

Glenfield to Macarthur

URBAN RENEWAL CORRIDOR STRATEGY

JULY 2015



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Executive Summary

This Land Use and Infrastructure Strategy has been informed by a coordinated approach between the NSW Government and Campbelltown City Council to establish a strategic planning framework to guide future development and infrastructure delivery throughout the Glenfield to Macarthur corridor over the next 20 years.

Executive Summary

The Strategy provides a comprehensive evidence base to support future growth in south-west Sydney by identifying opportunities for additional homes and jobs close to existing public transport, employment areas and the regional city of Campbelltown-Macarthur.

The Strategy includes detailed Precinct Analysis for each of the Glenfield, Macquarie Fields, Ingleburn, Minto, Leumeah, Campbelltown and Macarthur station precincts.

The Strategy outlines the future vision and character of each area, the types and number of new homes and jobs that could be delivered by 2036, and the improvements to community facilities, public spaces, the transport network and other infrastructure needed to achieve sustainable growth.

The Strategy aims to promote community discussion about the vision for each station precinct, guide future development and inform more detailed precinct planning and infrastructure investigations for the corridor.

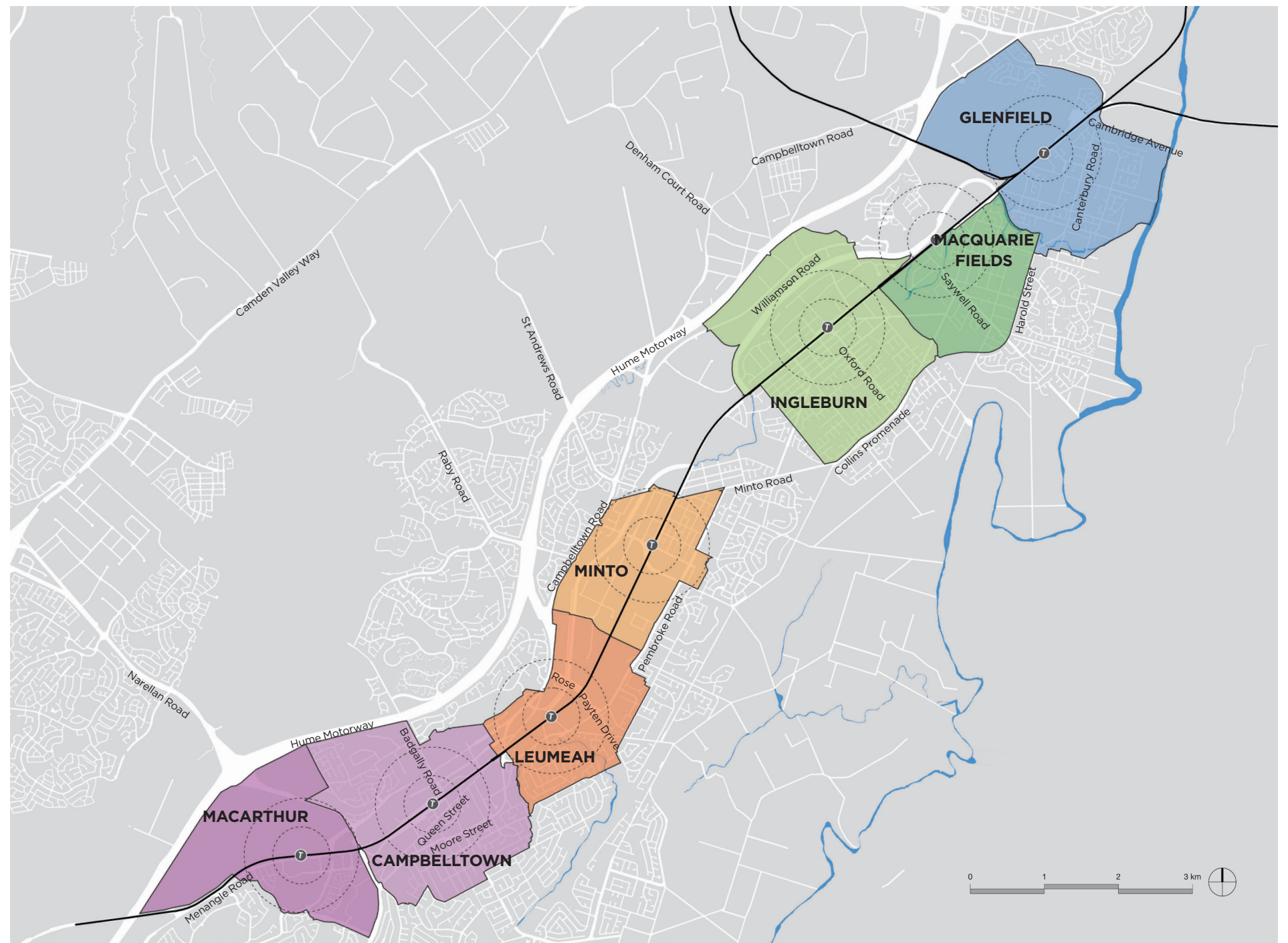


Figure 1: Glenfield to Macarthur Urban Renewal Corridor

Introduction

Context

The Glenfield to Macarthur urban renewal corridor is located in the south-west subregion, the fastest growing region in Sydney. Over the next 20 years, demand for an additional 664,000 homes and 689,000 jobs will be generated in the south-west.

To support this growth, planning for additional housing and jobs is needed. *A Plan for Growing Sydney* recognises that urban renewal is essential to meet demand for new housing. The Plan aims to accelerate urban renewal in transport corridor areas and close to major centres.

The identification of housing, employment and urban renewal opportunities around Campbelltown-Macarthur and key public transport corridors is a priority for the south-west subregion.

This Strategy supports the aims of *A Plan for Growing Sydney* by identifying opportunities to develop homes, create local jobs, improve public spaces and co-ordinate associated infrastructure in the areas around the Glenfield, Macquarie Fields, Ingleburn, Minto, Leumeah, Campbelltown and Macarthur stations.



Study Area

The study area is focussed along 15km of the existing Cumberland and South Rail Line in the Campbelltown local government area.

The boundaries for each precinct generally correspond with an 800m- 1.5km radius from the rail station, representing a 10 - 20 minute walk. This is considered an appropriate distance to provide opportunities for more homes and jobs in a walkable and accessible urban environment.

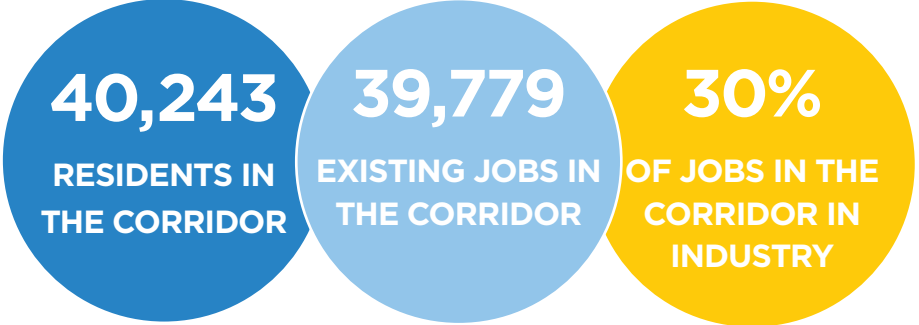


Figure 2: Key demographic facts for the Glenfield to Macarthur Corridor and South West Subregion (as at 2011 Census)

Purpose of the Land Use and Infrastructure Strategy

The Strategy establishes a strategic planning framework to guide future development and infrastructure delivery throughout the corridor over the next 20 years. The Strategy identifies opportunities for additional housing and jobs around each station and the infrastructure required to support future growth.

The Strategy aims to:

1. Identify the environmental and built form constraints and opportunities for renewal
2. Develop a vision and land use plan for each precinct
3. Project appropriate housing and employment growth to 2036
4. Be informed by market demand and economic feasibility analysis
5. Incorporate a high level infrastructure capacity analysis
6. Identify the infrastructure required to support projected growth
7. Develop a framework to guide future land use change
8. Provide an evidence base for more detailed precinct planning
9. Establish an implementation and monitoring framework

The Strategy has been informed by constraints analysis and detailed technical investigations to determine potential for growth and the infrastructure needed to support this growth along the corridor. These investigations included urban design, transport, employment, economic feasibility, market demand, social infrastructure, public domain and open space studies.

The Strategy will enable Council and Government agencies to identify, prioritise and co-ordinate future land use change and the delivery of infrastructure in accordance with the Corridor’s identified long term growth potential.

The Strategy aims to promote community discussion about the vision for each station precinct, guide future development and inform more detailed precinct planning and infrastructure investigations for the corridor.

Key Considerations

The studies that have informed the Land Use and Infrastructure Strategy include:



Figure 3: Key considerations

Methodology

The following figure illustrates the project’s methodology:



Figure 4: Methodology for developing the Land Use and Infrastructure Strategy

Calculating Projected Growth

To translate the land uses and built forms of each precinct’s Land Use and Infrastructure Plan to projected housing and jobs growth, an assessment of the capacity for growth and the likely demand for additional housing and jobs was undertaken.

The steps for determining projected housing and jobs growth included:

1. Map the physical constraints to development such as transport and access, open space, hydrology, vegetation and ecology, heritage, bushfire risk and recent developments.
2. Identify the unconstrained areas with the most potential for redevelopment to 2036.
3. Catalogue the existing characteristics of the unconstrained sites including their site area, the number and type of dwellings and the amount of employment floor space by activity.
4. Allocate a land use, development type, minimum lot size and floor space ratio control to every unconstrained site, as identified in each precinct’s Land Use and Infrastructure Plan.
5. Determine the number of additional jobs and dwellings that could be provided by each unconstrained site. This is achieved by translating the residential and employment floorspaces to a number of dwellings and jobs, based on a set of assumptions documented in Figure 5.
6. Undertake a high level market demand analysis to determine the demand for different dwelling types on unconstrained sites within each precinct. An employment lands study also informed the projected demand for additional types of jobs in each precinct to 2036.

The market demand analysis:

- ▶ Assessed the desired future character, built form and housing types proposed under each precinct’s Land Use and Infrastructure Plan against market conditions and demand; and
- ▶ Identified take-up/realisation rates for each land use, which informed the calculation of the projected growth for each precinct.

The ‘take-up’ or ‘realisation’ rates were informed by several factors, including broader population growth analysis, property sub-markets, historic dwelling activity, the development pipeline, each precinct’s dwelling capacity and current market feasibility.

Assumptions

The following figure illustrates the project’s assumptions:

Assumptions		
Commercial floor space per job	25	sqm
Retail floor space per job	35	sqm
Bulky goods/Industrial floor space per job	70	sqm
Low Rise - Single detached dwellings	450-700	sqm lot size
Low Rise - Townhouse	250	sqm lot size
Medium Rise - 3-6 storey apartments	1.2:1 - 2.2:1	FSR
High Rise - 7+ storey apartments	3:1 - 4:1	FSR
Mixed Use residential (80%) retail (20%)	2:1 - 4:1	FSR
Industry & Innovation	0.5:1 - 1:1	FSR
Business Park	1:1	FSR
Commercial	4:1	FSR
Conversion of Gross Floor Area to Net Lettable Area	85%	
Residential Net Lettable Area per dwelling	100	sqm avg

Figure 5: Assumptions for developing the Land Use and Infrastructure Strategy

Ecologically Sustainable Development

Applying the principles of ecologically sustainable development has been intrinsic to the development of the Strategy.

- ▶ Analysis of environmental constraints identified areas to be protected and rehabilitated, and unconstrained land suitable for development
- ▶ Growth projections for each precinct have been informed by economic feasibility and market demand analysis that reflect the long term housing and employment needs for the area
- ▶ New homes and jobs are to be concentrated within walking distance of each train station to encourage use of public transport
- ▶ Recommended improvements to the transport network aim to encourage more people to walk, cycle and use public transport for local and regional trips
- ▶ Improved connections to ecological corridors and open spaces have been identified.

Land Use and Infrastructure Strategy

Vision

The Glenfield to Macarthur Urban Renewal Strategy has the potential to transform and revitalise the communities around the seven train stations between Glenfield and Macarthur.

The Strategy is founded on the principles of providing greater connectivity by strengthening existing centres and links and providing new links between the stations and surrounding uses. The Glenfield to Macarthur Corridor will be transformed into a highly connected and accessible corridor where residents can work, live and play.



Figure 6: Desired built form for the Glenfield to Macarthur Corridor

Projected Housing

The projected housing growth to be delivered under the Land Use and Infrastructure Strategy is an additional 15,000 dwellings to 2036. This results in an increase in dwellings from just over 15,000 in 2011 to just over 30,000 in 2036.

The Strategy seeks to increase buildings heights in areas within close proximity to train stations. Generally areas within 400m-800m from the station are identified for gradual increases in building heights, with apartments ranging from three-six storeys proposed for smaller centres, increasing to over 7 storeys for areas surrounding larger centres, and up to 12 storeys in Campbelltown/Macarthur regional city centre.

