

Prepared for: NSW Land and  
Housing Corporation

Date: June, 2022

Place Strategy

# Riverwood Estate State Significant Precinct





# Acknowledgement of Country







The location of what is now known as Riverwood Estate is within Country that has been described as belonging to the Bidjigal / Bediagal / Bideegal people.


The Bediagal are described as 'Woods People' who occupied land away from the sea, along rivers and creeks, and ranged between the Georges River in the south and Parramatta in the north. This identification as woods people provides indications as to the likely primary modes of subsistence and possibly their systems of belief.

The Bediagal people were served by the freshwater and riverine resources of the Salt Pan Creek, the local widely-varied woodlands botany and its faunal species.

*"We Aboriginal people have walked this land for tens of thousands of years and we continue to do so today. We hold a deep connection to the land, skies and water ways. The study area is highly significant to us Aboriginal people as it is located close by to a water way, this would indicate that Aboriginal people would have utilized this water source."*

**Kamilaroi-Yankunjatjara Working Group, advice on the Aboriginal cultural heritage values of the study area.**

Architectus acknowledges the Australian Aboriginal and Torres Strait Islander peoples of this nation. We acknowledge the traditional custodians of the lands on which our company is located and where we conduct our business. We pay our respects to ancestors and Elders, past and present. Architectus is committed to honouring Australian Aboriginal and Torres Strait Islander peoples' unique cultural and spiritual relationships to the land, waters, and seas, and their rich contribution to society.

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# Executive Summary

Riverwood Estate has changed over time from its First Nations origins, through its World War 2 history as the largest military hospital in Australia, to its present day use as a social housing estate.

Riverwood Estate State Significant Precinct is a 30-hectare site, comprising around 1,100 social and private dwellings as well as land owned by Council. The site presents two clear opportunities. Firstly, the opportunity to increase housing supply, diversity and affordability in an area already identified by State and local government strategies and plans as a suitable location for growth and additional housing. Secondly, the opportunity to deliver better social and economic outcomes for both current and future residents of the precinct.

Purpose of the report:

NSW Land and Housing Corporation (LAHC) has engaged Architectus Urban Design and Planning Team to prepare this Place Strategy to support a State Significant Precinct application for the Riverwood Estate. This report defines Place by remembering and celebrating the past, identifying and understanding the present and presenting the vision for the future. This Place Strategy outlines future opportunities to connect with Country, the strategic context, confirms project objectives and outcomes and provides place-based direction for the precinct.

Architectus and a consultant team have worked with NSW Land and Housing Corporation to prepare a master plan for the Riverwood Estate. The master plan has provided a basis for the proposed planning framework, demonstrating what can be achieved through the renewal of the Estate. The key outcomes of the master plan, which have been incorporated into the proposed planning framework, include:



**24,000sqm** of new public open space including Roosevelt Park, a 1ha local park which is located to service Riverwood town centre as well as the precinct



Multiple residential entries and front gardens creating **safe, active, tree lined streets and spaces** preserving the existing strong community connections and forging new ones



**3,900 new dwellings** including fit-for-purpose social and market dwellings, providing diversity in housing options including terraces, low scale garden apartments and medium to higher density perimeter block apartments



## Executive Summary



Maintain the existing green character of the site with a **30% tree canopy** target to mitigate the effects of climate change and urban heat



A **Sustainable** precinct achieving a 5-star Green Star - Communities rating,



A new, 5,000sqm pedestrianised **Community Greenway** connecting Riverwood Public school and Salt Pan Creek Reserve through the new local Park to Belmore Road



A precinct that embeds **Green Infrastructure principles** including tree canopy, connected soil networks, promoting and protecting biodiversity, passive irrigation and stormwater capture and reuse across the site



New and improved streets provide **new walking and cycling connections into the Green Grid** as well as Riverwood town centre, Karne Street Reserve and Riverwood Public School



A permeable edge to surrounding open space including **3 new public connections** to Salt Pan Creek Reserve and Karne Street Reserve



**Support the Riverwood local centre** with retail uses along Belmore Road within 400m of the station and a larger population supporting local businesses and retailers



Approximately **1200sqm** of community uses across the precinct, including 2 childcare centres, to strengthen the existing community



## Executive Summary

### Vision

Our vision is to deliver a new neighbourhood in Riverwood that contributes to the growth of Greater Sydney as a more liveable, productive and sustainable metropolis and provides a greater supply of diverse and affordable housing in an area identified for renewal.

The Riverwood Precinct will be transformed into an attractive and safe neighbourhood with a mixture of private and social housing. People will choose to live here because of the high-quality buildings, facilities and open space, and connections to nearby transport, schools, employment opportunities and services.

New housing, transport and social infrastructure will support a growing and more diverse community with different housing needs. The development will be accessible and welcoming, complementing the site's natural setting with new and upgraded parks positioned amongst mature trees and improved connections to Salt Pan Creek, a central part of Metropolitan Sydney's Blue-Green Grid.

It will be a place that celebrates the site's history and provide opportunities to re-establish Connection to Country. There will be a network of new and reinstated tree-lined pedestrian-friendly streets that connect shared facilities and open spaces to encourage residents to engage with each other and the broader Riverwood community. Buildings and dwellings will be designed to activate streets and provide natural surveillance of the public domain.

The development will be a sustainable built environment. Contemporary sustainability features will be integrated into buildings and the public domain, including commitments to a tree canopy target and management of water in the landscape to mitigate against the effects of climate change and urban heat.





30ha

**Roosevelt Avenue**  
transformed into a grand 30m wide boulevard

**Increase tree canopy**  
cover of up to 30%

View corridor from Belmore Road to Salt Pan Creek Reserve

**New Roosevelt Park**  
1ha

New active transport links to Riverwood town centre and open space



# Introduction

## Riverwood

The Riverwood suburb is located within the Canterbury-Bankstown LGA. Riverwood is strategically located 18km from Sydney, and centrally located between the district centres of Bankstown and Hurstville.

The suburb of Riverwood is well serviced by public transport, located on the T8 Airport, Inner West & South Line, providing express services to the Sydney CBD within 22 minutes. Riverwood is also well serviced by existing bus routes along Belmore Road, providing connections to key centres, including Bankstown, Hurstville, and Roselands. Riverwood is well serviced by key local and regional road networks, provided by the M5 Motorway, Belmore Road, and King Georges Road. The adjacent diagram provides an overview of the local context.

Riverwood is a predominately residential suburb, with a retail shopping strip running along Belmore Road, to the north and south of Riverwood Station. Riverwood Plaza is a small shopping centre located on the corner of Belmore Road and Webb Street that incorporates a supermarket, postal office and small-scale retail and local services.

Salt Pan Creek Reserve, to the west of the precinct, is a significant green corridor containing important ecological communities, mangroves, wetlands, recreational facilities and walking and cycling trails on both sides of the creek. The Salt Pan Creek Green Grid Corridor has been identified as a priority project as part of the GANSW Green Grid Strategy.

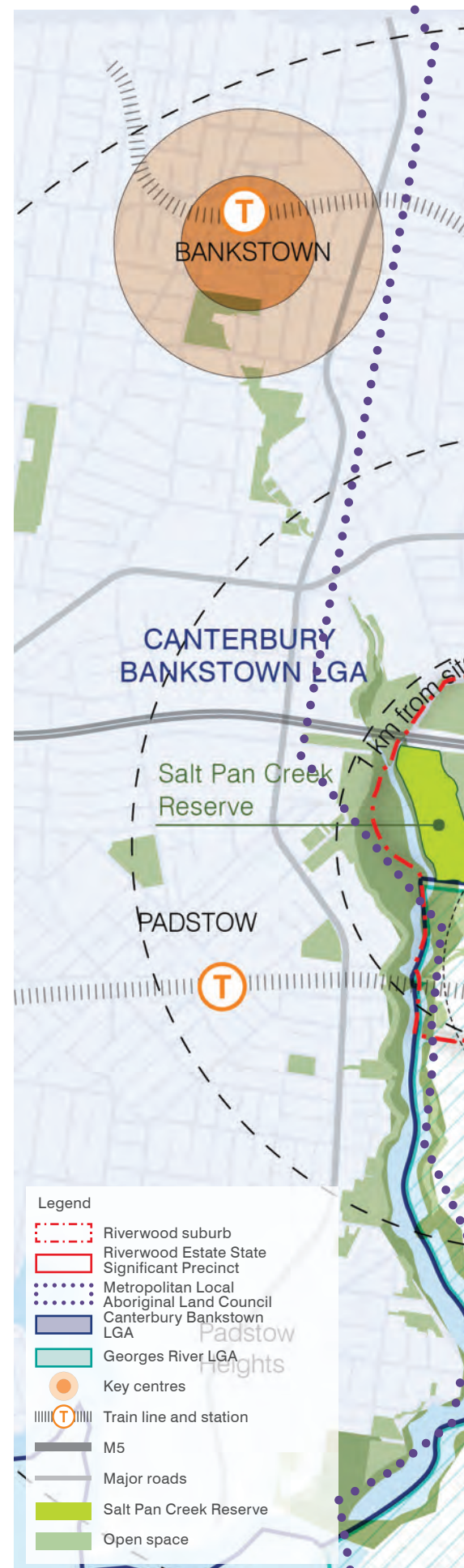
To the north, are significant employment lands, including Riverwood Business Park within the Bonds Road Employment area and Wiggs Road Industrial precinct, making up a significant proportion of employment lands within the local area. To the west, extensive employment lands are in Padstow, adjacent to the M5 Motorway and Salt Pan Creek Reserve.

Two primary public schools are located within the suburb of Riverwood, being Riverwood Public School and Hannans Road Public School. Various other primary and high schools also exist within surrounding suburbs of Bankstown, Beverly Hills, Georges River, Kingsgrove, Penshurst and Wiley Park.

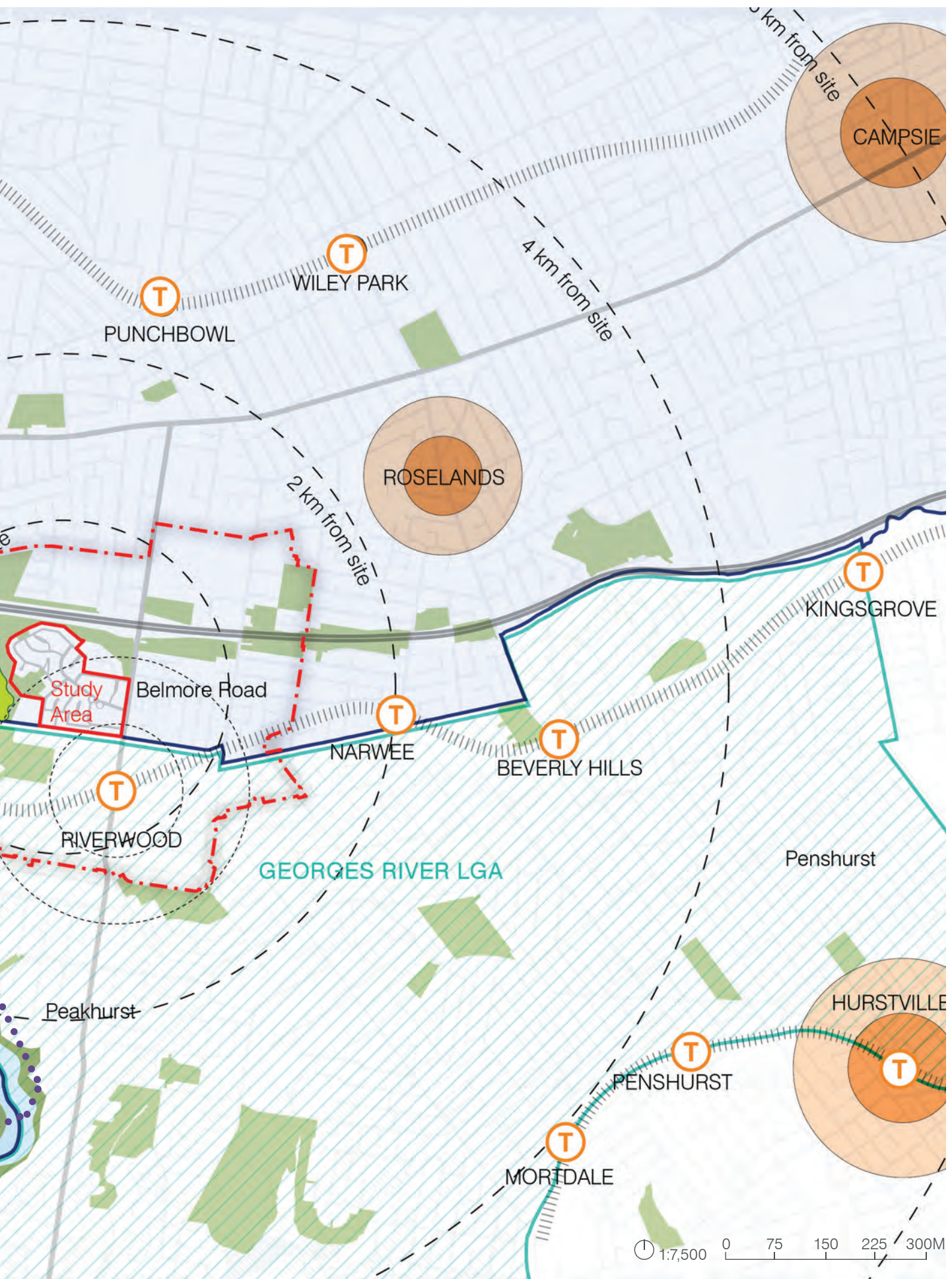
The Western Sydney University (Bankstown Campus) is located 7km to the west of Riverwood, and the South-Western Sydney TAFE Campus is located in Padstow, approximately 2km to the west.

Significant health facilities are available at Bankstown-Lidcombe Hospital, located approximately 3km to the north west. It is noted the Bankstown-Lidcombe Hospital has recently been earmarked for significant redevelopment, comprising a second, new hospital on a new site within Bankstown (noting that at time of writing a site for the development has not been selected). This significant investment and new hospital development will improve the provision of health services for the residents of Bankstown, Riverwood and South Western Sydney.

**Riverwood Estate State Significant Precinct is a 30-hectare site, comprising around 1,100 social and private dwellings. The western boundary is a priority Green Grid Corridor with The masterplan for Salt Pan Creek Reserve, to the west of the site, having been adopted by council in February 2019.**









# Introduction

## Study requirements

Study Requirements for the project were issued by DPE on 17 December 2020. These Study Requirements have been fundamental in developing the master plan, forming both the brief and assessment parameters for the project team.

Item 1 of the Study Requirements relates to Place Strategy. Below provides a summary.

### Overview of Study Requirement 1

Item	Study Requirement	Refer Chapter
1.1	Prepare a Strategic Place Framework for the precinct that:	
	Identifies and understands the strategic context, confirms project objectives and outcomes and provides place-based direction for other aspects of the study, including:	
	<ul style="list-style-type: none"><li>Describing the case for change, need for government intervention, strategic context</li></ul>	Why Renewal
	<ul style="list-style-type: none"><li>Noting State and Local Government objectives, priorities and commitments</li></ul>	Why Renewal
	<ul style="list-style-type: none"><li>Identifying critical targets (meaning aspects of the LAHC brief which are considered essential to the project's success, for example: no loss of social housing)</li></ul>	Why Renewal
	<ul style="list-style-type: none"><li>Outlines the project scope and parameters, including the study area and broader context which will be considered as part of the study</li></ul>	Introduction, Country & The Precinct
	<ul style="list-style-type: none"><li>Describes the whole of Government and external stakeholder network, including potential future investors</li></ul>	Why Renewal
	<ul style="list-style-type: none"><li>Identifies specific local considerations</li></ul>	Why Renewal
1.2	Defines a Place Brief including:	
	<ul style="list-style-type: none"><li>Background research and findings related to the strategic context</li></ul>	The Precinct & Place narrative
	<ul style="list-style-type: none"><li>Place audit including key place needs and opportunities</li></ul>	The Precinct & Place narrative
	<ul style="list-style-type: none"><li>Preliminary analysis of broader networks and infrastructure; natural systems and cultural systems</li></ul>	Introduction, Country, The estate historic timeline, The Precinct, Place narrative
	<ul style="list-style-type: none"><li>Outcomes of initial engagement with local Aboriginal community to embed a Connecting with Country in development of the Place Framework, Urban Design Framework, Public Domain Strategy and Consultation Strategy</li></ul>	Country
	<ul style="list-style-type: none"><li>Preliminary spatial analysis and identification of sub-precincts and key sites</li></ul>	The Precinct & Place narrative
	<ul style="list-style-type: none"><li>Results and summary of stakeholder and community collaboration/consultation</li></ul>	Why renewal & The Precinct

## Introduction

Item	Study Requirement	Refer Chapter
	<ul style="list-style-type: none"> <li>Place narratives*, drivers and character including consideration of the existing physical and social elements of the site that has assisted in building community and illustrating the history of the site and the story of its residents (for example, but not limited to: the community gardens, yards)</li> </ul>	Place narrative & Guiding principles
	<ul style="list-style-type: none"> <li>An emerging place vision— identity, principles and key directions</li> </ul>	Place vision, Guiding principles
	<ul style="list-style-type: none"> <li>Evaluation criteria to support place vision and principles— including economic, social, environmental and cultural factors (please note these criteria should be used by the project team to refine the scheme, they should also be included in reports so that they can be used and understood by anyone engaging with or assessing the project)</li> </ul>	Master plan evolution
	<ul style="list-style-type: none"> <li>High level scenarios, priorities and staging options</li> </ul>	Master plan evolution
	<ul style="list-style-type: none"> <li>Next steps, including identification of threshold decisions to be resolved to address impediments and barriers</li> </ul>	Why renewal
1.3	A foundation for the Urban Design Framework, including:	
	<ul style="list-style-type: none"> <li>Key spatial moves and directions</li> </ul>	Guiding principles & The Master plan
	<ul style="list-style-type: none"> <li>Stakeholder/community collaboration/consultation and how this has/will inform the proposal</li> </ul>	Why renewal
	<ul style="list-style-type: none"> <li>Local character and identity of sub precincts— Place Narrative, Drivers and Character</li> </ul>	The Precinct, The Master plan & Place narrative
	<ul style="list-style-type: none"> <li>Iterative options and scenario testing against evaluation criteria, informed by spatial analysis</li> </ul>	Master plan evolution
	<ul style="list-style-type: none"> <li>Proposed layout and built form, including landscape, open space, density, land use and mix</li> </ul>	The Master plan, Place narrative, Roosevelt Park Urban Neighbourhood & Garden apartments Neighbourhood
	<ul style="list-style-type: none"> <li>Infrastructure staging and delivery plan, including early responses to staging threshold questions</li> </ul>	Delivering the plan
	<ul style="list-style-type: none"> <li>Draft development staging, sequencing and implementation outline</li> </ul>	Delivering the plan
	<ul style="list-style-type: none"> <li>Reference schemes and visualisations</li> </ul>	Throughout document
Considerations	Consider the broader context of the site including but not limited to the school, Washington Park, adjoining streets, Salt Pan Creek and reserve, Belmore Road, the local centres, character of the suburb	Throughout document
Author	The place framework is to be prepared by suitably qualified design or engagement professional(s) or otherwise suitably experienced expert to undertake the required works	
Consultation	The place framework is to demonstrate consultation with Canterbury Bankstown City Council, Georges River Council, Government Architect NSW, DPIE's Place Design and Public Spaces Division and the Greater Sydney Commission.	Why renewal



# Country



The location of what is now known as Riverwood Estate is on Country described as belonging to the Bidjigal / Bediagal / Bideegal people of the Dharug nation. Bediagal Country possibly ranged as far as Castle Hill.

In contrast to the fishing and canoe-centred based culture common among First Nations People located around the bays and ocean at Sydney, Bediagal people were described to Governor Phillip by other First Nations People as 'climbers of trees' and 'men who lived by hunting'. This does not imply that the Bediagal did not utilise riverine resources such as at Salt Pan Creek. Rather, that their dry land activities differentiated them from the groups who lived in the sandy Country around the bays and ocean shore. This differentiation of the Bediagal based on the landform of their Country was also reflected in their material culture, their traditions and language, their dances, their songs and their dialects.

The Bediagal occupied land away from the sea, along rivers and creeks, which ranged between the Georges River in the south and Parramatta in the north. The Georges River is located about 4km to the south of the precinct and formed a boundary between First Nations language groups to the south and north. The lands around the river likely comprised an area of heightened First Nations inter-group contact.

## Geology

The predominant geology of the precinct is Wianamatta Group Shales with the eastern extremity of the precinct situated on silty to peaty quartz sand, silt and clay with frequent layers of shell, deposited by the Salt Pan Creek. The wider surrounds of the precinct contain isolated areas of carbonaceous claystone, and fine to medium grained sandstone which forms the outcroppings locally utilised as shelters, grinding stones and as surfaces for art.

## Vegetation

The vegetation form that is native to this area is Turpentine-Ironbark Forest. The open ground was often covered in herbs, wildflowers and flowering shrubs, and a variety of creepers grew over trees and branches. This rich vegetative form in the area of the precinct was complimented by the estuarine and mangrove vegetative species associated with the Salt Pan Creek that flowed nearby. This abundant and varied environment provided materials and vegetative food sources for First Nations People, and also provided a habitat for a wide variety of animals of prey.





