic Amenity | Character

- Provide a vegetated landscape buffer along the boundary of roads and key gateways, especially along Reynolds Road, Summerland Way, and the Bruxner Highway, and Spring Grove Road/ Northern Rivers Rail Trail. This should also apply along boundaries that will be highly visible from key roads.
- Employ site planning approach that:
 - > retains existing vegetation on the site where possible to facilitate landscape connectivity.
 - > provides a suitable balance between site coverage and landscaped space to ensure that development harmonises with town character and rural landscape.

Built form

- Align building height limits with those for industrial areas across wider NSW, noting that an overall height limit of 11m and above (or no height limit restriction) is more commonly applied across industrial zones in NSW. It is recommended that height limit restrictions be removed from Area 1 Nammoona and Area 2 Food Co-op.
- Ensure a high quality built form and cohesive character, especially where visible form key gateways on the Summerland Way, Bruxner Highway / Johnston street and the Northern Rivers Rail Trail.
- Facilitate the design, construction and operation of environmentally sustainable buildings and precincts, that includes efficient resource and energy use and reduces emissions and waste.
- Avoid creating large unrelieved expanses of walls and roofs and design buildings to give the sense that large bulky buildings are comprised of a variety of smaller volumetric elements where practicable.
- Ensure that buildings, structures and materials complement and enhance the visual quality of the rural environment and landscape.
- Provide for appropriate worker amenity in terms of access to natural light and ventilation and provision of sufficient indoor and outdoor areas for worker recreation.

7. RJP AREA 1 – NAMMOONA INDUSTRIAL PRECINCT

7.1 Context

The following sections outline the relevant contextual matters that have been considered in the preparation of this Structure Plan. Figure 13 provides an overview of spatial considerations in Area 1.

The Nammoona Industrial Precinct, situated to the north west of the RJP, currently contains a mix of infrastructure, agribusiness and industrial uses. Existing industrial activities are focused within the central portion of the area, including Council-owned assets (Northern Rivers Livestock Exchange and Richmond Valley Waste Management Centre) as well as privately operated industries. The industrial subdivision at Reynolds Road, in the southern portion of the area, has also recently been completed by Council to provide serviced lots. Council is in the process of attracting new industrial operators to its Stage 1 development. Stages 2 and 3 of the subdivision are approved but are yet to be constructed.

Rail frontage is available in two locations, to the north and south of the existing industries, providing opportunities for rail-oriented and/or rail freight enterprises. This area is one of the few remaining industrial areas that could be further planned to accommodate a mix of industrial uses including large format and higher impacting industries, noting it is well separated from existing and proposed future residential areas.

Key attributes:

Direct frontages / access to Summerland Way and the North Coast Rail Line.

Potential for freight rail access, including optimal location, configuration, and suitability for co-locating uses.

Potential for energy from waste/alternate waste treatment solutions, including optimal location, configuration, and suitability for co-locating uses.

Implications of North Coast Regional Growth Boundary and surrounding land zoned RU1 Primary Production on capacity to expand in future.

Capacity to manage air noise and odour to limit impacts on sensitive receivers and the north west residential investigation area.

Located in the North West Priority Growth Corridor. Potential benefits in relation to an expanding local workforce in the north west residential investigation area.

Opportunities to enhance environmental values and support conservation around the existing wetland in the north.

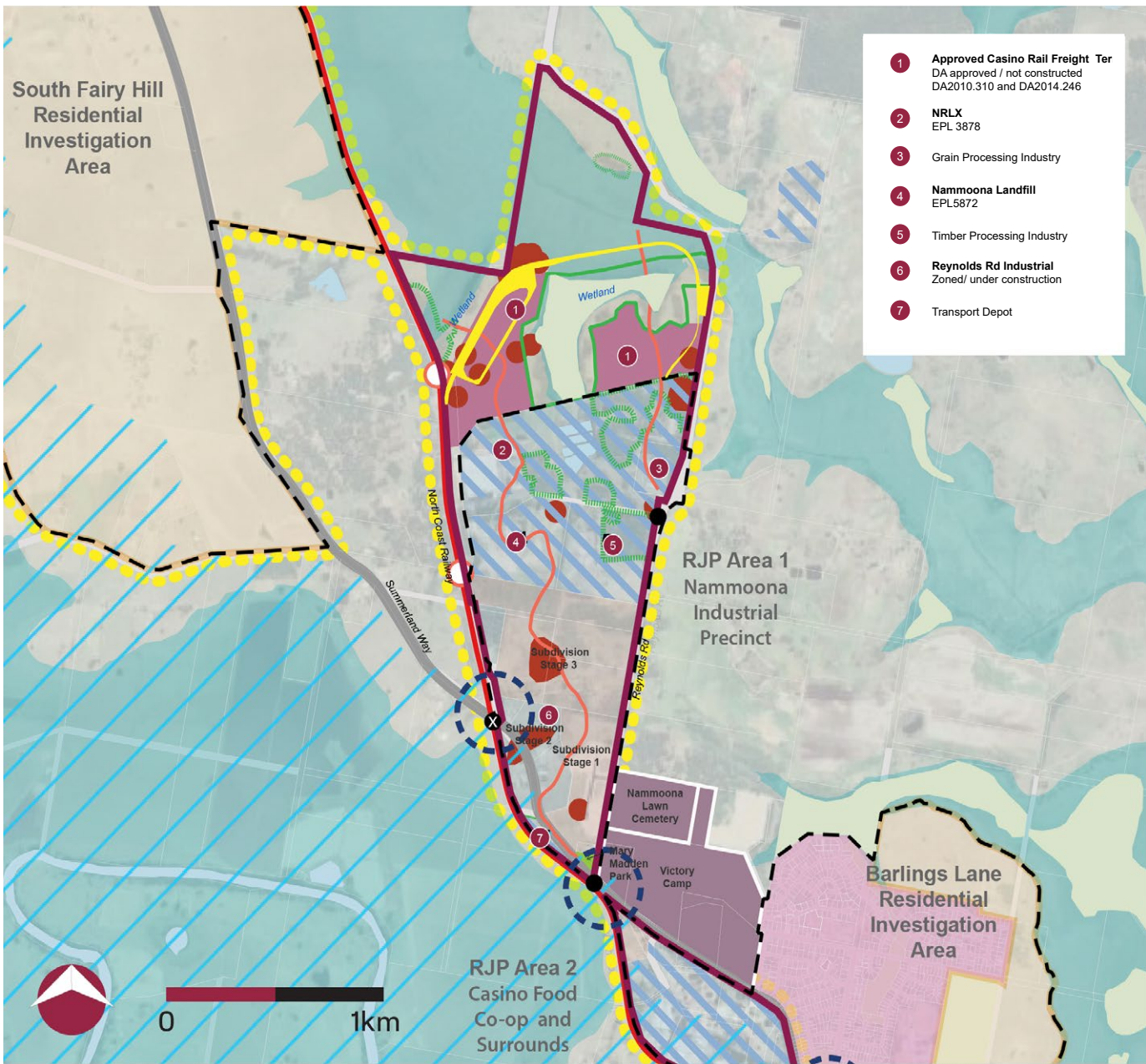


Figure 13. Area 1 - Nammoona Industrial Precinct - Context and key constraints



Figure 14. The Nammoona Industrial Area benefits from its location adjacent to the North Coast Railway providing opportunities for co-location of rail oriented industries



Figure 15. Richmond Valley Council's subdivision in the southernmost portion of Nammoona has been constructed with Council in the process of attracting new industries



Figure 16. Substantial industries operating in Nammoona include the Northern Rivers Livestock Exchange



Figure 17. Approved Casino Rail Freight Terminal site looking west from Reynolds Road



Figure 18. Reynolds Road is characterised by a vegetated edge which contributes to the landscape character of Nammoona and screens existing industries



Figure 19. Riverina Stockfeeds is a substantial industry in Nammoona supporting the agricultural sector



Figure 20. Substantially vegetated areas exist in various Nammoona precinct support local character, environmental connectivity and biodiversity



Figure 21. Recent tree planting in Richmond Valley Council's new industrial subdivision will contribute to the vegetated character of Reynolds Road

7.2 Structure Planning Considerations

This section provides a summary of salient information provided in the supporting technical investigations and analysis that underpins the actions set out under this Structure Plan.

7.2.1. Land use and zoning

Area 1 is predominantly zoned IN1 General Industrial, which permits a broad range of industrial uses, and prohibits heavy industry. Part 2 Clause 6 of the *Standard Instrument (Local Environmental Plans) Order 2006* provides for continuation of existing business and industrial zones for land identified under the RVLEP as "Land subject to the Richmond Valley Jobs Precinct Process". As such the land zoning in Area 1 has not transitioned to the new E zones now provided for under the RVLEP.

The northernmost portion of Area 1 is located outside of the Urban Growth Area boundary and is zoned RU1 Primary Production with the additional permitted use of a 'rail freight transport facility', with the wetland area zoned C2 Environmental Conservation. Any industrial uses not consistent with the objectives and land use permissibility of the RU1 Primary Production zone would require rezoning and extension of the Urban Growth Area boundary to be sought.

Mary Madden Park is owned by the Casino Historical Society. The site is zoned for General Industry, and may be used for industry, recreation or a combination of uses, subject to development consent.

Refer Figure 22.

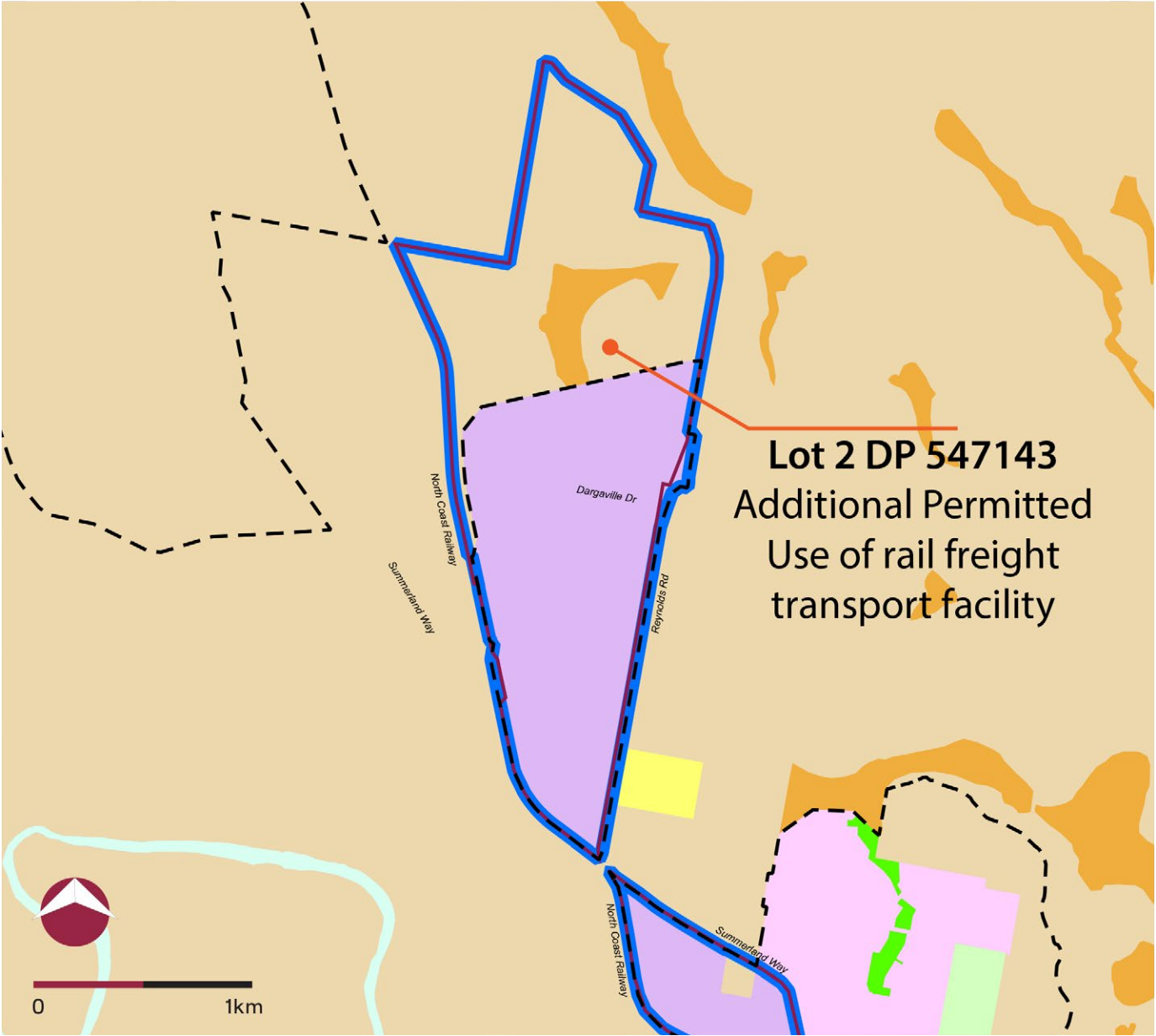


Figure 22. Area 1 - Nammoona Industrial Precinct - Current Land Use Zoning

7.2.2. Building Height

The maximum permissible building height in Casino's industrial areas is 8.5m. Based on historical approvals, the maximum building height has proven to be insufficient to accommodate industrial development, resulting in reliance on variations sought via Clause 4.6 of the RVLEP 2012.

A review of various regional LEPs confirms that industrial areas zoned to support General Industrial are often unlimited, or generally permitted a maximum building height of 11m or greater.

In order to promote greater certainty for planning and development outcomes, and minimise the need for variations to planning controls, it is recommended that building height limitations be removed in the General Industrial zone.

Refer Figure 23.

7.2.3. Minimum Lot size

Existing industrial zoned land in Area 1 has a minimum lot size requirement of 750sqm.

Existing development patterns, land tenure and the approved subdivision in the southern areas of Nammoona provide opportunities for larger format development.

Of the identified 67ha shortfall of employment land in Casino to 2041, projections suggest that 75% (50.25ha) of new zoned land would be required for smaller industrial (average lot size of 0.39 ha) and 25% of that land (16.75ha) for larger industrial - (average lot size of 5.95 ha).

Actual land uses and development scale cannot be predicted with any degree of accuracy. The 750sqm minimum lot size requirement may suggest that smaller lot sizes are appropriate. Any approach to enforce larger lot sizes in Nammoona risks establishing unnecessary barriers in the planning framework, which is inconsistent with the overarching intent of the RJP.

It is recommended that minimum lot size limitations be removed from Area 1. This will provide a flexible basis to accommodate future larger format land uses in the RJP and allow for tailoring to emerging business opportunities, locational needs, and evolving market demand.

In removing the Minimum Lot Size provision, there will be an ongoing need to ensure that future land subdivision patterns:

- maintain sufficient supply of lots to accommodate larger format industries;
- maintain a suitable diversity of potential lot sizes; and
- provide lots that support an efficient layout to meet their intended use.

Refer Figure 24.



Figure 23. Area 1 - Nammoona Industrial Precinct -- Current Height of Building

- Parklands/ Green Space
- Waterways
- Richmond Valley Regional Job Precinct
- NCRP Urban Growth Boundary
- Maximum Building Height 8.5m

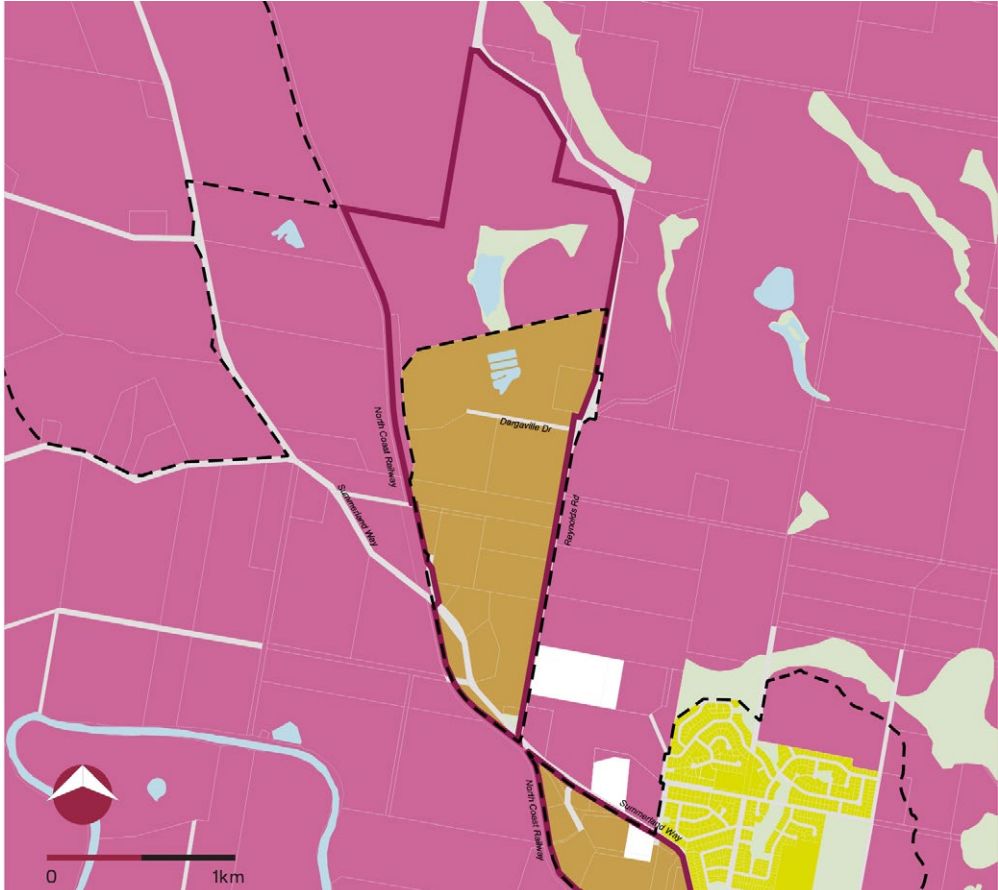


Figure 24. Area 1 - Nammoona Industrial Precinct - Current Minimum Lot Size

- Parklands/ Green Space
- Waterways
- Richmond Valley Regional Job Precinct
- NCRP Urban Growth Boundary
- 400 sqm
- 600 sqm
- 750 sqm
- 40 ha

7.2.4. Air, Noise and Odour

Air Quality, Odour and Noise risks in relation to sensitive receivers including existing and potential future residential uses and areas may increase as industrial development intensifies within Area 1.

Modelling undertaken considers impacts of air quality, noise and odour on sensitive receivers including both existing dwellings, and potential dwellings identified on the Dwelling Opportunity Map under the RVLEP 2012. Sensitive receivers are illustrated in Figure 25.

Modelling indicates that air quality and odour is likely to be manageable in relation to sensitive receivers across most parts of Area 1 subject to specific consideration of land use and industrial activity and detailed assessment of individual development proposals. Refer Figures 26 and 27. Noise modelling indicates that some parts of the precinct have capacity to manage noise from industrial uses of higher noise generation and limit impacts on sensitive receivers. These areas can be seen on Figure 28 where the maximum attenuated sound power levels exceed 95dB/ha.

This will need to taken into consideration with proposed configuration of industrial land use zoning. These are areas where modelling indicates that the maximum attenuated sound power levels exceed 95dB/ha as illustrated in Figure 28. However, not all higher intensity industry is a major noise generator and there may be potential to employ noise mitigation measures as part of the detailed design process as recommended in the air, noise and odour report (Todoroski Air Sciences 2024). These include measures to mitigate noise:

- at the source;
- along the path between source and receiver; and
- at the receiver.

Given the high level modelling undertaken to support this Structure Plan, flexibility to enable detailed matters relating to air quality odour and noise to be resolved at detailed design and Development Application stage needs to be provided. Given the potential for mitigation solutions and the potential for a low noise generating higher intensity industry, the extent of land on which

such uses may occur should not consider the 95 dBa/ha as an absolute constraint.

However, the sensitive receivers associated with possible dwelling opportunities for the sites located between the RJP boundary (blue line in Figure 25) and the modelled receptor boundary (white line in Figure 25) may restrict potential for higher noise industries. Any placement of higher intensity industries is more likely to create an unmanageable constraint should a noisy industry locate in proximity of any potential future dwelling in these locations.

As a general principle, there is a need to limit sensitive receptors within the modelled receptor boundary illustrated in Figure 25 to create an effective transition between the RJP and nearby existing and potential residential development.

There will be a need to consult with affected landowners regarding the compatibility of potential dwellings with future industry in the RJP. The intent is to provide a suitable level of flexibility for land use planning, protect the ongoing operation of the RJP and to ensure industrial opportunities can be provided in Nammoona.

A planning mechanism will be required under the RVLEP to establish a transition area for land surrounding the RJP. This would require consideration of the impact of proposed sensitive receptors on operations within the RJP industrial area to minimise land use conflict and ensure that no new dwellings are provided within the modelled receptor boundary identified in Figure 25.

Existing dwellings will be addressed as staged industrial development in Area 1 occurs. Any required acquisition, removal or re-purposing of dwellings will be the responsibility of Council and developers in conjunction with relevant development application pathways.

Figure 25 illustrates that the modelled sensitive receptor boundary also crosses over the Urban Growth Area boundary at South Fairy Hill referenced in the North Coast Regional Plan 2036, requiring a reduction in its area to mitigate potential land use conflict.

Refer Air, Noise and Odour Technical Report (Todoroski Air Sciences 2024).

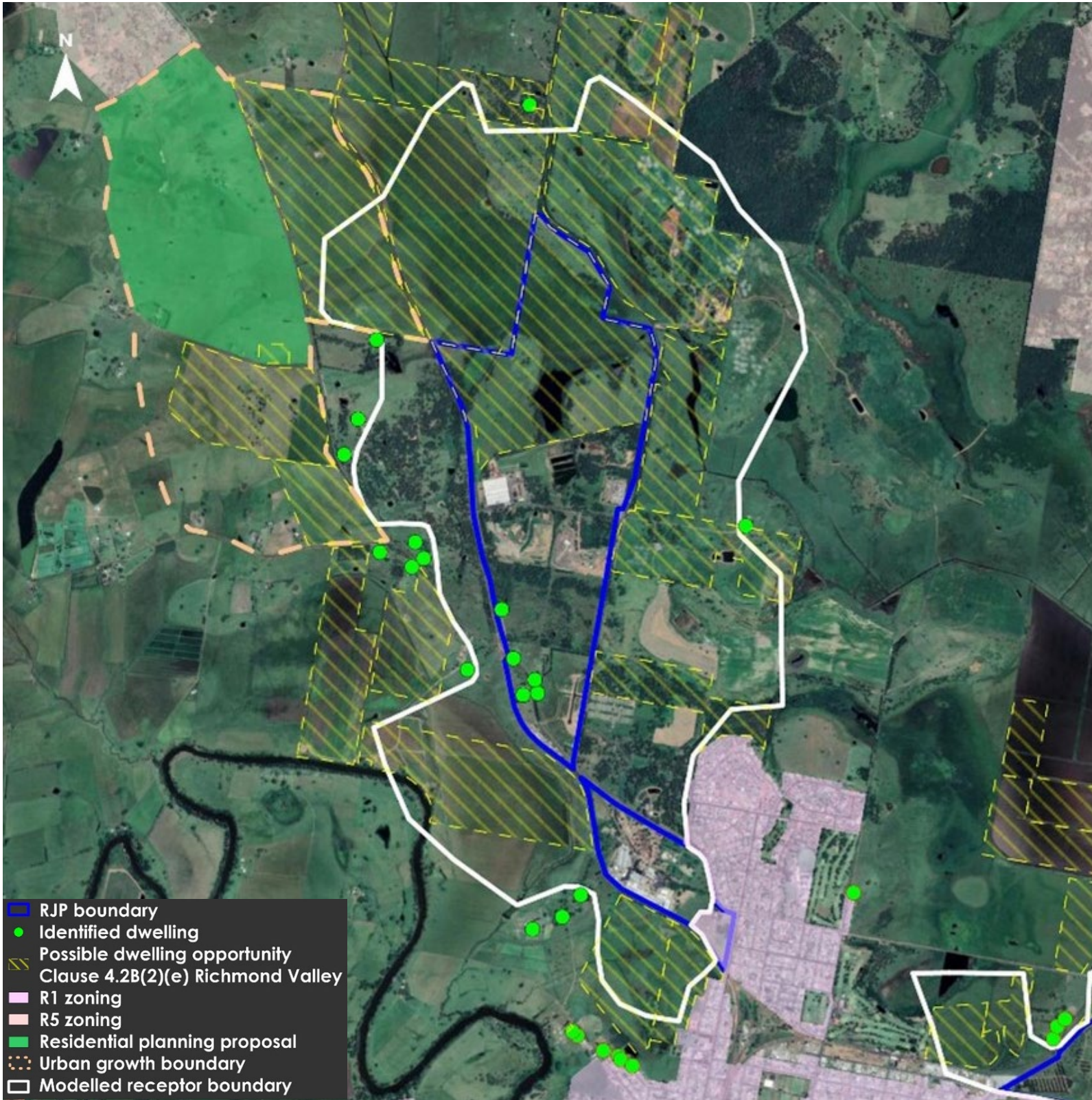


Figure 25. Area 1 - Nammoona Industrial Precinct - Modelled receptor boundary (Source Todoroski Air Sciences)

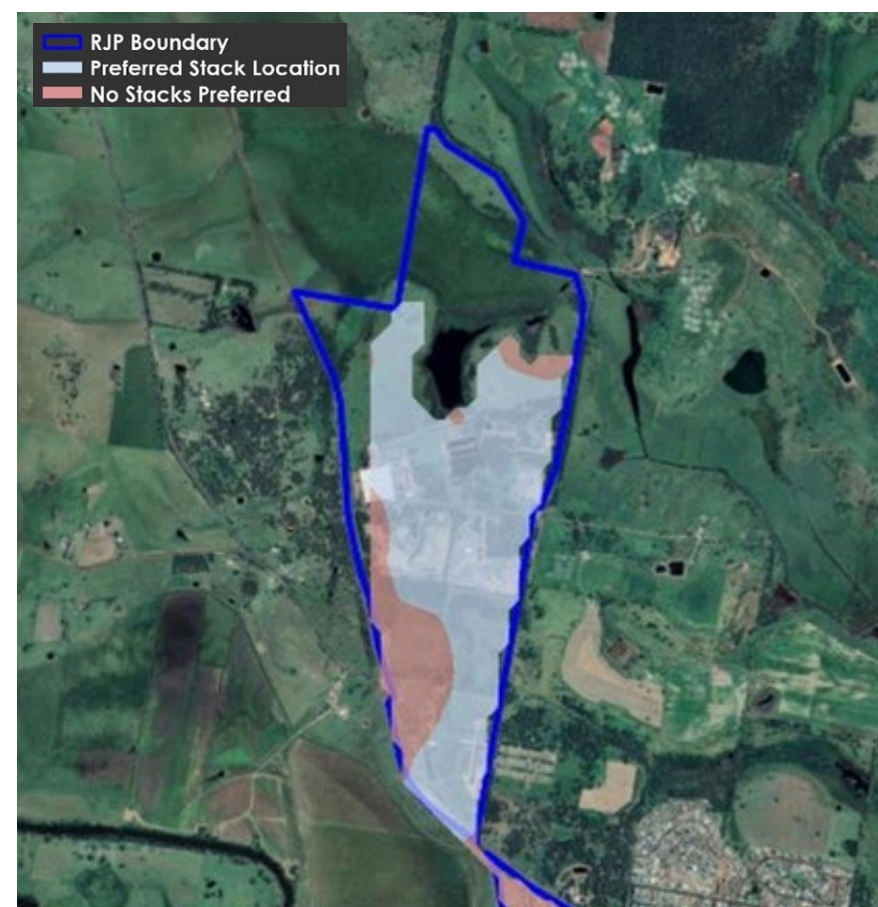


Figure 26. Area 1 - Nammoona Industrial Precinct - Preferred stack (point of emission) locations (Source Todoroski Air Sciences)



Figure 27. Area 1 - Nammoona Industrial Precinct - Maximum Odour Emission Rates (Source Todoroski Air Sciences)

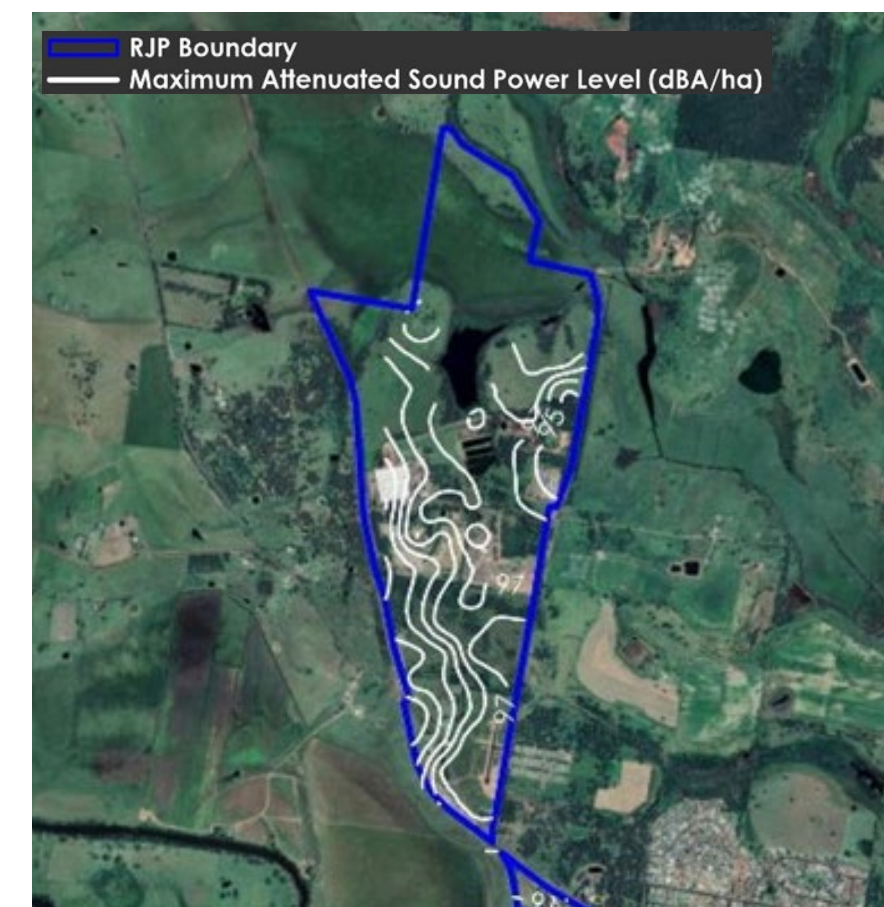


Figure 28. Area 1 - Nammoona Industrial Precinct - Maximum Attenuated Sound Power Levels (Source Todoroski Air Sciences)

7.2.5. Land Use Compatibility

The nearest existing residential area is 800m east of the Nammoona area. There is a large area of land identified to the north west of the precinct known as the South Fairy Hill Residential Investigation Area, which is intended for investigation for its suitability to accommodate residential expansion. There is a need to limit sensitive receivers in the south eastern portion of the investigation area to minimise impacts of air quality, noise and odour associated with future industrial activity. There will also be a need to address the status of existing residences within the RJP buffers in consultation with landowners and the community.

Expansion of industrial uses will require consideration of impacts on nearby residential areas and potential future dwellings in the South Fairy Hill Residential Investigation Area and on nearby rural lands.

The Sherpa Consulting Land Use Compatibility Report concludes that the intended land uses within Area 1 are likely to be compatible and generally not result in land use safety conflict as they do not involve significant quantities of hazardous materials or hazardous processes.

Whilst there may be impact to individual residences, it is likely the individual risk at the source can be managed by applying *State Environmental Planning Policy (Resilience and Hazards) 2021* and societal risk will be acceptable due to the separation distances to concentrated areas of population.

From a land use safety consideration, the development of industrial activities, freight rail facilities and a potential EfW/AWTS are likely compatible with existing developments provided that buffer distances in place at the current facilities are maintained. This is not an indication that EfW/AWTS will be proposed or approved in the Nammoona sub-precinct. Any proposal for such facilities must go through a formal and rigorous development application process including community consultation.

Refer to Land Use Considerations Technical Report (Sherpa Consulting 2024) for further information in relation to necessary buffers.

7.2.6. Biodiversity

The RJP Richmond Valley project area contains a number of key biodiversity values which include four potential Threatened Ecological Communities. Six threatened species were identified throughout the two field survey events, and an additional ten threatened species were identified as potentially occurring within the Investigation Area during the desktop review process. High threat weeds and Weeds of National Significance were located within the project area and will require treatment and or removal prior to disturbance of these areas to prevent further spread and resultant degradation and loss of biodiversity.

Vegetated areas within Area 1 contain areas of high biodiversity value including:

- Potential occurrence of NSW and federally listed Threatened Ecological Communities;
- Vegetated habitat corridors and linkages; and
- Threatened species habitat for Southern Myotis, Common Planigale and Hairy Jointgrass.

The Barlings Creek vegetation corridor provides a link to habitat within the northernmost areas of Area 1, including those parts already used for industrial purposes. This includes freshwater wetlands and Swamp Oak, which have been identified as threatened communities and important habitat.

Direct and indirect impacts to threatened species, resultant of habitat clearance have been considered in the development of the Structure Plan, though further surveys are required to inform credit obligations associated with individual developments.

The Biodiversity Assessment Method requires that the avoid, minimise, offset hierarchy is applied to development projects. Therefore, any future Biodiversity Development Assessment Report or Biodiversity Certification Assessment Report will be required to outline measures taken to avoid impacts to biodiversity and provide justification where avoidance is not applied.

Areas designated with conservation value that have been considered in the Structure Plan or as part of future developments to avoid and minimise biodiversity impacts are shown on Figure 29.

- **Areas of high biodiversity value** (mapped in Figure 29 as High Constraint) include the northern wetland area in the Nammoona Precinct. It contains multiple biodiversity values including two Threatened Ecological Communities (Swamp Oak and Swamp Sclerophyll forest), and habitat for multiple threatened species including those species credit species directly observed within the RJP, Southern Myotis and Koala. This area also provides a diversity of habitat types, including foraging and roosting opportunities for migratory wetland birds.
- **Areas of medium biodiversity value** (mapped in Figure 29 as Moderate Constraint) include those areas that contain threatened species habitat in patches that are connected and considered viable to support Southern Myotis or Koala. Areas of medium value also include those areas of Threatened Ecological Communities that are small and fragmented within the landscape.

Other areas of native vegetation mapped in Figure 29 as Plant Community Types (PCT) are generally considered a low constraint to development. These still provide biodiversity values and may trigger the requirement for biodiversity credits, depending on the areas of clearing required to implement future developments. Under the *Biodiversity Conservation Act 2016*, developments that result in a significant impact to biodiversity or exceed the Biodiversity Offset Scheme clearing area

threshold, will be required to prepare a Biodiversity Development Assessment Report and calculate offset credit requirements.

An existing development consent (DA2008.0091) has commenced within the southern areas of Nammoona. The development consent authorises a 14-lot industrial subdivision, including road reserve and associated works. This permits the clearing of vegetation associated with the development of roads and services, including cut and fill of the proposed site. This means vegetation south of existing industrial uses in Nammoona is and will remain permitted to be cleared. The lots associated with the development consent are as follows:

- Lot 1 DP 118483
- Lot 2 DP 570138
- Portions of Lots 9, 12 and 13 DP 755727

Additional field surveys were completed in September 2022, utilising the methods from the Koala (*Phascolarctos cinereus*) Biodiversity Assessment Method Survey Guide (June 2022) to assess areas of potential koala habitat for the presence of this species. There were no observations or signs of any koalas within the RJP Investigation Area during these surveys. Based on the methods for mapping species polygons in the Biodiversity Assessment Method Survey Guide, no areas of koala habitat polygons are mapped within the RJP Investigation Area.

Existing terrestrial biodiversity mapping and clauses in RVLEP 2012 provides a suitable basis for ongoing consideration of remnant vegetation within the existing industrial zone. Reliance on existing legislation and establishment of additional controls under the Richmond Valley DCP to support retention and enhancement of linkages is considered to be a more suitable approach for land that is already zoned for industrial purposes.

A key opportunity for Nammoona is to protect and enhance areas of biodiversity value in the north of Area

1. The avoid, minimise and offset hierarchy has been applied through the Structure Planning and Design process, including workshops undertaken to inform the Structure Plan. The existing conservation area associated with the wetland in the Casino Rail Freight site has been expanded and protected, by applying a combination of C2 Environmental Conservation and C3 Environmental Management zones. These add a layer of protection to habitat corridors and conservation areas through state and local planning measures.

The recommended land use planning approach is to consider opportunities to connect areas of biodiversity value through future development applications. These corridors are recommended to be a minimum width of 50m to remain viable for fauna movement opportunities, to reduce any impacts from edge effects.

While retention of biodiversity and linkages is recognised as an important value, it is noted that a significant portion of Area 1 has an existing industrial zoning under the RVLEP 2012. The back-zoning of existing industrial land is not considered appropriate and reliance on existing legislation and establishment of additional DCP controls to support retention and enhancement of linkages is considered to be a more suitable approach for land that is already zoned for industrial purposes. In this regard, the Structure Planning process provides an opportunity to establish setback buffers to edge boundaries, property boundaries and along proposed or potential future road links, including along links identified for future proofing.

Impacts to high biodiversity values, particularly in areas that support multiple threatened species should be identified and avoided where possible. These areas will potentially contribute significantly to the offset obligation and cost associated with the development and therefore, further avoidance would reduce the ecosystem and species credit requirements and costs

Providing connected corridors and green infrastructure throughout the Structure Plan area has been recommended to be considered in the landscaping

design during the implementation of the developments, as the threatened fauna species that have the potential to occur in the RJP Investigation area can use artificial or modified environments.

This should include consideration for the following in any development codes or performance criteria:

- Providing species lists of native trees from the PCTs that occur in the RJP Investigation Area to support roosting or foraging resources for native microbats.
- Providing linear corridors planted as buffers. Where possible these should be a minimum of 50m wide and be designed and planted characteristic of the PCTs within the RJP Investigation Area.
- Including water sensitive urban design principles in any proposed stormwater management system to support foraging opportunities for Southern Myotis.
- Plan and implement an ecological restoration plan for areas of medium and high biodiversity value that have been protected in C2 and C3 zones.

Refer Biodiversity Analysis Report (ERM 2024) and Section 9 of this Structure Plan for further detail.

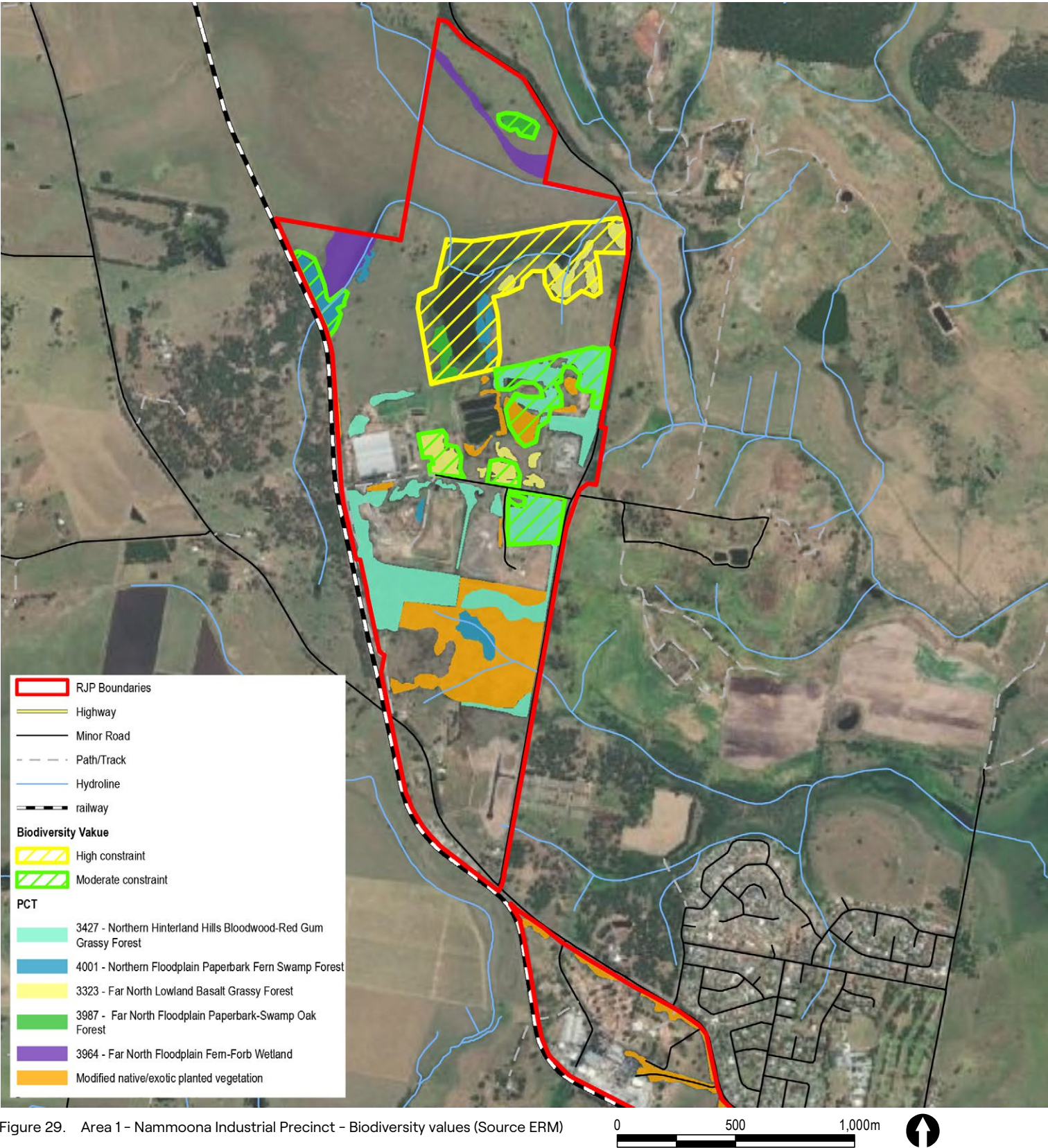


Figure 29. Area 1 - Nammoona Industrial Precinct - Biodiversity values (Source ERM)

7.2.7. Visual Quality, Character and Place

The area is adjacent to an identified residential growth area to the west of the railway line, requiring consideration for visual amenity and impacts.

Reynolds Road and parts of the precinct are substantially vegetated with tall trees. This provides a scenic quality along the edges of Reynolds Road and effectively screens existing industrial uses undertaken within the area. Council's recent subdivision in the southern portion of the site provides a buffer and tree planting to Reynolds Road. Combined with a parkland entrance to the precinct, the locality retains a rural leafy character. As industrial activity intensifies, ongoing consideration will need to be given to the landscape interface along the edge of Reynolds Road, RJP boundaries and any proposed new roads within the precinct.

