SUBURBAN RAIL LOOP EAST

SRL East Draft Structure Plan – Glen Waverley

Urban Design Report

More Homes For Victorians

VICTORIA State Government

SRL East Draft Structure Plan

Urban Design Report

Glen Waverley

Technical Report R.4

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SUBURBAN RAIL LOOP

AJM Joint Venture

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Contents

This document is to be read in conjunction with:

SRL East Structure Plan - Urban Design Report - Attachment A: Supporting Research
SRL East Structure Plan - Urban Design Report - Attachment B: Gehl Public Space and Life study
SRL East Structure Plan - Urban Design Report - Attachment C: Assessment of Solar Access to the Public Realm

Executive summary

Suburban Rail Loop (SRL) East is a city and state-shaping project that will transform Victoria's public transport system and support vibrant suburbs across Melbourne. Realised over decades, SRL will deliver sustained job creation and investment in Melbourne's already thriving middle suburbs, leading to increased demand for floorspace.

Draft Structure Plans (Structure Plans) are being prepared for the neighbourhoods surrounding the new underground stations at Box Hill, Burwood, Glen Waverley, Monash, Clayton and Cheltenham.

The Structure Plans will set a vision and framework to guide growth and change in each neighbourhood, while preserving valued existing character attributes and ensuring high quality environments.

This Urban Design Report will inform the development of the Structure Plan for Glen Waverley.

Recommendations

This report sets out recommendations relating to urban design to consider when developing the Structure Plans, with the objective to achieve the Glen Waverley Vision and the SRL Urban Design Principles and Objectives. This includes reconciling the provision of growth with the creation of high quality amenity, defining the attributes of each neighbourhood that will deliver diverse opportunities, and identifying the public realm interventions necessary to create a well connected, comfortable and welcoming public realm.

The recommendations are organised around three major urban design components - public realm, urban form and built form. A set of eight design directions were developed to guide the recommendations:

- Design Direction 1: Ensure streets are inviting places that support community life
- Design Direction 2: Promote active transport access
- Design Direction 3: Foster resilient urban environments
- Design Direction 4: Facilitate outdoor recreation
- Design Direction 5: Provide for growth in a form that delivers high amenity environments
- Design Direction 6: Establish diverse, liveable and productive neighbourhoods
- Design Direction 7: Support an inviting public realm
- Design Direction 8: Ensure high quality and responsive built form.

Each design direction provides a set of strategies to inform how the design directions can be achieved in the Structure Plan Area.

The **public realm strategies** seek to deliver an environment which invites people to walk, particularly to key destinations such as public transport, activity centres, major employment areas and large open spaces, and which provides outdoor amenity to support higher-density living and working. The initiatives include new links where there is a gap in walkability or general permeability, and new open spaces where a gap in provision has been identified. Additionally, the strategies advocate for a street and open space system with an enhanced environmental performance, creating climate resilient streets and spaces.

The **urban form strategies** seek to deliver higher-density and high-quality development for living and working in response to the increased accessibility brought about by the SRL, while also contributing to a high-quality public realm. The Structure Plan Area comprises a collection of places, each of which has distinct attributes and a distinct desired land use function. The strategies promote different forms of development in each place that will capitalise on its attributes and support its desired land use function, reinforcing their diversity and individual identity and sense of place.

The different place types include:

- A central core of well-spaced towers providing for high-density mixed-use activity, complemented by pedestrian-favoured promenades and urban spaces that support street life and events
- Grand boulevards and avenues with moderately-tall and uniform built form to capitalise on their public transport accessibility and to create a well-framed public realm, complemented by broad footpaths and formal rows of mature trees
- Mixed-use areas comprising medium-rise, adaptable buildings that create a continuous, activated street wall behind small, landscaped setbacks
- Residential neighbourhoods developed with low-medium rise apartment buildings in garden settings and leafy streets, and dissected by 'green streets' that connect them to key destinations.

(These places differ from the Structure Plan neighbourhoods, which are informed by a broader range of considerations.)

The **built form strategies** seek to deliver a vibrant public realm, a high standard of on-site amenity and environmentally responsive built form. A 'mid-rise' scale of development is generally recommended because it provides for growth in a form that delivers high amenity environments by maintaining a relatively-open streetscape and a sense of openness between buildings, enabling solar access and sky views. Mid-rise buildings also represent best practice across a range of functional, contextual, social and environmental criteria. The varied forms of mid-rise development recommended will deliver a diverse range of accommodation types, suitable for the anticipated land uses and household types, and a diverse visual experience. Building setbacks are recommended to enable increased tree canopy cover, which will help to mitigate the urban heat island effect, offer access to nature, bolster biodiversity and facilitate natural stormwater management.