Mixed use centres are also identified around some stations to provide opportunities for increased retail and residential development. This approach aims to provide increased amenity, access to services and jobs and underpins the principles of transit oriented development. The existing character of areas further from the station would be retained, with a mixture of dwellings, townhouses and terraces.

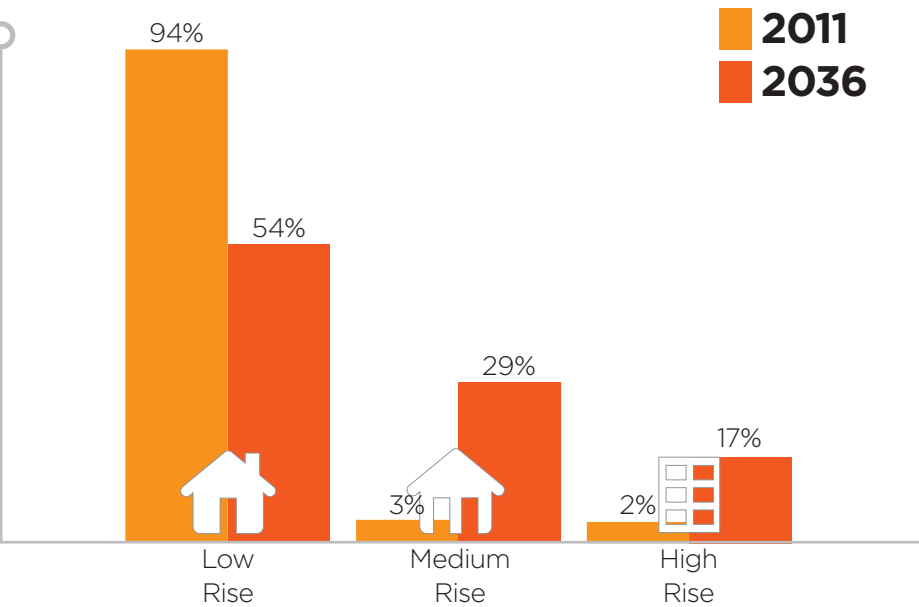


Figure 7: Existing and projected dwelling growth by typology across the corridor

Dwelling Type	2021	2031	2036
Low Rise	2,850	6,200	8,050
Medium Rise	1,800	3,095	4,350
High Rise	400	1,830	2,600
Total Dwellings	5,050	11,125	15,000

Figure 8: Cumulative projected dwelling growth across the corridor

Projected Jobs

The projected jobs growth under the Land Use and Infrastructure Strategy is an additional 20,700 jobs. This results in an increase in jobs from almost 40,000 in 2011 to 60,000 in 2036.

The largest increase in new jobs will be in education and healthcare, with over new 8,000 new jobs throughout the corridor, and in retail with over 7000 new jobs to 2036. This is consistent with *A Plan for Growing Sydney's* priorities for Campbelltown-Macarthur.

The Strategy prioritises retaining and enhancing employment areas, recognising the significant local and regional industrial jobs within the corridor. The Strategy also identifies new business park areas to provide opportunities to transition to higher order employment uses in areas close to larger centres and key educational facilities.

The Strategy identifies greater capacity for jobs growth than housing growth over the next 20 years, recognising the significant employment role of the corridor for the broader South-West region. The Regional City of Campbelltown-Macarthur will provide an increasingly important commercial function for the subregion and consolidating commercial and retail functions will create a lively and attractive commercial centre for the region.

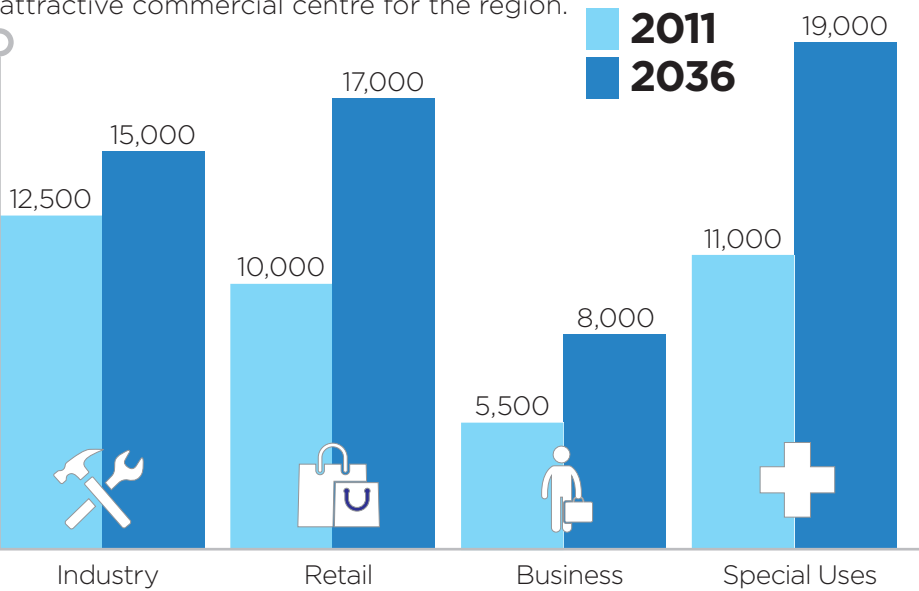


Figure 9: Existing and projected jobs growth by typology across the corridor

Job Type	2021	2031	2036
Industry	1,145	2,300	2,830
Retail	3,310	5,730	7,090
Business	1,180	1,880	2,310
Special Uses	3,190	6,610	8,470
Total Jobs	8,825	16,520	20,700

Figure 10: Cumulative projected dwelling growth across the corridor

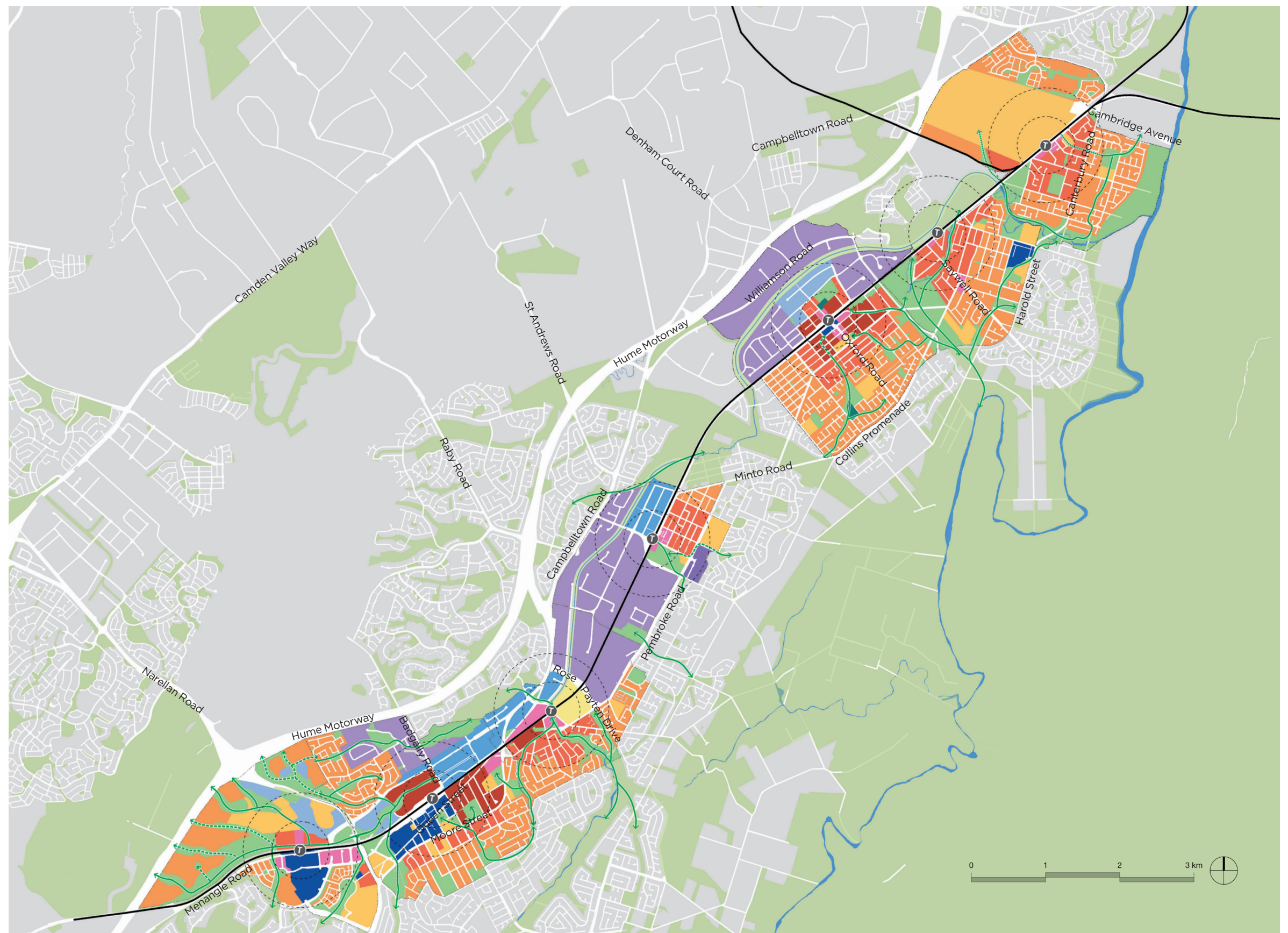
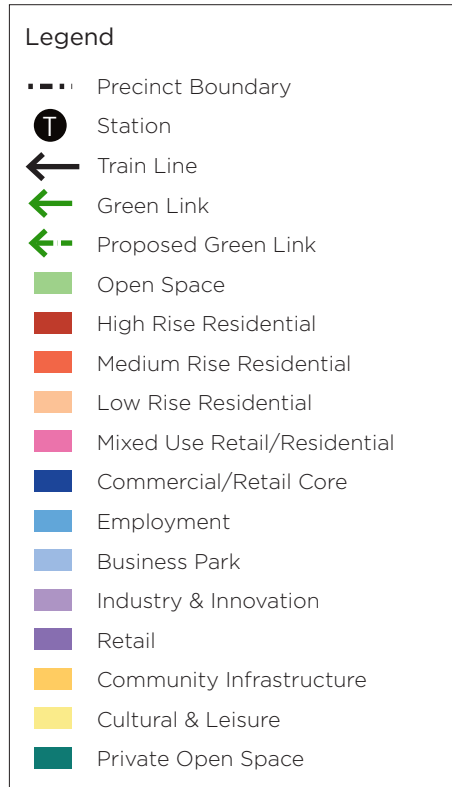


Figure 11: Glenfield to Macarthur Urban Renewal Corridor

Land Use and Infrastructure Strategy

Transport and Movement

The Land Use and Infrastructure Strategy is supported by an Integrated Transport Strategy, a strategic transport assessment commissioned by Transport for NSW.

The proposed transport network aims to:

- ▶ Improve walking and cycling connections to stations and between precincts;
- ▶ Reduce indirect bus routes and increase regional bus route frequency; and
- ▶ Improve road and street legibility and permeability throughout the Corridor;
- ▶ Protect passenger and freight rail and allow for growth;
- ▶ Protect key freight routes into major employment areas and activity centres to facilitate efficient local and regional freight movements.

Key network improvements are identified on Figure 12 and include:

- ▶ Potential regional road upgrades to provide improved road network connections ; including extensions to:
 - Cambridge Avenue in Glenfield
 - Devon Road and Chester Road over the rail line at Ingleburn
- ▶ Undertake a parking study for each precinct to identify parking demand, develop appropriate parking management strategies and identify opportunities for improved mode share to increase walking, cycling and public transport use.
- ▶ Potential public and active transport link extension of Badgally Road and Menangle Road to improve pedestrian, cycle and public transport connectivity to Campbelltown station and CBD
- ▶ Increase rail services to meet the needs of the region's growing population. The stopping patterns and level of service within the corridor will be matched to the role and function of each of the precincts.
- ▶ Potential improvements to Sydney's suburban bus network to create a more connected system that provides direct routes to, from and through the corridor.
- ▶ A new regional cycle route from Glenfield to Macarthur adjacent and perpendicular to the rail corridor to provide improved connections to stations and the surrounding area.
- ▶ Local cycle and pedestrian network improvements to encourage walking and cycling within precincts and throughout the corridor.