The southern portion of the area adjoins the Summerland Way, which provides the north west gateway into the Casino Town site from Kyogle. Planned upgrades will enhance its role as a tourist route, placing greater emphasis on the visual quality of this gateway. Parts of the Area 1 are visible from this important gateway and consideration for visual impacts of future development will be necessary.

As new development occurs consideration should be given to embellishing landscaping features for visual amenity with additions such as post and rail fence top respond to the rural context. At key gateways opportunities for co-ordinated signage / branding and possible key entry features such as public art should be considered.

Refer Figures 14-21.

7.2.8. Land Tenure, Opportunity Sites and Strategic Land

The central portion of the area is occupied by a range of industrial uses including Northern River Livestock Exchange, Riverina Stockfeeds, DMT Timber Treatment and the Richmond Valley Council's waste transfer, recycling and landfill facility. Existing industrial operations include large, underutilised areas that may provide opportunities for further subdivision or expansion, but parts of these sites are heavily vegetated and will require consideration of biodiversity impacts.

A significant area of underutilised land exists in the northernmost extents of Area 1. The approval for the Casino Rail Freight Terminal for rural related produce remains current on this land. There is an opportunity to diversify employment land uses to support the feasibility of the rail freight terminal. This would require an extension of the Urban Growth Area boundary to be obtained.

There is an approved three stage subdivision encompassing all of the land south of the existing industrial area. The Stage 1 subdivision has recently been subdivided for industrial uses and provides a key opportunity for short term industrial development. The remaining stages of the subdivision are approved but as yet undeveloped and have the opportunity to benefit from access to rail via the existing rail siding.

Refer Figure 30.



Figure 30. Area 1 - Nammoona Industrial Precinct - Land Tenure

7.2.9. Aboriginal Heritage

A total of nine previously registered valid Aboriginal sites are within the Investigation Area. All previously registered sites are within the boundaries of current AHIP C0001253 and are subject to the requirements of that Aboriginal Heritage Impact Permit (AHIP). These include culturally modified trees, artefact scatters and isolated artefacts.

Six new Aboriginal sites were identified in Nammoona including three Culturally Modified Trees, three artefact scatters and one isolated artefact.

Of these, one site was located within the boundaries of existing AHIP C0001253. This site can be managed in accordance with the provision of the AHIP while the AHIP remains valid. In addition, one site (RVRJP IF 01) is no longer considered a heritage constraint as it was unknowingly destroyed following survey.

Four areas of Potential Archaeological Deposit (PAD) were identified across Area 1. Given impacts to these areas may occur in conjunction with future development, further investigation through test excavation would be required to confirm the presence and nature of archaeological deposits within these areas. Avoidance of any impacts should be prioritised. Where this is not achievable, an AHIP will need to be sought prior to any works being undertaken.

The northern portion contains significant areas of high potential for subsurface archaeological material, with a number of identified artefacts. PADs and Culturally Modified Trees (Carved or Scarred). The approved Casino Rail Freight Terminal has addressed Aboriginal Heritage matters via the approval process and applied suitable avoidance and protection strategies.

Any land use recommendations associated with this Structure Plan do not directly involve approval to undertake earthworks, no harm can occur associated with this process and an AHIP is not required to support completion of the rezoning and Structure Plan process.



Figure 31. Area 1 - Nammoona Industrial Precinct - Aboriginal Heritage (Source ERM)



Aboriginal Heritage Sensitivity Mapping

Figure 31 identifies areas of high medium and low archaeological sensitivity. For the purposes of future planning, any development applications in areas of high archaeological sensitivity will need to be supported by an Aboriginal Cultural Heritage Assessment Report and Cultural Heritage Management Plan which details measures to manage and preserve the identified Aboriginal cultural heritage values.

Any development applications in areas of moderate archaeological sensitivity would (at a minimum) need be supported by a due diligence assessment. They should also include a review of the Aboriginal Heritage Information Management System database to confirm that the assessment of potential of the current report remains consistent with the known Aboriginal heritage record. Should an updated Aboriginal Heritage Information Management System search identify newly recorded Aboriginal heritage sites which may be subject to impact as part of the proposed works, a stand-alone Aboriginal Cultural Heritage Assessment Report should be prepared to support the development application.

Development applications within areas of low archaeological sensitivity should include a review of the Aboriginal Heritage Information Management System database to confirm that the assessment of potential in the RJP remains consistent with the known Aboriginal heritage record. Should an updated Aboriginal Heritage Information Management System search identify newly recorded Aboriginal heritage sites which may be subject to impact as part of the proposed works within an area of low archaeological potential, a stand-alone Aboriginal Cultural Heritage Assessment Report should be prepared to support the development application.

Implications of identified Aboriginal Heritage Values for complying development

There are several controls within the *State and Environmental Planning Policy (Exempt and Complying Development Codes) 2008* which identify limitations in what developments may be considered Complying Development based on existing environmental conditions.

Of relevance to Aboriginal heritage values, land which is identified by an environmental planning instrument as being within environmentally sensitive land such as land identified as being of 'high Aboriginal cultural significance' cannot be complying development. (Section 1.19 (e)).

Based on the results of the current assessment it is recommended that all land identified as having high Aboriginal heritage sensitivity in the above sensitivity mapping be considered to be located within an environmentally sensitive landscape. Developments within these boundaries should not be assessed as complying development.

Additionally, complying development may not be undertaken on land that comprises, or on which there is, a draft heritage item (Section 1.18a). A draft heritage item is defined as a:

'Building, work, archaeological site, tree or Aboriginal object identified in a local environmental plan that has been subject to community consultation'

At present no Aboriginal heritage values are specifically recognised within the Richmond Valley LEP. It is recommended that the RVDCLP 2021 be amended to identify potentially sensitive heritage areas for further, more detailed consideration at the development application stage.

Refer Heritage Report (ERM 2024).

7.2.10. Historic Heritage

Three registered historic heritage items are located immediately adjacent to Area 1 - Nammoona. These are:

- The Nammoona Lawn Cemetery has been identified to be subject to potential visual impacts associated with the proposed land uses; and
- The Victory Camp has been identified to be subject to neutral visual impacts associated with the proposed Structure Plan land uses.

One area with unlisted heritage values has been identified in proximity to Area 1 - Nammoona being:

- Northern Cooperative Industrial landscape.

Potential visual impacts to the Nammoona Lawn Cemetery associated with the Reynolds Road Industrial subdivision have been assessed and managed as part of the existing subdivision approval which has resulted in the development of screening vegetation between the industrial subdivision and the Nammoona Lawn Cemetery.

It is noted that the existing building height controls for industrial development within this landscape limits buildings heights to 8.5m, noting building height is recommended to be increased by this Structure Plan. Where individual development within this industrial subdivision significantly visually impacts the Nammoona Lawn Cemetery, a Statement of Heritage Impact (SoHI) would be required to provide advice on additional visual impacts and management measures to mitigate impacts.

Refer Figure 32 and Heritage Report (ERM 2024).

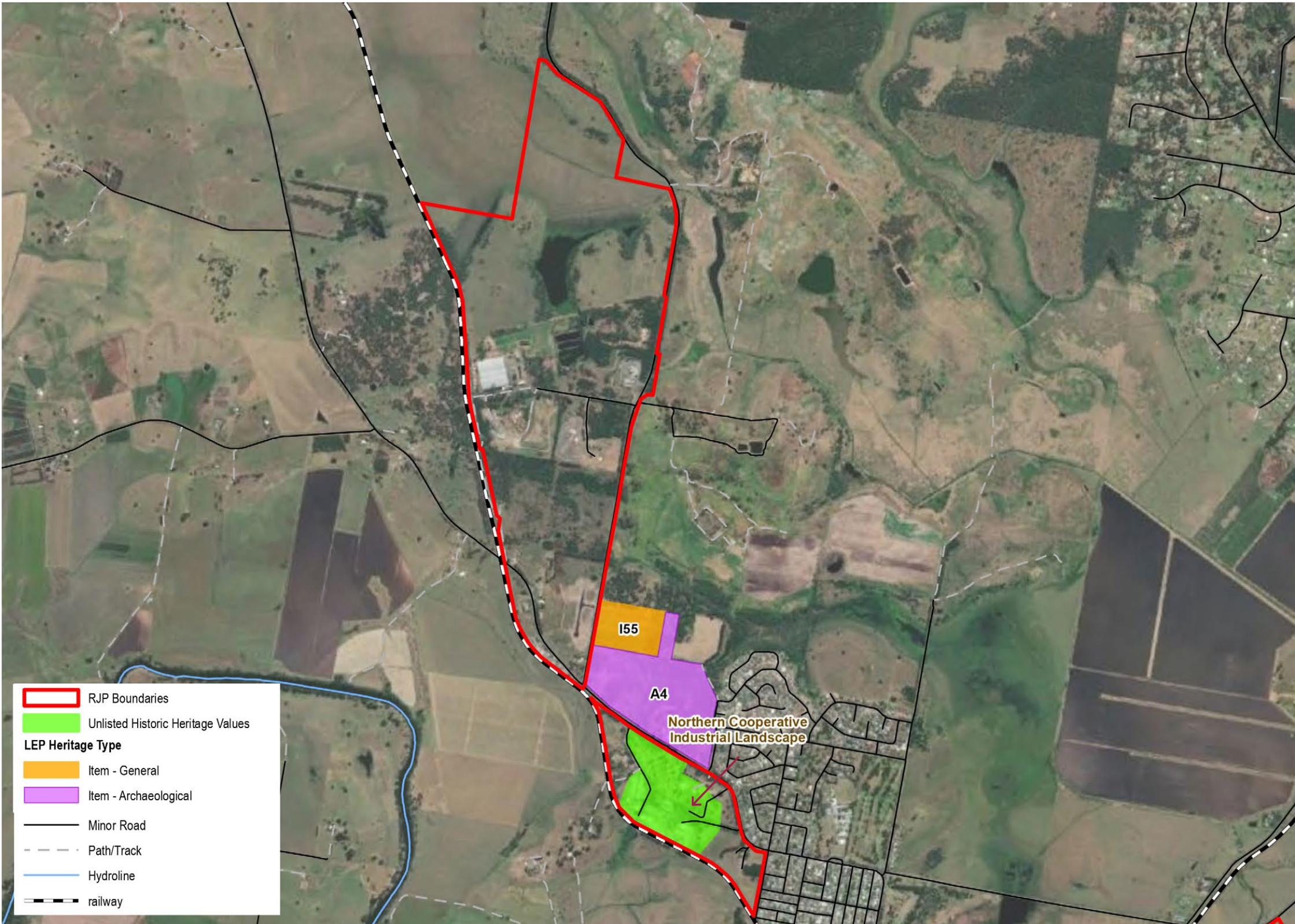


Figure 32. Area 1 - Nammoona Industrial Precinct - Historic Heritage (Source ERM)

7.2.11. Traffic and transport

Summerland Way

Summerland Way is a state road that runs north from Grafton, passing through Casino and terminating at the border of NSW and Queensland. It is a north-south inland route that runs approximately parallel to the Pacific Highway. It is an important route for the agricultural and industrial industries.

A railway level crossing with supporting signage and boom gates is located at Summerland Way south of the Nammoona Industrial Precinct. The speed limit on Summerland Way is typically 80 km/h but reduces to 50 km/h within the Casino Township.

A desktop review indicates that north of Casino, Summerland Way has been designed and constructed in accordance with Austroads specifications, with 3.5 metre wide travel lanes and an overall road reserve of around eight metres.

Reynolds Road

Reynolds Road runs along the eastern edge of the area. It is a shoulderless two-way road with no line markings north of Dargaville Drive on a limited road width where large container trucks would be regularly operating. Heavy vehicles seeking to head north from Reynolds Road onto Summerland Way are required to traverse up to two lanes of southbound traffic and merge into a single lane of northbound traffic.

The need for upgrades to Reynolds Road and Summerland Way and the intersection itself to support industrial growth in Area 1 is being assessed. The staging and timing of this work will be considered as part of updates to contributions planning.

Reynolds Road may be upgraded as required to support the development of the Nammoona industrial area (as detailed in the preferred RJP option), if traffic modelling suggests this is required as well as to support changes to its horizontal and vertical alignment and address corridor safety issues.

Summerland Way and Reynolds Road Intersection

Traffic modelling indicates that the intersection of Summerland Way and Reynolds Road operates with a good level of service and well within its mid-block capacity of 900 vehicles/hour/lane.

It is noted that heavy vehicles seeking to head north from Reynolds Road onto Summerland Way are required to traverse up to two lanes of southbound traffic and merge into a single lane of northbound traffic. The overall truck volume increase through intermodal traffic, proposed industrial land uses and the ongoing growth of local industries, including the livestock exchange, will also drive consideration of an upgrade at the Reynolds Road/Summerland Way intersection.

Traffic modelling undertaken considered projected growth to the 2031 and 2041 growth horizon. The modelling determines if the intersection of Summerland Way/Reynolds Road has the capacity to accommodate the vehicle activity associated with the current and proposed land uses.

Modelling indicates that the intersection of Summerland Way and Reynolds Road will continue to operate with a good level of service. This confirms it has the capacity to accommodate the growth associated with the Nammoona industrial area, and the wider regional growth in proximity to Richmond Valley/Casino. However, given the cumulative traffic impacts associated with growth across the RJP and future residential development at

South Fairy Hill, the intersection of Summerland Way and Hillcrest Lane will need to be improved (refer section 8.2.10).

A small section of industrial land is located to the southwest of Summerland Way, in an area currently occupied by low intensity industrial land uses. There are potential safety issues associated with the driveway to and from the site being approximately 150 metres to the north west of Reynolds Road. If this section of land accommodates increased intensification of land uses associated with the RJP, then an alternative access intersection should be provided further to the northwest of Reynolds Road, to support the safe movement of vehicles.

Active Transport

Active transport and public transport connectivity in Nammoona is poor. Reynolds Road is approximately 3.2 km from the Casino Town Centre, which exceeds a comfortable walking distance. The current layout/road reserve of Summerland Way does not provide any active transport infrastructure to provide a safe, integrated traffic, cycle and pedestrian network and support the transport need of cyclists, pedestrians and public transport users.

There is a need to support active transport between the Casino town site and Nammoona Industrial Area. The existing Richmond Valley Council Pedestrian Access and Mobility Plan proposes a Shared Footpath Cycleway on Summerland Way between Hotham Street and Reynolds Road. This path would support active transport connectivity between the Nammoona RJP and the Casino Township. It is recommended that Summerland Way between the Casino Township and Reynolds Road be widened to provide cycle paths, in accordance with the Austroads criteria

Additional items to consider when reviewing the provision of active transport to the Nammoona industrial area include:

- Providing an active transport path into the industrial areas from Summerland Way. Any sharing of Reynolds Road between heavy vehicles and cyclists would require a dedicated path to be provided.
- Providing a bi-directional cycle path on the north-east side of Summerland Way, so northbound cyclists are not required to cross a busy road to access the Nammoona industrial area (which is consistent with the Pedestrian Access and Mobility Plan).
- Providing a storage area on Summerland Way in proximity to Reynolds Road to support cyclists crossing the road safely.
- Reduce the speed limit on Summerland Way in proximity to Reynolds Road from 80 km/h to 60 km/h.

Public Transport

The current public transport services (bus and train) in Casino are infrequent and provide little utility to the RJP. There are no bus stops in proximity to the RJP subject sites.

If there is a significant increase in patronage demand associated with the employees of commercial/industrial developments associated with the RJP, bus services be reviewed to determine the feasibility of providing additional services and appropriately located bus stops to service Nammoona.

Refer Traffic and Transport Analysis Report (GHD 2024)

7.2.12. Freight Rail Connectivity

Development consent for the proposed 'Casino Rail Freight Terminal' in the north of Nammoona remains current but has yet to be developed. There is an existing railway siding adjacent to the Stage 3 subdivision south of the landfill site. This provides an additional opportunity to support rail based industries in Nammoona.

The development of freight rail facilities hinges on feasibility, which is challenged by factors that balance cost, volume, distance and efficiency. Investigations undertaken by George Stanley Consulting noted that the most feasible operating parameters would be for large and super container volumes over distances of 500km or greater to ports such as Melbourne, Sydney and Newcastle.

There is an opportunity to support feasibility of freight rail facilities through increased land use diversity. This will assist in attracting and supporting new rail-oriented industries that stand to benefit from co-location and offer potential to stimulate secondary employment opportunities.

Refer Intermodal Feasibility Report (George Stanley Consulting 2024)

7.2.13. Soils, Geology and Contamination

Area 1 has the possibility of contamination, which as part of any future development will need to be investigated and remediated (if required) to avoid potential risk of harm to current and future human health and sensitive ecological ors.

Contaminated land will be managed in accordance with the NSW contaminated land management framework and relevant legislation during planning and development, including the *State Environmental Planning Policy (Resilience and Hazards) 2021*, *Contaminated Land Management Act 1997* and the *Environment Planning and Assessment Act 1979*.

Refer Soils, Geology and Contamination Report (ERM 2024)

7.2.14. Utilities and Infrastructure

The Utilities Infrastructure Analysis Report (GHD 2024) confirms that no wastewater network is in operation within Area 1. However, a connection between Nammoona and the existing sewerage network is under construction and scheduled for commissioning in 2023. It will provide opportunities for Nammoona's wastewater loads to be supplied directly to the existing Sewage Treatment Plant.

The growth of industrial activity in Nammoona is expected to significantly increase demand on the existing Sewage Treatment Plant, which is at capacity and identified for short term upgrade in its current location under the Casino Place Plan.

There is potential to coordinate infrastructure upgrades for the entire north west corridor to maximise efficiency.

Identified infrastructure upgrades to support the intended outcomes proposed by this Structure Plan are outlined in Section 10 and in the Utilities and Infrastructure Report (GHD 2024).

7.2.15. Energy from waste/alternate waste treatment solutions

The aim in RJP is to provide strategic planning for future industry, including renewable energy. This may include energy from waste operations, as proposed in the *Protection of the Environment Operations (General) Regulation 2022*. The Regulation identifies four nominated precincts in NSW for investigation of alternative waste treatment initiatives, including the Nammoona part of the Richmond Valley RJP.

The Regulation enables a strategic approach to the role of alternative waste treatment infrastructure to ensure it protects the environment and human health into the future, and maximises efficiencies for waste innovation, management, and energy recovery.

The RJP planning investigations have generally considered that energy from waste/alternate waste treatment solutions (EfW/AWTS) may be located somewhere in the precinct.

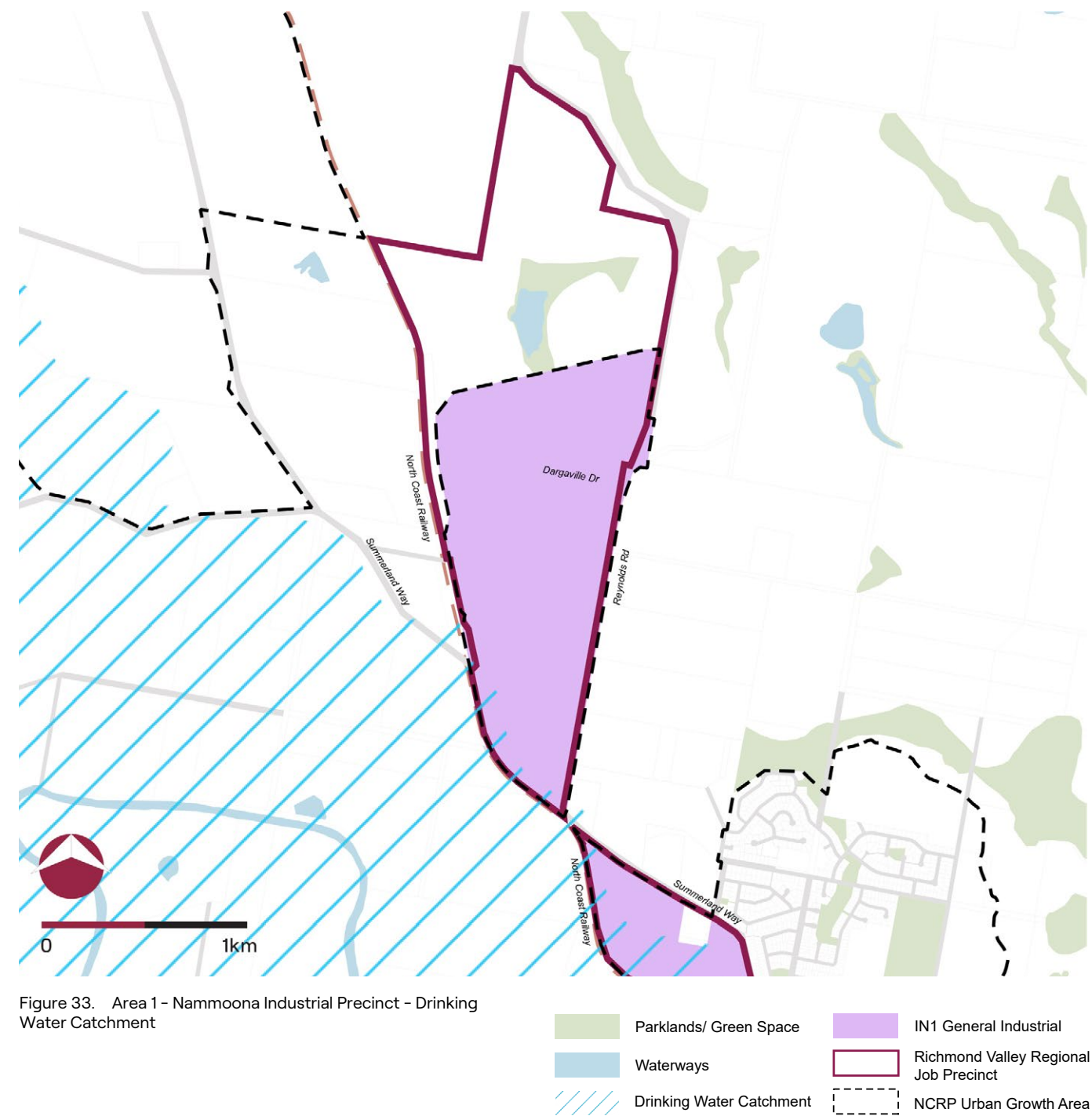
At this time, a specific site has not been identified for EfW/AWTS. Any future proposal for an EfW/AWTS facility will be subject to a separate full development assessment process under the existing planning framework. This would include detailed community consultation and input from other Government Agencies such as NSW EPA.



7.2.16. Drinking Water Catchment

The south west corner of Area 1 is located in Casino's drinking water catchment, which has implications for managing runoff and stormwater quality which will, need to be addressed through the relevant development assessment and approval processes.

Refer Figure 33.



7.2.17. Hydrogeology, Water Quality and Demand

Water Demand

Growth of industrial activity in Nammoona will significantly contribute to water demand in Casino. The Casino Place Plan, and the Hydrogeology, Water Quality and Demand Analysis Report (GHD 2024) outline a range of measures for augmenting supply and water efficiency to accommodate industrial growth in Nammoona as it occurs.

Richmond Valley Council follows the 5/10/10 rule set out in the DPHI Water's draft guidelines for "Assuring future urban water security – Assessment and adaption guidelines for NSW local water utilities" to determine water security. With the current estimated 3,074 ML/yr bulk supply storage from the Jabour Weir, Richmond Valley Council advised during discussions on 16 November 2022 they have not experienced difficulties supplying sufficient water to the town of Casino.

Therefore, bulk water supply is not currently an issue for the Richmond Valley LGA, but as climate patterns change, bringing longer periods of drought, inland communities such as Casino will experience greater water security challenges. Council has been preparing for the impacts of climate change and increased development by investigating options to upgrade its bulk supply over the short-medium term. These options, to be implemented over the next 2-10 years will help to ensure there is sufficient water to meet the projected growth in the Casino township due to the RJP and Casino's access to flood-safe residential land.

Refer Hydrogeology, Water Quality and Demand (GHD 2024) and the Casino Place Plan (Gyde 2023).

Water Courses

The Regional Jobs Precinct Flood Impact Assessment (BMT 2024) (FIA) considers mapped watercourses/ hydro lines in Area 1, which are illustrated in Figure 34. The FIA identified that watercourse in the south of Area 1 have no defined bed and banks or riparian vegetation, and recommended that these be removed in consultation with DPHI.

The FIA identified recommends that the mapped watercourses/ hydro lines in the north of Area 1 are reviewed in greater detail as they do exhibit characteristics of a ‘river’ as defined in the *Water Management Act 2000*.

The assessment also recommends that buffers to watercourses be established. The FIA estimates the required riparian corridor widths as outlined in Table 1. Any future design and development in the north of Area 1 should be in conjunction with an on-ground assessment of the watercourses and riparian buffer corridors included in the design, if required.

Table 1. Recommended riparian corridor widths (DPHI 2022)

Watercourse type	VRZ width	Total RD width
1st order	10 metres	20 m + channel width
2nd order	20 meters	40 m + channel width
3rd order	30 metres	60 m + channel width
4th order and greater (includes estuaries, wetlands and any parts of rivers influenced by tidal waters)	40 metres	80 m + channel width

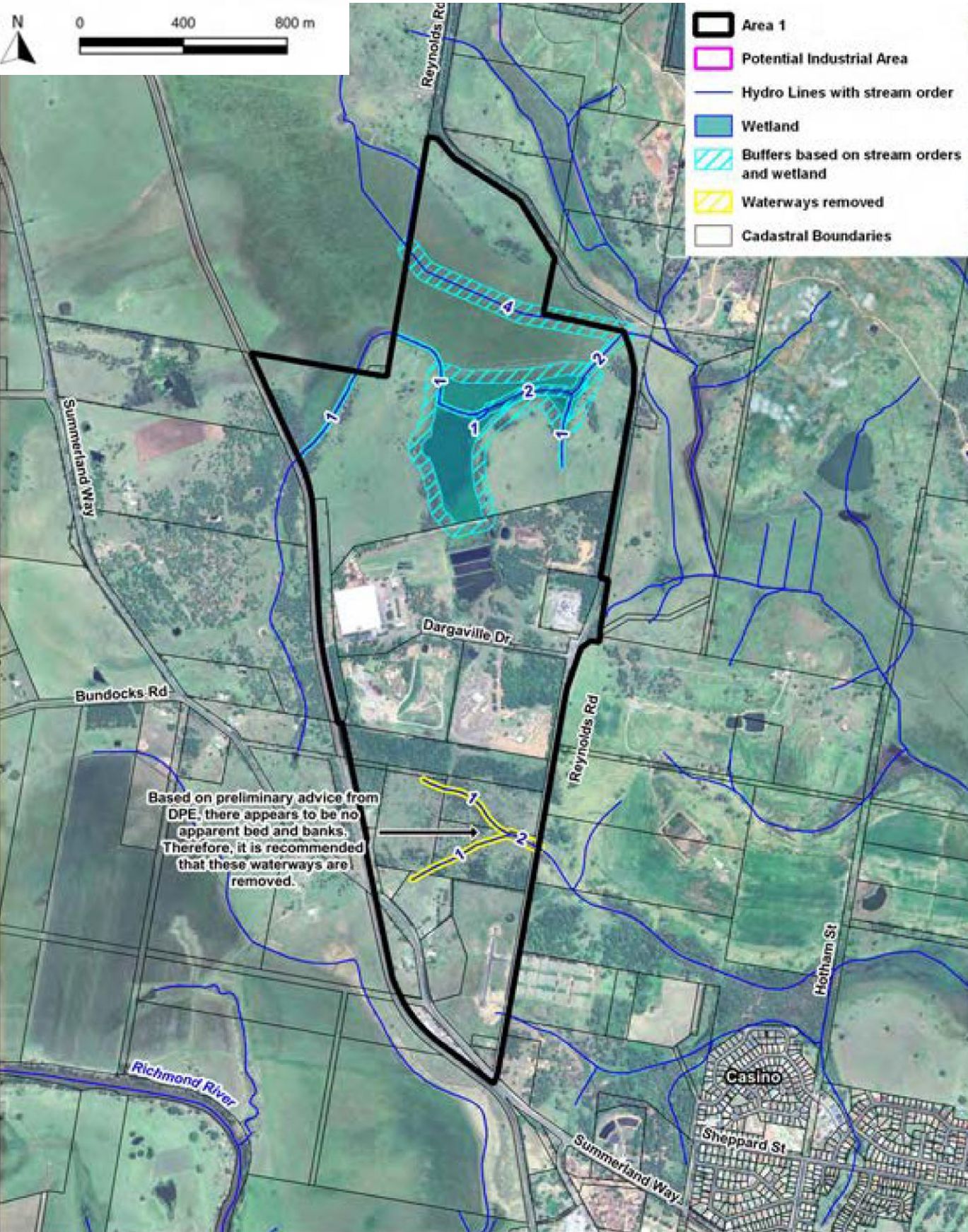


Figure 34. Area 1 - Nammoona Industrial Precinct - Potential Riparian Areas (Source BMT)

Water Quality Management

The Regional Jobs Precinct Flood Impact Assessment (BMT 2024) includes a flood and drainage assessment and a stormwater quality assessment.

Three potential stormwater quality management strategies were evaluated using a MUSIC model developed for the assessment. Of these strategies, bioretention systems have been recommended to achieve stormwater quality performance targets whilst maximising land use efficiency.

Indicative areas and locations of retention systems are illustrated in Figure 35.

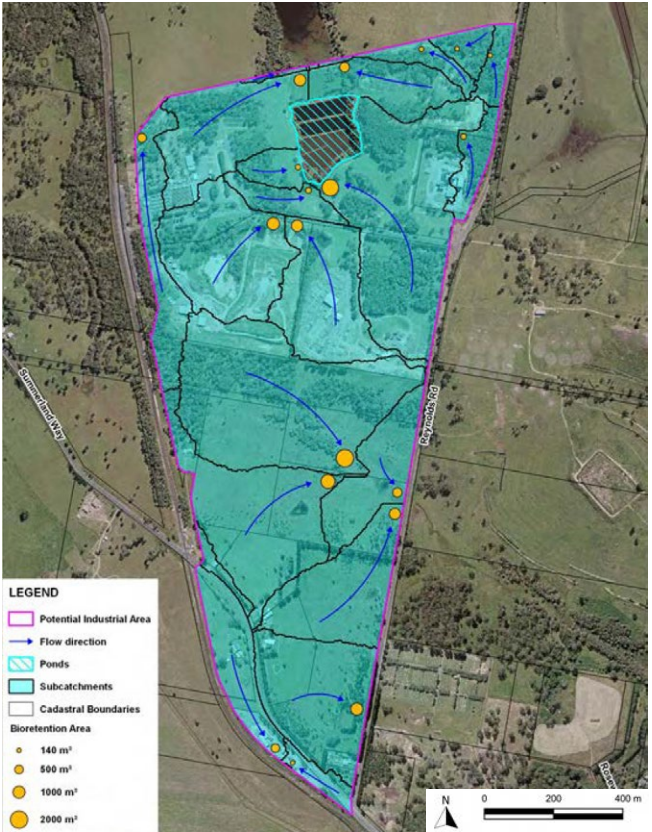


Figure 35. Area 1 - Nammoona Industrial Precinct - Indicative locations of bioretention basins (Source BMT)

It is noted that the mean annual stormwater post development volumes can be assessed to inform the strategic planning of the RJP. However, a review of the peak flowrates and a hydrological model will be required. This will need to be undertaken at a more detailed stage of the planning process once a conceptual site design has been developed.

7.2.18. Flooding Risk

A baseline analysis and flood impact assessment for the RJP has been undertaken by BMT on behalf of Council. The analysis included a flood and drainage assessment and a stormwater quality assessment of the RJP precinct, with a particular focus on the northern portion of RJP Area 1.

The majority of Area 1 Nammoona is not located in an area known to be prone to flooding.

The southern portion of Area 1 site is not affected by inundation from regional flood events up to and including the PMF event as it is significantly higher than the adjacent Richmond River floodplain to the north.

The lower lying areas to the north of the Urban Growth Area boundary are flood affected, however there are significant areas of land outside of identified flood prone areas which generally correspond to the approved development areas for the Casino Rail Freight Terminal.

The northern part of Area 1 is affected by an overland flowpath which crosses Reynolds Road to flow into Barlings Creek. There is minimal change in regional inundation extent between the 2% AEP and 0.2% AEP flood events within for Area 1. The key recommendation for Area 1 is to develop outside of the area shown as inundated for all events, which is illustrated in Figure 36.

The portion of Reynolds Road located south of the overland flowpath crossing is not affected by regional flooding in all the events up to the PMF event, therefore, the evacuation of RJP Area 1 can be safely performed to the south via Reynolds Road and Summerland Way. Access can then be made to the evacuation centre if required.

7.2.19. Bushfire Risk

Large parts of Area 1 have been mapped as containing areas of bushfire hazard as can be seen in Figure 35. It is therefore important that new development mitigates the risk of bushfire to the new site users and surrounding assets. It is noted that an existing development consent has commenced south of the existing industrial areas, which allows for substantial clearing of vegetation. If undertaken, this would change the bushfire hazard risk profile in that area.

Bushfire risk interfaces with a number of issues include the potential for increased frequency of bushfire events associated with climate change and the effects on threatened species. These are important considerations, noting the opportunity to retain vegetation connectivity.

The main bushfire risks are in the vicinity of existing industrial activities.

The application of suitable Asset Protection Zones (APZ) across the precinct should result in a Bushfire Attack Level of:

- BAL 29 or lower to all the future building envelopes;
- BAL 12.5 or lower to all SFPP; and
- BAL 12.5 or lower to all potential hazardous industry.

Consideration will need to be given to main evacuation routes including Reynolds Road, Summerland Way and various local roads as well as the application of Asset Protection Zones (APZ) based on site specific risk through the individual development applications.

Refer Figure 37 and Bushfire Analysis Report (ERM 2024)

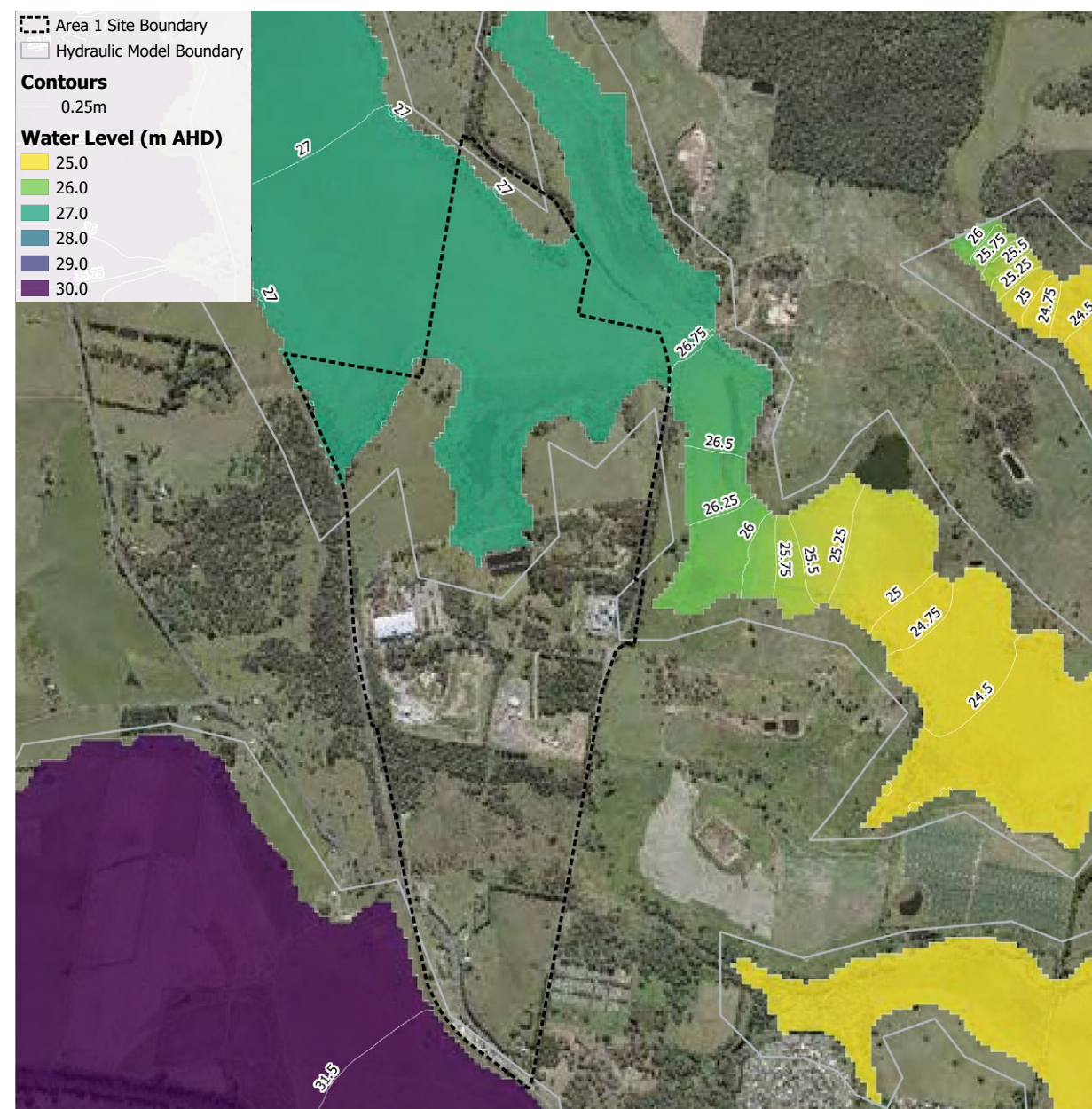


Figure 36. Area 1 - Nammoona Industrial Precinct - PMF Peak Flood Level - Baseline Conditions (Source BMT)

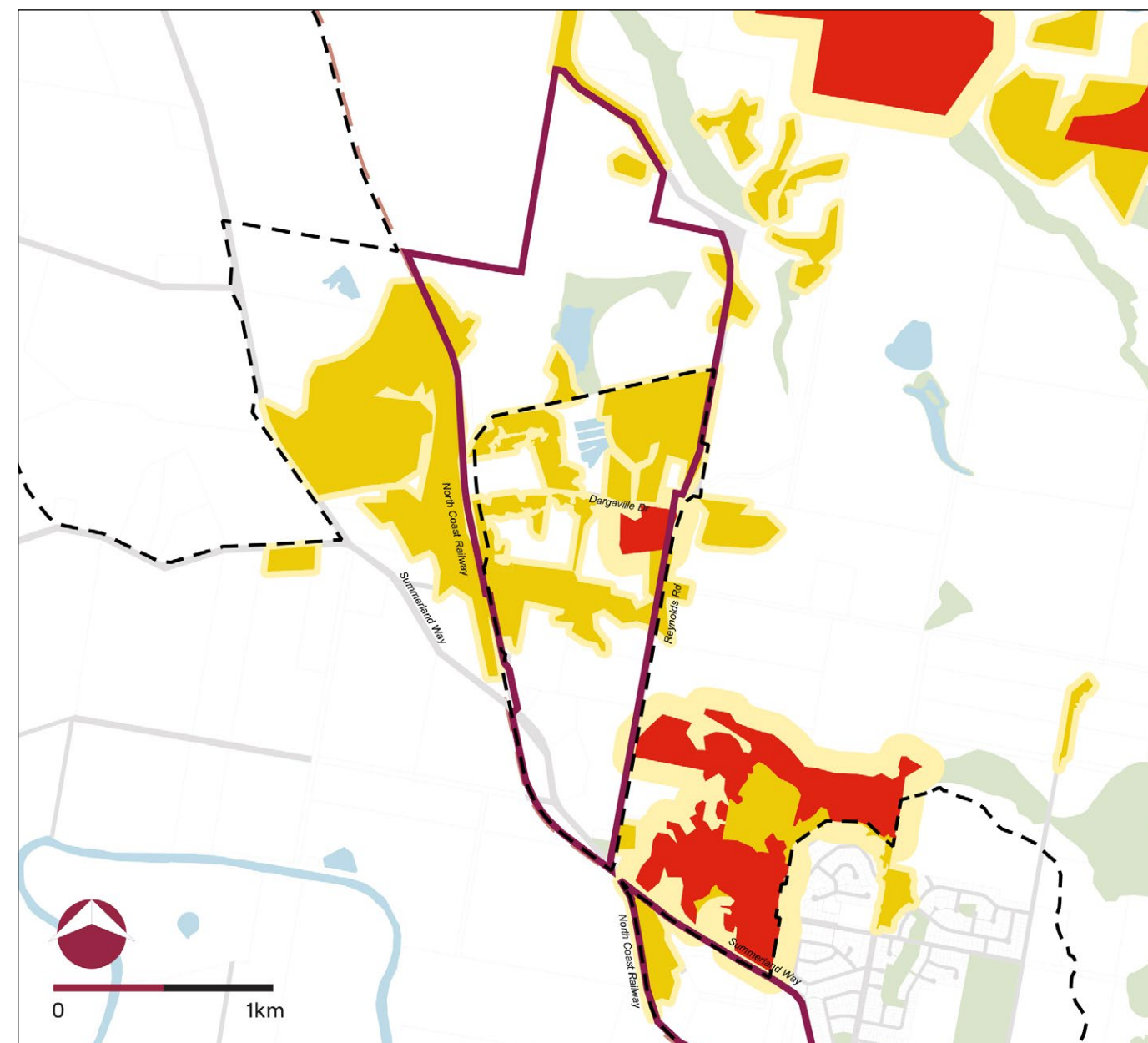
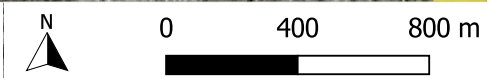
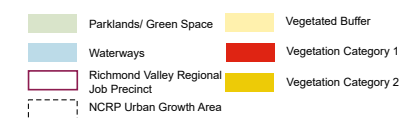


Figure 37. Area 1 - Nammoona Industrial Precinct - Bushfire



7.3 Structure Plan – Area 1 Nammoona Industrial Precinct

This section outlines initiatives to facilitate growth in Area 1 - Nammoona Industrial Area. Structure Plan recommendations for Nammoona take into consideration the opportunities, constraints and future needs outlined in previous sections and supporting technical reports.

Vision for Area 1 – Nammoona Industrial Precinct

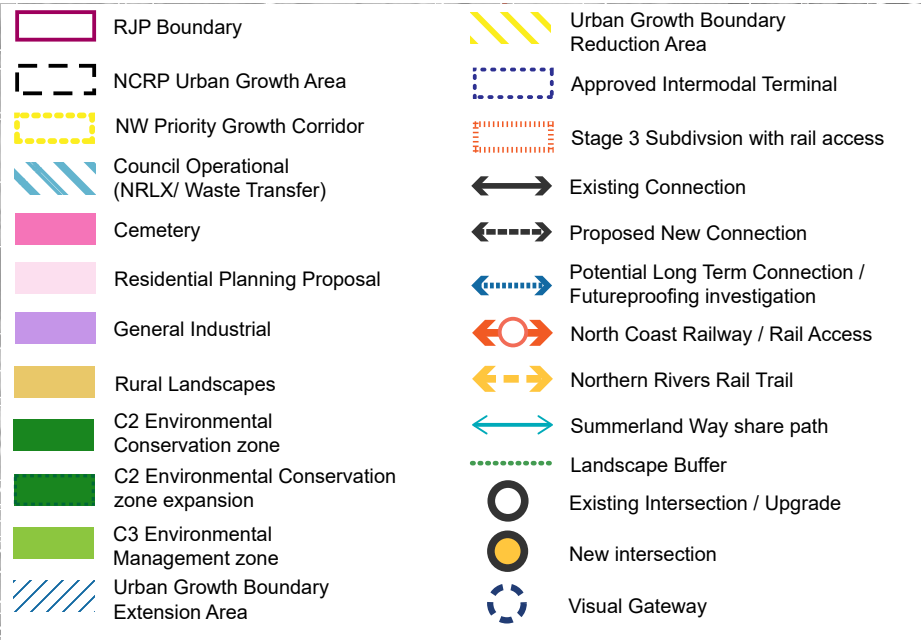
The availability of large lot parcels and separation from existing and future residential areas supports large format and heavier industrial uses in Area 1. There are opportunities for both large and smaller format industrial uses in this locality including areas where the impacts of higher intensity industries are manageable in relation to any sensitive land uses.