Figure A: View of Kingsway

The Vision for Glen Waverley outlines the long-term aspiration for the precinct including the Structure Plan Area.

The Vision for Glen Waverley:

Glen Waverley will be a genuinely walkable neighbourhood, with everything needed for a great quality of life nearby.

Public realm outcomes

The public realm in the Glen Waverley Structure Plan Area is centred around an active social heart surrounding Kingsway, with a connected network of Green Streets that support pedestrian and ecological connectivity. The network of tree-lined streets, green links and existing public open spaces connects to the broader biodiversity network beyond the Structure Plan Area.

A comprehensive description of the design directions and strategies is provided in Section 3.

The actions needed to realise these strategies are detailed in Section 6.

Legend

- SRL station
- SRL East alignment
- Structure Plan Area
- Active and social heart
- Green Street network supporting pedestrian and ecological connectivity
- Connected green open space
- Fine-grain pedestrian links
- Tree-lined avenues
- Green links and avenues to creek-line ecosystems and recreational trails (Scotchmans Creek and Dandenong Creek)
- Urban boulevard to enhance sense of arrival to the Central Core

Figure B: Public realm outcomes

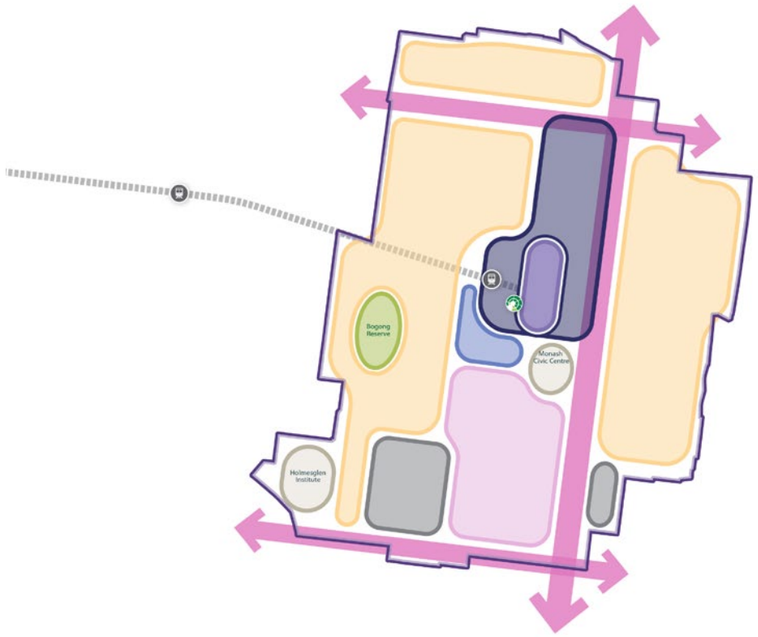
Urban form and built form outcomes

The Central Core situated around the SRL station at Glen Waverley, and the existing commercial/retail core, are envisaged to face the highest level of intensification. The 'Main Street' urban form is proposed for the existing fine-grain shopping strips around Kingsway. The 'Key Movement Corridors' urban form is proposed along Springvale Road, High Street Road and Waverley Road, ensuring well-framed streets and accessible housing and employment opportunities. Low to moderate intensity residential and employment urban forms are proposed in other areas responding to the green low density context.

A comprehensive description of the design directions and strategies is provided in Section 4.

The built form strategies needed to support an inviting public realm and shape high quality and responsive development are identified in Section 5.

The actions needed to realise these strategies are detailed Section 6.



Legend

- SRL station
- Existing Glen Waverley Station
- Structure Plan Area
- Existing rail line
- Public open space
- Central Core
- Central Core Flanks
- Main Streets
- Key Movement Corridors
- Urban Neighbourhoods
- Residential Neighbourhoods
- Enterprise Neighbourhoods
- Civic facility

Figure C: Urban form outcomes

1 Introduction

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1.1 Introduction

Suburban Rail Loop (SRL) is a transformational project that will help shape Melbourne's growth in the decades ahead. It will better connect Victorians to jobs, retail, education, health services and each other – and help Melbourne evolve into a 'city of centres'.