## Salt Pan Creek

Salt Pan Creek is associated with the Bediagal group of the Dharug nation.

River side areas in the Sydney region, such as Salt Pan Creek, have been noted as preferentially occupied by First Nations People and have been historically recorded as used for purposes including yam cultivation.

The Bediagal people were served by the freshwater and estuarine resources of the Salt Pan Creek, the local widely-varied woodlands botany and its faunal species. Ethnohistorical accounts indicate that the study area would have constituted an attractive area for extended camping by First Nations People in the past.

The current course of the Salt Pan Creek appears to have been considerably modified through the substantial filling along its eastern banks, and the Salt Pan Creek once flowed far closer to the location of the precinct than it currently does. In this the Salt Pan Creek, or part of it, is seen within the current Salt Pan Creek Reserve.

The Salt Pan Creek Green Grid Corridor links Bankstown to the Georges River and has been identified as a priority project as part of the Government Architect NSW Green Grid Strategy. Salt Pan Creek Reserve, to the west of Riverwood, is a significant portion of this green corridor

containing important ecological communities, mangroves, wetlands, recreational facilities and walking and cycling trails on both sides of the creek.

In February 2019, The City of Canterbury Bankstown adopted a masterplan for Salt Pan Creek Reserve, Whitmarsh Reserve and McLaughlin Fields. The masterplan will provide for a destination parkland providing for multiple recreational uses that engage a broad cross section of community, and that celebrates the location, history and setting of Salt Pan Creek.

Connecting nearby town centres such as Riverwood is a key part of delivering Sydney's overall green grid. The Study Area is located adjacent to Salt Pan Creek and provides a significant opportunity to contribute to the development and use of the future master plan.

The master plan will:

- Further activate and facilitate access;
- Promote passive and active recreation opportunities within Salt Pan Creek Reserve; and
- Improve connections and access across the Study Area to the wider Riverwood community to areas of open space that will provide recreational, social and cultural spaces for the community.



### Engagement with local First Nations community

An Aboriginal Cultural Heritage Assessment Report (ACHAR) for the Estate has been produced by Artefact and First Nations community consultation has been conducted in accordance with the Consultation Requirements. The consultation undertaken for this study is statutory in nature. It is understood that additional engagement and consultation would be undertaken during design and implementation phases with a focus on an oral history approach resulting in a far richer understanding of local Aboriginal history.

A total of 12 stakeholder groups had registered their interest in the consultation process, including one group which requested that its details not be disclosed publicly (not listed below). These groups were:

- A1 Indigenous Services
- Butucarbin Aboriginal Corporation
- Clive Freeman
- Didge Ngunawal Clan
- Gulaga
- Kamilaroi Yankuntjatjara Working Group
- Metropolitan Local Aboriginal Land Council
- Murra Bidgee Mullangari Aboriginal Corporation
- Ngambaa Cultural Connections
- Worri Woilywa
- Wurrumay Pty Ltd

#### The First Nations stakeholders were consulted on two occasions:

- A copy of the proposed ACHAR methodology was distributed to First Nations stakeholders on 26 April 2021;
- The Draft ACHAR was distributed to Registered Aboriginal Parties on 25 May

Further detail including responses, key findings and recommendations as well as a consultation log which details all correspondence with the Registered Aboriginal Parties for the project can be found within Attachment L Aboriginal Heritage Assessment of the planning proposal.

### Potential pathways for connecting

The NSW Government Architect's *Connecting with Country draft framework* (December 2020) offers 4 potential pathways to connect with Country and help develop cultural awareness. These pathways help projects to align with First Nations values.

#### Pathway 1: Learning from first languages and placenames

This pathway acts as a form of cultural expression through language. It is important to recognise cultural expression can take many forms including performance, ceremony, collection and preparation of food, song, dance, art, clothing, and tools" (2020b: p21.).

#### Opportunities:

- Learn the meaning of first placenames in the area to better understand the historical character and purpose of the site.

- Share, communicate and celebrate language through including first placenames throughout the masterplan
- Allow Country to tell us who she is through placenaming and naming of the parks or streets within the master plan.

### **Pathway 2: Develop mutually beneficial relationships with Country**

A relationship with Country is developed through making decisions that address the needs of Country as well as benefiting the people upon it. This relationship will be developed through walking Country and gaining insights from local knowledge holders and may include:

- Expressions of water in the way it moves through the site and is cleaned before returning to Salt Pan Creek
- Use of endemic plant material of significance to local Dharug First Nation People
- A natural soil profile, derived from local parent geology, unobstructed by structures and services and connected to the local groundwater to optimise growth and aid the ongoing flourishing of the tree.
- Protecting and providing healthy habitats for native fauna
- Contributing to the revitalisation of Salt Pan Creek reserve
- To retain significant existing tree canopy where possible and where replacement is required to consider intergenerational equity where the number of trees planted replace removed canopy in a generation.

### **Pathway 3: Reawakening memories of cultural landscapes**

To learn from Country through walking Country with First Nations knowledge holders and being guided as to appropriate:

- Application of cultural practices to assist deep understanding of Country
- Memories to be shared in both tangible and intangible means

### **Pathway 4: Finding common ground**

Knowledge sharing and providing opportunities to combine First Nations ways of knowing and eco systemic thinking with western scientific knowledge.

Opportunities:

- Knowledge sharing through inviting First Nations People to co-design and co-manage projects like community gardens and community spaces
- Recognising the importance of First Nations Peoples retained authorship and control of their shared knowledge

LAHC acknowledges we all stand on Aboriginal land and is committed to implementing the principles outlined in the draft framework, to demonstrate an ongoing commitment to planning and creating places that respect Aboriginal cultural heritage and respond to the contemporary social, cultural and economic needs of Aboriginal people.

As the development of the master plan predates the release of the guidelines, Connecting with Country requirements will be met in future stages of the project.

The draft DCP details objectives and provisions to ensure development acknowledges and embeds Country.



# The Estate Historic Timeline

## Pre 1788

Riverwood Estate is within Country that has been described as belonging to the Bediagal people, a woods people of the Georges River hinterland. The precinct is on mildly sloping and flat lands near the Salt Pan Creek. Such river side areas in the Sydney region have been noted as preferentially occupied by First Nations People and have been historically recorded as used for purposes including yam cultivation (Hunter, 1793 [2003]). The Bediagal people were served by the freshwater and riverine resources of the Salt Pan Creek, the local widely-varied woodlands botany and its faunal species. Ethnohistorical accounts indicate that the study area would have constituted an attractive area for extended camping by First Nations People in the past.

## 1788-1815 Early Land Grants

Following the arrival of the first fleet in 1788 and pre-dating land grants, European activities in the area probably included small scale industry involved in evaporation of salt from the Salt Pan Creek, named after this early activity.

Riverwood Estate and its surrounds were first subject to land grants in 1809-10. In 1810 George Pashley received 80 acres of land in the area, David Batty, James Plunkett, Richard Calcutt and Andrew Murphy each received 60 acres, and William Holmes and Robert Lack received 50 acres each.

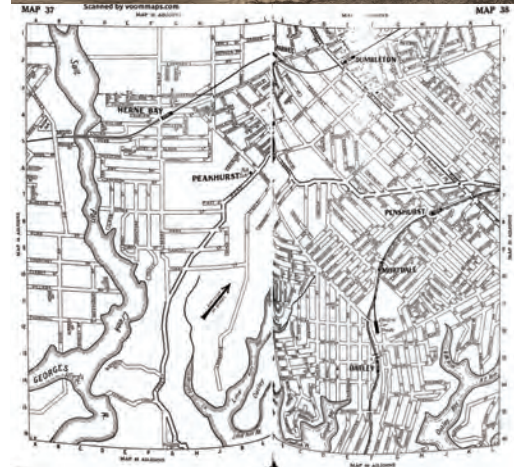
## 1815-1942 Farming

Following the first land grants and increased access to the area, timber-getters and market gardeners became more frequent occupants, however their presence was often only transient, as they continually moved to new sources of timber.

The Levingston family were long term residents of the area. Robert Levingston acquired 140 acres in the area between Canterbury Road, Belmore Road and Salt Pan Creek. They attempted to subdivide the area in 1919, with the locality dubbed the "Herne Bay Estate", named after a small cove on the eastern bank of the Salt Pan Creek. This subdivision was unsuccessful.

In the 1930s, James Levingston (son of Robert) established Herne Bay Public Golf Links. The original slab hut farmhouse of Robert Levingston was used as the club house.

Through the period to the Second World War, Herne Bay seems to have existed as a not particularly successful farming area, with a considerable community of homeless or marginalised persons living in camps along the Salt Pan Creek frontage.



# The Estate Historic Timeline

## 1942-1945 Military hospital

During World War 2, hospital facilities were required for the large number of USA military personnel injured in the war in the Pacific. In 1942 the United States Army was granted authority to assume control of Levingston's Golf Course under the auspices of national security regulations.

The US Army 118th General Hospital was constructed by the Australian Government at the location of Riverwood Estate. The installation, Herne Bay Hospital, was the largest military hospital in Australia, comprised of 490 timber barracks-type huts accommodating 1,250 patients and 3,500 staff.

The US army left the site at the conclusion of war in the Pacific in 1945. The hospital was taken over by the Royal Navy and the Australian Army.

## 1945-Current Social housing estate

The end of the war saw the Australian Government better able to turn its attention to domestic affairs, including the provision of housing for the homeless. Building materials were scarce and combined with a large proportion of Australia's qualified builders and labourers serving in the armed forces, meant that many Australian families were homeless due to a lack of housing availability rather than solely due to poverty. This situation was exacerbated by the large migrant intake following the Second World War.

The backlog of persons requiring urgent housing appears to have been large, and after the war the hospital site at what is now Riverwood Estate was temporarily put into use as one of the largest public housing projects undertaken in Australian history (Canterbury Commons, 2017).

During the 1950's the Housing Commission began to demolish the estate timber huts, replacing them with high and medium density housing. Permanent streets were laid out, named after persons and places in the USA as a commemoration of the site's history.

A construction program in the 1970's resulted in the provision of large numbers of additional dwellings at the site, comprising bedsits, townhouses and multi-level towers.

In 1992, the M5 Motorway was constructed through the northern part of the housing estate, and in 1997 Riverwood wetland was constructed in the north east of the estate. Footpaths, and barbecue areas were established to encourage recreation and awareness of the environment.

The most recent phase of ongoing improvements at the estate has been the development of the Washington Estate in a collaborative effort by multiple entities including Housing NSW and Payce Communities Pty Ltd. This saw the redevelopment of previous Housing Commission infrastructure into an integrated community of private and social housing.





# Why Renewal

The renewal of the Riverwood Precinct will transform the existing 1,100 dwellings and ageing estate into a vibrant, higher density neighbourhood, delivering new and improved public spaces, community facilities and retail uses that will provide benefits for residents and the broader community.

## Why Renewal?

The Riverwood Precinct is a 30 ha, predominantly Government-owned site located within 300m to 1km from Riverwood railway station and shopping strip. The Riverwood Estate was declared to be of State significance on the basis of its potential to deliver more housing in a new, mixed tenure community, while generating social and economic benefits for NSW.

In response, a planning proposal to support the redevelopment of the site has been prepared. The planning proposal will support the delivery of:

- Approximately 3,900 new dwellings, with a mix of dwelling types, sizes and tenures, in buildings with heights ranging from 3 to 12 storeys.
- 4.8ha of new or upgraded public open space, including new parks, green connections and upgrades to existing parks, providing green space and more connectivity for the new residents and the broader community of Riverwood, particularly to Salt Pan Creek.
- A street network that is green, legible, safe and welcoming, enabling new residents and the people from the local community to move around and through the site and to connect the site with the surrounding area, Riverwood Station and bus routes.

The site presents two clear opportunities. Firstly, the opportunity to increase housing supply, diversity and affordability in an area already identified by State and local government strategies and plans as a suitable location for growth and additional housing tenants. Secondly,

the opportunity to deliver better social and economic outcomes for both current and future social housing

This case for change will provide justification for the planning proposal against these two opportunities. It will justify the planning proposal with reference to State and local government policies; the NSW strategic planning framework of regional, district and local plans; and the Government's four housing pillars of supply, diversity, affordability and resilience. It will also provide justification for the planning proposal against the Government's policies and strategies for social housing, including the over-arching objective to deliver more social housing of the right type in the right location.

The case for change is particularly strong when considered against the demand for fit for purpose social housing across NSW, Greater Sydney and in the area surrounding the site. Across NSW, as of 30 June 2020, there were more than 50,000 applicants on the waiting list for social housing. Approximately 10% of these applicants (about 5,150) were on the waiting list for social housing in the four allocation zones surrounding the site. A large proportion of these applicants, particularly those who have been assessed as having an urgent need for housing, require accessible or modified dwellings.

Currently, there are 1,079 dwellings (1,019 LAHC owned social housing dwellings, 2 AHO owned social housing dwellings and 60 privately owned dwellings) on the site. The social housing dwellings are contained in low, medium and high density buildings which were mostly built in the 1960s and 1970s. Over 85% of the social housing



dwellings on the site are apartments. Many of these do not meet contemporary accessibility and design standards, are costly to maintain and modify when required to meet the needs of tenants.

The planning proposal will deliver new social housing dwellings, that meet contemporary design and accessibility standards, in a good location where they are needed. The new social housing dwellings will cost significantly less to maintain than the dwellings currently on the site. Ultimately, this will mean that the LAHC, which is self-funded, will be able to either deliver more social housing or improve the quality of social housing on other sites.

The case for renewal and reconcentration of the site is further supported by a comparison of demand for social housing in the Riverwood allocation zone against demand in adjoining allocation zones. The Riverwood allocation zone is located in the middle of the St George, Canterbury and Bankstown allocation zones. As of 30 June 2021, the Riverwood allocation zone is ranked in 61st position for priority demand (the lowest priority demand ranking for a metropolitan location), while St George is ranked 3rd, Canterbury is ranked 16th and Bankstown is ranked 17th.

While the reasons for this would vary from applicant to applicant, it is likely to be at least partly due to the older, less accessible dwellings in the Riverwood estate being unsuitable for many applicants on the priority waiting list. It may also be that applicants for social housing would prefer not to live in an older, concentrated estate in an area perceived to have social problems.

The renewal of the site to a new, mixed tenure development has the potential to address these issues and make Riverwood a more desirable area for social housing tenants and the future private owners and renters who may live on the site, as well as the broader community.

The planning proposal will also deliver broader social and economic benefits to the Riverwood community. The addition of an extra 2,800 dwellings close to the Riverwood centre, particularly in the form of apartments, will assist in meeting the identified need for smaller, well-located dwellings for the ageing population of the area over the next 15 years.

The residents of the additional 2,800 dwellings will support local businesses and shops, strengthen the Riverwood high street and encourage further commercial and retail development in an area identified for growth and change in State and local strategic plans. Residents with children living on the site would also have the potential to increase enrolments at Riverwood Primary School, which adjoins the site and is currently below capacity.

In summary, the planning proposal is consistent with the strategic planning framework for where and how housing should be delivered in Riverwood. It responds to the Government's position to use Government-owned land to deliver better social and economic outcomes, including by increasing housing supply and affordability. It will assist Government to meet high and growing demand for social housing.



## Case for Change Strategic Context Table

The planning proposal has the potential to:	Government plan, policy or strategy
Increase supply, diversity, affordability and resilience of housing in response to the Government's four pillars of housing	– Housing 2041
Renew an older social housing estate with a new, mixed tenure residential community	– Housing 2041 Action Plan 2021-2022
Demonstrate best practice urban development on government-owned land	– Housing 2041 Action Plan 2021-2022
Increase the number of people in Greater Sydney living in an area where they can access centres, jobs and services within 30 minutes	– Greater Sydney Region Plan
Deliver 2,800 of the 83,500 additional dwellings required in the South District of the Greater Sydney by 2036	– South District Plan – Canterbury-Bankstown Local Housing Strategy
Increase housing diversity by delivering 2,800 additional dwellings (predominantly apartments) in an area identified as being suitable for higher density residential development and where smaller dwellings are required to meet housing demand	– Greater Sydney Region Plan – South District Plan – Canterbury-Bankstown LSPS – Canterbury-Bankstown Local Housing Strategy – Georges River LSPS – Georges River Local Housing Strategy
Provide a more affordable housing choice in an area where housing affordability is an issue	– Canterbury-Bankstown LSPS – Canterbury-Bankstown Local Housing Strategy – Georges River LSPS – Georges River Local Housing Strategy
Support the future development of the Riverwood centre, which has been identified as an area for growth and change, and support the integration of land use and transport planning	– Greater Sydney Region Plan – South District Plan – Canterbury-Bankstown LSPS – Canterbury-Bankstown Local Housing Strategy – Georges River LSPS – Georges River Local Housing Strategy
Renew 1,019 social housing dwellings (including 2 social housing dwellings owned by the AHO) located in an older-style estate with new and accessible social housing dwellings in an attractive, mixed-tenure community	– Future Directions for Social Housing
Deconcentrate a social housing estate and deliver better social and economic outcomes for current and future tenants as well as for residents in the broader community	– Future Directions for Social Housing

## Why Renewal

The planning proposal has the potential to:	Government plan, policy or strategy
Respond to demand for social housing by providing dwellings suitable for older, smaller households of one or two people who either need or prefer to live in a secure apartment near transport and services	<ul style="list-style-type: none"> <li>– Future Directions for Social Housing</li> <li>– LAHC Portfolio Strategy</li> </ul>
Support the viability of the social housing portfolio by replacing older social housing dwellings that are costly to maintain and modify with new fit-for-purpose dwellings	<ul style="list-style-type: none"> <li>– LAHC Portfolio Strategy</li> </ul>
Deliver new, accessible, social housing dwellings that will be able to more easily be modified to suit the needs of older tenants and tenants with complex needs in an area where demand for these types of dwellings is high	<ul style="list-style-type: none"> <li>– LAHC Portfolio Strategy</li> <li>– Canterbury-Bankstown Local Area Analysis</li> <li>– Social Housing Demand Analysis</li> </ul>

## Social Housing Context

LAHC owns and manages the NSW Government's social housing portfolio under the Housing Act 2001. The objectives of the Housing Act that are particularly relevant to the planning proposal include to:

- Ensure that public housing is developed as a viable and diversified form of housing choice;
- Ensure that public housing and community housing reflects the housing standards of the general community and is designed to cater for the ongoing needs of consumers;
- Ensure that the available supply of public housing is shared equitably among people who are most in need; and
- Encourage social mix and the integration of different housing forms in existing and new communities.

LAHC manages the social housing portfolio, which currently includes over 125,000 social housing dwellings, in line with these objectives and with a strong focus on making the best use of its available assets and resources to provide homes for as many people in need as possible.

The planning proposal, which will deliver new social homes

as part of a mixed-tenure development, responds to the objectives of the Housing Act, particularly by ensuring that social housing reflects the standards of the general community and social housing is built to the same standard and is integrated with private housing.

The planning proposal will also allow LAHC to provide housing on the site that better meets current and projected demand for smaller and more accessible dwellings. This is likely to subsequently reduce the number of underutilised social housing dwellings in the area and result in a more equitable sharing of social housing among people in need.

In managing the portfolio, including decisions about where to sell, buy and redevelop property, LAHC is guided by the Government's policy for social housing, Future Directions for Social Housing in NSW and the LAHC Portfolio Strategy 2020.





LAHC also responds to on-going analysis of the demand for social housing, including detailed analysis of needs and preferences of current tenants, as well the needs and preferences of households on the NSW Housing Register who are eligible for social housing. In addition, LAHC considers the longer term implications that projected population growth and change may have on future demand for social housing.