Area 1 has the potential to become a thriving multi-use, multi-user industrial area and is a key location for attracting new businesses looking for a larger footprint development opportunity or rail frontage. There are significant opportunities for new development in this underutilised industrial area and potential for incremental expansion and diversification of already developed industrial lands.

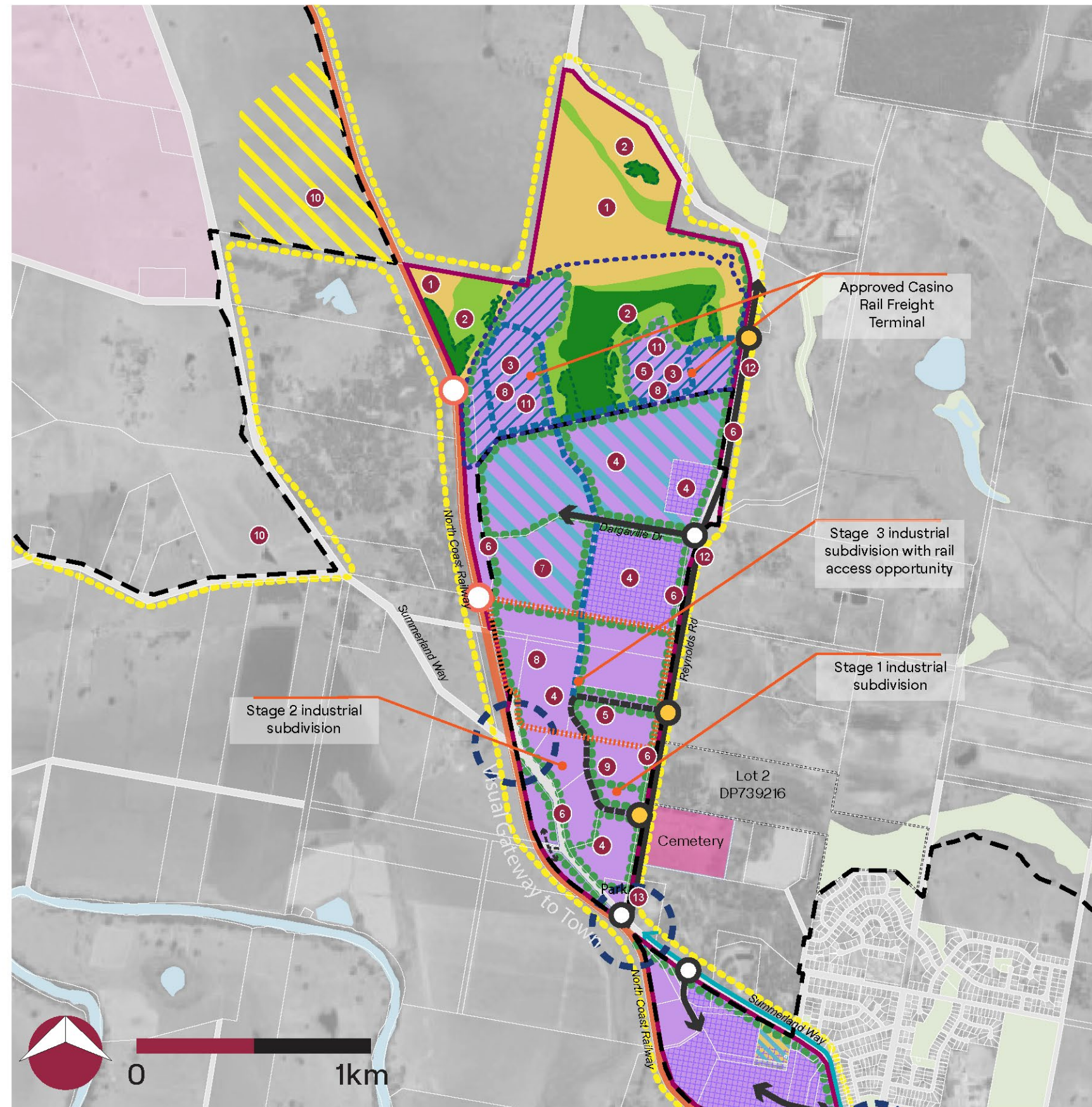
Given its location, there is opportunity to leverage the agglomeration of agribusiness to the north-west of Casino along the Summerland Way supporting:

- Downstream food processors of soy beans, such as plant-based protein producers (e.g. textured plant protein manufacturing and protein fractionation).
- Medical grade processors of locally produced inputs (tea tree and honey, for example) to produce high quality food products such as ‘nutraceuticals’, functional foods, fermented foods in line with emerging food processing trends.

There is an opportunity to leverage the approved freight rail facility in the north as well as the potential for rail accessibility in the southern areas of Area 1. There is a need to safeguard the operational requirements arising from Council’s landfill site and the future potential for energy from waste/alternate waste treatment solutions.



- 1 Retain existing rural zoning north of the approved intermodal terminal, except those areas identified for conservation zones
- 2 Area of high environmental value to be conserved via C3 Environmental Management zoning with some expansion of C2 Environmental Conservation to protect Paperbark Swamp Forest and Swamp Oak
- 3 Extend Urban Growth Boundary following rezoning for industrial uses to support the approved freight rail terminal or as an alternative use if it is not developed
- 4 Establish zone to permit a range of general industrial uses to support ongoing operation, incremental expansion and diversification of existing industrial uses
- 5 Establish zone to permit a range of general and higher intensity industrial uses locations that can benefit from rail access and where air, noise and odour impacts are manageable
- 6 Establish DCP site planning controls that promote the strategic retention and enhancement of existing vegetation to establish 10m wide landscape buffers along roadsides and RJP boundaries. 20m buffers to be provided north of Stage 3 subdivision
- 7 Construct cell 6 of Council landfill site



- 8 Support the development of industrial uses that may benefit from accessibility to rail
- 9 Ongoing staging, delivery and curation of industrial uses in Council's industrial subdivision
- 10 Adjust urban growth boundary and reduction of NCRP Residential Investigation Area to manage impacts of industrial uses and avoid land use conflict with future residential lands
- 11 Support delivery of the approved freight rail terminal with increased land use diversity by establishing zone to permit a range of general and heavy industrial uses
- 12 Monitor and upgrade Reynolds Road as necessary to support intensification of industrial uses
- 13 Retain General Industry zoning for Mary Madden Park to be used for industry, recreation or a combination of uses, subject to development consent

Figure 38. Area 1 - Nammoona Industrial Precinct - Structure Plan

7.4 Actions to Implement the Area 1 – Nammoona Structure Plan

Table 3. Nammoona – Key Actions

Actions		Approach
1_1.0	Land Use	
1_1.1	Establish land use zones to permit a range of general industrial uses.	<p>Establish land use zones to permit a range of general industrial uses that will support growth and expansion of business and industry. This will include existing industrial zoned land as well as an extension of such uses within the Casino Rail Freight Terminal site.</p> <p>Refer Figures 38, 39 and 40.</p>
1_1.2	Establish land use zones to permit a range of general and higher intensity industrial uses in locations where noise, odour and air quality can be suitably managed.	<p>Establish land use zones to permit a range of general and higher intensity industrial uses in locations where noise, air and odour impacts are manageable (i.e. noise in areas identified at or above 95dBa/ha). Higher intensity industrial uses are most suitable in two locations in Area 1.</p> <p>In the north of Area 1, a combination of general and higher intensity industrial uses will provide a flexible basis for future land uses to benefit from co-location with and support the feasibility of a rail freight terminal as well as to provide a framework that will enable the development of new industries should the terminal not be realised.</p> <p>Higher intensity industrial uses in the southern part of Area 1 may also benefit from potential rail access options. While part of the areas identified as suitable for higher intensity industrial uses is to be located in areas where maximum attenuated sound power levels are lower than 95dBa/ha, this is considered appropriate given not all higher intensity industry is a major noise generator and there may be potential to employ noise mitigation measures as part of the detailed design process as recommended in the air, noise and odour report (Todoroski Air Sciences 2024).</p> <p>Refer Figures 38, 39 and 40.</p>
1_1.3	Obtain an extension to the Urban Growth Area boundary to include proposed industrial land in the north of the Precinct	Obtain an extension to the Urban Growth Area boundary into the approved Casino Rail Freight Terminal site to encompass identified General Industrial and potential higher intensity industrial land uses in areas that are not constrained by flooding or biodiversity. The intent is to enhance land use flexibility and provide for a wider range of uses that could potentially benefit from co-location with the approved Casino Rail Freight Terminal, and allow for alternate employment related uses to occur on the site should the terminal not be realised.
1_1.4	Remove height limits and minimum lot size provisions for general and higher intensity industrial land use within the RJP boundary	<p>To reduce reliance on cl 4.6 variations under the RVLEP 2012 and provide greater certainty for development outcomes, remove building height and minimum lot size limitations under the RVLEP 2012 for General Industrial and Heavy Industrial land uses.</p> <p>In removing the Minimum Lot Size provision for Area 1, there will be an ongoing need to ensure that future land subdivision patterns:</p> <ul style="list-style-type: none"> maintain sufficient supply of lots to accommodate larger format industries; maintain a suitable diversity of potential lot sizes; and lots that support an efficient layout to meet their intended use.
1_1.5	Minimise potential for land use conflict	<p>Establish a planning mechanism under the RVLEP to establish a transition area for land surrounding the RJP requiring consideration of the impact of proposed sensitive receptors on operations within the RJP industrial area to minimise land use conflict and ensure appropriate consideration of land use conflicts. Establish Development Control Plan provisions related to the requirements of DCP Part I-11 Land Use Conflict Risk Assessment to manage potential land use conflict.</p> <p>Retain the existing RU1 Primary Production zoning within the Modelled or Boundary identified in Figure 25 and insert a provision under the RVLEP 2012 to reduce land use conflict within and surrounding the Richmond Valley RJP for both residential and industrial land uses. The intent of the clause would provide matters for consideration for development applications on adjoining or surrounding land, to consider the likely adverse impacts from the existing and continued operations on a proposed development, including the impact of noise, odour, and hours of operation.</p> <p>Review and update the Development Control Plan (DCP) to ensure new residential development adjacent to the precinct considers satisfactory mitigation from predicted industrial intensification as directed by the Richmond Valley Regional Job Precinct Master Plan.</p>

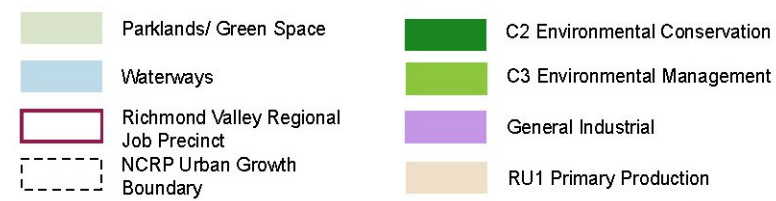
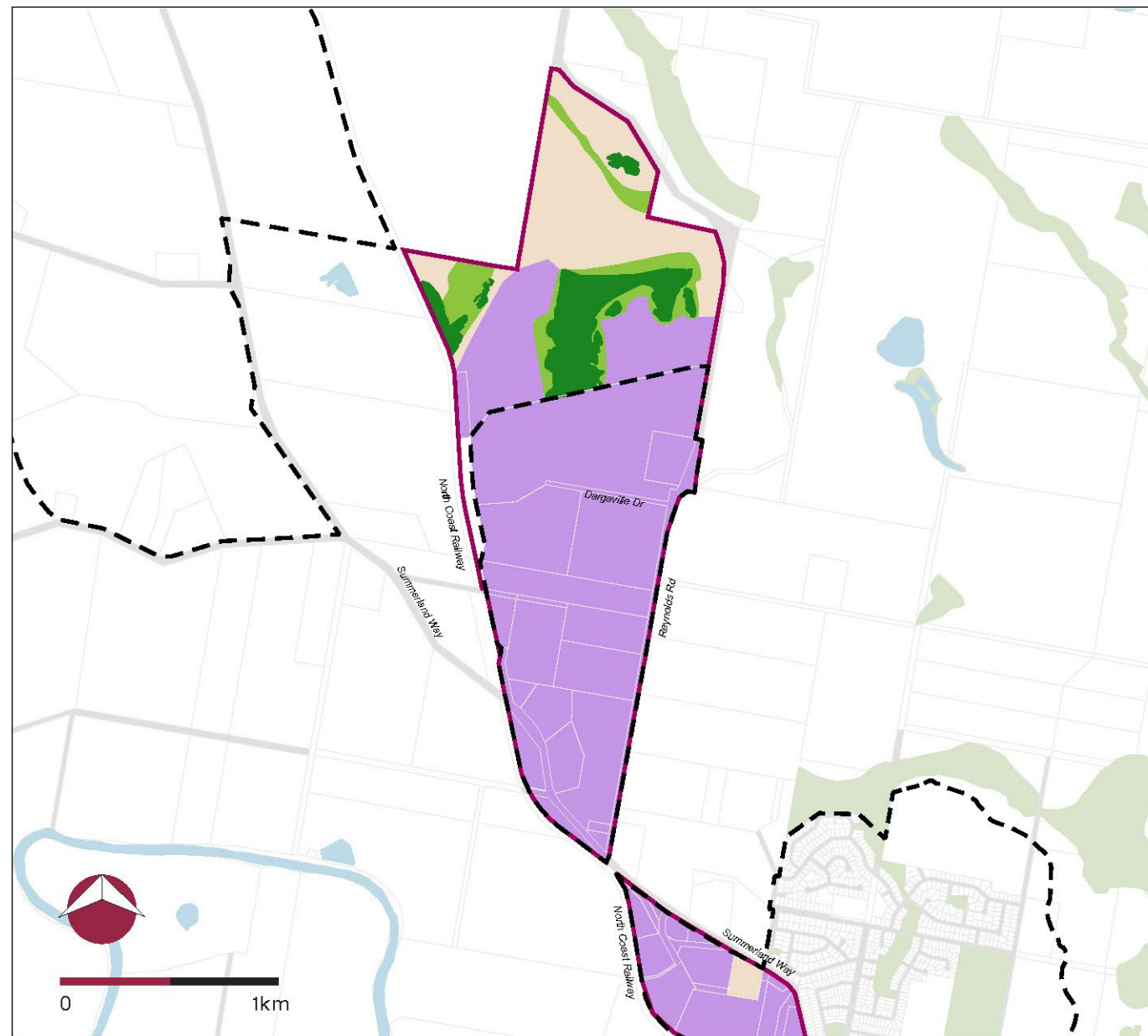


Figure 39. Area 1 - Nammoona Industrial Precinct - Future Land Use Zoning

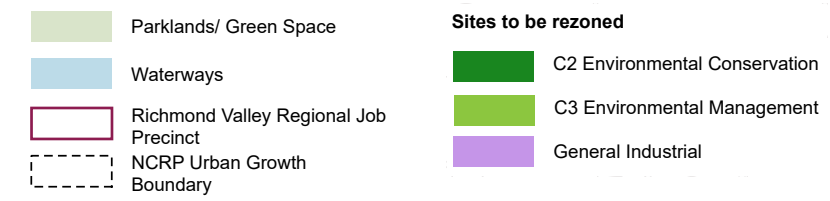
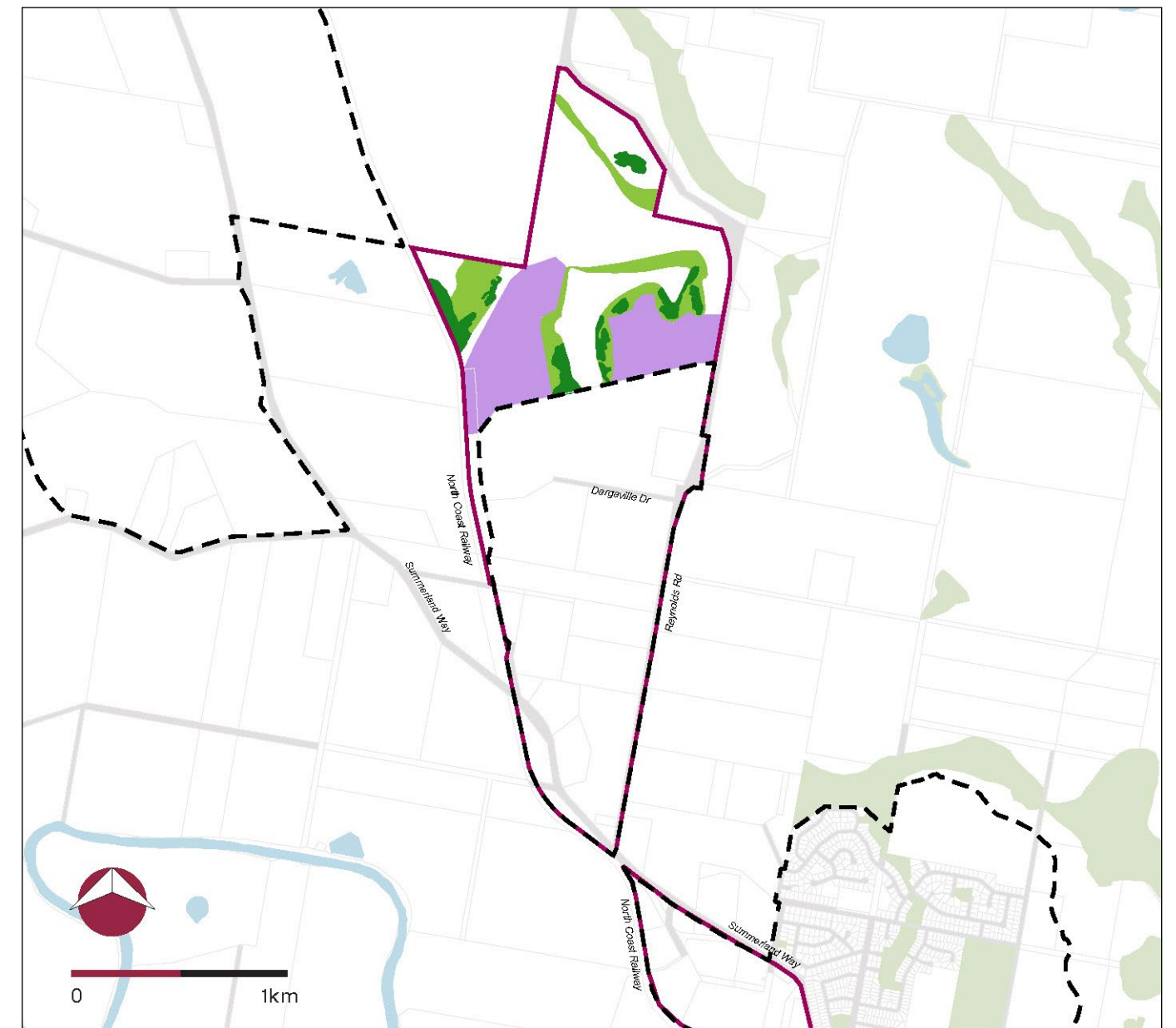


Figure 40. Area 1 - Nammoona Industrial Precinct - Land Use Zoning Amendments to the RVLEP 2012

Actions		Approach
1_2.0	Movement and Transport	
1_2.1	Approved Casino Rail Freight Terminal site - Investigate feasibility of alternative direct road access route into proposed industrial lands should the terminal not be developed	If the approved Casino Rail Freight Terminal is not developed, consider alternative direct for options access between Reynolds Road and proposed industrial sites in the proposed Urban Growth Area boundary extension area, subject to a detailed traffic study and consideration of environmental and biodiversity constraints.
1_3.0	Environment and Biodiversity	
1_3.1	Establish Conservation zones for areas of identified environmental and biodiversity sensitivity	<p>Seek to include areas of identified environmental and biodiversity sensitivity within the C2 Environmental Conservation and associated buffers in the C3 Environmental Management zones under RVLEP 2012.</p> <p>Plan and implement an ecological restoration plan for areas of medium and high biodiversity value that have been protected in C2 and C3 zones. This plan should focus on management of exotic grasses and improvement of water quality within the existing wetland. Areas of buffer plantings at the interface of the conservation zones and adjacent developable or RU1 land should be implemented to protect the biodiversity values in these areas. This should include more dense plantings of native species, to manage nutrients and pollutants in runoff, weed incursion and changes to noise or light environments.</p>
1_3.2	Establish DCP guidance to support the protection and connection of areas of biodiversity values in Nammoona	<p>Establish DCP site planning controls that:</p> <ul style="list-style-type: none"> Promote landscape connectivity to support movement/ dispersal of threatened fauna. This may include the strategic retention of existing vegetation and/or introduction of new vegetation corridors. Where possible and practicable, corridors with a minimum width of 50m is preferred and may be incorporated into setbacks and landscaped areas via the development application process. These areas will potentially contribute significantly to the offset obligation and cost associated with future development and therefore, further avoidance would reduce the ecosystem and species credit requirements and costs. Any linear corridors planted as buffers should include native groundcovers, grasses, forbs, shrubs and trees characteristic of the PCTs within the RJP Investigation Area. The detailed design of these corridors should also include habitat enhancements such as large logs, bush rock and artificial hollows to improve habitat quality for native fauna. This approach has the potential to provide habitat for Common Planigale, which requires more complex ground cover such as logs, rocks and deeper leaf litter. Provide species lists of native trees from the PCTs that occur in the RJP Investigation Area to be used as roosting or foraging resources for native microbats. Species lists should include a combination of Eucalyptus, Corymbia and Melaleuca spp. as tree plantings for any corridors, street tree, landscaping or park trees. Include water sensitive urban design principles in the any proposed stormwater management system, such as bioretention basins, vegetated swales or constructed wetlands. Southern Myotis will forage on insects over waterbodies, including artificial wetlands and farm dams.

Actions		Approach
1_4.0	Visual Quality, Character and Place	
1_4.1	Establish DCP guidance to ensure the visual quality of buildings and landscape in the RJP	<p>Establish new guiding mechanisms under the DCP to facilitate development of new industries in a manner that protects, complements and enhances the visual and scenic qualities of the Nammoona area. This will need to occur in the short term to ensure adequate guidance for development outcomes in conjunction with any amendment to LEP planning controls under the RVLEP 2012 as proposed in this Structure Plan. Key guiding principles include:</p> <ul style="list-style-type: none"> • Providing generous and dense landscaping including tall trees between new developments and public space to soften the visual appearance industrial activity as viewed from public space. • Development that is visible from public space and the Summerland Way to be of a high visual quality so as to protect the visual quality of key gateways. • Establish landscape buffers as recommended within the Structure Plan to manage visual impacts on visually and heritage sensitive areas. This will provide dense vegetation and tree planting adjacent to all visually sensitive boundaries and roads including Reynolds Road, Summerland Way, Dargaville Drive and any new road proposed within Area 1. This is to comprise a minimum total landscape strip of 10m. A wider landscape strip of 20m is to be provided on Reynolds Road north of 85 Reynolds Road. <p>As new development occurs consideration should be given to embellishing landscaping features for visual amenity with additions such as post and rail fence top respond to the rural context. At key gateways opportunities for co-ordinated signage / branding and possible key entry features such as public art should be considered.</p>
1_5.0	Infrastructure	
1_5.1	Monitor capacity and upgrade infrastructure as required to support growth	<p>As new development occurs in Nammoona and in relation to the South Fairy Hill residential investigation area, undertake ongoing monitoring of infrastructure capacity and undertake upgrades as necessary. The strategies and staging for likely infrastructure upgrades to support growth in Area 1 are outlined in the Utilities Infrastructure Report (GHD 2024).</p> <p>Refer also to Section 10 of this Structure Plan for infrastructure prioritisation and sequencing.</p>
1_5.2	Updates to contributions planning to support funding and delivery of identified infrastructure and transport upgrades	<p>To support growth in the precinct, undertake updates to contributions planning under section 7.11 and 7.12 of the <i>Environmental Planning and Assessment Act 1979</i> to coordinate contributions related to new development in the funding and provision of identified infrastructure upgrades. Council may also consider entering into planning agreements to deliver necessary infrastructure upgrades where appropriate. Recommended inclusions are outlined in the Utilities Infrastructure Report (GHD 2024).</p>
1_5.3	Establish a satisfactory arrangements provision	<p>Establish a satisfactory arrangements provision under the RVLEP 2012, requiring that the consent authority must be satisfied that services that are essential for the proposed development are available or that adequate arrangements have been made to make them available when required.</p>

8. AREA 2 – CASINO FOOD CO-OP AND SURROUNDS PRECINCT

8.1 Context

The following sections outline the relevant contextual matters that have been considered in the preparation of this Structure Plan. Figure 41 provides an overview of spatial considerations in Area 2.

The Casino Food Co-op is the largest employment centre in Casino. It is largely a single-user precinct but does support a variety of activities. Several different activities are undertaken within the complex, with cattle yards supporting an abattoir and tannery. The Co-op plans to consider bio-energy facility as part of their ongoing operations.

The area is a key driver of employment and investment elsewhere in town, with several local businesses forming part of the supply or value-add chain for this industry.

The area also includes town water supply infrastructure, and contains publicly owned lands that appear to be underutilised. NSW Department of Education owns the south-eastern portion of the area, and Essential Energy own the north west portion of the area.

Key attributes:

Direct frontages / access to Summerland Way and the North Coast Rail Line.

Operational needs of existing industrial uses as the largest driving force for employment in Casino.

Potential to activate underutilised lands for industrial or employment purposes.

Interface and land use compatibility considerations in relation to interfacing residential and industrial areas.

Proximity to sensitive uses (e.g. residential areas to the west).

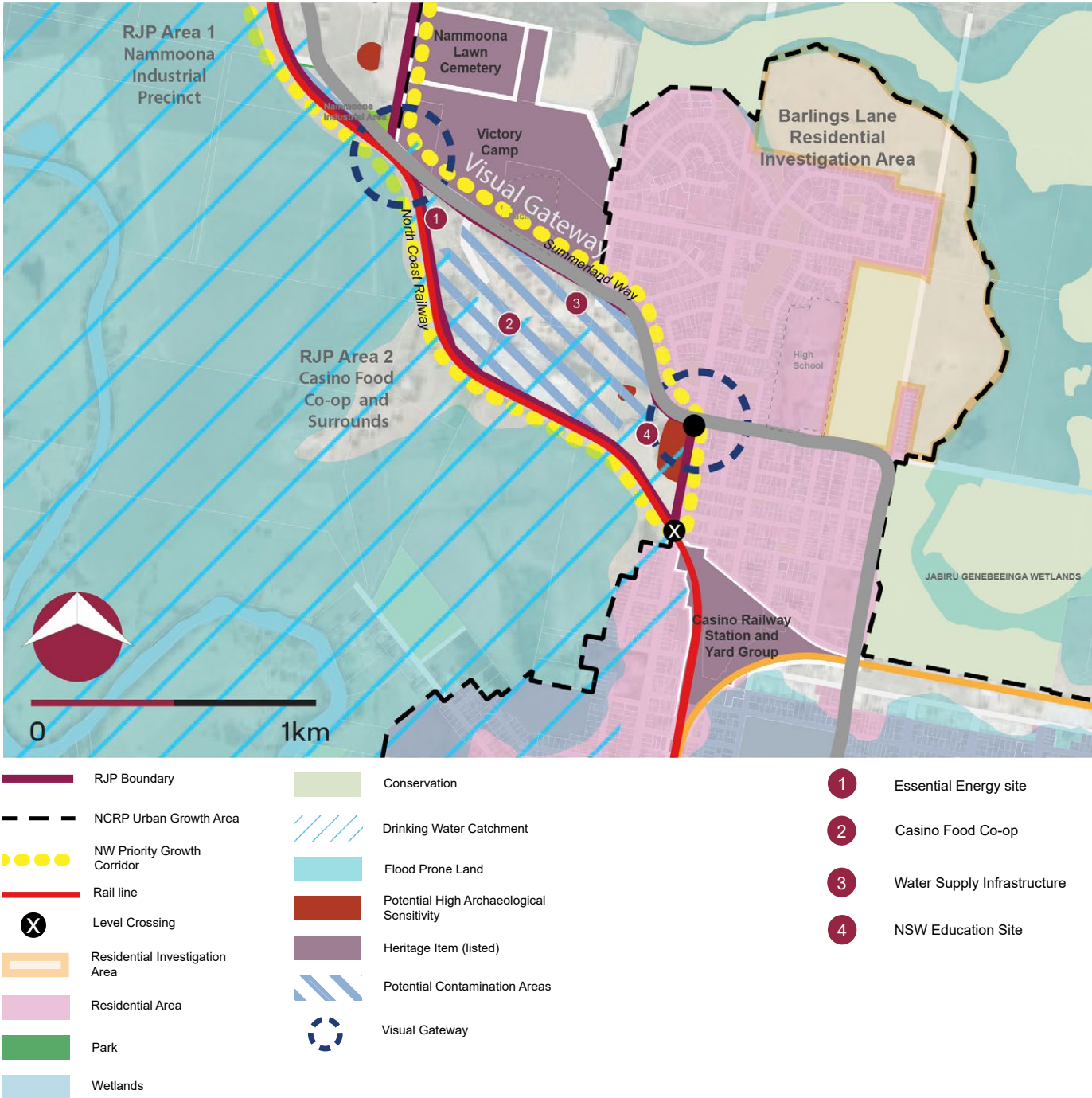


Figure 41. Area 2 – Casino Food Co-op and Surrounds Precinct – Context



Figure 42. A vegetated edge treatment and ridgeline along the Summerland Way provide effective screening of industrial uses within Area 2 and contribute to landscape character and the arrival experience along this key gateway



Figure 43 Post and rail fencing along the internal driveway to the Food Co-op adds to the rural character of Area 2



Figure 44. The southern driveway access into Area 2 has a strong rural and landscape character



Figure 44. Operational areas of the Food-Coop provide a major contribution to employment in Casino



Figure 46. The Essential Energy site in the northern extents of the precinct is one of few underutilised areas in Area 2



Figure 47. The Casino Food Co-op as viewed from the northern approach from Summerland way near the northern truck entry

8.2 Structure Planning Considerations

This section provides a summary of salient information provided for in the supporting technical investigations and analysis that underpins the actions set out under this Structure Plan.

8.2.1. Land use and zoning

Area 2 Casino Food Co-op and Surrounds Precinct is predominantly zoned IN1 General Industrial, which permits a broad range of industrial uses, conducive to the existing operations of the Food Co-op. Part of the site is currently used for temporary accommodation. While this may be necessary at the moment, it should not form part of the long-term management of the site.

Part 2 Clause 6 of the *Standard Instrument (Local Environmental Plans) Order 2006* provides for continuation of existing business and industrial zones for land identified under the RVLEP as "Land subject to the Richmond Valley Jobs Precinct Process". As such the land zoning in Area 2 has not transitioned to the new E zones now provided for under the RVLEP.

There is an R1 General Residential zone at the south eastern extents of the area, which is land owned by NSW Department of Education and used for agricultural based education associated with the nearby Casino High School curriculum. A small area on the central portion of the site is zoned RU1 Primary Production which contains a drinking water treatment and storage facility.

Refer Figure 48.

8.2.2. Building Height

The maximum permissible building height in Casino's industrial areas is 8.5m. Based on historical approvals, the maximum building height has proven to be insufficient to accommodate industrial development, resulting in reliance on variations sought via Clause 4.6 of the RVLEP 2012.

A review of various regional LEPs confirms that industrial areas zoned for general industrial purposes are often unlimited or generally permitted a maximum building height of 11m or greater.

In order to promote greater certainty for planning and development outcomes, and minimise the need for variations to planning controls, it is recommended that building height limitations be removed in Area 2.

It is recommended that DCP controls be established to facilitate an appropriate height transition in proximity to residential areas.

8.2.3. Minimum Lot size

Existing industrial zoned land in Area 2 has a minimum lot size requirement of 750sqm. While a 750sqm minimum lot size may considered appropriate for Area 2, it is recommended that minimum lot size limitations be removed from Area 2 as they provide an unnecessary limitation on development outcomes.

In removing the Minimum Lot Size provision, there will be an ongoing need to ensure that future land subdivision patterns:

- maintain a suitable diversity of potential lot sizes; and
- provide lots that support an efficient layout to meet their intended use.

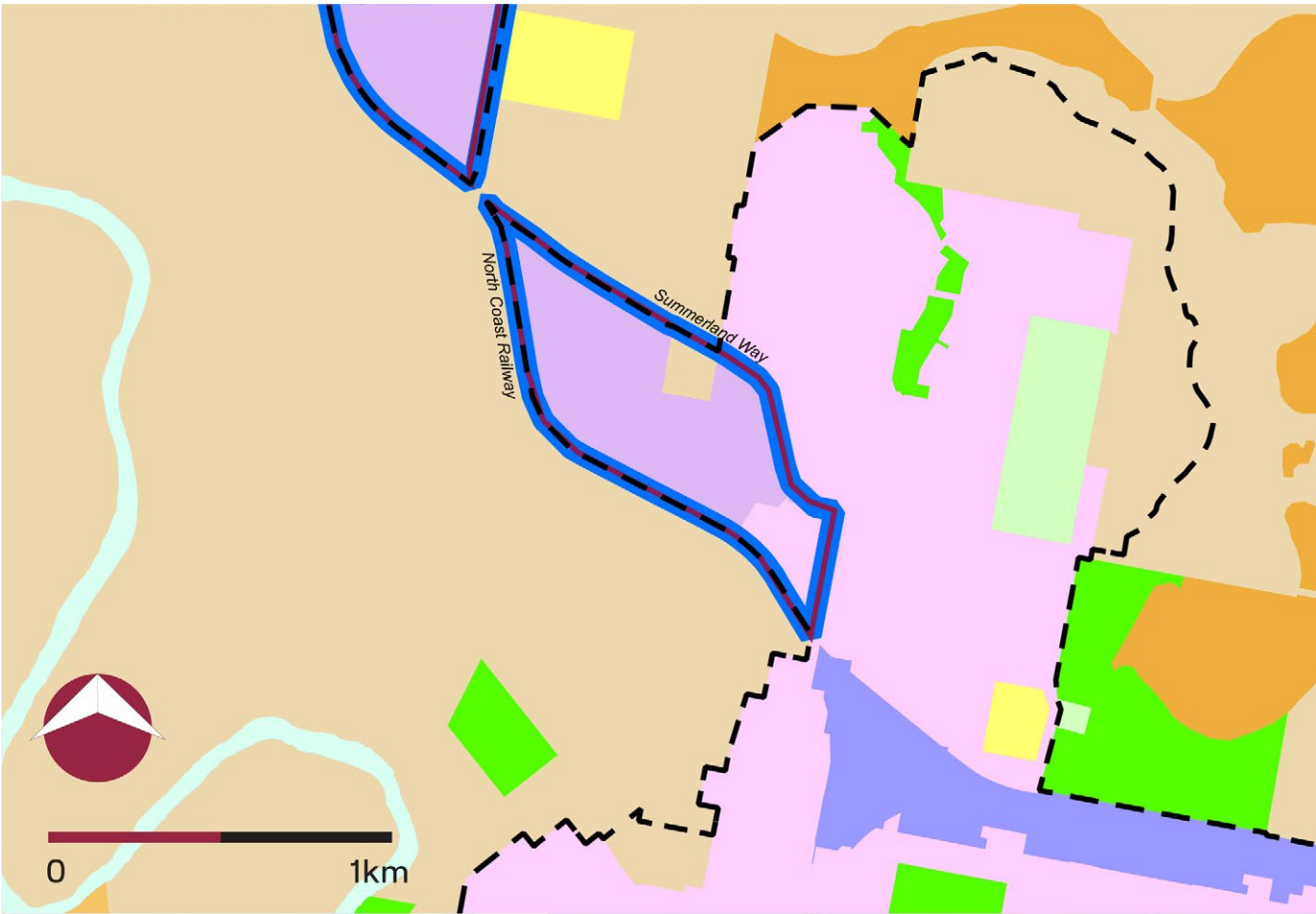


Figure 48. Area 2 - Casino Food Co-op and Surrounds Precinct - Land Use Zoning

 Richmond Valley Regional Job Precinct	 E1 Local Centre
 NCRP Urban Growth Boundary	 E2 Commercial Centre
 W1 Natural Waterway	 E4 General Industrial
 RE1 Public Recreation	 IN1 General Industrial
 C2 Environmental Conservation	 R1 General Residential
 SP2 Infrastructure	 R5 Large Lot Residential
 Land subject to Richmond Valley Regional Jobs Precinct Process	 RU1 Primary Production

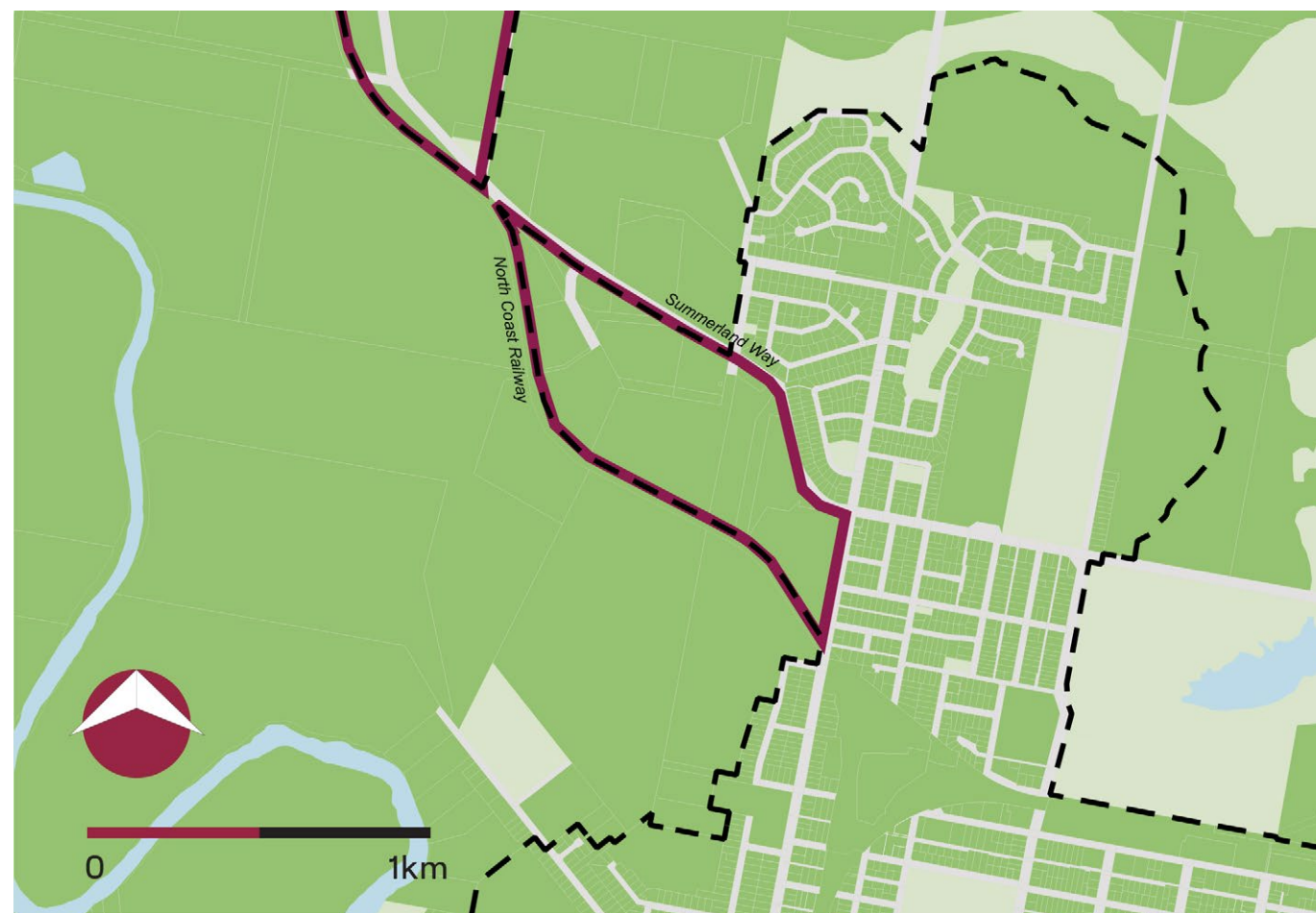


Figure 49. Area 2 - Casino Food Co-op and Surrounds Precinct - Maximum Building Height

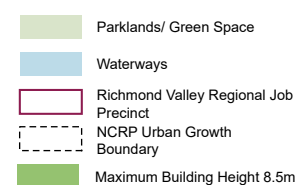


Figure 50. Area 2 - Casino Food Co-op and Surrounds Precinct - Minimum Lot Size



8.2.4. Land Tenure, Opportunity Sites and Strategic Land

The majority of the site is under company ownership with large land holders being the Food Co-op and CHT Tannery. The three adjoining properties are owned by infrastructure providers, including Essential Energy, Richmond Valley Council, and NSW Department of Education.

There are underutilised sites and areas within the site offering opportunities for expansion and diversification of existing uses and potentially the introduction of new uses.

Based on preliminary discussions, the NSW Department of Education site is currently used for educational purposes associated with the agricultural elements of the Casino High School curriculum. Given land tenure and permissibility under the *State Environmental Planning Policy (Transport and Infrastructure) 2021*, there may be a longer term opportunity for a tertiary educational facility which may offer potential to contribute to skills development support the RJP.

The Department of Education site (legally known as Lot 1, DP 861450) has been identified for further investigation and is being proposed as a key catalyst site for education uses. While adult education uses have been identified as a potential lower sensitivity use, planning will still need to consider compatibility with the existing Casino Coop and manage potential land use conflict. This option is subject to further engagement with the NSW department of Education and the existing school community.