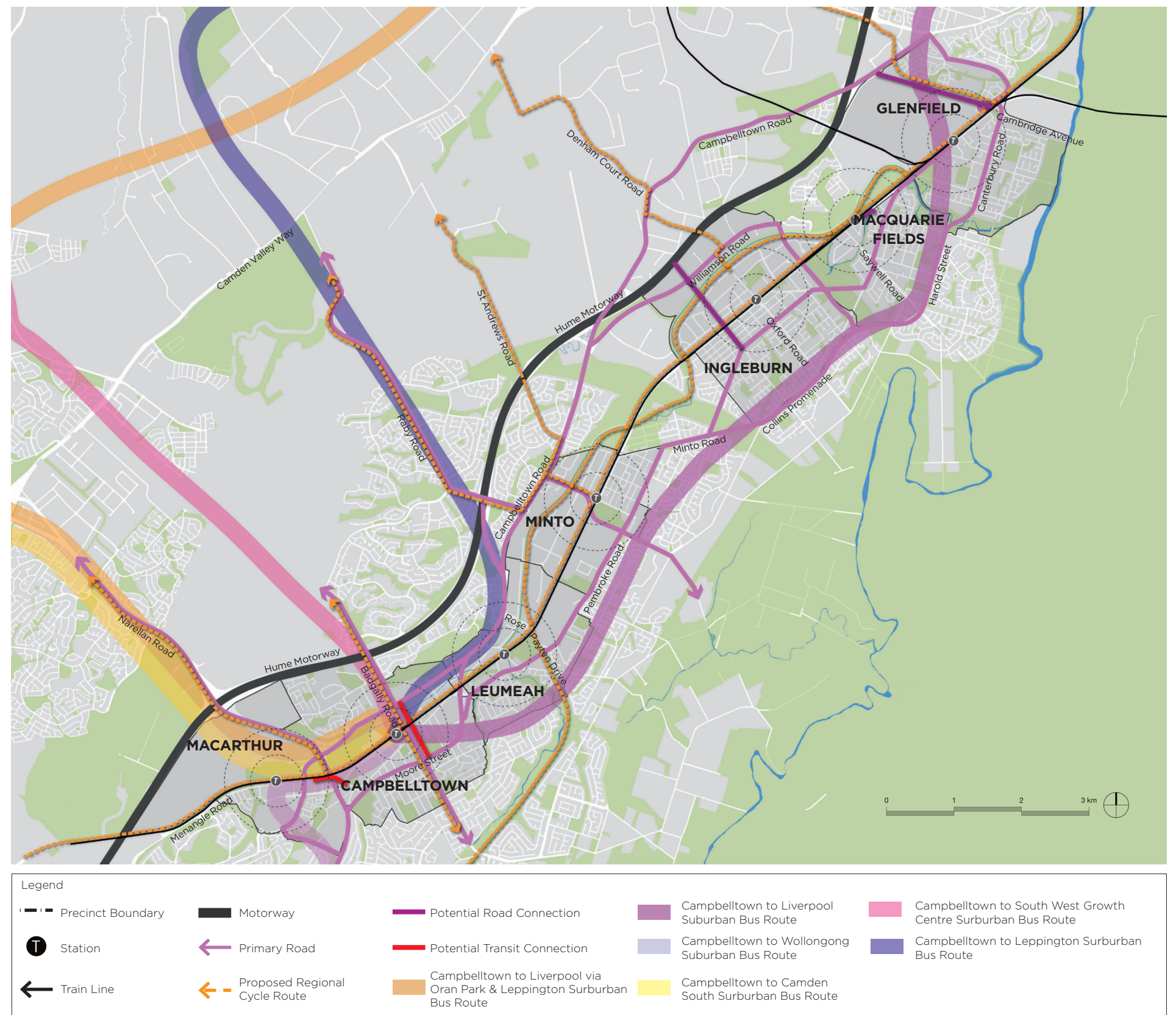


Figure 12: Proposed transport infrastructure

Open Space

The corridor has an extensive network of open space, including local and district sport and recreation facilities. The total area significantly exceeds traditional benchmarks and no additional open space is required to accommodate projected growth. The corridor contains large expanses of underutilised, low quality grassed areas that do not contribute to the amenity of the region, provide little to no recreational value and incur significant on-going maintenance costs. This presents an opportunity for Council to:

- ▶ Consider alternative uses for under utilised and small scale parcels of open space.
- ▶ Consider the possible utilisation of any savings from reduced open space maintenance costs towards embellishment works within station precincts to improve liveability.
- ▶ Develop open space guidelines to encourage appropriate local planning for the open spaces needs of the community.

Community Facilities

The corridor is well served by existing community facilities, many of which have spare capacity to accommodate projected growth. Medium to long term recommendations across the corridor include:

- ▶ Consider the redevelopment of Glenfield community centre into a contemporary multi-purpose community facility
- ▶ Review the potential for the integration/expansion of Greg Percival Library and Community Centre in Ingleburn
- ▶ Examine the feasibility of a district scale community hub and expanded library to serve the Campbelltown and Macarthur precincts that accounts for city wide community needs

Education

The Department of Education has estimated projected growth can mostly be accommodated by providing additional infrastructure on existing school sites. It is estimated:

- ▶ One new primary school will be required to service the Campbelltown and Macarthur precincts
- ▶ Around 41 additional primary school and 40 additional high school teaching spaces and associated infrastructure will be needed
- ▶ No additional high schools are likely to be required.

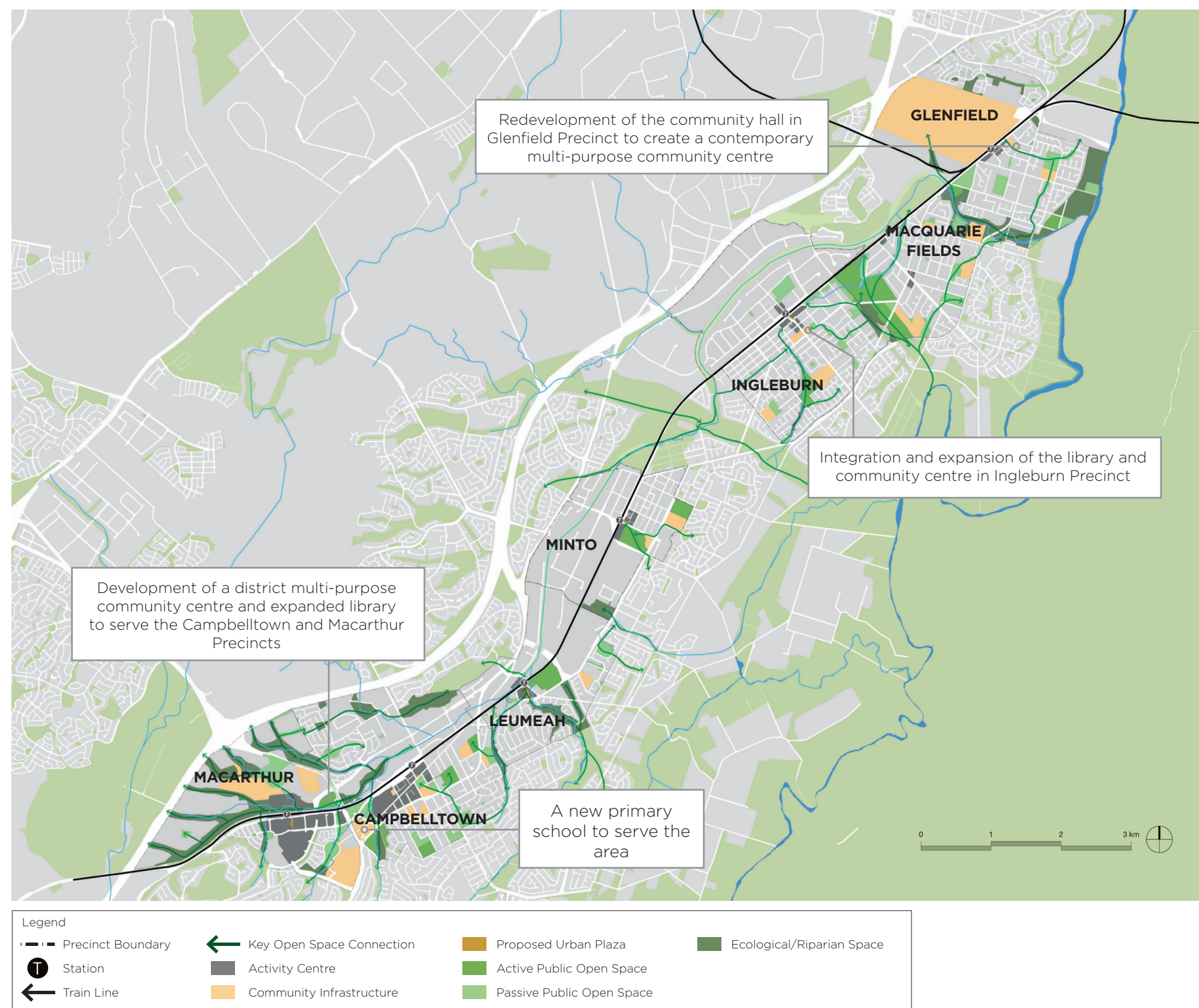


Figure 13: Proposed social infrastructure improvements in the corridor

Glenfield Vision

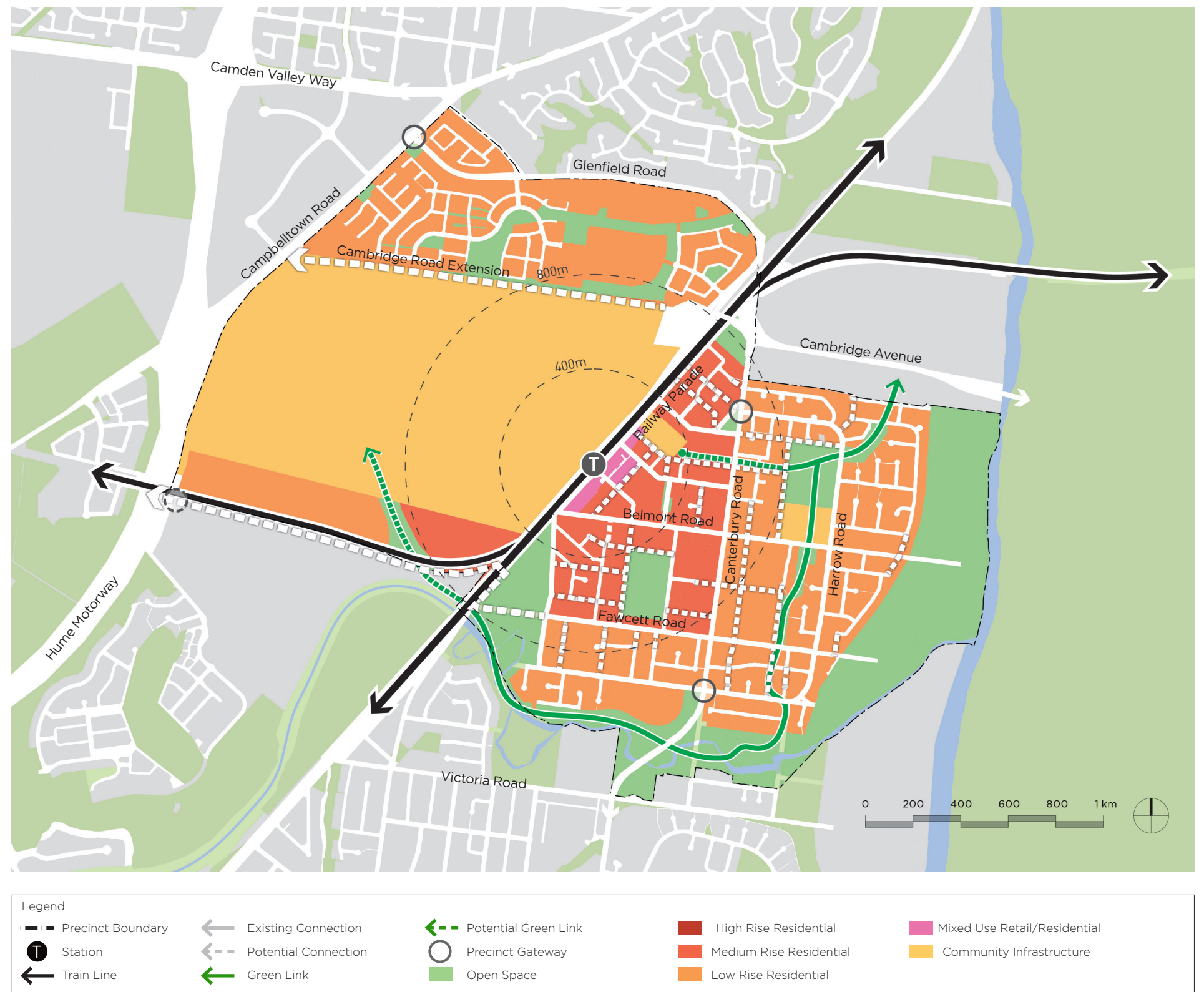
“A vibrant local centre and transport interchange for the south-west”

Built Form

- ▶ Enhanced local centre providing increased amenity and local services for residents and commuters
- ▶ Ground floor retail and local jobs within the mixed use centre to generate activity
- ▶ Providing a range of building heights, with increased heights closest to the station to maximise pedestrian activity and increase trade for local businesses.