## Why Renewal

### Primary Drivers for Renewal





The primary drivers for renewal of the Riverwood Precinct include:

	<p>Social housing dwellings are at the end of their economic lifecycle. The social housing dwellings at the Riverwood Estate, built in the 1950's and 1970's, are at the end of their useful life and require a high level of maintenance at a significant cost to government. Further, substantial parts of Riverwood Estate require major refurbishment to bring them up to standard. Construction of new social housing at Riverwood Estate will lower the maintenance requirements and costs by replacing the ageing housing and infrastructure with modern, new, fit for purpose homes into the future.</p>
	<p>Social housing dwellings are no longer fit-for-purpose and suitable for the needs of residents. The existing social housing dwellings at Riverwood Estate are aging, being at the end of their useful life and are no longer suitable for the needs of residents. In particular, there is growing demand for smaller dwellings, such as one and two bedroom homes with better design and accessibility to suit a range of needs and lifestyles. The proposal seeks enable a range of dwelling types and sizes to be provided to meet this demand to better respond to the existing and future needs of residents.</p>
	<p>To reduce concentration of social housing in Riverwood Estate. At present, Riverwood Estate is a concentration of social housing and is somewhat set apart from the wider community of Riverwood. Historically, the Riverwood Estate has suffered from a range of physical and social disadvantages attributed to poorly designed public spaces, an uninviting pedestrian and street network, and buildings that are easily identifiable as social housing. The proposal seeks to respond to these known constraints to deliver a diverse, mixed tenure development which is better integrated within the broader suburb of Riverwood.</p>
	<p>To improve safety and create a welcoming neighbourhood. At present, the Riverwood Estate has a number of environmental and built form constraints, including a fragmented street network and poor building layouts which reduce lines of sight and poor lighting across the estate, limiting active and passive surveillance and presenting significant challenges in preventing crime.</p>
<p>The proposed master plan seeks to respond to these known constraints, including rationalising the existing street network, delivering revised building layouts with a positive street address and maximising visibility and lighting across the precinct, to ensure a safe welcoming and inviting place for all.</p>	

## Why Renewal

### Broader Community Benefits

In addition to the primary drivers of renewal, the proposal will also provide other benefits to the broader suburb of Riverwood, including:

	Increased enrolments at Riverwood Primary School. Enrolment demand at Riverwood Primary School is currently below capacity. The renewal of the precinct will increase and diversify the population within the catchment of the Riverwood Primary School which will help the school grow and improve.
	Revitalise the Riverwood Local Centre. A larger population will further support local businesses and retailers, strengthening the high street and creating opportunities for new retail. The renewal of the precinct will contribute to the economic livelihood of the Riverwood Local Centre overall.
	Integration of Salt Pan Creek Reserve. The Salt Pan Creek Reserve is a significant regional space adjacent to the precinct. This parcel of land is owned by Canterbury-Bankstown Council and is subject to a separate Council-led master plan which seeks to improve the interface and connections to Salt Pan Creek Reserve, which will be further supported by upgrades to Whitmarsh and McLaughlin Fields, to transform this area into a regional parkland destination with various sports fields and recreational facilities.
	The renewal of the precinct will complement the master plan for the Salt Pan Creek Reserve and provide an opportunity for the reserve to integrate and connect with the wider community. The dwellings adjacent to the park will be redeveloped to activate the park edge. The renewal will also provide key pedestrian and vehicular access to the Salt Pan Creek Reserve. Overall, the redevelopment will also support people living in close proximity to high quality open spaces and sporting fields.
Overall, there is a strong case for change for the renewal of the Riverwood Estate, with the renewal of existing ageing social housing with new fit-for-purpose social housing dwellings within a vibrant and diverse mixed tenure setting. This will allow LAHC to better match the housing requirements of social housing tenants, whilst also delivering new and improved public spaces, community facilities and educational uses that will provide benefits for residents and the broader community.	



# Why Renewal

## The 'Do Nothing' Approach

- This case for change provides justification for the planning proposal, both regarding to the need for additional and more diverse and affordable housing typologies, as well as the need for more accessible social housing.
- The redevelopment of the site for higher density residential purposes is consistent with both State and local government strategies, policies and plans for housing. It provides an opportunity to increase the supply, diversity, affordability and resilience of housing in a well-located area with good amenity. It also responds to established planning principles of integrating higher density housing with transport, services and open space.
- The redevelopment of the site will support the provision of higher quality and more accessible social housing to existing tenants on the site and deliver social housing that is likely to meet the needs of tenants who may live on the site in the future. The planning proposal is focused on the delivery of accessible apartments in a mixed-tenure residential development that will be designed to provide a high level of on-site amenity and connectivity for all residents on the site as well as the broader community of Riverwood.
- The 'Do Nothing' option for this site is inconsistent with the clear objective of both State and local government strategic plans for Riverwood to develop over the next 15 to 20 years as a centre, with improved transport, services and increased housing diversity and supply. It would result in a significant under-utilisation of a large, valuable parcel of Government-owned land, in a location that has been identified as being suitable for higher density housing, at a time when there is strong and widespread concern about housing supply and affordability across NSW.
- The 'Do Nothing' option would also mean that an additional 2,800 dwellings (predominantly apartments) would not be delivered in an area where local government strategies and policies demonstrate a need for smaller, accessible and more affordable dwellings.
- The 'Do Nothing' option would result in the on-going use of the site as a social housing estate, with dwellings that are old, expensive to maintain, not suitable for many of the current tenants and that do not align with the needs of many applicants on the waiting list for this area. The retention of these dwellings in this area would result in an on-going financial cost to Government due to the cost of modifying older dwellings to meet the needs of tenants and applicants, using funds that could otherwise potentially be spent on renewing social housing.
- The site would continue to be an area of social housing concentration, with the majority of housing on the site being used for social housing. There would continue to be a significant contrast between the new social housing in the high amenity, adjoining, mixed-tenure residential development at Washington Park and the older buildings and amenities on the site.
- For the current tenants, the social impacts of living in an area of high concentration of social housing would continue. In the context of Government's plans for growth and change in this area and in the context of the Government's objective to deconcentrate social housing estates, it is unlikely that there would be significant investment in upgrades of the buildings or landscaped areas on a site that is expected to be redeveloped in the near or medium term future.
- For the broader community, the on-going use of this site as an area of concentrated social housing is less than ideal. Currently, the pedestrian and vehicle connections through the site, particularly to the Salt Pan Creek Reserve and Riverwood public school, are poor and the site does not integrate well into the surrounding area. More importantly, the high concentration of social housing marks the area as different from nearby residential areas and does little to strengthen community ties across different social and economic groups.
- The continuation of the current use of the site is not in line with Government policy and strategy and is not an efficient use of Government-owned land.

### Case for Change Summary

01	This case for change provides justification for the planning proposal, both regarding the need for additional and more diverse and affordable housing typologies, as well as the need for modern and improved accessible social housing.
02	The redevelopment of the site for higher density residential purposes is consistent with both State and local government strategies, policies and plans for housing. It provides an opportunity to increase the supply, diversity, affordability and resilience of housing in a well-located area with good amenity. It also responds to established planning principles of integrating higher density housing with transport, services and open space.
03	The redevelopment of the site will support the provision of higher quality and more accessible social housing to existing tenants on the site and deliver social housing that will better meet the needs of social housing tenants. The planning proposal will facilitate the delivery of accessible apartments in a mixed-tenure residential development that will be designed to provide a high level of on-site amenity and connectivity for all residents on the site as well as the broader community of Riverwood.



# Why Renewal

## Project objectives

The key objective of the project is to establish a new planning framework to facilitate the renewal of Riverwood Estate.

### The key project objectives are:

- **Objective 1:** To deliver the sustainable renewal of the Riverwood Estate, transforming it into a more safe, attractive, and connected neighbourhood with a strong connection to its past.
- **Objective 2:** To increase housing supply, diversity, and affordability in a mixed tenure development that meets the needs of current and future residents.
- **Objective 3:** To integrate development with the natural environment, surrounding neighbourhood and Riverwood centre.
- **Objective 4:** To provide a high-quality public domain where it is enjoyable to move around the precinct, play and relax.
- **Objective 5:** To provide welcoming community spaces and facilities that support people to connect with others.
- **Objective 6:** To achieve high environmental performance that addresses the effects of climate change and urban heat through management of water in the landscape, tree retention and planting, and sustainable buildings.

These project objectives have underpinned the development of the proposed master plan and planning framework for the site.

## Where we are today/next steps

The Riverwood Estate State Significant Precinct has been active since the Minister for Family and Community Services identified the project for renewal in 2016.

Since then a number of iterations have informed the development of the final master plan with inputs from the community and key stakeholders through consultation.

Following the extensive consultation with the community and stakeholders, the master plan was prepared as an indicative way the precinct could be renewed.

A draft planning framework has been prepared to facilitate the redevelopment of the precinct. The master plan has informed the draft planning framework, as it demonstrates that the precinct can be renewed to accommodate more housing in an improved urban environment and supported by new parks, shops and infrastructure.

# Why Renewal

## Strategic Planning context

The Riverwood Estate Place Strategy is informed by the Greater Sydney Region Plan, the South District Plan and the Canterbury Bankstown Local Strategic Planning Statement (LSPS) – Connective City 2036. These documents identify Riverwood as a Planned Precinct and recognise the importance of Riverwood Estate as a major urban renewal project by the NSW Land and Housing Corporation.

This Place Strategy also draws upon other local and state planning strategies including the social housing context as outlined in the Future Directions for Social Housing and the Land and Housing Corporation Portfolio Strategy. Each of these strategies and their strategic relevance are addressed at Appendix A.

The Place Strategy has considered the following strategies and reports that are relevant to the site:

### State (NSW Government)

- Greater Sydney Region Plan: A Metropolis of Three Cities
- Our Greater Sydney 2056: South District Plan
- Future Transport Strategy 2056
- NSW Movement and Place Framework
- Premiers Priorities
- Draft NSW Public Spaces Charter
- Walking Space Guide - Towards Pedestrian Comfort and Safety, TfNSW July 2020
- Green Cover Technical Guidelines (NSW Government);
- NSW Government Architect Better Placed Policy
- Sydney Green Grid: Spatial Framework and Project Opportunities
- NSW Government Architect Greener Places Framework and Draft Greener Place Design Guide
- NSW Government Architect Evaluating Good Design and Implementing Good Design
- NSW Government Architect Connecting with Country Draft Framework and Designing with Country Discussion Paper
- NSW Government Architect Good design and design excellence in the planning system

### Local (Canterbury Bankstown and Georges River Council)

- Canterbury Bankstown LSPS – Connective City 2036
- Georges River Council Local Strategic Planning Statement (LSPS) – 2040
- Canterbury Bankstown Council Housing Strategy
- Canterbury Bankstown Council Affordable Housing Strategy
- Canterbury Bankstown Council Employment Land Strategy
- Canterbury Bankstown's Community Strategic Plan 2028
- Canterbury Bankstown Master Plan for Salt Pan Creek,

- Whitmarsh and McLaughlin Fields
- Canterbury Strategic Recreation Plan 2010
- Canterbury Open Space Strategy 2017
- Playgrounds and Play Spaces Strategic Plan 2018

### Social housing context

- The Future Directions for Social Housing (Future Directions)
- Housing 2041: NSW Housing Strategy; and
- LAHC Portfolio Strategy

## Consultation overview

Extensive consultation has been undertaken with the community, Canterbury-Bankstown Council, Georges River Council, the Department of Planning, Industry and Environment and NSW Government Architects during the preparation of this proposal.

A critical part of the development of the master plan was engagement with residents to understand what is currently valued about the area and key factors to be considered in the renewal of the site. Consultation has included drop in sessions and resident surveys, and a dedicated person located on-site to provide ongoing opportunities for engagement with residents.

The project team has also engaged formally with a number of key local stakeholders including:

- Riverwood Community Centre CEO
- HCP worker and family services provider
- Kick Start Youth Café manager
- Riverwood Community Centre youth worker
- Riverwood FACS team leader
- Riverwood Public School principal
- Hannan's Road Public School principal
- Department of Education
- Morris Iemma Indoor Sports Centre manager
- St George Community Housing Place Manager and Manager, Operations
- Brooks Community Consultants
- Local child care providers,
- Riverwood Library
- Members from Riverwood/Mortdale Men's Shed.

LAHC and the project team have also consulted with staff from both Canterbury-Bankstown Council and Georges River Council, as well as DPE staff and the Greater Sydney Commission via the Project Review Group (PRP) established for the project. Consolidated feedback from the PRP has been incorporated into the final master plan and draft planning framework.

Government Architect NSW (GANSW) were also consulted, including ongoing engagement through State Design Review Panel (SDRP) processes.



### Key findings from community consultation

- **Open space and public domain** - People would like to see the inclusion of playgrounds with connection to nature, local parks for active and passive sports and games, and community gardens. People would also like improved walking and cycling connections and better surveillance.
- **Community facilities and services** - People would like to see more spaces for older and young people, additional community meeting rooms, a library or spaces for education and training and improvements to Riverwood Community Centre. People would also like health services such as a medical centre incorporated into the Study Area along with a grocery store, chemist, post office and opportunities for multi-cultural groceries/restaurants.
- **Traffic and transport** - People have concerns regarding the safety at the intersection of Washington Avenue and Belmore Road. People also identified the need for wider streets, more parking and retaining the names of existing streets.
- **Housing and built form** - People would like to see a mix of housing types including density, bedrooms and tenure (particularly more aged care/seniors housing). More open space between buildings was also a key issue raised by a number of residents.
- **People** - Residents in the Study Area would like to retain social networks with neighbours. People are also concerned with relocation issues including how relocations would be managed and the cost of potential relocations.



Community consultation

Source: Architectus



## Why Renewal

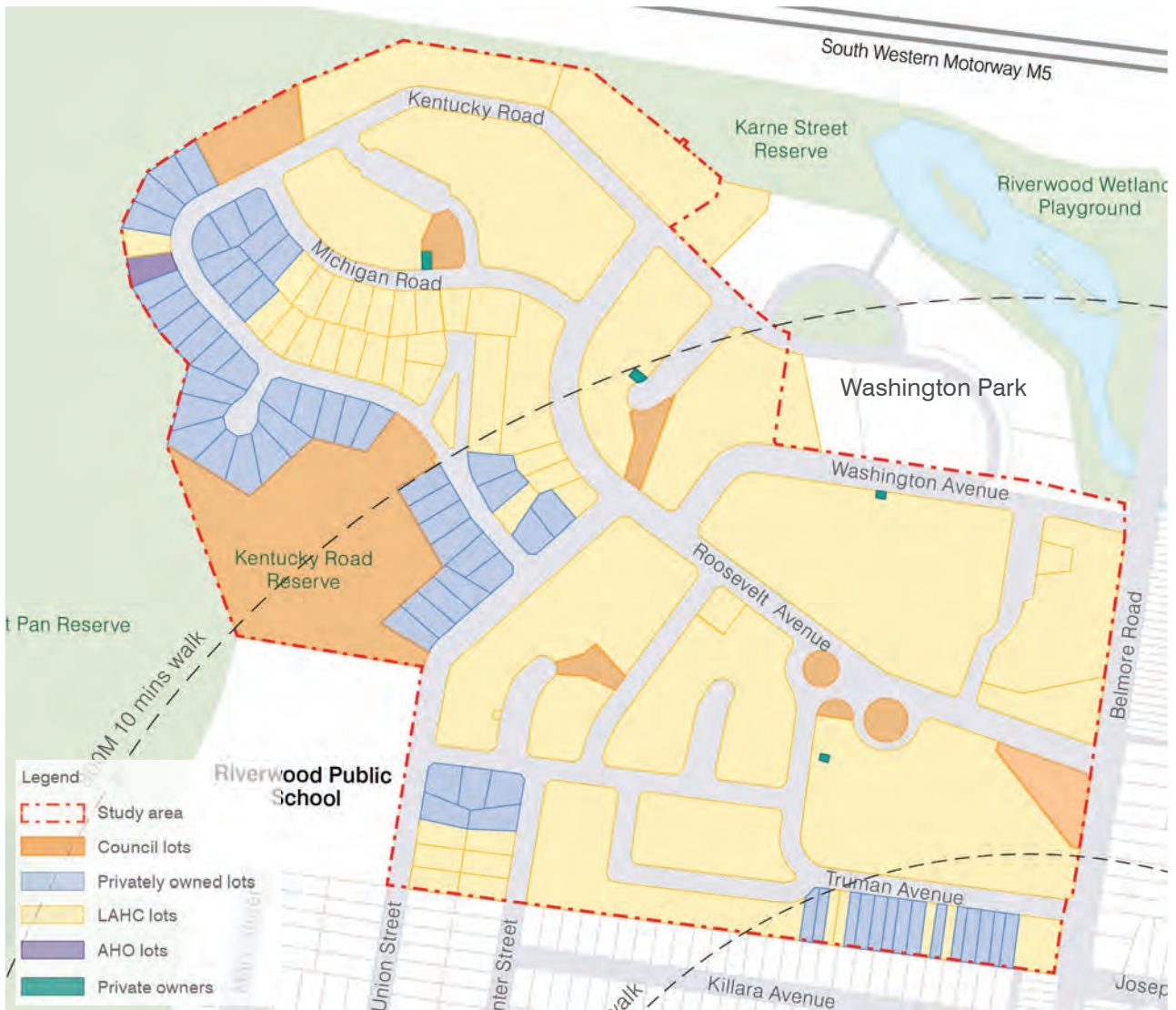
### Key findings from the State Design Review Panel (SDRP)

The project team presented to the State Design Review Panel established for the SSP process 3 times through the development of the SSP proposal.

A summary of the emerging positive aspects of the proposal that are supported and should be maintained as well as recommendations include:

Positive aspects	
✓	The overall structure of the masterplan has been maintained and is supported.
✓	The approach to building on the existing street layout but improving its permeability to support walkability, cycling and improved access and connections to the surrounds.
✓	The intent to preserve existing trees and integrate them into future public spaces and road reserves.
✓	The level of intensification, including density and housing typologies, which contribute to deliver housing policy targets while also improving the urban amenity of the area.
✓	The commitment to upgrading local infrastructure and utilities, including the under grounding of electrical and other utilities overheads.
✓	The proposed design targets which can provide a useful reference for monitoring the development of the design and the project implementation.
✓	The initiative and commitment of the team to developing a Connecting with Country framework.
✓	The water sensitive urban design approach, including the adoption of a water budget. Coordination of this approach with similar initiatives from the local Council is encouraged.
✓	The approach to basement carpark footprints and location of vehicular and service entries to support walkability, streetscape amenity and tree retention.
✓	The project's support of the implementation of the adopted master plan for the Salt Pan Creek Reserve via a VPA, including a financial contribution and public space connections.
Recommendations	
For a detailed report on recommendations and their responses, which indicate the way in which the master plan has addressed them, refer to attachment M Design Review response.	
Recommendations focused on: <ul style="list-style-type: none"><li>– Urban structure</li><li>– Tree canopy</li><li>– Open space/Streetscapes</li><li>– Built form</li></ul>	

# The Precinct



## Project context

The Riverwood Study Area is a 30-hectare site, comprising around 1,100 dwellings including social and private dwellings as well as Council owned land. The entire precinct is located within 5-15 minutes walk to the Riverwood Train Station.

Architectus and a consultant team have been working with the LAHC in the preparation of a master plan for the redevelopment of the Study Area.

The master plan aims to replace the existing social housing dwellings with a mix of social and private dwellings, new streets, parks and community uses.

The first stage of redevelopment at Riverwood, Washington Park was completed in 2017 and has delivered social housing mixed with private housing in a model that has created a better place for all residents. The project demonstrates what can be achieved through redeveloping concentrated social housing estates into a diverse community offering inspiration and opportunity.

The remaining 16.7 hectares of LAHC owned land in Riverwood was announced for renewal by the then Minister for Family and Community Services, The Hon. Brad Hazzard, in 2016

# Key Findings

The team closely analysed the site, relevant plans and policies, and consulted with government agencies, Canterbury-Bankstown and Georges River Councils, existing residents and the broader community. The analysis and consultation yielded key findings which helped to identify the needs of, and inform the vision for Riverwood. The guiding principles form a design strategy for how to respond to the project objectives to bring the vision to life.

## Place

- 1 The **value of community and gardens**: There is an active community in Riverwood, where people generally know their neighbours and look after each other. Many people get to know each other through gardening and spending time in community gardens and front gardens.
- 2 The **site has a rich history**, with evidence of early indigenous activity as well as a US Military Hospital during WWII.
- 3 At its closest, the **site is 300m from the town centre and station**.

## Green/Blue Infrastructure

- 4 There is a **lack of local open space** within the Riverwood town centre (800m from the station).
- 5 The site comprises many **beautiful large trees** that provide shade, amenity and habitat.
- 6 The site is relatively flat with a gentle slope that runs from east to west, with a high point along Belmore Road and the low point at Salt Pan Creek Reserve.

## Connectivity

- 7 The existing street network comprises **narrow streets and many cul-de-sacs** that don't lead to important destinations and make it difficult to find your way through the site.
- 8 **Active transport** links terminate at the site.
- 9 Canterbury Bankstown Council has recently adopted at the Salt Pan Creek Reserve Master plan in February 2019, which will see it evolve into a fantastic regional open space asset.

## Land Use

- 10 The need for an appropriate **interface to lower scale residential housing**.
- 11 The **existing social housing buildings have an average age of around 50 years** constructed mostly in the 1960's and 1970's and require renewal. The current **social housing mix does not service the demands of the LGA**.
- 12 While 16.7 hectares of the Riverwood Estate is used for social housing, there are **many lots in private ownership**.





# Place Vision



Our vision is to deliver a new neighbourhood in Riverwood that contributes to the growth of Greater Sydney as a more liveable, productive and sustainable metropolis and provides a greater supply of diverse and affordable housing in an area identified for renewal.

The Riverwood Precinct will be transformed into an attractive and safe neighbourhood with a mixture of private and social housing. People will choose to live here because of the high-quality buildings, facilities and open space, and connections to nearby transport, schools, employment opportunities and services.

New housing, transport and social infrastructure will support a growing and more diverse community with different housing needs. The development will be accessible and welcoming, complementing the site's natural setting with new and upgraded parks positioned amongst mature trees and improved connections to Salt Pan Creek, a central part of Metropolitan Sydney's Blue-Green Grid.

It will be a place that celebrates the site's history and provide opportunities to re-establish Connection to Country. There will be a network of new and reinstated tree-lined pedestrian-friendly streets that connect shared facilities and open spaces to encourage residents to engage with each other and the broader Riverwood community. Buildings and dwellings will be designed to activate streets and provide natural surveillance of the public domain.

The development will be a sustainable built environment. Contemporary sustainability features will be integrated into buildings and the public domain, including commitments to a tree canopy target and management of water in the landscape to mitigate against the effects of climate change and urban heat.