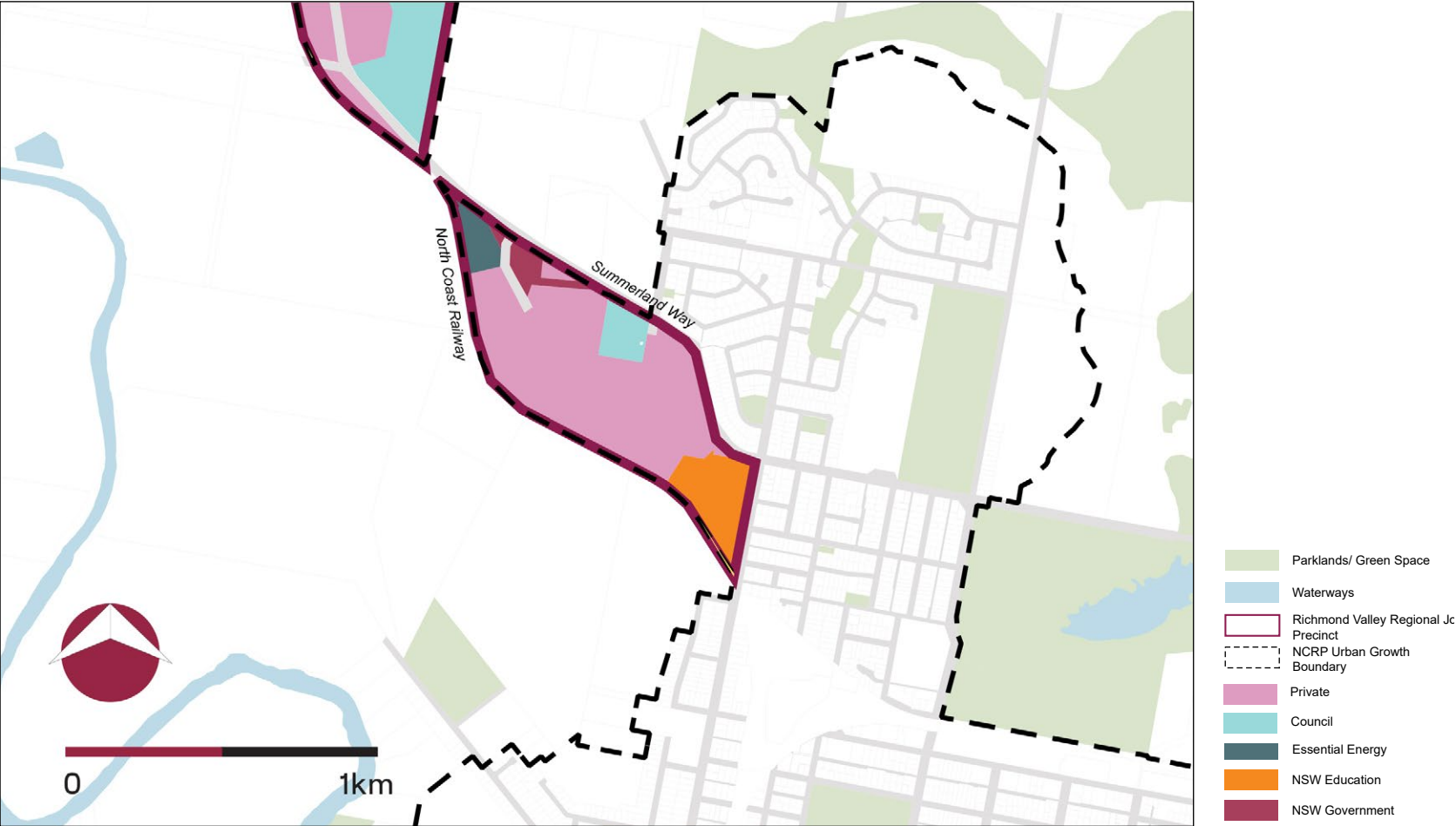


Figure 51. Area 2 - Casino Food Co-op and Surrounds Precinct - Land Ownership

8.2.5. Air, Noise and Odour

Air Quality, Odour and Noise risks in relation to residential uses may increase if industrial development intensifies within Area 2. The existing ridgeline along Summerland Way assists in mitigating impacts of existing industrial operations within Area 2.

Modelling undertaken considers impacts of air quality, noise and odour on sensitive receivers including both existing dwellings, and potential dwellings identified on the Dwelling Opportunity Map under the RVLEP 2012.

Modelling indicates that noise is likely to be manageable in relation to sensitive receivers. As a general principle, there is a need to limit sensitive receptors within the modelled receptor boundary illustrated in Figure 55 to create an effective transition between the RJP and nearby existing and potential residential development.

A planning mechanism will be required under the RVLEP to establish a transition area for land surrounding the RJP. This would require consideration of the impact of proposed sensitive receptors on operations within the RJP industrial area to minimise land use conflict within the modelled receptor boundary identified in Figure 55.

There is an existing potential air, noise and odour risk in relation to the Department of Education site. There is an opportunity to identify potential future compatible uses (e.g. tertiary / vocational education facility) and alternative zoning to achieve this (e.g. Special Purpose zone).

Hazards associated with the Co-op need to be considered in relation to any alternative use in this location. Societal risk will be a key consideration for development on this location. Residential uses should be avoided on the parts of the site effected by emission or hazards related to the Co-op.

Refer Figures 52-55 and Air, Noise and Odour Technical Report (Todoroski Air Sciences 2024)

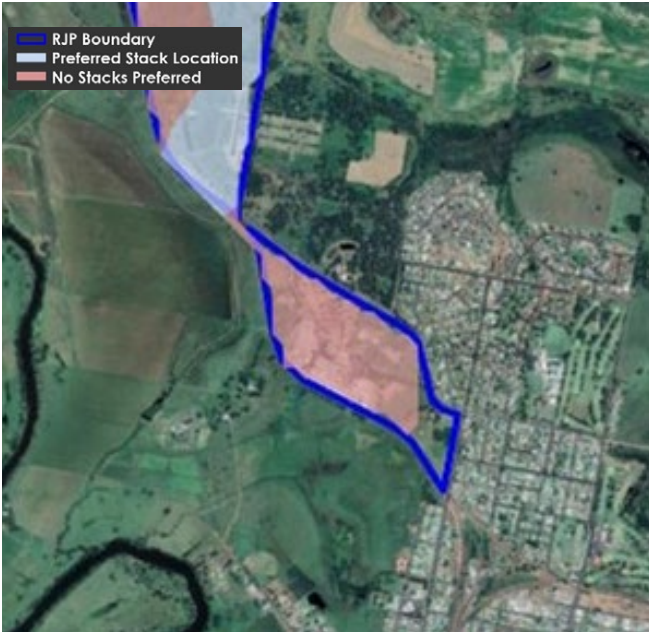


Figure 52. Area 2 – Casino Food Co-op and Surrounds Precinct – Preferred stack (point of emission) locations (Source Todoroski Air Sciences)

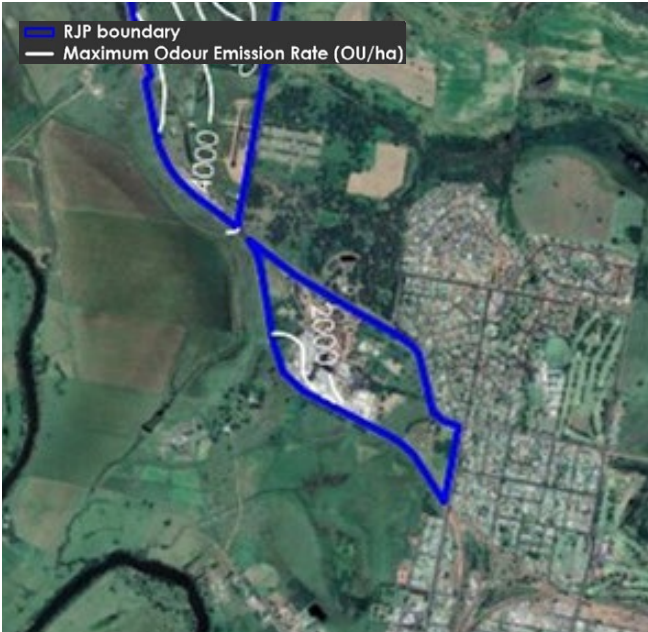


Figure 53. Area 2 – Casino Food Co-op and Surrounds Precinct – Maximum Odour Emission Rates (Source Todoroski Air Sciences)

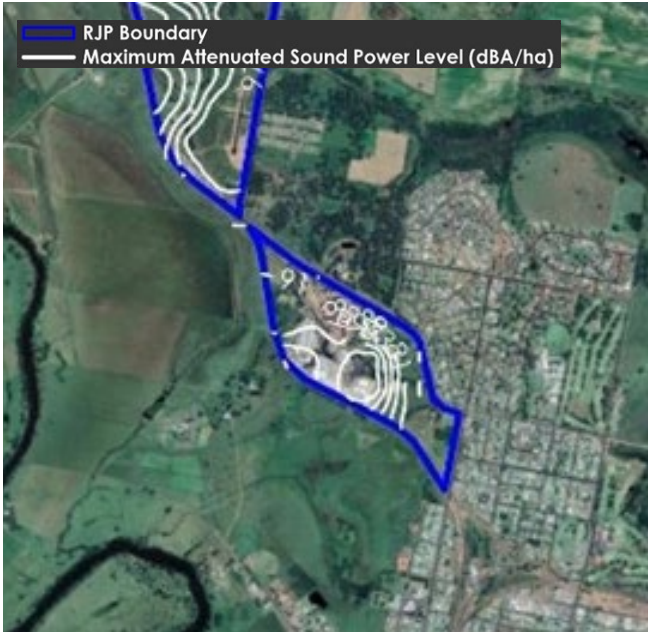


Figure 54. Area 2 – Casino Food Co-op and Surrounds Precinct – Maximum Attenuated Sound Power Levels (Source Todoroski Air Sciences)



Figure 55. Area 2 – Casino Food Co-op and Surrounds Precinct – Sensitive Receivers (Source Todoroski Air Sciences)

8.2.6. Biodiversity

There are no areas of medium or high biodiversity value identified in Area 2.

Eucalypt patches exist north of Area 2. These connect to Barlings Creek and Jabiru Geneebeinga Wetlands, which provides suitable migratory bird habitat. This is part of an important local habitat corridor that includes continuous patches of habitat large enough to sustain viable populations of threatened flora and fauna and to facilitate dispersal movement.

Land clearing and industrial activity may impact Threatened Ecological Communities, and will need to be considered in greater detail in later detailed design/development processes.

Commonwealth, State and Local regulatory frameworks and associated legislation will need to be addressed at detailed design stage as applicable and relevant.

Refer Figure 56 and Biodiversity Analysis Report (ERM 2024).

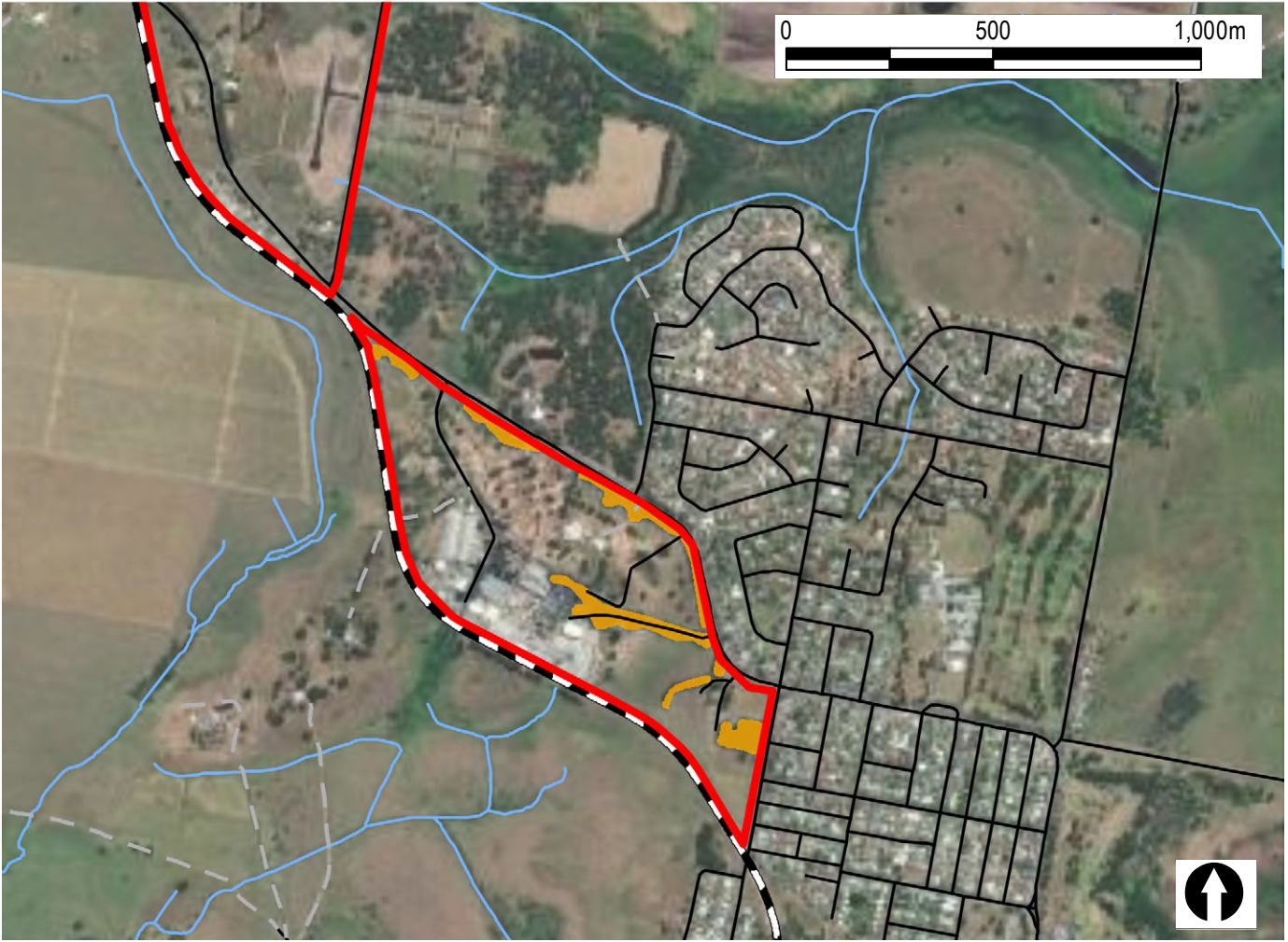


Figure 56. Area 2 - Casino Food Co-op and Surrounds Precinct - Biodiversity values (Source ERM)

- RJP Boundaries
- Hydroline
- railway
- Modified native/exotic planted vegetation

8.2.7. Visual Quality, Character and Place

Area 2 benefits from a heavily treed edge and ridgeline along the Summerland Way which assists in softening the visual impacts of industrial operations maintaining its visual and gateway qualities. The visual qualities of the interface between Area 2 and adjacent residential areas are especially important.

The north-east interface of the site with Summerland Way presents a strong rural character, defined by pole and timber rail fencing and informal perimeter tree planting.

These character elements are also evident along Hillcrest Lane the driveway to the Food Co-op, which is characterised by a formal tree planting arrangement to both sides which provides a rural feel of industry in nature as viewed from public roads and driveways. Refer Figures 40-45.

As new development occurs consideration should be given to embellishing landscaping features for visual amenity with additions such as post and rail fence top respond to the rural context. At key gateways opportunities for co-ordinated signage / branding and possible key entry features such as public art should be considered.

8.2.8. Aboriginal Heritage

Two areas of Potential Archaeological Deposit were identified in Area 2. These exist in the westernmost portion of Area 2, in both the Food Co-op and NSW Department of Education sites.

Further test excavation has been undertaken on one of the PADs on the Co-op land.

Where impacts to these areas are proposed, further investigation would be required to confirm the management requirements for archaeological deposits within these areas. Refer Figure 57.

Aboriginal Heritage Sensitivity Mapping

Refer to Section 7.2.9 of this Structure Plan which include recommendations also relevant to Area 2 Food Co-op.

Implications of identified Aboriginal Heritage Values for complying development.

Refer to Section 7.2.9 of this Structure Plan which include recommendations also relevant to Area 2 Food Co-op.

Refer Heritage Report (ERM 2024)

8.2.9. Historical Heritage

Area 2 is located in proximity to three heritage items being:

- Victory Camp site (former) - Archaeological (Local A4)
- Nammoona Lawn Cemetery (Local I55)
- Casino Railway Station and Yard Group (Local I39)

Development controls are recommended for the portion of Area 2 which abuts the Casino Railway Station and Yard Group to manage potential visual impacts to the item from future proposed development. Any future development with significant visual impacts on this heritage item may require a Statement of Heritage Impact as well as to consider impacts of building bulk and colour schemes. Vegetation buffers are recommended along the Hotham Road boundary to mitigate visual impact on the residential and heritage context.

The Northern Cooperative Industrial landscape has been identified within Area 1 with unlisted heritage value, however Council has no intention to list the Food Co-op as a heritage item.

Implications of identified Historic Heritage Values for complying development

Complying development cannot be undertaken on land which is identified as an item of environmental heritage or a heritage item by an environmental planning instrument.

Refer Figure 58 and Heritage Report (ERM 2024)

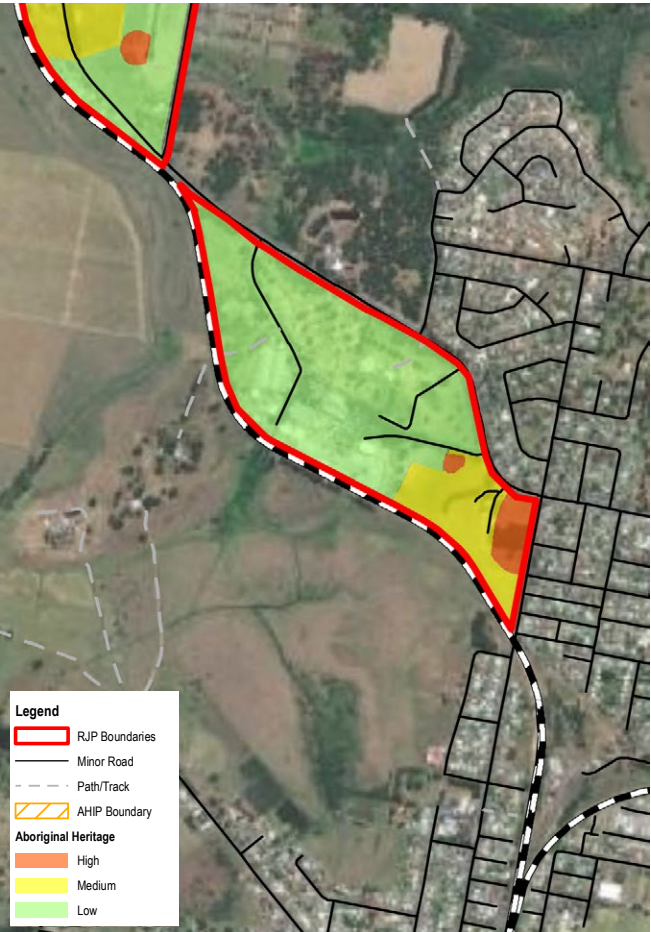


Figure 57. Area 2 - Casino Food Co-op and Surrounds Precinct - Aboriginal Heritage sensitivity (source ERM)

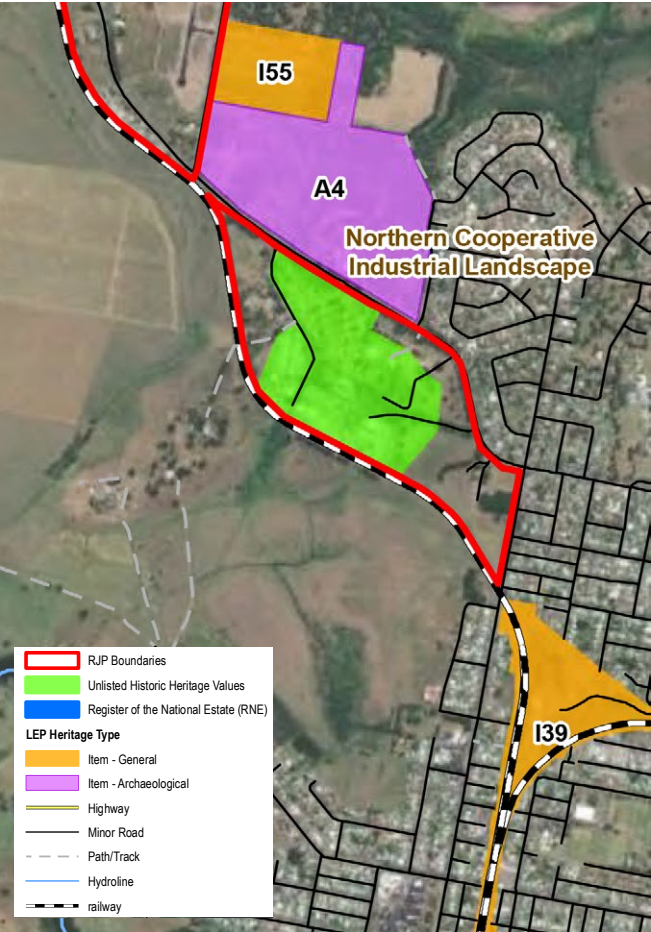


Figure 58. Area 2 - Casino Food Co-op and Surrounds Precinct - Historic Heritage (source ERM)

8.2.10. Traffic and transport

Access to the Co-op subject site is currently provided via Summerland Way, from Hillcrest Lane and a private road. Currently, heavy vehicles primarily utilise the Hillcrest Lane intersection for access/ egress and staff and visitors primarily utilise the private roadway for access/egress to parking areas. The access intersections at the Co-op onto Summerland Way currently operate with good levels of service.

Traffic modelling has been undertaken for the intersections of Summerland Way/Hillcrest Lane and Summerland Way/Co-op access road, to assess the impacts of the land uses associated with the Casino Food Co-op RJP. The modelling determines if the intersections have the capacity to accommodate the vehicle activity associated with the current and proposed land uses.

Looking ahead to 2041, and based on its current configuration, the intersection of Summerland Way/Hillcrest Lane is expected to operate with an unacceptable level of service in both the morning and afternoon peak hour periods. In order to mitigate impacts, it is recommended that the chevrons on Summerland Way in proximity to Hillcrest Lane be removed to support an improved level of service.

Poor active transport and public transport connectivity is a key issue for Area 2. A relatively high portion of

Casino residences are located within a nominal 1.2 km (15 minute) distance from Area 2. Additionally, a significant majority of the Casino Township is located within a nominal 3.6 km (15 minute cycle) from the Co-op subject site. The proposed shared path on Summerland Way detailed in the PAMP would provide utility to the Casino Food Co-op site. These upgrades will provide a continuous pedestrian pathway from the Casino Township to the Co-op subject site.

The current public transport services (bus and train) in Casino are infrequent and provide little utility to the RJP. There are no bus stops in proximity to the RJP subject sites.

If there is a significant increase in patronage demand associated with the employees of commercial/industrial developments associated with the RJP, bus services be reviewed to determine the feasibility of providing additional services appropriately located bus stops to service Nammoona.

Refer Traffic and Transport Analysis Report (GHD 2024)

8.2.11. Land Use Compatibility

Existing low density residential dwellings front onto Queensland Road and Hotham Street, and interfaces directly with Area 2. Due to its relationship with the adjacent residential lands and the existing Food Co-op, the future use of the NSW Department of Education site is a key consideration for Area 2.

Land use compatibility is a two-way consideration in this location, where the amenity of nearby residential areas is important in relation to industrial operations. So too is maintaining the ability for the Food Co-op to maintain its ongoing operation without additional threat of encroachment of incompatible uses in underutilised areas of the precinct.

Further development in the Food Co-Op area should be accompanied by a Preliminary Hazard Assessment (PHA) to demonstrate that as minimum:

- The risk of escalation to incidents involving ammonia or LPG at the Food Co-Op is acceptable,
- Societal risk is acceptable.

The following matters will require consideration:

- Avoid additional potentially hazardous developments which have the potential for consequences outside of the Food Co-Op area.
- Societal risk will be a key factor in relation to the potential future development of the Department of Education site.
- The current rural buffer to the south of the railway line should be retained.

8.2.12. Soils, Geology and Contamination

Based on the site history and background data reviewed, potential contaminants associated with current and historical uses may include:

- AEC – 4 Mixed On-site Commercial / Industrial Land Uses (Abattoir)

Potential sources of contamination include:

- A range of other commercial / industrial sites located within the Site such as Abattoir.
- On-site fuel and chemical storage.
- Leaks and spills of fuels / chemicals associated with refuelling and maintenance.
- Hazardous materials associated with degrading building structures.

Contaminated land will be managed in accordance with the NSW contaminated land management framework and relevant legislation during planning and development, including the *State Environmental Planning Policy (Resilience and Hazards) 2021*, *Contaminated Land Management Act 1997* and the *Environment Planning and Assessment Act 1979*.

Refer Soils, Geology and Contamination Report (ERM 2024)

8.2.13. Hydrogeology, Water Quality and Demand

Growth of industrial activity in the Food-Coop will contribute to water demand in Casino. The Casino Place Plan, and the Hydrogeology, Water Quality and Demand Analysis Report (GHD 2024) outline a range of measures for augmenting supply and water efficiency to accommodate industrial growth as it occurs.

RVC follows the 5/10/10 rule set out in the DPHI Water’s draft guidelines for “Assuring future urban water security – Assessment and adaption guidelines for NSW local water utilities” to determine water security. With the current estimated 3,074 ML/yr bulk supply storage from the Jabour Weir, Richmond Valley Council advised during discussions on 16 November 2022 there have not experienced difficulties supplying sufficient water to the town of Casino.

Therefore, bulk water supply is not currently an issue for RVC, but as climate patterns change, bringing longer periods of drought, inland communities such as Casino will experience greater water security challenges in the future. Council has been preparing for the impacts of climate change and increased development by investigating options to upgrade its bulk supply over the short-medium term. These options, to be implemented over the next 2-10 years will help to ensure there is sufficient water to meet the projected growth in the Casino township due to the Regional Job Precinct and Casino’s access to flood-safe residential land.

Refer Hydrogeology, Water Quality and Demand (GHD 2024) and the Casino Place Plan (Gyde 2023).

8.2.14. Drinking Water Catchment

A substantial portion of the precinct is located in Casino’s drinking water catchment for which current activity in the precinct are being managed in line with existing approvals and licenses. Future development will have implications for managing runoff and stormwater quality which, will need to be addressed through the relevant development assessment and approval precesses.

Refer Figure 59.

8.2.15. Utilities and Infrastructure

The growth of industrial activity in Area 2 will contribute to demand on the existing Sewage Treatment Plant, which at capacity and identified for short term upgrade in its current location under the Casino Place Plan. Note that the majority of waste water from Area 2 is irrigated onto paddocks owned by the Co-op, rather than being directed into the sewerage system.

Monitoring and infrastructure upgrades will need to be undertaken as to support future growth in Area 2, including water supply, waste water, stormwater electricity and telecommunications.

Identified infrastructure upgrades to support the intended outcomes proposed by this Structure Plan are outlined in Section 10 and in the Utilities and Infrastructure Report (GHD 2024).

Refer Utilities Infrastructure Analysis Report (GHD 2024)

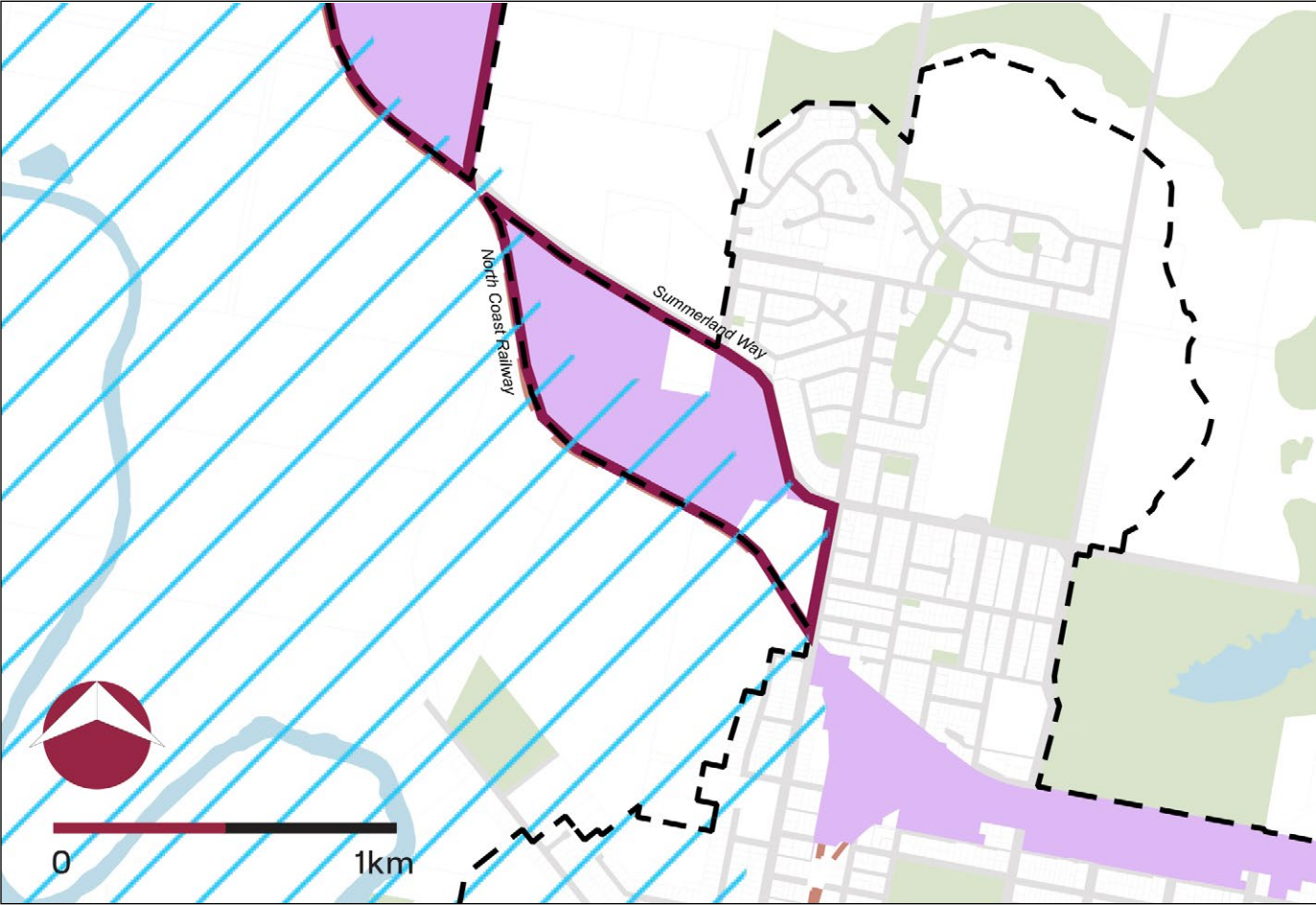


Figure 59. Area 2 - Casino Food Co-op and Surrounds Precinct - Drinking Water

- Parklands/ Green Space
- Waterways
- Drinking Water Catchment
- IN1 General Industrial
- Richmond Valley Regional Job Precinct
- NCRP Urban Growth Area

8.2.16. Energy from waste/alternate waste treatment solutions (EfW/AWTS)

A proposed biodigester opportunity has been identified on the Co-op site as a key proposed EfW/AWTS initiative. The proposal is anticipated to use existing on-site organic wastes/effluent, supplemented with off-site waste products, to produce biogas.

Any future proposal for an EfW/AWTS facility will be subject to a separate full development assessment process under the existing planning framework. This would include detailed community consultation and input from other Government Agencies such as NSW EPA.

8.2.17. Flooding Risk

The Food Co-op is not located in an area known to be prone to flooding. Flood mapping for Casino is the subject of an ongoing investigation being carried out for Richmond Valley Council and is anticipated to be updated once flood studies are approved.

Refer Figure 60.

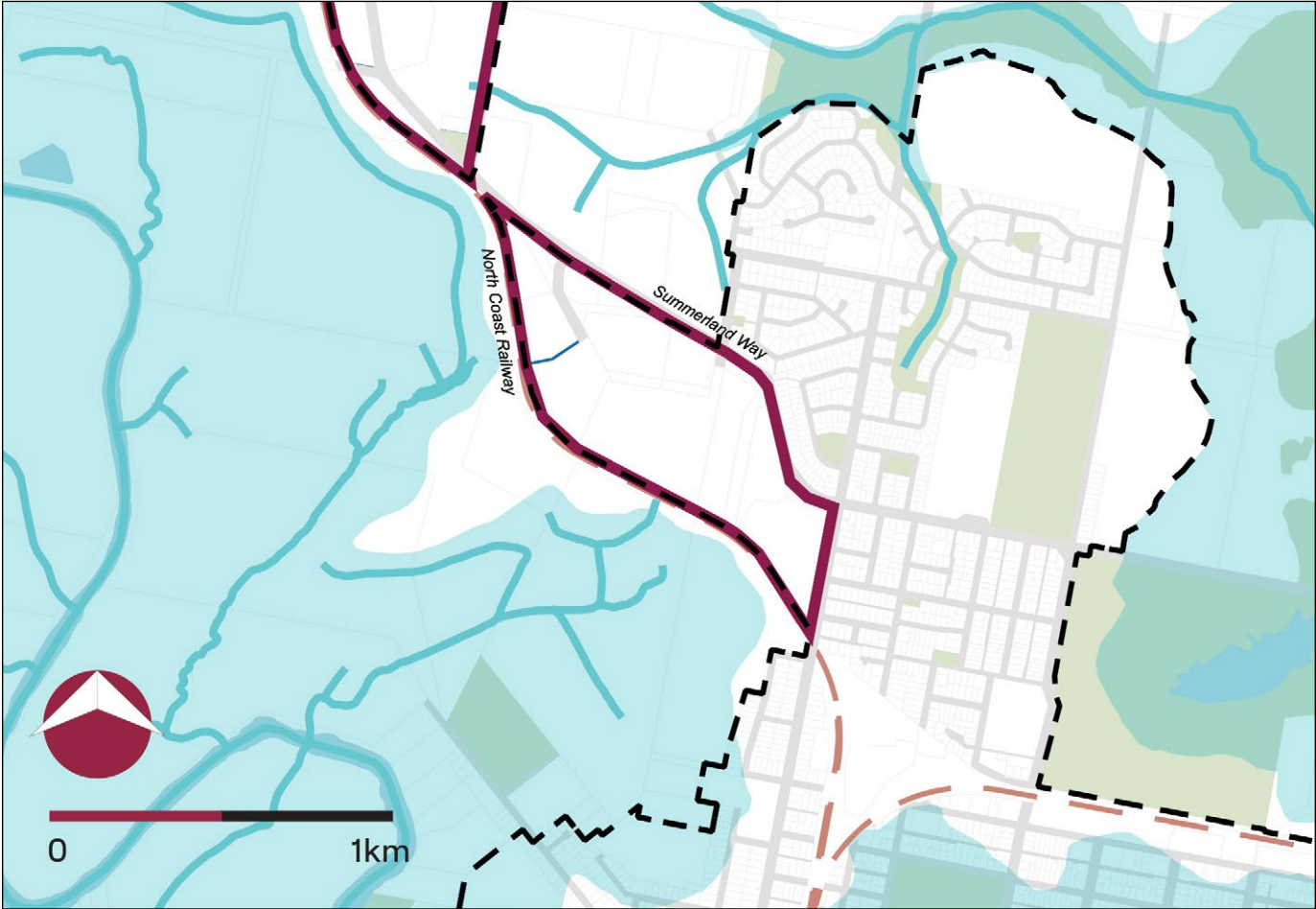








Figure 60. Area 2 - Casino Food Co-op and Surrounds Precinct - Flooding

	Parklands/ Green Space		Flood Prone Land
	Waterways		Drainage
	Richmond Valley Regional Job Precinct		
	NCRP Urban Growth Area		

8.2.18. Bushfire Risk

The north western portion of Area 2 has been mapped as including Vegetation Category 2 with vegetated buffer areas extending along the Summerland Way.

It is therefore important that new development is undertaken to mitigate the risk of bushfire to the new site users and surrounding assets. Bushfire risk interfaces with a number of issues include the potential for increased frequency of bushfire events associated with climate change and the effects on threatened species.

Consideration will need to be given to main evacuation routes including Reynolds Road and Summerland Way as well as the application of Asset Protection Zones (APZ) based on site specific risk.

Refer Figure 61 and Bushfire Analysis Report (ERM 2024).

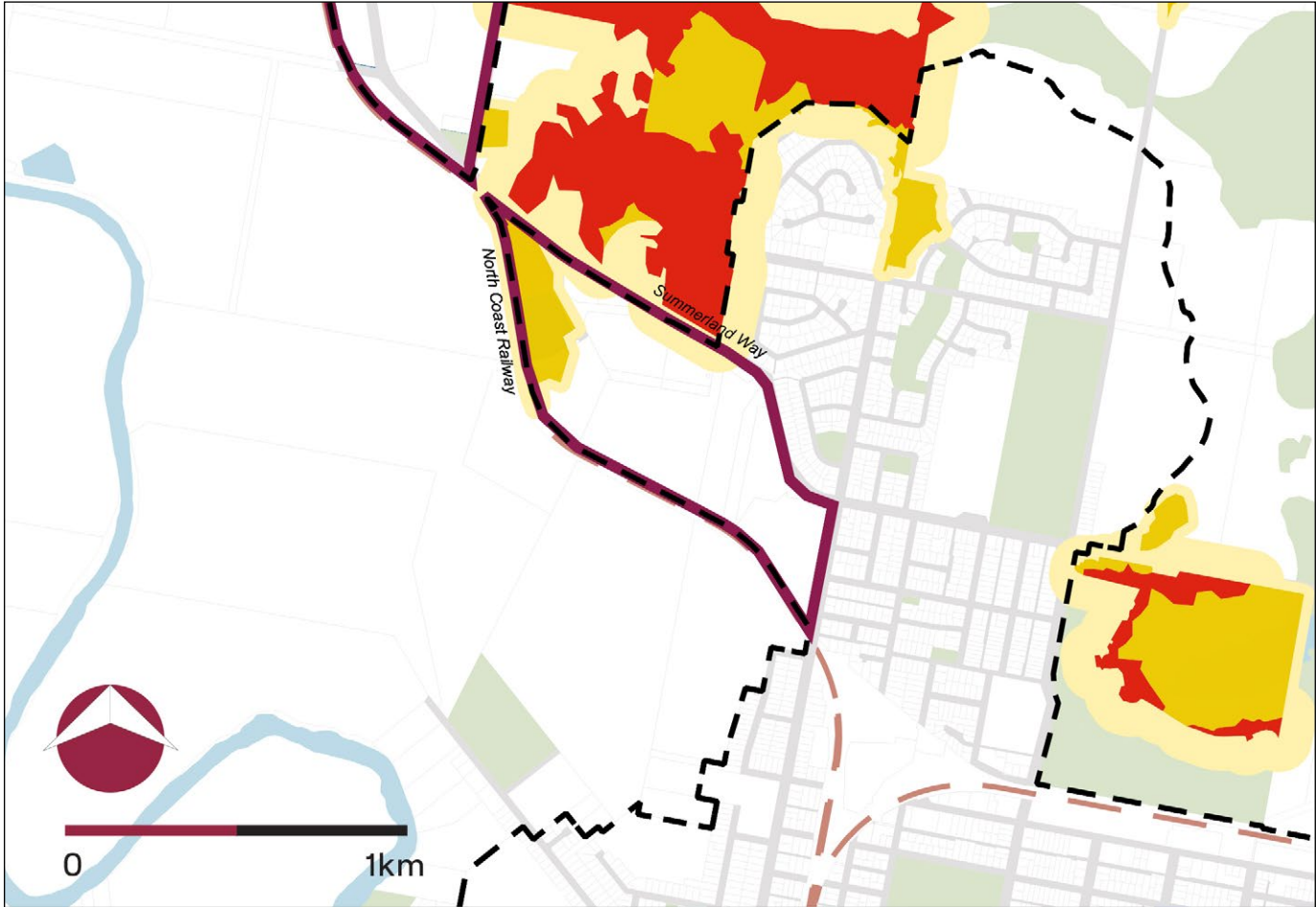









Figure 61. Area 2 - Casino Food Co-op and Surrounds Precinct - Bushfire

	Parklands/ Green Space		Vegetated Buffer
	Waterways		Vegetation Category 1
	Richmond Valley Regional Job Precinct		Vegetation Category 2
	NCRP Urban Growth Area		

8.3 Structure Plan – Area 2 Casino Food Co-op and Surrounds Precinct

This section outlines initiatives to facilitate growth in Area 2 - Food Co-op. Structure Plan recommendations for Area 2 take into consideration the opportunities, constraints and future needs outlined in previous sections and supporting technical reports.

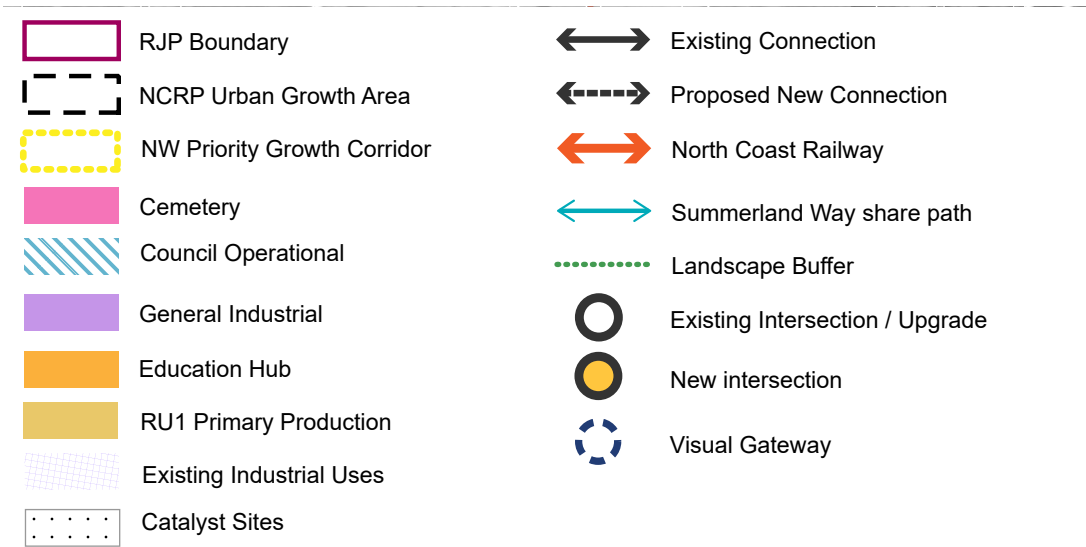
Vision for Area 2 – Casino Food Co-op and Surrounds Precinct

This area will continue to support the ongoing needs of the Casino Food Co-op complex, which may include facilitating increased production levels or diversification of services (e.g. organic meats).

Opportunities for addition uses outside of the Food Co-op are limited to two sites. These may provide additional opportunities for other complementary and catalytic businesses to co-locate on adjoining underutilised lands will be pursued in collaboration with State Government owners.

Cold storage facilities have recently been incorporated into the complex and plans are currently underway to establish a ‘retail ready’ value-add facility. This may include exploring options for Biogas in accordance with relevant legislation and in consultation with Council, key agencies and the community.

