



RIVERSTONE TOWN CENTRE URBAN DESIGN ANALYSIS

FOR BLACKTOWN CITY COUNCIL

JUNE 2016

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CONTENTS

EXECUTIVE SUMMARY	4	4. GARFIELD ROAD OVERPASS	50
1. INTRODUCTION	6	5. OPPORTUNITIES AND CONSTRAINTS	55
1.1. BACKGROUND		5.1. OPPORTUNITIES	
1.2. PURPOSE OF THE REPORT		5.2. CONSTRAINTS	
2. THE CONTEXT	9	6. KEY URBAN DESIGN ISSUES	61
2.1. REGIONAL CONTEXT		7. PRECEDENT ANALYSIS	64
2.2. NORTH WEST GROWTH CENTRE		8. REFERENCES	69
2.3. TOWN CENTRE CONTEXT			
3. THE TOWN CENTRE	21		
3.1. STUDY AREA			
3.2. HISTORY			
3.3. LAND USE			
3.4. BUILT FORM			
3.5. LAND OWNERSHIP			
3.6. ACCESS AND TRANSPORT			
3.7. PARKING			
3.8. TOPOGRAPHY + VIEWS			
3.9. HYDROLOGY			
3.10. OPEN SPACE + LANDSCAPE			
3.11. HERITAGE			
3.12. ACTIVATION			

EXECUTIVE SUMMARY

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BACKGROUND

Blacktown City Council has engaged Elton Consulting to deliver a Master Plan for the Riverstone Town Centre. As part of this team, GroupGSA are tasked with producing the Master Plan and urban design strategies for the Town Centre.

STUDY AREA

Riverstone is located in the Blacktown Local Government Area (LGA) on the north western periphery of the Sydney Metropolitan region. The 49.8ha Study Area has been defined by Council and contains the existing core Town Centre functions located around the Riverstone Train Station and Garfield Road East.

Riverstone is an established community with the character of a country town, dating to the mid / late 19th century. The Town Centre analysis and consultation with Council, stakeholders and the community has revealed a struggling Town Centre in decline, exacerbated by uncertainty over the final form of a proposed overpass across the railway line.

NORTH WEST GROWTH CENTRE

The Riverstone Town Centre occupies a geographically central location within the NWGC. Significant new greenfield communities have been unfolding within and around the NWGC in recent years, accompanied by major road upgrades. These changes are beginning to transform the rural character of the region and its demographics.

The influx of new residents into precincts around the Town Centre will increase its potential catchment. At the same time, the existing Town Centre is under pressure from new, competing centres. Precinct planning for surrounding areas have assumed the creation of community services hub in Riverstone to meet wider community needs.

OPPORTUNITIES

- > **Strategically located Council landholdings:** Contiguous Council-owned blocks have the potential to transform the Town Centre.
- > **The Market Street spine:** A pedestrian-focused Market Street could integrate existing uses with new retail, commercial and community development.
- > **A combined retail / community hub:** The Town Centre can be a focus for community services provision in the NWGC. Clustering retail and community services could attract surrounding communities to the Town Centre.
- > **Proximity to Riverstone West, a potential employment centre.**
- > **Walkable Town Centre Core:** Relatively undeveloped areas are located within a 5 minute walk of the station.
- > **Differentiation from NWGC retail centres:** Riverstone can differentiate itself from competing centres by establishing a fine-grained, mixed use retail centre with inviting public spaces.
- > **Flexible open space:** Vacant lots under Council ownership provide flexible spaces available for events etc that can activate the Town Centre.
- > **Deep Town Centre lots:** The upper levels of mixed use development could be set back from the street to disguise the scale of development.
- > **Proximity to Riverstone Park, a future regional sports field.**
- > **Heritage:** Heritage items can help establish a sense of place that is grounded in the Town Centre's roots. Preservation of heritage can assuage local concerns about any potential loss of country town character.

- > **Connectivity to Future Cycle Routes:** Adjacent precinct planning identifies potential cycle routes to which new cycle routes within the Study Area could connect to.

CONSTRAINTS

- > **Garfield Road Overpass:** This will effectively end the viability of the road as a retail / commercial focus, and sever the northern and southern parts of the Town.
- > **The railway line:** This makes it difficult to integrate developments on either side of the line. The single track configuration constrains service frequencies.
- > **Future Garfield Road upgrade:** In the long term, Garfield Road will likely be upgraded to increase capacity. It will likely bring more traffic through the Study Area with attendant noise and pollution impacts, and potentially make it difficult to improve upon the current lack of pedestrian crossings across the road.
- > **Heritage buildings:** Listed heritage items should be retained as a constraint in any future Master Plan.
- > **Flood affected land:** The western part of the Town Centre is particularly affected by 1-in-100 year floods.
- > **Limited pedestrian permeability:** Large block dimensions in the east-west direction constrain north-south pedestrian movement, limiting walkability.
- > **Long term constraints:** Certain buildings are considered long term constraints based on their function, ownership and recent construction:
 - + Riverstone Schofields Memorial Club
 - + Police station: currently being re-developed.

KEY URBAN DESIGN ISSUES

- > **The lack of an identifiable heart.** There is no place that can act as a focus for the community, a space that goes beyond simply satisfying retail needs.
- > **Limited retail and entertainment offer.** Retail choice is diminishing, while remaining businesses are struggling. Increased retail and entertainment opportunities are required to transform the Town Centre into a more attractive place to live, shop and work, and extend activity into the night.
- > **No sense of arrival into Riverstone.** Due to the lack of Town Centre identity, tired building stock, and lack of gateway or landmark urban form. People arriving by train are confronted by the blank wall of Marketown.
- > **An established country town on the edge of a growing metropolitan area.** A careful balance will need to be struck between intensifying land use in the Town Centre to better utilise land and the desire to retain the country town character valued by the community.
- > **Getting the re-development of Marketown right.** Its planning and design should be considered holistically within the context of the Town Centre, and not just as a stand-alone building. It needs to be designed so that future development around it can respond in a way that nudges development towards a desired Town Centre outcome.
- > **Providing community and social services to the existing and future community.** The NWGC planning framework assumes that Riverstone Town Centre will accommodate a major community services hub.
- > **Managing competing demand for Town Centre space.** Co- location of retail, commercial and community uses in the Town Centre is desirable in order to establish a sustainable mix of uses and to differentiate the Riverstone Town Centre from competing centres. Given the finite availability of land, the spaces allocated for the various uses need to be viable, while providing sufficient public space.
- > **Managing future transitions in the Town Centre.** Chief among these is that forced upon the Town Centre by the overpass. In the short to medium term prior to the construction of the overpass, the viability of existing businesses along Garfield Road need to be maximised. In the long term, during and following the construction of the overpass, there will need to be a change in the Town Centre's focus away from Garfield Road.
- > **Integrating the Garfield Road Overpass into the Town Centre fabric.** The proposed Garfield Road Overpass will disrupt the Town Centre. The Master Plan will need to identify the best use of land adjoining the overpass, in particular the land left over on the southern side of the overpass following the demolition of existing development.
- > **Connecting areas beyond the Study Area.** Riverstone Park, the Riverstone Industrial area and the future Riverstone West employment area are located near the Town Centre.
- > **Planning for a changing community.** The demographic composition of the wider NWGC area is changing. The Master Plan for the Town Centre should recognise these changes so that it serves the needs of all members of the present and future community.
- > **Managing heavy vehicle traffic through the Town Centre.** Heavy vehicle movements through the Town Centre are incongruous with the Study Area's country town character and compromise pedestrian amenity.

01
Intro

01
INTRODUCTION

1.1. BACKGROUND

Blacktown City Council has engaged Elton Consulting to deliver a Master Plan for the Riverstone Town Centre. GroupGSA are part of the master planning team, tasked with producing the Master Plan and associated urban design strategies for the Town Centre.

Riverstone is located in the Blacktown Local Government Area (LGA) on the north western periphery of the Sydney Metropolitan region, some 40km from the Sydney CBD. The master planning exercise is applicable to a Study Area defined by Council. This area contains the existing core Town Centre functions located around the Riverstone Train Station and Garfield Road East. These core functions form a relatively small part of the Study Area, which extends to encompass surrounding, largely residential, areas.

The Riverstone Town Centre has been in decline and at best stagnant since the closure of the Meat Works, a major employer, in the 1980s / 1990s. It faces challenges such as the decision to locate a railway overpass at Garfield Road, the current main street of the Town Centre, and by competing retail / commercial centres that are developing in the North West Growth Centre (NWGC). Its location in the NWGC is however also an opportunity to reinvigorate the Town Centre. The Master Plan must provide a clear path for addressing the challenges to growth and leveraging the opportunities of a rapidly changing context.

Elton Consulting are managing the stakeholder consultation process and providing town planning services. Arup is the traffic consultant while the economic analysis is provided by AEC.



FIG. 1.1: RIVERSTONE TOWN CENTRE MASTER PLAN STUDY AREA

1.2. PURPOSE OF THE REPORT

This report summarises the analysis that forms the first stage of the master planning process. It provides an in-depth analysis of the Study Area and its spatial, regional, socio-economic and demographic context. The outcome is an understanding of the opportunities and constraints to the future development of the Town Centre, and an articulation of the key urban design issues that need to be addressed. The report is based on site visits, desktop research and interviews with Council staff and Councillors.

The outcomes of this urban design analysis and the conclusions of the planning, traffic and economic analyses undertaken separately by the other consultants on the master planning team will be distilled into the master plan vision and objectives for the Study Area.



FIG. 1.2: LOCATION PLAN



02 CONTEXT

2.1. REGIONAL CONTEXT

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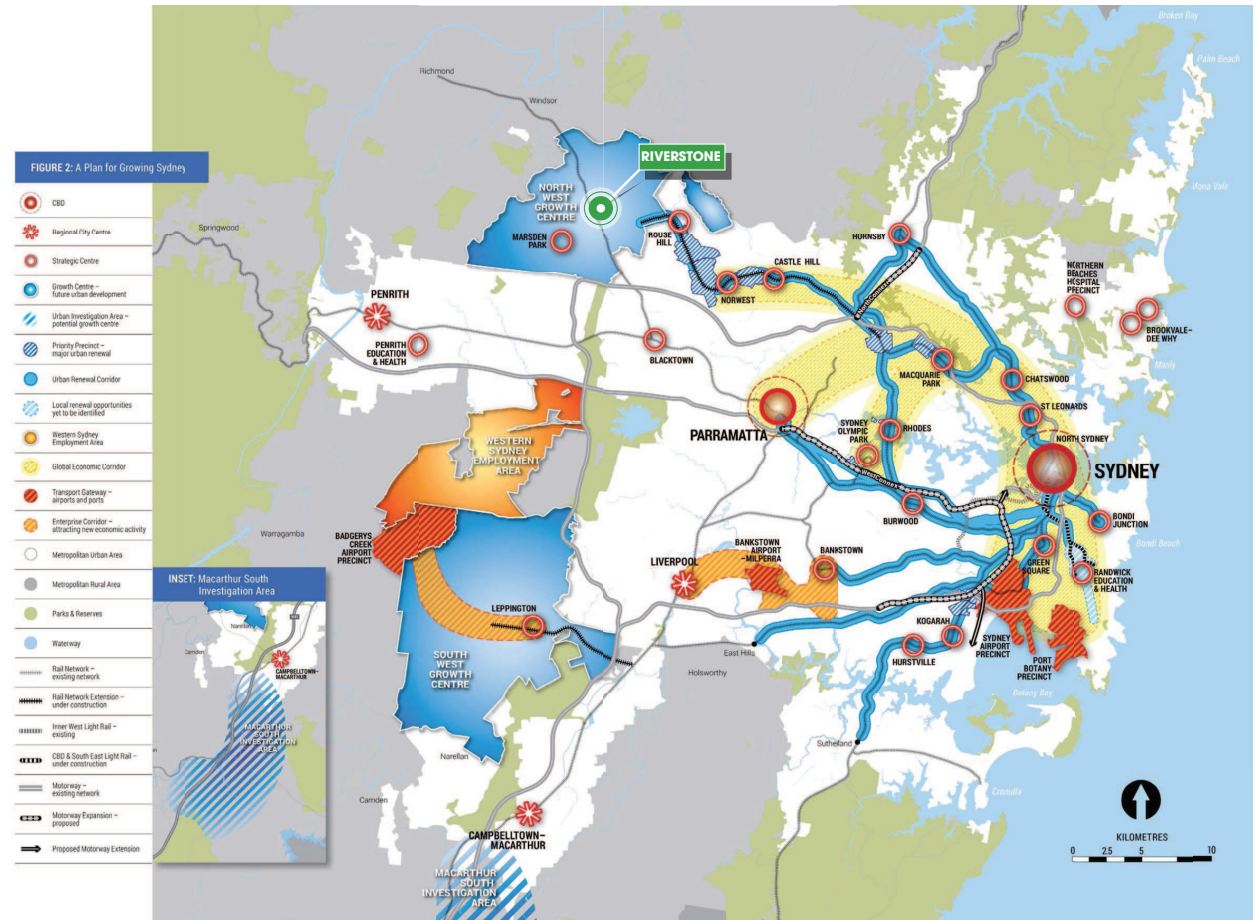
The Riverstone Town Centre is situated 20km north west of Parramatta and 11 km north of Blacktown. The Blue Mountain foothills are 20km away and readily visible from vantage points in the Town Centre.

The region has a notably rural character. Grazing lands are set amongst large lot rural residential properties, market gardens and remnant Cumberland Plain vegetation. Pockets of suburban development and local centres are distributed across this rural context. Riverstone is one of the larger settlements. Places of regional significance include the Rouse Hill Town Centre and Rouse Hill Regional Park.

The Riverstone Town Centre occupies a geographically central location within the North West Growth Centre (NWGC). Lands within the NWGC are undergoing a process of re-zoning and being released for development. Significant new greenfield communities, such as the Ponds development to the south, have been unfolding within and around the NWGC in recent years.

Major road upgrades are occurring at the same time. These include upgrades of the previously rural Richmond and Schofield Roads into arterial roads. The upgrade of Richmond Road is in turn sparking new retail / commercial development such as the Sydney Business Park in Marsden Park.

All of these changes are beginning to transform the rural character of the region and also its demographics.



2.2. NORTH WEST GROWTH CENTRE

The NWGC is an extensive area of largely undeveloped land located north of the M7 Motorway. Covering 10,000ha across the Blacktown, Hills, and Hawkesbury Local Government Areas (LGA), the NWGC was designated by the NSW Government as an area for sustainable residential expansion at Sydney's metropolitan periphery. The Richmond branch of the North Shore, Northern & Western Line rail corridor terminating at Richmond bisects the NWGC.

A Plan for Growing Sydney (NSW Department of Planning & Environment, December 2014) projects the need for 664,000 additional homes over the next 20 years. The NWGC, along with the South West Growth Centre, is intended to accommodate a significant portion of this demand. 70,000 new dwellings providing homes for 200,000 people is projected for the NWGC.

The NWGC is divided into 16 precincts. Future development will consist of expansion and intensification of existing settlements, as well as new Greenfield development. A Precinct Planning process coordinates planning with infrastructure provision to streamline the re-zoning of NWGC lands. Each precinct is planned based on the principle of locating services, schooling, employment and leisure opportunities near where people live. Eleven precincts have been re-zoned, with another three precincts currently subject to Precinct Planning. The NWGC will undergo significant change over the next 25-30 years.

The *North West Growth Centre Structure Plan (Edition 3)* (NSW Department of Planning, 2006) identifies Rouse Hill as the Regional Centre for the NWGC. The Riverstone Town Centre is designated to continue as a Town Centre serving interfacing precincts. Garfield Road East is designated as one of three mixed use employment corridors, along with Schofields Road and Richmond Road. The latter is already attracting new retail / commercial development, benefiting from the Richmond Road upgrade works.