Movement Network

- ▶ Capitalise on significant upgrades to Glenfield station to provide a highly connected and accessible station for residents and commuters
- ▶ Develop a continuous safe regional commuter and recreational cycle route from Glenfield to Macarthur adjacent and perpendicular to the rail corridor
- ▶ Introduce new local cycle routes to link to existing networks and improve connections with Glenfield station and the surrounding area.
- ▶ Opportunities to maximise pedestrian and cyclists linkages along open space networks
- ▶ Identifying new green connections that link existing open spaces to increase their amenity and accessibility
- ▶ Promote walking and cycling, by providing new shared pathways, separated cycleways, footpaths, pedestrian refuges, street tree planting, bicycle storage facilities and lighting.



Housing

- Provide a variety of housing types within walking distance of the station to cater for all members of the community
- Creating walkable neighbourhoods that benefit from a high level of accessibility to jobs, both within the precinct and nearby centres; open spaces; shops and community facilities
- Retaining the existing character of areas east of Canterbury Road and south of Fawcett Road, with a mixture of detached dwellings and town-houses.

Dwelling Type	2021	2031	2036
Low Rise	700	1,400	1,700
Medium Rise	100	700	1,100
High Rise	0	0	0
Total Dwellings	800	2,100	2,800

Figure 15: Projected dwelling growth in Glenfield

Jobs

- An upgraded local centre will create a lively and active hub around the station while servicing the daily shopping needs of residents and commuters
- Education and health related jobs will continue to provide an important employment base for the precinct.

Job Type	2021	2031	2036
Industry	40	90	110
Retail	120	240	300
Business	70	140	180
Special Uses	150	300	380
Total Jobs	380	770	970

Figure 16: Projected job growth in Glenfield

Open Space and Public Domain

- Establish a high quality open space and public domain network that provides better linkages to, and embellishments of existing open spaces
- Create great streets through generous new street tree planning, street furniture and pedestrian pathways
- Investigate opportunities to review underutilised open space to contribute towards improved recreational outcomes
- Potential redevelopment of the Glenfield community hall to create a contemporary multi-purpose community facility.



Figure 17: Existing character for the Glenfield precinct, Railway Parade



Figure 18: Desired future character for the Glenfield precinct, Railway Parade

Macquarie Fields Vision

“A local village centre”

Built Form

- ▶ Establish a small scale mixed use centre at the station providing a variety of retail uses
- ▶ Ground floor retail and local jobs within the mixed use centre to generate activity.
- ▶ Provide a range of building heights, with increased heights closest to the station to maximise pedestrian activity and increase trade for local businesses.

Movement Network

- ▶ Extend Victoria Road and Railway Parade over Redfern Creek to enhance amenity and access to Macquarie Fields station by providing a direct connection to the town centre.
- ▶ Develop a continuous, safe regional commuter and recreational cycle route from Glenfield to Macarthur adjacent and perpendicular to the rail corridor.
- ▶ Introduce new local cycle routes to improve connections with Macquarie Fields station and the surrounding area, including between the station, the sports precinct of Milton Park, Macquarie Road Reserve and Bob Prenter Reserve and Glenquarie shops
- ▶ Promote cycling and walking by providing new shared pathways, separated cycleways, footpaths, pedestrian refuges, street tree planting, bicycle storage facilities and lighting.

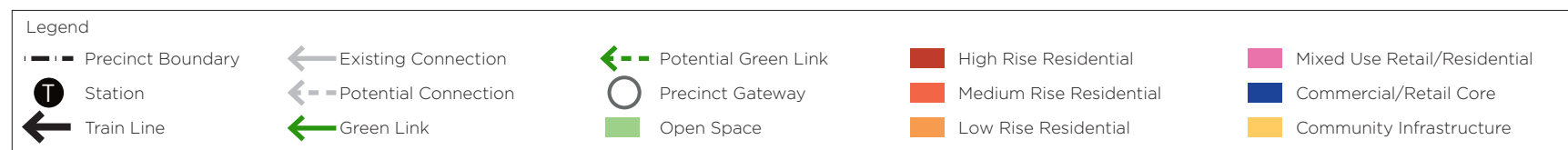
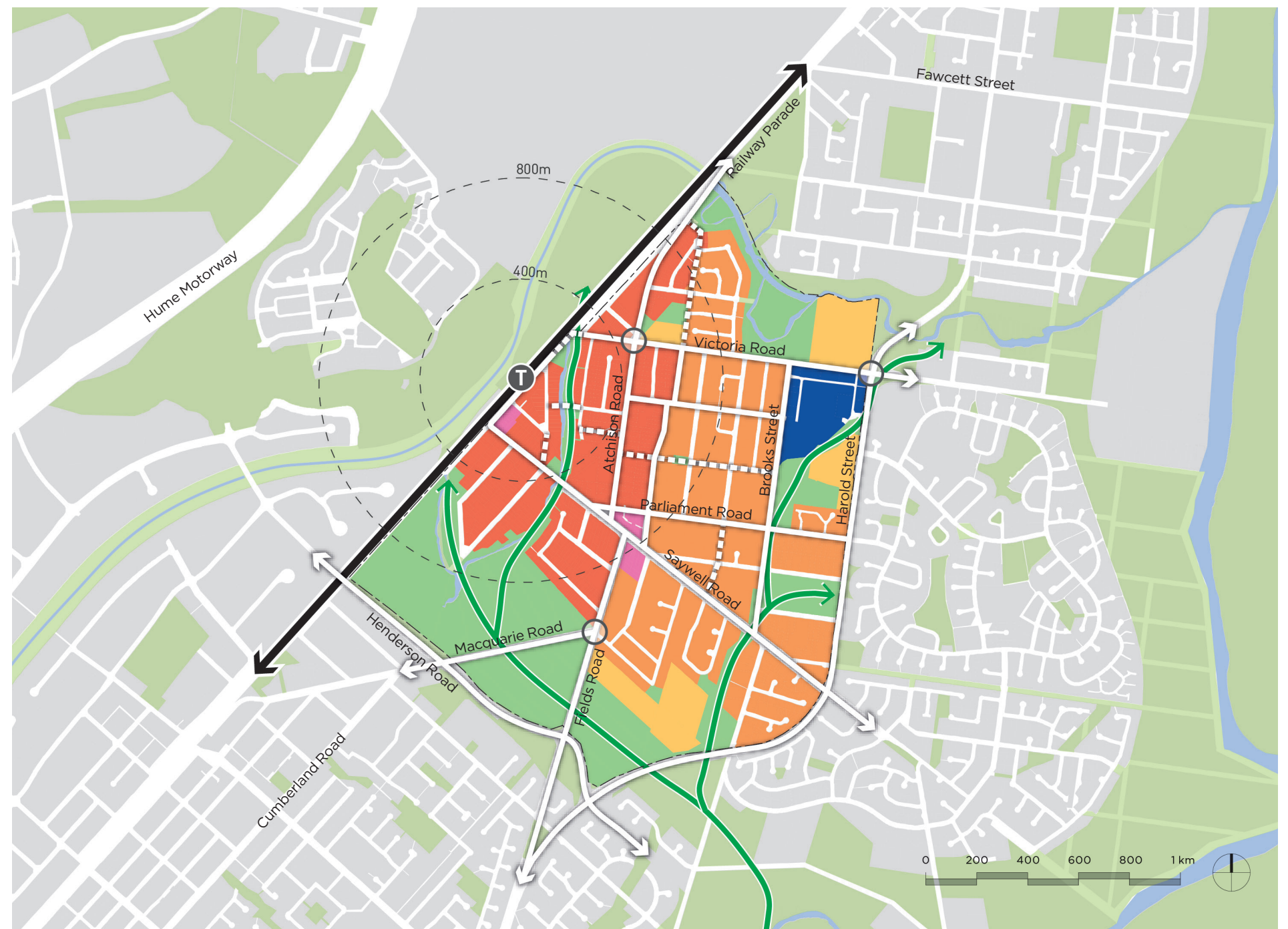


Figure 19: Macquarie Fields Land Use and Infrastructure Plan

Housing

- Provide a variety of housing types within walking distance of the station to cater for all members of the community
- Retaining the existing character of areas east of Parkland Avenue, with a mixture of detached dwellings and town-houses.

Dwelling Type	2021	2031	2036
Low Rise	100	200	250
Medium Rse	0	110	150
High Rise	0	0	0
Total Dwellings	100	310	400

Figure 20: Projected dwelling growth in Macquarie Fields

Jobs

- A new local centre at the station will promote more activity to service the daily shopping needs of residents and commuters.
- Education and retail jobs will continue to provide an important employment base for the precinct.

Job Type	2021	2031	2036
Industry	40	80	100
Retail	100	200	260
Business	60	100	120
Special Uses	120	240	300
Total Jobs	320	620	780

Figure 21: Projected job growth in Macquarie Fields

Open Space and Public Domain

- Establish a quality open space and public domain network that provides better linkages to, and embellishments of existing open spaces, including the replacement of ageing playgrounds and park furniture.
- Investigate opportunities to review underutilised open space to contribute towards improved recreational outcomes
- Potential longer term expansion of the Macquarie Fields Leisure Centre into a regional aquatic facility for south west Sydney.
- Promote ecological corridors and connections along Redfern Creek, through the connecting sports reserves and towards Georges River.



Figure 22: Existing character for the Macquarie Fields precinct, Redfern Creek and Victoria Road



Figure 23: Desired future character for the Macquarie Fields precinct, Redfern Creek and Victoria Road

Ingleburn Vision

“A vibrant town centre that strengthens Ingleburn’s unique urban village character and desirability as a place to live”

Built Form

- Maintain the scale and village feel of Ingleburn town centre by restricting buildings fronting Oxford Road to two storeys, with higher buildings set back from the street.
- Enable higher rise residential and commercial buildings between 4 and 8 storeys close to the station and surrounding the town centre to maximise pedestrian activity and increase trade for local businesses.

Movement Network

- Promote cycling and walking by providing new shared pathways, separated cycleways, footpaths, pedestrian refuges, street tree planting, bicycle storage facilities and lighting.
- Develop a continuous, safe regional commuter and recreational cycle route from Glenfield to Macarthur adjacent and perpendicular to the rail corridor.
- Introduce new local cycle routes to improve connections with Ingleburn station and the surrounding area.
- Investigate the potential for a new vehicle connection over the rail line between Devon Road and Chester Road.

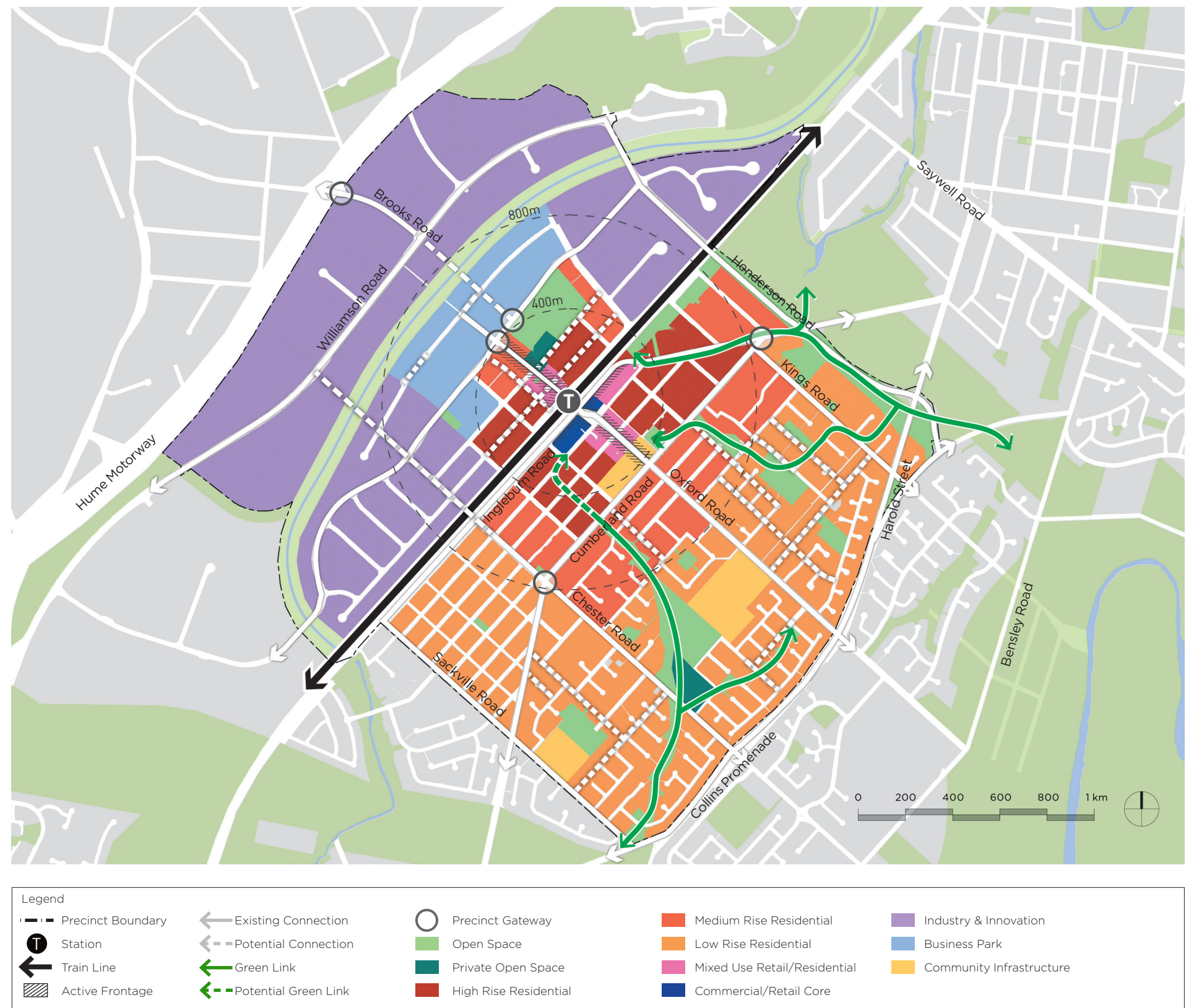


Figure 24: Ingleburn Land Use and Infrastructure Plan

Housing

- Provide a variety of housing types within walking distance of the station to cater for all members of the community.
- Retaining the existing character of areas east of Cumberland Avenue, with a mixture of detached dwellings and town-houses.