# Guiding Principles

The following guiding principles have been established to set clear direction regarding a future urban renewal outcome for the precinct.

The guiding principles have been informed by the key findings and are the actions required to meet the objectives of the master plan. The guiding principles have informed the draft development control plan (DCP).



## Design active, living streets – places for all ages to interact

- Maisonette apartments, front doors and front gardens fronting streets, where ever possible.
- 6-8 storey street wall heights that create a pedestrian scale and allow sunlight to streets.
- Towers located so as not to overshadow open spaces.
- Community and retail uses to activate streets and parks



## Protect and enhance the memory of the site and uses

- Learn the meaning of first placenames in the area to better understand the historical character and purpose of the site.
- Allow Country to tell us who she is through placenaming and naming of the parks or streets within the master plan.
- Retention of key streets
- Retention of as many significant trees as possible
- Retain provision for community uses across the precinct.



## Create neighbourhoods with distinct character

- A higher density neighbourhood close to public transport and the town centre.
- A lower density neighbourhood interfacing with Salt Pan Creek Reserve which prioritises communal gardens and views of tree canopy.



## Create a legible permeable neighbourhood that is a joy to walk through

- Roosevelt Avenue re-designed as a grand 30m boulevard.
- Wide streets connecting Belmore Road directly to the school and park.
- Direct sight lines to the new local park from Belmore Road encourage its use to the wider community while helping to orientate pedestrians.
- New, highly permeable street block pattern – typical blocks are 80m x 100m.
- 30% tree canopy target to provide shade



## Prioritise retention of significant trees across the site.

- Retention of existing road patterns, deep soil locations and the siting and design of buildings to maximise significant tree retention and achieve the 30% canopy target.



## Maximise views and skyview

- Taller building footprints to not exceed 750 square metre gross floor area.
- The slender side of towers should be in the direction of the park.
- The edges of the site have been designed to sit below the tree line.
- From key regional views, towers are slim and well-spaced.



## Provide a hierarchy of gardens, parks and outdoor spaces

- Roosevelt Park – a new local park for all of Riverwood.
- Community Greenway – an active linear open space that connects the school to Belmore Road.
- Maximise the number of dwellings with uninterrupted pedestrian access to a park.
- Multiple pocket parks adjoining Salt Pan Creek Reserve allow for views to the park and community gardening activities.
- Activate Salt Pan Creek Reserve and provide car, cycle and pedestrian access to the park.



## Provide a high level of residential amenity

- All buildings comply with SEPP 65 solar access and communal open space standards.
- All buildings to comply with the Apartment Design Guide building separation standards.



## Maximises opportunities to access amenity along the Salt Pan Creek Green grid

- To provide and improve pedestrian, cycle and vehicular access to the Salt Pan Creek Reserve.
- Increase opportunity to access amenity along the Salt Pan Creek blue grid.
- Maximise views from public domain, rooftop gardens and apartments across the green grid corridor



## Implement a height strategy that responds to its context

- To locate density within walking distance of Riverwood train station
- Towers located and orientated so not overshadow the park
- Minimise any impacts on adjoining neighbourhoods with a sensitive height transition of 3 storeys, to existing single dwellings to the south.
- Provide master plan provisions that optimises potential uplift for privately owned lots.



## Optimising the sites potential through the provision of market housing and the renewal of the existing social dwellings

- To renew the existing aged social housing dwellings.
- Optimising the site's potential to a point where:
  - The heights in the master plan are supportable from a strategic planning perspective, when looking at the centre in its context.
  - The development will result in great internal amenity.
  - The public domain provided is of the highest quality and suitable for a large increase in population.
- A master plan that represents an equitable outcome for all landowners and agencies.

# Master Plan Evolution

The design process has been guided by four themes derived from the key findings and directions which underpin the vision.

These themes provide a number of shared opportunities, relevant to all options tested, as well as an assessment criteria namely:



## Place

The need to create a great place, with its own character and identity, celebrating what makes Riverwood special and providing new public domain that gets excellent solar access, is active, safe and well-designed.

### Shared opportunities:

- Connection to Country.
- The master plan should provide multiple front doors, front gardens to preserve the strong community connections and forge new connections.
- Retail uses.

### Assessment criteria:

- Provides a hierarchy of open space.
- Protects and enhances memory of the site.
- Distinct precinct characters that respond to their context.
- Celebrate topography of site through marking high points.
- Provide vistas through and beyond site to important features.

## Green/Blue Infrastructure

Revealing and connecting with the existing and surrounding natural systems.

### Shared opportunities:

- Connect both public domain and private deep (continuous) soil within the site as a network. Continuous soil network to extend and connect beyond the site.
- Link existing urban tree canopy and habitat with green grid connectors. Maximise urban tree canopy, locally native species and habitat on site.
- Evenly distribute open space throughout neighbourhoods to provide access within a short walk for all dwellings.
- Maximising water infiltration, reuse and the improvement of quality water leaving the site.

### Assessment criteria:

- Provide opportunity for high retention of existing high value vegetation.
- Local park to service town centre.



# Master Plan Evolution



## Connectivity

Re-connect the Study Area back into the broader community.

### Shared opportunities:

- Expansion and connection of the existing cycle network through the site and into the regional network.
- Create a robust street network that prioritises pedestrian movement and active transport, while supporting increased densities and a diverse range of housing typologies.

### Assessment criteria:

- Legible permeable neighbourhood.
- Improves walking and cycling to the town centre.
- Increases connectivity to:
  - Salt Pan Creek Reserve
  - Riverwood Public School, and
  - Karne Street Reserve.

## Land Use

Built form, heights and density that are appropriate for the site's strategic and local context with building envelopes that provide good internal amenity for apartments.

### Shared opportunities:

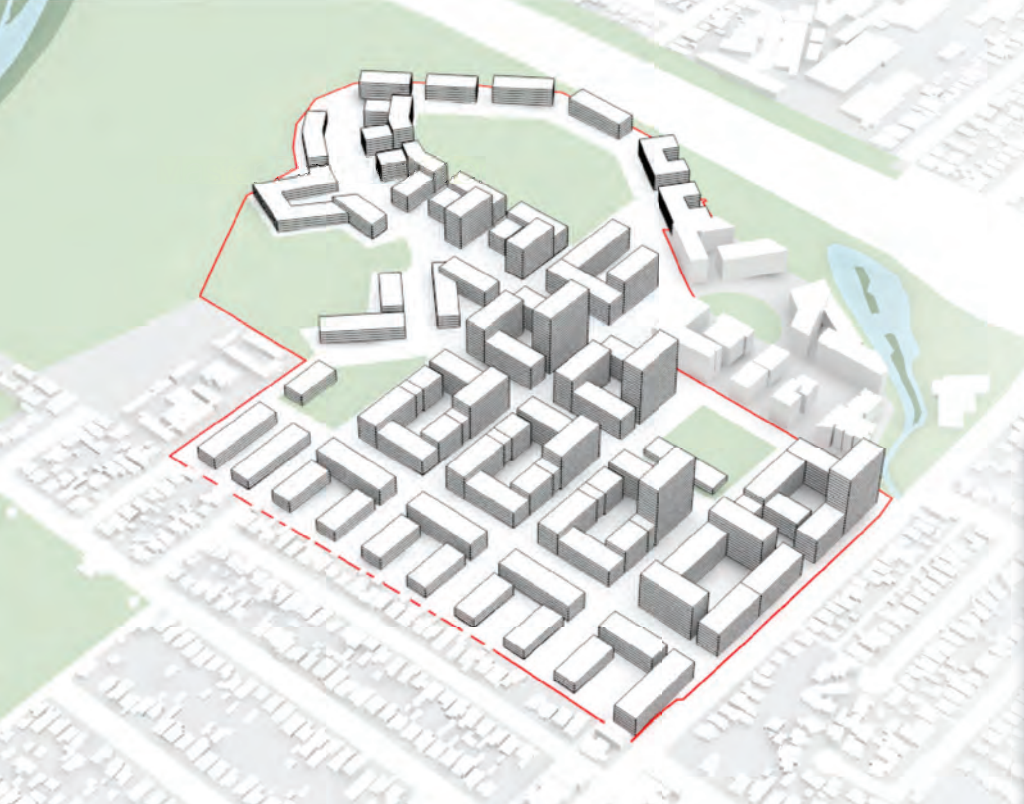
- Transform the ageing social housing dwellings into new fit-for-purpose social dwellings within an integrated community where social housing blends in with private housing.

### Assessment criteria:

- Good neighbour
  - Consider impacts to surrounding context, particularly to the south, through a diverse range of housing typologies.
- Equitable/viable development for privately owned lots.
  - Shows how these sites can also be developed in a coordinated way with minimum amalgamation.

Aligned with the above themes options were developed, each with a specific focus to drive the Master Plan approach, different street layouts, open space arrangements building layouts, typologies and land use mixes. These options were then assessed against the above criteria developed from the master plan vision and guiding principles.

The 2021 preferred option has also been assessed against the same criteria to provide a direct comparison.



Option 01 Perspective view

Option 1 tested a layout which prioritised connectivity, legibility, and efficiency of the street network. Major open space located in the north west to connect into existing open space network



Master plan with connections into and through the site

### Strengths

- Major open space visibly stitches into existing open space network.
- Major open space location creates a unique precinct focused around open space.
- Street network prioritises legibility and connectivity.
- Efficient street pattern has the potential to result in a greater yield.
- Connects existing development at Washington Park into the site and the town centre to the south.
- Appropriate interface to lower density residential to the south.
- Connects Karne Street Reserve with Kentucky reserve with public domain and view corridors.
- Provides direct link from Belmore Road to Riverwood Public School.
- Provides link along Washington Avenue from Belmore Road to Salt Pan Creek Reserve and Kentucky Road Reserve.
- Higher density centred within site and within 800m of the station.

### Weakness

- Open space does not service the wider open space need for the Riverwood community.
- Street network does not preserve the memory of the site.
- Lack of diverse development typologies across the site.
- Rationalised street network does not encourage tree retention.
- Staging and ensuring equitable development for privately owned lots.
- Assumed acquisition of all private lots would not support a viable development outcome.
- Connection to Riverwood Primary school dependant on acquisition of a number of private lots to the south.
- Potential visual and solar impacts to neighbours.
- Would require relocation of the sewer line.
- Key opportunities such as high points of the site are not celebrated.

### Options assessment

Objective	Assessment	
Place	Provides opportunity for a hierarchy of open space	●
	Protects/enhances memory of site	●
	Distinct precinct characters that respond to their context	●
	Celebrate topography of site through marking high points	●
	Provide vistas through and beyond site to important features	●
Green Infrastructure	Provide opportunity for high retention of existing high value vegetation	●
	Local park to service town centre	●
Connectivity	Legible permeable neighbourhood	●
	Salt Pan Creek Reserve	●
	Riverwood Public School	●
	Karne Street Reserve	●
	Improves walking and cycling to the town centre	●
Land Use	Good neighbour	●
	Equitable/viable development for privately owned lots.	●



Option 02 Perspective view

Option 2 considered potential acquisition of all private lots. Open space was located central to the site and a new street network prioritising efficiency retained part of Roosevelt Avenue as an organising spine



Master plan with private lots

### Strengths

- Central open space services the master plan.
- Street network prioritises legibility.
- Efficient street pattern has the potential to result in a greater yield.
- Appropriate interface to lower density residential to the south.
- Connects Karne Street Reserve with Kentucky reserve with public domain and view corridors.
- Provides direct link from Belmore Road to Riverwood Public School.
- Higher density centred within site and within 800m of the station.
- Higher density located around central open space.
- Additional laneway connection south to town centre.

### Weakness

- Central open space does not service the wider open space need for the Riverwood community.
- Street network does not preserve the memory of the site.
- Lack of diverse development typologies across the site.
- Built form strategy did not create unique precincts in response to local context including parklands, town centre, low density residential and high density residential.
- Rationalised street network does not encourage tree retention.
- Large development lots interfaced with Salt Pan Creek Reserve result in:
  - Raised basement/ground levels adjoining the park which present as blank walls impacting activation.
  - Reduce opportunities for connections through to Salt Pan Creek Reserve, and
  - Reduce opportunities for views through to Salt Pan Creek Reserve.
- Difficulty in staging and ensuring equitable development for privately owned lots.
- Assumed acquisition of all private lots would not support a viable development outcome.
- Would require relocation of the sewer line.

### Options assessment

Objective	Assessment	
Place	Provides opportunity for a hierarchy of open space	●
	Protects/enhances memory of site	●
	Distinct precinct characters that respond to their context	●
	Celebrate topography of site through marking high points	●
	Provide vistas through and beyond site to important features	●
Green Infrastructure	Provide opportunity for high retention of existing high value vegetation	●
	Local park to service town centre	●
Connectivity	Legible permeable neighbourhood	●
	Salt Pan Creek Reserve	●
	Riverwood Public School	●
	Karne Street Reserve	●
	Improves walking and cycling to the town centre	●
Land Use	Good neighbour	●
	Equitable/viable development for privately owned lots.	●





Option 03 Perspective view

Option 3 tested a layout that could be built around the existing sewer line. This option also assumed acquisition of private lots and considered a new regular lot pattern along Salt Pan Creek Reserve



### Strengths

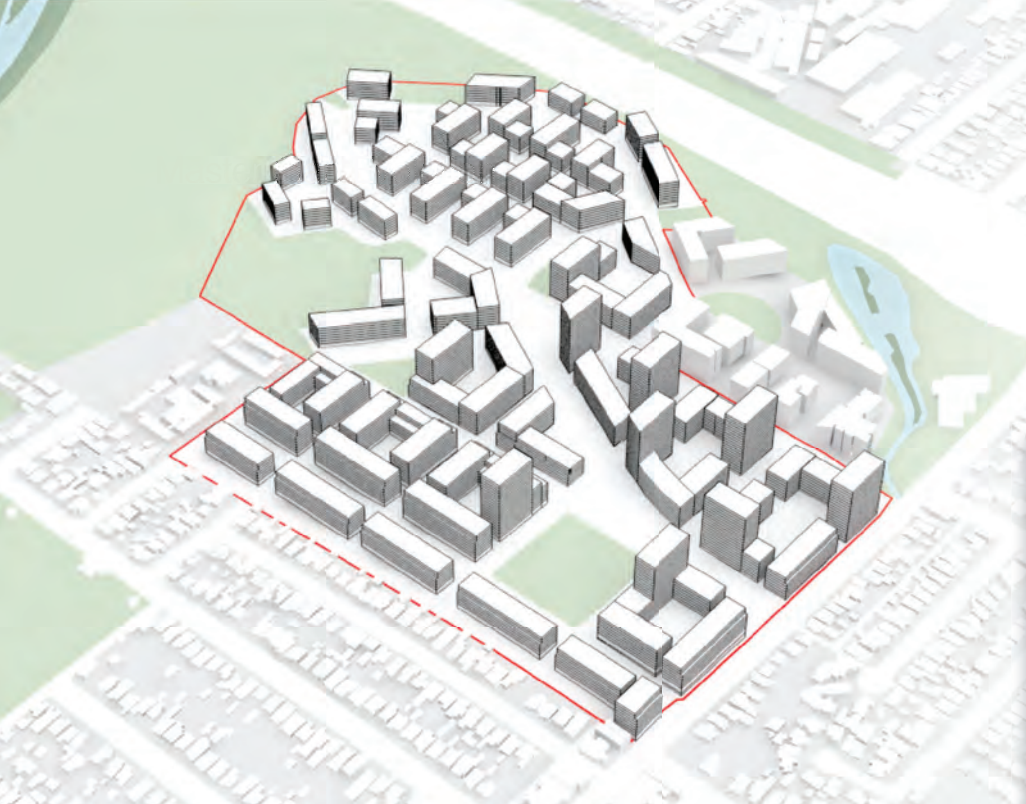
- Central open space services the master plan as well as the wider open space need for the Riverwood community.
- Efficient street pattern has the potential to result in a greater yield.
- Appropriate interface to lower density residential to the south.
- Connects Karne Street Reserve with Kentucky reserve with public domain and view corridors.
- Provides direct link from Belmore Road to Riverwood Public School.
- Additional laneway connection south to town centre.

### Weakness

- Street network does not preserve the memory of the site.
- Lack of diverse development typologies across the site.
- Built form strategy did not create unique precincts in response to local context including parklands, town centre, low density residential and high density residential.
- Rationalised street network does not encourage tree retention.
- Large development lots interfaced with Salt Pan Creek Reserve result in:
  - Raised basement/ground levels adjoining the park which present as blank walls impacting activation
  - Reduce opportunities for connections through to Salt Pan Creek Reserve, and
  - Reduce opportunities for views through to Salt Pan Creek Reserve.
- Difficulty in staging and ensuring equitable development for privately owned lots.
- Assumed acquisition of all private lots would not support a viable development outcome.
- Would require relocation of the sewer line.

### Options assessment

Objective	Assessment	
Place	Provides opportunity for a hierarchy of open space	●
	Protects/enhances memory of site	●
	Distinct precinct characters that respond to their context	●
	Celebrate topography of site through marking high points	●
	Provide vistas through and beyond site to important features	●
Green Infrastructure	Provide opportunity for high retention of existing high value vegetation	●
	Local park to service town centre	●
Connectivity	Legible permeable neighbourhood	●
	Salt Pan Creek Reserve	●
	Riverwood Public School	●
	Karne Street Reserve	●
	Improves walking and cycling to the town centre	●
Land Use	Good neighbour	●
	Equitable/viable development for privately owned lots.	●



Master plan with 20 storey tower locations

**Option 4, 2017 Master Plan.**  
This option focused on maximising housing with a focus on providing more social housing at no cost to government



Option 01 Perspective view

### Strengths

- Local open space services master plan as well as the Riverwood town centre.
- Central open space located at high point of site.
- View corridor from Belmore Road to new local open space and Salt Pan Creek.
- Memory of the site is preserved through retention of existing streets.
- New streets increase legibility and connectivity.
- Retained existing street network encourages tree retention.
- Built form strategy creates 2 unique precincts in response to parkland in the north/west and the town centre in the south/east.
- Diversity in apartment typologies.
- View corridors, setbacks and open space connect Salt Pan Creek Reserve through and beyond the master plan.
- Direct connection from Riverwood Public School to Belmore Road through the extension of Truman Avenue.
- Connects existing development at Washington Park into the site and the town centre to the south.
- Connects Karne Street Reserve with Kentucky reserve with public domain and view corridors.
- Connects Belmore Road along Washington Avenue to Salt Pan Creek Reserve & Kentucky Road Reserve.
- Higher density within 800m of the station.

### Weakness

- Densities and heights prioritise establishing a desired future character over the existing character of the surrounding neighbourhood.
- Potential visual and solar impacts to neighbours.
- 6 storey interface to the south create potential visual and solar impacts to neighbours.
- Lack of diverse dwelling typologies.
- Would require relocation of the sewer line.
- No additional connection south to town centre.

### Options assessment

Objective	Assessment	
Place	Provides opportunity for a hierarchy of open space	●
	Protects/enhances memory of site	●
	Distinct precinct characters that respond to their context	●
	Celebrate topography of site through marking high points	●
	Provide vistas through and beyond site to important features	●
Green Infrastructure	Provide opportunity for high retention of existing high value vegetation	●
	Local park to service town centre	●
Connectivity	Legible permeable neighbourhood	●
	Salt Pan Creek Reserve	●
	Riverwood Public School	●
	Karne Street Reserve	●
	Improves walking and cycling to the town centre	●
Land Use	Good neighbour	●
	Equitable/viable development for privately owned lots.	●

# Master Plan Evolution

## Options comparison



Option 1

Tested a layout which prioritised connectivity, legibility, and efficiency of the street network. Major open space located in the north west to connect into existing open space network.



Option 2

Considered potential acquisition of all private lots. Open space was located central to the site and a new street network prioritising efficiency retained part of Roosevelt Avenue as an organising spine.

### Options assessment

Theme	Objective	Option 1	Option 2
Place	Provides opportunity for a hierarchy of open space	Green	Yellow
	Protects/enhances memory of site	Yellow	Yellow
	Distinct precinct characters that respond to their context	Yellow	Red
	Celebrate topography	Red	Red
	Provide vistas through and beyond site to important features	Green	Yellow
Green Infrastructure	Retention of existing high value vegetation	Yellow	Red
	Local park to service town centre	Red	Red
Connectivity	Legible permeable neighbourhood	Green	Green
	Salt Pan Creek Reserve	Green	Red
	Riverwood Public School	Green	Green
	Karne Street Reserve	Green	Green
	Improves walking and cycling to the town centre	Yellow	Green
Land Use	Good neighbour	Yellow	Green
	Equitable/viable development for privately owned lots.	Red	Red



## Master Plan Evolution

## Master plan



### Option 3

Tested a layout that could be built around the existing sewer line. This option also assumed acquisition of private lots and considered a new regular lot pattern along Salt Pan Creek Reserve.



### Option 4

2017 Master Plan. This option focused on maximising housing with a focus on providing more social housing in line with the communities plus model, at no cost to government.