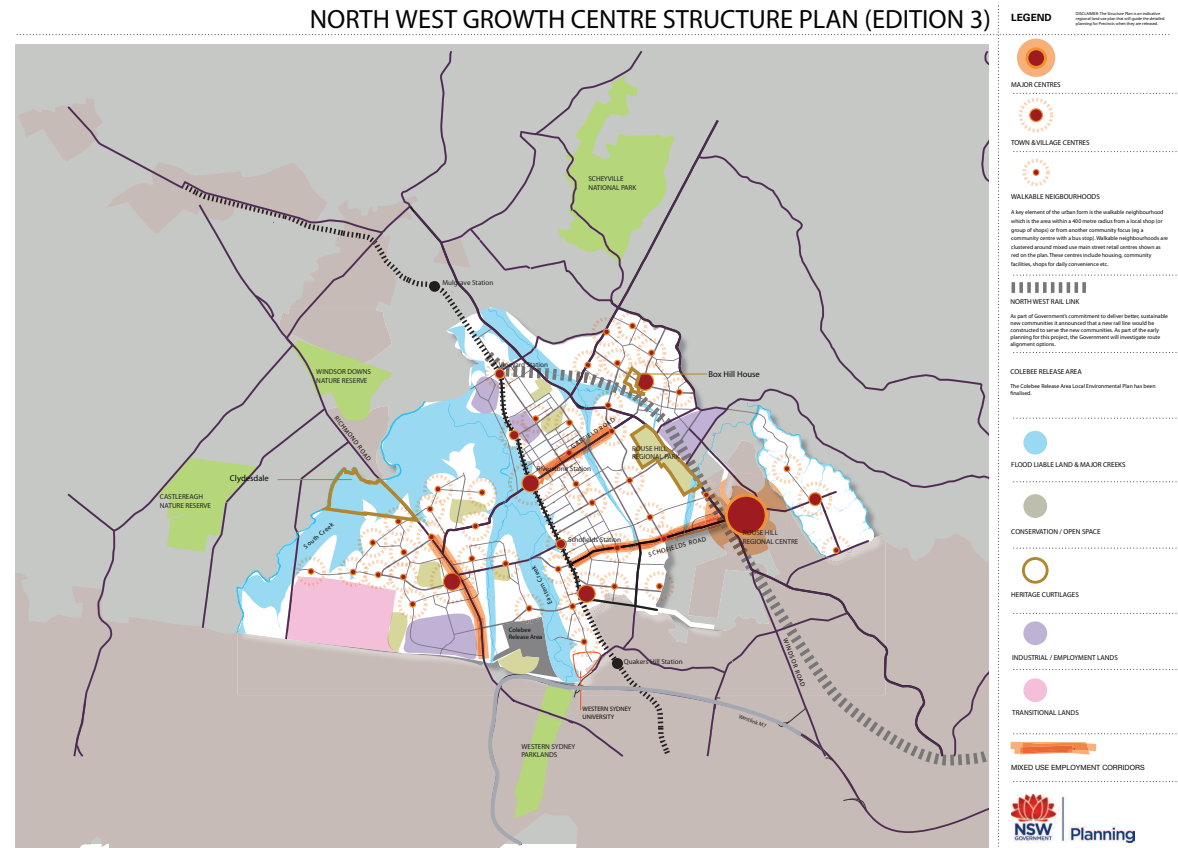


FIG. 2.2: NORTH-WEST GROWTH CENTRE STRUCTURE PLAN (SOURCE: NSW DEPARTMENT OF PLANNING, 2006)

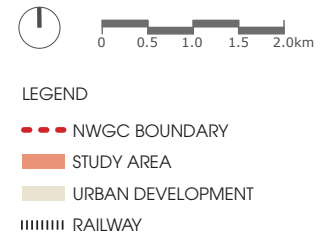
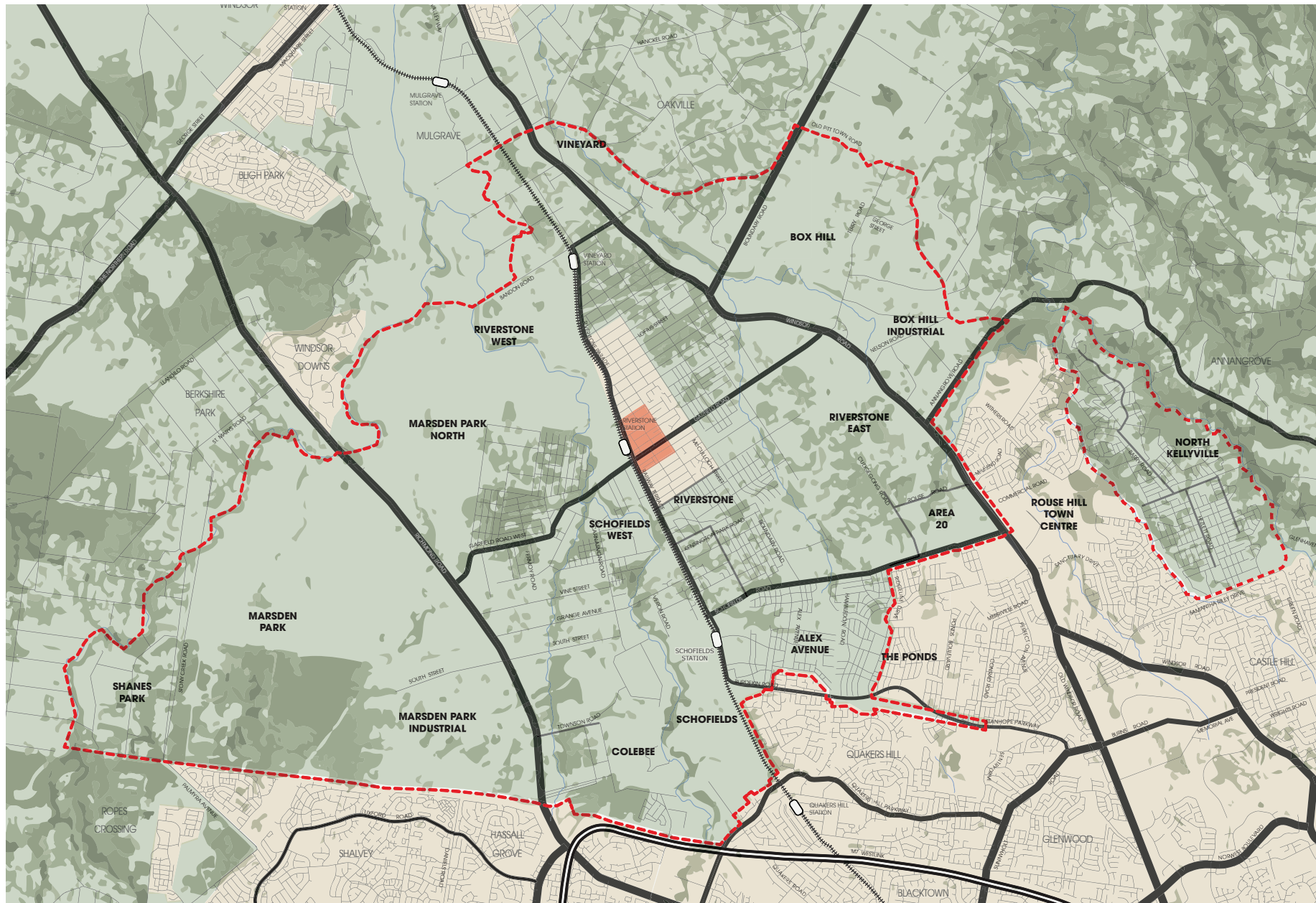


FIG. 2.3: THE EXISTING NORTH-WEST GROWTH CENTRE REGION

2.2.1. PRECINCTS

The Riverstone Town Centre has been excluded from the Precinct Planning process. Planning of surrounding precincts has however been based on the continued functioning of the Riverstone Town Centre as the retail and commercial centre for the locality and surrounding areas.

The Riverstone Precinct Plan covers mostly rural land beyond the existing suburban edges of Riverstone. The Plan envisages mostly low density residential development supported by a neighbourhood centres and shops. The existing Riverstone Town Centre is well-placed geographically to provide higher order services to this future community.

The table provides a summary of each NWGC Precinct and their status.

PRECINCT	PLANNING STATUS	SUMMARY INFORMATION
Alex Avenue	Rezoned in 2010	<ul style="list-style-type: none"> Estimated 6,300 dwellings / Estimated population 18,000 Two new schools Min. 25,000 sqm of retail New train station at Schofields with a commuter car park Upgrades to Hambledon, Burdekin and Schofields Roads Medium to high density residential development around Schofields Station
Area 20	Rezoned in 2011	<ul style="list-style-type: none"> Estimated 2,500 dwellings / Estimated population 6,400 Cudgegong Road Station proposed as part of the North West Rail Link Mix of housing typologies including mixed use and medium to high density residential capitalises upon proximity to the station and Rouse Hill Town Centre
Box Hill and Box Hill Industrial	Rezoned in 2013	<ul style="list-style-type: none"> Estimated 9,600 dwellings / Estimated population 29,700 16,000 jobs A new town centre, supported by 3 village centres
Colebee	Rezoned in 2005	<ul style="list-style-type: none"> Estimated 1,000 dwellings / Estimated population 3,000 Partially completed
Marsden Park Industrial	Rezoned in 2010	<ul style="list-style-type: none"> Employment area with an estimated 10,000 jobs Commercial land, industrial development and bulky goods retailing Estimated 1,200 dwellings
Marsden Park	Rezoned in 2013	<ul style="list-style-type: none"> Estimated 10,300 dwellings / Estimated population 30,000 Capacity for estimated 3,000 jobs A new town centre incorporating a retail centre, mixed use, and medium to high density residential, adjacent to new sport fields Two village centres

TABLE 2.1: NWGC PRECINCTS - SUMMARY INFORMATION (SOURCE: [HTTP://GROWTHCENTRES.PLANNING.NSW.GOV.AU/THEGROWTHCENTRES/NORTHWESTGROWTHCENTRE.ASPX](http://GROWTHCENTRES.PLANNING.NSW.GOV.AU/THEGROWTHCENTRES/NORTHWESTGROWTHCENTRE.ASPX))

Marsden Park North	Released for planning in 2014	<ul style="list-style-type: none"> Estimated 4,000 dwellings / Estimated population 11,200 Large areas flood-affected
North Kellyville	Rezoned in 2008	<ul style="list-style-type: none"> Estimated 4,500 dwellings / Estimated population 14,000 Located close to existing residential areas and the Rouse Hill Town Centre
Riverstone	Rezoned in 2010	<ul style="list-style-type: none"> Estimated 9,000 dwellings / Estimated population 27,000 58ha of open space / 57ha of conservation areas 14ha of employment land Three new primary schools and a new K-12 School
Riverstone East	Released for planning in 2013	<ul style="list-style-type: none"> Estimated 5,300 dwellings / Estimated population 15,000
Riverstone West	Rezoned in 2009	<ul style="list-style-type: none"> Capacity for estimated 12,000 jobs Pre-dominantly industrial, light industrial and business park uses
Schofields	Rezoned in 2012	<ul style="list-style-type: none"> Estimated 2,950 dwellings / Estimated population 8,000 Medium to high density residential around Schofields Station Three neighbourhood centres New primary school Potential public transport corridor linking Schofields station to Rouse Hill
Schofields West	Yet to be released for precinct planning	<ul style="list-style-type: none"> Estimated 2,000 dwellings / Estimated population 5,600
Shanes Park	Yet to be released for precinct planning	<ul style="list-style-type: none"> Estimated 500 dwellings / Estimated population 1,400
Vineyard	Released for planning in 2013	<ul style="list-style-type: none"> Estimated 2,500 dwellings / Estimated population 7,000

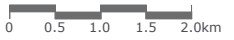
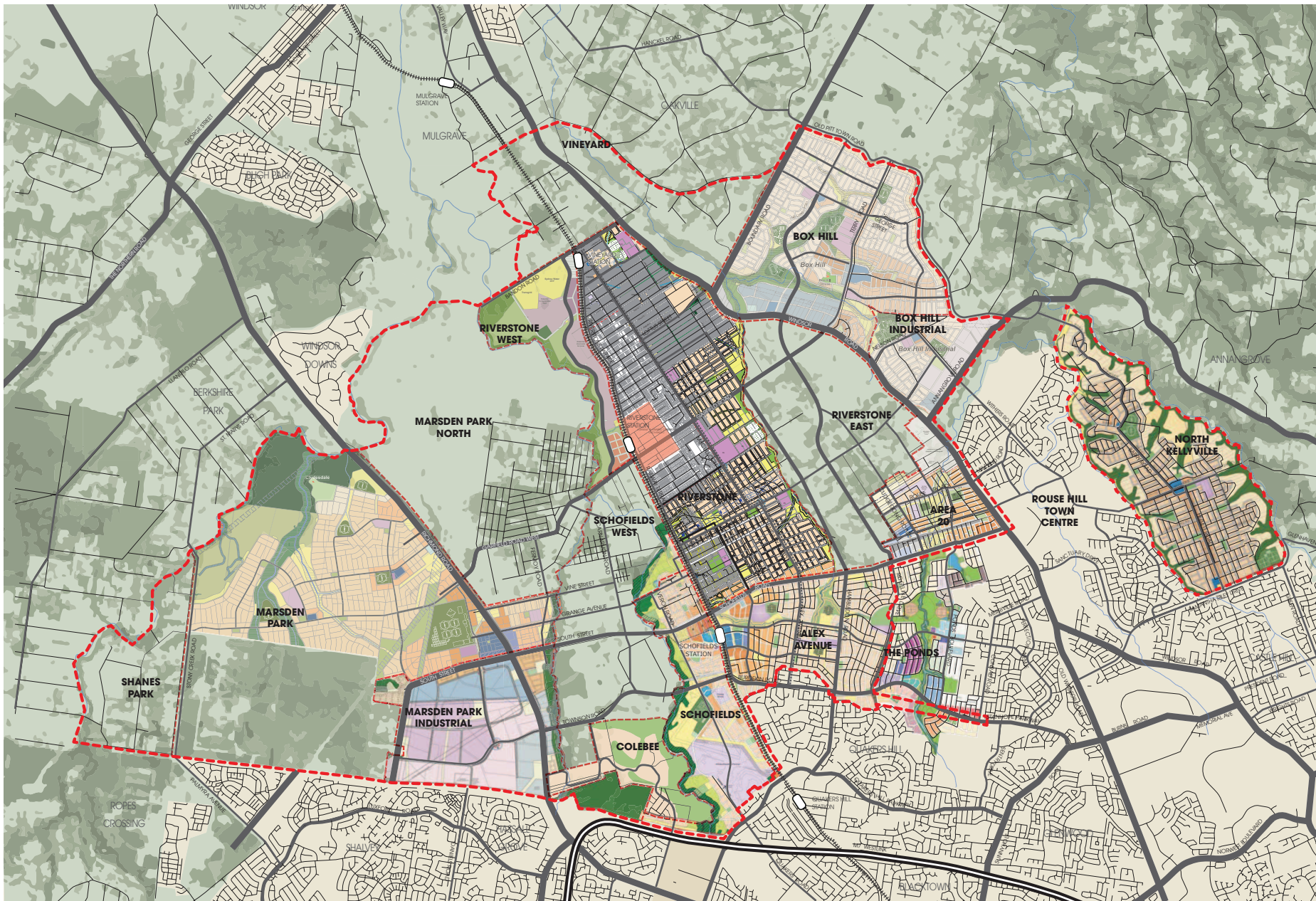
TABLE 2.1: NWGC PRECINCTS - SUMMARY INFORMATION (CONTINUED) (SOURCE: [HTTP://GROWTHCENTRES.PLANNING.NSW.GOV.AU/THEGROWTHCENTRES/NORTHWESTGROWTHCENTRE.ASPX](http://GROWTHCENTRES.PLANNING.NSW.GOV.AU/THEGROWTHCENTRES/NORTHWESTGROWTHCENTRE.ASPX))



FIG. 2.4: NEW SHOPPING CENTRE AT THE PONDS



FIG. 2.5: SHOPPING CENTRE BY THE SCHOIELDS STATION



LEGEND

- NWGC BOUNDARY
- STUDY AREA
- URBAN DEVELOPMENT
- RAILWAY

FIG. 2.6: PROPOSED NORTH WEST GROWTH CENTRE PRECINCTS (AS KNOWN AT JUNE 2015)

2.2.2. ROAD NETWORK

The Study Area is well-connected regionally. It is located along Garfield Road, currently the only continuous east-west connection between Richmond Road and Windsor Road in the NWGC. Richmond Road and Windsor Road are north-south arterials that connect to the M7 motorway. Opportunities to establish east-west connections within the NWGC are constrained by the need to cross the railway line. Journey times to the Sydney CBD are approximately 45 minutes without traffic.