SRL will deliver a 90-kilometre rail line linking every major train service from the Frankston Line to the Werribee Line via Melbourne Airport.

SRL East from Cheltenham to Box Hill will connect major employment, health, education and retail destinations in Melbourne's east and south east. Twin 26-kilometre tunnels will link priority growth suburbs in the municipalities of Bayside, Kingston, Monash and Whitehorse.

SRL East Draft Structure Plan Areas will surround the six new underground stations at Box Hill, Burwood, Glen Waverley, Monash, Clayton and Cheltenham.

1.2 Purpose of this report

This report will inform the development of the Draft Structure Plan (Structure Plan) to guide land use planning and development in the Glen Waverley SRL neighbourhood.

It describes the existing public realm and urban design character of the Structure Plan Area, and identifies issues and opportunities relating to its development.

Recommendations to consider when developing the Structure Plans are made, with the objective to avoid, minimise or manage potential negative impacts of change, and to maximise potential for positive change.

1.3 Structure planning

Structure Plans have been prepared for defined areas surrounding the new SRL East stations to help deliver the vision developed for each SRL East neighbourhood.

The Structure Plans cover defined Structure Plan Areas that can support the most growth and change. These areas cover a walkable catchment that extends from the SRL station entrances. Additional places are included within each defined area as required to make planning guidance more robust and effective, and to align with each community's aspirations and current and future needs.

A Structure Plan is a blueprint to guide how an area develops and changes over a period of time. Structure Plans describe how future growth within the area will be managed in an appropriate and sustainable way to achieve social, economic and environmental objectives. The plans cover a wide range of matters, such as transport connections and car parking, housing and commercial development, community infrastructure, urban design, open space, water and energy management, climate resilience and sustainability.

By tailoring planning decisions to reflect the needs of a defined area, Structure Plans give effect to the policies and objectives set for these areas and cater for changing community needs. They also provide certainty for residents, businesses and developers by identifying the preferred locations and timing of future land uses, development and infrastructure provision.

Structure Plans take a flexible and responsive approach that enables places to evolve over time.

Planning scheme amendments will be required to implement the Structure Plans into the planning schemes of the cities of Bayside, Kingston, Monash and Whitehorse.

1.4 The Structure Plan Area

The Structure Plan Area is the area subject to structure planning, that will undergo development to accommodate the projected population and jobs growth for the Glen Waverley Structure Plan Area by 2041.

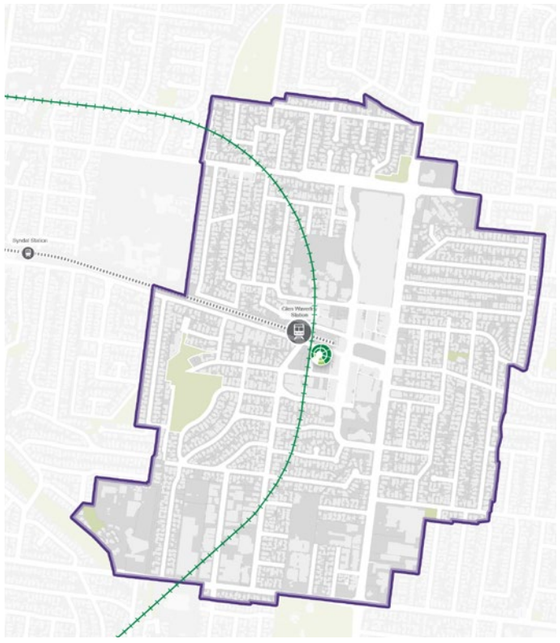


Figure 1.1: Glen Waverley Structure Plan Area

1.5 Methodology

The methodology for the urban design assessment involved the following steps:

- A Study Area for the assessment was identified. For this assessment, the Study Area comprised the SRL Glen Waverley Structure Plan Area, surrounding the station where the most change and development will occur
- Legislation, polices and other documents relevant to the assessment were reviewed. This included:
  - National, state and local government policies, legislation, strategies and guidelines relevant to the affected area
  - SRL East policy and strategies including: SRL East Precinct Visions, SRL East Urban Design Framework, SRL Precinct Development Framework, and SRL East Urban Design Strategy*
  - The community and stakeholder engagement
  - Technical assessments undertaken, including studies on housing, land use, economics, housing, retail, transport, open space, community infrastructure, flooding and water management, aviation, ecology and arboriculture, sustainability and climate response
- Research was conducted into forms of higher-density development and designs for streets and open spaces in higher-density environments
- Urban design context and background analysis, and the identification of issues and opportunities. This included a desk top review and site visits
- Testing of solar access in the public realm and private properties adjoining development
- Based on the assessment, recommendations were developed for public realm, urban form and built form
- Consideration of previous consultation undertaken for the feasibility, design development and environmental and planning approval phases of the SRL project, and engagement undertaken through the development of the Structure Plans
- The urban design peer review and advice was sought on the recommendations made in this report.

** While the SRL East Urban Design Strategy was only developed to guide the use and development of the SRL Rail and Infrastructure Project, this document seeks to ensure that the urban design strategies for the broader Structure Plan Area align, respond and build-on the SRL East Urban Design Strategy.*

1.6 Recommendations

The report outlines the basis for the recommended urban design strategies and initiatives. These are organised around:

A **Public Realm Framework**, **design directions** and **strategies** that seek to deliver an environment which invites people to walk, particularly to key destinations such as public transport, activity centres and major open space areas, and which provides outdoor amenity to support higher-density living and working. This includes recommendations for:

- New streets, lanes and pedestrian links to provide convenient walking routes throughout the Structure Plan Area
- Improvements to existing streets, lanes and pedestrian links based on their role in the movement network, to support their appeal and safety for pedestrians, and social activity
- New and upgraded open spaces to provide for the recreation needs of the future community.

An **Urban Form Framework, design directions and strategies** that seek to deliver create a range of distinct, higher-density neighbourhoods and high quality development for living and working in response to the increased accessibility brought about by the SRL and the land uses sought in each area, while also contributing to a high quality public realm. This includes recommendations for:

- The types, and forms intensity and land use of new buildings in each part of the Structure Plan Area
- Specific locations within each area where greater or lesser building scale is appropriate. The further design of key interfaces between built form and public realm.

A **Built Form Framework, design directions and strategies** that seek to ensure high quality development for living and working, and to contribute to high quality public realm amenity. This includes recommendations for:

- The design of buildings where they address the public realm
- The massing of built form at its interface with neighbouring properties
- On-site landscaping.

Outcomes that illustrate how the public realm, urban form and built form strategies can be delivered in each Place Type within the Structure Plan Area.

1.7 Report structure

Section 1. Introduction — *Provides a brief overview of SRL and the purpose, method, recommendations, scope and structure of the Structure Plan Urban Design Report.*

Section 2. Context — *Outlines the context for the urban design recommendations, including the strategic context, SRL Urban Design Principles and Objectives, the urban context of the Structure Plan Area and the Vision.*

Section 3. Public realm — *Sets out a Public Realm Framework to support the achievement of the Vision, including a summary of the underpinning public realm analysis, and proposed future public realm and open space network.*

Section 4. Urban form — *Sets out an Urban Form Framework to support the achievement of the Vision, including a summary of the underpinning analysis and proposed future urban form pattern.*

Section 5. Built form — *Sets out a Built Form Framework that identifies the recommended built form outcomes.*

Section 6. Outcomes — *Brings together and elaborates on the public realm and built form outcomes recommended by the Public Realm, Urban Form and Built Form Frameworks for individual places within the Structure Plan Area.*

Section 7. Recommendations summary — *Summarises the urban design initiatives recommended to be incorporated in the Structure Plan.*

Appendices

Appendix A. *Provides an analysis of the existing public realm and urban design characteristics in the Structure Plan Area.*

Appendix B. *Provides an analysis of development conditions in the Structure Plan Area.*

Appendix C. *Provides an analysis of the street network and public realm quality.*