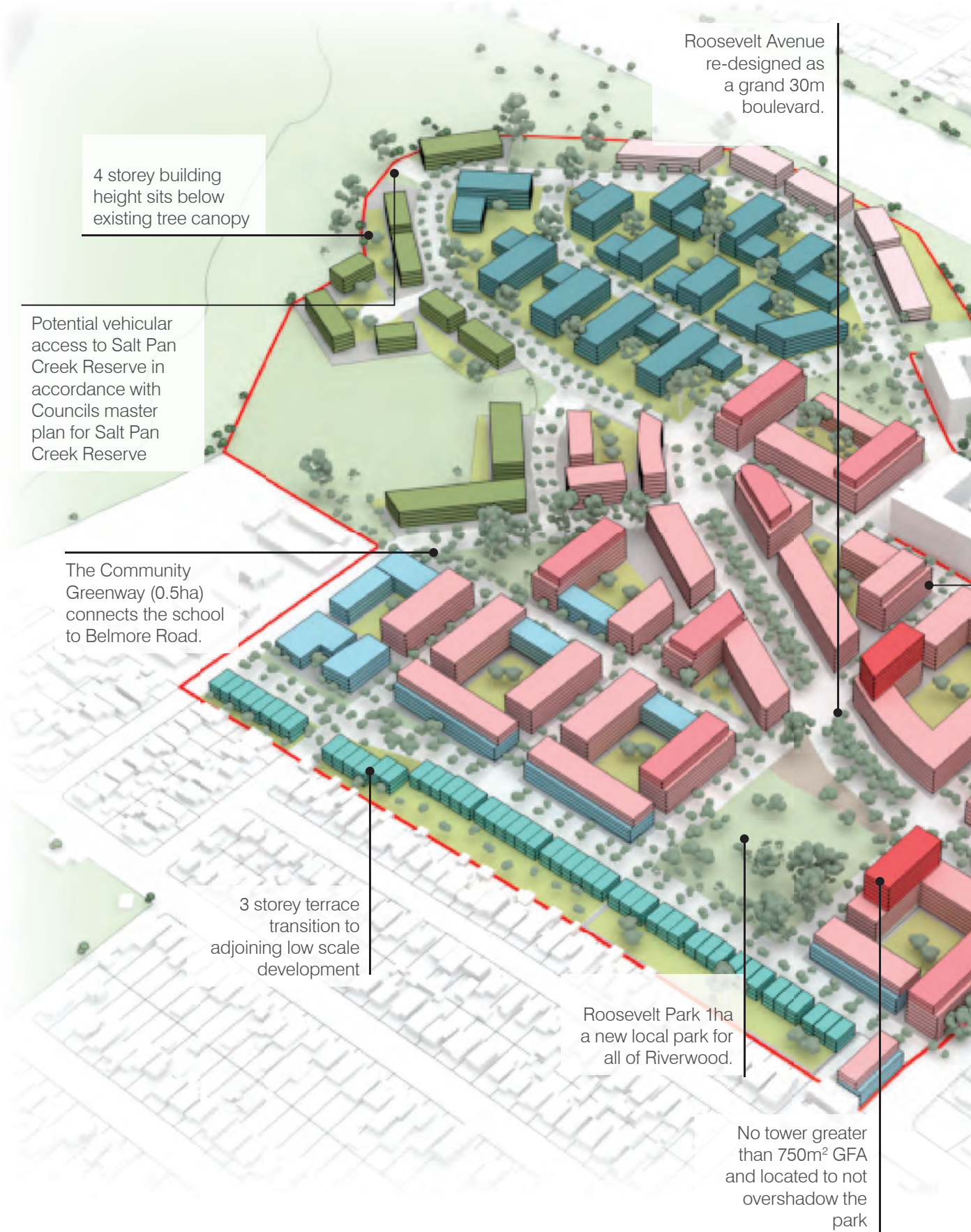


## The Master Plan

Following the options testing a preferred master plan was developed building upon all the previous options in order to address all assessment criteria within the four guiding themes.

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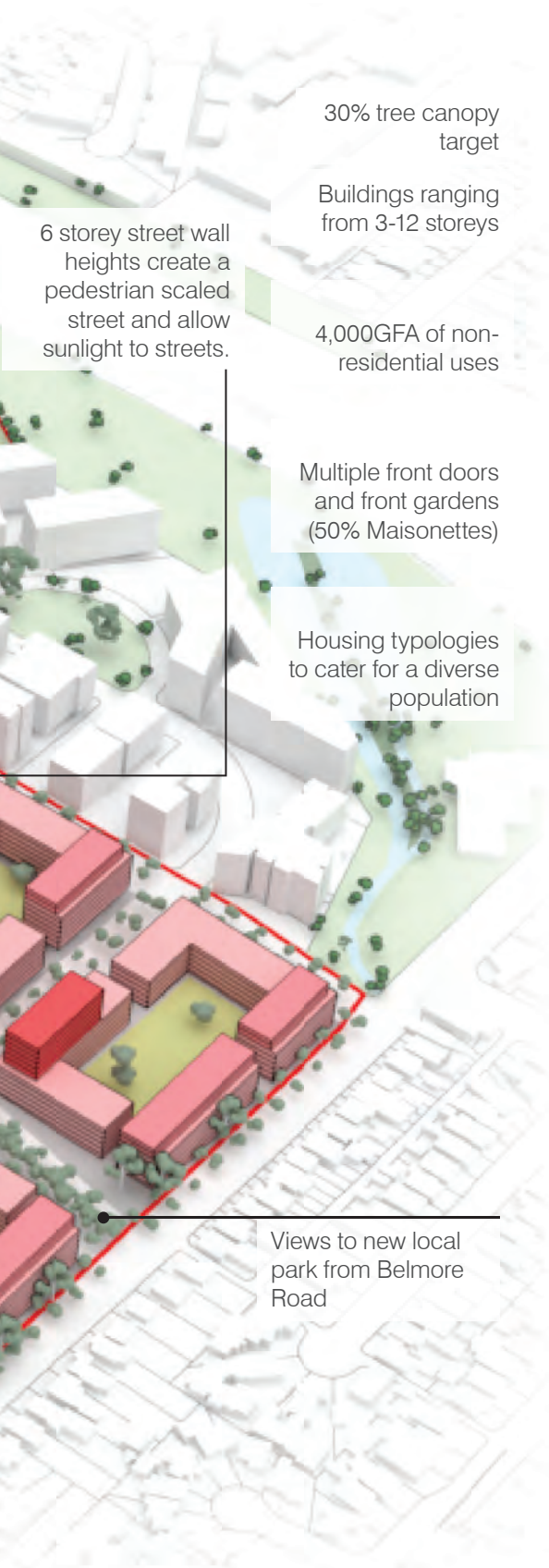
# The Master Plan





## Key design moves

Spatial outcomes of the guiding principles



**Retain Roosevelt Avenue** and complete the Kentucky Road loop



**Reconnect Riverwood Public School** back to the broader community



Retain as much of the existing street network to optimise **tree retention** while creating a legible street grid



Create a **permeable edge** to **Salt Pan Creek Reserve** to provide better connections and clear views of the regional open space



Create **new open local parks** and playgrounds within neighbourhoods to complement existing green open spaces



Create a **pedestrianised 'Community Greenway'** connecting Riverwood Public School with new local open space



Create **green streets** between **green space**



Create **distinct neighbourhoods** that respond to their local context



# Place Narrative

## 2 Neighbourhoods, 6 character areas

The place narrative is based on an initial master planning process which identified two distinct precincts within the broader master plan. The character of these precincts is described below.



### Roosevelt Park Urban Neighbourhood

This neighbourhood is urban in character and is an extension of the Riverwood Town Centre. New parks and streets will be of the highest quality, and combined with diverse housing types, it will be an active and exciting place to live.

Building heights respond to street type and character, to create local neighbourhoods and the feeling of a place that has evolved over time.

New parks and a Community Greenway create a sequence of places that draw people to the school and the park, where the school, supported by community uses and new open space, will become a hub for the wider community.

The retention of Roosevelt Avenue continues the memory of the site and provides a strong connection to open space.



### Garden Apartments Neighbourhood

A lower scale, green precinct that re-imagines old fashioned neighbourhoods, with children playing in the street and front gardens that help neighbours get to know each other.

Carefully designed, elevated communal open spaces that open to the streets re-visit the existing character of the neighbourhood to promote interaction, and continue the Riverwood residents' love of gardening.

Much of the neighbourhood's character comes from views down every street to Salt Pan Creek Reserve and parks.

This precinct is also the link between the Study Area and the regional open space asset - the Salt Pan Creek Green Grid Corridor. It should be welcoming to visitors, and provide places for people to relax and enjoy the park.

Providing new links north to the Washington Park community gardens and Karne Street reserve, in the form of new open space, it reconnects those existing community facilities back into the broader community.

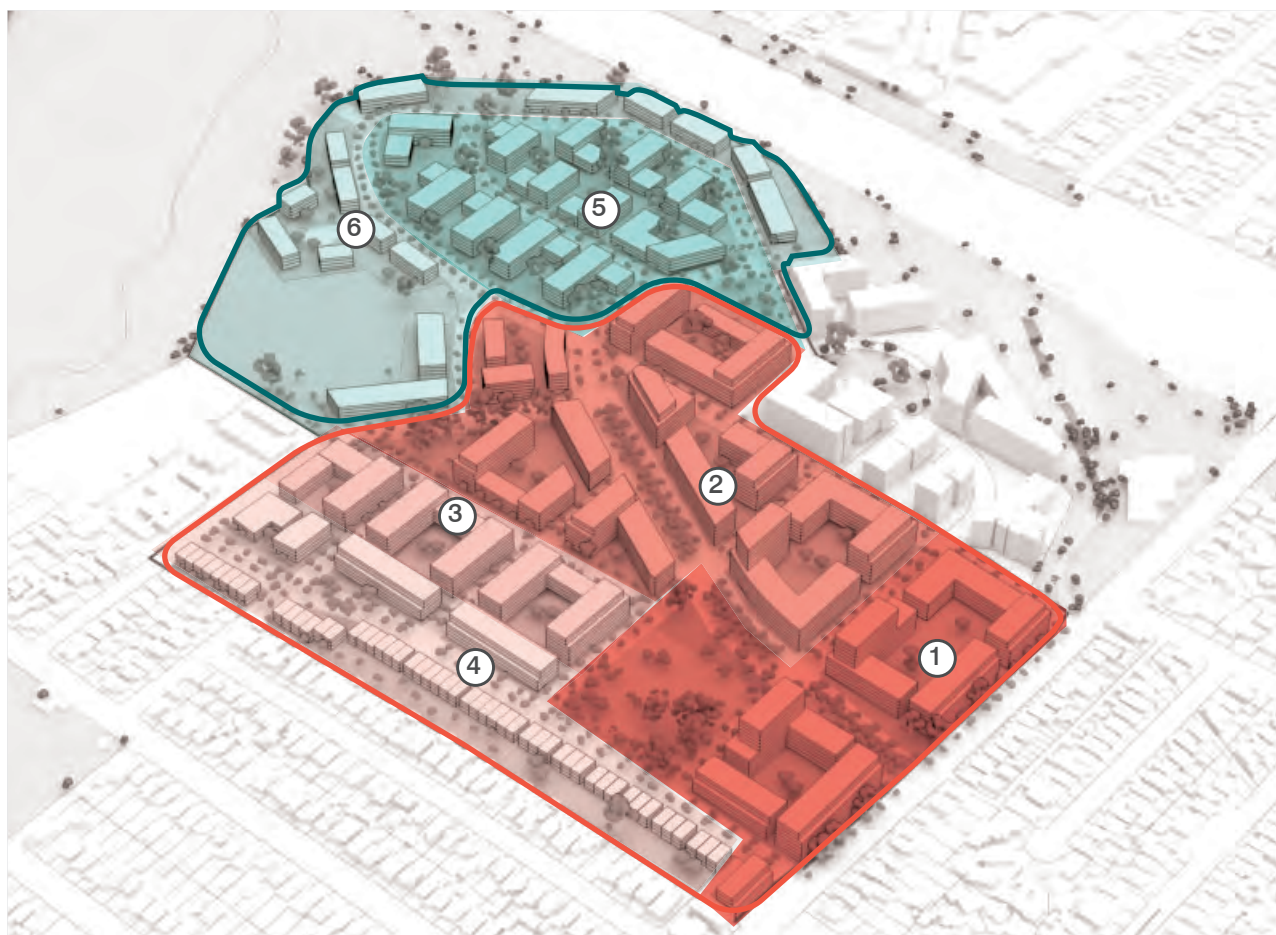
## Place Narrative

### Character area master plan approach

Within these two precincts, additional sub precincts, or character areas have been identified.

These character areas provide place based direction regarding specific design criteria which informs land use, urban structure, open space and canopy, density, built form, density and interface requirements. This criteria and the key infrastructure provided within each character area to support the vision and place narrative is detailed in the following chapter.

The key defining factors (or criteria) of the character areas have been incorporated into the draft planning framework, particularly the built form controls in the draft DCP (e.g., through location and distribution of building height, setbacks, frontage controls, etc).



- Roosevelt Park Urban Neighbourhood
- 01 Eastern Gateway
- 02 Roosevelt Avenue
- 03 The Community Greenway
- 04 Southern Interface

- Garden Apartments Neighbourhood
- 05 Garden Apartments
- 06 Park Edge Interface



# Roosevelt Park Urban Neighbourhood



Render of Roosevelt Park  
Source: Scharp







## Character Area 1 Eastern Gateway



The Eastern gateway character area sits 400m to the north of Riverwood Station. This is the front door of the precinct and will be delivered in the first stages of the redevelopment.

The character area covers approximately 4.5 hectares oriented north–south. The site is bordered by Belmore Road to the east, Washington Avenue to the north, Truman Street to the south and bisected by Roosevelt Avenue (the entry to the Study Area).

Renewal of the Study Area provides additional dwellings supported by new local open space and additional connections further south to Riverwood town centre and north to Washington park. These increase the vibrancy of this character area and improve the journey throughout the precinct

Roosevelt Park is at the heart of the community and is located off Roosevelt Avenue with direct lines of sight from Belmore Road. The large central lawn offers a welcoming relaxing green space while informal sports fields and gym equipment provide for more active forms of recreation.

Retail and community uses, within 400m of the station, create a vibrant urban experience along Belmore road contributing to its role of high street and key connection to the Riverwood train station.

The location of taller buildings (12 storeys) in key locations, mark the gateway to the Study Area and with a generous podium setback provide a consistent pedestrian scale street wall. They will create diversity in form and scale, while delivering a finer grain, lower scale built form across most of the character area which will minimise visual impacts from beyond the site, and create a transition from surrounding lower scale residential areas.



# Roosevelt Park Urban Neighbourhood



## Criteria

The master plan for the **Eastern Gateway** character area recommends:

### Land use

- Ground floor non-residential uses, within 400m of the station along Belmore Road.
- Community uses adjoining open space provide opportunities for spill out activities creating a vibrant active neighbourhood.
- A cafe within Roosevelt Park provides an opportunity for outdoor dining in a bright sunny location.
- Maisonettes at ground floor residential uses ensure activation along Roosevelt, Belmore and Truman Street.

### Proposed layout

- The proposal maintains the entrance to the Study Area at the corner of Roosevelt and Belmore Road.
- The structure enables a clear visual connection through to the new local park from outside the Study Area.

### New public open space

- Roosevelt Park (1ha) located to the south east, within 400m of the station, where direct visual connections encourage the broader community to engage with the new open space.

### Greenery

- A 30% canopy cover target means the streets, public open space and development lots will be cool, protected green spaces for users as well as residents promoting walkability, passive recreation and views to green from both the public domain and apartments.

### Density

- Density is concentrated closer to the station supporting active and public transport.
- Taller buildings are located off Belmore Road .
- Higher density built form mark entrance to the precinct.

### Podium design

- Predominate 3m setback at ground, for private gardens with a maximum street wall height of 6 storeys. An additional 3m setback above the street wall will create a pedestrian focused urban feel at street level and reduce visual impact of taller elements.

### Tower design

- Building separation requirements will apply a minimum 24m separation for 12 storey buildings. Floor plate restrictions (750 m<sup>2</sup> GFA) for above podium levels with length no longer than 45m guarantee taller elements have a slender look and mitigate any visual impact from both within and outside the precinct.

### Active fine grain frontages

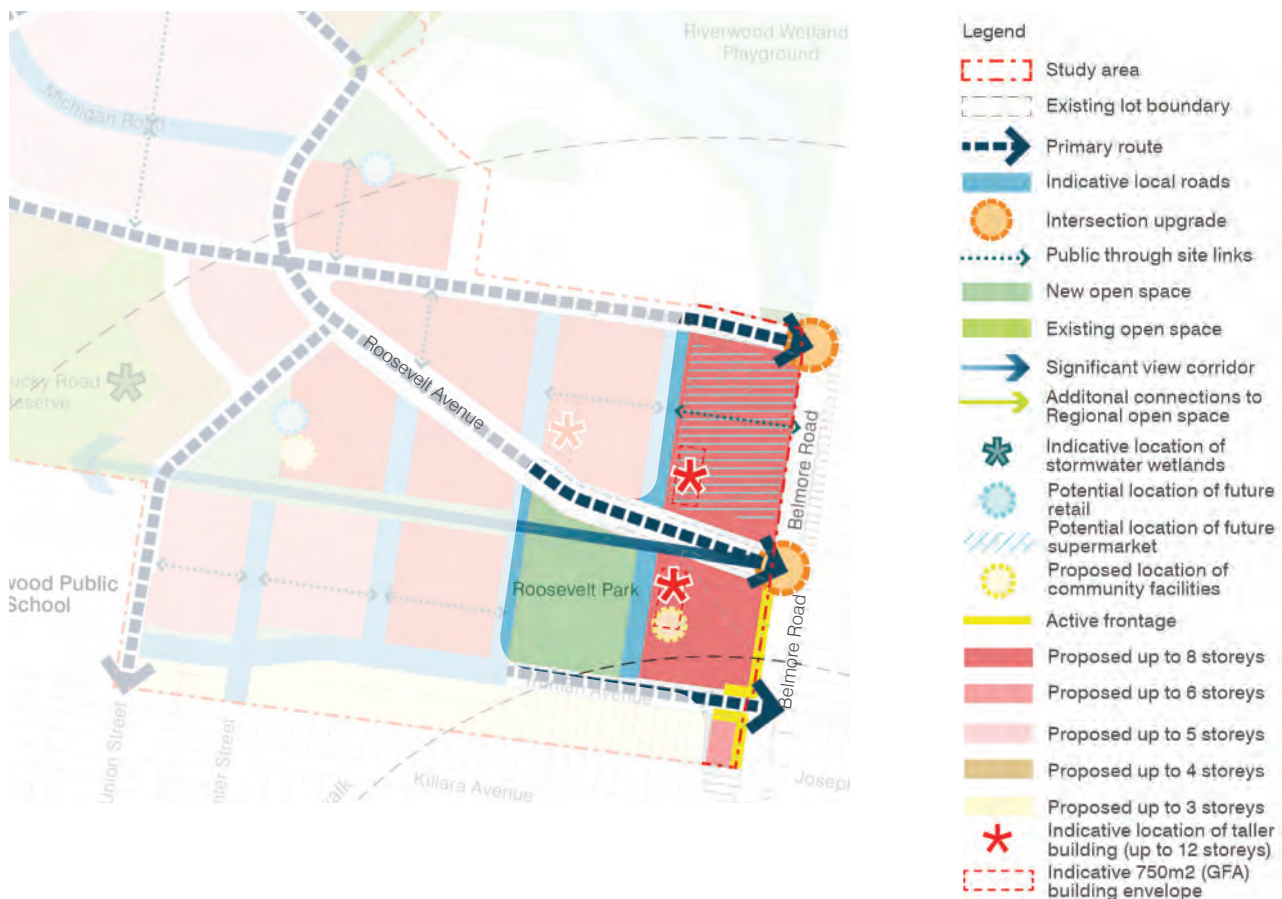
- 50% of all ground floor frontages to be maisonettes.

### Overshadowing

- 8-12 storeys orientated north/south to mitigate overshadowing impacts to surrounding public domain.
- Overshadowing to neighbours is DCP compliant. Solar access controls to open space guarantees these are bright, welcoming places to play, meet and sit all year.

# Roosevelt Park Urban Neighbourhood

## Eastern Gateway Urban Structure



## Key infrastructure

Key infrastructure is to be provided to support the current and future population. The key infrastructure items are:

- 1 ha of open space at Roosevelt Park.
- New through site links (minimum width of 8m) connect from Belmont Road into the precinct.
- Extension of existing cycleways into the character area.
- New shared paths (3.5m width) connecting through the Study Area from Belmont Rd to Salt Pan Creek Reserve.
- Widening of Roosevelt to a 30m landscaped boulevard, that will support higher densities and buildings heights, promoting all forms of active transport.
- 2,500m<sup>2</sup> of ground floor non-residential uses that will meet the day to day needs of the residents, and support Riverwood Town Centre.
- A new signalised intersections.
- Retention of mature trees and additional tree planting.

## Design excellence

To ensure the highest quality design, all development, including the public domain will need to demonstrate design excellence.

- For local Development Applications, all buildings higher than 3 storeys are to be reviewed by Council's Design Review Panel (DRP), both prior to submission and during assessment of any Development Application.
- For State Significant Development Applications, development should be reviewed by the State Design Review Panel (SDRP) and will be guided by any Secretary's Environmental Assessment Requirements (SEARs).