Garfield Road is a conduit for regional heavy vehicle traffic.

The existing network of rural roads will form the basis for an upgraded road system to support the growth of the NWGC. Rural roads upgraded to sub-arterial and arterial roads will provide greater capacity for private and public transport. Schofields Road is currently being upgraded into a dual carriageway Transit Boulevard. When complete, it will form a major east-west link in the NWGC connecting precincts along the road to Rouse Hill Town Centre and the proposed Marsden Park Town Centre.

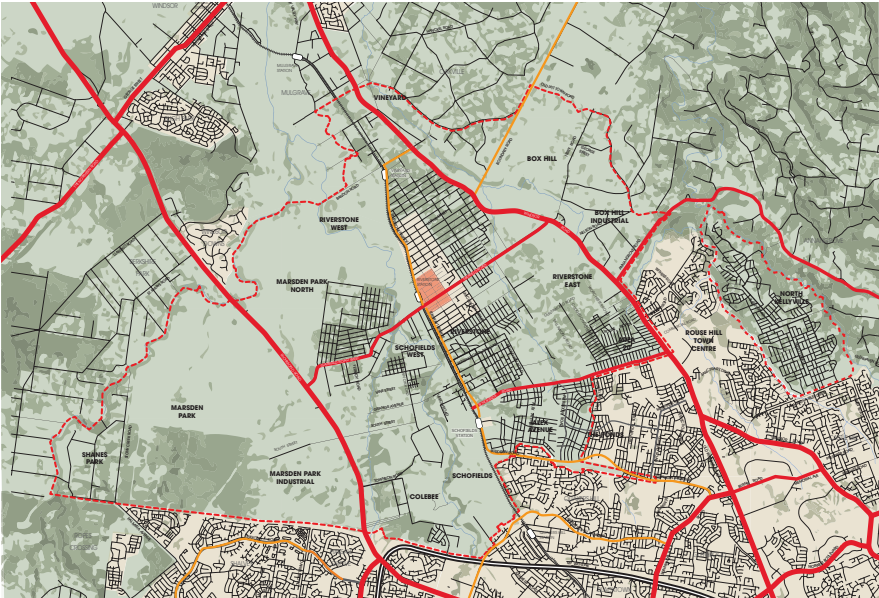


FIG. 2.7: EXISTING NWGC ROAD HIERARCHY

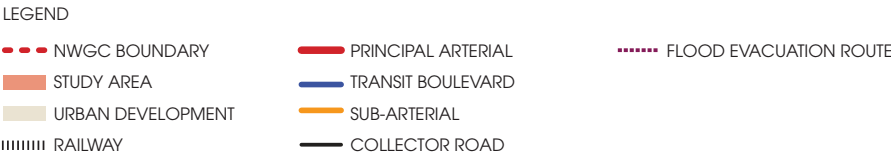
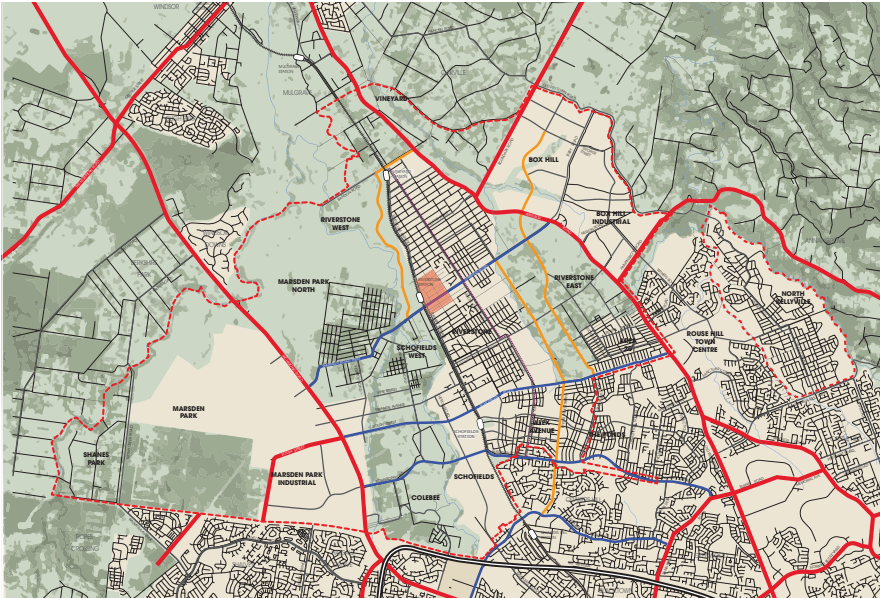


FIG. 2.8: PROPOSED NWGC ROAD HIERARCHY

2.2.3. IMPLICATIONS FOR THE STUDY AREA

- > Nearby precincts such as Riverstone, Riverstone East, Schofields West, Vineyard and Marsden Park North will accommodate new residential populations that will increase the potential catchment of the Riverstone Town Centre.
- > Unlike the new town centres in the NWGC, the Riverstone Town Centre is an established centre.
- > The Study Area Town Centre catchment traditionally extended to the suburban and agricultural areas of Vineyard, Box Hill, Marsden Park and Schofields, in addition to Riverstone. As the NWGC develops many of these areas will establish their own centres, potentially reducing the geographical footprint of the existing catchment.
- > The Riverstone West Precinct is planned to be a major employment centre, generating potential synergies with the Study Area. The development status of this precinct is however unknown.
- > Developing and proposed town centres in the NWGC will compete with Riverstone Town Centre for retail / commercial businesses and foot traffic. The nascent Town Centre around Schofields Station is not far from the Study Area and easily accessible. A Woolworths has been recently established opposite the station. Precinct planning for the area permits higher density residential development around the train station. This could potentially increase the viability of businesses located there, while the ongoing upgrade of Schofields Road will make the new Schofields Town Centre easier to access.

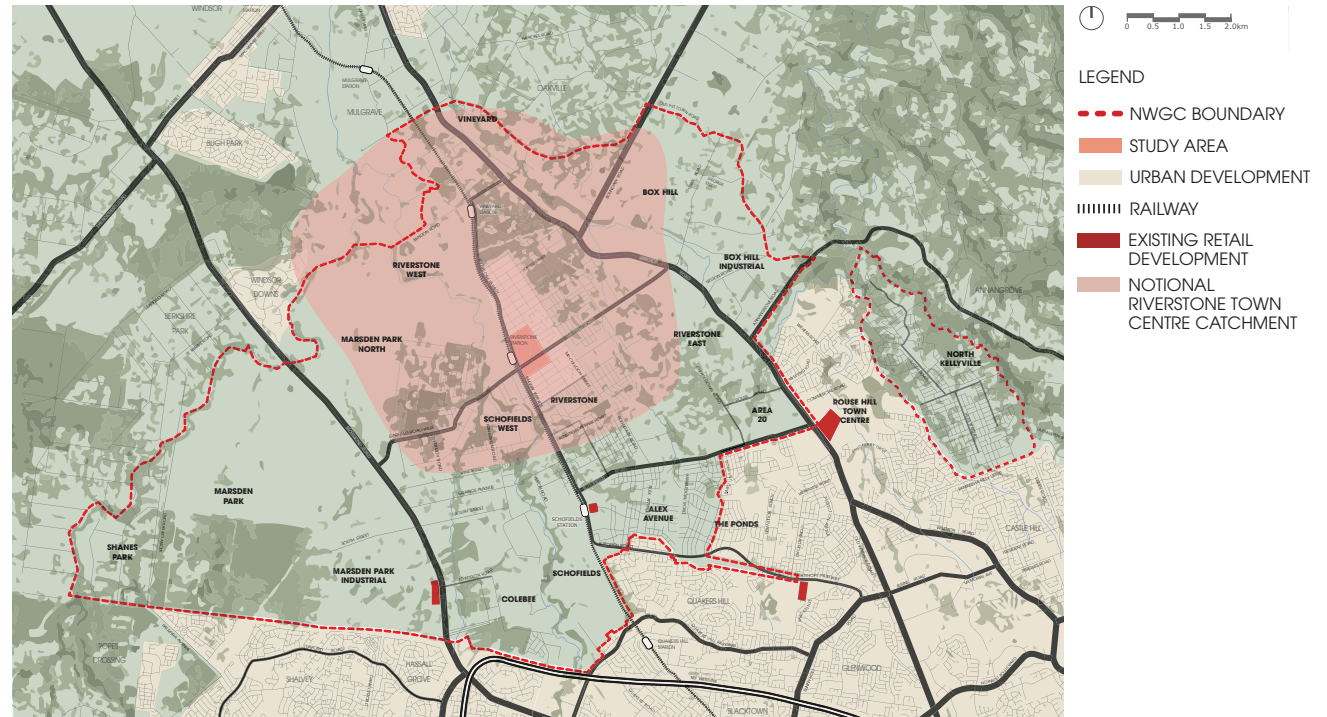


FIG. 2.9: POTENTIAL RIVERSTONE TOWN CENTRE RETAIL CATCHMENT (INDICATIVE) UNDER THE EXISTING SITUATION

- > The proposed town centre at Marsden Park will be located on Richmond Road and easily accessible from the Study Area. Future town centre development at Marsden Park may add to the decline of the Riverstone Town Centre if it proves to be successful in attracting new businesses to the Marsden Park.
- > Major tenants such as Ikea and Bunnings have recently opened along Richmond Road. This provides additional retail choice for the current Riverstone Town Centre catchment. This may potentially reduce footfall in the Town Centre.
- > The planning of the Riverstone, Alex Avenue, Riverstone East and Area 20 Precincts have assumed that a community services hub will be established in the Riverstone Town Centre to meet the need for related services in these precincts. (Source: *Riverstone Precinct: Precinct Planning Report*, Growth Centres Commission, November 2008).
- > *A Plan for Growing Sydney* identifies Rouse Hill Town Centre and Marsden Park as Strategic Centres. The Riverstone Town Centre is located midway between these areas, which are easily accessible from the Town Centre and its catchments. There is a risk that this could further erode the competitiveness of the Riverstone Town Centre as a retail centre.

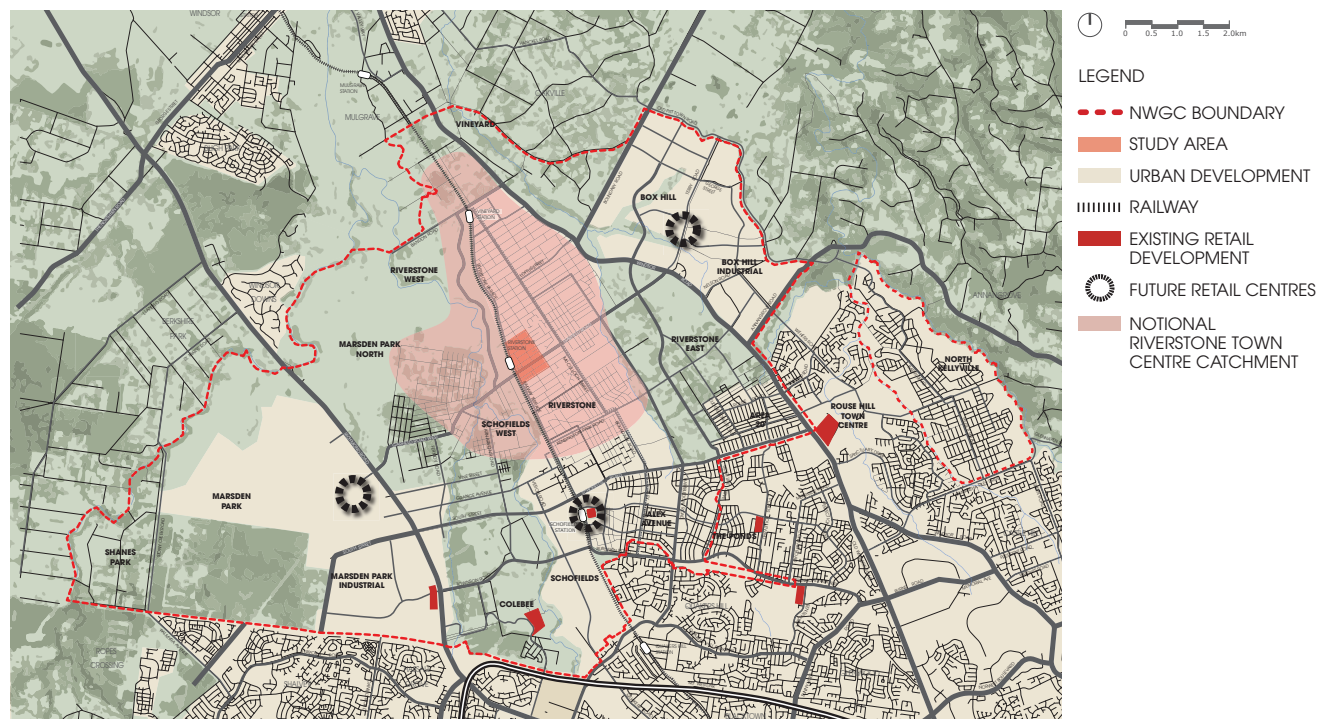


FIG. 2.10: POTENTIAL RIVERSTONE TOWN CENTRE RETAIL CATCHMENT (INDICATIVE) IN THE FUTURE ONCE THE NWGC IS FULLY DEVELOPED

2.3. TOWN CENTRE CONTEXT

The Town Centre Study Area abuts the railway line, which defines a clearly defined edge to the urban areas of Riverstone. The Town Centre is enveloped by suburban residential development, extending to the north, south and east of the centre; development to the west is constrained by the railway line and the floodplain.

Schools are loosely clustered around the eastern extents of Riverstone. Hamilton Street represents the eastern edge to existing development.

A significant industrial area is located just over 1km north of the Town Centre. The industrial area is clearly demarcated from the residential by Hobart Street. Heavy vehicle movements generated by the industrial lands contribute to heavy vehicle traffic along Garfield Road.

The Riverstone Scheduled Lands, approximately 300ha in area, are located beyond the industrial area. The Scheduled Lands is essentially an undeveloped bushland area. It was subdivided into a grid pattern in the 1890s. The resultant 'paper subdivisions' created some 3,500 small lots, typically 9.2m wide and 61m deep. Ownership of the lands is fragmented across approximately 550 private and State / Local Government landowners.

Development to date has been constrained by its rural zoning and limited road and services infrastructure. Significant areas of the Scheduled Lands are also covered by remnant Cumberland Plain Woodland. Significant, contiguous sections are protected under the Growth Centres SEPP.

Rural subdivisions and the expansive Eastern Creek floodplain, used as pasture, lie to the west of the railway line. Significant areas are flood-prone, constraining development. The Riverstone Trotting Track and Riverstone Park are located west of the railway line.

The former Meat Works site was located on the western side of the railway line. It is now occupied by facilities associated with Connect Logistics' haulage activities. Infrastructural uses such as the Riverstone Sewage Treatment Plant and the Transgrid Vineyard Bulk Supply Point are located further north.

2.3.1. DEMOGRAPHICS

Population

In the 2011 census the population of the Riverstone suburb was 6,191, comprised of approximately 50.2% females and 49.8% males.

Population Density

The population density is approximately 2.66 persons per hectare.