Dwelling Type	2021	2031	2036
Low Rise	400	700	800
Medium Rise	0	100	350
High Rise	0	100	250
Total Dwellings	400	900	1,400

Figure 25: Projected dwelling growth in Ingleburn

Jobs

- Oxford Road to be strengthened as a prominent retail and commercial centre for surrounding suburbs.
- Reinforce Ingleburn as a major industrial centre for south western Sydney.
- Encourage renewal, intensification and diversification of some employment lands over time through the emergence of a business park with direct access to the station.

Job Type	2021	2031	2036
Industry	650	1,300	1,600
Retail	600	1,000	1,200
Business	200	350	450
Special Uses	300	600	750
Total Jobs	1,750	3,250	4,000

Figure 26: Projected job growth in Ingleburn

Open Space and Public Domain

- Promote Oxford Road as a vibrant, safe, pedestrian friendly street with widened footpaths, street tree planting, inviting public gathering spaces, outdoor dining, attractive street furniture and barrier free access.
- Establish a quality open space and public domain network that provides better linkages to and upgrades of existing open spaces.
- Provide a new green link along Redfern Creek connecting Wood Park and the town centre.



Figure 27: Existing character for the Ingleburn precinct, Oxford Road



Figure 28: Desired future character for the Ingleburn precinct, Oxford Road

Minto Vision

“An important employment centre that also meets the local community’s retail needs”

Built Form

- ▶ Ground floor retail and local jobs within the local centre to generate activity.
- ▶ Provide a range of building heights, with increased heights closest to the station to maximise pedestrian activity and increase trade for local businesses.

Movement Network

- ▶ Promote cycling and walking by providing new shared pathways, separated cycleways, footpaths, pedestrian refuges, street tree planting, bicycle storage facilities and lighting.
- ▶ Develop a continuous, safe regional commuter and recreational cycle route from Glenfield to Macarthur adjacent and perpendicular to the rail corridor.
- ▶ Introduce new local cycle routes to improve connections with Minto station and the surrounding area, including through the northern ecological corridor.
- ▶ Improve connections between Minto Marketplace and Minto station through the transformation of Redfern Road with widened footpaths, cycle paths and street tree planting.

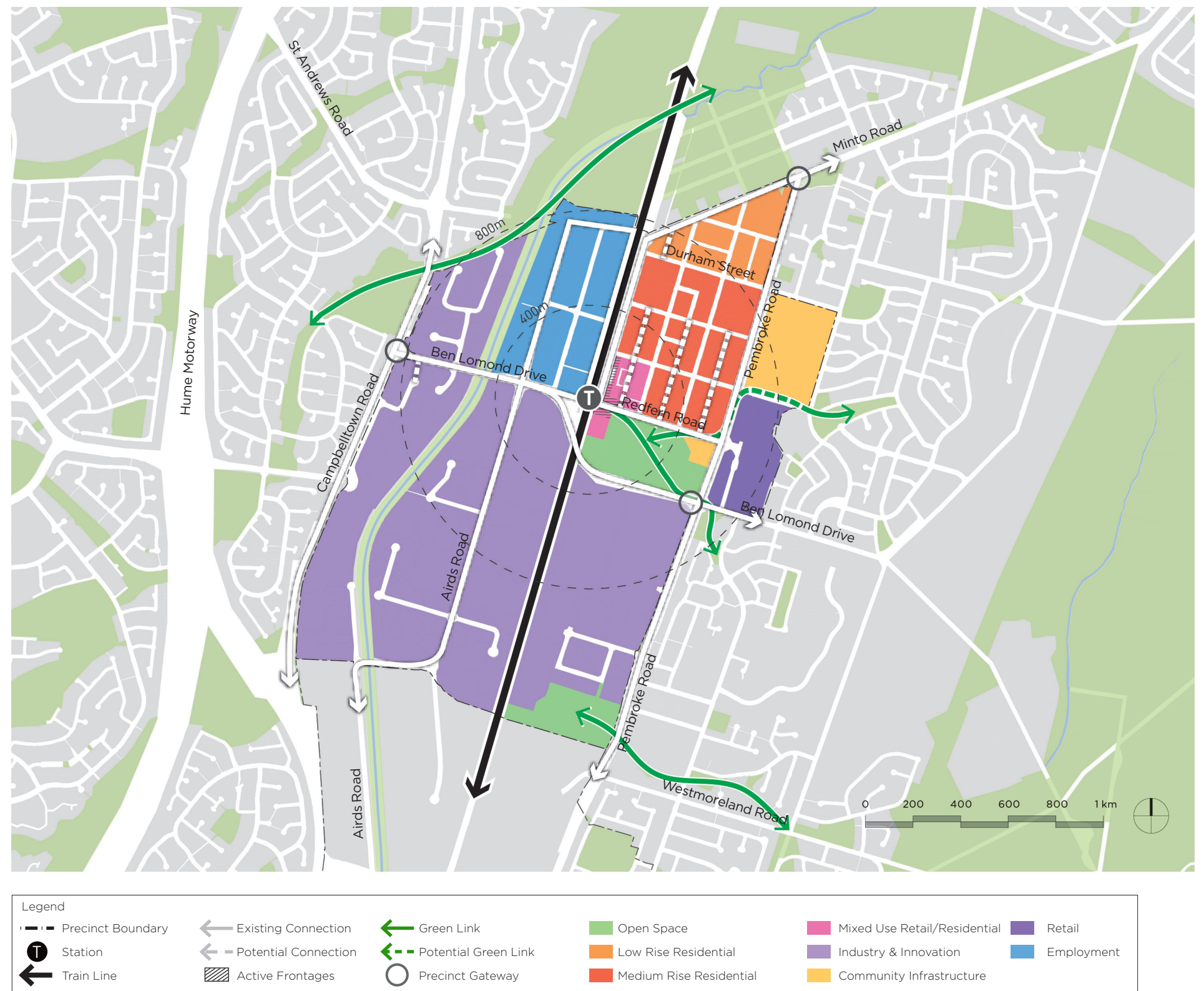


Figure 29: Minto Land Use and Infrastructure Plan

Housing

- ▶ Provide a variety of housing types within walking distance of the station to cater for all members of the community.
- ▶ Retain the existing character of areas north of Durham Street, while encouraging medium rise apartments west of Pembroke Road.

Dwelling Type	2021	2031	2036
Low Rise	100	200	300
Medium Rise	0	35	100
High Rise	0	0	0
Total Dwellings	100	235	400

Figure 30: Projected dwelling growth in Minto

Jobs

- ▶ An upgraded local centre will complement Minto Marketplace by creating a lively and active hub around the station that services the daily shopping needs of residents and commuters.
- ▶ Construction and industrial related jobs will continue to be the major land use for the precinct as the demand for new housing increases.
- ▶ Longer term potential for the precinct’s employment lands to accommodate office uses and more consolidated employment activities.

Job Type	2021	2031	2036
Industry	250	500	600
Retail	220	340	400
Business	70	90	100
Special Uses	320	640	800
Total Jobs	860	1,570	1,900

Figure 31: Projected job growth in Minto

Open Space and Public Domain

- ▶ Enhance the local centre around Minto station with pedestrian friendly streets, outdoor dining, street tree planting, inviting public gathering spaces and attractive street furniture.
- ▶ Establish a quality open space and public domain network that provides better linkages to and upgrades of existing open spaces.
- ▶ Enhance the importance of Coronation Park as a district asset through a diversification of uses, upgraded change rooms and a district size children’s playground.



Figure 32: Existing character for the Minto precinct, Redfern Road



Figure 33: Desired future character for the Minto precinct, Redfern Road

Leumeah Vision

“A regionally significant sporting, recreation and entertainment precinct for south west Sydney”

Built Form

- ▶ Campbelltown Sports Stadium and surrounding lands to be redeveloped as a regionally significant precinct, providing a gateway to the Campbelltown Macarthur regional city centre.
- ▶ Ground floor retail and mixed residential uses within an enhanced local centre to generate activity and ensure a highly visible station.

Movement Network

- ▶ Promote cycling and walking by providing new shared pathways, separated cycleways, footpaths, pedestrian refuges, street tree planting, bicycle storage facilities and lighting.
- ▶ Develop a continuous, safe regional commuter and recreational cycle route from Glenfield to Macarthur adjacent and perpendicular to the rail corridor.
- ▶ Introduce new local cycle routes to improve connections with Leumeah station and the surrounding area.

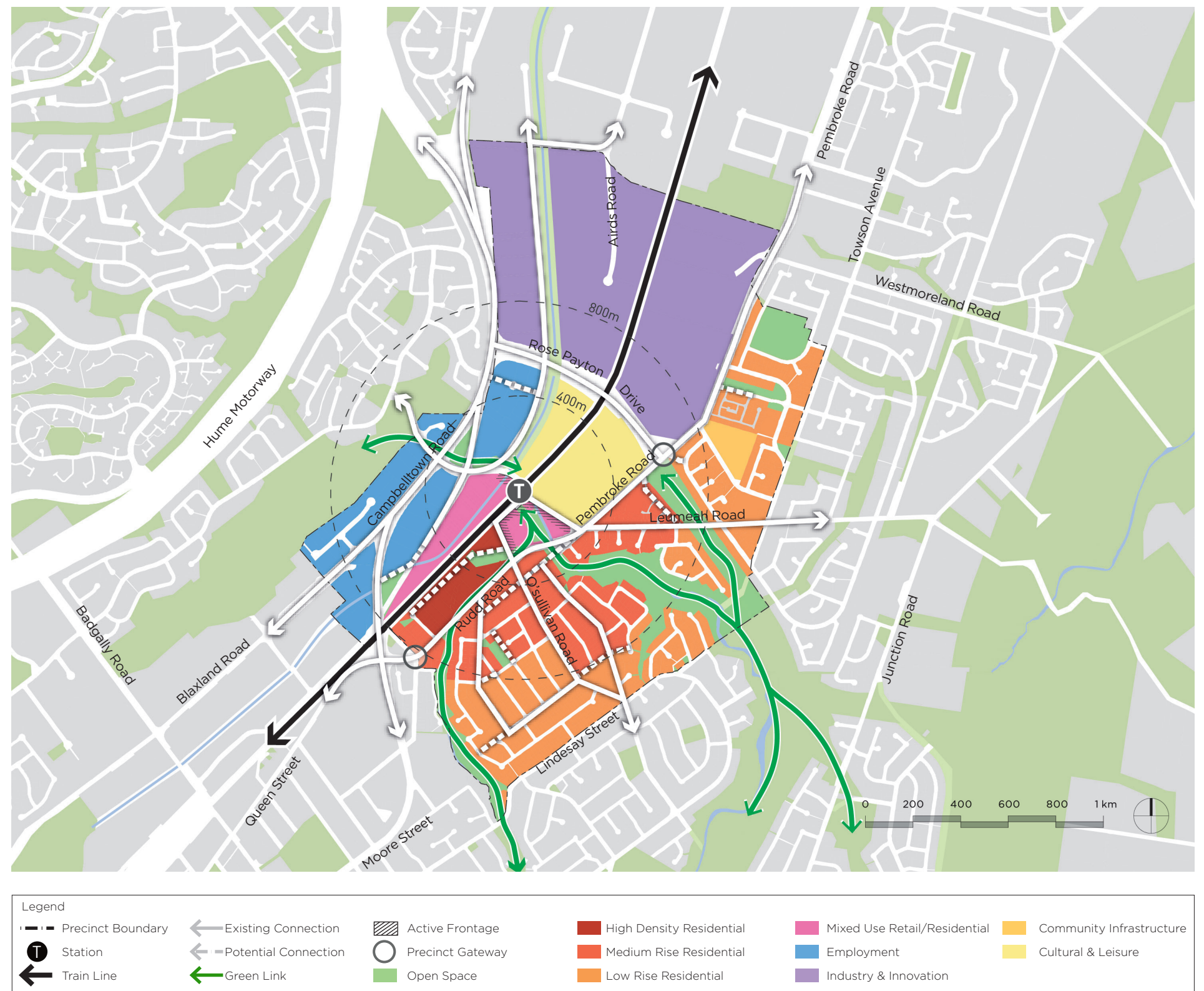


Figure 34: Leumeah Land Use and Infrastructure Plan

Housing

- ▶ Provide a variety of housing types within walking distance of the station to cater for all members of the community.
- ▶ Providing a range of building heights, with increased heights closest to the station to maximise pedestrian activity and increase trade for local businesses.