Roosevelt Park concept plan

## Programme

- A** "Civic Plaza" with water jets
- B** Kiosk | Amenities building
- C** Neighborhood playground
- D** Activity promenade with table tennis & informal seating
- E** Informal sportfields (street ball, volleyball court soccer goal)
- F** Kick around lawn
- G** Loop path with orchard trees
- H** Quiet seating nodes along perimeter loop path

## Legend

- Buildings
- Lawn
- Mass planting
- "Civic plaza" paved area with water jets
- Activity promenade paving
- Concrete footpath
- Playground (softfall)
- Sport courts surface
- Permeable paving (crushed sandstone)



- 01 Sydney Park Playground | Sydney | JMD
- 02 Centenary Square | Parramatta | JMD design
- 03 Sydney Park Kiosk | Sydney | JMD design
- 04 The Lawn on D | Boston | Sasaki
- 05 21 Balancoires | Montreal | Daily Tous Les Jours
- 06 Caulfield Campus Green | Sydney | T.C.L.
- 07 Redfern Park | Sydney |

## Character Area 2 Roosevelt Avenue



Within 800m of the station and a short walk to the town centre, this sub precinct has an urban character with block edge apartments and multiple front doors activating the streets.

The character area covers approximately 7 hectares in area, and sits within the centre of the Study Area within 800m of Riverwood station. The site is bordered by Union Street to the west, Washington Avenue to the north, Truman Street to the south and bisected by Roosevelt Avenue.

The retention of Roosevelt Avenue, transformed into a 30-metre-wide, tree-lined boulevard, continues the memory of the site. It will support buildings up to 8 storeys, creating a consistent 6 storey street wall height, and built form along the length of Roosevelt Avenue

Additional connections south to Riverwood town centre, west to Salt Pan Creek reserve, east to the wider community and north to Washington park increase the permeability of this character area and support the increase in density.

The location of taller buildings (8-12 storeys) will create an urban village focused around a new central open space and are orientated in a north south direction. This will minimise overshadowing and visual impacts from beyond the site, as well as create a transition from surrounding lower scale residential areas.

These taller buildings will create diversity in form and scale, while delivering a finer grain, lower scale built form across most the site.



## Roosevelt Park Urban Neighbourhood



Render looking north across community park. Source: Scharp

### Criteria

The master plan for the **Roosevelt Avenue** character area recommends:

#### Land use

- Predominately residential in character streets will be activated by multiple ground floor entries, through site links to important destinations and on street parking.
- Community uses adjoining open space provide opportunities for spill out activities creating a vibrant active neighbourhood.
- Potential for retail/food and beverage interfacing with the Civic park to support the neighbourhood.

#### Proposed layout

- The proposed layout centres around the existing Roosevelt Avenue spine and creates a clear, legible street hierarchy that connects the site back to the Riverwood suburb. With improved connections to Salt Pan Creek Reserve, Riverwood town centre and Riverwood station this character area promotes connectivity, legibility and walkability.

#### New public open space

- Community park (0.28 ha) connects open space with ground floor community uses such as childcare or a men's shed .
- New laneways and through site links connect new and existing open spaces promoting walkability and opening the precinct up to the broader community.

#### Greenery

- A 30% canopy cover target means the streets, public open space and development lots will be cool, protected green spaces for users as well as residents.

#### Density

- A fine grain density approach to each street block that will create a comfortable, pedestrian scale 6 storey street wall.
- Higher density is concentrated closer to the station supporting active and public transport.

#### Podium design

- 3m setback at ground with a maximum street wall height of 6 storeys and 3m above podium setback.

#### Tower design

- Building separation requirements will apply a minimum 24m separation for 12 storey buildings. Floor plate restrictions (750 m<sup>2</sup> GFA) for above podium levels with length no longer than 45m guarantee taller elements have a slender look and mitigate any visual impact from both within and outside the precinct.

#### Active fine grain frontages

- 50% of all ground floor frontages to be maisonettes.

#### Overshadowing

- 8-12 storeys orientated north/south to mitigate overshadowing impacts to surrounding public domain.
- Solar controls to open space guarantees these are bright, welcoming places to play, meet and sit all year.

# Roosevelt Park Urban Neighbourhood

## Roosevelt Avenue Urban Structure



## Key infrastructure

The key infrastructure items that will support the increase in density in this character area are:

- 0.28ha of open space at Community Park.
- New through site links (minimum width of 8m) provided throughout the sub precinct.
- Extension of existing cycleways into the character area.
- New dedicated cycle routes connecting through the Study Area from Belmore Road to Salt Pan Creek Reserve.
- Widening of Roosevelt to a 30m landscaped boulevard, that will support higher densities and buildings heights, and that will promote walking, cycling and other forms of active transport.
- 1,500m<sup>2</sup> of ground floor non-residential uses for a men's shed/maker space, that will meet the day to day needs of the residents, and support Riverwood Town Centre.
- Retention of mature trees and additional tree planting.

## Design excellence

To ensure the highest quality design, all development, including the public domain will need to demonstrate design excellence.

- For local Development Applications, all buildings higher than 3 storeys are to be reviewed by Council's Design Review Panel (DRP), both prior to submission and during assessment of any Development Application.
- For State Significant Development Applications, development should be reviewed by the State Design Review Panel (SDRP) and will be guided by any Secretary's Environmental Assessment Requirements (SEARs).



## Roosevelt Park Urban Neighbourhood



Community Park concept plan

### Programme

- A** Shaded area for social community activities  
(community festivals, gatherings, line dancing, BBQs)
- B** Garden beds
- C** Community orchard
- D** Picnic lawn
- E** Building with assumed community facilities

### Legend

- Buildings
- Lawn
- Mass planting
- "Civic plaza" paved area
- Concrete footpath
- Playground (softfall)
- Permeable paving (crushed sandstone)



- 01 James St Reserve Community Garden | Sydney
- 02 Docklands Community Garden | Melbourne | Urban Reforestation
- 03 Victoria Park gathering area | Sydney | HASSEL

### Character Area 3 Community Greenway



Within 800m of the station and a short walk to the town centre is the Community Greenway character area.

The character area is approximately 0.5 hectares in area, and sits between Salt Pan Creek Reserve and Riverwood Public School in the west and Roosevelt Park in the east.

A pedestrian promenade designed with children and play in mind - this generous space will connect local residents with the existing primary school and provide a common space for children and families to meet and play with other children in the neighbourhood.

While designed with children in mind The Community Greenway caters for 'play' across all ages including small lawn areas, community planting pods, chess boards and seated gathering pods for supervising parents to meet and chat.







Render looking north across The Community Greenway. Source: Scharp

## Criteria

The master plan for the **Community Greenway** character area recommends:

### Land use

- Residential frontages along The Community Greenway will consist of multiple front doors and front gardens to promote activity, interaction and safety through passive surveillance.
- Community uses in the adjoining Community Park (see character area 'Roosevelt Avenue') spill out onto the Community Greenway creating a network of vibrant open space.

### Proposed layout

- The proposed layout creates a clear, physical and visual connection from Belmore Road, across Roosevelt Park to Riverwood Public School and Salt Pan Creek Reserve.
- This connection is completely free of vehicular access prioritising pedestrians and school kids.

### New public open space

- The Community Greenway (0.5 ha) connects open space with ground floor community uses such as childcare or a men's shed.
- A new through site link connects new and existing open spaces increasing the walkability of the sub precinct and opening the Study Area up to the broader community.

### Greenery

- A 30% canopy cover target means the streets, public open space and development lots will be cool, protected green spaces for users as well as residents promoting walkability, passive recreation and views to green from both the public domain and apartments.

### Density

- A fine grain density approach to each street block that will create a comfortable, pedestrian scale 4 storey street wall height.

### Building design

- 3m setbacks at ground provide opportunities for front gardens.
- A 4 storey street wall along the Community Greenway will maximise solar access and amenity.
- 6 storey built form with a north south orientation up to 6 storeys (8 fronting the park) above podium level.

### Active fine grain frontages

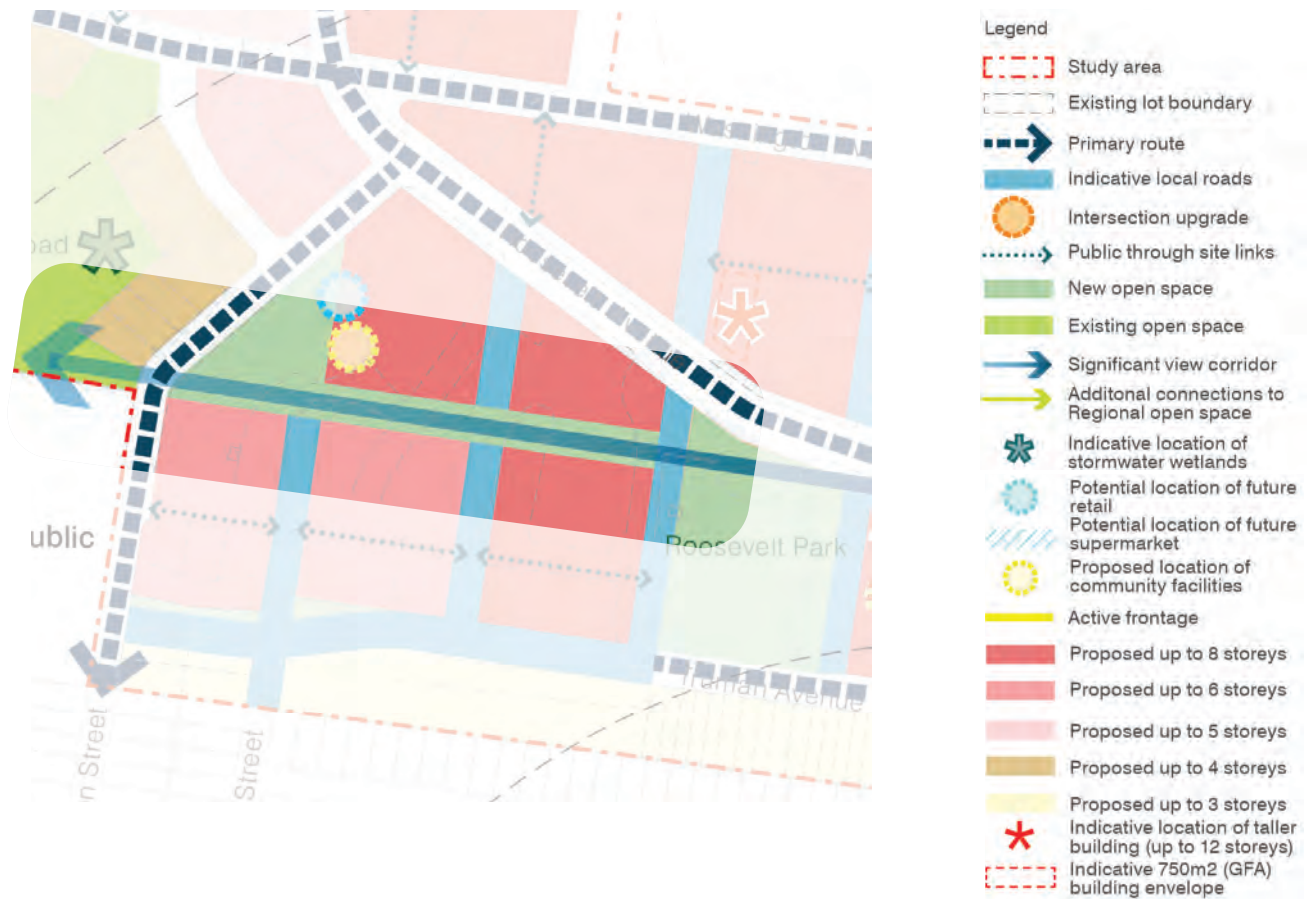
- 80% of all ground floor frontages must be ground floor maisonettes.

### Overshadowing

- Street wall heights reduced to 4 storeys along The Community Greenway to minimise overshadowing.
- 6-8 storeys orientated north/south to mitigate overshadowing impacts to surrounding public domain.

## Roosevelt Park Urban Neighbourhood

### Community Greenway Urban Structure



### Key infrastructure

The primary infrastructure delivered within this character area is The Community Greenway itself.

- 0.5 ha of open space at The Community Greenway.
- Connections to existing cycleways into and through the character area.
- New pedestrianised connection to Salt Pan Creek Reserve.
- New pedestrianised connection to Riverwood Public School.
- Potential for tree retention and new tree planting.

### Design excellence

To ensure the highest quality design, all development, including the public domain will need to demonstrate design excellence.

- For local Development Applications, all buildings higher than 3 storeys are to be reviewed by Council's Design Review Panel (DRP), both prior to submission and during assessment of any Development Application.
- For State Significant Development Applications, development should be reviewed by the State Design Review Panel (SDRP) and will be guided by any Secretary's Environmental Assessment Requirements (SEARs).





- 01 Play equipment
- 02 Trampolines
- 03 Chess for adults to play
- 04 Community libraries
- 05 Colourful pavement
- 06 Space for rest and respite
- 07 Large format games
- 08 Active walkways



Community Greenway concept plan

### Programme

- A** Pedestrian promenade
- B** Shared path
- C** Play pods
- D** Seating & gathering pods  
(pop up library, board game tables)
- E** Planted area
- F** Lawn
- G** Orchard

### Legend

- Buildings
- Lawn
- Mass planting
- "Civic plaza" paved area
- Activity promenade paving
- Concrete footpath
- Playground (softfall)
- Permeable paving (crushed sandstone)

Civic plaza concept plan

## Character Area 4 Southern Precinct



The Southern Precinct character area is the southern most portion of the site. It directly adjoins single and two story dwellings to the south of the Study Area.

The character area is approximately 4 hectares in area, oriented east–west running parallel to The Community Greenway. The site is bordered by Belmore road to the east, The Community Greenway to the north, existing one and two storey dwellings to the south with the extension of Truman Avenue running through the centre connecting Riverwood Public School back into the wider community.

Buildings transition to a lower scale form to minimise overshadowing and overlooking to low rise housing to the south of the Study Area.

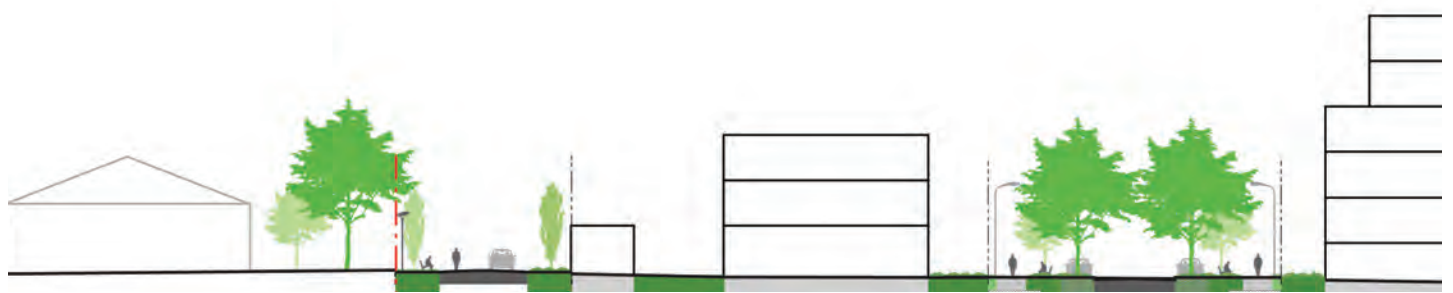
The character of this area transitions from a 4 storey street wall to a 3 storey terrace typology along the boundary of the Study Area.

Where possible vehicular access to terraces should be provided via a rear lane to remove the need for multiple driveways along Truman Avenue. This increases the amount of street tree planting and street parking provided, activating the area and making it safe, shaded, pleasant environment to walk through.

Front loaded terraces must have a width to ensure streetscape is not dominated by driveways.



# Roosevelt Park Urban Neighbourhood



Section cut through southern interface with rear laneway



Section cut through southern interface with front loaded terraces

## Criteria

The master plan for the **Southern Precinct** character area recommends:

### Land use

- Residential in character streets will be activated by multiple ground floor entries and on street parking.

### Proposed layout

- The Laneway running parallel to Belmore Road has been extended into the site creating another connection south to the town centre.
- Truman Avenue has been extended west to connect belmore road with Riverwood Public School.
- Context responsive with apartment buildings to the north and terrace typologies to the south where they interface with low scale residential.

### Greenery

- A 30% canopy cover target means the streets, public open space and development lots will be cool, protected green spaces for users as well as residents promoting walkability, passive recreation and views to green from both the public domain and apartments.

### Density

- The proposed 3 storey terrace typology to the south fits with the low scale development outside the Study Area providing a much needed transition mitigating overshadowing and privacy issues.
- The apartment buildings to the north act as a transition to the higher density areas of the master plan.

### Built form

- 3 storey terraces provide transition to the south.
- Apartment buildings to the north have a 4 storey street wall to respond to the terraces opposite with upper two storeys setback 3m.
- Stepped transition zones facilitate a gradual change in character allowing an increase in density which works from a human scale at ground.

### Active fine grain frontages

- 50% of all ground floor apartment frontages must be maisonettes making the area an exciting safe and walkable place to visit.
- 3 storey development with minimum 4m front setback to allow for private gardens to meet and mingle with neighbours.

### Overshadowing

- Overshadowing to neighbours complies with existing DCP controls.

# Roosevelt Park Urban Neighbourhood

## Southern Precinct Urban Structure



## Key infrastructure

The infrastructure provided in this character area :

- Extension of Truman Avenue to Riverwood Public School.
- Extension and new connection of the laneway parallel to Belmore Road at the eastern end of the character area.
- Connections to existing cycleways into the character area and the broader community.
- Potential for tree retention and new tree planting.

## Design excellence

To ensure the highest quality design, all development, including the public domain will need to demonstrate design excellence.

- For local Development Applications, all buildings higher than 3 storeys are to be reviewed by Council's Design Review Panel (DRP), both prior to submission and during assessment of any Development Application.
- For State Significant Development Applications, development should be reviewed by the State Design Review Panel (SDRP) and will be guided by any Secretary's Environmental Assessment Requirements (SEARs).





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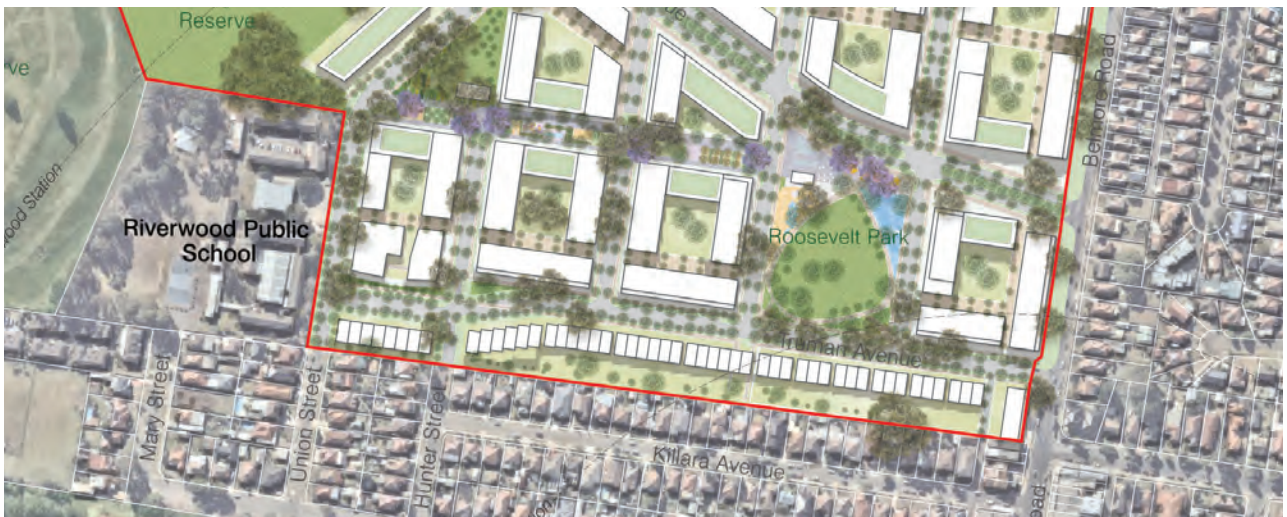
07



08

- 01 4 storey street wall
- 02 Example street scape
- 03 Front loaded terrace
- 04 Basement typology

- 05 Maisonette frontages
- 06 Gradual density transition
- 07 Front loaded terrace
- 08 Basement typology



Illustrative master plan. Source: Architectus



# Garden Apartments Neighbourhood



Garden apartments  
Source: Scharp







## Character Area 5 Garden Apartments



Located within the Kentucky loop, the garden apartment precinct will be characterised by lower scale apartments, focused around communal gardens, in a parkland setting

The garden apartments prioritise views over roof top terraces, communal gardens and to Salt Pan Reserve

Built form with both 3 and 5 storey elements provide opportunities for both rooftop gardens on lower levels, with views of communal gardens at ground and taller elements maximising views across Salt Pan creek.

Communal gardens and ground floor apartments will directly adjoin the street. This will create opportunities for residents to interact with their neighbours, while increasing visual interest, surveillance and street activation.





## Garden Apartments Neighbourhood



Render looking east down Michigan Road at garden apartments. Source: Scharp

### Criteria

The master plan for the **garden apartments** character area recommends:

#### Land use

- Residential in character streets will be activated by multiple ground floor entries, through site links to important destinations and on street parking.