Cultural Mix and Diversity

81.0% of people living in the suburb of Riverstone were born in Australia. Small minorities were born outside of Australia, as follows: 1.9% England, 1.6% New Zealand, 1.3% Malta, 1.2% Italy, 0.8% Philippines, 0.7% Germany, 0.5% South Africa, 0.4% Netherlands, 0.4% China, 0.4% Scotland, 0.3% India, 0.3% Lebanon, 0.3% Croatia, 0.3% United States of America.

Vehicles per Household

According to the ABS there are 1.8 vehicles per household.

Median Weekly Household Income

The median individual income is \$559 per week and the median household income is \$1,191 per week.

Forecasted Future Residential Growth

Residential development forecasts assume the number of dwellings in the Riverstone Release Area will increase by an average of 319 dwellings per annum to 10,647 in 2036.

Forecasted Future Population Growth

The 2015 population forecast for Riverstone Release Area is 7,529. By 2036 it is forecast to grow to 32,885.

Forecasted Future Household Types

In 2011, the dominant household type in the Riverstone Release Area was 'Couple families with dependents'. The largest forecast increase in household types up to 2026 is expected to be in this household type.

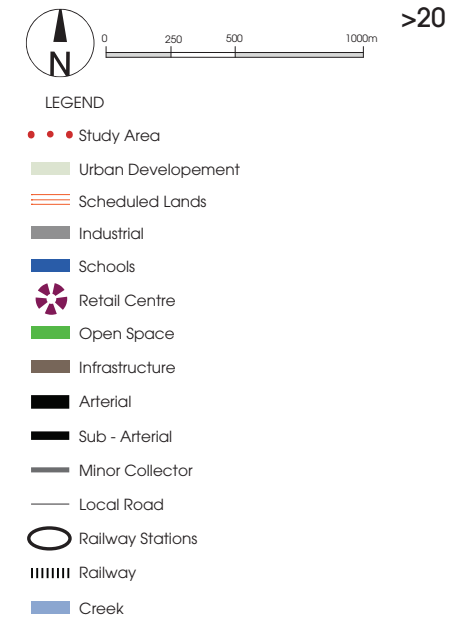
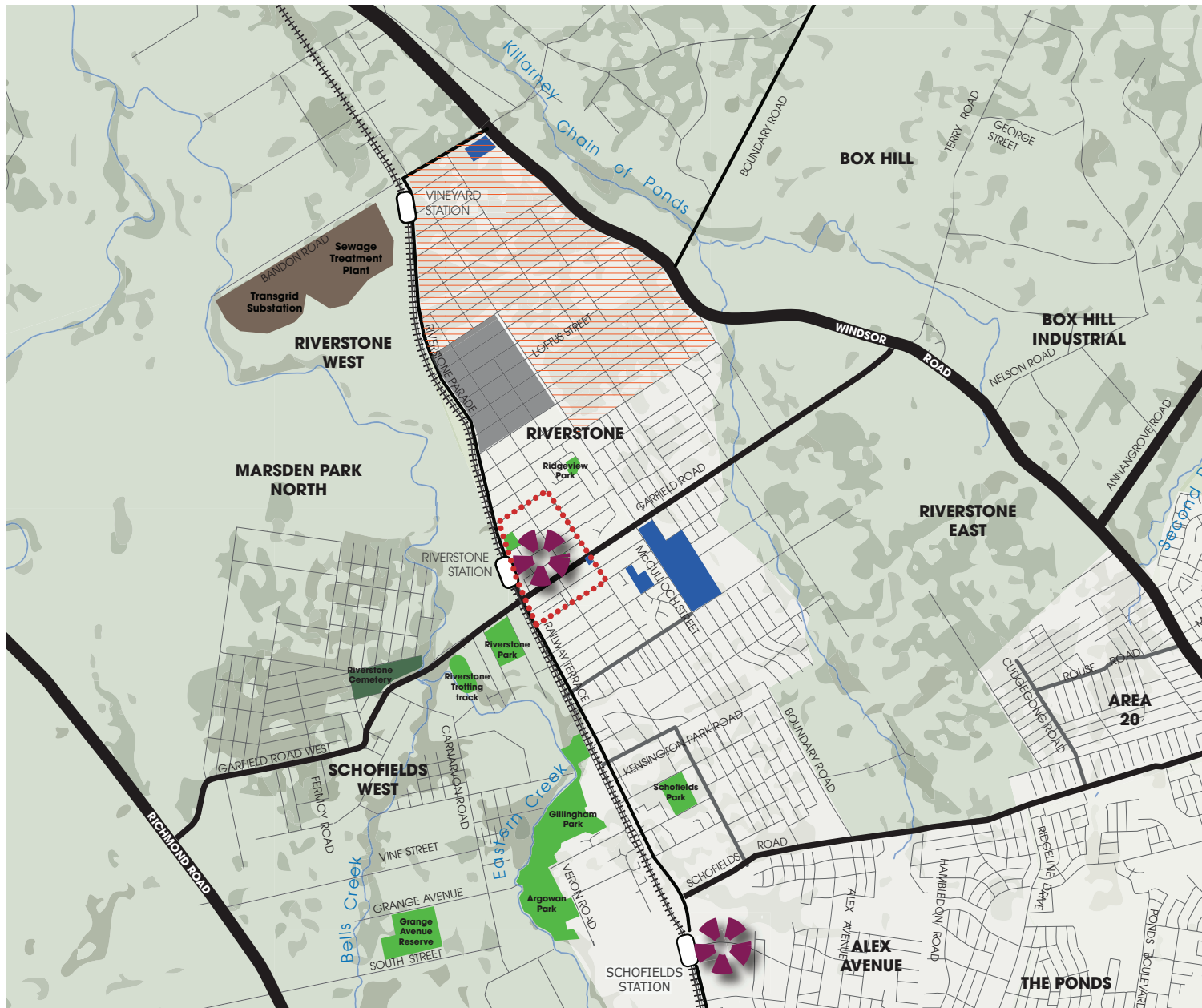


FIG. 2.11: TOWN CENTRE CONTEXT

05

THE

03
THE TOWN CENTRE

3.1. STUDY AREA

Riverstone is an established community with the character of a country town. The Study Area covers an area of 49.8ha. For the purposes of master planning its extent is defined by the following:

- > Richmond railway line to the west
- > King Street to the north, to incorporate the Council Depot site into the master planning process
- > Piccadilly Street to the east, to include the Riverstone Swimming Centre
- > Elizabeth Street to the south. This allows the interface with the future Garfield Road Overpass to be addressed. The overpass will require acquisition of lots on the southern side of the Garfield road.

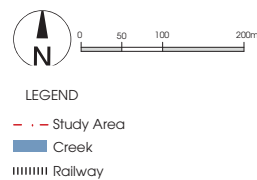


FIG. 3.1: THE TOWN CENTRE STUDY AREA

3.2. HISTORY

Prior to European settlement, Riverstone fell within the area of the Aboriginal Darug people. The European history of Riverstone began in 1810. Governor Macquarie granted approximately 1,000 ha of land to Maurice Charles O'Connell, who named it Riverston Farm after his birthplace. The land was utilised for farming, as pasture, orchards and vineyards. It was subdivided and sold by O'Connell's widow in the mid / late 19th century, resulting in the formation of the street network seen today.

Riverstone is a long established community. The Town Centre originates from the mid / late 19th century, when it formed to service surrounding rural areas. The railway line, connecting Riverstone to Richmond and Blacktown, started operation in 1864. The Riverstone population was small up to the Second World War. In 1911 the population was recorded to be 981. The population in 1947 according to the census had grown to 2,217, while at the time of the most recent census (2011) this had further expanded to 6,381.

The Riverstone Meat Works was established in 1878. It was critical to the local economy for just over a century until its permanent closure in 1992. In the late 1970's it employed approximately 2,000 people. Marketown, the main retail centre of Riverstone, was opened in 1978.

The closure of the Meat Works, a major employment generator, has been a significant factor in the Riverstone's decline. The population base for the Town Centre has essentially been static since then and ageing. Recent uncertainty over the location of the railway crossing also discouraged investment.



FIG. 3.2: RIVERSTONE STATION (1900 - 1910)



FIG. 3.3: RIVERSTONE REGIONAL AREA (1900 - 1910)



FIG. 3.4: RIVERSTONE CHURCH OF ENGLAND SCHOOL (1900 - 1910)

3.3. LAND USE

The Study Area generally consists of low density residential development. The non-residential uses are clustered within a smaller core area around the train station. Retail and commercial uses line Garfield Road East from the Riverstone Parade intersection to the George Street intersection.

The main retail centre is Markettown. It accommodates a small IGA supermarket and other retail tenancies on the ground floor. Businesses in Markettown are struggling, facing increasing competition from new development in nearby precincts, such as the Woolworths in Schofields. The local library is located on the first floor. It includes a Digital Hub well-used by the wider community.

Market Street, one block north of Garfield Road East, is characterised by community and recreational facilities such as the Riverstone Swimming Centre and the Sam Lane Neighbourhood Centre.

There is significant vacant land in the Town Centre Core, such as the land between Markettown and the Riverstone Bowling Club. Partly used as a carpark for the shopping centre, the rest is vacant. There is a grassed area opposite across Pitt Street. On occasion, the vacant lots are utilised for events such as the annual Riverstone Festival in May.

Entertainment options are limited. The Riverstone Schofields Memorial Club is located on Market Street. The Riverstone Bowling Club is located across the Markettown carpark to its north, somewhat isolated from the Town Centre Core. A number of cafes and takeaway shops are located along Garfield Road East. There is a pub just beyond the Study Area boundary to the west, on the other side of the railway line.

The Casuarina School is located along Garfield Road East at the edge of the Study Area. St Andrew's Uniting Church, a heritage item, is also located along Garfield Road East.



FIG. 3.5: GARFIELD ROAD RETAIL / COMMERCIAL DEVELOPMENT



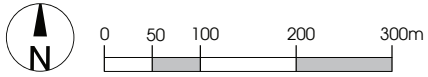
FIG. 3.6: SAM LANE NEIGHBOURHOOD CENTRE



FIG. 3.7: ST ANDREW'S UNITING CHURCH



FIG. 3.8: RIVERSTONE BOWLING CLUB



LEGEND

- Study Area
- Railway
- Existing Town Centre Core
- Council Depot
- Low Density Residential
- Public Recreation
- Car Parking
- Community Facilities
- Commercial
- Retail / Hospitality
- Private Club
- Education
- Medical Centre
- Riverstone Station
- Police Station
- Fire Station
- Sports Centre
- Church
- Open Space

KEY FACILITIES

- Retail - Marketown
- ① Child Care Centre
- ② Sam Lane Neighbourhood Centre
- ③ Mens Shed
- ④ Community Garden
- ⑤ Riverstone Schofields Memorial Club
- ⑥ Bicentennial Museum
- ⑦ Riverstone Swimming Centre
- ⑧ Riverstone Bowling Club



FIG. 3.9: EXISTING LAND USE

3.4. BUILT FORM

>26

3.4.1. TYPOLOGIES

The residential typology is mostly detached, with some semi-detached dwellings. Street frontage building setbacks vary, with the space used for front yards or driveways. The resultant streetscape is distinctly suburban.

Retail and commercial development built to lot edges start to define a sense of enclosure to Garfield Road East. This is particularly evident near the Riverstone Parade intersection. There is some sense of arriving at a Town Centre for those approaching from the west or along Riverstone Parade.

Moving east along Garfield Road East the consistency of this edge is interrupted by vacant lots, variable front setbacks and buildings setback from adjoining boundaries to allow vehicular access. The sense of enclosure dissipates, resulting in an incoherent streetscape and a weak Town Centre identity.



FIG. 3.10: MARKETOWN



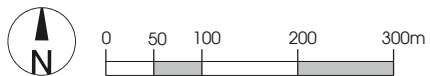
FIG. 3.11: CONTINUOUS TWO STOREY STREET EDGE ALONG GARFIELD ROAD



FIG. 3.12: TWO STOREY RESIDENTIAL



FIG. 3.13: DETACHED SINGLE STOREY DWELLINGS



LEGEND

- Study Area
- Railway
- Existing Town Centre Core
- Buildings



FIG. 3.14: EXISTING FIGURE GROUND

3.4.2. BUILDING HEIGHTS

Buildings in the Study Area are mostly single storey. Two storey built form exists mostly as retail and commercial buildings along Garfield Road East. Some dwellings are two storeys; these are spread across the Study Area.

3.4.3. URBAN CHARACTER

The Town Centre lacks a discernible heart – a place that can be a focus for the community and their public activities. One reason for this is the limited legibility of urban form and uses. Marketown internalises activity and presents blank facades to the public domain. The Riverstone library is located on the first floor and has no street presence within the Town Centre.

Other focal uses such as the Riverstone Schofields Memorial Club and the Sam Lane Complex are dispersed across the Town Centre Core and sit within large blocks setback from the street behind car parking or landscape.

Buildings in the Study Area are generally not sufficiently differentiated in terms of scale, character or use to be perceived as landmarks that contribute to Town Centre legibility or identity.

Heritage items in the Study Area are generally low-key in terms of scale and form. They are dispersed across the Study Area and impart some sense of the Town Centre history, with buildings that date to the Victorian, Inter-war, and Post-war periods.

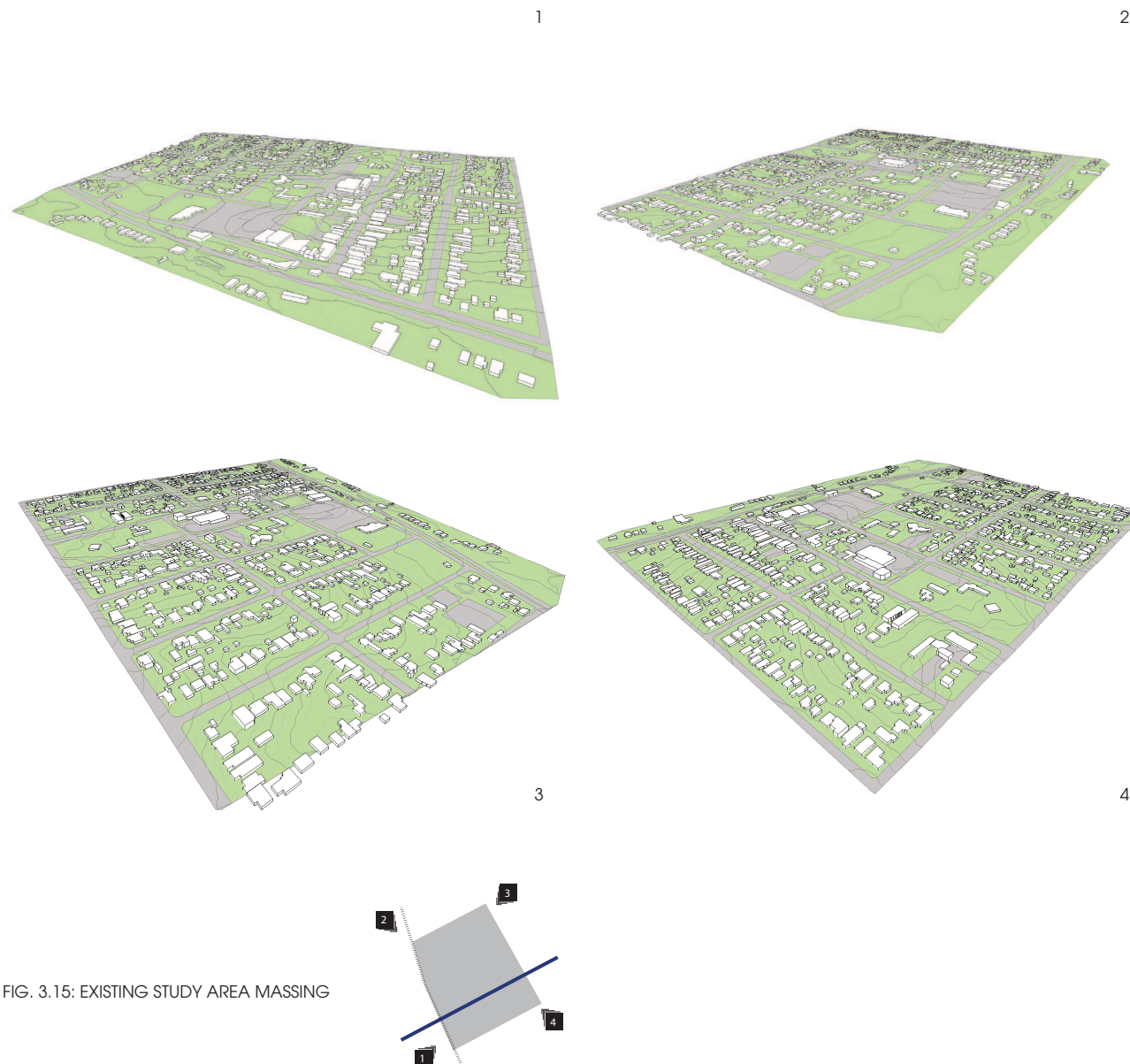
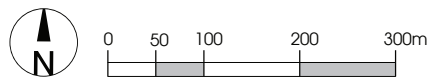


FIG. 3.15: EXISTING STUDY AREA MASSING




-  Study Area
 Railway
 Existing Town Centre Core
 1 Storey
 2 Storey



FIG. 3.16: EXISTING BUILDING HEIGHTS

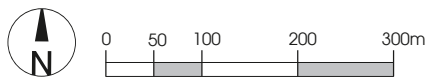
3.5. LAND OWNERSHIP

>30

Lots with retail and commercial developments are largely privately owned. The remainder are owned by companies or government entities. Residential lots are predominantly privately owned, though a few are owned by companies or by government. Notwithstanding, significant parcels of land, both developed and undeveloped, are owned by Council. Subject to availability of funding and investors, this gives Council the opportunity to significantly shape the future development of the Town Centre.