Any new uses in Area 2 will consider the land use compatibility in relation to existing uses and impacts on nearby sensitive residential uses.



- 1 Essential Energy site identified as an opportunity site for energy infrastructure
- 2 Maintain and enhance dense treed interface to Summerland Way and Hotham Street to buffer and screen land uses in the Area
- 3 Dpt of Education site to be identified as a catalyst site for the purposes of an education hub and associated uses
- 4 Remove building height limits to provide greater development certainty

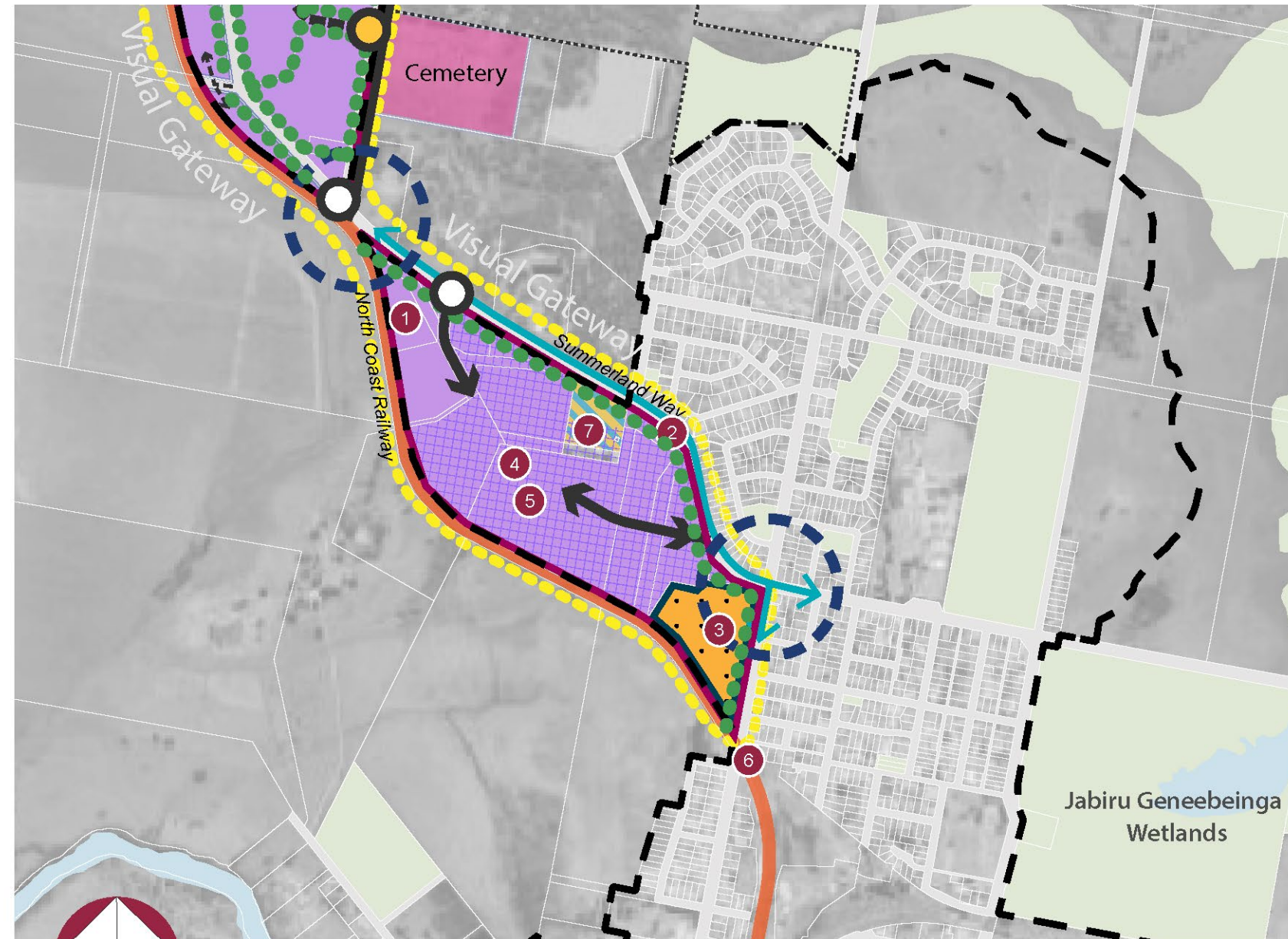


Figure 62. Area 2 - Food Co-op - Structure Plan

- 5 Maintain existing General Industrial zone to support ongoing operation, incremental expansion and diversification of existing industrial uses
- 6 Establish DCP site planning controls that promote the strategic retention and enhancement of existing vegetation to establish 10m wide landscape buffers along roadsides and RJP boundaries. Buffer to extend along Hotham Street to minimise visual impact on nearby heritage (Casino Station Group)
- 7 Retain existing reservoir site for infrastructure purposes

8.4 Actions to Implement the Area 2 Casino Food Co-op and Surrounds Precinct Structure Plan

Table 4. Area 2 Casino Food Co-op and Surrounds Precinct – Key Actions

Actions		Approach
2_1.0	Land Use	
2_1.1	Establish zone to permit a range of general industrial uses	Establish zone to permit a range of general industrial uses that will support growth and expansion of business and industry in Area 2.
2_1.2	Establish an education hub on the NSW Department of Education site	<p>Establish suitable land use zone to facilitate the future development of an education hub on the NSW Department of Education site.</p> <p>The NSW Department of Education site is identified as a catalyst site. Its use will primarily be subject to Department of Education needs for education related uses and infrastructure. The intent of the Department of Education site is to accommodate catalyst development related to the establishment of an Education Hub or alternate, compatible uses.</p> <p>If the site is not to be used as an Education Hub, Council may consider proposals for alternate uses. Unsolicited proposals may be considered, based on relevant NSW government guidelines, in consultation with the landowner.</p> <p>Any proposed use will need to be compatible and complementary with surrounding land uses, including the current and future operations of the Co-op. The avoidance of land use conflict will be a key consideration.</p>
2_1.3	Retain the Essential Energy site for energy related infrastructure	<p>The Essential Energy site is identified as an opportunity site to accommodate its intended use for energy infrastructure related purposes, which may be of benefit as growth in the North West Priority Corridor occurs. Its use will primarily be subject to Essential Energy's needs for energy related uses and infrastructure.</p> <p>The site will retain its existing General Industrial zoning.</p> <p>If Essential Energy seeks to achieve an alternative use of the site in addition to or other than its intended use, or the site becomes surplus to the needs of Essential Energy, consideration for alternative uses may be given.</p>










- | | |
|---|---|
|  Parklands/ Green Space |  General Industrial |
|  Waterways |  RU1 Primary Production |
|  Richmond Valley Regional Job Precinct |  Special Purposes/ Education |
|  NCRP Urban Growth Boundary | |

Figure 63. Area 3 - Casino Food Co-op and Surrounds Precinct - Future Land Zoning







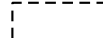
- | | |
|---|---|
|  Parklands/ Green Space | Sites to be rezoned |
|  Waterways |  Special Purposes/ Education |
|  Richmond Valley Regional Job Precinct | |
|  NCRP Urban Growth Boundary | |

Figure 64. Area 3 - Casino Food Co-op and Surrounds Precinct - Future Land Zoning

Actions		Approach
2_1.4	Remove height limits and minimum lot size provisions for general and heavy industrial land use within the RJP boundary	<p>To reduce reliance on cl 4.6 variations under the RVLEP and provide greater certainty for development outcomes, remove height limits under the RVLEP for Area 2. Establish controls under the DCP to ensure appropriate height transition between the RJP and adjacent residential areas.</p> <p>In removing the Minimum Lot Size provision for Area 2, there will be an ongoing need to ensure that future land subdivision patterns:</p> <ul style="list-style-type: none"> • maintain a suitable diversity of potential lot sizes; and • lots that support an efficient layout to meet their intended use.
2_1.5	Minimise potential for land use conflict	<p>Establish a planning mechanism under the RVLEP to establish a transition area for land surrounding the RJP requiring consideration of the impact of proposed sensitive receptors on operations within the RJP industrial area to minimise land use conflict and ensure that no new dwellings are provided within the identified modelled receptor boundary.</p> <p>Establish Development Control Plan provisions related to the requirements of DCP Part I-11 Land Use Conflict Risk Assessment to manage potential land use conflict.</p> <p>Particular consideration will need to be given to minimising the potential for incompatible uses from encroaching on Food Co-op operations as well as the impacts of future industry in Area 2 in relation to nearby sensitive uses.</p> <p>Retain the existing RU1 Primary Production zoning within the Modelled Sensitive Receptor Boundary identified in Figure 55 and insert a provision under the RVLEP 2012 to ensure that no new dwellings are provided within that boundary.</p>
2_2.0	Movement and Transport	
2_2.1	Monitor capacity of the Hillcrest Lane / Summerland Way intersection and facilitate upgrades as required	As new development occurs in Area 2 and in relation to the north west residential investigation area, Council will undertake ongoing monitoring of the Hillcrest Lane / Summerland Way intersection, identify and undertake any necessary upgrades as required. Upgrades may include removing the chevrons on Summerland Way in proximity to Hillcrest Lane.
2_2.2	Undertake upgrades to Summerland Way to support an active transport link	Widen Summerland Way between the existing town site and Reynolds Road to accommodate an active transport link between the existing town site and Reynolds Road to cater for the high portion of Casino residences located within a nominal 1.2 km cycling distance. This should occur irrespective of the level of growth that occurs in the precinct given the strong employment population that already exists in the precinct.

Actions		Approach
2_3.0	Visual Quality, Character and Place	
2_3.1	Establish DCP guidance to ensure the visual quality of buildings and landscape in the RJP	<p>Establish new guiding mechanisms under the DCP to facilitate development of new industries in a manner that protects, complements and enhances the visual and scenic qualities of the Food Co-op area. This will need to occur in the short term to ensure adequate guidance for development outcomes in conjunction with any amendment to LEP planning controls under the RVLEP 2012 as proposed in this Structure Plan. Key guiding principles include:</p> <ul style="list-style-type: none"> • Maintaining and enhancing the vegetated interface along Summerland Way to ensure this important gateway to Casino remains of a high visual quality. This is to comprise a minimum total landscape strip of 10m. Providing generous and dense landscaping including tall trees between new developments and public space to soften the visual appearance industrial activity as viewed from public space. • All development and especially that is visible from public space and the Summerland Way should be of a high visual quality so as to protect the visual quality of key gateways. <p>As new development occurs consideration should be given to embellishing landscaping features for visual amenity with additions such as post and rail fence top respond to the rural context. At key gateways opportunities for co-ordinated signage / branding and possible key entry features such as public art should be considered.</p>
2_4.0	Infrastructure	
2_4.1	Monitor capacity and upgrade infrastructure as required to support growth	<p>As new development occurs in Area 2 and in relation to the north west residential investigation area, undertake ongoing monitoring of infrastructure capacity and undertake upgrades as necessary. The strategy for likely infrastructure upgrades to support growth in Area 1 as identified by the Utilities Infrastructure Report (GHD 2024) are outlined in Section 7 of the Utilities Infrastructure Report (GHD 2024) and Section 7 of the Traffic and Transport Report (GHD 2024).</p> <p>Refer also to Section 10 of this Structure Plan for infrastructure prioritisation and sequencing.</p>
A2_4.2	Updates to contributions planning to support funding and delivery of identified infrastructure and transport upgrades	<p>To support growth in the precinct, undertake updates to contributions planning under section 7.11 and 7.12 of the <i>Environmental Planning and Assessment Act 1979</i> to coordinate contributions related to new development in the funding and provision of identified infrastructure upgrades. Council may also consider entering into planning agreements to deliver necessary infrastructure upgrades where appropriate. Recommended inclusions are outlined in the Utilities Infrastructure Report (GHD 2024) and Traffic and Transport Report (GHD 2024).</p>

9. RJP AREA 3 – JOHNSTON ST INDUSTRIAL AREA AND SURROUNDS PRECINCT

9.1 Context

The following sections outline the relevant contextual matters that have been considered in the preparation of this Structure Plan. Figure 65 provides an overview of spatial considerations in Area 3.

9.1.1. Cassino Drive Industrial Area

The Cassino Drive Industrial Area is an established employment centre consisting of a range of industrial and urban services uses. Development is clustered around a looped road system accessible from a single access point onto Johnston Street (forming part of the Bruxner Highway).

The Cassino Drive Industrial Area is already a popular location for industrial users and has long been recognised in local strategic planning documents as having the potential to expand, providing future employment land supply for the town. The industrial area is a mixed-use and mixed-user estate currently accommodating over 40 businesses on a range of lot sizes. On-site development typically consists of sheds of varying sizes including hard-stand and car parking areas.

The area zoned for industrial development is nearing capacity. A planning proposal to rezone more land for industrial uses had previously been submitted by landowners motivated to facilitate land use change for employment purposes. The planning proposal has since been withdrawn pending the outcome of this Regional Job Precinct program.

9.1.2. Sewage Treatment Plant

Within this area, Casino’s existing sewage treatment plant (STP) abuts Spring Grove Road, and the Richmond Valley Events Centre (Primex) provides for local agricultural exhibitions. The Primex site is an existing industrial zone.

Council is currently investigating replacement of the existing STP which is reaching the end of its serviceable life. A potential replacement site has been identified within the RJP boundary as shown in Figure 65.

9.1.3. Land south of the Bruxner Highway

The land south of the Bruxner Highway was previously included in the RJP boundary. It has been investigated and excluded from the RJP boundary and any recommendations for land use change. This is on the following basis:

- The area of new zoned land that can be accommodated within the RJP boundary confirm that land south of the Bruxner Highway is surplus to projections for employment land needs to 2041.
- The land is flood affected and further investigations are being undertaken by Council to confirm the suitability of land for future development.
- The land is visually significant at the entry to Casino requiring careful consideration of the visual presentation of any future land uses in the location to maintain a positive arrival experience into Casino.

The above does not preclude this land from future consideration for future land use change. The land is retained in the Casino Place Plan for investigation, subject to consideration as part of Council’s floodplain management planning.

Key attributes:

Existing industrial uses and agglomeration benefits.	Potential to further activate the north-eastern portion of Area 3, with new access opportunities.
Direct frontage / accessibility onto Bruxner Highway.	Potential for intensive agricultural industry/ research facility, including optimal location, configuration, and suitability for co-locating uses.
Potential to expand the industrial Urban Growth Area boundary into adjacent RU1 Primary Production zoned land subject to the meeting of identified criteria under the North Coast Regional Plan.	Opportunities to support high water using industries to benefit from co-location and water recycling opportunities from the Sewage Treatment Plant.
The need for a suitable planning approach in response to flooding, to minimise risk, address evacuation requirements, optimise the developable area within the precinct and avoid significant impact on surrounding uses.	Access and agglomeration benefits associated with the interface onto Johnston Street Industrial Area.
Potential to plan for the harmonious interrelationship between land use and to minimise land use conflict in relation to sensitive uses (e.g. existing low density or rural residential areas).	The need to consider visual quality and entry experience along the interface to Richmond Valley Rail Trail along the area’s northern boundary to Spring Grove Road.
Potential for access onto Spring Grove Road.	Potential to plan for the harmonious interrelationship between land use and to minimise land use conflict in relation to sensitive uses (e.g. existing low density or rural residential areas).
Considering the operational needs and buffers in relation to the Sewage Treatment Plant, which is in need of short term upgrade/ replacement.	

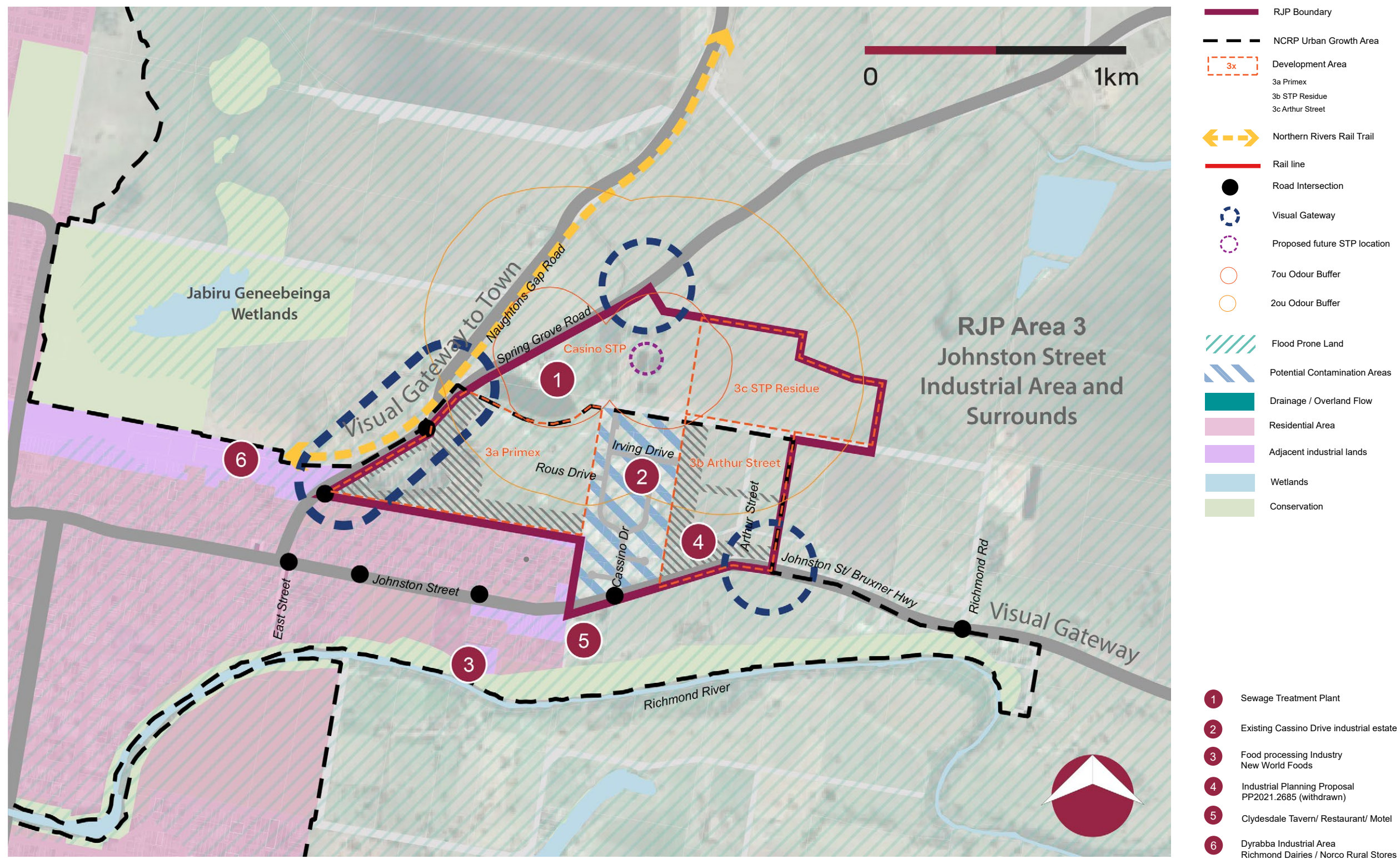


Figure 65. Area 3 – Johnston Street Industrial Area and Surrounds Precinct – Context

Area 3 - Johnston Street Industrial Area, STP and Surrounds



Figure 66. Typical industrial development in the existing Casino Drive industrial estate



Figure 67. Johnston Street looking south provides a rural gateway character to the precinct and view towards the Richmond River 'Green Ribbon'



Figure 70. Sewage treatment plant



Figure 68. View looking west towards Arthur Street and across the proposed industrial expansion area



Figure 69. Landscape character of the Casino industrial estate



Figure 71. The sewage treatment plant is well screened from Spring Grove Road with earth berm and dense vegetation

9.2 Structure Planning Considerations

This section provides a summary of salient information provided for in the supporting technical investigations.

9.2.1. Land use and zoning (existing)

The following land use zones apply within Area 3 under the Richmond Valley LEP 2012 (illustrated in Figure 72).

- IN1 – General Industrial, which encompasses the existing Cassino Drive industrial estate.
- RU1 – Primary Production.
- IN1 – General Industrial, which encompasses the Primex site.
- R1 – General Residential, which is limited to the unmade road between the Primex site and the existing residential area to its south.

Part 2 Clause 6 of the *Standard Instrument (Local Environmental Plans) Order 2006* provides for continuation of existing business and industrial zones for land identified under the RVLEP as "Land subject to the Richmond Valley Jobs Precinct Process". As such the land zoning in Area 3 has not transitioned to the new E zones now provided for under the RVLEP.

It is noted that the vacant land east of the sewage treatment plant is located outside of the Urban Growth Area boundary.

Refer Figure 72.

9.2.2. Land use and zoning (proposed)

Arthur Street

The portion of the area east of the existing industrial area site has previously been subject to a planning proposal (PP-2021-2685). The planning proposal sought to expand the existing industrial area eastward.

The planning proposal has since been withdrawn pending the outcome of this Regional Job Precinct program. The planning proposal sought to change the current zoning from RU1 Primary Production to IN1 General Industrial and to reduce the minimum subdivision standards from 40 hectares to 750sqm.

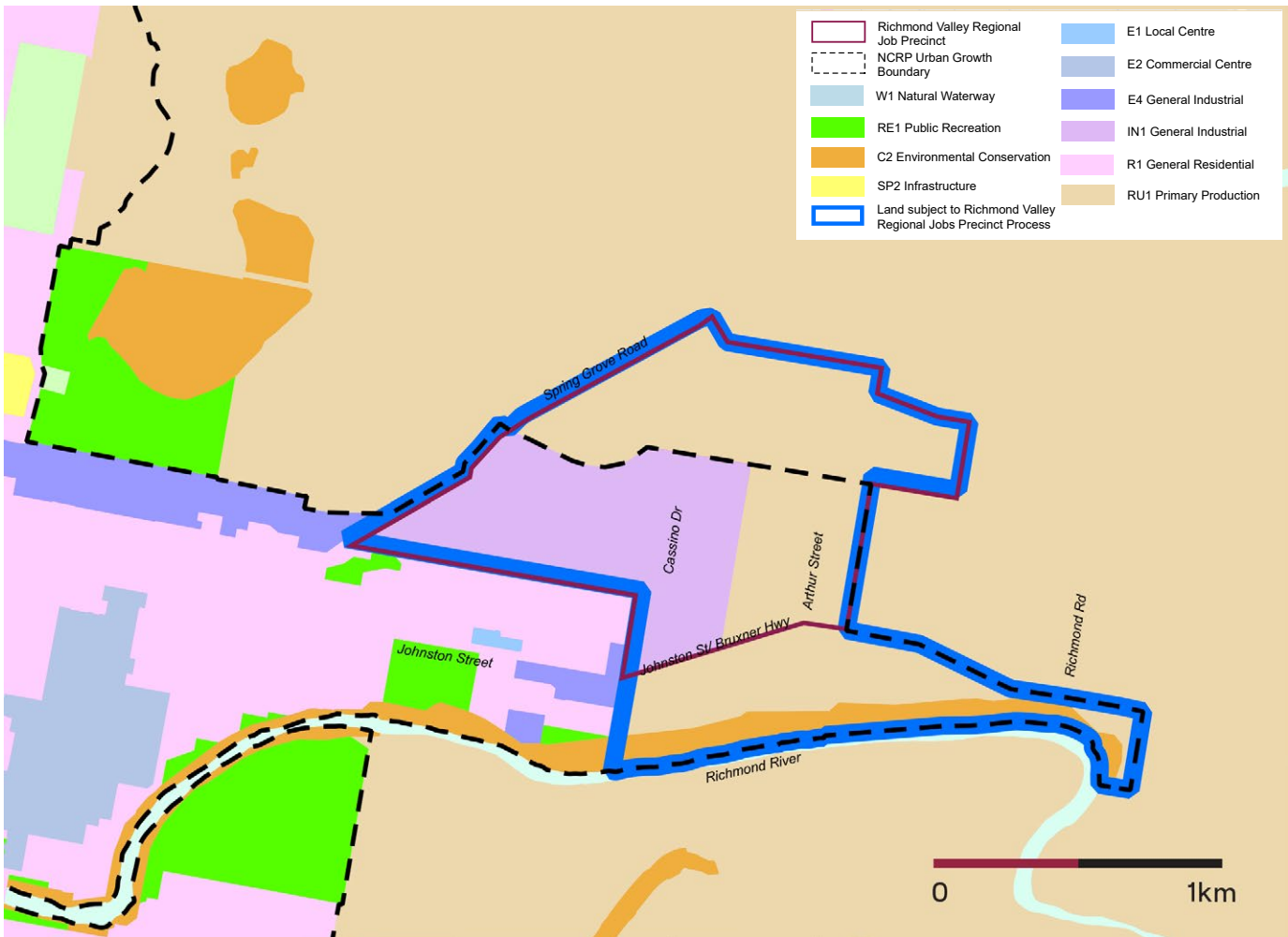


Figure 72. Area 3 - Johnston Street Industrial Area and Surrounds Precinct - Current land use zoning

9.2.3. Building Height

The maximum permissible building height in Casino's industrial areas is 8.5m. Based on historical approvals, the maximum building height has proven to be insufficient to accommodate industrial development, resulting in reliance on variations sought via Clause 4.6 of the RVLEP 2012.

A review of various regional LEPs confirms that general industrial areas are often unlimited or generally permitted a maximum building height of 11m or greater. In many such areas no height restrictions are common. However, given the visual prominence of this gateway location, and the relationship to adjacent residential uses, establishing height limits is considered to be a more suitable approach for Area 3.

In order to promote greater certainty for planning and development outcomes, and minimise the need for variations to planning controls, it is recommended that building height limits be removed under the RVLEP. It is recommended that DCP controls be established to facilitate an appropriate height transition in proximity to residential areas.

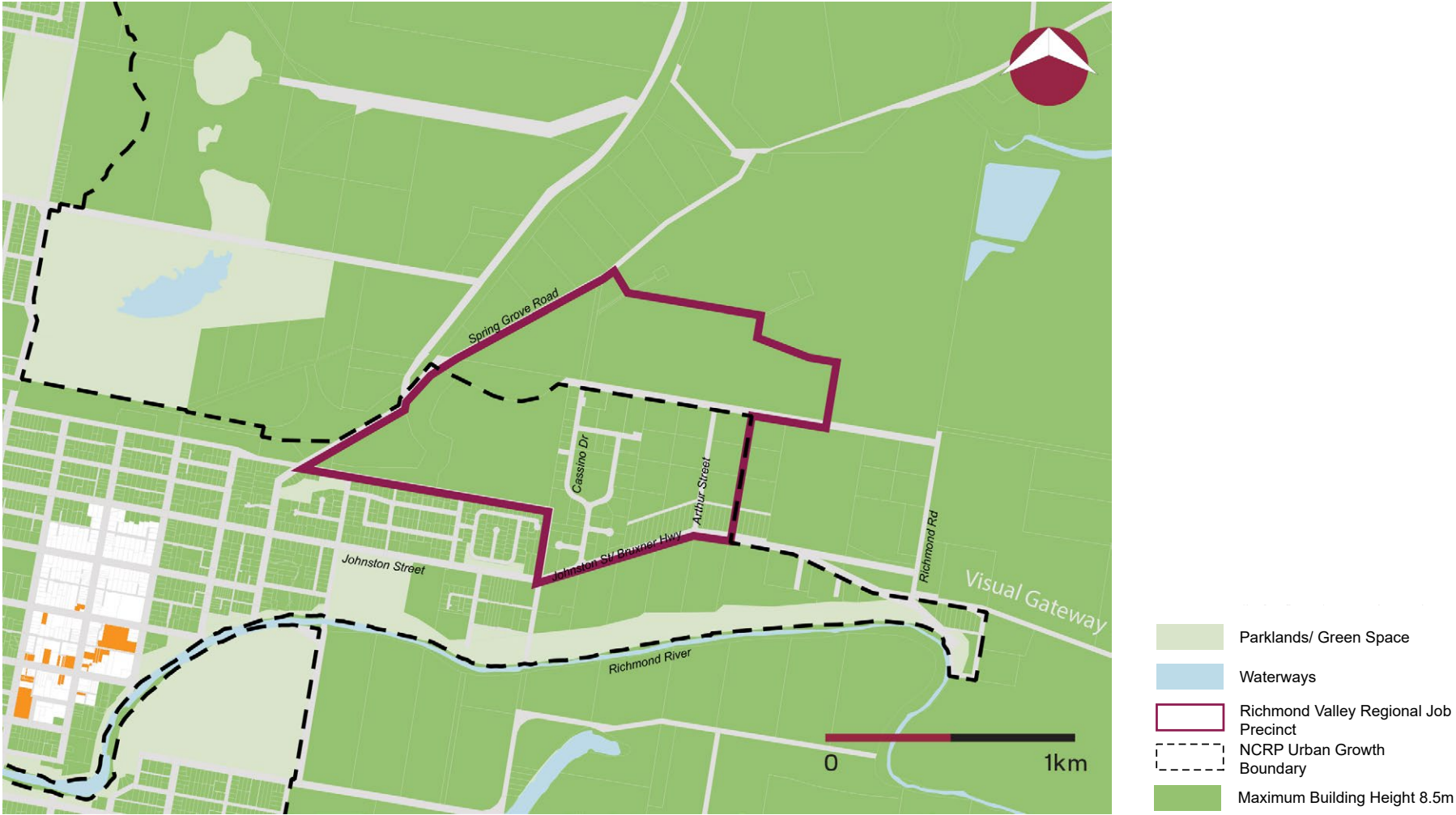


Figure 73. Area 3 – Johnston Street Industrial Area and Surrounds Precinct – Current maximum Height of Buildings

9.2.4. Minimum Lot size

Existing industrial zoned land in Area 3 has a minimum lot size requirement of 750sqm.

Existing development patterns, land tenure provide opportunities for smaller format development, however there are opportunities in Development Area 3c (STP residue) for strategic larger format uses.

Actual land uses and development scale cannot be predicted with any degree of accuracy. The 750sqm minimum lot size requirement provides the most flexible basis to accommodate future land uses in Area 3 to adapt to emerging business opportunities, locational needs, and evolving market demand.

Any approach to enforce larger lot sizes in Area 3 risks establishing unnecessary barriers in the planning framework, which is inconsistent with the overarching intent of the RJP.

While a 750sqm minimum lot size may considered appropriate for Area 3, it is recommended that minimum lot size limitations be removed from Area 3 as the control provides an unnecessary limitation on development outcomes.

In removing the Minimum Lot Size provision, there will be an ongoing need to ensure that future land subdivision patterns:

- maintain a suitable diversity of potential lot sizes; and
- provide lots that support an efficient layout to meet their intended use for both small and large operations.



Figure 74. Area 3 - Johnston Street Industrial Area and Surrounds Precinct - Current minimum lot size



9.2.5. Employment Land Supply

For the RJP to meet the projected growth and employment needs to 2041, there is a need to create some 67ha of additional employment land within the RJP. Of that 67ha, 75% (50.25ha) is expected to be needed for smaller industrial with an average lot size of approximately 4,000sqm, best suited to the existing context of Area 3.

The remaining 25% (16.75ha) is projected to be required for larger industrial with an average lot size in the order of 6 ha. Nammoona Industrial precinct would be best positioned to accommodate large lots, consistent with existing context.

With approximately 87 ha of new industrial areas to be created in Area 1 (Nammoona Industrial precinct) and Area 3 (Johnston Street Industrial Area and Surrounds Precinct), the RJP is capable providing of sufficient area without the need for including flood affected land south of Bruxner Highway, which was previously included in the RJP boundary. This is illustrated in Figure 75.

The 54 ha of available land in Area 3 provides opportunities to substantially contribute to projected needs for smaller lots. By way of example, the strategic advantages of Development Area 3c (STP residue) east of the STP may attract larger scale uses. If this occurs some small lots may need to be provided to be provided in north Nammoona.

The additional 20 hectares of land will provide sufficient area to accommodate small and large lot projections. It will provide additional flexibility to support a range of types and scales of industrial uses that the RJP will ultimately attract, which cannot be predicted at this point in time, noting that substantial part of Area 3 is identified for E3 Productivity Support, reduces supply of industrial land. Noting also the land use limitations within identified drainage corridors in Area 3.

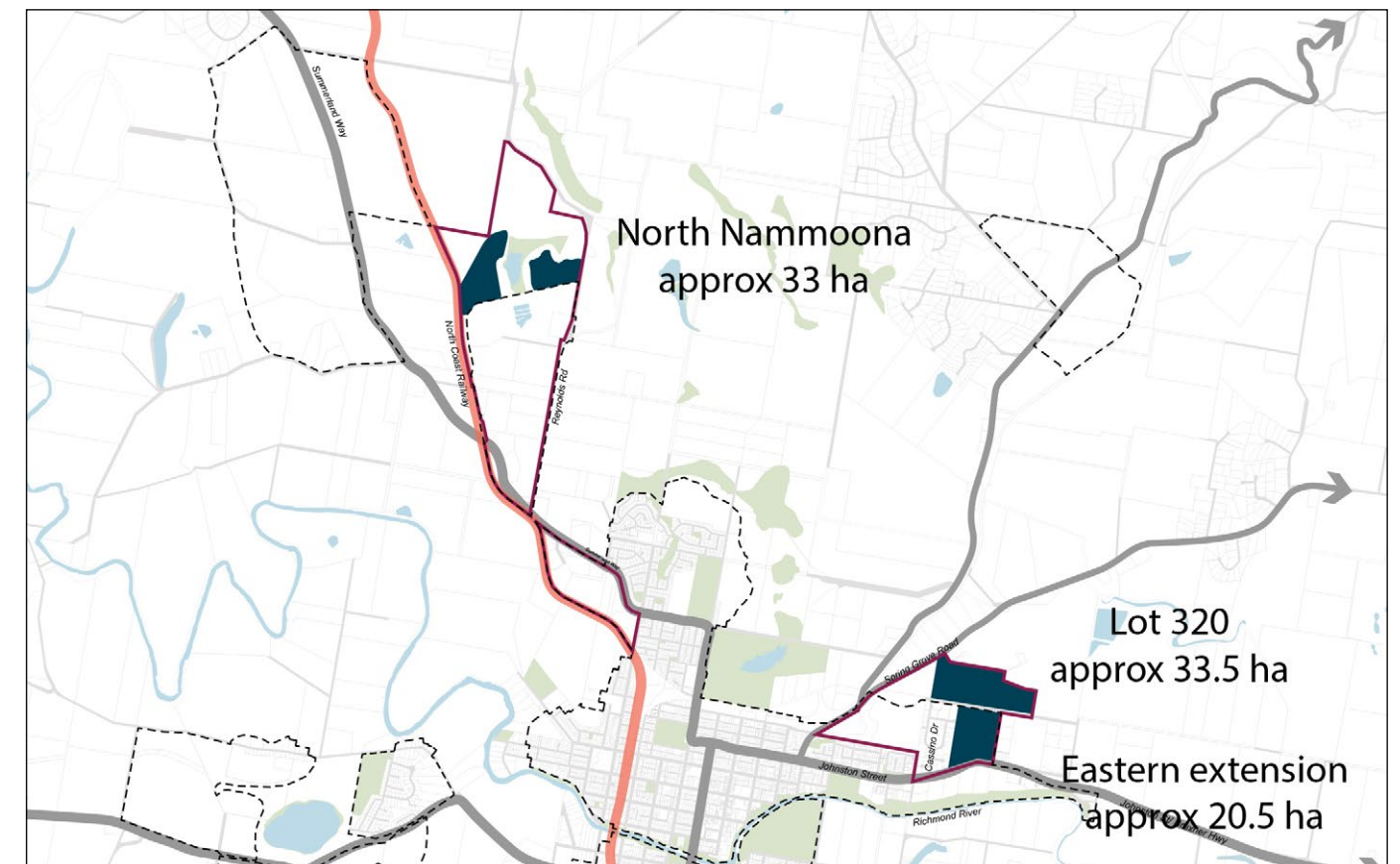


Figure 75. Area 3 - Johnston Street Industrial Area and Surrounds Precinct - Additional industrial land to be created by the RJP

Further, as there is limited unconstrained land suitable for industrial purposes, there are benefits in providing capacity beyond the projected 2041 horizon to facilitate ongoing growth associated with the momentum that will be established by the RJP.

9.2.6. Biodiversity

Extensive biodiversity surveys have been undertaken in Area 3. A summary of findings is provided as follows.

No areas of biodiversity significance was identified in Area 3. Biodiversity is not considered to be a major constraint in this area.

Commonwealth, State and Local regulatory frameworks and associated legislation will need to be addressed at detailed design stage as applicable and relevant.

Refer Biodiversity Analysis Report (ERM 2024)

9.2.7. Visual Quality, Character and Place

Johnston Street/ Bruxner Highway runs adjacent to the southern boundary of Area 3, and is a key gateway to the Casino town site. Given the precinct will impact the arrival experience from this eastern gateway, the visual qualities of future development will be an important consideration.

There are existing views from the Bruxner Highway southwards towards the treed banks of the Richmond River. Views are most proximate at the easternmost extents of the precinct with views towards the treed banks becoming more distant towards the town site. The trees on its embankment are visible from nearby vantage points particularly along Johnston Street/ Bruxner Highway.

The existing Cassino Drive Industrial Area is typically characterised by single storey utilitarian and shed structures of varying sizes and bulk. These are interspersed with at grade car parking and large areas of hard-stand. While neat in areas, landscape is unembellished with lawned verges, security fencing and minimal tree planting. Where tree planting does exist, it assists in screening and softening the appearance of industrial uses. There is a large setback to the Bruxner Highway, which provides a soft green edge to the industrial uses along an important arrival gateway.

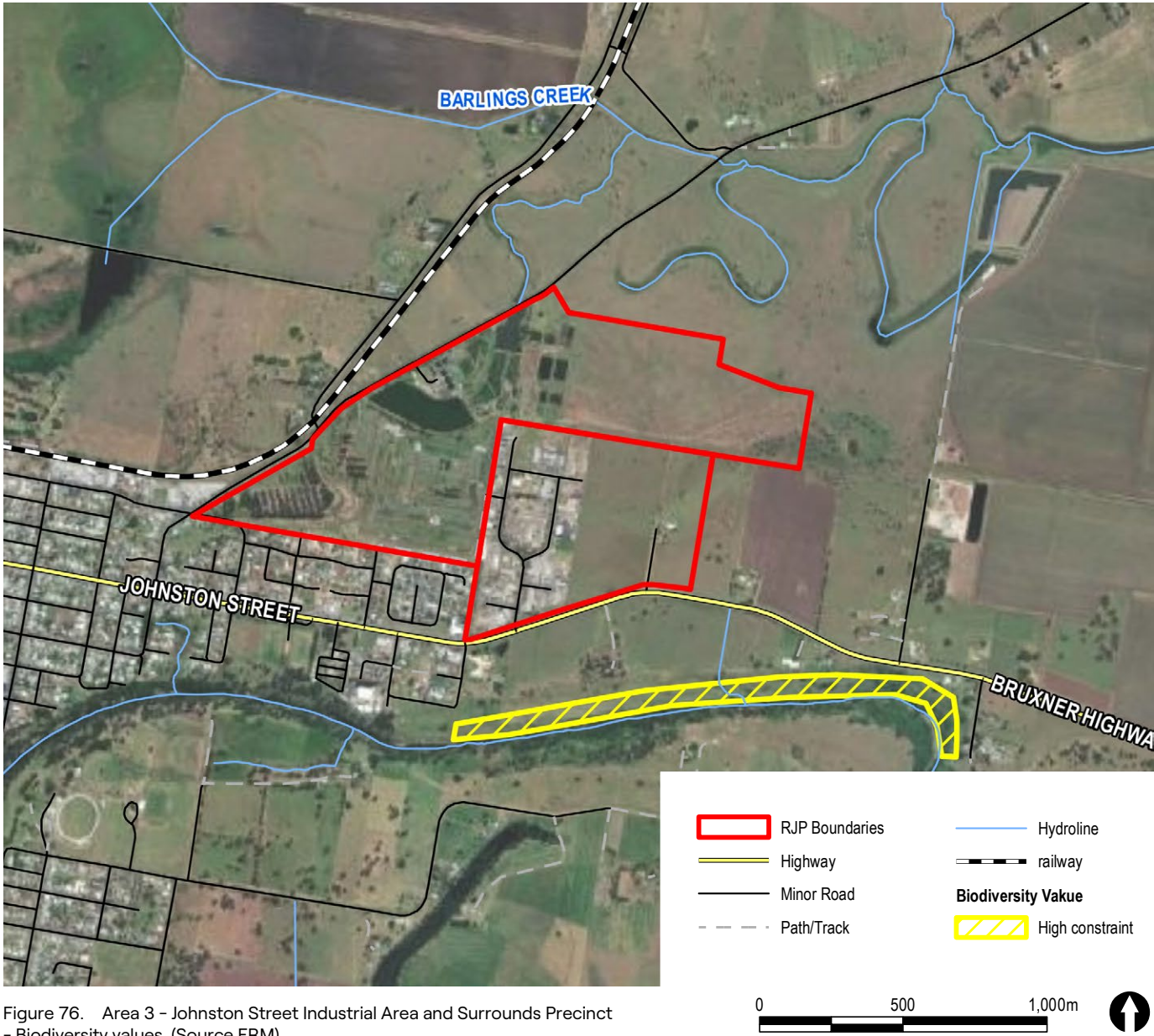


Figure 76. Area 3 – Johnston Street Industrial Area and Surrounds Precinct – Biodiversity values (Source ERM)

The undeveloped remainder of the precinct is rural in character. While this will transform as development occurs, it is important to consider the overall visual character of evolving industrial lands to ensure a visually sympathetic relationship to the rural setting and to facilitate positive perceptions of the Casino town site via this primary gateway.

Spring Grove Road provides visual access to Area 3. The sewage treatment plant is generally screened by dense vegetation along the edge of the road. A key visual consideration in this locality is the visibility of Area 3 from the Northern Rivers Rail Trail, which will form a key tourist gateway to the Casino town site.

Any future development in the north eastern portion of the precinct will be visible from Spring Grove Road. The future rail trail will cross Naughtons Gap Road at its intersection with Spring Grove Road. This highlights the gateway location of the precinct and importance of the arrival experience to the town site for hikers and vehicles travelling from Lismore.

The Primex site is predominantly rural in character. In general, the adjacent sewage treatment plant is visually unobtrusive and reasonably concealed behind vegetation and an earth berm.

Linking Casino and Lismore, Spring Grove Road/ Caniaba Road is known for its scenic qualities and passes through hilly and densely vegetated terrain. Ensuring any future industrial development reflects the softer visual and landscape qualities at its interface with this road should be considered.

As new development occurs consideration should be given to embellishing landscaping features for visual amenity with additions such as post and rail fence top respond to the rural context. At key gateways opportunities for co-ordinated signage / branding and possible key entry features such as public art should be considered.

9.2.8. Land Tenure, Opportunity Sites and Strategic Land

Area 3 consists of a number of private landholdings. The existing Cassino Drive Industrial Area is under fragmented ownership. Large privately owned land parcels exist east of the existing industrial area (Development Area 3b - Arthur Street).