Supporting Documents

Attachment A: Supporting research — *Summarises the research undertaken on:*

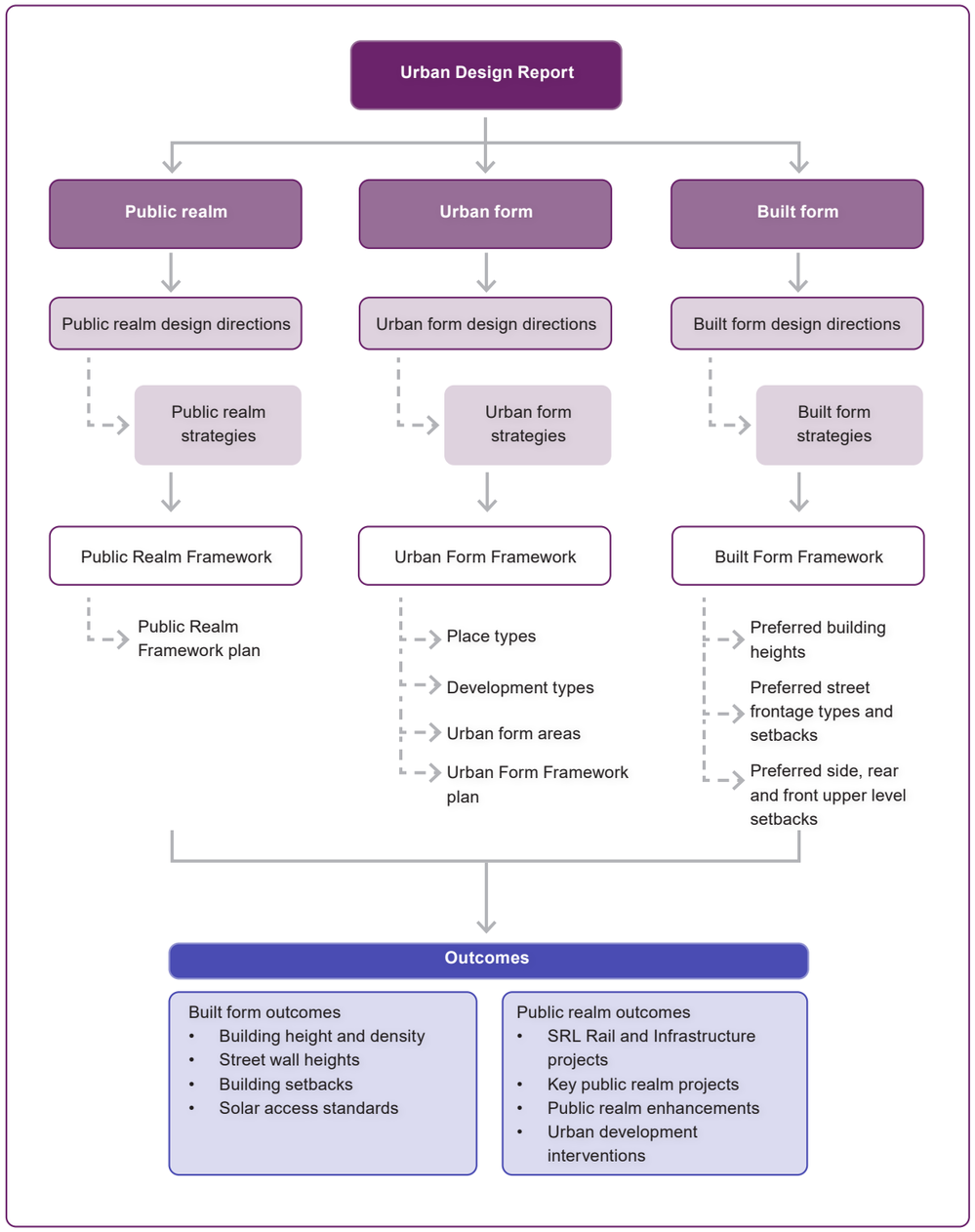
Part 01. *Urban development typologies*

Part 02. *Public realm typologies*

Attachment B: Gehl Public space and Life Study — *Supporting urban design research, containing the Public Space and Life Study produced by Gehl.*

Attachment C: Assessment of solar access to public realm — *Summarises testing undertaken of solar access to public realm.*

1.8 How to use this report



1.9 What is urban design?

Urban design is the practice of shaping the built environment to improve the quality of design and overall liveability, productivity and connectivity of cities. While built form is a key contributor, urban design is about more than just the appearance of the built environment. Urban design also relates to functional, environmental, economic and social outcomes of a project.

Urban design operates at a variety of scales, from precinct and neighbourhood planning to the design of a station forecourt or public park.

Achieving high-quality urban design requires good processes and guidance that optimise outcomes and value for money. High-quality design is authentic, contextual and site-specific.