FIG. 3.17: VACANT COUNCIL-OWNED LAND ADJACENT TO MARKETOWN



LEGEND

- Study Area
- Railway
- Existing Town Centre Core
- Blacktown City Council
- NSW Land & Housing Corporation
- Roads & Maritime Service
- Riverstone-Schofields Memorial Club LTD
- Dept of Education & Communities
- Department of Land
- Minister for Emergency Services (NSW Fire Brigades)
- Police
- Church
- Company
- Private
- Strata Title



FIG. 3.18: LAND OWNERSHIP

3.6. ACCESS AND TRANSPORT

>32

3.6.1. ROAD NETWORK

The grid pattern of the Study Area establishes a reasonably permeable street network for vehicles. North-south roads provide efficient access to the industrial areas to the north and the developing Schofields precinct to the south.

Garfield Road carries a significant amount of traffic, including heavy vehicles. Heavy vehicles also utilise Riverstone Parade for north-south movements. The signalised intersection by the railway crossing is a congested pinch point. Anecdotally it is understood that some people try to avoid driving through the Town Centre to bypass the congestion. This discourages people, particularly those from areas further afield, from accessing the Town Centre. These people may find it more convenient to go to the Schofields town centre of the Rouse Hill Town Centre instead.

The heavy vehicle traffic through the Town Centre is incongruous with the country town character and impedes pedestrians from crossing the road.

Local streets are generous in width. Typically these accommodate one lane in each direction and space for parallel parking on both sides of the road. Properties are generally accessed at the front. A number of laneways service retail development and provide additional rear lane access to residential properties.



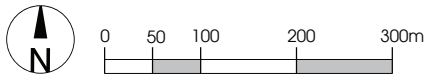
FIG. 3.19: GARFIELD ROAD EAST - RIVERSTONE PARADE INTERSECTION



FIG. 3.20: GARFIELD ROAD EAST - PICCADILLY STREET INTERSECTION



FIG. 3.21: TYPICAL LOCAL STREET (PARK STREET SHOWN)



LEGEND

- Study Area
- Railway
- Existing Town Centre Core
- █ Arterial
- █ Sub-Arterial
- █ Minor Collector
- █ Local Street
- █ Laneways
- Signalised Intersections
- Roundabout



FIG. 3.22: EXISTING ROAD HIERARCHY

3.6.2. PUBLIC TRANSPORT

TRAIN SERVICES

The Study Area is served by rail and bus. The train station is located in the Town Centre Core and easily accessible. The station is located on the Richmond branch of the North Shore, Northern & Western Line. It provides services to Parramatta and the Sydney CBD and terminates at Richmond in the opposite direction. The line between Schofields and Richmond is single track, which limits service frequency. Maximum frequency is half-hourly in either direction:

- > Journeys to Parramatta take 32 minutes
- > Journeys to Sydney Town Hall take 1 hour 6 minutes
- > Journeys to Blacktown take 14 minutes. This compares favourably with car journeys, which take approximately 20 minutes.

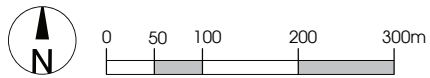
Schofields Station, one station south of Riverstone, provides additional transport options, with services to Campbelltown and other Western Sydney stops by way of Parramatta on the Cumberland Line. The more frequent services from Schofields station makes it a more attractive option for rail-users in the Study Area as it is within easy driving distance. However, there is a shortage of commuter parking at the station.

The wider NWGC context will be better served with the construction of the North West Rail Link (NWRL) to Rouse Hill Town Centre and terminating at the proposed Cudgegong Station in the Area 20 precinct. This new link is scheduled for completion in 2019. Existing bus links between Riverstone and Rouse Hill are presently infrequent.

BUS SERVICES

Bus services in Riverstone are provided by Busways:

- > Routes 661 and 662 terminate at Riverstone train station and serve areas north of Riverstone, including Windsor and Maraylya
- > Route 746 connects Riverstone to Box Hill and Rouse Hill.
- > Route 757 terminates at Riverstone and goes to Mount Druitt via Richmond Road.
- > Route T74 connects bus stops in Riverstone to Blacktown.
- > Route T75 connects bus stops in Riverstone to Rouse Hill Town Centre and Blacktown by way of other NWGC precincts.



LEGEND

- Study Area
- Railway
- Existing Town Centre Core
- Public Bus:
- Bus Stop
- Bus Route:
- 661
- 662- 746
- 757
- T75
- T74
- Proposed Cycleway (RMS)

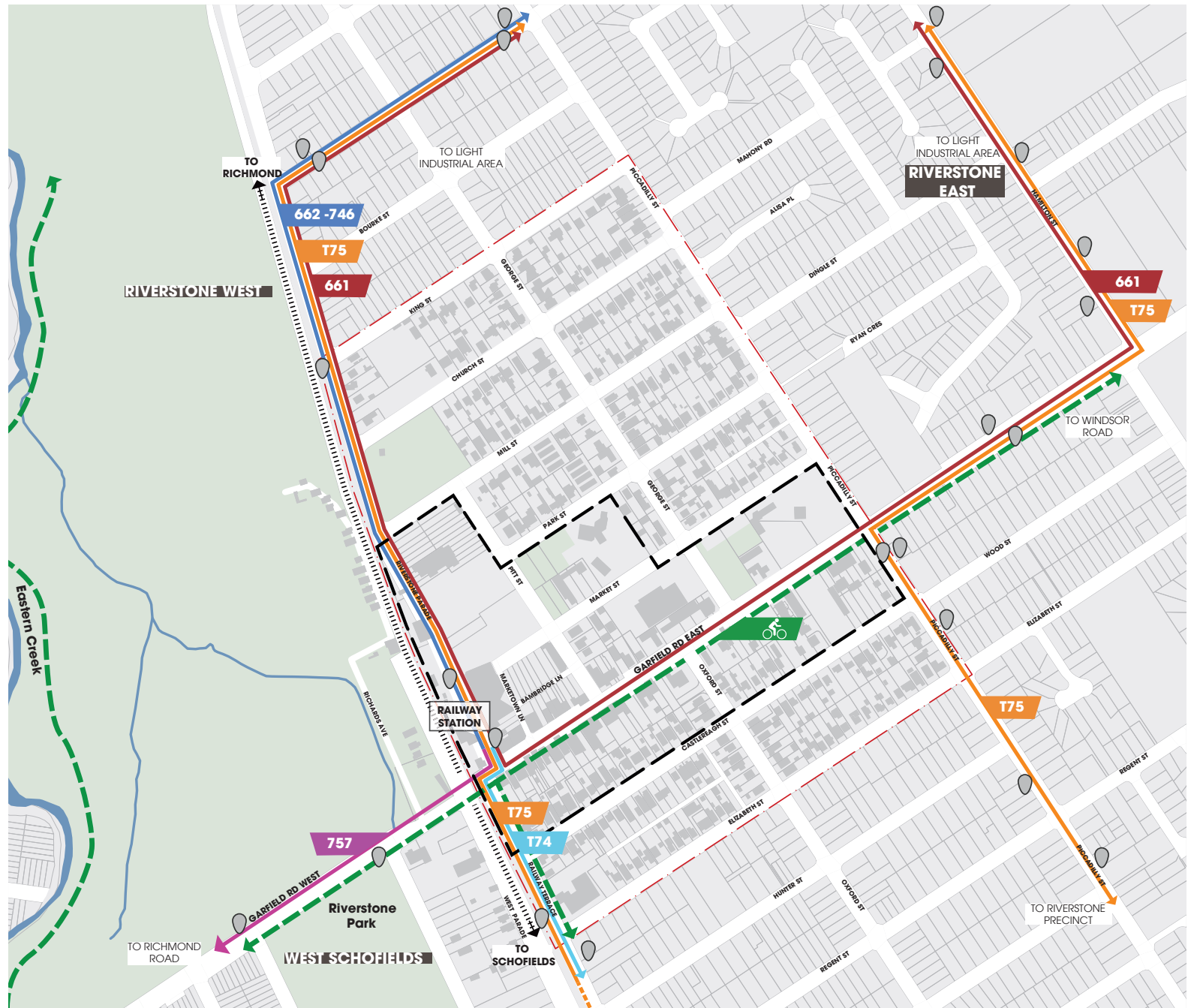


FIG. 3.23: PUBLIC TRANSPORT PROVISION

3.6.3. PEDESTRIAN

Pedestrian footpaths are provided throughout much of the Town Centre Core. Gradients rarely exceed 1 in 20, resulting in a walkable Town Centre Core. Elsewhere in the Study Area pedestrian paths are less common and people are required to walk on the road or grassed verges. The typical 200m by 100m block dimensions of the street grid limit pedestrian permeability in the north-south direction.

Only two pedestrian crossings are provided along Garfield Road East within the Study Area. These are nearly 600m apart, impeding connectivity between areas to the south and north of the road.

The railway line forms a barrier to westward movement beyond Riverstone Parade. In the future, should Riverstone West and West Schofields develop, additional pedestrian connections to integrate these precincts with the Riverstone Town Centre could be beneficial.

Most of the retail and commercial activity in the town is contained within an easy 5 minute walk. The inactive frontages of Marketown detract from the pedestrian experience around the shopping centre.

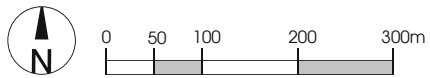
Community facilities such as the pool are more dispersed. The furthest of these are located approximately 10 minutes from Marketown (the notional centre of the town). For a small town this starts to become inconvenient for pedestrians. The lack of activation on routes leading up to these facilities can make journeys feel longer.

3.6.4. BICYCLE

There are presently no formal provisions for cyclists. Local roads are wide and traffic levels are generally low. Cyclists share the roads with cars. Garfield Road is a more challenging environment for cyclists given the heavy traffic on the road.



FIG. 3.24: LACK OF FOOTPATHS BEYOND THE TOWN CENTRE CORE



LEGEND

- Study Area
- Railway
- Existing Town Centre Core
- Footpaths
- Proposed Cycleway (RMS)
- Pedestrian Crossing
- Signalised Intersections
- 400 m / 5 minute walking band from Marketown

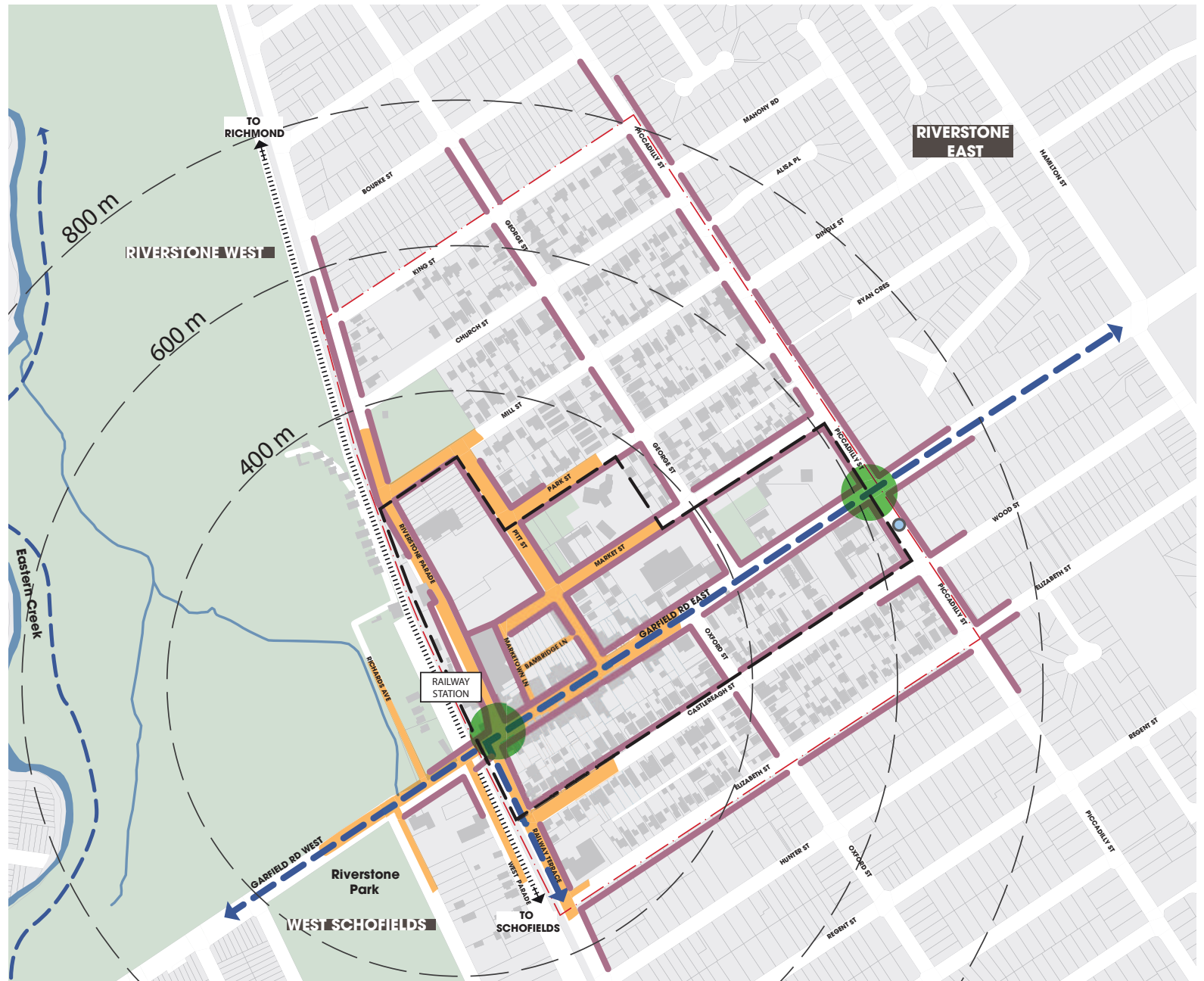


FIG. 3.25: PEDESTRIAN / BICYCLE CIRCULATION

3.7. PARKING

Parking is provided across the Study Area in off-street surface parking areas and unrestricted on-street parking. Some of the surface parking areas are expansive and dominate the public domain, such as the Marketown car park. Adjacent vacant land is used as an informal parking area and overflow commuter parking.