Larger land parcels provide the opportunity for coordinated growth and expansion of land uses that will support population growth associated with the Regional Job Precinct.

Richmond Valley Council and Primex (events space) are key land owners in Area 3.

The land tenure of Area 3 provides a key strategic opportunity for Council to open up the buffer lands for development and integrate future development on this site with the expansion of the existing Cassino Drive Industrial Area towards the east and west.

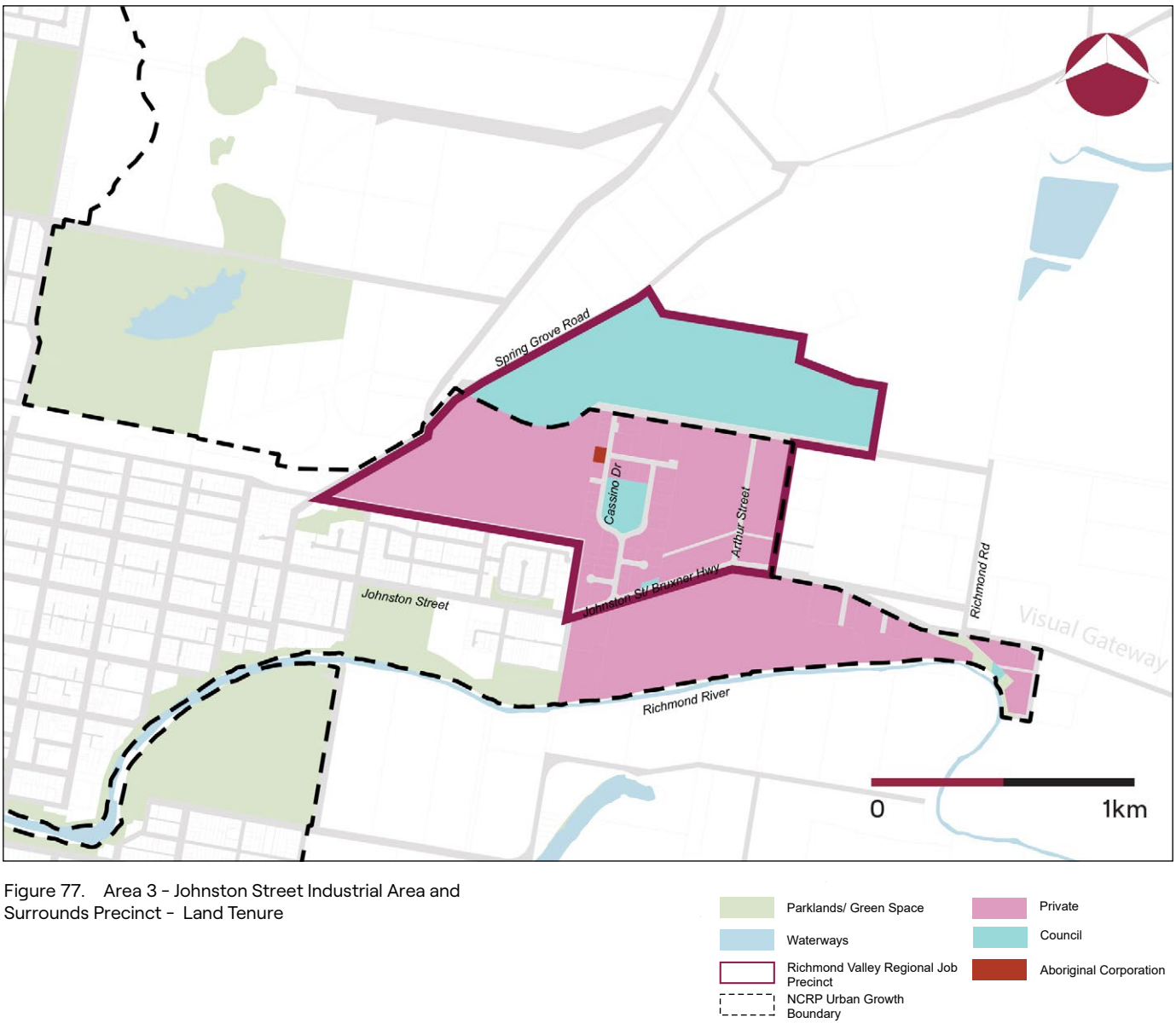


Figure 77. Area 3 - Johnston Street Industrial Area and Surrounds Precinct - Land Tenure

9.2.9. Aboriginal Heritage

Aboriginal heritage is not considered to be a major constraint in Area 3.

Refer Heritage Report (ERM 2024)

9.2.10. Historic Heritage

There are no heritage items present in Area 3. As such, historic heritage is not considered to be a major constraint.

However, there are areas of heritage value in proximity to the area. This includes an unregistered historic heritage item (Richmond River). This area is bound by a conservation zone and is unlikely to be directly impacted by proposed land uses associated with this Structure Plan.

Irvington Wharf 1 has unlisted heritage value and has been identified in proximity to Area 3 along the Richmond River. Irvington Wharf is recommended to be considered by Richmond Valley Council for inclusion as a heritage item in the Richmond Valley LEP. Prior to heritage listing an updated condition report should be prepared for Irvington Wharf to confirm whether recent weather events have impacted the previously reported condition of the item.

Refer Heritage Report (ERM 2024)

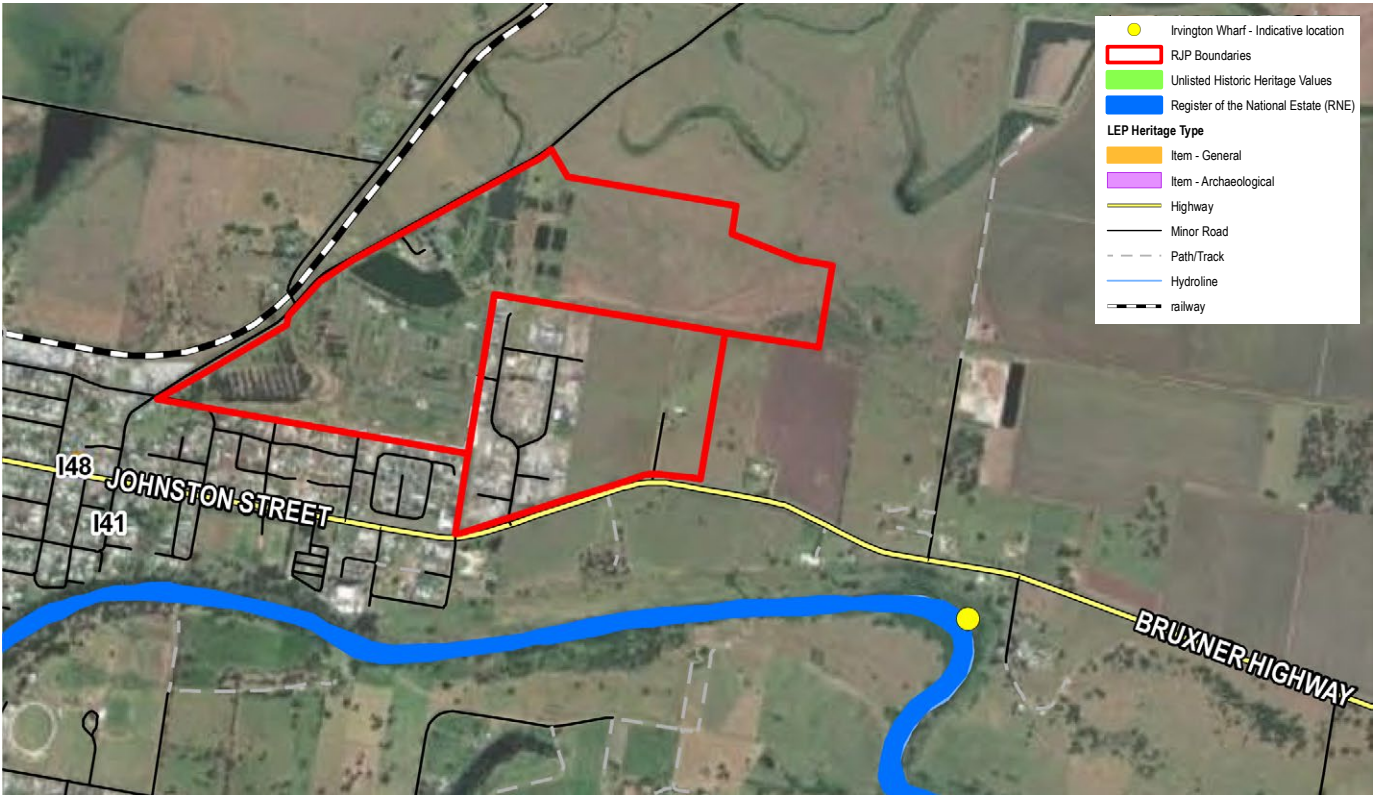


Figure 78. Area 3 - Johnston Street Industrial Area and Surrounds Precinct - Historical Heritage (Source ERM)



9.2.11. Strategic Agricultural Lands

The Northern Rivers Farmland Protection Project – Final Recommendations Report (2005) seeks to protect important farmland from urban and rural residential development by mapping farmland and developing planning principles.

Strategic agricultural land is identified under the NSW Government's Strategic Regional Land Use Policy (2012). Strategic agricultural land is highly productive land that has unique natural resource characteristics (such as soil and water resources) and socio-economic value (such as high productivity, infrastructure availability and access to markets).

Development Area 3c (STP residue)

This Council-owned site as adjacent agricultural land is zoned RU1 under the Richmond Valley Local Environment Plan 2012. It is mapped as Regionally Significant Farmland.

While the site potentially has agricultural value for the region, it is better suited to RJP associated uses with potential for greater economic benefits to the region that will support agricultural industries.

Land use undertaken with the site is identified as 'Grazing Modified Pastures' (0.065% in LGA) and 'Class 3 – High Capability Land' with moderate limitations and capable of sustaining high-impact land use (i.e. cropping with cultivation but not regular cultivation due to flooding). The land is currently idle, but its previous use and current most suitable agricultural use is extensive beef cattle production.

The site is flood prone and contains a typical gilgai microrelief landscape (sometimes referred to as 'melonholes') meaning that during and following periods of rain, the gilgai depressions fill with water and the landscape is then dotted with an array of shallow wetlands.

The extent and nature of the flooding is confirmed via the Council's Richmond Valley Flood Study. The study indicates that the site is minimally flood affected.

Management of gilgai microrelief landscape can be completed using agricultural machinery. Smoothing removes topsoil from the higher parts, depositing it in the lower parts and exposing areas of subsoil. Smoothing also alters the nutrient cycling of the soil such as phosphorus availability and soil nitrogen levels in the surface soil (which decrease significantly) and increases the acidity of the exposed subsoils.

Fill could be used on the entire site as an option noting the flood prone land however proposed development must be in accordance with floodplain management plan and Floodplain Management Manual. The need for fill and its impacts will be considered via the Richmond Valley Flood Study.

The Northern Rivers Farmland Protection Project states that Regionally Significant Farmland mapping is not an absolute constraint to future strategic urban development.

The Agricultural Land Assessment (GHD 2024) provides an analysis of the current status of the site's Regionally Significant Farmland classification. It concludes that there is sound reasoning for land use change as assessed against the recognised criteria. However, the justification for rezoning is dependent on the availability of land for industrial purposes in relation to the particular strategic advantages that Development Area 3c (STP residue) provides.

Strategic advantages of Development Area 3c (STP residue) and potential inclusion in the Urban Growth Area boundary

The site offers a major strategic advantage for a strategic high water using industry that can benefit from water recycling opportunities provided by the adjacent sewage treatment plant. It would be significant benefit to the RJP for the site to be rezoned for general industrial

purposes.

For this to occur, the site would need to be included within Casino's Urban Growth Area boundary. The North Coast Regional Plan 2041 sets a number of principles to guide variation of the of the growth boundary.

A variation to the Urban Growth Area Boundary is justifiable as it:

- is consistent with the North Coast Regional Plan 2041 in that it maintains strong alignment with key objectives to enhance and grow industry and employment opportunities.
- is consistent with the adopted Casino Place Plan which identifies the land as being located in the Richmond Valley Regional Job Precinct.
- can be achieved with efficient and cost effective delivery of infrastructure via Council's contributions framework.
- will not impact any land of high environmental value, Aboriginal heritage or historical heritage.
- avoids risks associated with flooding, bushfire, land slip and acid sulfate soils.
- will appropriately manage land use interrelationships and is suitably buffered in relation to sensitive uses and receivers. DCP provisions are recommended to ensure future development within the RJP considers satisfactory mitigation of potential impacts from existing surrounding agricultural land uses.
- is contiguous with and urban zone and will effectively round off an urban boundary, noting that the adjacent RU1 zoned STP site contains infrastructure to service the needs of the local urban area.

The final key principle is to demonstrate that no other

suitable site is available to accommodate a potential high water using industry. Noting the strategic advantages of this site, potential sites across the RJP and Casino's existing industrial area. No other area (specifically the Airport, Hare Street, Nammoona industrial areas) has the same advantages for a high water user. The ability for alternative sites to cater for the same strategic advantages of Lot 320 are considered as follows:

- Airport adjacent industrial areas are more suitable for airport related uses and the types of uses that could benefit from air transport opportunities such as logistics, and should be retained for such uses.
- The nearby Development Area 3a (Primex) offers a strategic advantage for a high water user associated with the STP, but is constrained by residential uses / land use conflict.
- The Dyrabba industrial area is not adjacent to the sewage treatment plant and unable to benefit from water recycling opportunities. It is also constrained by nearby sensitive residential uses.
- Preliminary flood analysis suggests that Hare Street industrial precinct is significantly more flood affected with flood depths of up 1.3m – Compared to 0.02m on Development Area 3c (STP residue). This is a significant constraint to industrial development in the Hare Street industrial precinct.
- Land within the RJP south of the Bruxner Highway does not have the same strategic advantages for a high water user as it is not adjacent to the sewage treatment plant. It is also flood affected subject to further investigation to confirm if the land is capable.
- Industrial Land in Nammoona Industrial precinct (Area 1) and within the Casino Food Co-op and Surrounds precinct (Area 2) is too far from the sewage treatment plant to offer any strategic advantage for a high water user without significant investment in infrastructure.

Refer Agricultural Land Assessment - Baseline Analysis Report (GHD 2024)



9.2.12. Traffic and transport

The intersection of Cassino Drive and Bruxner Highway provides a good access option for the Johnson Street and STP industrial areas (north of the Bruxner Highway). Modelling confirms that this intersection currently operates with a good level of service. East Street (to the west of the existing industrial area) also operates with a good level of service.

Eastwards expansion of the existing Cassino Drive Industrial Area into Development Area 3b (Arthur Street) provides an opportunity for an additional access point onto the Bruxner Highway at Arthur Street. This offers potential to connect with east-west road to integrate with the existing industrial estate via Irving Drive. Spur roads (i.e. Irving Drive and Rous Drive) and unmade road reserves within the existing industrial estate allow for expansion of the road network and connection of the expansion area and Development Area 3c (STP residue) to the north.

Looking ahead to the 2031 growth horizon, based on its current configuration, the intersection of Bruxner Highway and East Street is expected to operate with an unacceptable level of service in the morning peak hour. In order to mitigate traffic impacts associated with growth to 2031, it is recommended that:

- the intersection of Bruxner Highway and East Street may need to be upgraded to a single lane roundabout.
- Council monitor the performance of the Bruxner Highway/East Street intersection in consultation with Transport for NSW.
- the intersection of Bruxner Highway and Arthur Street be upgraded to support access/egress to and from the Johnston Street Industrial Area and Surrounds precinct.

Analysis indicates that due to the heavy vehicle activity on Bruxner Highway, in the 2041 horizon year, there

are insufficient gaps for vehicles to turn from Cassino Drive, resulting in long delays for outbound vehicles. In order to mitigate traffic impacts associated with growth to 2041, it is recommended that:

- the intersection of Bruxner Highway/Arthur Street be upgraded to a roundabout to support access/egress to and from the Johnston Street and STP industrial areas.
- right turn movements be removed from Cassino Drive onto Bruxner Highway. Analysis indicates that the proposed roundabouts at East Street and Arthur Street could accommodate the redistributed right turn movements from Cassino Drive.

TfNSW has provided a preliminary indication that upgrades to the Cassino Drive and Arthur Street intersection would be supported as a robust access option into the existing industrial area. A roundabout at Arthur Street would be beneficial for the following reasons:

- enables clear sight lines to be achieved;
- provides a logical location for transition from highway speed (100kmh) to town speed (50-60km); and
- minimises the need for land acquisition and can be factored in to site planning for the industrial expansion area.

Any future intersection at Arthur Street may require relocation of the existing 50km/h zone to the east of the intersection.

The northern eastern portion of Area 3 has frontage to Spring Grove Road. There are two opportunities for new access to be provided onto Spring Grove Road, which may be considered depending on the future use of land within Development Areas 3a (Primex) and 3b (STP residue). These are:

- Primex site to the east of and via the proposed Rous Drive spur road; and
- North east of the existing STP, potentially via an existing unmade road reserve to the north of the Cassino Drive road spur or other alternate location within Development Area 3c (STP residue) such as an alignment with Arthur Street.

Extension of Rous Drive to Spring Grove Road (with the provision of a new priority controlled T-junction) is preferred due to its better connectivity back into town and will be subject to a detailed design exercise. It also provides a more direct route to the Bruxner Highway for emergency evacuations. Access via either or both of these two intersection opportunities will need to consider factors like flooding, evacuation, drainage and timing of land use delivery.

Benefits associated with additional access points onto Spring Grove Road include reduced pressure on Bruxner Highway connecting Area 3 to other industrial areas along the Dyrabba Street industrial area, Nammoona and the Food Co-op. These will also reduce reliance on and East Street for industrial traffic, noting its residential context.

In the interim, access to the undeveloped western portion of the precinct may be given primary access via Cassino Drive, and potentially via a number of unmade road reserves that may provide an opportunities for access to Bruxner Highway via Arthur Street and Cassino Drive.

Expansion of the Johnston Street industrial precinct to the east of the current precinct will bring forward options of road access to the expanded industrial area. The potential for access from the Irving Drive spur should be considered as an interim measure until an additional access point from Bruxner Highway at Arthur Street is warranted.

Any new roads within Area 3 will need to consider impacts on flooding and overland flow. Fill levels for the roads will

be a key consideration and it will be necessary to model the effects on local flood levels. Where crossing drainage channels is proposed, suitable design measures will need to be incorporated to facilitate overland flow. Particular consideration will be required for roads that are proposed as evacuation routes during emergency.

A shared footpath/cycleway should be prioritised to link the Bruxner Highway and the future Rail Trail at Naughtons Gap Road via East Street / Spring Grove.

Active Transport

Council will continue to implement the recommendations of the Pedestrian Access Mobility Plan to support the uptake of active transport in Area 3.

The proximity of Area 3 to the Casino township, highlights that walking and cycling should be encouraged as mode shares. The upgrades of the active transport infrastructure in proximity to the industrial areas would provide utility to future employees/residents of the industrial and the wider Casino community.

A significant majority of pedestrians and cyclists would be expected to access Area 3 from the west.

The Bruxner Highway currently provides a concrete footpath between West Street and Cassino Drive. It is recommended that the footpath be extended east on Bruxner Highway from Cassino Drive to the additional access intersection at Arthur Street.

The Bruxner Highway typically provides wide shoulders within Casino, however, in proximity to Cassino Drive the shoulder widths narrow to order of one metre or less. Dedicated cycle paths are recommended along the Bruxner Highway between West Street, Cassino Drive and the additional access intersection at Arthur Street. It is noted that a reduction of the speed limit on the Bruxner Highway east of Cassino Drive, would support the provision of shoulder bicycle lanes, rather than off road bicycle paths.

Public Transport

The current public transport services (bus and train) in Casino are infrequent and provide little utility to the RJP. There are no bus stops in proximity to the RJP subject sites.

If there is a significant increase in patronage demand associated with the employees of commercial/industrial developments associated with the RJP, bus services be reviewed to determine the feasibility of providing additional services appropriately located bus stops to service Areas 3.

Refer Traffic and Transport Analysis Report (GHD 2024)

9.2.13. Utilities and Infrastructure

The growth of industrial activity in Area 3 will contribute to demand on the existing sewage treatment plant, which at capacity and identified for short term upgrade in its current location under the Casino Place Plan.

There is limited capacity in existing the STP (approx. 1300 ET) and it has limited capacity to accommodate trade waste. While this may facilitate some growth in the short to medium term, the potential introduction of an industry with heavy output of trade waste may place pressure on available capacity. Monitoring growth and priority time frames will be essential to ensure ongoing capacity to service the needs of all urban growth in Casino.

Monitoring and infrastructure upgrades will need to be undertaken as to support future growth in Area 3, including water supply, waste water, stormwater electricity and telecommunications.

Identified infrastructure upgrades to support the intended outcomes proposed by this Structure Plan are outlined in Section 10 and in the Utilities and Infrastructure Report (GHD 2024).

9.2.14. Land Use Compatibility

The existing residential properties adjacent to Area 3 will constrain developments that store or handle dangerous goods that exceed the *State Environmental Planning Policy (Resilience and Hazards) 2021* screening threshold.

Based on land compatibility assessments (Sherpa Consulting 2024), consideration of a mix of general industrial with a light industrial buffer (i.e. E3 Productivity Support zone) to residential areas would be an appropriate option to manage land use safety. However there would be a need to limit potential sensitive uses (e.g. hotel and motel accommodation) in any proposed E3 Productivity that is within 400m of the Sewage Treatment Plant.

General industries may store and handle flammable or combustible materials with the potential for fires to occur. Quantities of toxic material are typically limited to below the Resilience SEPP thresholds and do not present an off-site risk. Buffers of 25-50 metres would be sufficient to manage the risk from fires in storage locations.

It is Council's high priority to upgrade the existing sewage treatment plant. Council anticipates replacement of the existing STP within 5-10 years. The design and location of any proposed new facility is subject to ongoing planning by Council. The STP replacement may occur either in its current location or on the land immediately adjacent the existing facility at the western end of Development Area 3c (STP residue). As such, consideration for both existing and future buffers will be necessary.

If a new sewage treatment plant based on like-for-like technology is provided then risks associated with types and quantities of chemicals can be managed to acceptable levels. In this regard there would be no land use safety restrictions on industrial development up to the sewage treatment plant boundary.

The technology is available to introduce biogas production. While Council has not confirmed what technology will replace the sewage treatment plant, it makes sense to future-proof potential for biogas production which can result in positive sustainability outcomes and odour reduction.

The predominant risk associated with biogas production is the potential for sudden release of gas with fire or explosion and risks associated with flaring. There is also potential for toxic gases, such as hydrogen sulphide, which will need to be managed.

A 150-200m buffer from current sewage treatment plant process plant has been recommended from the buffer tank or stack (i.e. potential point of emission) to any receptors. This will enable a biogas facility to be accommodated with no safety impact on residential areas and, together with appropriate controls for will mitigate risk associated with future industrial development adjacent to the facility.

No residential development is proposed in affected areas adjacent to the sewage treatment plant. For industrial development, odour risk controls are recommended to be established under the DCP.

In relation to the existing STP, odour risk controls will be necessary for uses located 100m from the STP boundary into Lot 320 and 50m into the Primex site to the south to encourage the development of low density users (e.g. warehouse with openings limited to emergency exits and no windows facing the STP) in the buffer area.

For a future STP at the western end of Development Area 3c (STP residue), odour risk controls are expected to be necessary for uses located 200m from the sewage treatment plant boundary.

DCP Part I-11 provides existing controls to manage land use conflict in relation both existing and proposed uses to which a buffer may apply. Its provisions provide

the ability for Council to compel an applicant to prepare a Land Use Conflict Risk Assessment as part of the development application process.

Strengthening the provisions mitigating impacts in relation to the potential future inclusion of biogas production on the will assist in future proofing this opportunity.

Refer Land Use Considerations Technical Report (Sherpa Consulting 2024)

9.2.15. Air, Noise and Odour

The residential areas adjacent to Area 3 have potential to be impacted by air, noise and odour emissions associated with the sewage treatment plant and the existing industrial activities undertaken in the Cassino Drive industrial estate. The use of land south of the Bruxner Highway will also be impacted. There is a need to consider cumulative impacts on adjacent residential uses in this locality. Given existing constraints heavy industrial uses are not recommended in Area 3.

Noise modelling indicates that most parts of Area 3 are at or below the maximum attenuated sound power levels exceed 95dB/ha and not suitable for heavy industrial uses.

In particular, the Primex site is zoned for industrial purposes and presently not used to its full zoning potential. Any future development of the southern part of the site will need to consider impacts on residential activities. As such, lower impact uses are more suitable for this part of the site.

Most of Area 3 is suitable for general industry based on noise and odour contours but there is a need to consider adjoining residential uses to the south west. An existing farm dwelling east of Arthur Street is also identified as a sensitive receiver. Consideration for lower impacting interfacing industrial uses as could be expected to occur in an E3 Productivity Support zone should be considered in this part of the RJP.

Existing general industrial uses adjoining the R1 General Residential zone at the southern end of Cassino Drive include a truss factory, recycling facility and mechanical workshop / tow truck operation. Air, noise and odour emissions are an existing issue for residential uses in this location. It is recommended that the general industrial zone be retained in this location to support the ongoing operation and certainty of existing uses. However, there remains a need for management solutions to minimise impacts into the future.

It is recommended to establish planning provisions to highlight amenity considerations and provide a specific policy to require future uses in this location are limited to daytime operations only.

Although the future land use for the land south of the Bruxner Highway will potentially be confirmed via a future planning proposal process, air noise and odour modelling results for the Area 3 Structure Plan confirms that there will be areas of impact in relation to this land. Consideration for lower impacting interfacing uses (i.e. E3 Productivity Support) in industrial expansion areas in (i.e. Area 3 - Arthur Street) should be considered adjacent to the Bruxner Highway.

As a general principle, there is a need to limit sensitive receptors within the modelled receptor boundary illustrated in Figure 84 to create an effective transition between the RJP and nearby existing and potential residential development.

It is proposed to review related LEP and North Coast Regional Plan provisions in consultation with affected landowners, including lot size provisions and the Urban Growth Area boundary. A planning mechanism will be required to establish a transition area for land surrounding the RJP. This would require consideration of the impact of proposed sensitive receptors on operations within the RJP industrial area to minimise land use conflict within the modelled receptor boundary identified in Figure 84.

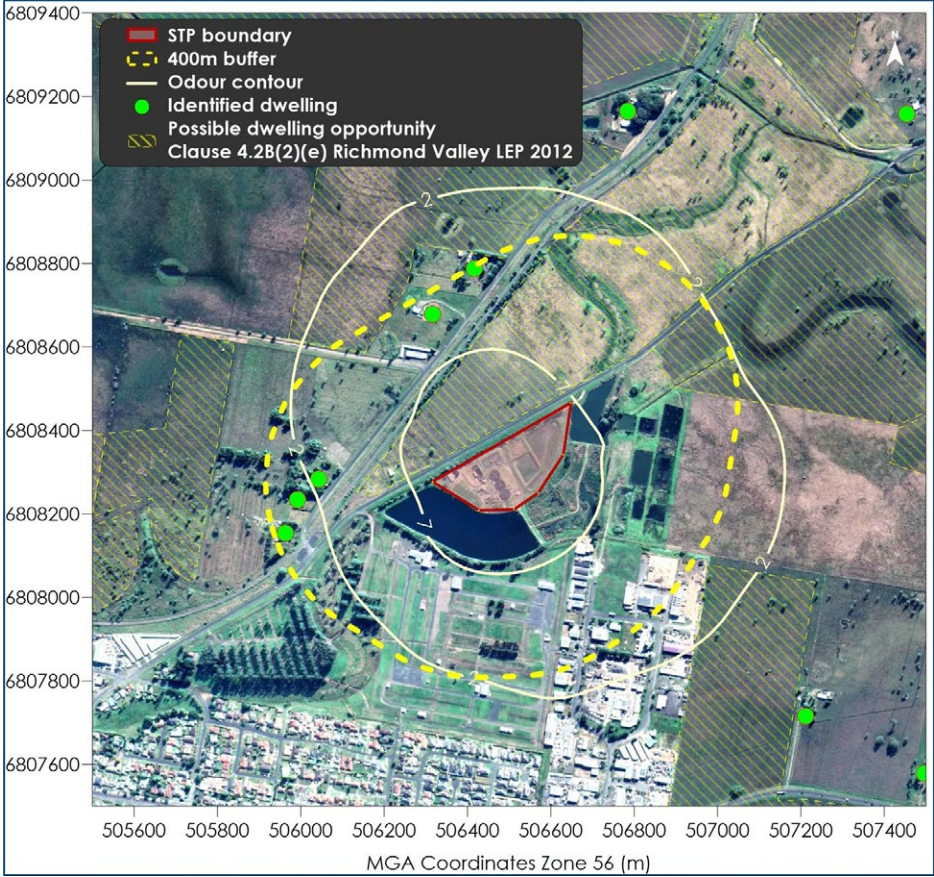


Figure 79. Area 3 - Johnston Street Industrial Area and Surrounds Precinct - Existing Sewage Treatment Plant biogas buffer (Source Todoroski Air Sciences)

Odour emissions from the existing and potential future sewage treatment plant

It is assumed that a new STP will be constructed at the western end of Development Area 3c (STP residue). However, as the timing of the new STP is not known, there will be a need allow for the continued operation of the existing STP and ensure future land use compatibility in relation to the anticipated future STP. As such, consideration of buffers and land use interactions will be necessary in relation to both the existing and the proposed new STP.



Figure 80. Area 3 - Johnston Street Industrial Area and Surrounds Precinct - Potential Future Sewage Treatment Plant biogas buffer (Source Todoroski Air Sciences)

Figure 79 and 80 show the approximate extent of buffers to mitigate effects of odour emissions from the existing and potential future STP.

It is noted that the odour contours for the proposed future STP are indicative and have been prepared on a basis to support strategic planning for the RJP. The contours are based on generic modelling for the existing STP site and do not reflect actual modelling for the proposed new facility, the design and location of which is not currently known or planned for. However the principles outlined in the following sections provide sound guidance for managing land use interrelationships in relation to the

STP facility and need to be considered to manage land use conflict and to prevent such conflicts in relation to a future facility.

The area that may be adversely affected by emissions will depend on site and process-specific factors, such as the scale of the operation, plant processes and emission controls, storage of raw material and waste, local wind patterns and topography. The possibility of future expansion will also be relevant in the consideration of an appropriate separation distance.

To mitigate impacts of a sewage treatment plant on future

land uses and the surrounding land use context, the following recommendations will need to be considered to inform land use planning (Todoroski 2024):

Land uses within the 200m contour line

No new residential development should occur within this buffer.

Sensitive receptors exist within (or on) the 200m buffer line, which are already subject to effects from the existing plant and some that will likely be subject to effects from a future STP. In relation to effects of a future facility, best practice plant and controls should be selected to minimise impacts of any new plant (where possible), rather than utilising the full buffer extent.

Land uses within the 700m contour line

No new industrial receptors should occur. Development other than that ancillary to the STP should be avoided within the 700m contour. LEP and/or DCP controls will need to be established to limit development within the 700m contour, other than development that is ancillary to the STP and not odour sensitive.

Given the minimal extent of impact of the existing STP within the RJP boundary, this issue can be suitably managed through careful consideration of site planning and setbacks. The future STP is likely to result in a greater impacts on Development Area 3c (STP residue). Odour risk controls will be necessary for uses located within the 700m buffer.

Land uses between the 200m and 700m contour lines

General industrial activities are acceptable between the 200m and 700m buffer lines, especially those making some air and noise emissions (e.g. panel beater, mechanic, sawmill, fabrication, spray painting).

Uses that generate odour should preferably be located closer to the STP. This approach has benefits in reducing the cumulative effects of additional odour generating uses. However, further consideration of the cumulative effects of any proposed collocation of



Figure 81. Area 3 - Johnston Street Industrial Area and Surrounds Precinct - Preferred stack (point of emission) locations (Source Todoroski Air Sciences)



Figure 82. Area 3 - Johnston Street Industrial Area and Surrounds Precinct - Maximum Odour Emission Rates (Source Todoroski Air Sciences)



Figure 83. Area 3 - Johnston Street Industrial Area and Surrounds Precinct - Noise Risk Areas (Source Todoroski Air Sciences)

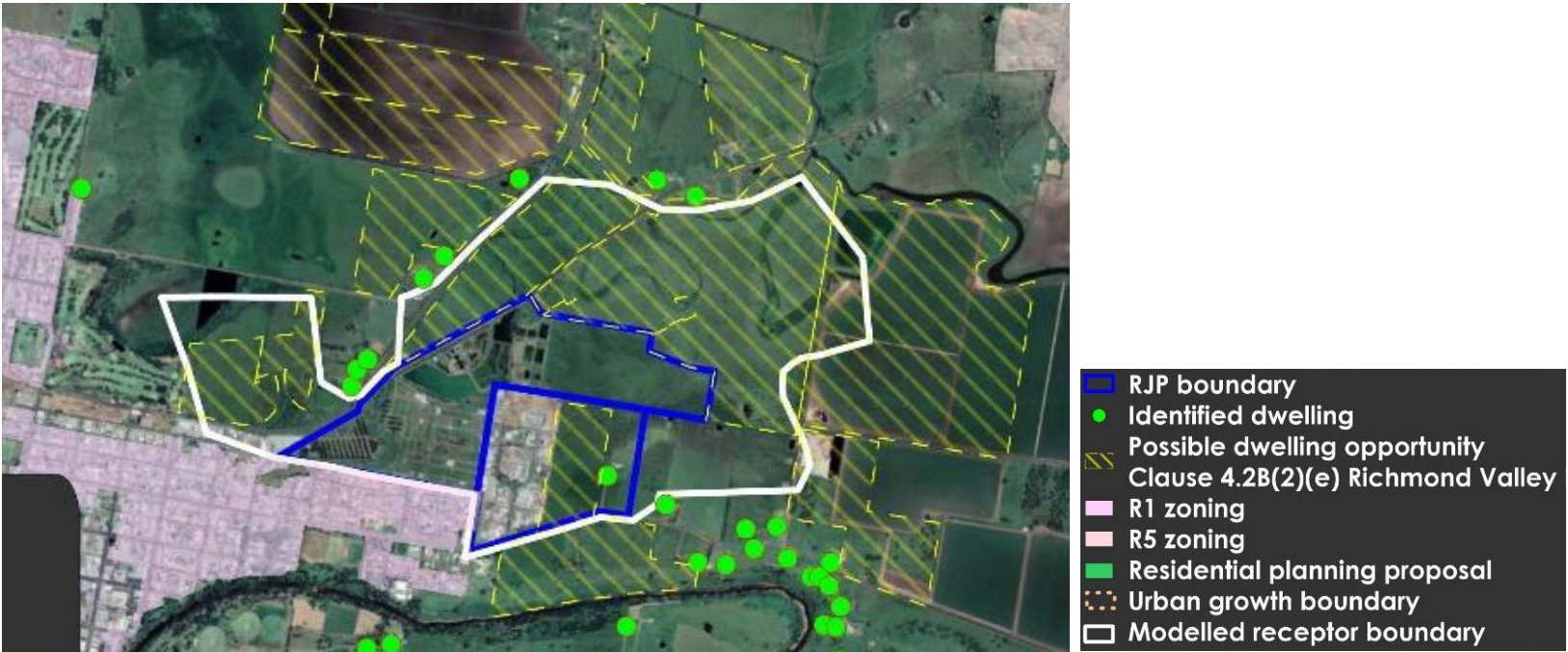


Figure 84. Area 3 - Johnston Street Industrial Area and Surrounds Precinct - Sensitive Receivers (Source Todoroski Air Sciences)

odour generating industries will be required to minimise impacts on sensitive receivers due to potential outwards expansion of odour contours. Facilities with no tangible odour effects should preferably be located furthest from the STP.

Any sensitive commercial or industrial uses should be avoided, for example places where people may sit down to eat, or places with large numbers of people (e.g. cafe, call centre, business office/ business centre, church, movie theatre etc). Any place with young children or elderly or sick people (e.g. childcare, school, aged care, day care, hospital) should not be approved within the 2ou contour line. None is achievable in the E4 General Industrial zone.

Sensitive uses are not significant consideration for locating arrangement of the E4 General Industrial zone, as few such uses are likely to be permissible (e.g. neighbourhood shops/ take away food and drink premises) and there are other suitable nearby locations, where such uses may be located including the nearby B1 Neighbourhood Centre (equivalent E1 Local Centre) zoned site on Johnston Street, and other E4 General Industrial zoned areas not impacted by odour buffers.

There is potential for an alternative lower impacting employment zone (e.g. E3 Productivity Support) for part of the Primex site to manage potential impacts of industrial activity on the adjacent residential area. Consideration needs to be given to the permissibility of uses within the at zone. Under the Standard Instrument, the E3 zone permits/ mandates a number of uses not desirable in the 2ou - 7ou range. Given the number of sensitive uses, it would not be appropriate to tailor the E3 zone to such a degree.

As such, the extent of the E3 zone is to be provided outside of the 2ou buffer area, generally south of the east west alignment of the Rous Drive spur road within the existing Cassino Drive industrial area.

Refer Air, Noise and Odour Technical Report (Todoroski Air Sciences 2024).

9.2.16. Soils, Geology and Contamination

Based on the site history and background data reviewed and ERM's professional experience, potential contaminants associated with current and historical uses may include:

- AEC – 4 Wastewater treatment plant

Potential sources of contamination include:

- Potential leaks from current and former sewer lines.
- On-site fuel and chemical storage.
- Leaks and spills of fuels / chemicals associated with refuelling and maintenance.
- Hazardous materials associated with degrading building structures.

Contaminated land will be managed in accordance with the NSW contaminated land management framework and relevant legislation during planning and development, including the *State Environmental Planning Policy (Resilience and Hazards) 2021*, *Contaminated Land Management Act 1997* and the *Environment Planning and Assessment Act 1979*.

Refer Soils, Geology and Contamination Report (ERM 2024)

9.2.17. Hydrogeology, Water Quality and Demand

Water Demand

Growth of industrial activity in Area 3 will contribute to water demand in Casino. The Casino Place Plan, and the Hydrogeology, Water Quality and Demand Analysis Report (GHD 2024) outline a range of measures for augmenting supply and water efficiency to accommodate industrial growth as it occurs.

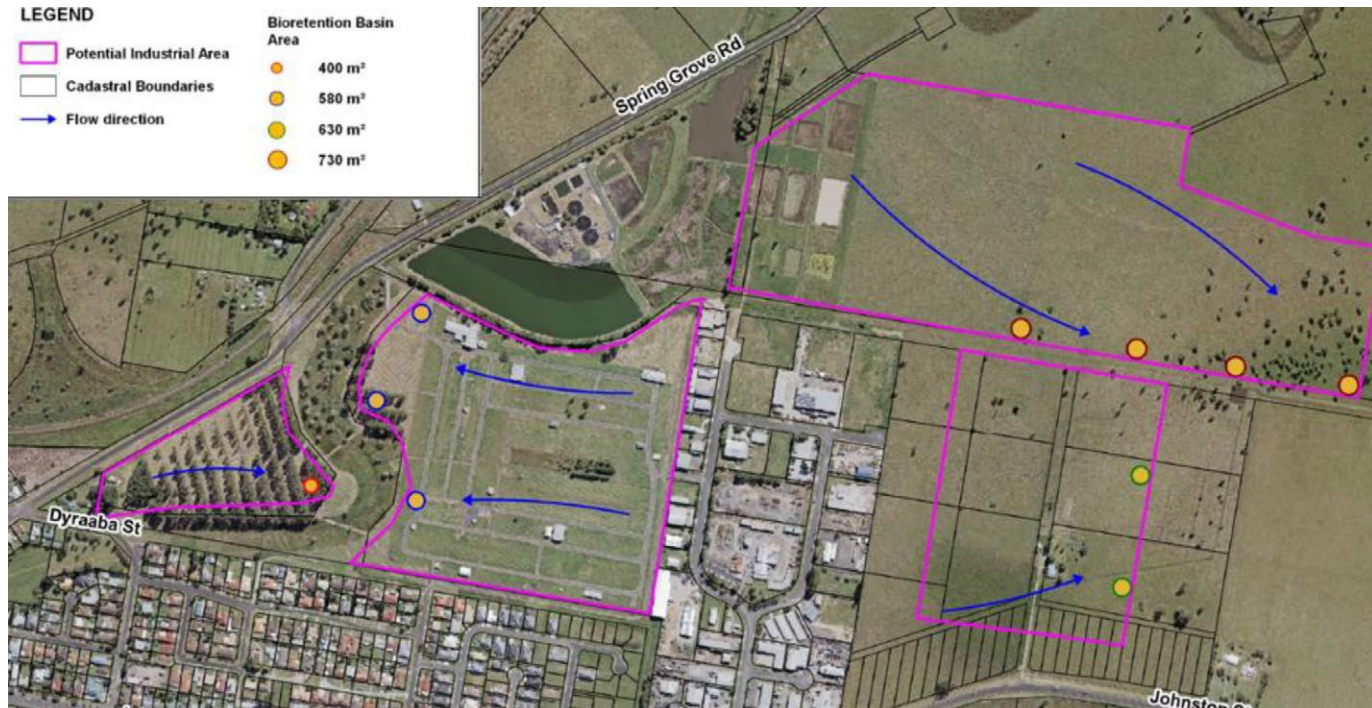


Figure 85. Area 3 - Johnston Street Industrial Area and Surrounds Precinct - Indicative locations and area of bioretention basins (Source BMT)

RVC follows the 5/10/10 rule set out in the DPHI Water's draft guidelines for "Assuring future urban water security – Assessment and adaption guidelines for NSW local water utilities" to determine water security. With the current estimated 3,074 ML/yr bulk supply storage from the Jabour Weir, Richmond Valley Council advised during discussions on 16 November 2022 there have not experienced difficulties supplying sufficient water to the town of Casino.

Therefore, bulk water supply is not currently an issue for RVC, but as climate patterns change, bringing longer periods of drought, inland communities such as Casino will experience greater water security challenges in the future. Council has been preparing for the impacts of climate change and increased development by

investigating options to upgrade its bulk supply over the short-medium term. These options, to be implemented over the next 2-10 years will help to ensure there is sufficient water to meet the projected growth in the Casino township due to the Regional Job Precinct and Casino's access to flood-safe residential land.

Refer Hydrogeology, Water Quality and Demand (GHD 2024) and the Casino Place Plan (Gyde 2023).

Water Quality Management

The Regional Jobs Precinct Flood Impact Assessment (BMT 2024) includes a flood and drainage assessment and a stormwater quality assessment.

Three potential stormwater quality management strategies were evaluated using a MUSIC model developed for the assessment. Of these strategies, bioretention systems have been recommended as achieving stormwater quality performance targets whilst minimising land use.

Indicative areas and locations of retention systems are illustrated in Figure 85.