Density Done Well

Density can mean different things, in different places. Each location requires consideration of the scale of density appropriate to its specific local context and future role. Different scales of density bring different benefits and present different challenges. Good urban design can help address these challenges, to improve:

- Functionality, character and spirit of public places for individuals and communities
- Levels of comfort, accessibility, safety and inclusiveness of places
- Expression of social and cultural values associated with places and people
- Socio-economic composition, diversity and economic vibrancy of urban areas
- Ecological systems, sustainability and the resilience of urban environments
- Community connectedness, health and wellbeing, and pride of place.

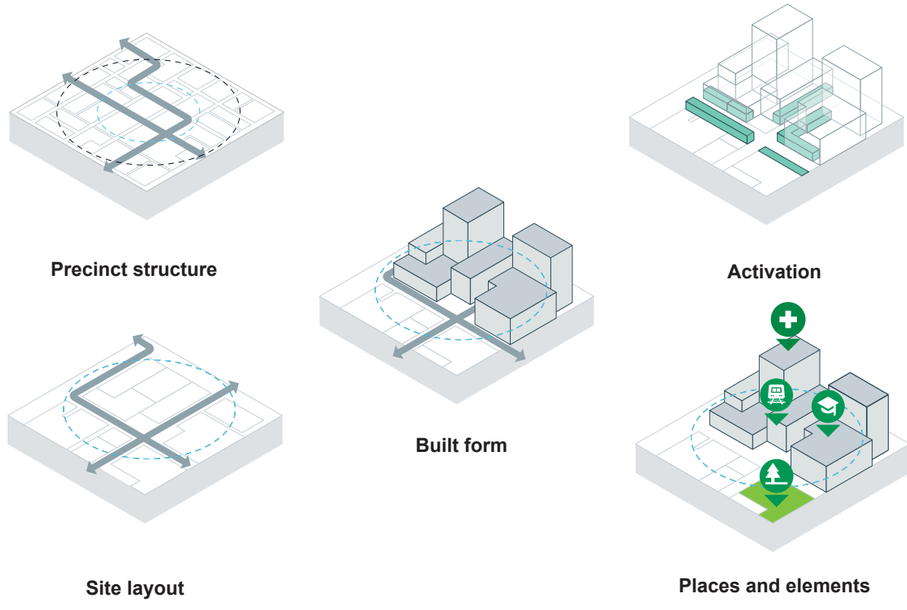


Figure 1.2: How urban design works across different scales of a project

2 Context

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2.1 Policy context

Plan Melbourne 2017–2050

Plan Melbourne is the Victorian Government's long-term planning strategy for the future development of Melbourne, providing the strategic basis for the planned growth of the city in response to key challenges and opportunities facing Melbourne for the next 30 years. These include a growing population; remaining competitive in a changing economy; housing that is affordable and accessible; keeping up with the growing transport needs; and the need for climate mitigation and adaptation.

Plan Melbourne 2017-2050: Addendum 2019 updates the growth projections for Melbourne and identifies the need for: an additional 1.8 million jobs and 1.6 million dwellings to support Melbourne's growth by 2051; and a transport network able to cope with an extra 11.8 million trips per day by 2050.

The Addendum recognises that Melbourne's public transport network needs to develop to support the distribution of population and employment in line with growth estimates, stating that: '*Melbourne needs a huge, well-planned investment that enables the city to grow while meeting these transport challenges*'.

SRL is recognised as providing opportunity to create a direct rail connection between Melbourne's major employment, health and education precincts and activity centres outside the CBD. The role of 20-minute neighbourhoods in making Melbourne a city of inclusive, vibrant and healthy neighbourhoods is recognised.

The focus of Plan Melbourne is delivering more homes near transport, jobs and essential services in vibrant liveable and sustainable neighbourhoods.

Plan Melbourne identifies Glen Waverley as a Major Activity Centre (MAC) and encourages the provision of more housing choices closer to jobs and public transport.

Victoria's Housing Statement 2024–2034

Victoria's Housing Statement 2024–2034 sets an ambitious goal for addressing Victoria's housing needs.

The overall target is to increase housing delivery from 54,000 homes a year to 80,000 homes a year (equivalent to 800,000 homes over the next decade), with 70 per cent provided in established areas and 30 per cent in growth areas.