Parking areas associated with buildings are typically located between the building and the street. On Garfield Road such parking areas break up the continuity of building edges. For buildings such as the Riverstone Schofields Memorial Club it means the presence of the development on the street is diminished and opportunities to activate the street lost. This model of parking provision, typical of communities of this scale, reflects the car-dependent lifestyles of the area. This detracts from the character of the public domain.

Commuter parking is provided at the train station to support park-and-ride.



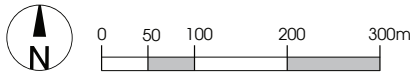
FIG. 3.26: MARKETOWN CAR PARK



FIG. 3.27: RIVERSTONE SCHOFIELDS MEMORIAL CLUB - PARKING LOCATED BETWEEN THE STREET AND BUILDING



FIG. 3.28: GARFIELD ROAD COMMERCIAL DEVELOPMENT SET BEHIND PARKING AREA



LEGEND

- Study Area
- Railway
- Existing Town Centre Core
- * Shopping Centre Parking
- Commuter Parking
- Private Parking
- Informal Parking
- Public Parking



FIG. 3.29: EXISTING PARKING PROVISION

3.8. TOPOGRAPHY + VIEWS

The western part of the Study Area lies on the Eastern Creek floodplain and rises gently to the east. The lowest point along the western edge is approximately RL 15m. The topography steepens near the edge of the Study Area at Piccadilly Street, rising towards a high point beyond the Study Area of approximately RL 43m. Gradients are reasonably gradual where the land steepens.

The best views from the Study Area are to the west. These vistas capture the floodplain of Eastern Creek, largely open but with areas of remnant bushland, and further beyond, the Blue Mountains. The vacant land between Marketown and the Bowling Club, and the open vista that looks out to the west from this area, creates a sense of expansive openness in the Town Centre. The grid street pattern means that each street running east-west has view corridors to the floodplain and the Blue Mountains in the distance, particularly as the land rises eastward.

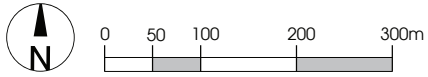
This visual connection to rural lands forms an important part of Riverstone's sense of place as a country town. Should the Riverstone West precinct be developed in the future as envisioned by current precinct planning, this visual character could change dramatically.



FIG. 3.30: EXPANSIVE VIEWS TO WEST FROM NEAR MARKETOWN CREATE A SENSE OF OPENNESS



FIG. 3.31: LONG VIEW CORRIDORS DOWN EAST-WEST STREETS (PARK STREET SHOWN) PUNCTUATED BY THE BLUE MOUNTAINS IN THE DISTANCE



LEGEND

- Study Area
- Railway
- Existing Town Centre Core
- Contours ("ASL": Above Sea Level)

	10 m		27.5 m
	12.5 m		30 m
	15 m		32.5 m
	17.5 m		35 m
	20 m		37.5 m
	22.5 m		40 m
	25 m		42.5 m
- <--> Open Expansive Views
- <--> View Corridors
- High Point
- Ridgeline



FIG. 3.32: TOPOGRAPHY + VIEWS

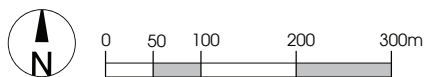
3.9. HYDROLOGY

The Study Area is located in the Eastern Creek catchment. The western part of the Study Area, north of Marketown, is low-lying and affected by 1-in-100 year ARI floods. Floods as high as 19.2m have been recorded in the area, back in 1867. Hamilton Street, running west of the Study Area, is identified as a flood evacuation route in the planning of the NWGC.

The current precinct plan for the Riverstone West precinct is based on raising the ground level west of the Study Area on the other side of the railway line above the floodplain. This will potentially affect views.



FIG. 3.33: THE EASTERN CREEK FLOODPLAIN WEST OF THE RAILWAY LINE



LEGEND

- Study Area
- Railway
- Existing Town Centre Core
- Flooding:
 - High Risk
 - Medium Risk - 1 in 100 ARI Flood Level
 - Low Risk - PMF

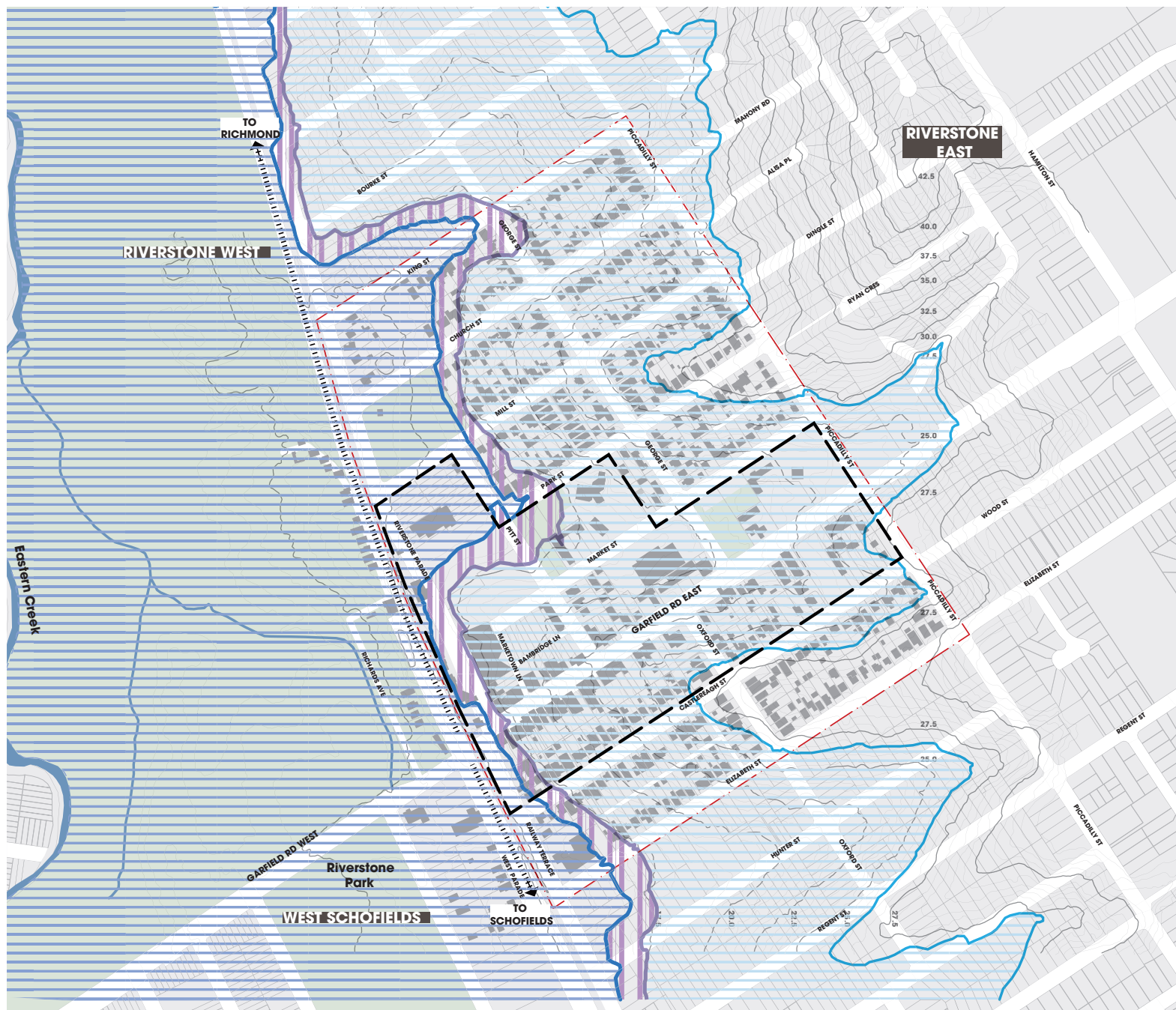


FIG. 3.34: TOPOGRAPHY + HYDROLOGY

3.10. OPEN SPACE + LANDSCAPE

>44

Since the earliest days of European colonisation, Riverstone has been characterised by extensive clearing for agriculture and urban development. Ties to the remnant vegetation/ ecological communities can still be found, predominantly throughout the flood plains of Eastern Creek and South Creek to the west and pockets of woodland, transitional forest and Cooks River Transitional Forest to the east. Alluvial and Residual soils make up the composition of the overarching landscape, (Alluvial Berkshire Park, Alluvial South Creek and residual Blacktown).

The Study Area features native Eucalyptus sp. to residential streets (associated with the remnant forests and woodlands) and deciduous/ ornamental species introduced during European colonisation in the late 1800's.

Due to the historical context of Riverstone 'Recognition of current remnants and their significance means that future reserves planning can cater for their protection, their incorporation into larger corridors and make bushland conservation a prominent factor in the community (Blacktown City Council 1998). there are a number of significant trees and vegetation associated with historical buildings and sites. The following are deemed to contain significant vegetation and or vegetation communities (numbers refer to the designations on the Open Space and Landscape plan):

- > St Andrews Uniting Church (7)
- > Riverstone Police Station (8)
- > Private Residential Cottage (9)

Several different parks, sporting fields and communal open space are located in Riverstone:

Mill Street reserve (1)

Riverstone's playing field, catering predominantly for team sports on the weekend and school athletics carnivals. Being the largest area of publically accessible open space in close proximity to the town centre and residential properties, families and children may also use this area at their own leisure.

Communal Open Space (2)

Centrally located to the town centre and surrounding residential areas, a pocket of communal open space associated with the community facilities is used during the annual Riverstone festival and other minor communal events.

Lions Park (3)

Associated with the Riverstone Swimming Centre and adjacent to Garfield Road, the park provides a gathering place for families. The park is characterised by a combination of deciduous and remnant native vegetation.

Rivestone Bowling Club (4)

A privately owned parcel of open space, the bowling Club provides an activity and social space for the community.

Riverstone Swimming Centre (5)

Associated with Lions Park, the aquatic centre provides an additional recreational opportunity for the Riverstone community. Members of the public and the local school use the facility for swimming carnivals. The pool is closed during winter.

Casuarina School (6)

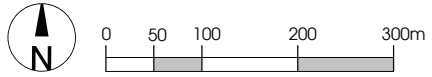
The open space associated with the school is important to the wider historical context and the character of the school.



FIG. 3.35: LIONS PARK



FIG. 3.36: GARFIELD ROAD STREETSCAPE



LEGEND

- Study Area
- Railway
- Existing Town Centre Core
- ✱ Playground
- Public Open Space
- Controlled Public Open Space
- School Playgrounds
- Historic and Significant Tree / Vegetation
- Tree Planting
- 1 Mill Street Reserve
- 2 Communal Open Space
- 3 Lions Park
- 4 Riverstone Bowling Club
- 5 Riverstone Swimming Centre
- 6 Casuarina School
- 7 Historic Planting and Significant Trees (Hoop Pine)
- 8 Historic Planting and Significant Trees (Camphor Laurel)
- 9 Historic Planting and Significant Trees (Silky Oak)



FIG. 3.37: EXISTING OPEN SPACE + LANDSCAPE

3.11. HERITAGE

>46

With a history dating to the 19th century, the Study Area contains heritage items of local significance as listed in the *Blacktown Local Environmental Plan 2015*. The Riverstone train station is the lone item listed on the NSW State Heritage Register as a State Significant item.

The train station and residential cottages on the opposite side of the railway line forms a small cluster of heritage items.

A number of items line Garfield Road East, giving some historic character to the road. The items variously date to the Victorian, Inter-war and Post-war periods. A variety of typologies are represented, including a church, shop, school, and cottages. One of the latter is now used as the Bicentennial Museum.

Elsewhere heritage items are mostly residential cottages located amidst other dwellings dating from various periods of time in Riverstone's history.

Vestiges of Riverstone's history as a town that grew with the Meat Works remain in the form of the 'Butchers Row'. These cottages, located west of the railway line, housed workers at the former Meat Works.

The heritage of the town is not defined solely by the listed items – some parts of the town such as the Castlereagh / Elizabeth Street residential blocks has a historic character that is evoked by the street tree planting and the high proportion of Victorian / Edwardian dwellings.



FIG. 3.38: RIVERSTONE TRAIN STATION



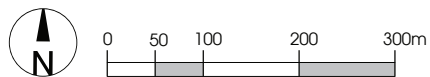
FIG. 3.39: RIVERSTONE PUBLIC SCHOOL



FIG. 3.40: PARRINGTON TERRACE



FIG. 3.41: BICENTENNIAL MUSEUM (FORMER COTTAGE)



LEGEND

- Study Area
- ||||| Railway
- Existing Town Centre Core
- Item - General (Office of Environment & Heritage)
- 160 Private Residential Cottage
- 164 Private Residential Cottage
- 165 Private Residential Cottage
- 167 Parrington Terrace
- 168 Private Residential Building
- 169 St Andrews Uniting Church
- 170 Small Weatherboard Cottage and Connecting Shop
- 171 Riverstone Public School
- 172 Bicentennial Museum
- 175 Inter-war Residential Development in Spanish Mission Style
- 176 Private Residential Cottage
- 177 Private Residential Cottage
- 178 Private Residential Cottage
- 179 Riverstone Police Station
- 182 Private Residential Building
- 183 Riverstone Group of Worker Cottage
- 184 Riverstone Railway Station, Station Master Residence
- 185 Riverstone Memorial
- 186 Riverstone Railway Station, Station Group and Residence
- 7 Historic and Significant Trees & Vegetation
- 3 Historic Planting and Significant Trees (Hoop Pine)
- 8 Historic Planting and Significant Trees (Camphor Laurel)
- 9 Historic Planting and Significant Trees (Silky Oak)



FIG. 3.42: HERITAGE ITEMS

3.12. ACTIVATION

>48

Activated frontages are limited, and largely confined to a short stretch of Garfield Road East and Pitt Street. This is a product of:

- > Lack of uses able to activate streetscapes
- > The internalised retail activity of Marketown, which presents blank frontages to all elevations.

The activated stretch of Garfield Road between Riverstone Parade and Pitt Street is the part that most feels like a Town Centre. The activation of Garfield Road and its Town Centre character is compromised by the amenity impact of passing traffic.

Existing activation is generally of a lower order with few retail or café / restaurant type uses from which activities can spill out into the public domain. This part of the Town Centre will eventually disappear with the construction of the Garfield Road overpass. This makes the need for a new Town Centre structure that can define a strong Town Centre and Riverstone identity ever more pressing.



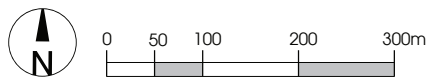
FIG. 3.43: BLANK MARKETOWN FACADE



FIG. 3.44: ACTIVATION ALONG GARFIELD ROAD



FIG. 3.45: ACTIVATION ALONG PITT STREET



LEGEND

- Study Area
- ||||| Railway
- Existing Town Centre Core
- 1 Sports Fields
- 2 Bowling Club
- 3 Swimming Pool
- 4 Park
- 5 Riverstone Schofields Memorial Club
- .-.- Active frontages
- 6 Child Care Centre
- 7 Community Garden
- 8 Shopping Centre and Library
- Internal Activation
- ▲ Building Entry Point
- 9 Community Centre
- 10 Museums
- 11 Retail / Commercial
- Informal Open Space for Events



FIG. 3.46: PLACES OF INTEREST + ACTIVATION

04
GARFIELD ROAD
OVERPASS

04
GARFIELD ROAD
OVERPASS

4.1. GARFIELD ROAD OVERPASS

>51

The Garfield Road Overpass is proposed to be constructed once the development/population of the NWGC reaches 75% of the projected numbers. The timeframe for its realisation is therefore uncertain, and will at the very least be 10 years from now.

An analysis of the impacts of the overpass is limited by information available to date. The analysis here is based on a Concept Plan that formed part of the *Riverstone Railway Crossing Community Consultation Report* (RMS, August 2014). This document provides a high level representation of the proposal, without any information on the vertical alignment of the proposal.

Based on this, it is understood that the overpass will be a two lane dual carriageway with one way on- and off-ramps on both sides of the railway line. The overpass will start to rise above ground at Pitt Street. Riverstone Parade connects to Railway Terrace under the overpass to connect the northern and southern parts of the Town Centre. West of the railway line, West Parade connects to Richards Avenues under the overpass.