It is noted that the mean annual stormwater post development volumes can be assessed to inform the strategic planning of the RJP. However, a review of the peak flowrates a hydrological model of the proposed development is required. This will need to be undertaken at a more detailed stage of the planning process once a conceptual site design has been developed.

9.2.18. Flooding Risk, Mitigation and Fill

The Regional Jobs Precinct Flood Impact Assessment (BMT 2024) provides a baseline analysis and flood impact assessment for Area 3. The analysis includes a flood and drainage assessment and a stormwater quality assessment.

The flood impact assessment confirms that inundation of Area 3 during regional flood events is due to water entering the site from the west and south. It concluded that the optimised fill areas shown in Figure 86 can be achieved with completion of flood mitigation works. Limited filling of Stage 1 areas is possible within Area 3 without the need for major drainage infrastructure.

The flood impact assessment advised that identified flood impacts can potentially be mitigated by reinstating original flow paths in the vicinity of the sewage treatment plant.

BMT recommended adopting the following flood planning levels for the RJP Area 3:

- A 1% AEP flood level for general commercial/ industrial use.
- A 1% AEP + Risk-Based Freeboard (RBF) flood level for commercial/industrial activities which include storage of hazardous materials.
- Provision of sufficient readily accessible habitable areas above the PMF to cater for the safety of potential occupants, clients and visitors.

In considering the potential development outcomes for Area 3, BMT applied the following acceptable flood impact criteria:

- Increase in flood level no greater than 20mm in residential areas.
- Increase in flood level no greater than 20mm in commercial and industrial areas.
- Increase in flood level no greater than 200mm in agricultural areas.
- Increase in flood level no greater than 400mm in general rural open space
- Acceptable flood impacts to be assessed for the 2% and 1% AEP events. Sensitivity tests on flood impacts to be carried out for the 1% AEP + climate change flood event.
- Sensitivity tests for changes in extreme flood behaviour for the 0.2% AEP and PMF events.

BMT identified an optimised filling extent for Area 3, which is illustrated in Figure 86.

The optimised filling extent was developed in combination with flood mitigation works intended to limit off-site flood impacts to within acceptable levels and provide an overall benefit to existing residential areas in Casino and to the Cassino Drive Industrial Estate.

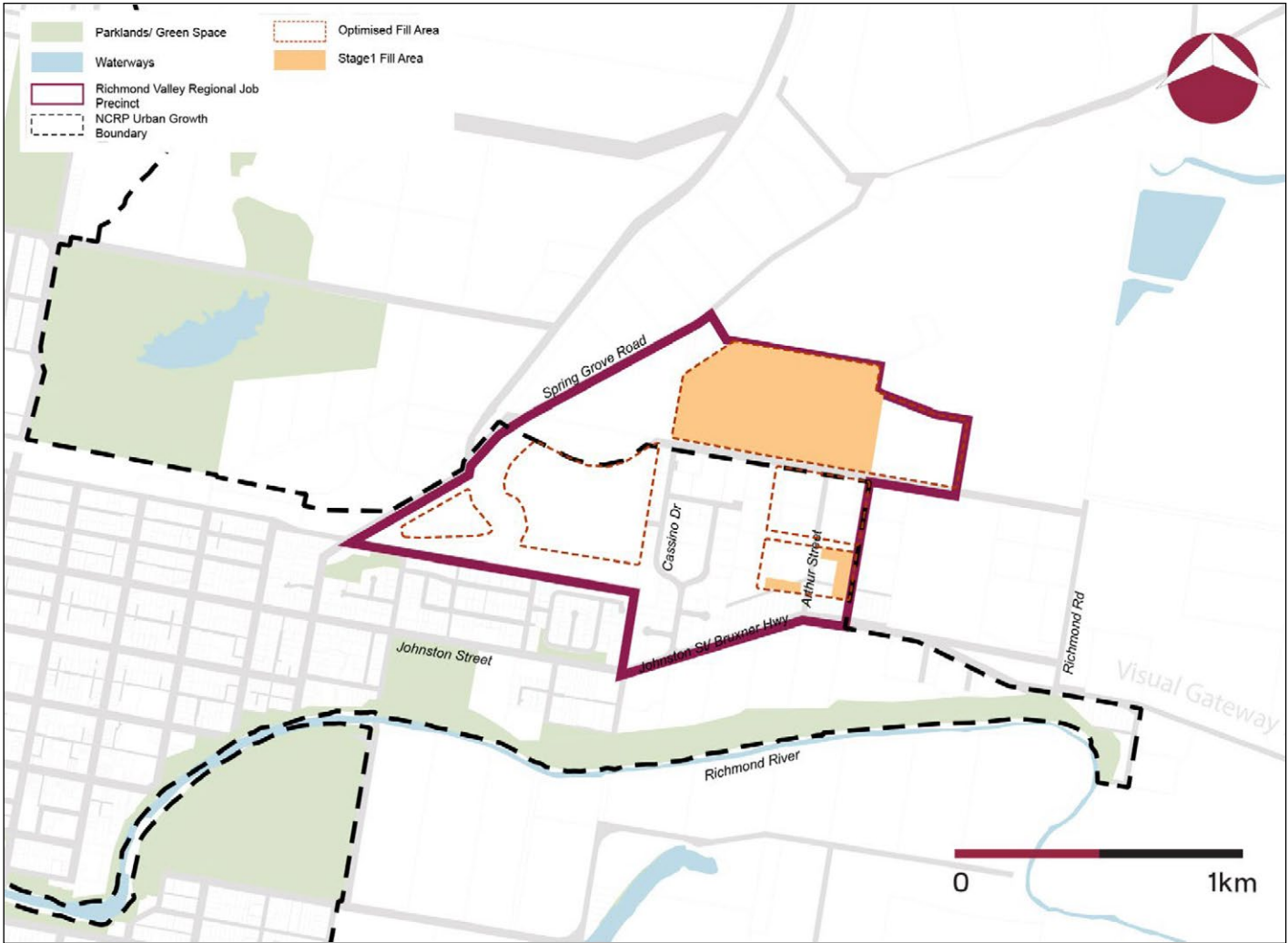


Figure 86. Area 3 - Johnston Street Industrial Area and Surrounds Precinct - Optimised Fill Extents - Adjusted (Source Gyde)

Note - Optimised and Stage 1 fill areas in the south east of Area 3 have been slightly adjusted to enable developable land parcels to be configured in alignment with the Irving Drive. While these have been adjusted based on high level advice from BMT, the exact extent and configuration of fill areas will be subject to detailed design and testing via future planning processes.

The filling of land for development in Area 3 will require implementation of one of the following two major drainage options described as follows and illustrated in Figures 87 and 88:

- Option 1B: Reinstatement of a broad flow path through a natural depression in the terrain which was blocked by the construction of the STP tertiary treatment pond and other associated infrastructure, along with increasing the drainage capacity under Spring Grove Road.
- Option 2B: A new broad channel within Crown Land adjacent to Naughtons Gap Road to provide a link between two natural gullies and which bypasses the existing STP, along with additional drainage under Spring Grove Road.

The identified flood mitigation options are intended to promote increased flow through or around the STP. These options will reinstate a similar situation that existed prior to the construction of the STP.

The implementation of either of the identified mitigation options is considered acceptable from a flood management perspective.

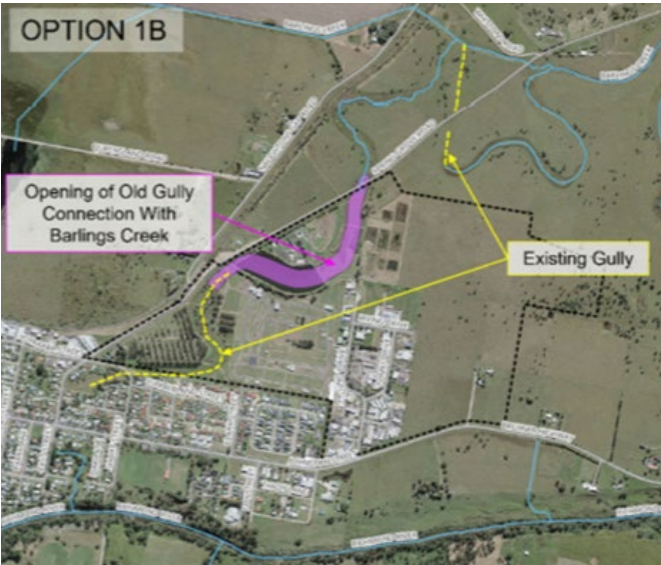


Figure 87. Area 3 – STP and Johnston Street – Drainage Option 1B (Source BMT)

Council's initial preference is Option 2B as it can potentially be implemented in a shorter time frame than Option 1B, which relies upon the construction of a new STP and decommissioning of the existing STP. This will require consultation with relevant parties regarding the Aboriginal land claim on the land in which the infrastructure is proposed to be located.

Council's planning for a new STP is ongoing, with the aim of delivering a new, operational STP from 2029.

Staging of fill

The identified flood mitigation options are recommended to occur prior to the placement of any substantial quantities of fill within Area 3.

In its technical note dated 4 August 2024, BMT tested two filling scenarios to consider the extent of fill that could be placed in Area 3 prior to the implementation of key mitigation measures.

The result of this testing confirmed that filling of the hatched area illustrated in Figure 89 (i.e. Stage 1 fill areas) prior to implementation of the main mitigation

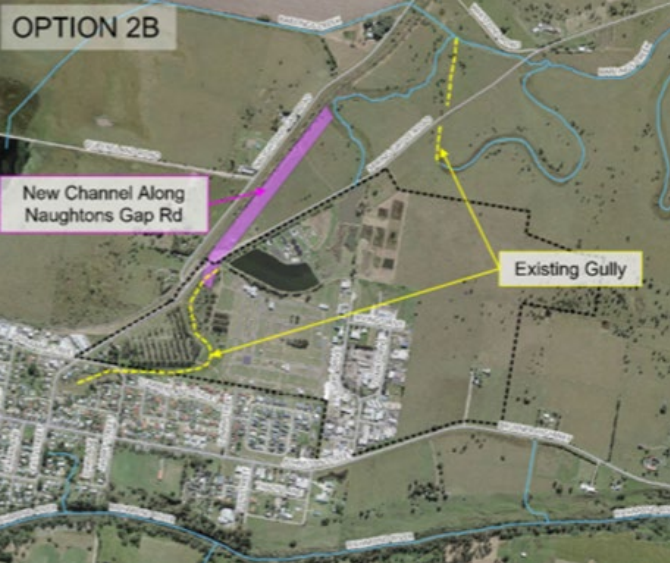


Figure 88. Area 3 – Johnston Street Industrial Area and Surrounds Precinct – Drainage Option 2B (Source BMT)

options creates minimal, localised peak flood level impacts outside of the RJP Area 3. This confirms that it is possible to fill these areas without the need for implementation of either of the major drainage options.

On this basis, filling may commence the Stage 1 fill areas in the short term to facilitate development of new employment uses in Area 3.

Use of non-fill areas

To facilitate the efficient use of land in the RJP and maximise visibility of businesses from Bruxner Highway, it may be desirable and beneficial to use the non-fill areas for purposes related to industrial development (e.g. car parking, display areas, bio-retention basins).

In correspondence dated 23 August 2023, the DPHI confirmed that some use of the non-fill areas in

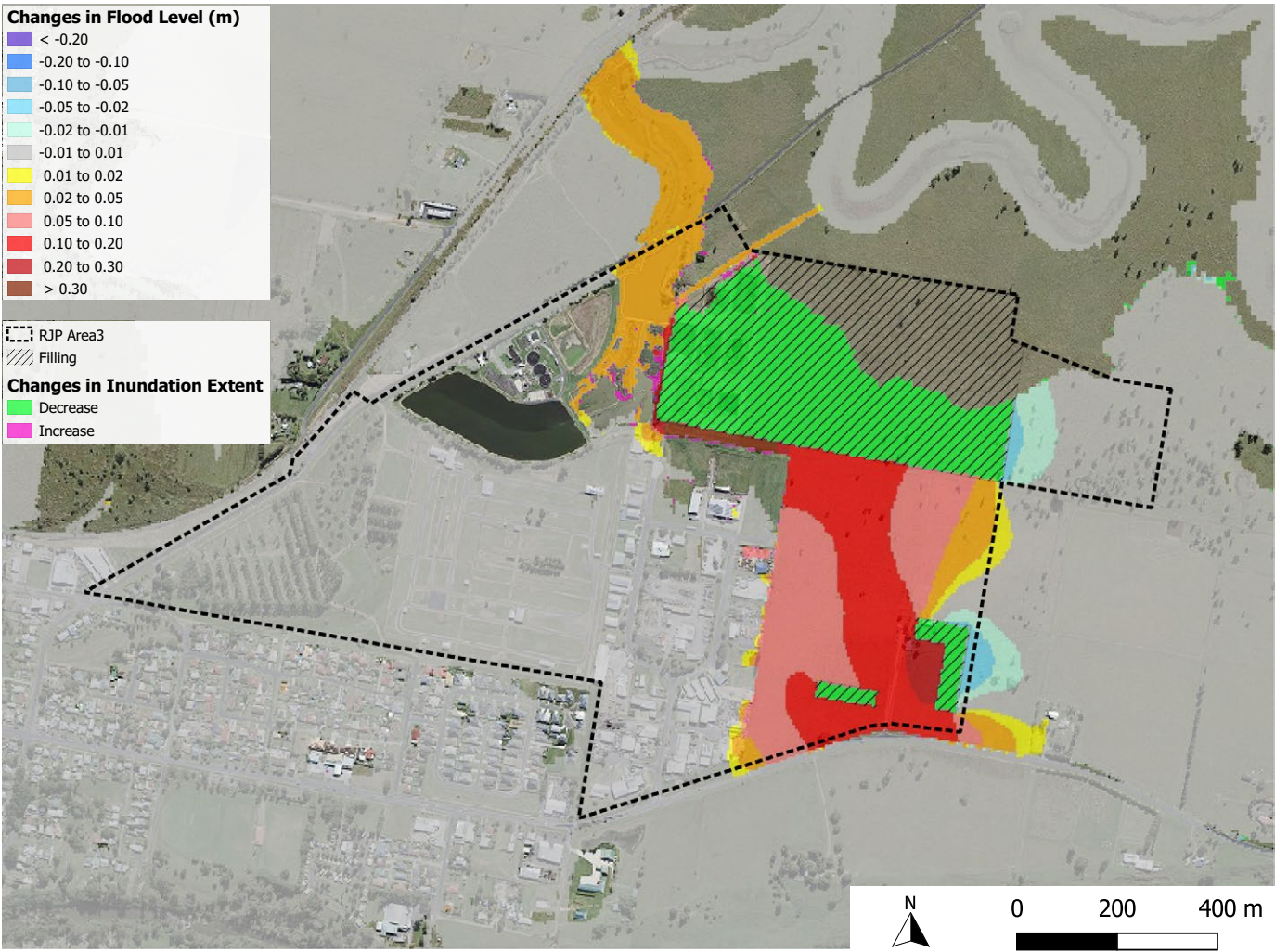


Figure 89. Area 3 – Johnston Street Industrial Area and Surrounds Precinct – extent of fill that could be placed in Area 3 prior to the implementation of key mitigation measure (Source BMT)

conjunction with industry can be considered.

Industrial zones are therefore proposed to retained (or instated) on the non-fill areas. However, there will be a need to restrict the type of uses that can take place in these areas to ensure that drainage flow is able to occur without causing peak flood level impacts outside of the RJP Area 3.

The DPHI advised that the use of the non-fill land for temporary uses that are not likely to impede the flow of water and car parking associated with adjoining businesses on the fill area is likely to be acceptable.

Examples of unacceptable uses include:

- The installation of closed sheds or buildings which may take up flood storage or redirect flows.
- Solid fencing which may impede flood flows or redirect flows elsewhere, adversely impacting on neighbouring properties.

The general objective is to avoid any use of the non-fill areas which could be subject to unacceptable impacts due to flooding and/or which may impact on the level or flow of flood water in the locality. Any use of the non fill areas will need to be supported by a flood impact analysis.

Vehicle access over non-fill areas

Road networks within Area 3 will need to be located and designed to minimise impacts on flood storage and overland flow.

The structure plan generally positions roads outside of non-fill areas to minimise effects on drainage flow and flood storage, and to minimise peak flood level impacts outside of the RJP Area 3.

Design considerations will be required where it is unavoidable for roads to cross over non-fill areas.

Flood Evacuation

The Regional Jobs Precinct Flood Impact Assessment (BMT 2024) anticipates that evacuation to the evacuation centre is possible within the anticipated warning times. With sufficient warning time, it anticipates that evacuation to Casino should also be possible.

A late warning evacuation where roads towards Casino are inundated, would require evacuation to the east towards Spring Grove. This route includes drainage crossings on Spring Grove Road and Naughtons Gap Road. A section of Spring Grove Road near the STP would be unsafe in the 1% AEP event, but could be bypassed via Naughtons Gap Road.

The three bridges located at the Barlings Creek crossings of Naughtons Gap Road and Spring Grove Road are critical to the safe flood evacuation of Area 3. These crossings remain accessible in the 1% AEP event but there is a risk of inundation in the event of blockage at the structure.

The Flood Impact Assessment notes that most of the roads within the existing industrial area are affected by flood hazard category H3 (i.e., “unsafe for vehicles, children and the elderly”) in the 1% AEP event. These flooding issues are further exacerbated when considering the future climate scenario.

9.2.19. Bushfire Risk

Bushfire is not considered to be a significant risk in Area 3. Refer Figure 90.

Refer Bushfire Analysis Report (ERM 2024).

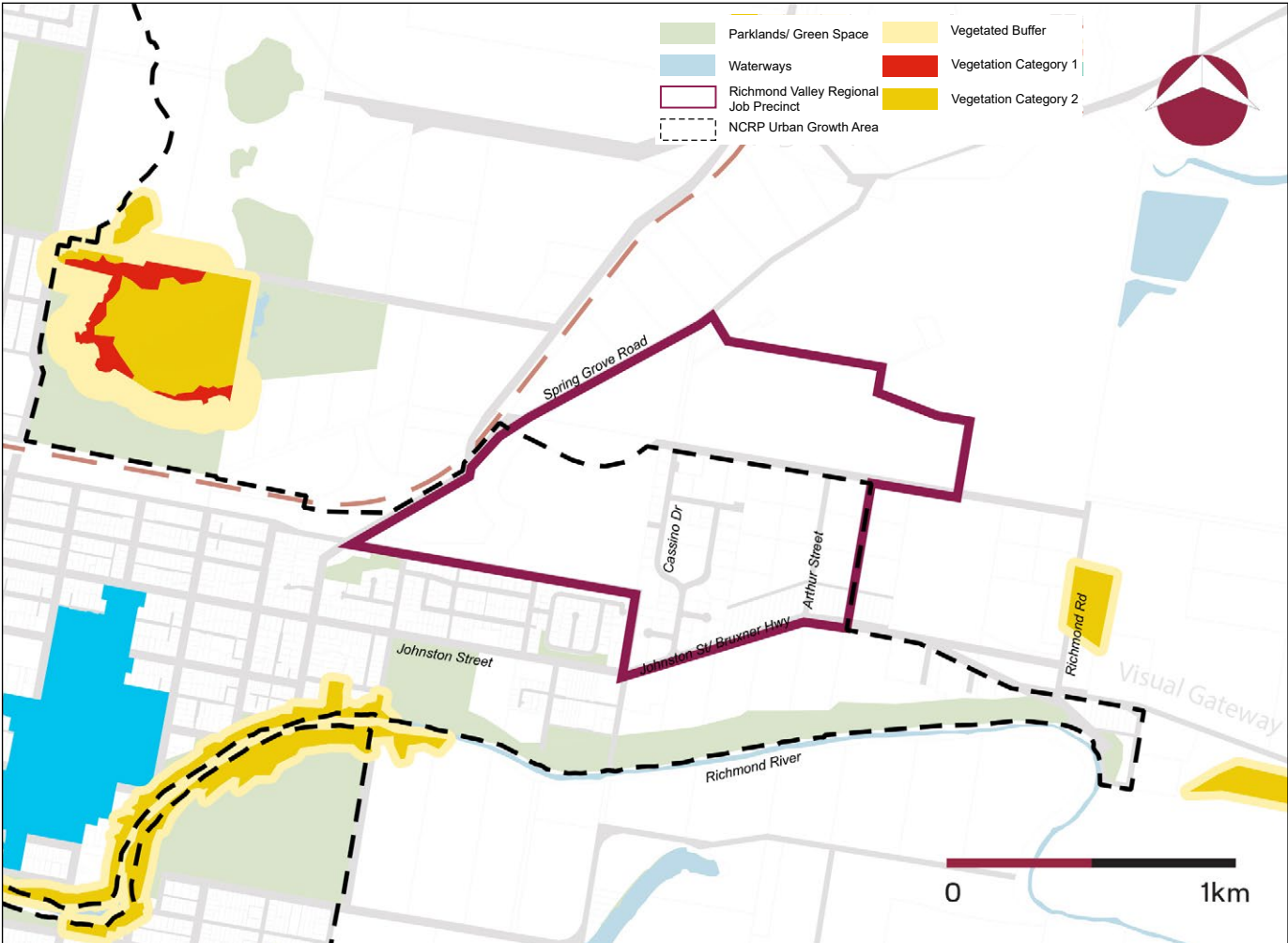


Figure 90. Area 3 - Johnston Street Industrial Area and Surrounds Precinct - Bushfire

9.3 Structure Plan – Area 3– Johnston Street Industrial Area and Surrounds Precinct

This section outlines initiatives to facilitate growth in Area 3 - Johnston Street Industrial Area and Surrounds. Structure Plan recommendations for Area 3 take into consideration the opportunities, constraints and future needs outlined in previous sections and supporting technical reports.

Vision for Johnston Street Industrial Area and Surrounds Precinct

There is an opportunity to leverage Development Area 3a (Primex) in relation to the rural and agribusiness in the region. The site is currently utilised as large events space, with a focus on agricultural exhibitions and opportunities to support the paddock to plate experience. The site offers potential to diversify and attract industries that can co-exist harmoniously with adjacent residential lands.

A focus for Development Area 3b (Arthur Street) will be to support retention and growth of existing industries, including opportunities to expand and diversify within the Richmond Valley RJP. Providing new opportunities for existing businesses to expand and relocate operations and new business to build on existing supply chains are key considerations for the future of this precinct.

It is expected that Development Area 3b (Arthur Street) will comprise new development on smaller lots averaging in the order of 4,000sqm. Development Area 3b (Arthur Street) will seek to attract smaller service industries to cater for local demand, as well as to provide capacity for catalyst development to drive growth and employment.

It is not possible to predict the particular land requirements of existing and emerging industries. As the wider precinct transforms to accommodate new and expanded industrial uses, diverse industrial lot types, land use permissibility, configurations and areas that are robust and easily adaptable will be necessary to accommodate diverse business, relocation and expansion needs.

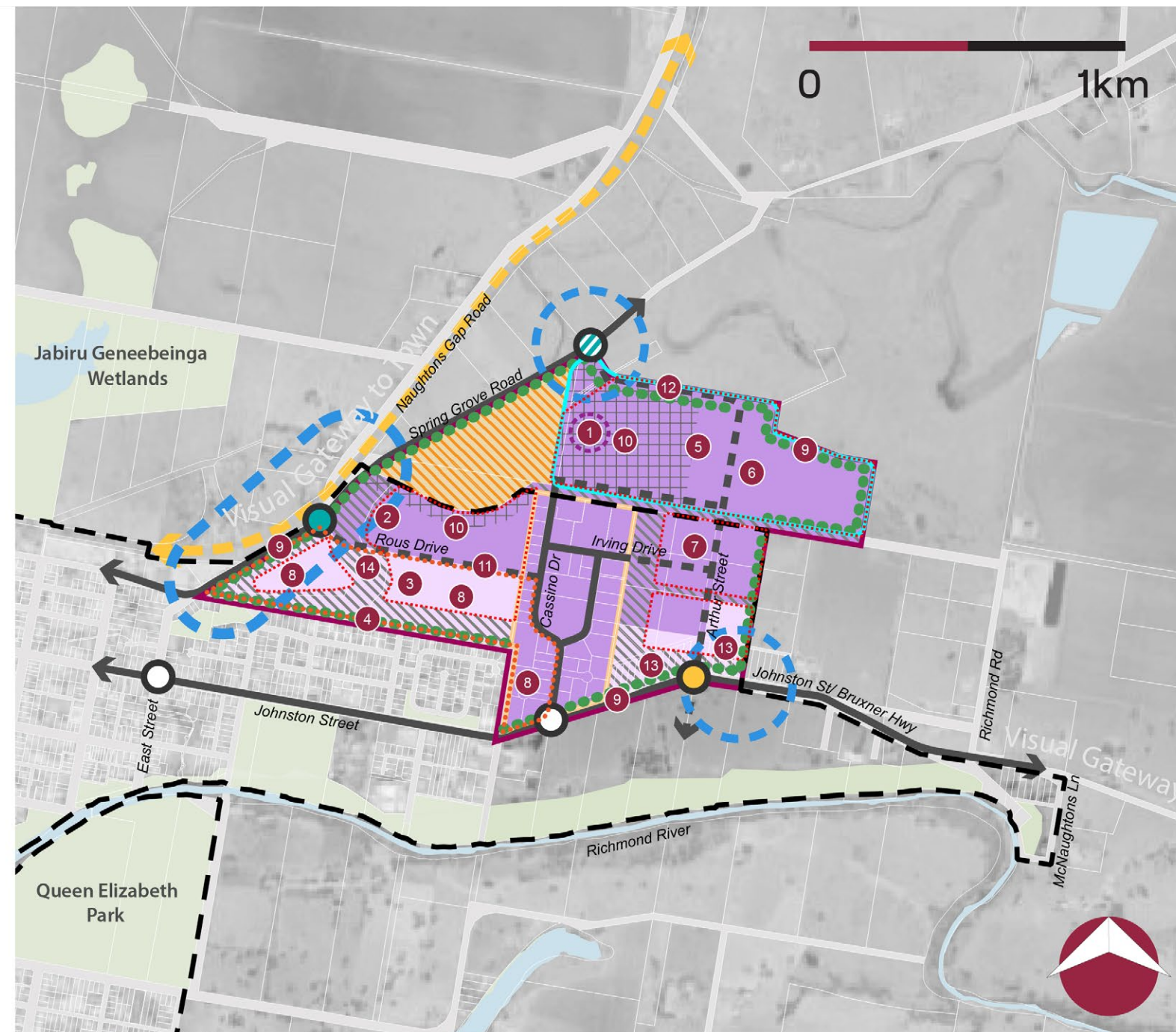
Innovative sewage treatment technologies may benefit businesses in the broader town site as well potentially reducing impact in relation to surrounding uses.

Development Area 3c (STP residue) offers potential for a northward expansion of the existing Cassino Drive Industrial Area. Land east of the sewage treatment plant will be planned as a catalyst site for strategic, catalyst and high water using industries that can benefit from water recycling opportunities from the plant. Preference will be given to uses associated with agribusiness, such as intensive plant agricultural production, research and development, or other value-add processes.

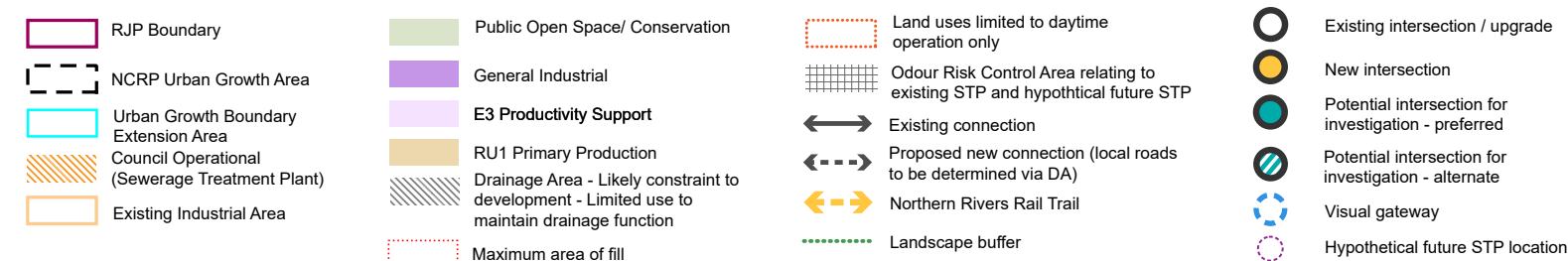
Extension of the existing road network will facilitate integration between existing and future employment lands and provide access opportunities onto Johnston Street/ Bruxner Highway and Spring Grove Road.

Figure 91. Area 3 – Johnston Street Industrial Area, STP and Surrounds – Structure Plan

- 1 New Sewerage Treatment Plant to include water recycling and potentially biogas production
- 2 Establish zone to permit a range of general industrial uses to maintain potential for alternative employment generating use of Primex site that considers constraints and the relationship to Sewerage Treatment Plant, and impacts on adjacent residential land
- 3 Establish new E3 Productivity Support zone to allow for mixed low impact light industrial/commercial uses that consider the relationship to Sewerage Treatment Plant and impacts on adjacent residential land
- 4 Retain existing unmade road reserve to buffer residential uses
- 5 Establish zone to permit a range of general industrial uses on Lot 320 DP75727 to support high water using industrial uses on the proposed industry catalyst site. Seek to extend the Urban Growth Boundary into this site. Ensure permissibility of Intensive Plant Agriculture
- 6 Facilitate water recycling and reuse from STP site to benefit high water industrial uses
- 7 Expand industrial zoned land eastwards



- 8 New land uses limited to daytime operations to minimise impacts on adjoining residential uses
- 9 Establish DCP site planning controls to establish 10m wide landscape buffers along roadsides and RJP boundaries. 20m wide buffer to be provided on the northern side of Bruxner Highway consistent with existing industrial area
- 10 Establish controls to limit development within the 70m odour risk contour, other than development that is ancillary to the STP and not odour sensitive
- 11 Extend Rous Drive westward to connect onto Spring Grove Road and service new E3 Productivity Support zone
- 12 Potential new link onto Spring Grove Road (Indicative location)
- 13 Establish E3 Productivity Support zone to benefit from high visibility and exposure. This zone will also buffer land south of Bruxner Highway and existing dwelling east of Arthur Street
- 14 Drainage flow path is a likely constraint to future development. Limited use to maintain drainage function



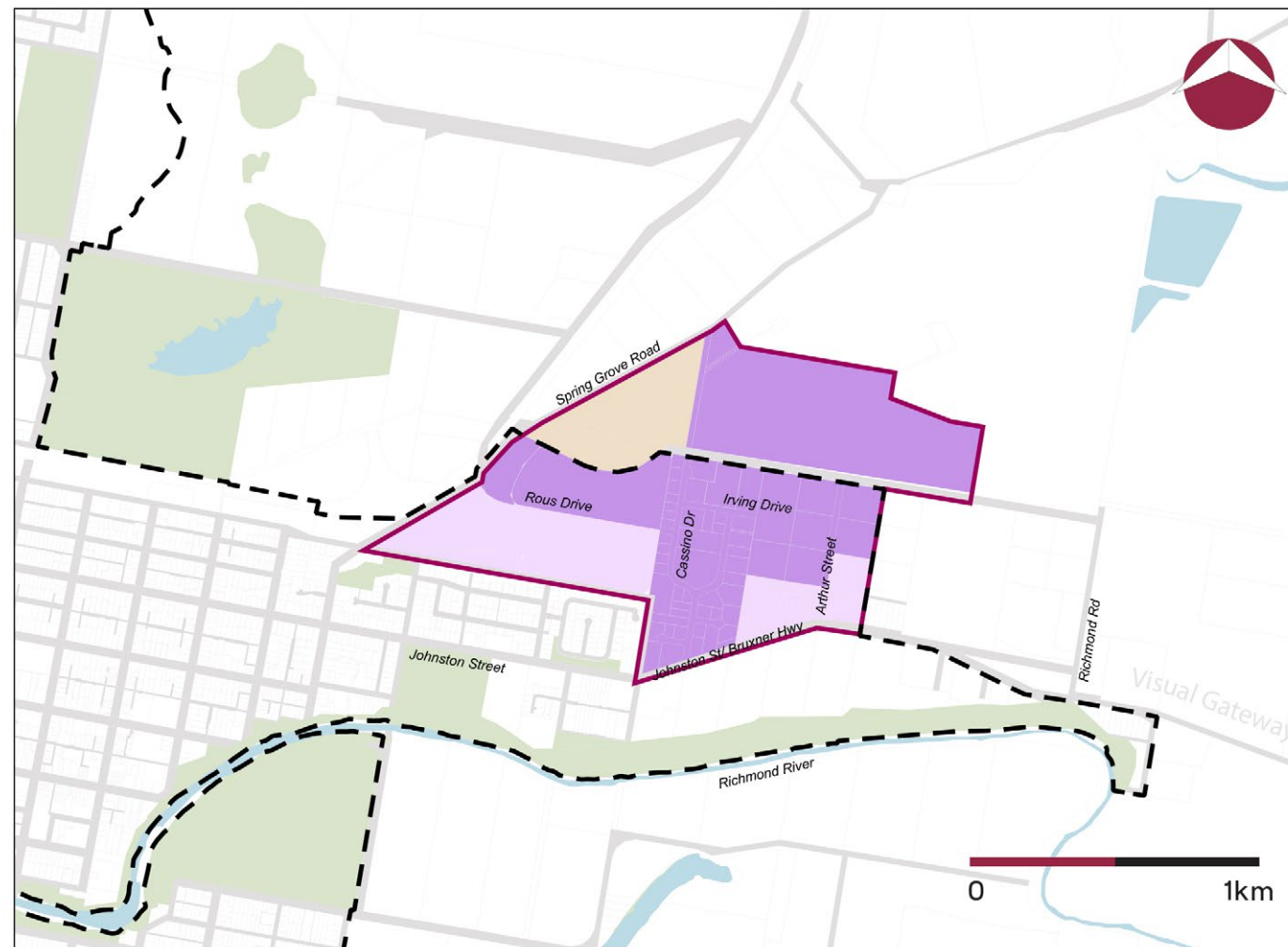
9.4 Actions to Implement Area 3 – Johnston Street Industrial Area, STP and Surrounds Structure Plan

Table 5. STP and Johnston Street – Key Actions

Actions		Approach
3_1.0	Land Use	
3_1.1	Establish zone to permit a range of general industrial uses on existing industrial zoned land and expand industrial uses eastwards of the existing Cassino Drive industrial estate into Area 3 (Arthur Street)	<p>Establish zone to permit a range of general industrial uses in Area 3 - Arthur Street to support ongoing operation, growth and expansion of business and industry.</p> <p>Establish zone to permit a range of general industrial uses east of the Cassino Drive industrial estate to Area 3 - Arthur Street. The intent is to facilitate expansion and diversification of existing industries and to increase opportunities for new industries to locate in Casino that will benefit from the RJP and the strength of existing supply chains.</p> <p>Development of land in Development Area 3b (Arthur Street) will need to consider land fill limitations and overland flow paths to minimise flooding impacts on adjoining areas.</p> <p>Industrial expansion may provide relocation opportunities for industrial and urban services land uses on the periphery of the Casino town centre should this be considered desirable by landowners.</p>
3_1.2	Introduce E3 Productivity Support zone to buffer industrial uses from sensitive receivers	<p>New industrial land adjacent to the Bruxner Highway is to be zoned E3 Productivity Support to buffer land uses to the south of Bruxner Highway and east of the RJP boundary.</p> <p>As the E3 Productivity Support zone does not presently exist in the Richmond Valley LGA, there will be a need to tailor the zone to align with local context.</p> <p>E3 zoned sites along the Bruxner Highway will have high visibility from the key gateway to Casino from Lismore. This may provide relocation opportunities for industrial and urban services land uses on the periphery of the Casino town centre should this be considered desirable by existing operators and landowners.</p>
3_1.3	Set achievable height limits in Area 3	To reduce reliance on cl 4.6 variations under the RVLEP and provide greater certainty for development outcomes, remove height limits under the RVLEP for Area 3. Establish controls under the DCP to ensure appropriate height transition between the RJP and adjacent residential areas.
3_1.4	Remove minimum lot size provisions for general industrial land use and E3 Productivity Support zoned land within the RJP boundary	<p>To provide greater certainty for development outcomes, no minimum lot size limitations should apply under the RVLEP 2012 for General Industrial land and E3 Productivity Support zoned land uses.</p> <p>In removing the Minimum Lot Size provision in Area 3, there will be an ongoing need to ensure that future land subdivision patterns:</p> <ul style="list-style-type: none"> • maintain a suitable diversity of potential lot sizes; and • lots that support an efficient layout to meet their intended use for both small and large operations.

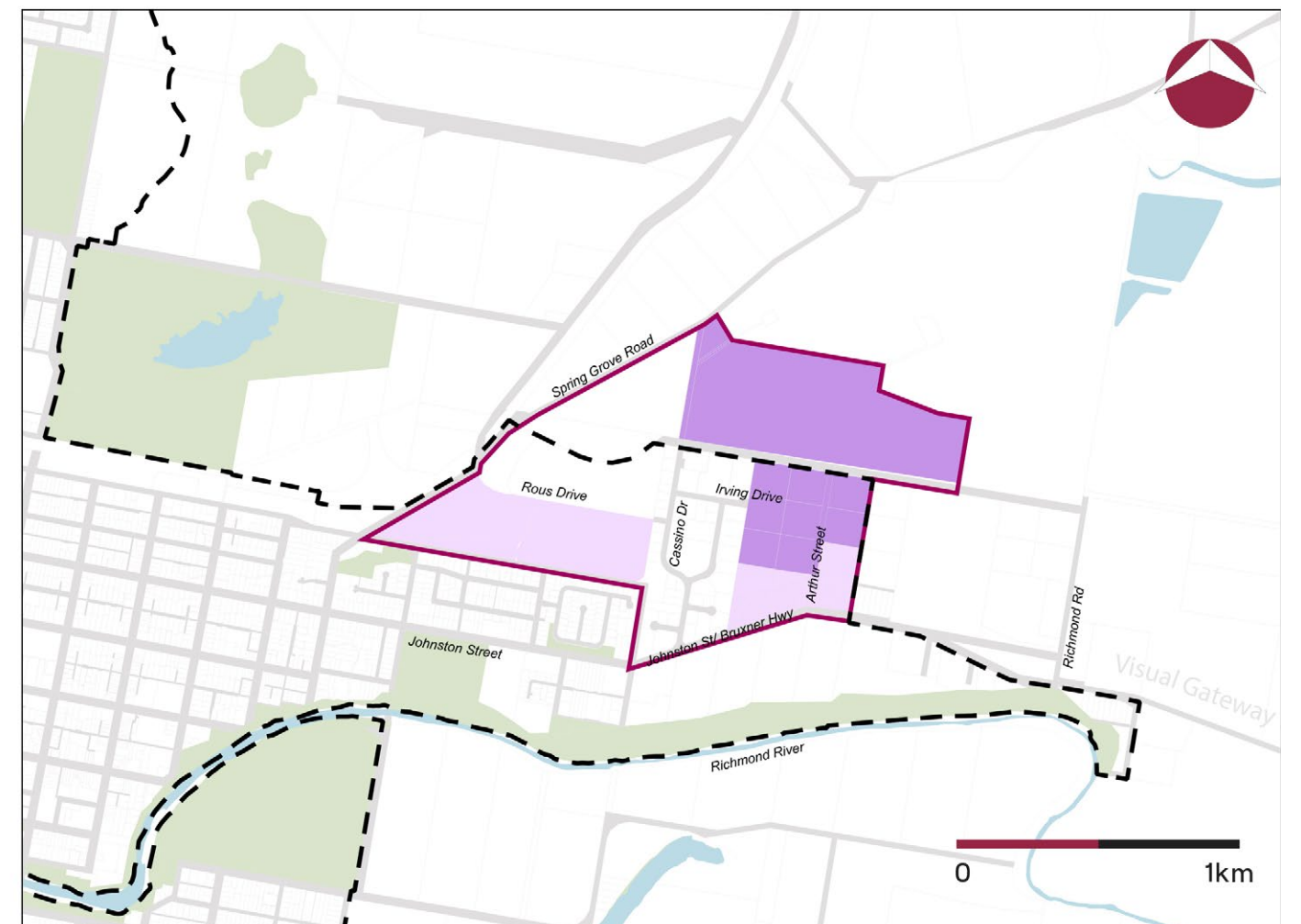
Actions		Approach
3_1.6	Rezone (Council owned) Lot 320 DP75727) to support a diverse range of General Industrial uses	<p>This site is recommended for rezoning to support a diverse range of General Industrial uses. This will enable a strategic high water using industry, to benefit from water recycling opportunities from the sewage treatment plant. To maintain future potential for an Intensive Agricultural Catalyst hub, ensure that 'Intensive Plant Agriculture' remains permissible on the site.</p> <p>Development of land in Development Area 3c (STP residue) will need to consider land fill limitations and overland flow paths to minimise flooding impacts on adjoining areas.</p> <p>Refer Figures 93-94.</p>
3_1.7	Rezone the south eastern portion of the Primex site (Lot 3 DP859772) to E3 Productivity Support	<p>Rezone the southern portion of the Primex site (Lot 3 DP859772) from E4 General Industrial zone to E3 Productivity Support. The intent is to facilitate diversity of business and industrial opportunities in relation to the wider RJP and support lower impacting industries in proximity to residential areas. As the E3 Productivity Support zone does not presently exist in the Richmond Valley LGA, there will be a need to tailor the zone to align with local context.</p> <p>Development of land in Development Area 3a (Primex) will need to consider land fill limitations and overland flow paths to minimise flooding impacts on adjoining areas.</p> <p>Consideration will need to be given to buffers to the Sewage Treatment Plant.</p> <p>Development Area 3a (Primex) may provide relocation opportunities for industrial and urban services land uses on the periphery of the Casino town centre should this be considered desirable by existing operators and landowners.</p> <p>Refer Figures 93-94.</p>
3_1.8	Seek an extension to the Urban Growth Area boundary into Lot 320	<p>Upon rezoning of the site to support General Industrial uses, seek an extension the Urban Growth Area boundary into Lot to enable development of industry or high water using industry that can benefit from water recycling opportunities adjacent to the sewage treatment plant. This is on the basis that it meets the criteria set out in the NCRP 2041, and is a justifiable variation to regionally significant farmland.</p>

Actions	Approach
3_1.10 Minimise potential for land use conflict	<p>Establish a planning mechanism under the RVLEP to establish a transition area for land surrounding the RJP requiring consideration of the impact of proposed sensitive receptors on operations within the RJP industrial area to minimise land use conflict within the identified modelled receptor boundary.</p> <p>Establish Development Control Plan provisions related to the requirements of DCP Part I-11 Land Use Conflict Risk Assessment to manage potential land use conflict. Particular consideration will need to be given to minimising:</p> <ul style="list-style-type: none"> • risk associated with a potential future biogas facility within the sewage treatment plant site; • impacts of future businesses and industrial development on existing residential areas south of the Primex site as well as other nearby sensitive receivers on RU1 Primary Production land (including land south of Bruxner Highway); and • avoiding sensitive, incompatible and inappropriate development forms within identified STP buffers. <p>Strengthen provisions under DCP Part I-11 Land Use Conflict Risk Assessment to require risk assessment for land in identified buffer areas to address risk associated with biogas production regardless of whether it is existing or not.</p> <p>Establish DCP controls applicable to land within identified buffer areas to encourage the development of low density users (e.g. warehouse with openings limited to emergency exits and no windows facing the sewage treatment plant).</p> <p>Retain the existing RU1 Primary Production zoning within the Modelled Receptor Boundary identified in Figure 84 and insert a provision under the RVLEP 2012 to limit new dwellings within that boundary and to require consideration of potential land use conflict, including satisfactory mitigation of potential impacts from existing surrounding agricultural land use.</p> <p>Establish a clause under the RVLEP 2012 to highlight amenity considerations and provide a specific policy to require future uses in the south west of Cassino Drive within the existing industrial estate are limited to daytime operations only. This clause should also apply to the proposed E3 Productivity Support zoned land between the proposed Rouse Drive Extension and the existing residential areas to the south.</p> <p>Continue to implement the requirements of DCP Part I-11 Land Use Conflict Risk Assessment to manage potential land use conflict. Particular consideration will need to be given to minimising:</p> <ul style="list-style-type: none"> • impacts of future development on nearby residential areas and other sensitive receivers. • impacts of future development on the Food Co-op to ensure that new land use sensitivities do not inhibit the ability of the Food Co-op to maintain ongoing operations.