Dwelling Type	2021	2031	2036
Low Rise	150	500	700
Medium Rise	0	50	250
High Rise	0	30	50
Total Dwellings	150	580	1,000

Figure 35: Projected dwelling growth in Leumeah

Jobs

- ▶ Leumeah's emergence as a regional recreation and entertainment precinct will be a catalyst for growth in services, retail and cultural employment jobs.
- ▶ Construction and industrial related jobs will continue to be a major employment base for the precinct.
- ▶ Potential for the precinct's employment lands to accommodate a broader range of employment generating uses and intensification of activities over time.

Job Type	2021	2031	2036
Industry	35	70	90
Retail	600	1,000	1,200
Business	80	120	140
Special Uses	180	360	450
Total Jobs	895	1,550	1,880

Figure 36: Projected job growth in Leumeah

Open Space and Public Domain

- ▶ Enhance the local centre around Leumeah station with pedestrian friendly streets, outdoor dining, street tree planting, inviting public gathering spaces and attractive street furniture.
- ▶ Establish a quality open space and public domain network that provides better linkages to and upgrades of existing open spaces.
- ▶ Promote ecological corridors linking the precinct with Smiths Creek Reserve to the Georges River
- ▶ Investigate opportunities to review underutilised open space to contribute towards improved recreational outcomes



Figure 37: Existing character for the Leumeah precinct, O'Sullivan Road



Figure 38: Desired future character for the Leumeah precinct, O'Sullivan Road

Campbelltown Vision

“Campbelltown - Macarthur is a Regional City Centre offering higher order civic, cultural, employment, residential and retail opportunities”

Built Form

- ▶ Provide a range of building heights, with higher rise buildings between 7 and 12 storeys close to the station to maximise pedestrian activity and increase trade for local businesses.
- ▶ Retain the existing character of areas east of Lindesay Street, with a mixture of detached dwellings, townhouses and terraces.
- ▶ Large floor plate, campus style office park west of the station.

Open Space and Public Domain

- ▶ Enhance the activity around Campbelltown station and Queen Street with pedestrian friendly streets, outdoor dining, street tree planting, inviting public gathering spaces and attractive street furniture.
- ▶ Establish a quality open space and public domain network that provides better linkages to and upgrades of existing open spaces.
- ▶ Promote connections to ecological corridors within the precinct and broader area, including through Bradbury Park and Fishers Ghost Reserve
- ▶ Investigate opportunities to review underutilised open space to contribute towards improved recreational outcomes
- ▶ Strengthen community and cultural facilities, including a new district level multi-purpose community facility and expanded central library servicing Campbelltown and Macarthur.
- ▶ Longer term provision of a new primary school servicing the area.

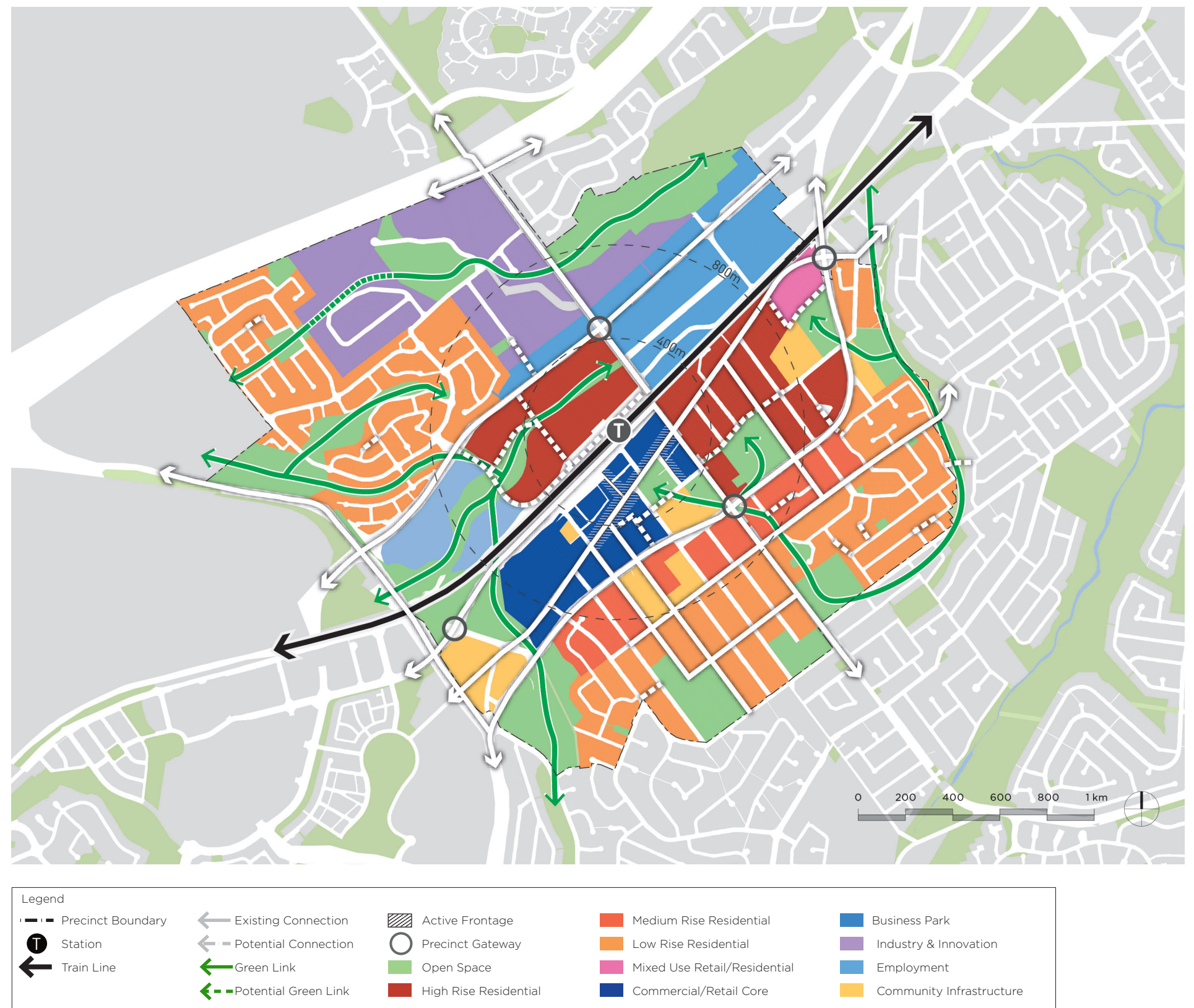


Figure 39: Campbelltown Land Use and Infrastructure Plan

Housing

- Provide a variety of housing types within walking distance of the station to cater for all members of the community.

Dwelling Type	2021	2031	2036
Low Rise	1,000	1,700	2,100
Medium Rise	100	400	700
High Rise	400	900	1,200
Total Dwellings	1,500	3,000	4,000

Figure 40: Projected dwelling growth in Campbelltown

Jobs

- A revitalised and activated Queen Street will deliver a significant amount of retail and commercial jobs with high levels of amenity and access to public transport.
- A new prestige campus-style office park with access to the station, Hume Highway, TAFE and University of Western Sydney will facilitate business clustering and expansion of Campbelltown’s knowledge economy in the medicine/health, education and administration sectors.

Job Type	2021	2031	2036
Industry	100	200	250
Retail	1,000	1,700	2,150
Business	500	800	1,000
Special Uses	1,250	2,650	3,450
Total Jobs	2,850	5,350	6,850

Figure 41: Projected job growth in Campbelltown

Movement Network

- Promote cycling and walking by providing new shared pathways, separated cycleways, footpaths, pedestrian refuges, street tree planting, bicycle storage facilities and lighting.
- Introduce new regional and local cycle routes and walking connections to improve links with Campbelltown station and the surrounding area.
- Improve linkages to and through the City Centre through a high quality public domain connecting the revitalised commercial and retail core, Queen Street, Campbelltown Mall and Council chambers.
- Improve east west connections by investigating a potential future pedestrian, cycle and public transport link between Badgally Road and Broughton Road.



Figure 42: Existing character for the Campbelltown precinct, Queen Street



Figure 43: Desired future character for the Campbelltown precinct, Queen Street

Macarthur Vision

“Macarthur will complement Campbelltown as a Regional City Centre, with world class health facilities, integrated educational institutions, more diverse housing, a premier retail precinct and attractive public spaces.”

Built Form

- ▶ Provide a range of building heights, with higher rise buildings close to the station to maximise pedestrian activity and increase trade for local businesses.
- ▶ Retain the existing character of areas east of Gilchrist Avenue, with a mixture of detached dwellings, townhouses and terraces.
- ▶ Large floor plate, campus style office park west of the station.

Movement Network

- ▶ Promote cycling and walking by providing new shared pathways, separated cycleways, footpaths, pedestrian refuges, street tree planting, bicycle storage facilities and lighting.
- ▶ Introduce new regional and local cycle routes and walking connections to improve links with Macarthur station and the surrounding area.
- ▶ Improve linkages to and through the City Centre through a high quality pedestrian plaza connecting the station, Macarthur Square, Kellicar Road and Bolger Street.
- ▶ Improved connections to public spaces within the precinct and surrounding area, such as Marsden Park Barber Reserve and Mount Annan Botanic Gardens to capitalise on the natural assets surrounding the centre.

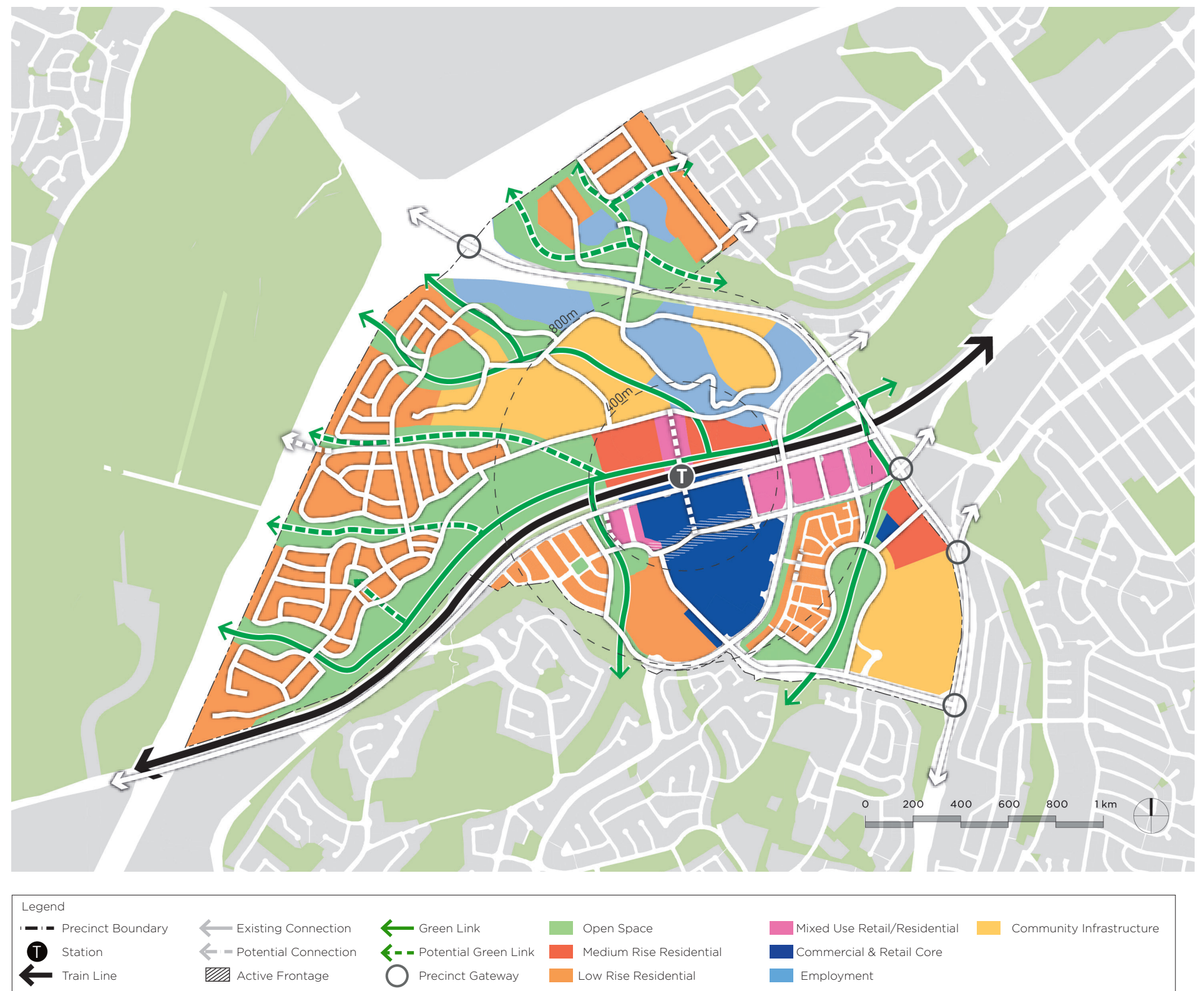


Figure 44: Macarthur Land Use and Infrastructure Plan

Housing

- Provide a variety of housing types within walking distance of the station to cater for all members of the community.