#### Proposed layout

- Varying front setbacks (minimum of 2.5m) as well as communal gardens directly adjoining streets will promote casual interactions, increase green view from the public domain, as well as visual interest and safety through passive surveillance making the garden apartments a joy to walk through.
- Staggered building heights provide opportunities for rooftop terraces with views across Salt Pan Creek.
- Communal spaces and large setbacks also ensure when travelling by car through the garden apartments views will be dominated by green.

#### New public open space

- The Civic Plaza (0.35 ha) located on the intersection of Roosevelt Avenue and Kentucky Road.
- Community garden park (0.16 ha) connecting the master plan to the existing community garden and Karne Street Reserve in the north.
- New laneways (minimum 12m widths) and through site links (minimum 8m width) provide new connections through to Salt Pan Creek Reserve and increase permeability of the site creating new spaces to meet, rest and play.

#### Greenery

- A 30% canopy cover target means the streets, public open space and development lots will be cool, protected green spaces for users as well as residents promoting walkability, passive recreation and views to green from both the public domain and apartments.

#### Density

- The proposed 3-5 storeys character fits in with the existing 3 storey character of the precinct while maximising views across Salt Pan Creek Reserve.

#### Built form

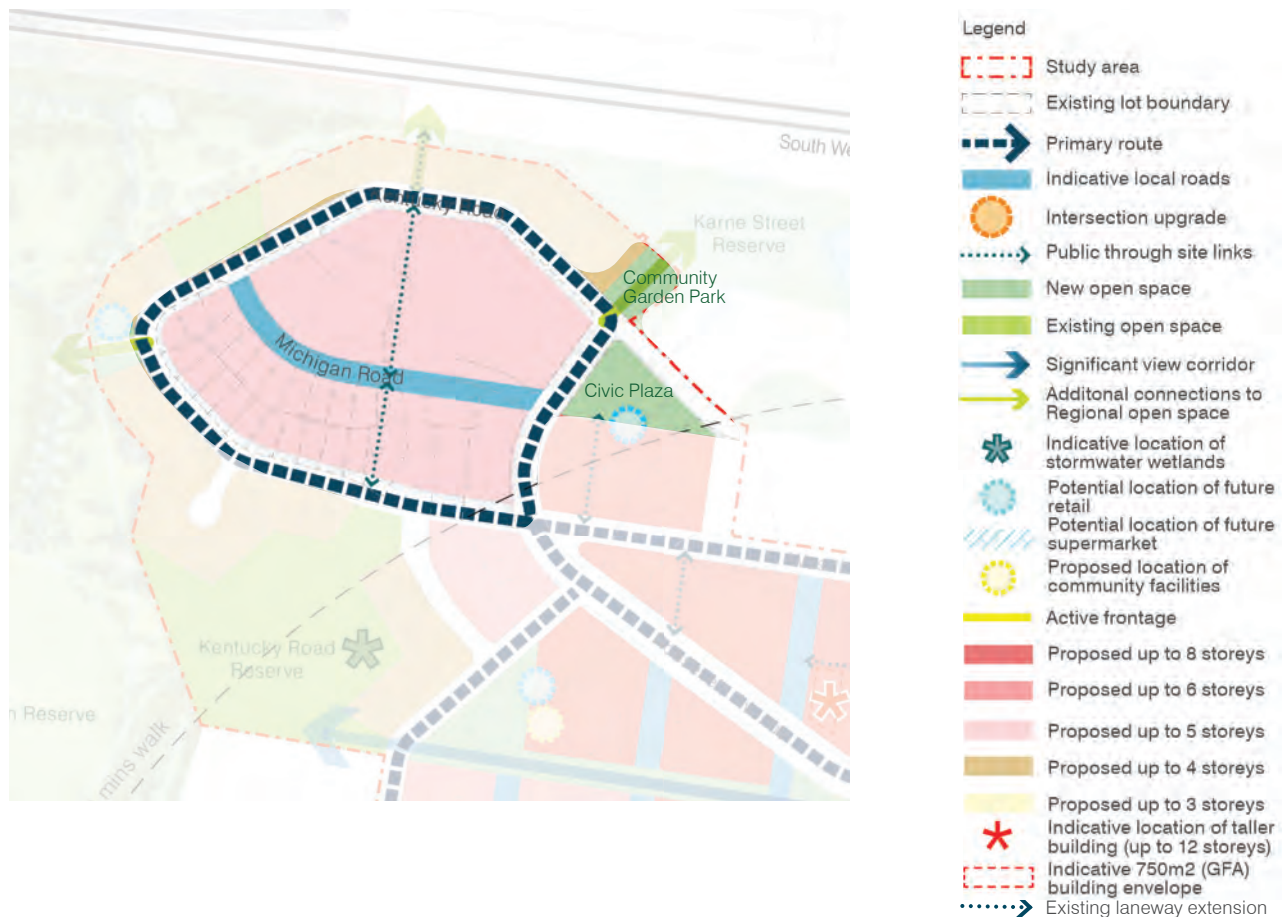
- Opportunities for rooftop terraces with views across Salt Pan Creek Reserve on 3 storey element.
- Multiple front doors fronting streets and laneways activate this residential neighbourhood encouraging interactions between neighbours and passers by.

#### Active fine grain frontages

- Private maisonette entries and lobby entries should be provided every 10 metres making the area an exciting safe and walkable place to visit.

# Garden Apartments Neighbourhood

## Garden apartments Urban Structure



## Key infrastructure

The master plan provides improved connections, to and through the sub precinct. This character area makes use of the topography to maximise views across Salt Pan Creek Reserve making the garden apartments a well connected, safe, walkable and visually interesting place to live. The key infrastructure items that will add to connectivity and a sense of place include:

- 0.35 ha of open space at Civic Plaza.
- 0.16ha of open space at Community garden park.
- New 12m laneway connecting through the precinct between Salt Pan Creek reserve and Karne Street Reserve.
- Expanding the existing cycle network into and through the character area to provide better connections to the regional cycleway network, Riverwood town centre and Salt Pan Creek corridor.
- Multiple through site links .
- Retention of mature trees and additional tree planting.
- Retention of existing street network where possible.

## Design excellence

To ensure the highest quality design, all development, including the public domain will need to demonstrate design excellence.

- For local Development Applications, all buildings higher than 3 storeys are to be reviewed by Council's Design Review Panel (DRP), both prior to submission and during assessment of any Development Application.
- For State Significant Development Applications, development should be reviewed by the State Design Review Panel (SDRP) and will be guided by any Secretary's Environmental Assessment Requirements (SEARs).



# Garden Apartments Neighbourhood



Civic Park concept plan

Programme	Legend
A Plaza for gathering & weekend markets	Buildings
B Informal seating & board game tables under canopy of trees	Mass planting
C Activity pods (play area, badminton court, soccer goal)	"Civic plaza" paved area
D Private gardens of adjoining building residents	Sport courts surface



Community Garden Park concept plan

Programme	Legend
A Existing Community gardens	Buildings
B New pedestrian path through garden allotments	Lawn
C Community lawn	Mass planting
D Timber seating & viewing points towards the garden allotments and Karne St Reserve	Community gathering space/ paved area
	Timber seating and viewing points
	Concrete footpath



- 01 Civic plaza concept plan
- 02 Community garden park concept plan
- 03 Tai chi in the park
- 04 Group dancing
- 05 Shaded places to sit

- 06 Connection to Karne Street Reserve
- 07 Views to existing communal garden
- 08 Community lunch event

## Character Area 6 Park edge interface



This character area is the link between the regional open space asset - the Salt Pan Creek Green Grid Corridor and the Study Area. It should be welcoming to visitors, and provide places for people to relax and enjoy the park.

Located along the edge of Salt Pan Creek Reserve, the proposed layout will improve ground plane permeability and provide strong connections to open space across and through the site. This includes the potential for a new vehicular link to Salt Pan Creek Reserve.

Salt Pan Creek Reserve gives this character area a vegetated interface with views across tree canopy from each apartment. Pockets of Cumberland Plain Woodland are found throughout and will be protected with no impact by the proposed renewal.

Characterised by slender apartment buildings, with minimal lot amalgamation, help create a permeable park edge. This smaller apartment typology helps provides views from Kentucky through to Salt Pan Creek and helps to bring the park character into the site

2 storey ground floor maisonette apartments will have front gardens spilling out, activating the park edge. Balconies at higher levels will overlook Salt Pan Creek Reserve, with excellent views and surveillance from the top two-floors.

Buildings will be dual frontage to ensure activation of the park edge, as well as providing a high quality streetscape along the street frontage.





Render looking west to 4 storey built form interfaced with Civic Park. Source: Scharp

## Criteria

The master plan for the **park edge** character area recommends:

### Land use

- Predominately a residential character area there is some potential for retail/food and beverage interfacing with Salt Pan Creek to support the neighbourhood.

### Proposed layout

- 3m front setbacks ensure front gardens and green positively contribute to the streetscape amenity.
- 4.5m setbacks to Salt Pan Creek ensure privacy while promoting activity and safety.
- Thinner building footprints respond to narrow blocks.
- Apartment depth of 15m support a greater area for deep soil, gardens and planting ensuring views of green from both the public domain and apartments.
- Potential vehicular access to Salt Pan Creek Reserve.

### Improvements to existing public open space

- Kentucky Road Reserve (approx. 22,000m<sup>2</sup>).
- 'Local community play space' (approx. 3,000m<sup>2</sup>) identified in the Salt Pan Creek Reserve master plan.
- Improved physical and visual connections through revised lot patterns and new through site links.

### New public open space

- New pocket parks (600m<sup>2</sup>) have the potential to be activated by ground retail/cafe, spilling out creating new spaces to meet, eat and relax.

## Greenery

- A 30% canopy cover target means the streets, public open space and development lots will be cool, protected green spaces for users as well as residents promoting walkability, passive recreation and views to green from both the public domain and apartments.
- Retention of all Cumberland Plain Woodland within this character area.

## Density

- The proposed 4 storeys character fits in with the existing 3 storey character of the precinct while maximising views across Salt Pan Creek Reserve.
- The majority of these apartments fall outside of 800m from the station so encourage a lower density typology.

## Built form

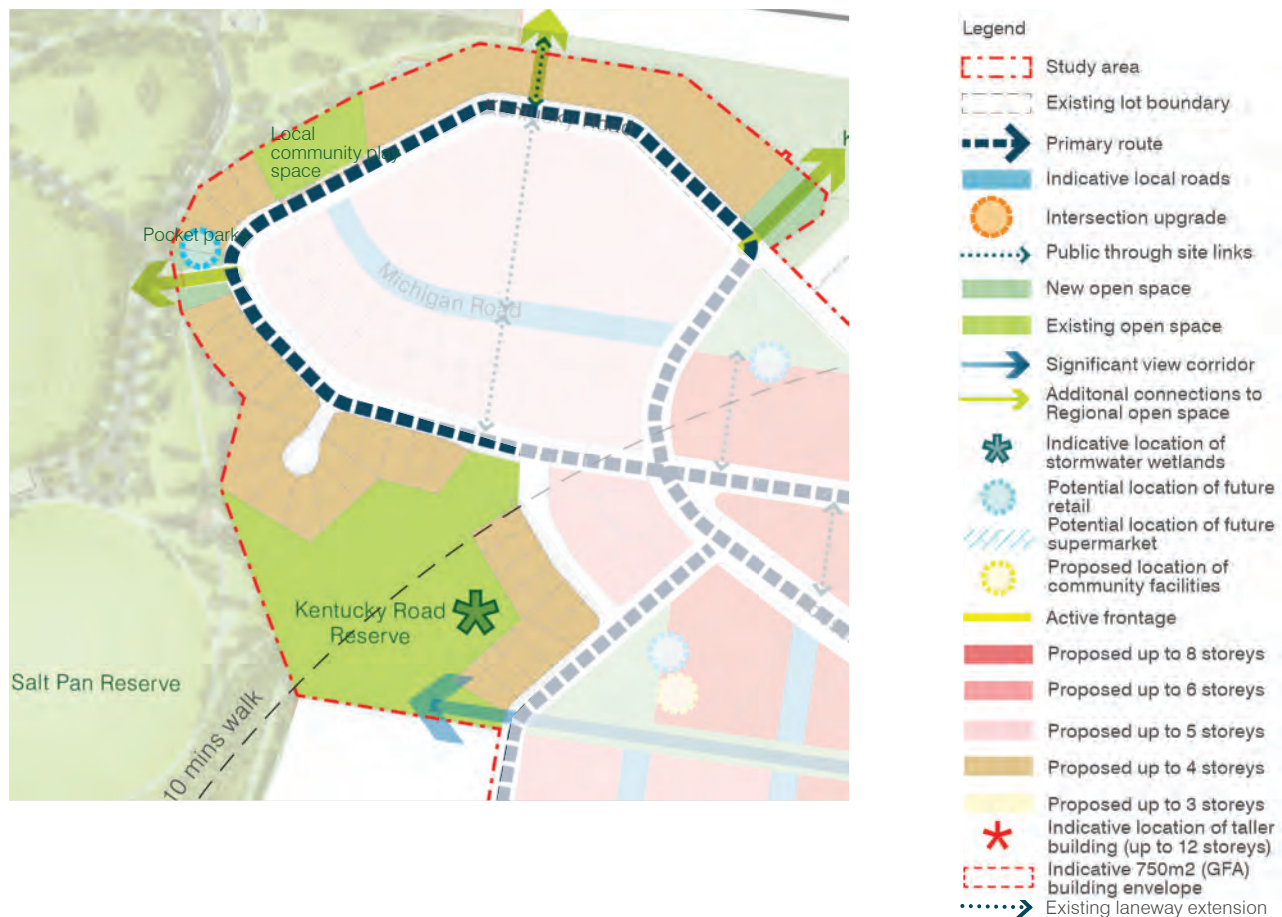
- 4 storey typology allows the built form to remain below the existing tree canopy.
- Dual frontages ensure both Kentucky Road and Salt Pan Creek Reserve will be activated by 2 storey ground floor maisonettes with private gardens encouraging interactions between neighbours and passers by.

## Active fine grain frontages

- 70% ground floor maisonettes making the area an exciting, safe and walkable place to visit.

# Garden Apartments Neighbourhood

## Park edge interface Urban Structure



## Key infrastructure

Identified within the master plan are improved connections, to and through the sub precinct as well as key public domain opportunities to make the character area an exciting doorstep to the Salt Pan Creek create a connected, safe and vibrant place to live. The key infrastructure items that will add to connectivity and a sense of place include:

- Existing 2.2ha of open space at Kentucky Road Reserve.
- Existing 0.3ha of open space at Local Community Play Space.
- Potential for a new vehicular entry to Salt Pan Creek Reserve and additional pocket park (600m<sup>2</sup>).
- Extension of existing cycleways into the master plan connecting the broader community with Salt Pan Creek Reserve.
- Stormwater harvesting and water quality wetlands in Kentucky Road Reserve once implementation begins on the Salt Pan Creek Master Plan.
- Multiple through site links.
- Retention of mature trees and additional tree planting.
- Retention of existing street network where possible.

## Design excellence

To ensure the highest quality design, all development, including the public domain will need to demonstrate design excellence.

- For local Development Applications, all buildings higher than 3 storeys are to be reviewed by Council's Design Review Panel (DRP), both prior to submission and during assessment of any Development Application.
- For State Significant Development Applications, development should be reviewed by the State Design Review Panel (SDRP) and will be guided by any Secretary's Environmental Assessment Requirements (SEARs).





Salt Pan Creek Master Plan. Source: City of Canterbury Bankstown Council



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04



# Delivering The Plan



Roosevelt Park render  
Source: Scharp





## Delivering The Plan

### Proposed planning framework

A key aim of the project is to develop a framework that will enable the renewal of the Riverwood Precinct, while delivering improved social outcomes in a mixed community with new social and private housing. The proposed master plan provides for approximately 3,900 new dwellings, buildings ranging between 3 and 12 storeys and new open space including two local open spaces, Roosevelt Park and the Community Greenway.

To facilitate the renewal of the precinct, as indicated as possible through the master plan, the rezoning of the Study Area will occur through an amendment to the Canterbury LEP 2012. The amendment will be facilitated through a SEPP under Section 3.29 of the EP&A Act.

The proposed amendments include:

- Changes to the land use zones across the site;
- Increasing maximum building heights across the site;
- Redistributing and increasing of floor space ratio controls across the site;
- Removal of minimum lot size controls across the site;
- Provision for an active street frontage along Belmore Road;
- Provision for an additional permitted use (APU) to enable residential flat buildings within the B2 Local Centre zone,
- Provision for an APU on certain land identified to allow neighbourhood shops up to 250m<sup>2</sup>; and
- Provision for an APU on certain land identified to allow a neighbourhood supermarket up to 1,000m<sup>2</sup> and food and drink premises including cafes and restaurants.



### Land use zones

A mix of R4 High Density Residential, B2 Local Centre and RE1 Public Recreation zones are proposed for the Study Area.

The proposed land use zoning strategy will deliver opportunities for a diverse range of housing throughout the Study Area, supported by retail and community uses. The majority of the site is proposed to retain its current R4 High Density Residential zoning. Land currently zoned R3 Medium Density Residential is proposed to be rezoned to R4 High Density Residential to allow development of residential flat apartment buildings as a permitted use (with consent).



## Delivering The Plan



### Maximum height of building

A range of maximum building height controls are proposed across the Study Area ranging between 12m (3 storeys) and 41 metres (12 storeys), with the exception of land that is proposed to be rezoned RE1 Public Recreation. RE1 Public Recreation zoned land is proposed to have maximum height of 5m to allow for small scale buildings such as kiosks and cafés, consistent with the objectives and permitted uses (with consent) in the current RE1 Public Recreation Zone in accordance with the Canterbury LEP 2012.

The proposed height strategy ensures a suitable transition from the lowest buildings in the south of the site, to the tallest buildings in the centre of the site. The proposed maximum height controls have been determined based on the desired future character of each street, and to manage impacts such as overshadowing and solar access.



### Floor Space Ratio

A range of maximum floor space ratio controls are proposed across the Study Area between 0.9:1 and 2.5:1.

The proposed controls reflect the detailed urban design analysis undertaken in the Urban Design Study and aim to provide a high quality and appropriate built form outcome, consistent with the master plan.

A detailed outline of how the FSRs have been determined is included in the Urban Design Report. The maximum FSRs achieve approximately 346,000m<sup>2</sup> of GFA across the precinct, which will result in around 3,900 dwellings.

## Delivering The Plan



### Minimum lot size

It is proposed to remove the minimum lot size control for the Study Area.

Instead, the proposal seeks to align with the minimum lot sizes, for various land use types, in accordance with the Canterbury Bankstown Consolidated Local Environmental Plan 2020.

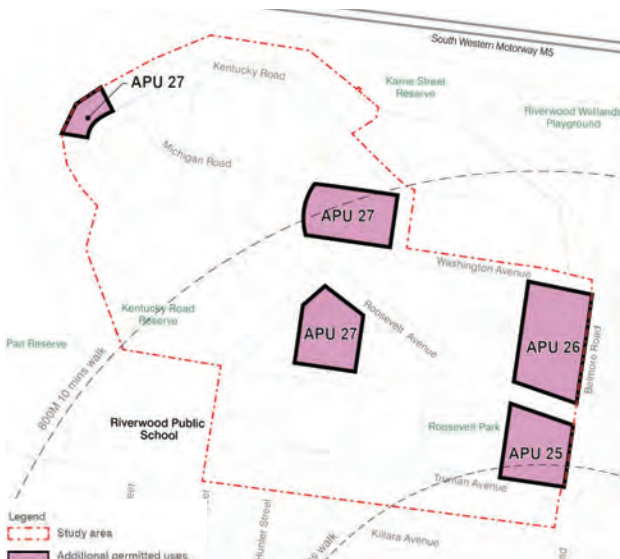
### Active Street Frontage

A new active street frontage is proposed along certain land with frontage to Belmont Road and Truman Avenue.

The active street frontage control has been determined to encourage land uses that promote pedestrian street traffic on certain street frontages located within walking distance (400m) of Riverwood train station.



## Delivering The Plan



### Additional Permitted Uses

To support the proposed master plan, three (3) APUs are proposed, including:

- Provision for an Additional Permitted Use (APU) on certain land identified as “**APU 25**” to enable residential flat buildings within the B2 Local Centre zone;
- Provision for an APU on certain land identified as “**APU 26**” to allow a neighbourhood supermarket up to 1,000m<sup>2</sup> and food and drink premises including cafes and restaurants as an additional permitted use;
- Provision for an APU on certain land identified as “**APU 27**” to allow neighbourhood shops up to 250m<sup>2</sup> and food and drink premises including cafes and restaurants as an additional permitted use.

## Delivering The Plan

### Development Control Plan (DCP)

To support the proposed changes to the Draft CBLEP, a DCP is proposed to guide future development throughout the Study Area. The DCP includes detailed design controls to support the proposed LEP controls and deliver the highest quality design and built form outcome for the site. The DCP includes provisions relating to desired future character, land uses, public domain, local infrastructure, open space and public domain, heritage, built form, parking, tree canopy and tree retention and sustainability.