From discussions with the RMS representative at the Council Technical Workshop on 22 July 2015, it is understood that, upon descending the overpass from the west, the first signalised intersection would be located at Piccadilly Street. At George Street there would only be a left-in left-out arrangement.

The only means for vehicles to get across the railway line will be via the overpass. For pedestrians, the opportunities are unclear and conflicting information has been received. Consultation with Transport for NSW (on 16 June 2015) seemed to indicate that no provision had been allowed for. At the Council Technical Workshop on 22 July 2015, Council staff indicated that their understanding was that there would be a pedestrian bridge crossing at the train station to provide access to both platforms.

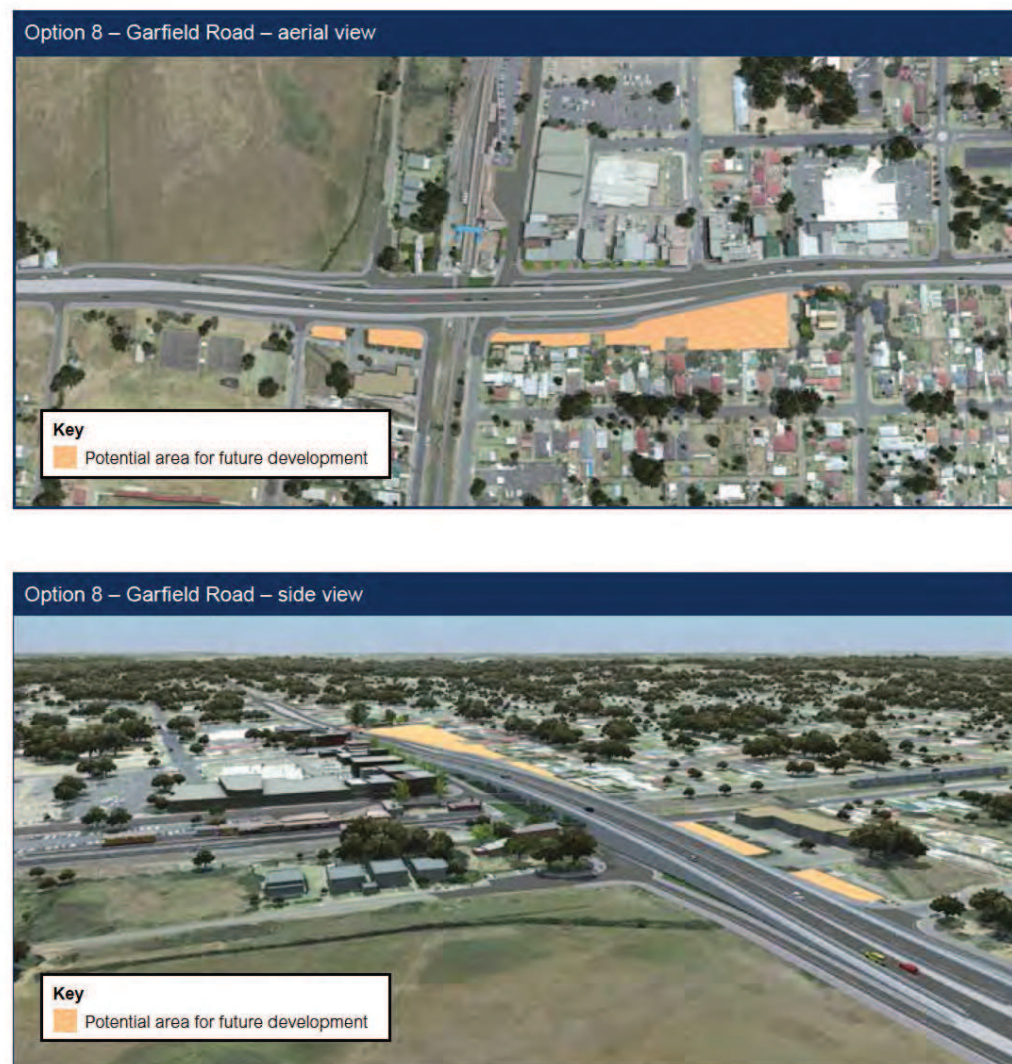
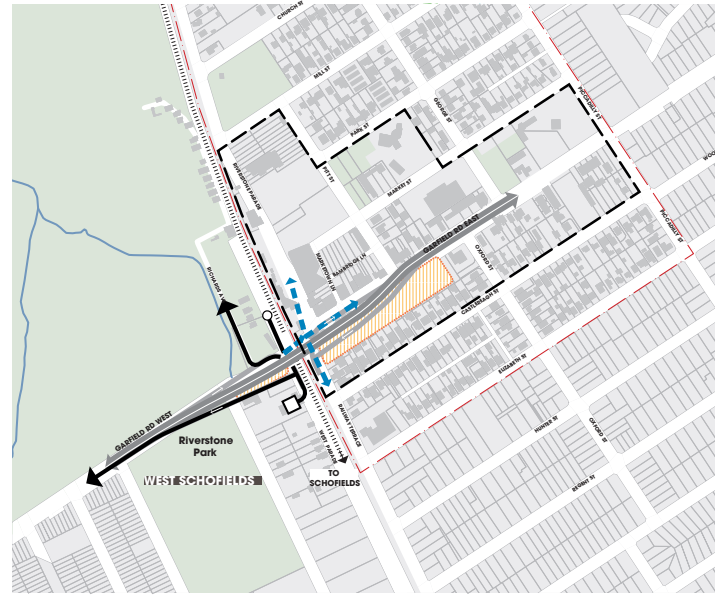


FIG. 4.1: PROPOSED GARFIELD ROAD OVERPASS (SOURCE: RMS, AUGUST 2014)

KEY IMPACTS

- > Severance of the Town Centre. The overpass will be a physical and visual barrier that will significantly reduce the connectivity of the southern parts of the Town Centre to the northern part, where most of the retail, entertainment and community land uses are located.
- > Reduced permeability for vehicles and pedestrians. The overpass and the associated upgrade of Garfield Road into a dual carriageway limits opportunities for north-south movements across the corridor. Journeys that are simple to make today will in some cases become much more circuitous, exacerbating the severance of the Town Centre, impeding its function, and significantly reducing walkability.
- > A number of scenarios for both vehicles and pedestrians are illustrated here, based on a worst-case understanding of available information, to highlight the impacts.
- > Loss of businesses. The overpass will require resumption of existing retail and commercial buildings on the southern side of Garfield Road. The viability of existing retail and commercial development on the northern side of the road will be compromised as these would face onto the overpass structure.
- > Loss of the Garfield Road as the Main Street of the town. Garfield Road was traditionally Riverstone's Main Street. The overpass would result in the loss of this focal space.
- > Visual impact. The overpass structure will be a significant construction with attendant visual impacts that will conflict with Riverstone's existing country town character. There is likely to be significant retaining walls and a major increase in the extent of asphalt.
- > Residual land. The overpass will result in a long thin strip of residual land between the overpass and residences along Castlereagh Street. Identifying an appropriate use for this land will need to consider the mitigation of its proximity to the overpass and the interface with the remaining low density residences.
- > Noise impact. The overpass will be designed to carry significant traffic volumes, including heavy vehicles. This noise will be propagated from an elevated point and will require mitigation.
- > Safety. Moving between areas to the north and south of the overpass, on both sides of the railway line, require pedestrians to walk under the overpass. This could compromise actual and perceived safety, particularly at night.



LEGEND

- Study Area
- Railway
- Existing Town Centre Core
- Movement Unchanged By Overpass
- Affected Movement (Post-Overpass)
- Movement Prior To Overpass
- Starting Point
- Destination
- Indicative Extent of Residual Lands

FIG. 4.2: ANALYSIS OF VEHICULAR MOVEMENT SCENARIOS POST-OVERPASS



LEGEND

- Study Area
- ||||| Railway
- Existing Town Centre Core
- Movement Unchanged By Overpass
- Affected Movement (Post-Overpass)
- Movement Prior To Overpass
- Starting Point
- Destination
- ▨ Indicative Extent of Residual Lands

FIG. 4.3: ANALYSIS OF PEDESTRIAN MOVEMENT SCENARIOS POST-OVERPASS

05 OPPO

05
OPPORTUNITIES +
CONSTRAINTS

5.1. OPPORTUNITIES

Strategically located Council landholdings: Significant amounts of land in the Study Area are Council-owned, including sites in the Town Centre Core. These large, contiguous blocks have plenty of development potential that can transform the Town Centre function and sense of place to meet future needs.

A combined retail / community hub: The Town Centre can be a focus for community services provision in the NWGC. The precinct planning for the Riverstone Precinct is based on the assumption that a community services hub will be established in the Town Centre. The clustering of retail and community services begins to create a compelling reason for surrounding communities to come to the Town Centre. The Town Centre could also accommodate a portal for multiple Council services, bringing the Council closer to the community it serves.

Located within a visibly growing NWGC context: As the NWGC develops to its expected capacity over the next 20-30 years there will be an increasing need for retail, commercial, social, and community developments. As an established community with good access, the Riverstone Town Centre is well-placed to attract these developments and continue its current function of serving areas beyond Riverstone.

The Market Street spine: Market Street runs parallel to Garfield Road. Most of the social and community facilities in the Study Area either have their access off the street or could be re-configured to access the street. The street terminates at Marketown and the Council site earmarked for the new Marketown development.

A pedestrian-focused Market Street spine could integrate existing uses with new retail, commercial and community development. The spine could become the heart of Riverstone and address the likely marginalization of Garfield Road upon completion of the overpass.

Walkable Town Centre Core: The core areas of the Town Centre Core located within an easy 5 minute walk of the train station is relatively undeveloped. This area can be developed more intensively to improve activation and establish a vibrant and convenient Town Centre Core.

Proximity to a potential employment centre: The Riverstone West precinct is currently planned to accommodate significant employment uses. Although its future is unclear, should this precinct develop as envisioned this will establish a large employment generator on the doorstep of the Town Centre. This could have a catalyzing effect on the Town Centre, spurring development to service the new working population, and attracting complementary businesses.

Differentiation from other developing retail centres within the NWGC:

Recently developed retail centres such as the Woolworths development in Schofields and big box retail development along Richmond Road are utilitarian in character and mono-functional. Buildings are located within parking areas with little attempt to define an attractive public domain. Riverstone can differentiate itself from these competing centres by establishing a fine-grained, mixed use retail centre with good quality public spaces that invite people to linger in the Town Centre.

Deep Town Centre lots: These create opportunities for mixed use development where the upper levels can be set back significantly from the street to disguise the scale of development when perceived from the street level.

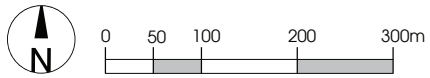
Heritage buildings: Listed heritage items in the Town Centre Core can help to establish a sense of place that is grounded in the Town Centre's roots. Preservation of the items can also assuage local concerns about any potential loss of country town character arising from new development.

The curtilage of existing heritage items may be improved to enhance the setting of these items and their prominence within the Town Centre. Introducing interpretative elements into the Town Centre fabric, public domain and public art can also begin to enhance the sense of place in Riverstone.

Flexible open space: The Town Centre Core has a number of vacant lots under Council ownership. These provide flexible spaces that are utilized for a variety of temporary uses and events that activate the Town Centre.

Proximity to a future regional sports field: Riverstone Park is intended to become a regional sports field with four to five sports fields, serving the future Riverstone and Alex Avenue communities. This creates additional reasons for surrounding communities to visit the Town Centre.

Connectivity to Future Cycle Routes: Adjacent precinct planning identifies potential cycle routes around the Study Area. Cycle routes can be proposed within the Study Area that establish continuity of cycleways.



LEGEND

- Study Area
- ||||| Railway
- Proposed Regional Sport Field
- Council - owned Sites
- ↑ Potential Address to Market Street
- ↔ Potential Pedestrian Link
- Potential Retail - Community Spine
- 400m / 5 minute walking band from Marketown
- + Potential Employment Centre
- Open Space Assets
- Heritage Site - Town Centre Core
- Riverstone Swimming Centre
- / Open Expansive Views
- / View Corridors



FIG. 5.1: STUDY AREA OPPORTUNITIES

5.2. CONSTRAINTS

Garfield Road Overpass: The proposed Garfield Road overpass will require demolition of properties on the southern side of the road. The viability of the road as a focus of retail / commercial activity will be significantly diminished. It will create a barrier to movement between areas to the north and south of it. It will also introduce a hard urban character very different from the present country town character. The heavy vehicle traffic movements that the overpass will continue to enable will create noise and pollution impacts upon the Town Centre.

Future Garfield Road upgrade: In the long term, Garfield Road will likely be upgraded to increase its capacity through additional lanes. It is presently understood that upgrades will occur within the current road corridor. The upgrade could change the country road character of Garfield Road. When this occurs it is likely that the road will bring more traffic through the Study Area with attendant noise and pollution impacts. It may also potentially make it difficult to improve upon the current lack of pedestrian crossings across the road.

The upgrading of Schofields Road from a two lane rural road to a four lane dual carriageway currently underway gives an indication of the potential future character of Garfield Road.

Flood affected land: the western part of the Town Centre is particularly affected by 1-in-100 year floods. New development in these areas will need to incorporate mitigation measures.

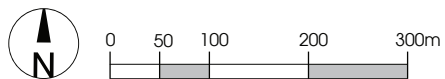
The railway line: The railway line constrains pedestrian and vehicular connectivity, making it difficult to integrate developments on either side. Development near the line will be affected by noise. The current single track configuration constrains service frequencies.

Limited pedestrian permeability: Large block dimensions in the east-west direction constrains north-south pedestrian movement, limiting the walkability of the Study Area.

Heritage buildings: Listed heritage items should be retained as a constraint in any future Master Plan.

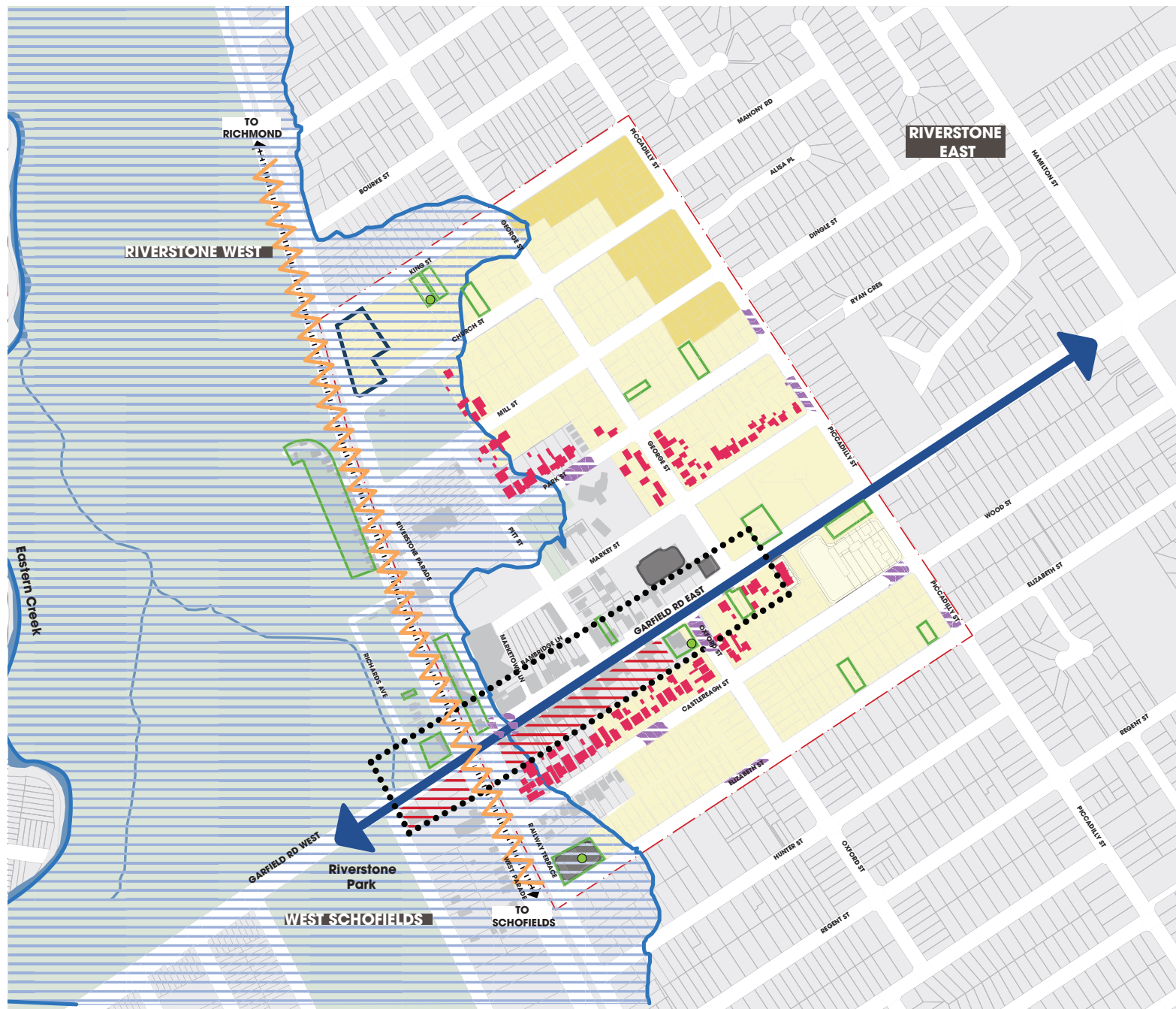
Long term constraints: Certain buildings could be considered long term constraints for the purposes of this master planning exercise based on their function, ownership and recentness of construction:

- > Riverstone Schofields Memorial Club: relatively recent development that can be expected to remain as it is for the near future
- > Police station: Heritage site currently being re-developed.