Dwelling Type	2021	2031	2036
Low Rise	400	1,500	2,200
Medium Rise	1,600	1,700	1,700
High Rise	0	800	1,100
Total Dwellings	2,000	4,000	5,000

Figure 45: Projected dwelling growth in Macarthur

Jobs

- Enhanced role as the retail hub of south west Sydney through a revitalised town square and activated Kellicar Road with high levels of amenity and access to public transport
- Continued expansion of the precinct’s world class health and education sectors
- A new prestige campus-style office park with access to the station, Hume Highway, University of Western Sydney will promote opportunities for business clustering and expansion of Macarthur’s knowledge economy in the medicine/health, education and administration sectors.

Job Type	2021	2031	2036
Industry	30	60	80
Retail	670	1,250	1,580
Business	200	280	320
Special Uses	870	1,820	2,340
Total Jobs	1,770	3,410	4,320

Figure 46: Projected job growth in Macarthur

Open Space and Public Domain

- Enhance the activity around Macarthur station with pedestrian friendly streets, outdoor dining, street tree planting, inviting public gathering spaces and attractive street furniture.
- Improve night time safety by increasing lighting of pathways between the station and university.
- Strengthen community and cultural facilities, including a new district level multi-purpose community facility and expanded central library servicing Campbelltown and Macarthur.
- Longer term provision of a new primary school servicing the area.



Figure 47: Existing character for the Macarthur precinct, Kellicar Road



Figure 48: Desired future character for the Macarthur precinct, Kellicar Road

Implementation

Actions and Implementation

The Corridor Strategy seeks to inform the community of the future direction and vision for the Glenfield to Macarthur corridor over the next 20 years.

The Corridor Strategy will be implemented through:

- ▶ Precinct planning
- ▶ Local planning

Ongoing monitoring and reporting of development activity throughout the corridor will also inform the timing for delivery of the infrastructure required to support future growth.

Precinct Planning

Current planning controls such as zoning, height, and floor space ratios constrain some of the proposed development identified in the Corridor Strategy and would need to be revisited.

A comprehensive suite of development controls would need to be prepared and a number of technical studies would also need to be commissioned as part of this process, including traffic and transport, infrastructure servicing, flooding and economic feasibility analysis.

A development control plan and public domain strategy would also be developed to guide the future development of each precinct.

An exhibition package would be prepared and publicly exhibited for community comment. Precinct planning could be led by Campbelltown City Council, or in partnership with the Department and would be carried out in consultation with relevant agencies, services providers and landowners.

Local Planning

To ensure future land use change is consistent with the Corridor Strategy, a local planning direction would be implemented when the Strategy is finalised.

The local planning direction would require future planning proposals to be consistent with the Strategy and ensure the Strategy and supporting precinct analysis is considered in detailed planning for any proposed land use change.

Infrastructure and Funding Arrangements

A critical element of the Corridor Strategy has been an analysis of the infrastructure and servicing required to support future population and employment growth throughout the corridor.

Figure 49 identifies, at a strategic level, the key infrastructure required to support redevelopment. Each precinct's Land Use and Infrastructure Analysis also contains a more detailed description of the relevant infrastructure requirements.

Future precinct planning would include more detailed analysis to determine the infrastructure required to support a potential rezoning. This analysis would include indicative costs, delivery timeframes and investigate suitable infrastructure funding arrangements.

The Department will work collaboratively with Council and infrastructure agencies to coordinate the infrastructure required to support integrated land use planning throughout the corridor.

This would include the identification of available finance and contribution schemes as well as Section 94 Plans and Voluntary Planning Agreements to deliver key infrastructure items and social and open space projects

Monitoring and Reporting

Population and Housing

The Department will monitor and report annually:

- ▶ the number of housing approvals, construction commencements and completions for all housing types throughout the Corridor
- ▶ the pipeline for additional housing throughout south west Sydney
- ▶ the performance of Council's development processing times.

The Department will also monitor population, household and dwelling projections for south west Sydney and the Campbelltown LGA.

This will provide a valuable evidence base to inform service and infrastructure delivery to match population growth.

Employment Lands

The Department's Employment Lands Development Program will continue to monitor and audit the supply of employment lands throughout the Corridor to inform policy development, infrastructure co-ordination and future planning for employment lands.

Utilities

Electricity



The corridor is currently serviced by two 66kV Bulk Supply Points at Ingleburn and Macarthur and several zone substations at Campbelltown, Kentlyn, Bow Bowing, Macquarie Fields, Minto, Casula and Prestons. Endeavour Energy is well placed to service the projected growth, with no augmentation of the network required before 2025. By 2036 there will likely be network constraints and upgrades may be required at Kentlyn and Ambarvale Zone Substations. No augmentation would be required on the upstream 66kV network.

Drinking Water



The corridor is currently serviced by the Macarthur delivery system and a number of water reservoir systems. A small part of the Glenfield precinct is serviced by the Carnes Hill water supply zone, part of the Prospect South delivery system. Overall, there is sufficient capacity in the existing system to service the projected growth in the corridor. Some network extensions or minor reticulation works may be required to service new developments; however, this will require more detailed assessment as development occurs.

Waste Water



The corridor is currently serviced by the Glenfield-Malabar wastewater network (including treatment plants). The wastewater network has sufficient capacity to service the projected growth within the corridor. Some network extensions or minor reticulation works may be required to service new developments; however, this will require more detailed assessment as development occurs.

Gas Supply



Jemena are responsible for gas supply in the corridor. Jemena does not anticipate the growth forecast to have a significant impact on supply however individual large developments may create local additional demand for gas. Jemena has an ongoing program of providing new reticulation mains for new developments.

Communications



The corridor is currently serviced by existing fibre optic communications cabling. These cables supply existing telephone services and require extensive work to be incorporated into the NBN network. Telephone services are available to the area. High speed data connections can be provided by wireless or existing fibre optic infrastructure prior to completion of the NBN network.

Infrastructure Analysis

Figure 49 identifies the key infrastructure required to support the projected growth throughout the corridor.

Item	Measure	Planning Responsibility	Timing	Funding Mechanism
Public Transport				
1	Increased rail services to meet the needs of the region's growth	TfNSW	Train service levels are reviewed continually by TfNSW. The stopping patterns and level of service will be matched to the growth and function of each precinct	TfNSW delivery responsibility
2	Improvements to Sydney's suburban bus network to create a more connected system that provides direct routes to, from and through the corridor	TfNSW	Bus service levels are reviewed continually by TfNSW and RMS. Detailed planning for a new suburban bus route to be investigated based on development in the area.	TfNSW delivery responsibility
3	Improvements to local bus services	TfNSW	Bus service levels are reviewed continually by TfNSW and RMS.	TfNSW delivery responsibility
4	Additional kiss and ride facilities at Glenfield, Ingleburn and Minto stations	TfNSW/Council	To be determined as precinct develops	Delivery as part of Council's Section 94 Plan
Walking & Cycling				
5	A new continuous regional cycle route from Glenfield to Macarthur adjacent and perpendicular to the rail corridor to provide improved connections to the stations, including additional east-west cycle connections to link with surrounding areas	TfNSW	To be determined as precinct develops	TfNSW funding responsibility
6	Series of identified local cycle network improvements to improve connectivity and station access	Council	To be determined as precinct develops	Delivery as part of Council's Section 94 Plan
7	Streetscape works such as footpath improvements, pedestrian crossings and refuges, street tree planting, bicycle storage facilities and lighting.	Council	To be determined as precinct develops	Delivery as part of Council's Section 94 Plan
8	Potential public and active transport link extension of Badgally Road across the rail corridor to improve connectivity	TfNSW/Council	Further transport investigations to be undertaken as the precinct develops	Subject to further funding and delivery investigations
Roads				
9	Potential regional road upgrades to provide improved road network connections ; including extensions to: <ul style="list-style-type: none"> Cambridge Avenue at Glenfield Devon Road and Chester Road over the rail line at Ingleburn 	Relevant road authority	Further transport investigations to be undertaken as the precinct develops.	Delivery as part of Council's Section 94 Plan
Education & Community Infrastructure				
10	Additional teaching spaces and infrastructure at existing primary and high schools, and the potential longer term need for a new primary to service the Campbelltown and Macarthur area	Department of Education and Communities	To be determined as precinct develops	Delivered as part of DEC's School Cluster Asset Plan
11	Potential development of identified community facilities and open space to meet the needs of the community	Council/ developer	To be determined as precinct develops	Delivery as part of Council's Section 94 Plan

Figure 49: Infrastructure servicing required in the Corridor

Background

Strategic Context

NSW 2021

NSW 2021 is the Government's 10 year strategic business plan to guide policy, Government investment and budget allocation to deliver on community priorities for public services and the provision of infrastructure.

NSW 2021 places renewed emphasis on the importance of public transport provision, particularly in Metropolitan Sydney. There are a number of goals specifically aimed at improving access and transport across Sydney, including growing patronage on public transport by making it a more attractive modal choice. This will reduce traffic congestion, improve travel times and achieve significant environmental benefits. The Glenfield to Macarthur urban renewal corridor will help achieve this goal by focussing new housing and jobs within walking distance of the existing stations along the rail corridor.

A Plan for Growing Sydney

Released in 2014, *A Plan for Growing Sydney* sets out the NSW Government's vision for Sydney through to 2031. It envisages Sydney as a strong global city and a great place to live. It also sets out four major goals for the city:

- ▶ A competitive economy with world-class services and transport;
- ▶ A city of housing choice with homes that meet our needs and lifestyles;
- ▶ A great place to live with communities that are strong, healthy and well connected; and
- ▶ A sustainable and resilient city that protects the natural environment and has a balanced approach to the use of land and resources.

The Plan outlines nine actions that are required for the delivery of the Government's goals. The key action, as relevant to the Glenfield to Macarthur urban renewal corridor, is accelerating urban renewal across Sydney at train stations and providing homes closer to jobs.

The Plan recognises that urban renewal is essential to meet the demand for new housing in Sydney over the next 20 years. A key action of the Plan is to undertake urban renewal in transport corridors which are being transformed by investment, and around strategic centres. The Plan focuses new housing in centres which have public transport that runs frequently and can carry large numbers of passengers.

The Plan identifies Campbelltown – Macarthur as a Regional City, to

be a major focus for housing, jobs and services for the South-West. Specific actions for the future development of Campbelltown and Macarthur relevant to the Corridor Strategy include:

- ▶ Continued growth of the Campbelltown – Macarthur region as a regional city centre to support the surrounding communities.
- ▶ Work with Council to retain a commercial core in the Campbelltown – Macarthur region for long-term employment growth.
- ▶ Work with Council to concentrate capacity for additional mixed-use development around train stations, including retail, services and housing.
- ▶ Support the development of a major health and education precinct in Campbelltown-Macarthur, capitalising on Campbelltown Hospital and the University of Western Sydney.
- ▶ Work with Council to investigate business park opportunities on the western side of the train line.
- ▶ Work with Council to improve walking and cycling connections to train stations on the western side of the train line, and to Campbelltown Hospital and Queen Street.

NSW State Infrastructure Strategy (2014, Infrastructure NSW)

The Strategy presents a vision for NSW in 2031 and makes recommendations for infrastructure investment to support growth over the next 20 years.