Once endorsed, the DCP would be used to inform future development proposals within the Study Area. The DCP will be managed and published by DPE, however will be publicly available and will apply to all future development within the Riverwood Estate SSP, irrespective of type or scale. For any DAs for which they are the consent authority, Canterbury Bankstown will also review and consider proposals against this DCP.

The site specific DCP will work in tandem with Council's Consolidating DCP. Where possible, the precinct will be subject to the DCP controls that apply across the Canterbury Bankstown local government area (under the Consolidating DCP). The draft DCP only includes controls that vary or provide site specific outcomes for the Riverwood Precinct. Wherever inconsistent, the site specific DCP will apply.

The draft DCP has been informed by the master plan. It allows for some flexibility for continued improvement in design and to adapt to changing environmental, economic and social drivers for development in Riverwood. However, the key objectives, principles and character defining elements of the master plan have been incorporated and reflected in the draft DCP.

Recommended controls to support the design and built form outcomes identified in the master plan are included in the DCP provided at Attachment B.

**See example DCP Urban Structure map to the right**



## Delivering The Plan



# Delivering The Plan

## Indicative staging

The redevelopment of the Riverwood Study Area will occur over a 15-20 year period. The redevelopment will be completed in stages to allow for infrastructure to be delivered over time to meet the growing population and to allow for many existing residents to remain in place while the initial stages are developed. The time required for redevelopment responds to the time required to deliver the new infrastructure and housing, as well as market demand for new housing in Riverwood.

A potential staging plan is provided at Figure 31 which provides an indicative five stage development layout. Stages 1-4 includes an amalgamation of Council owned roads and parks and LAHC owned land which will enable the delivery of precinct wide infrastructure, including, but not limited to, utilities, parks, streets, and community facilities.

Stage 5 as shown at Figure 31 identifies the privately owned land, which is not intended to be acquired or amalgamated with LAHC or Council owned land. The proposal provides the opportunity for privately owned land to be amalgamated with other private land. However, the privately owned land can remain as is or redevelop in accordance with the proposed planning controls at any stage once the land is rezoned.

The potential Stages 1-4 including LAHC and Council owned land are indicative of a potential order of redevelopment to ensure a coordinated program and provision of necessary infrastructure. This potential staging is also provided to ensure that the development of sites can occur independently to the greatest extent possible.

Staging plans will be submitted with any application for residential subdivision within the land identified in Stages 1-4, or for major public domain works within the study area. A planning agreement will specify land area and standard of embellishment of key items such as public open space. Staging plans will address:

- Infrastructure delivery - For each respective stage, construction of buildings shall not commence until necessary stormwater and flood management works are implemented, along with suitable services provision, to ensure that land is capable of being developed. However, one stage does not need to be completed before another can proceed. The detailed sequencing of the development will be determined following negotiation and confirmation from utilities providers, including Sydney Water, in relation to the approval and delivery of key infrastructure upgrades.
- Public domain and open space - improvements will be delivered within all development stages to ensure high-quality public spaces are available to support existing and future residents, as well as the broader Riverwood community.
- Community facilities and other services - delivery of community infrastructure, shops and services are to be staged to keep pace with housing delivery and population growth.
- Transport and active links – staging is to consider the impact on and improvements required to the local and regional traffic or transport networks, and provide for active transport links through the study area.
- Tree canopy – the staging plan is to indicate how tree canopy targets will be met across the study area.
- Sustainability – the staging plan is to consider precinct wide environmental sustainability measures (e.g. how the 5 star Green Star communities rating can be achieved)
- Housing mix – the staging plan will indicate an indicative future mix of social and private housing (and affordable, if relevant) across the Study Area. It is intended that new social housing will be delivered in Stage 1-4 up to a maximum of 30% of all housing within Stages 1-4 but the final amount and mix will be determined as part of the detailed design and future development applications.

The timing and delivery of new housing across the site will be informed by the relocation process of existing and future social housing tenants living across the Study Area. However, this matter will be undertaken by LAHC and Department of Communities and Justice (DCJ), in partnership with other key stakeholders in the area and is not subject to this proposal nor a future development application.



## Delivering The Plan



# Delivering The Plan

## Sustainability

Sustainability principles should be integrated across all stages of the renewal of the Riverwood Precinct. A number of regulations and policies at a state, national and international level provide guidance on developing a sustainability approach for the precinct. Rating tools are useful in assessing how the master plan can respond to and comply with sustainability principles and initiatives.

A Green Star - Communities rating is considered by industry as one of the best practice frameworks for integration of sustainability in large scale urban developments. It outlines a holistic approach to address key issues such as energy use, greenhouse gas emissions, water use, wastewater, solid waste and climate change resilience.

Achieving a 5-star Green Star - Communities v1.1 tool rating is recommended to ensure that the precinct complies with all sustainability related regulations, and contributes to achieving a well-designed and integrated sustainable community. The Green Star - Communities core principles are described adjacent.

In combination with achieving a 5-star Green Star - Communities rating for the precinct, consideration of the following rating tools is recommended:

- Aiming to achieve 5 stars for Green Star Buildings v1 for towers and townhouses
- Aiming to achieve NABERS for apartment buildings
- BASIX energy and water scores that exceed minimum targets



### Embrace design excellence

- Adopting effective planning practices
- Encouraging integrated design
- Maintaining flexible and adaptable approaches
- Creating desirable places
- Promoting accessibility



### Create opportunities for economic prosperity

- Promoting education and learning
- Enhancing employment opportunities
- Attracting investment
- Encouraging innovation
- Promoting efficiency and effectiveness



### Demonstrate visionary leadership and strong governance

- Establish coordinated and transparent approaches
- Build a commitment to implementation
- Engaging with stakeholders
- Fostering sustainable cultures and behaviours
- Encouraging and rewarding innovation



### Enhance liveability

- Providing diverse and affordable living
- Creating health, safe and secure communities
- Fostering inclusiveness and cohesiveness
- Building community adaptability



### Foster environmental responsibility

- Enhancing our natural environment
- Reducing ecological footprint



# Delivering The Plan

## Local Infrastructure

The renewal of Riverwood Precinct will create a new mixed community that will require new and improved local infrastructure to cater for the needs of the future population. The Study Area is well serviced by existing social infrastructure, including child care centres, community facilities and recreational space. However, growth within the Study Area will generate the need for new and improved facilities to support renewal over the next 15-20 years.

To support the master plan and projected population growth, upgrades to local infrastructure will be required. This includes local road upgrades, new local drainage infrastructure and new social infrastructure, such as new open space and community facilities.

A range of local transport initiatives are proposed, including local street network upgrades, intersection upgrades and new and improved walking and cycling paths throughout the Study Area. The improvements include upgrades to existing walking and cycling connections within the Study Area, and new connections to provide better access to key regional assets such as Salt Pan Creek Reserve and the regional cycleway network.

The proposal seeks to deliver:

- Local open space, including 5 new local parks;
- New community spaces, including dedicated space for multi-purpose community facilities;
- New walking and cycling paths;
- Local street network improvements, including new streets and intersection upgrades; and
- Stormwater and drainage works.

The table below provides an outline of the local infrastructure schedules required to meet the needs of the existing and future population.

## Local infrastructure schedules

Item	Description	Timing	Mechanism
<b>Transport</b>			
New roundabout in the Precinct	Provide a new roundabout at Roosevelt Avenue, Washington Avenue and Kentucky Road intersection.	To be determined as study area develops in consultation with Council.	Arrangement for the proposed upgrades and dedication to Council to form part of VPA.
Widening of existing roads in the Precinct	<ul style="list-style-type: none"><li>– Existing roads to be widened include:</li><li>– Roosevelt Avenue (to 30 m wide) – 2.1m footpaths and 1.4m cycleways on both sides of the street and a 6m planted median with WSUD swale; 4.6m indented parking and planting areas; 3.3m travel lane in each direction.</li><li>– Kentucky Road (to 20 m wide) – 2.3m street planting on both sides of the street; 2m shared path on both sides of the street.</li><li>– Union Street.</li><li>– Truman Avenue.</li><li>– North-south road between Roosevelt and Truman (unnamed) to 15.7m wide.</li><li>– East-west road between Union and Kentucky (unnamed) to 15.7m wide.</li></ul>	To be determined as study area develops in consultation with Council.	Arrangement for the proposed upgrades and dedication to Council to form part of VPA.

## Delivering The Plan

Item	Description	Timing	Mechanism
Provision of new roads in the Precinct	<p>New roads include:</p> <ul style="list-style-type: none"> <li>Two new connections between Washington Avenue and Roosevelt Avenue.</li> <li>An extension of Truman Avenue westward through to Union Street.</li> <li>Several new north-south streets which connect the extended Truman Avenue to the Community Greenway and to Roosevelt Avenue.</li> <li>A north-south laneway (12m wide) between the two sections of Kentucky Road with a 3m wide planting and seating verge on both sides of street and a 6m shared laneway for vehicles and pedestrians.</li> <li>An extension of the laneway running south, through to Killara Avenue towards the Riverwood town centre and station.</li> </ul>	To be determined as study area develops in consultation with Council.	Arrangement for the proposed upgrades and dedication to Council to form part of VPA.
Cycling in the Precinct	Provision of dedicated off-road and shared paths along existing and new streets to improve connectivity and promote walking/cycling.	To be determined as study area develops in consultation with Council.	Arrangement for the proposed upgrades and dedication to Council to form part of VPA.
<b>Public Domain and Stormwater</b>			
OSD and water quality	<p>Option 1</p> <ul style="list-style-type: none"> <li>Regional Bioretention/ Raingarden located in Regional Detention Basin (RDB) of 1,300m<sup>2</sup> (for the Study Area) as identified in SPCRMP with potential to incorporate SPCR when comes online.</li> </ul> <p>Option 2</p> <ul style="list-style-type: none"> <li>Interim scenario would locate biofiltration areas outside the footprint of the playing field. The potential future reconfiguration as wetland providing the full benefit to SPCM could follow when the full SPCM is implemented.</li> </ul> <p>Option 3</p> <ul style="list-style-type: none"> <li>On lot treatment for all stages that would not require KRR.</li> </ul>	As the study area develops and in consultation with Council.	Arrangements for the proposed upgrades and dedication to Council to form part of VPA.
<b>Utilities – Lead In Infrastructure</b>			
<b>Water</b>			
Upgrade water supply to the site – Phase 1	Construct new 375mm main connecting to the existing 450mm main on Bonds Road to the site boundary. Length 1.3km.	0-700 dwellings development yield	Service provider/developer
Upgrade water supply to the site – Phase 2	Construct duplicate 375mm main from Bonds Road to Canarys Road.	1700-2700 dwellings	Service provider/developer



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Item	Description	Timing	Mechanism
<b>Sewer</b>			
Sub main	Realignment of the submain through the precinct according to new road layout - 1,524mm pipe or 1,500mm x 1,500mm box culvert.	The Bankstown Submain re-alignment is based on location	Service provider/developer
Pumping Station	New sewer pumping station North Washington Park and associated rising main	1700-2700 dwellings development yield	Service provider/developer
Pumping Station	Upgrade SPS 0211	2700-3900 dwellings development yield	Service provider/developer
Pumping Station	Upgrade SPS0182	2700-3900 dwellings development yield	Service provider/developer
<b>Electricity</b>			
Conduits and Feeder Cables	Two 11kV conduits and pull one 11kV feeder from Bankstown ZS	0-700 dwellings development yield	Service provider/developer
Conduits and Feeder Cables	Pull second cable from Bankstown ZS	700-1700 dwellings development yield	Service provider/developer
Conduits and Feeder Cables	Two new conduits and pull first 11kv from Mortdale ZS	1700-2700 dwellings development yield	Service provider/developer
Conduits and Feeder Cables	Potential second cable from Mortdale ZS	2700-3900 dwellings development yield	Service provider/developer
<b>Utilities – Reticulation Costs</b>			
Water		As Study Area develops	Service provider/developer
Waste Water		As Study Area develops	Service provider/developer
Electricity		As Study Area develops	Service provider/developer
Gas		As Study Area develops	Service provider/developer
Telecommunications		As Study Area develops	Service provider/developer
Stormwater		As Study Area develops	Service provider/developer
*excludes demolition and remediation costs			

# Delivering The Plan

## Regional Measures

The renewal of the Study Area has the potential to be an important catalyst for improvements to Salt Pan Creek Reserve, providing significant contributions towards the embellishment of Salt Pan Creek Reserve. An overview of regional infrastructure upgrades is provided in the Table on the following page.

Canterbury-Bankstown Council's existing Local Contributions Plan, includes a levy towards the upgrade of Salt Pan Creek Reserve, a regional open space asset, adjacent to the Study Area. As part of the future renewal of the Study Area, local contributions will be applied to future DAs within the Study Area.

The capacity of local schools to accommodate future growth has also been considered. Riverwood Public School, located adjacent to the Study Area, is a 2.5 hectare site and has sufficient capacity to accommodate future growth. Sir Joseph Banks High School, a 5.5 hectare site located to the north-west of the M5, also has sufficient capacity to expand and accommodate future student demand.

Consultation with Department of Education has confirmed that local schools have sufficient capacity to accommodate future growth. The Department of Education will work closely with LAHC to monitor future growth with the Study Area, and consider any necessary school infrastructure upgrades required to meet student demand.

## Funding Arrangements

The former Canterbury Council Development Contributions Plan 2013 contribution plan applies to future development in the Study Area. Future development will be subject to Section 7.11 levies in accordance with the plan, including levies towards the Salt Pan Creek Reserve.

A VPA is proposed to be entered into to ensure the local infrastructure needs of the future population are met.

The VPA will provide certainty in relation to the funding, timing and delivery of the infrastructure needed to support renewal within the Study Area. It is anticipated that the VPA will include a mix of works in kind and monetary contributions for transport and social infrastructure improvements.

It is proposed that existing roads and open space owned by Canterbury-Bankstown Council and required to facilitate development will be acquired by LAHC at nil value in return for new and improved assets.

Land proposed to be dedicated as part of the future public domain, including new streets and open space is identified in Figure 20 and is intended to be detailed in the VPA.

A number of properties will be affected by future road widening to facilitate the delivery of the proposal. The proposed approach is to identify the affected properties and area required for future road widening, with a setback and dedication control in the DCP to be considered as of any future redevelopment. This land will therefore not need to be acquired by Canterbury-Bankstown Council and will not be identified for acquisition in the Canterbury LEP 2012

The Regional Infrastructure Contribution (RIC) is a recently introduced mechanism to collect contributions from development to help fund State and regional infrastructure such as transport infrastructure, State or Regional roads etc.

The RIC is a charge that will apply to new residential development in Greater Sydney. The proposed RIC Framework will assist in the acceleration of the delivery of priority growth infrastructure. The base RIC is forecast to levy, on average, \$793 million per annum.

The RIC SEPP is proposed to commence on 1 July 2022. To minimise the potential for adverse impacts on current development supply, and in light of ongoing impacts of the COVID-19 pandemic, the RIC would be phased-in to allow industry stakeholders, councils, and consent authorities to adapt to the new charge.

It is anticipated that the proposed payment of the RIC would address the off-site traffic impacts on the State and Regional Roads.

Depending on the implementation timescale of the RIC and the delivery program for the renewal of the Riverwood Estate, it is understood that an alternative provision may be required. LAHC is therefore willing to consider an appropriate concurrence clause with the Planning Secretary to ensure satisfactory arrangements are in place for the adequate provision of State infrastructure as development progresses within the Riverwood Precinct



## Ownership and Ongoing Maintenance Arrangements

It is intended that new open space, new roads, community facilities and drainage facilities will be dedicated to Canterbury-Bankstown Council. The master plan will deliver a high quality public domain, a new central open space and community facilities, for the use and enjoyment of the broader Riverwood community, not just residents of the future development.

The ownership, management, and ongoing maintenance arrangements for the proposed local infrastructure, including proposed public open space and new community facilities will be subject to negotiation between LAHC and Canterbury-Bankstown Council, and will be detailed in the proposed VPA. It is anticipated that land zoned as public recreation will be transferred into the ownership of Council and will be managed in accordance with a plan of management prepared in accordance with the Local Government Act 1993.

## Regional infrastructure upgrades

Item	Description	LAHC Mechanism	Private Mechanism
<b>Transport infrastructure improvements outside of precinct</b>			
Belmore Road–Hannans Road–Washington Avenue	Works required by 2031 (based on indicative program):	RIC	RIC
(Option 1: retention of the existing Belmore Road centreline)	<ul style="list-style-type: none"> <li>Widen southern approach (including culvert bridge) to allow for 2 through lanes and one right turn lane.</li> <li>Widen northern approach to 3 lanes for 100m.</li> <li>Widen the eastern approach to provide additional 75m right turn lane.</li> <li>Turn Washington Avenue to left in, left out (priority control).</li> <li>Ban right turn onto Hannans Road from Washington Avenue.</li> <li>Move pedestrian crossing from south of Hannans Rd to south of Washington Avenue.</li> </ul>		
Belmore Road–Hannans Road–Washington Avenue	Works required by 2031 (based on indicative program):	RIC	RIC
(Option 2: relocation of the existing Belmore Road centreline to further west)	<ul style="list-style-type: none"> <li>Widen southern approach (including culvert bridge) to allow for 2 through lanes and one right turn lane.</li> <li>Widen northern approach to 3 lanes for 100m.</li> <li>Widen the eastern approach to provide additional 75m right turn lane.</li> <li>Turn Washington Avenue to left in, left out (priority control).</li> <li>Ban right turn onto Hannans Road from Washington Avenue.</li> <li>Move pedestrian crossing from south of Hannans Rd to south of Washington Avenue.</li> <li>Realign footpath on the west side of Belmore Road.</li> </ul>		
Belmore Road–Roosevelt Avenue	Works required by 2041 (based on indicative program):	RIC	RIC
(Option 1: no right turn bay on Belmore Road)	<ul style="list-style-type: none"> <li>Upgrade to traffic signals.</li> <li>Ban parking on Roosevelt Avenue from Washington Avenue to Belmore Road in the eastbound direction.</li> <li>Ban parking on Belmore Road from Truman Avenue to Washington Avenue in both directions.</li> </ul>		

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Item	Description	LAHC Mechanism	Private Mechanism
Belmore Road–Roosevelt Avenue  (Option 2: with right turn bay on Belmore Road)	<p>Works required by 2041 (based on indicative program):</p> <ul style="list-style-type: none"> <li>– Widen the intersection to accommodate design vehicle's turning path.</li> <li>– Provide a 55m right turn bay on Belmore Road southbound.</li> <li>– Realign footpath on the west side of Belmore Road.</li> </ul>	RIC	RIC
Bonds Road–Hannans Road	<p>Works required by 2031 (based on indicative program):</p> <ul style="list-style-type: none"> <li>– Ban parking on Hannans Road from Bonds Road to Mazarin Street in the eastbound direction.</li> </ul> <p>Works required by 2041:</p> <ul style="list-style-type: none"> <li>– Widen intersection to provide a 50m eastbound right turn lane and two west-bound approach and departure lanes.</li> </ul>	RIC	RIC
Bonds Road–Broadarrow Road	<p>Works required by 2031 (based on indicative program):</p> <ul style="list-style-type: none"> <li>– Upgrade to traffic signals.</li> <li>– Provide right turn bays on all approaches (50m on the northern and eastern approaches, 25m on the southern and western approaches).</li> </ul>	RIC	RIC
Bonds Road–Romilly Street	<p>Works required by 2031 (based on indicative program):</p> <ul style="list-style-type: none"> <li>– Upgrade to traffic signals.</li> <li>– Square up the staggered intersections to form a cross intersection to better accommodate the design vehicle's turning path</li> <li>– Relocate the existing utility poles at the northern corner at the intersection.</li> <li>– Provide right turn bays on Romilly Street, Talbot Street, and Bonds Road southern approach.</li> <li>– Provide left turn bay on Bonds Road northern approach.</li> <li>– Remove pedestrian refuge on Bonds Road as signalised crossing is provided further north at the intersection with Romilly Street.</li> <li>– Provide traffic islands on Talbot Street to prevent the right turn movements into and out of Larkhill Avenue, and the right turn weaving movement from Larkhill Avenue to the right turn lane on Talbot Street.</li> </ul>	RIC	RIC
Bonds Road–Forest Road–Boundary Road	<p>Works required by 2031 (based on indicative program):</p> <ul style="list-style-type: none"> <li>– Widen south-eastern approach to provide right turn lane.</li> <li>– Widen north-western approach to provide right turn lane flare of 25m.</li> <li>– Ban parking on Bonds Road for 270m prior to Forest Road.</li> <li>– Extend right turn bay on the south-western approach to Hugh Avenue.</li> <li>– Extend right turn bay on the north-eastern approach by 50m.</li> </ul> <p>Works required by 2041:</p> <ul style="list-style-type: none"> <li>– Extend right turn flare on north-western approach by 50m (total 75m).</li> </ul>	RIC	RIC
Canterbury Road–Belmore Road	<p>Works required by 2041 (based on indicative program):</p> <ul style="list-style-type: none"> <li>– Extend No Stopping Zone on Belmore Road to 90m.</li> <li>– Additional 20m kerbside left turn lane on Canterbury Road east approach.</li> </ul>	RIC	RIC
Cycle Network	Provision to enable connection to the broader cycle network.	RIC	RIC







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