LEGEND

- Study Area
- ||||| Railway
- ~~~~~ Railway Barrier
- Land Directly Affected By Proposed Overpass
- ↔ Future Garfield Road Upgrade
- / / / Site Demolished By Proposed Overpass
- Sensitive Residential Interface
- Area Beyond Easy Walking Distance Of Town Centre (600m)
- Area Beyond Easy Walking Distance Of Town Centre (800m)
- ▨ Gradient Steeper Than 1:20
- Heritage Sites
- Historic and Significant Trees & Vegetation
- Long Term Constraint
- ▨ Medium Risk - 1 in 100 ARI Flood Level
- ▨ Significant Flood Inundation



>60

FIG. 5.2: STUDY AREA CONSTRAINTS

06

KEY URBAN

06
KEY URBAN
DESIGN ISSUES

6.1. KEY URBAN DESIGN ISSUES

The analysis of the Town Centre and interviews with Council and stakeholders has revealed a struggling Town Centre in steady decline since the closure of the Meat Works in the 1980s. This has been exacerbated by the long term uncertainty about the final form of the proposed crossing across the railway line.

The final decision to establish the crossing as an overpass at Garfield Road has significant detrimental effects on the Town Centre which the Master Plan will need to address. The Master Plan must also provide a viable blueprint for how to take advantage of a changing NWGC while achieving a differentiated Town Centre that can compete with other proposed centres. In doing so, the Master Plan will need to address the following key urban design issues.

The lack of an identifiable heart. There is no place that can act as a focus for the community, a space that offers more than simply satisfying retail needs. The Town Centre needs a place that residents associate with Riverstone and imagine to be the heart of Riverstone. Any such space should be activated, open to the public, of its place, walkable and flexible to accommodate a variety of events such as ceremonial activities.

Limited retail and entertainment offer. The number and choice of shops in Riverstone is diminishing, while remaining businesses are struggling. Increased retail and entertainment opportunities could transform the Town Centre into a more attractive place to live, shop and work. The Master Plan needs to establish a spatial framework that will help to attract businesses back into the Town Centre. It must enable a diverse and sustainable mix of uses to flourish – uses that extend activity into the night-time.

No sense of arrival into Riverstone. The lack of Town Centre identity, tired building stock, and lack of gateway or landmark urban form means that there is no real sense of arrival into a well-functioning Town Centre. People arriving by train are confronted by the blank wall of Marketown.

An established country town on the edge of a growing metropolitan area. A careful balance will need to be struck between intensifying land use in the Town Centre to better utilise land and the desire to retain the country town character valued by the community. The social history of the Riverstone community and the physical fabric of this history need to be acknowledged, retained and enhanced where possible as part of a place-specific urban design strategy. Intensification of development in the Town Centre will need to be carefully managed and justified in order to be palatable to the local community.

Getting the re-development of Marketown right. The re-development of Marketown is an opportunity for a development that can catalyse change in the Town Centre. Its planning and



FIG. 6.1: THE GARFIELD ROAD / RIVERSTONE PARADE INTERSECTION - POOR SENSE OF ARRIVAL



FIG. 6.2: MARKETOWN INTERNALISES ITS RETAIL ACTIVATION

design should be considered holistically within the context of the Town Centre, and not just as a stand-alone building. It needs to be designed so that future development around it can respond in a way that nudges development towards a desired Town Centre outcome.

Providing community and social services to the existing and future community. The NWGC planning framework assumes that Riverstone Town Centre will accommodate a major community services hub. Council have proposed projects such as a new hub, redevelopment of the Riverstone Swimming Centre, and a PCYC Club. Lack of funding has prevented these schemes from being realised so far. Alternative delivery models need to be identified, for example partnership with private entities.

Managing competing demand for Town Centre space. Co-location of retail, commercial and community uses in the Town Centre is desirable in order to establish a sustainable mix of uses and to differentiate the Riverstone Town Centre from competing centres. Given the finite availability of land, the spaces allocated for the various uses need to be viable, while allowing for sufficient public and open space.

Connecting areas beyond the Study Area. Riverstone Park, the Riverstone Industrial area and the future Riverstone West employment area are located near the Town Centre. The Town Centre should seek to leverage the people that these areas attract by maximising connectivity to these areas.

Planning for a changing community. The demographic composition of the wider NWGC area is changing. The Master Plan for the Town Centre should recognise these changes so that it serves the needs of all members of the community.

Managing future transitions in the Town Centre. Chief among these is the transition forced upon the Town Centre by the Garfield Road Overpass. The Master Plan needs to provide a staging plan that, in

the short to medium term prior to the construction of the overpass, will maximise the viability of existing businesses along Garfield Road. In the long term, during and following the construction of the overpass, there will need to be a change in focus from Garfield Road as a main street to an alternative location.

Integrating the Garfield Road Overpass into the Town Centre fabric. The proposed Garfield Road Overpass will disrupt the Town Centre. The Master Plan will need to identify the best uses for land adjoining the overpass, in particular the land left over on the southern side of the overpass following the demolition of existing development. New adjoining development will need to be determined taking into consideration to the noise and pollution impact of passing traffic, the visual amenity impacts arising from the structure, and implications on connectivity to surrounding areas.

Managing heavy vehicle traffic through the Town Centre. Heavy vehicle movements through the Town Centre are incongruous with the Study Area's country town, low density residential character. Mitigation measures should be identified where possible to minimise impacts upon the operation of the Town Centre, its character, and amenity for pedestrians and cyclists.



FIG. 6.3: RIVERSTONE PARK



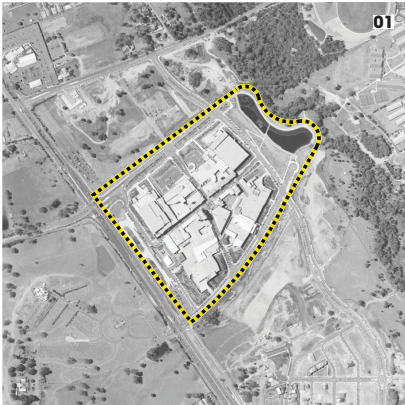
FIG. 6.4: VACANT LAND NORTH OF MARKETOWN

O'F
PREC

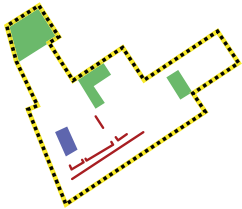
07
PRECEDENT
ANALYSIS

7.1. PRECEDENT ANALYSIS

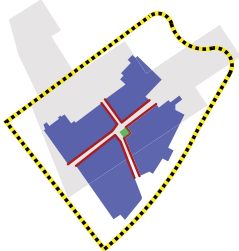
Precedent Area	Total Area (ha)
00 - Riverstone, NSW	16.30
01 - Rouse Hill, NSW	23.23
02 - Orange, NSW	32.86



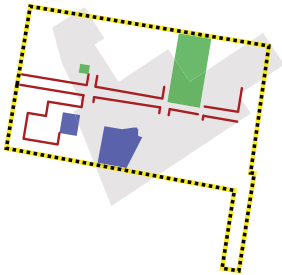
- LEGEND
- Open Space
 - Retail Centre
 - Street Activation
 - Riverstone Area



Riverstone, NSW



Rouse Hill, NSW



Orange, NSW

FIG. 7.1: SCALE COMPARISONS

01 - ROUSE HILL, NSW

Rouse Hill Town Centre is approximately 23.23 hectares, directly associated with low to medium density residential communities to the south, the Iron Bark Ridge Reserve and Caddies Creek to the east, the Castlebrook Lawn Cemetery and Crematorium to the west and future development lands to the north.

Rouse Hill Town Centre is characterised by a central plaza, forming a core where two 'cross roads' (Main Street and Civic Way) meet dividing the town centre into quarters. Associated with the plaza are the library and predominantly small cafes and restaurants. The majority of the buildings in the Town Centre are limited to seven stories and comprise of retail/ commercial uses to the ground floor and apartments above. Awnings extend out above the footpath areas.

All retail and commercial shopfronts interface directly with the footpath activating the public domain. Laneways interface with the 'cross roads', Main Street and Civic Way, providing permeability through the buildings.

Below ground parking is provided as well as on street parking throughout the Town Centre.

Ironbark Ridge Reserve and Caddies Creek provide a combination of active and passive recreation opportunities. Street trees and rain gardens are integrated throughout the Town Centre and aid in providing a connection to the reserve.

Rouse Hill Town Centre is an example of the following;

- > A combination of well-defined main streets and open internal laneways provides greater permeability.
- > Retail stores open out towards the main streets.
- > Town square provides a central core incorporating a library (community facility) and cafes.
- > Trees and rain gardens are integrated throughout the development.

02 - ORANGE, NSW

Orange Town Centre is approximately 32.86ha, characterised by historical buildings and parks, surrounded predominantly by low density residential properties, with numerous parklands to the south. The town centre was laid out on a grid, utilising the principles of the 'gridiron system'; made possible by the flat topography of the area.

The majority of the built form is 2-3 stories, constructed during the 19th century, expressing styles from the Victorian and Neoclassical eras of architecture. Built form in the retail / commercial area is typically to the property boundary and interfaces directly with the footpath. Awnings are fixed to brick façades extending over the footpath.

Small retail and commercial stores and two large anchor stores Myer and Big W are located along either side the Mitchell Highway, the main road of the town centre, providing activation to the public domain. Some blocks are fragmented by laneways providing greater permeability through built form. A pocket of open space (Robertson Park) exists in close proximity to the large retail precinct.

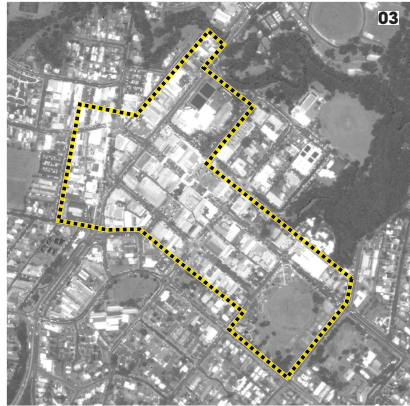
The main retail streets are provided with on-street parking. Off-street surface parking areas are typically located behind built form and visually screened from the streets.

Deciduous street trees characterise the streetscape and reflect the landscape character of Robertson Park. The park provides opportunities for a combination of social and active recreational activities. Other areas of open space to the south provide greater opportunities for active recreation.

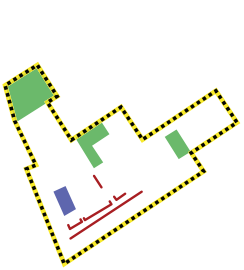
Orange Town Centre is an example of the following;

- > A country town with a well-functioning Town Centre.
- > Good integration of historical and contemporary buildings.
- > Grid pattern similar to Riverstone.
- > The Suburb developed around the same time as Riverstone.

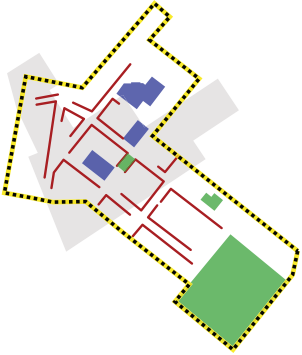
Precedent Area	Total Area (ha)
00 - Riverstone, NSW	16.30
03 - Coffs Harbour, NSW	40.55
04 - Five Dock, NSW	8.82



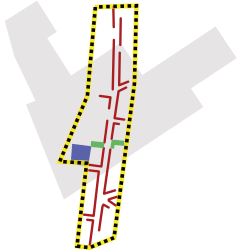
- LEGEND
- Open Space
 - Retail Centre
 - Street Activation
 - Riverstone Area



Riverstone, NSW



Coffs Harbour, NSW



Five Dock, NSW

FIG. 7.1: SCALE COMPARISONS (CONTINUED)

03 - COFFS HARBOUR, NSW

Coffs Harbour is approximately 40.55ha, a coastal town centre with the north coast regional botanic gardens to the north east and general residential to the south/ south-east.

In general the building heights are an average of four to five stories in the Town Centre. Many of the building typologies differ from one and other, and setbacks from the property boundary are variable in places.

The main street, Harbour Drive, is characterised by small retail/ commercial stores and a major shopping centre containing anchor stores such as Big W and Kathmandu, creating an activated public domain.

Permeability across the blocks is via small arcades and the major shopping centre and linear parks and plazas.

On street parking is available along all streets throughout the town centre. Closer to the major shopping centre are multistorey car parks.

Large open spaces are present; the botanic gardens to the north and the Coffs Harbour Golf Club to the South. Brelsford Park is the major communal open space within the town centre.

Coffs Harbour Town Centre is an example of the following;

- > Providing permeability in the form of arcades rather than laneways.
- > The proportions of the street widths and the building heights create a comfortable human scale.
- > A plaza located centrally along the main retail strip is a flexible space that provides opportunities for outdoor markets and spill-out seating.

04 - FIVE DOCK, NSW

Five Dock Town Centre is approximately 8.82 hectares. The linear Town Centre is located along the Great North Road, within a predominantly residential area. It contains a mix of retail and commercial uses.

Built form is typically two to three stories with retail to the ground floor and on the upper levels commercial offices or shop top housing. Retail shopfronts facing The Great North Road generally feature large windows to activate the street, either brick or rendered brick façade and awnings suspended over the footpath.

The majority of the older retail stores are small and the urban blocks are fine grain. This provides greater differentiation in the building types and facades at street level. Residential streets feed into the Town Centre, intersecting with the Great North Road.

The majority of parking is on street with some surface parking, located behind the retail buildings facing the Great North Road. There is also a publicly accessible basement parking area under a mixed use residential development located off the main retail street.

Open space is limited in the town centre itself; there is a small plaza located centrally. However, the associated Five Dock parklands to the east and Kings Bay/ Canada Bay to the north are in close proximity (approx. 400-500m walk). Throughout the Great Northern Road are deciduous street trees. The canopy of the trees extends partially over the road and adjacent footpaths.

Five Dock Town Centre is an example of the following;

- > Focused corridor of active retail and commercial shop fronts.
- > Good example of a 'main street': varied uses, differentiation in building typologies.
- > Proximity to open spaces.
- > Residential streets 'connect into' the main retail street (Great North Road).

08

REFERENCES

08 REFERENCES

8.1. REFERENCES

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