Key recommendations, relevant to the Glenfield to Macarthur urban renewal corridor, include:

- ▶ Improve road congestion through the 'pinch points' road program, including works to Campbelltown Road.
- ▶ Future integration of the South West rail link into the Sydney Trains network. In the long term, this line may be extended towards St Marys via the second Sydney Airport at Badgerys's Creek.
- ▶ Construction of an outer orbital motorway to connect the South West Growth Centre to the North West Growth Centre. The outer orbital motorway is expected to ease congestion on the local road network within the Glenfield to Macarthur Corridor.
- ▶ Reconfiguring roads around the Moorebank Intermodal Terminal to improve connectivity from the terminal to the major industrial and distribution centres between Eastern Creek and Campbelltown, including a new link between the site and the M7 motorway

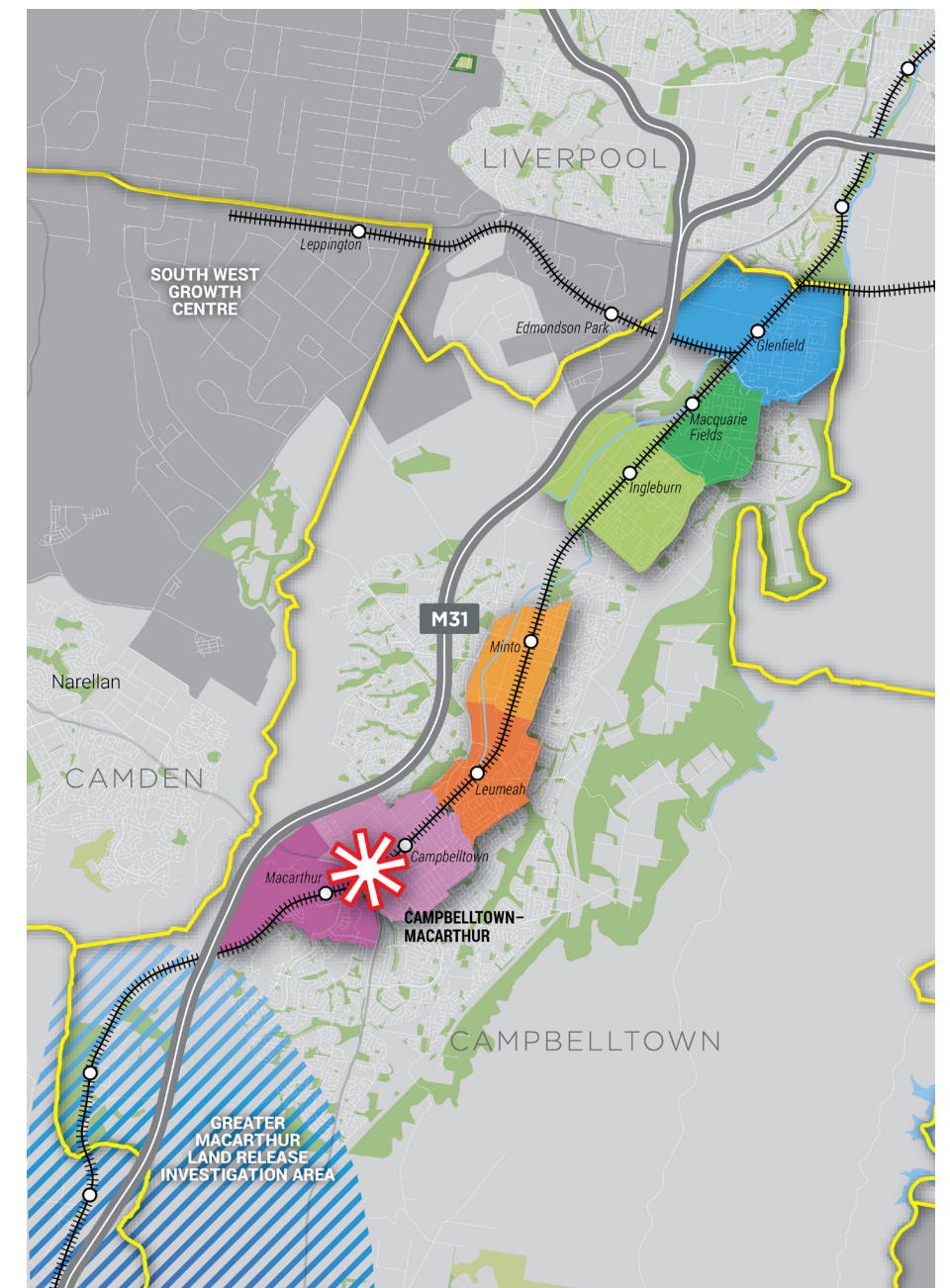


Figure 50: Glenfield to Macarthur Urban Renewal Corridor in the South West Subregion

- ▶ Expansion of Campbelltown Hospital and a new south-west Sydney paediatric facility to service the growing population of the region.
- ▶ Commencing planning for an outer Western Sydney stadium



Long Term Transport Master Plan (2012, Transport for NSW)

The *NSW Long Term Transport Master Plan* identifies strategies and actions for integrated transport across the state over the next 20 years. It provides a framework to identify challenges and to prioritise actions to meet the demands on the transport system to 2031.

The Plan recognises the importance of integrating transport and land use planning and identifying strategic corridors for future planning and network development. Campbelltown to Liverpool is identified as a strategic corridor, incorporating the Glenfield to Macarthur urban renewal corridor.

The Plan presents future active, public and private transport upgrades relevant to the Glenfield to Macarthur Corridor, including:

- ▶ Redesign of bus networks to provide buses to the South West Growth Centre, and Liverpool to Campbelltown via Leppington.
- ▶ Encouraging high density development in appropriate locations, particularly along major transport corridors.
- ▶ Improve the public transport links between Liverpool and the Campbelltown and Macarthur regions, including new road links and bus priority between Campbelltown and the South West Growth Centre.

NSW Freight and Ports Strategy, 2013

The *NSW Freight and Ports Strategy* is a 20 year plan for the freight and ports industry. The aim of the Strategy is to provide a transport network that allows the efficient flow of goods and freight.

The Strategy focuses on dedicated freight rail corridors to increase capacity and to ensure passenger and freight rail demand can be accommodated.

Key recommendations of the Strategy, relevant to the Glenfield to Macarthur Corridor, are:

- ▶ Supporting Australian Rail Track Corporation's expansion of the Southern Sydney Freight Line to connect the proposed intermodal facilities at Moorebank to the Metropolitan Freight Network
- ▶ Identifying and preserving land for an intermodal terminal to serve the freight needs of the Western Sydney Employment Area along with road and rail freight corridors, including Minto Intermodal Facility

Local Planning

Campbelltown Vision 2025

In 2005 Campbelltown City Council developed a strategic vision for the next 20 years. Campbelltown 2025 is a long term planning strategy for Campbelltown and provides overall guiding principles for future change that should be addressed in local planning strategies.

The Vision contains six strategic directions:

1. Protect and enhance the City's key environmental assets;
2. Growing the Regional City;
3. Building a distinctive Campbelltown sense of place;
4. Getting Around the City;
5. Building and maintaining quality infrastructure; and
6. Creating education, employment and entrepreneurial Opportunities.

Campbelltown Residential Development Strategy

The *Campbelltown Residential Development Strategy* was published by Council in 2013. The Strategy aims to identify opportunities for an additional 25,000 dwellings in the Campbelltown LGA over the next 20 years. Almost 20,000 of these dwellings are planned to be accommodated in existing urban areas.

The Strategy focuses on infill development opportunities, primarily around railway stations and existing centres.

The Strategy identifies a number of growth and redevelopment opportunities in the major centres of Campbelltown, Macarthur, Glenfield and Ingleburn. These centres are forecast to provide a significant proportion of the additional housing in the Campbelltown local government area, with over 60% of housing growth expected to be accommodated within these centres.

The Strategy also recognises the potential of the smaller centres of Leumeah, Minto and Macquarie Fields Station to provide additional development/redevelopment prospects over time as they evolve into suburban villages.

The Glenfield to Macarthur urban renewal corridor supports the aims of the Strategy by identifying opportunities for new housing opportunities in existing centres along the rail corridor.

Campbelltown Employment Lands Review 2011

The *Campbelltown Employment Lands Review* was released by Council in 2011. The Study evaluated current and future demand for employment lands within the Campbelltown local government area and identified opportunities for meeting employment needs.

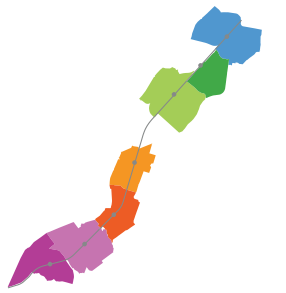
The Study identified that Campbelltown had 741 hectares of zoned employment lands, providing around 5% of Sydney's employment lands, and that an additional 341 hectares of employment land will be required over the next 20 years to support population growth.

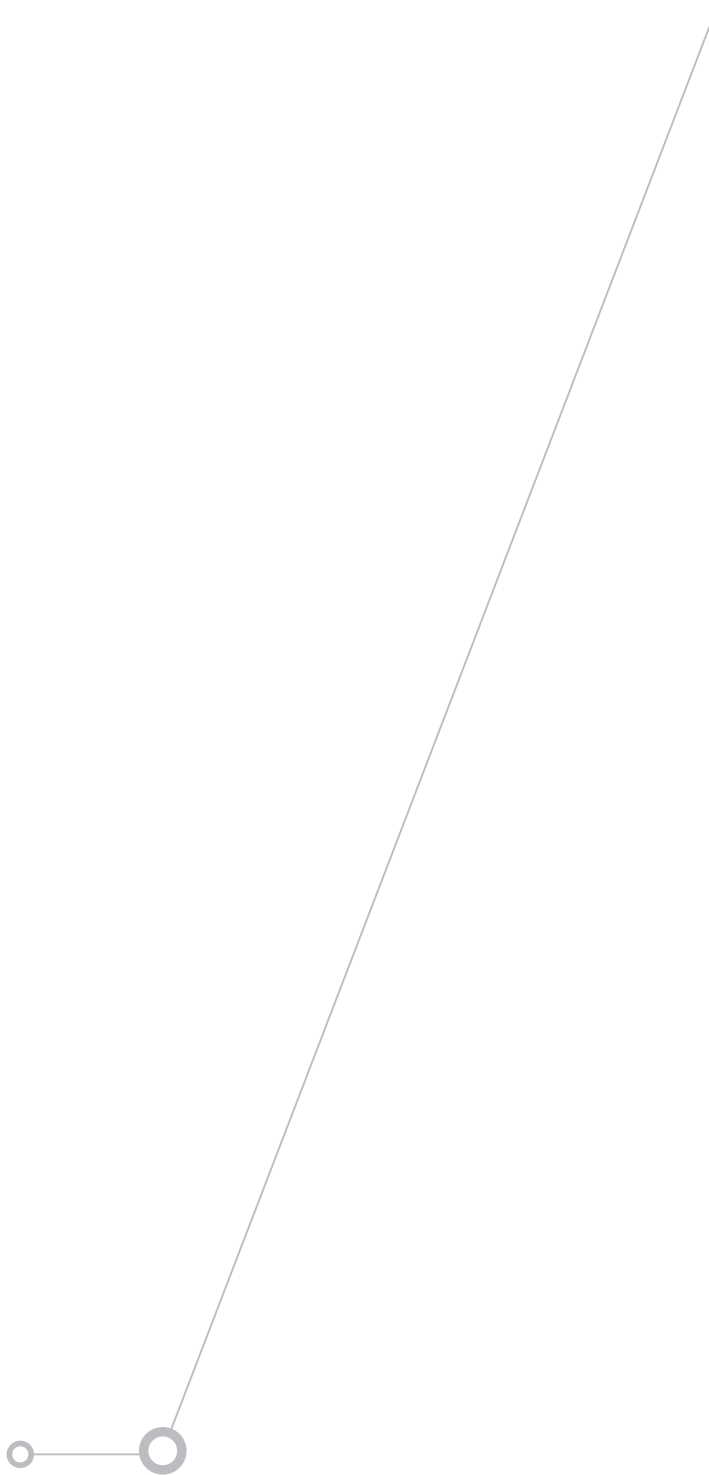
The Study recognises that the Campbelltown LGA and the South West Sydney Subregion suffer from a severe job deficit and rapid population growth in this region is likely to increase the jobs deficit.

The Study identifies that manufacturing in Campbelltown is expected to grow, with an additional 1500 jobs over the next 20 years. To ensure continued growth, in Campbelltown and the south-west region, the Strategy prioritises the protection of existing employment land, particularly along the rail corridor.

Despite steady growth in manufacturing, the Study also recognises the need to provide more knowledge and office based jobs to support population growth and provide a diverse range of jobs. A key recommendation of the Strategy is for priority to be given to establishing a new business park in Campbelltown and Macarthur, with the identification of possible sites at UWS/TAFE land and the Bethlehem Monastery site on Narellan Road.

The Glenfield to Macarthur urban renewal corridor is consistent with the recommendations of the Study by protecting existing employment land within the corridor and identifying opportunities for business park development in Campbelltown and Macarthur.





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