- | | |
|---|---|
|  Parklands/ Green Space |  General Industrial |
|  Waterways |  E3 Productivity Support |
|  Richmond Valley Regional Job Precinct |  RU1 Primary Production |
|  NCRP Urban Growth Boundary | |

Figure 92. Area 3 - STP and Johnston Street - Future Land Use Zoning



- | | |
|---|---|
|  Parklands/ Green Space | Sites to be rezoned |
|  Waterways |  General Industrial |
|  Richmond Valley Regional Job Precinct |  E3 Productivity Support |
|  NCRP Urban Growth Boundary | |

Figure 93. Area 3 - STP and Johnston Street - Land Use Zoning Amendments to the RVLEP 2012

Actions		Approach
3_2.0 Movement and Transport		
3_2.1	Build upon the existing road network to facilitate efficient movement and integrate Area 3	<p>To facilitate access to new development areas and underutilised land, existing road connections and unmade roads will be utilised where feasible. This will include:</p> <ul style="list-style-type: none"> • connecting with existing spur roads from the industrial area (i.e. Cassino Drive to the north, Rous Drive to the west, and Irving Drive to the east); • the use of the existing Arthur Street reserve to provide an additional access point into the proposed eastern industrial expansion area; and • providing access to Development Area 3c (STP residue) initially via Cassino Drive and in future potentially also via Arthur Street.
		Access to consider flooding impacts and drainage requirements
3_2.2	Align access to land south of Johnston Street with Cassino Drive and Arthur Street intersections	<p>Subject to confirmation of the future use of land south of Johnston Street, should vehicle access be required to service new uses, access will be aligned with the existing intersections at Cassino Drive and Arthur Street. Preliminary investigations confirm that this arrangement achieves the required minimum distance between intersections as per Austroads Guidelines. Intersection type will be subject to traffic modelling and may require a roundabout. Any intersection upgrade would require concurrence from TfNSW.</p>
		Access to consider flooding impacts and drainage requirements
3_2.3	Monitor capacity of intersections and facilitate upgrades as required	<p>As new development occurs, Council will undertake ongoing monitoring of key intersections and undertake any necessary modifications and upgrades as required, in consultation with Transport for NSW. This may include:</p> <p><i>To 2031:</i></p> <ul style="list-style-type: none"> • upgrading the intersection of Bruxner Highway/East Street be upgraded to a single lane roundabout. • upgrading the intersection of Bruxner Highway/Arthur Street to a priority controlled T-junction to support access/egress to and from the Johnston Street and STP industrial areas. <p><i>to 2041:</i></p> <ul style="list-style-type: none"> • upgrading the intersection of Bruxner Highway/Arthur Street to a roundabout to support access/egress to and from the Johnston Street and STP industrial areas. • removing right turn movements from Cassino Drive onto Bruxner Highway. <p>There may be a need to reduce the speed limit on Bruxner Highway in proximity to Johnson Street Industrial Area and Surrounds precinct from 100 km/h to 80 km/h or 60 km/h.</p>
3_2.4	Provide access to Lot 320 via Cassino Drive	<p>Development Area 3c (STP residue) should gain initial access from Cassino Drive via unmade road reserves. This will require consideration for impacts on the Cassino Drive/ Johnston Street intersection.</p> <p>Access to consider flooding impacts and drainage requirements</p>
3_2.5	Establish new connections onto Spring Grove Road	<p>Extend Rous Drive westward to Spring Grove Road in conjunction with establishment of E3 Enterprise Zone on the Primex site. In conjunction with establishment of E3 Enterprise Zone on the Primex site, extending Rous Drive as a secondary east/west connection between the existing Cassino Industrial Estate and Spring Grove Road will support efficient access and movement in Area 3 as well as better integration with the existing nearby Dyrabba industrial area and the wider RJP. While the intent is to provide access to the precinct via Dyrabba Street, careful consideration will be required and potentially discouraging access via East Street for heavy vehicle access to minimise impacts on residential uses.</p> <p>There is an opportunity for a second connection from Lot 320 connecting onto Spring Grove Road to the north of the sewage treatment plant.</p> <p>Access to consider flooding impacts and drainage requirements</p>

Actions		Approach
3_3.0	Visual Quality, Character and Place	
3_3.1	Establish DCP guidance to ensure the visual quality of buildings and landscape in the RJP	<p>Establish new guiding mechanisms under the DCP to facilitate development of new industries in a manner that protects, complements and enhances the visual and scenic qualities of Area 3. This will need to occur in the short term to ensure adequate guidance for development outcomes in conjunction with any amendment to LEP planning controls under the RVLEP 2012 as proposed in this Structure Plan. Key guiding principles include:</p> <ul style="list-style-type: none"> • Ensuring a high built form and landscape quality to support positive perceptions of the visual appearance of the RJP from the Northern Rivers Rail Trail for development along East Street and Spring Grove Road. • Establish landscape buffers as recommended within the Structure Plan to manage visual impacts on visually and heritage sensitive areas and gateways. This will provide dense vegetation and tree planting adjacent to all visually sensitive boundaries and roads including Bruxner Highway and Spring Grove Road as well as boundaries to the RJP visible from public space. This is to comprise a minimum total landscape strip of 10m. A wider landscape strip of 20m is to be provided along the Bruxner Highway consistent with the existing Cassino Drive industrial area. • Providing generous and dense landscaping including tall trees between new developments and public space to soften the visual appearance industrial activity as viewed from public space. • Ensuring a high visual and landscape quality for development that is visible from Johnston Street and Spring Grove Road so as to protect the visual quality of these key gateways. • Providing high built form and landscape quality along the eastern boundary of the industrial expansion area in Area 3 (Arthur Street) so as to maintain positive perceptions of the highly visible Bruxner Highway gateway. <p>As new development occurs consideration should be given to embellishing landscaping features for visual amenity with additions such as post and rail fence top respond to the rural context. At key gateways opportunities for co-ordinated signage / branding and possible key entry features such as public art should be considered.</p>
3_4.0	Infrastructure	
3_1.10	Upgrade or replace the existing Sewage Treatment Plant and future-proof the potential for incorporating biogas production	<p>Facilitate short term upgrades to, or replacement of, the existing sewage treatment plant to ensure that the existing and future needs of the town site can be adequately met. If replacement of the existing STP is favoured by Council, a new site is to be identified, potentially the eastern portion of Development Area 3c (STP residue).</p> <p>Future-proof the potential for incorporating biogas production into a future upgraded plant (see Item 3_4.1 below).</p>
3_4.1	Monitor capacity and upgrade infrastructure as required to support growth	<p>Undertake ongoing monitoring of infrastructure capacity and undertake upgrades as necessary. The strategy for likely infrastructure upgrades to support growth in Area 3 as identified by the Utilities Infrastructure Report (GHD 2024) are outlined in Section 7 of the Utilities Infrastructure Report (GHD 2024) and Section 7 of the Traffic and Transport Report (GHD 2024).</p> <p>Refer also to Section 10 of this Structure Plan for infrastructure prioritisation and sequencing.</p>
3_5.2	Updates to contributions planning to support funding and delivery of identified infrastructure and transport upgrades	<p>To support growth in the precinct, undertake updates to contributions planning under section 7.11 and 7.12 of the <i>Environmental Planning and Assessment Act 1979</i> to coordinate contributions related to new development in the funding and provision of identified infrastructure upgrades. Council may also consider entering into planning agreements to deliver necessary infrastructure upgrades where appropriate. Recommended inclusions are outlined in Section 9 of the Utilities Infrastructure Report (GHD 2024) and Section 9 of the Traffic and Transport Report (GHD 2024).</p>

10. STAGING, INTERDEPENDENCIES AND INFRASTRUCTURE PRIORITIES

The following provides a high level overview of staging and interdependencies across the Richmond Valley Regional Job Precinct. As delivery of intended outcomes across the Regional Job Precinct will largely be market driven, it is not possible to definitively predict the order in which development and investment will occur. However there are certain interdependencies that will impact delivery of future development and infrastructure upgrades requiring consideration for funding and efficiencies.

With respect to the proposed recommendations, the indicative time frames are as follows:

- Priority 1:** 0 – 5 years (2021 to 2026)
- Priority 2:** 5 – 10 years (2026 – 2031)
- Priority 3:** 10 - 20 years plus (2031 – 2041+)

The Utilities Infrastructure Analysis Report (GHD 2024) and Traffic and Transport Analysis Report (GHD 2024) provide additional context, mapping and background information in relation to these recommendations.

10.1 Area 1 – Nammoona Industrial Precinct

As new development occurs in Nammoona and in the South Fairy Hill Residential Investigation Area, ongoing monitoring of infrastructure capacity will need to be undertaken identify, prioritise and deliver infrastructure upgrades as necessary. Looking ahead to 2041, the North West Priority Growth Corridor will accommodate will be the primary location for population and employment growth. A coordinated approach to the planning and delivery of infrastructure in Nammoona and South Fairy Hill is essential for the efficient delivery of necessary infrastructure upgrades.

10.1.1. Planning/ Development Sequencing

Infrastructure servicing in Nammoona is currently fed from the southern extents of Area 1. A logical approach for the staging and for delivery of infrastructure upgrades and future development would be to commence from the existing Stage 1 subdivision in the south (illustrated as C1 in Figure 95) and progress northwards. Noting there is an approved rail freight terminal, there may be good reason and impetus to prioritise early development to occur in the northern extents of Area 1, it is likely that development outcomes may require consideration for out-of-sequence proposals in the north of Nammoona.

The efficiencies of infrastructure delivery should not be seen as a reason to place limitations on out-of-sequence development. However, there will need to be broader consideration for funding implications to facilitate equitable sharing of infrastructure costs. Updates to contributions planning under the section 7.11 and 7.12 of the *Environmental Planning and Assessment Act 1979* will assist in achieving this.

Table 5 provides a summary of the recommended utilities and infrastructure to service Nammoona. It outlines expected key infrastructure priorities, triggers and staging considerations.

A snapshot of key interdependencies for Nammoona is provided in the green box.

Sewage Treatment Plant

- **(Ongoing)** Monitor growth and priority time frames for STP upgrade/ replacement to ensure adequate capacity to accommodate growth.

A1-3: Southern Industrial Lands

- **(Short Term - Medium Term)** The approved subdivision in the south of Nammoona should be the priority focus for new development in Nammoona close to existing servicing.
- **(Short Term)** Marketing of Stage 1 (A1) lots has commenced. Release of lots expected to occur in the immediate term providing new industrial opportunities.
- **(Market/ Landowner Dependent)** Stage 2 (A2) dependent on market demand and uptake of Stage 1.

(Market/ Landowner Dependent) Stage 3 (A3) also dependent on landowner commitment and market

B: Existing Operations

- **(Market/ Landowner Dependent)** Land suitably zoned for incremental intensification of uses. Any change is dependent on the needs of existing operations and landowner needs.
- **(Short Term)** A new landfill cell to be constructed in 3 stages over several years with first stage expected to be operational in 2023.
- **(Ongoing)** All development will require to consideration for future proofing internal north south links and incorporation of landscape buffers.

C: Freight Rail Terminal

- **(Market/ Landowner Dependent)** Development of freight rail terminal dependent on landowner commitment and operational feasibility.
- **(Short Term)** Expansion of the Urban Growth Area boundary and rezoning of developable land to enable diverse rail dependent industrial uses to support rail freight feasibility.
- **(Medium Term/ Landowner Dependent)** Alternative road layout to be investigated by landowner (if necessary) to support stand alone industrial uses if the terminal is not developed.

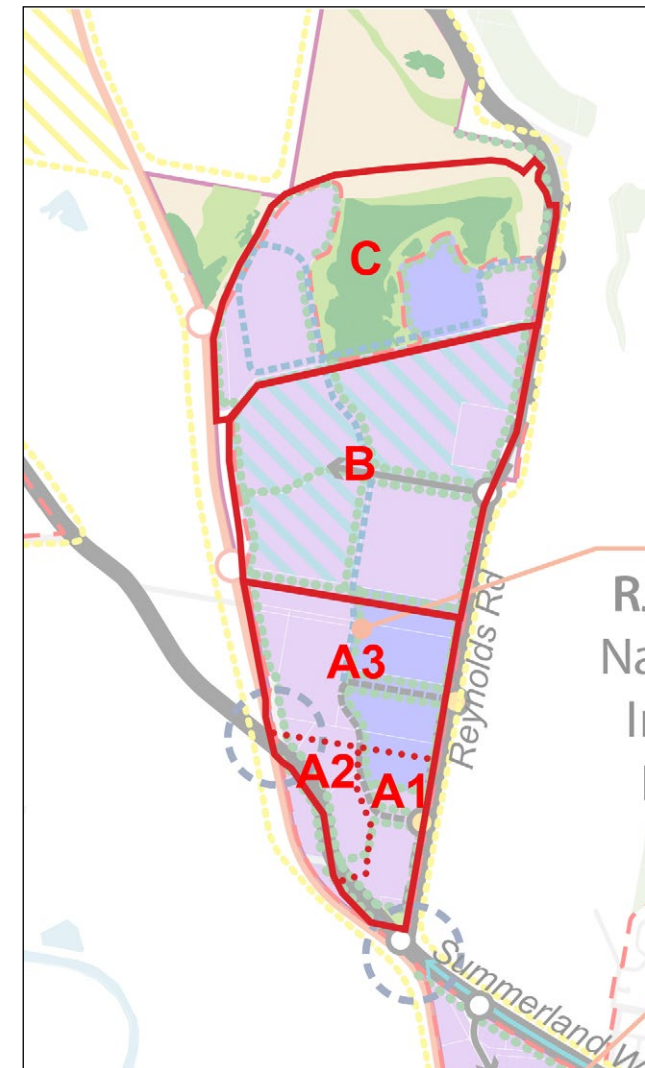


Figure 94. Area 1 Nammoona Industrial Precinct - Staging and interdependencies

Table 6. Nammoona – Priorities, triggers and staging guidance for identified upgrades

Item	Identified Future Upgrades	Priority	Trigger	Staging
Water Supply				
1_WS-1	A high-level storage tank/reservoir in the Casino Food Co-op complex area will supply sufficient pressures to the Nammoona area.	1-2	Triggered by development of Fairy Hill urban release area and by high water demand development types in Area 1 e.g. industry catalyst site	Fairy Hill urban release area (priority 1-2) planning is estimated to commence 2023 to 2026. Service Fairy Hill in conjunction with staged works to Area 1 is estimated to occur from 2026 to 2031. Water mains extended to site from the South along Summerland Way and North Coast Railway line from 2023 to 2026. On site storage tanks required to supplement demands during fireflow requirements estimated to commence 2026. High-level storage reservoir at Area 2 required by 2026 to give pressure to Area 1.
1_WS-2	Extension of the existing DN150 Reynolds Road main to supply industry in the north and extension of mains along Summerland Way to supply water to the southern industries.	1-2		
1_WS-3	On site storage tanks required to supplement demands during fireflow requirements.	1-2		
Waste Water				
1_WW-1	A new SPS in the north and rising main in combination with the RVC Reynolds Road SPS (currently under construction and scheduled to be commissioned in 2023) are to service the Nammoona development.	1-2	Triggered by development of Fairy Hill urban release area and in conjunction with wastewater loads in Area 1. Complete construction of SPS601a and sewer rising main to service area 1 and Fairy Hill.	Fairy Hill urban release area (priority 1-2) planning is estimated to commence 2023 to 2026. Service Fairy Hill in conjunction with staged works to Area 1 is estimated to occur from 2026 to 2031. New SPS and rising main located in residential / industrial area to service Area 1 to be commission 2023. Direct connection to industry catalyst site should be considered.
1_WW-2	The combining of the Nammoona development and north of Queensland Road wastewater catchments to be directly connected to the STP via a new SPS and rising main along Queensland and Naughtons Gap Roads.	1-2		
1_WW-3	Richmond Valley Council's trade waste policy should be applied to new or modified trade waste generators. Section 6.3 of the Policy includes identification of key quality issues.	1-2		

Item	Identified Future Upgrades	Priority	Trigger	Staging
Trade Waste				
1_TW-1	Richmond Valley Council's trade waste policy should be applied to new or modified trade waste generators. Section 6.3 of the Policy includes identification of key quality issues.	2	Development of trade waste triggered by expansion of industrial uses in Area 1.	Dependent on new proposals.
1_TW-1	Consider revising the trade waste policy to incorporate recent changes to the NSW Model Policy for Discharge of Liquid Trade Waste to the Sewerage System.	2		
Storm Water				
1_SW-1	Conversion of existing ponds/basins to detention/filtering structures can be explored to generally drain to north.	1-2	A small proportion of the southern region of the site falls under the drinking water catchment area. Detention/ filtering structures and stormwater harvesting triggered by development type and the demand for reuse e.g. industry catalyst site.	Works are expected to be ongoing following on from the residential / industrial subdivision from 2023 to 2031. The infrastructure required is dependent on development type. Investigate converting existing ponds/basins to detention/ filtering structures (drains north).
1_SW-2	Stormwater harvesting and treatment measures should be incorporated into the precinct planning utilising the existing basins to the north to capture runoff from the developments for reuse. These include passive irrigation of street trees to improve urban heat impacts and incorporation of permeable landscape features to reduce runoff volumes and promote infiltration.	1-2		
Waste management and recycling				
1_WM-1	Waste management and recycling – Further investigation of the landfill cell geometry and surrounding geology could be undertaken to better characterise the risk of landfill gas migration for nearby developments.	3		A new landfill cell is to be constructed in 3 stages (A, B and C) over several years with Stage A expected to reach capacity in 2023. A new leachate pond and stormwater sedimentation pond as well as the first stage of capping of the existing landfill cells will also be constructed. Investigation of the landfill cell geometry and surrounding geology could be undertaken to better characterise the risk of landfill gas migration for nearby developments. The landfill is expected close around 2037.

Item	Identified Future Upgrades	Priority	Trigger	Staging
Electricity				
1_E-1	Consider providing spatial allocations for a future zone substation (ZSS) within the development area (nominally 100 m x 100 m). It is understood there may be an Essential Energy owned site at the north-western corner of Area 2 which may be appropriate for this.	2	Moderate development of area / increase in electrical load (2-3 years lead time for infrastructure)	Additional 11kV feeder(s) required from existing Casino ZSS. Consider constructing as 132kV or 66kV (depending on future sub-transmission strategy) but energise at 11kV for the initial stages of development.
1_E-2	Consider providing transmission corridors from existing 132kV lines on the southern side of Casino to the future ZSS site.	2	Heavy industrial/intensive power loads or generator (2-3 years lead time for infrastructure)	Future ZSS likely required to service Area 1 / Area 2 and Fairy Hill. Consider ~100m x 100m area for future ZSS in north-west Casino in south of Area 1 or north-west of Area 2.
1_E-3	Engage with Essential Energy to assess the feasibility of upgrading the existing Casino ZSS to defer costs associated with developing a new ZSS site.	2		
1_E-4	Assuming existing Casino ZSS can be upgraded, consider building new 11kV feeders such that they can be readily energised at 132kV in the future i.e. build a 132kV line, but energise at 11kV initially.	2		
Telecommunications				
1_T-1	There are opportunities to expand the existing NBN Co in ground fibre networks to provide high speed, reliable internet and telecommunications. Further liaison with NBN Co is required once the proposed land uses and end user requirements are understood.	1-2	Triggered in conjunction with utilities and infrastructure development	Planning is estimated to commence 2023 to 2026. Liaison with NBN Co is required once land uses and end user requirements are understood. Works are estimated to be undertaken in conjunction with staged works to Area 1 from 2026 to 2031. Share easements and service corridors with other utilities and infrastructure where possible.

10.2 Area 2 – Casino Food Co-op and Surrounds Precinct

As new development occurs in Area 2 - Food Co-op, ongoing monitoring of infrastructure capacity will need to be undertaken identify, prioritise and deliver infrastructure upgrades as necessary.

A snapshot of key interdependencies for the Food Co-op is provided in the green box below.

10.2.1. Planning/ Development Sequencing

Area 2 - Food Co-op has access to existing servicing infrastructure. Future development in the precinct will largely be driven by the Food Coop itself. Development

of opportunity sites will be dependent on the needs and priorities of the Department of Education and Essential Energy. Any need for infrastructure upgrades will need to be addressed as growth occurs.

There will need to be broader consideration for funding implications to facilitate equitable sharing of infrastructure costs. Updates to contributions planning under the section 7.11 and 7.12 of the *Environmental Planning and Assessment Act 1979* will assist in achieving this.

Table 6 provides a summary of the recommended utilities and infrastructure to service Area 2 - Food Co-op. It outlines expected key infrastructure priorities, triggers and staging considerations.

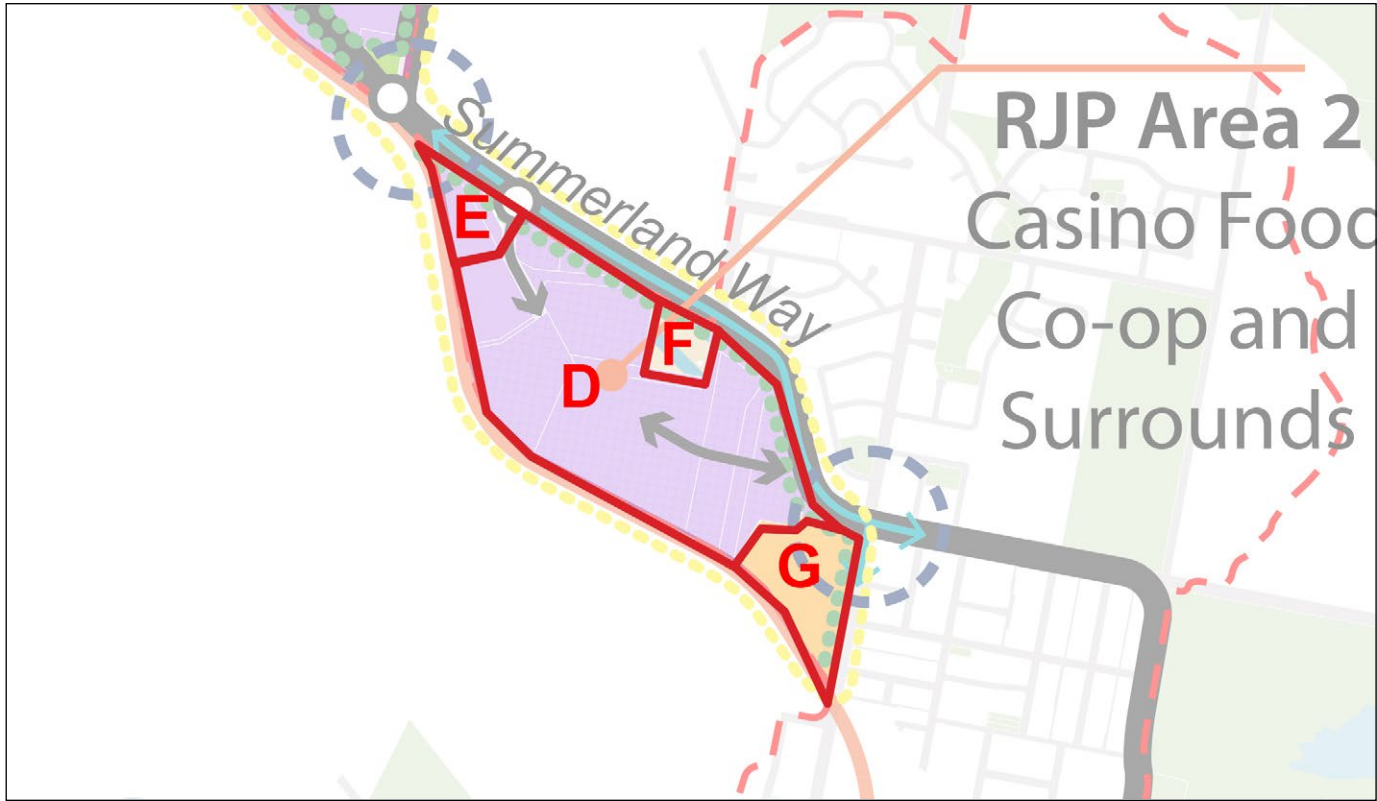


Figure 95. Area 2 – Casino Food Co-op and Surrounds Precinct – Staging and interdependencies

Sewage Treatment Plant

- **(Ongoing)** Monitor growth and priority time frames for STP upgrade/ replacement to ensure adequate capacity to accommodate growth.

D: Casino Food Co-op

- **(Market/ Landowner Dependent)** Land is suitably zoned. Diversification and growth of existing uses is dependent on the needs of existing operations and landowner commitment

E: Opportunity site – Essential Energy

- **(Market/ Landowner Dependent)** Change is dependent on demand and land use suitability of proposals as yet unknown. The site may be required for upgrades of electricity infrastructure to accommodate new development in the North West Priority Growth Corridor.

F: Water Infrastructure

- **(Council operations)** Site contains water infrastructure - no opportunity for change of use.

G: Opportunity site: NSW Department of Education

- **(Market/ Landowner Dependent)** Future land use is subject to the needs of NSW Department of Education. Any future alternative land use is dependent on relocation of existing curriculum related activities to an alternative site.

Table 7. Food Coop – Priorities, triggers and staging guidance for identified upgrades

Item	Identified Future Upgrades	Priority	Trigger	Staging
Water Supply				
2_WS-1	A 20 m high-level storage reservoir and dedicated booster pump station (BPS) located adjacent to the existing northern reservoirs will supply sufficient pressures to the minimal new developments in the Co-op area development on elevation 45 m or greater. Developments within this area to additionally have onsite storage to supplement demands during fireflow requirements. The storage capacity of the high-level reservoir and booster pump size is dependent on the demand scenario adopted. RVC have adopted demand scenario 2 which was recommended in the Hydrogeology, Quality and Demand Analysis Report. The tank is only recommended to be incorporated for scenarios 2 and 3 with sufficient storage for half the peak day flow values. The booster pump is recommended for all scenarios, largest size of the pump being approx. 5kW.	1-2	Area 1 pressure and flow requirements Area 2 fireflow requirements	High-level storage reservoir at Area 2 required first to give pressure to Area 1. Additional 5kW BPS required to service Area 2
2_WS-2	Industries developed on elevation less than 45 m to connect to low-level tanks/reservoirs via new mains hot-tapped into the existing DN600 trunk main.	1-2		
Waste Water				
2_WW-1	Due to the high elevation of the Co-op area and reduction of SPS601 catchment area, a new gravity main connection to the SPS601 via extending from the network East of Hotham Street currently within the Co-op development area.	2	DN150 receiving main is close to capacity and will require upgrading with any new proposals for the Co-op complex.	Extension of the gravity main from the east required to service Area 2 estimated to commence 2026 to 2031, dependent on expansion of Co-op complex.
Trade Waste				
2_TW-1	Richmond Valley Council's trade waste policy should be applied to new or modified trade waste generators. Section 6.3 of the Policy includes identification of key quality issues.	2	Development of trade waste triggered by expansion of co-op complex and development type e.g. EfW/AWTS facility, industry catalyst site, logistics services suppliers, engineering services businesses, packaging manufacturers, food processing businesses, medical grade agricultural product processors.	Dependent on new proposals for the Co-op complex.
2_TW-1	Consider revising the trade waste policy to incorporate recent changes to the NSW Model Policy for Discharge of Liquid Trade Waste to the Sewerage System.	2		

Item	Identified Future Upgrades	Priority	Trigger	Staging
Storm Water				
2_SW-1	The existing stormwater conveyance and treatment systems will require upgrading to accommodate development of the precincts.	2	Detention/filtering structures and stormwater harvesting triggered by development type and the demand for reuse e.g. industry catalyst site	Dependent on new proposals for the Co-op complex. Stormwater harvesting, treatment measures and irrigation in precinct should be incorporated with development type.
Electricity				
2_E-1	Align Nammoona servicing strategy with this area. i.e. if new ZSS is provided, supply to this will come from the new ZSS, otherwise, provide new 11kV feeders from Casino ZSS, and upgrade Casino ZSS accordingly.	3	Moderate development of area / increase in electrical load (2-3 years lead time for infrastructure) Heavy industrial/intensive power loads or generator (2-3 years lead time for infrastructure)	Additional 11kV feeder(s) required from existing Casino ZSS. Consider constructing as 132kV or 66kV (depending on future sub-transmission strategy) but energise at 11kV for the initial stages of development. Existing EE possible available land near Co-op. Future ZSS likely required to service Area 1 / Area 2 and Fairy Hill. Consider ~100m x 100m area for future ZSS in north-west Casino in south of Area 1 or north-west of Area 2. Existing Essential Energy possible available land near Co-op.
Telecommunications				
T-1	Telecommunications and internet – There are opportunities to expand the existing NBN Co in ground fibre networks to provide high speed, reliable internet and telecommunications. Further liaison with NBN Co is required once the proposed land uses and end user requirements are understood.	2	Triggered in conjunction with utilities and infrastructure development	Dependent on new proposals for the co-op complex. Liaison with NBN Co is required once end user requirements are understood. Share easements and service corridors with other utilities and infrastructure where possible.
Roads and Transport				
2_RT-1	Remove the chevrons on Summerland Way in proximity to Hillcrest Lane.	3		Expected to be required by 2041.

10.3 Area 3 – Johnston Street Industrial Area, STP and Surrounds

As new development occurs in Area 3 ongoing monitoring of infrastructure capacity will need to be undertaken identify, prioritise and deliver infrastructure upgrades as necessary.

A snapshot of key interdependencies is provided in the green box below.

10.3.1. Planning/ Development Sequencing

The key priority for Area 3 is the upgrade of the sewage treatment plant, as this has whole of town implications in relation to potential growth. Considering the expansion and diversification of employment uses in Area 3, landowner motivation for industrial expansion east of the existing Cassino Drive industrial area suggests that this will likely be opportunity for initial commencement. However, other opportunities may also present for strategic land parcels including the Primex site and lot 320.

While infrastructure upgrades such as additional access to the Bruxner Highway and Spring Grove Road are recommended, there are interim opportunities to provide access to identified growth areas via spur roads within the existing Cassino Drive Industrial Area to service growth areas on the Primex site (Rous Drive) and the eastern extension Area (via Irving Drive).

Upgrade existing sewage treatment plant is recommended prior to commencement of any high water using industry.

Table 7 provides a summary of the recommended utilities and infrastructure to service Area 3. It outlines expected key infrastructure priorities, triggers and staging considerations.

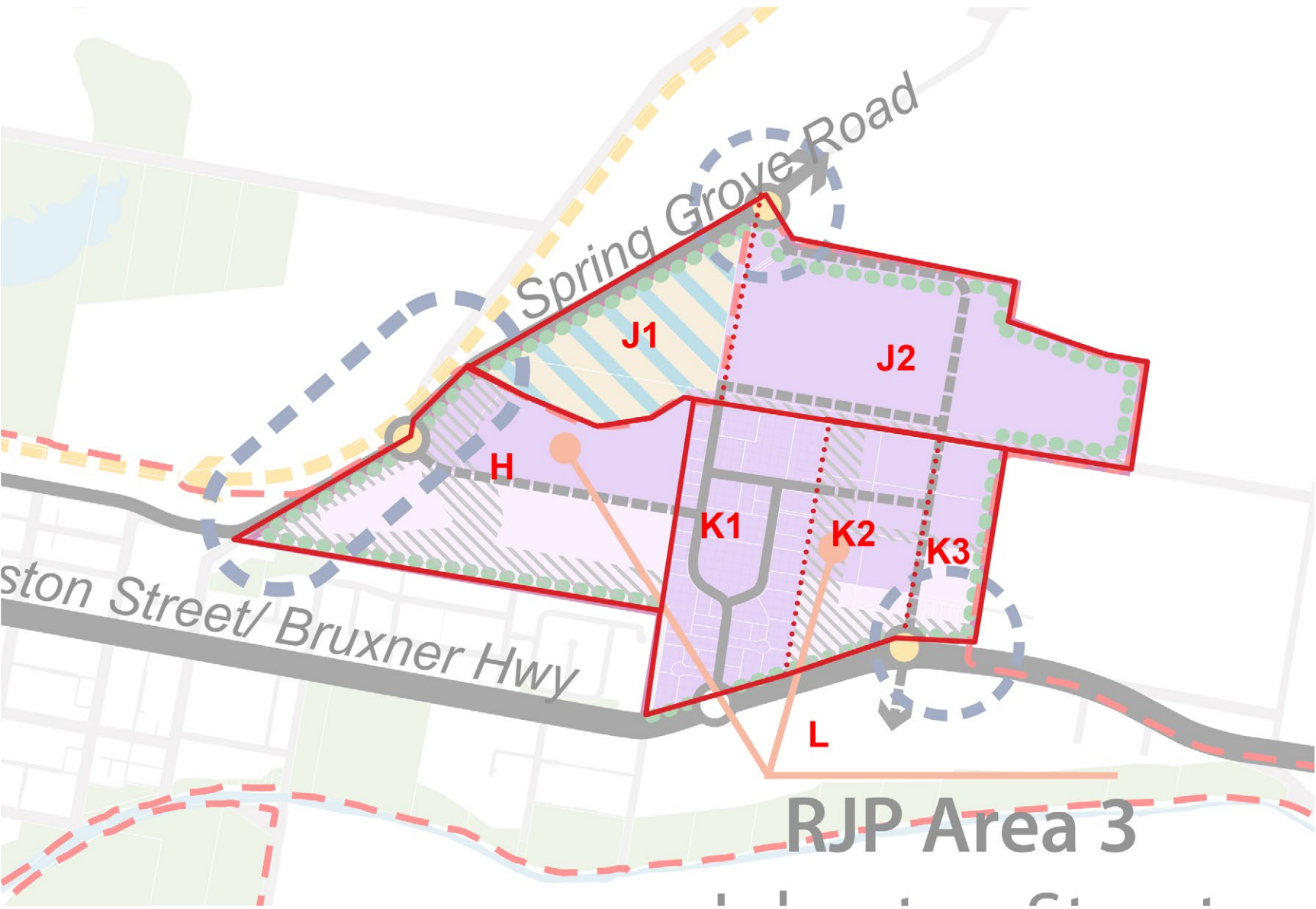


Figure 96. Area 3 – Johnston Street Industrial Area and Surrounds – Staging and interdependencies

H: Development Area 3a (Primex)

- **(Market/ Landowner/ Infrastructure Dependent)** Land is currently zoned for industrial uses. Future land use is subject to landowner commitment. Primex site unlikely to be suitable as a Stage 1 area due to requirement for major drainage channel to limit any flood impacts on existing urban areas in Casino.
- **(Short Term)** Rezone south eastern portion site to E3 Productivity Support to enhance diversity and enable lower impacts businesses to be developed in proximity to residential areas.

J1: Sewage Treatment Plant

- **(Key Priority)** Commence planning for upgrade of existing sewage treatment plant within the existing boundary or adjacent to the current facility.
- **(Ongoing)** Monitor growth and priority time frames for STP upgrade/ replacement to ensure adequate capacity to accommodate growth.
- **(Short Term)** Augment development controls to manage risk associated with the potential biogas production and future proof the development of a biogas facility.

J2: Development Area 3c (STP residue)

- **(Market/ Landowner Dependent)** Support investment attraction of strategic high water using industries. Upgrade existing sewage treatment plant is recommended prior to commencement of any high water using industry.
- Development of the northern Stage 1 fill area can occur up to 19,000 sqm GFA, with access via Cassino Drive. Once 19,000 sqm GFA is exceeded, a new roundabout at Arthur Street is required.
- Fill levels for the roads will be a key consideration and it will be necessary to model the effects on local flood levels.
- If it is feasible to construct road, water and sewerage infrastructure for the southern Stage 1 fill areas, full development of the northern Stage 1 fill area would be possible (i.e 19,000 sqm GFA +).
- There is a need for major drainage channel to be constructed ahead of Stage 2 development.

K1 Existing Cassino Drive Industrial Estate

- **(Short Term)** Minor infill opportunities on vacant land in K1.

K2-3: Development Area 3b (Arthur Street)

- **(Market/ Landowner Dependent)** Subject to timing of subdivision planning and delivery, facilitate upgrade to Arthur Street, including a potential roundabout to service the expansion area (Refer infrastructure priorities).
- Subject to timing of the major drainage channel, a new intersection at Arthur Street could be constructed to provide road access to the southern Stage 1 fill areas. If this occurs, the intersection should be constructed as a roundabout.
- Fill levels for the roads will be a key consideration and it will be necessary to model the effects on local flood levels.
- The design investigations may demonstrate that it is possible to construct the Arthur Street road connection from the Bruxner Highway to Development Area 3b (Arthur Street).
- Fill levels for the roads will be a key consideration and it will be necessary to model the effects on local flood levels.
- There is a need for major drainage channel to be constructed ahead of Stage 2 development.
- The delivery of sewerage infrastructure to the southern Stage 1 fill areas will require construction of a new Sewerage Pump Station and rising mains to the north via Arthur Street and Irving Drive, as shown in Figure 98. The feasibility of these mains will need to be considered in conjunction with the design of the Arthur Street and Irving Drive road connections.

L: South Bruxner

- **(Short Term)** Commence land use investigations to confirm preferred alternate land use to be implemented via separate planning proposal process. Planning (subject to confirmation of flood planning and mitigation measures)



Figure 97. Area 3 - Johnston Street Industrial Area and Surrounds - Sewerage with existing STP location

Table 8. STP And Johnston Street – Priorities, triggers and staging guidance for identified upgrades

Item	Identified Future Upgrades	Priority	Trigger	Staging
Water Supply				
3_WS-1	For the adopted demand Scenario 2: Approximately 1 km of DN200 rising lead-in water main attached to the closest existing DN200 main along Hickey Street.	1-2	Water infrastructure capacity approaching limit.	For demand scenario 2, areas closest to Hickey St to be developed first estimated to be from commencing 2026. Likely order being area south of STP, area East of STP and Johnston Street area.
Waste Water				
3_WW-1	SPS608 requires upgrading as it is currently under capacity and will need to take additional loadings from south of Area 3b potentially 3a.	1-2	SPS608 and SPS615 require upgrading as they are under capacity	Casino STP is at end of life and with the forecast RJP EPs, requires upgrading/ replacement commencing 2026. SPS608 requires upgrading to receive increased loadings from Area 3. Portion of RJP subject to Flood Study outcomes. South Bruxner land excluded from RJP with Council to investigate potential of site for residential. Timing of upgrades to sewerage reticulation and SPS's dependent on industrial expansion in Area 3.
3_WW-2	The southern portion of Area 3b and 3a may connect to the existing system, either via the existing Johnston St estate sewer branch or potentially to the Food Processing Industry branches similarly to the northern areas of Area 3a and 3b.	1-2		
Trade Waste				
3_TW-1	Richmond Valley Council's trade waste policy should be applied to new or modified trade waste generators. Section 6.3 of the Policy includes identification of key quality issues.	1	New trade waste generators in Area 3.	
3_TW-2	Consider revising the trade waste policy to incorporate recent changes to the NSW Model Policy for Discharge of Liquid Trade Waste to the Sewerage System.	1		
3_TW-3	The new STP should include a tankered waste receival facility to facilitate the disposal of septage and other liquid wastes from sources not permanently connected to sewer.	1		
Storm Water				
3_SW-1	Stormwater solutions will be guided by the Richmond Valley Flood Study - refer to section 7.3.4 of the Utilities and Infrastructure Report (GHD 2024)			

Item	Identified Future Upgrades	Priority	Trigger	Staging
Electricity				
3_E-1	Align servicing strategy to Pharmaceutical Customer strategy i.e. if a new Essential Energy ZSS is proposed to transformer supply to 11kV and for the customer to take supply at 11kV, utilise the ZSS to service the residual area. Otherwise, provide new 11kV feeders from either upgraded Casino ZSS or new Nammoona area ZSS.	1-3	Development of the STP site, industry catalyst site and expansion of industrial area to increase in electrical load.	Servicing heavy loads will likely require new 11kV supplies from a ZSS, either the existing or a new one, which could be difficult given the urban areas to be negotiated. Noting commentary against Area 1, 2, it is likely preferable to target light industry with lower power demands in this area to minimise infrastructure augmentations.
Telecommunications				
3_T-1	There are opportunities to expand the existing NBN Co in ground fibre networks to provide high speed, reliable internet and telecommunications. Further liaison with NBN Co is required once the proposed land uses and end user requirements are understood.	1	Triggered in conjunction with utilities and infrastructure development.	Liaison with NBN Co is required once land uses and end user requirements are understood. W
Roads and Transport				
3_RT-1	Upgrade the intersection of Bruxner Highway/East Street to a single lane roundabout	2		Expected to be required by 2031.
3_RT-2	Upgrade the intersection of Bruxner Highway/Arthur Street to be a priority controlled T-junction to support access/egress to and from the Johnston Street and STP industrial areas.	2	Cassino Dve/Bruxner Hwy at capacity by 2031 if proposed stage 1 areas are developed. At this point, the right turn movements out of Cassino Dve will be closed and Arthur Street/Bruxner Hwy 'T' intersection will be needed for additional Stage 1 growth	Expected to be required by 2031.
3_RT-3	Undertake discussions with Transport for NSW to advocate for a reduced speed limit on Bruxner Highway in proximity to Area 3 from 100 km/h to 80 km/h or 60 km/h.	1-2		
3_RT-4	Upgrade the intersection of Bruxner Highway/Arthur Street to a roundabout to support access/egress to and from the Johnston Street and STP industrial areas	3		Expected to be required by 2041.
3_RT-5	Remove right turn movements from Cassino Drive onto Bruxner Highway	3		Expected to be required by 2041.



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