The Housing Statement focuses on five key areas to achieve these targets and other housing aspirations:

1. ***Good decisions, made faster***
   The Victorian Government is reforming Victoria's planning system to boost housing supply across the state – clearing the backlog and giving builders, buyers and renovators certainty about how long approvals will take.
2. ***Cheaper housing, closer to work***
   The Victorian Government is making it easier to build more homes, with the best design standards, where Victorians want to live – that means going up and out, not just out.
3. ***More social housing***
   The Victorian Government is building more social and affordable homes across Victoria – launching Australia's biggest urban renewal project on top of the Big Housing Build.
4. ***A long-term housing plan***
   We know our state will keep growing – and we know we'll need a plan to manage that growth in the decades ahead.

Planning Policy Framework

The Victorian Planning Provisions (VPPs) are established under Victoria's Planning and Environment Act 1987 as a state-wide reference document or template that a municipal planning scheme or planning scheme provision must be based on.

The VPPs set out state and regional planning policies relating to settlement, environmental values and risks, natural resource management, built environment and heritage, housing, economic development, transport and infrastructure.

The VPPs specifically reference SRL in:

Clause 11.01-1R (Settlement) – The strategy seeks to 'develop the Suburban Rail Loop through Melbourne's middle suburbs to facilitate substantial growth and change in major employment, health and education precincts and activity centres beyond the central city at an appropriate scale to address the needs of Melbourne's rapidly growing population'.

Clause 72.08 (Background Documents) includes Plan Melbourne 2017-2050: Addendum 2019 as a reference document

Victoria's Infrastructure Strategy 2021–2051

Victoria Infrastructure Strategy 2021–2051 provides a practical roadmap for action over the next 30 years across a broad range of public policy areas including housing, energy, transport and social infrastructure.

The strategy seeks to address existing infrastructure pressures, demand on existing infrastructure, and assist with planning the timing and location of required and necessary new infrastructure.

Strong emphasis is placed on improving public and active transport connections in established areas by improving pedestrian, tram, bus and train infrastructure.

Recommendations focus on improving the connection and integration between these nodes of travel.

SRL will address will help achieve the objectives of the strategy, connecting activity centres, providing economic growth and housing opportunities, and improving access to jobs and services.

Victorian Infrastructure Plan 2021

The Victorian Infrastructure Plan 2021 lays out the infrastructure priorities of the Victorian Government.

The priorities include providing transport infrastructure to better connect people in Melbourne and regional areas to health, education and employment centres via public transport.

Urban Design Guidelines for Victoria 2017

The Urban Design Guidelines for Victoria 2017 support the delivery of functional and enjoyable places for people to live, work, and spend leisure time.

SRL aims to create neighbourhoods that foster community interaction and make it easy for people of all ages and abilities to live healthy lifestyles and engage in regular physical activity.

Better Apartment Design Standards for Victoria 2017

The Better Apartment Design Standards 2017 provide guidance for applicants, architects, building designers and planners for designing and assessing apartment developments to ensure their quality and functionality benefits the health and well-being of residents, and improves the environmental performance of apartment buildings.

SRL aims to deliver apartments that provide diverse, well-designed housing options to meet the long-term needs of Glen Waverley's growing community.

2.2 The Vision for Glen Waverley

The Vision for Glen Waverley outlines the long-term aspiration for the precinct including the Structure Plan Area.

The Vision for Glen Waverley:

A genuinely walkable neighbourhood, with everything needed for a great quality of life nearby.

Glen Waverley will be home to a thriving multicultural community with job and lifestyle opportunities to support its growing population. A diverse range of housing options will mean people can stay in the community they love, whatever their life stage. New homes will be complemented by high quality landscape and open spaces that strengthen the green, leafy character of the area and support its active and healthy way of life.

SRL will mean Glen Waverley residents will have everything they need closer to home – and will continue to benefit from existing state-of-the art schools and diverse lifestyle options. Greener streets and improved walking and cycling connections will encourage more people to leave the car at home as the suburb grows.

New connections will create more job opportunities for Glen Waverley. Just as residents will travel to universities or workplaces in Clayton, Monash or Box Hill, people from neighbourhoods along the SRL East rail line will come to work, study and play in Glen Waverley. The southern end of the precinct will become a sought-after commercial destination with a thriving business community.

The centre will remain at the heart of community life, coming alive in the evenings with restaurants, cafes and bars. As a place for celebrations, cultural events and community gatherings, a lively and people focused Kingsway will be the centrepiece of Glen Waverley.

SRL will unlock opportunities in Glen Waverley, delivering a vibrant and diverse precinct with more housing choice and greater affordability.

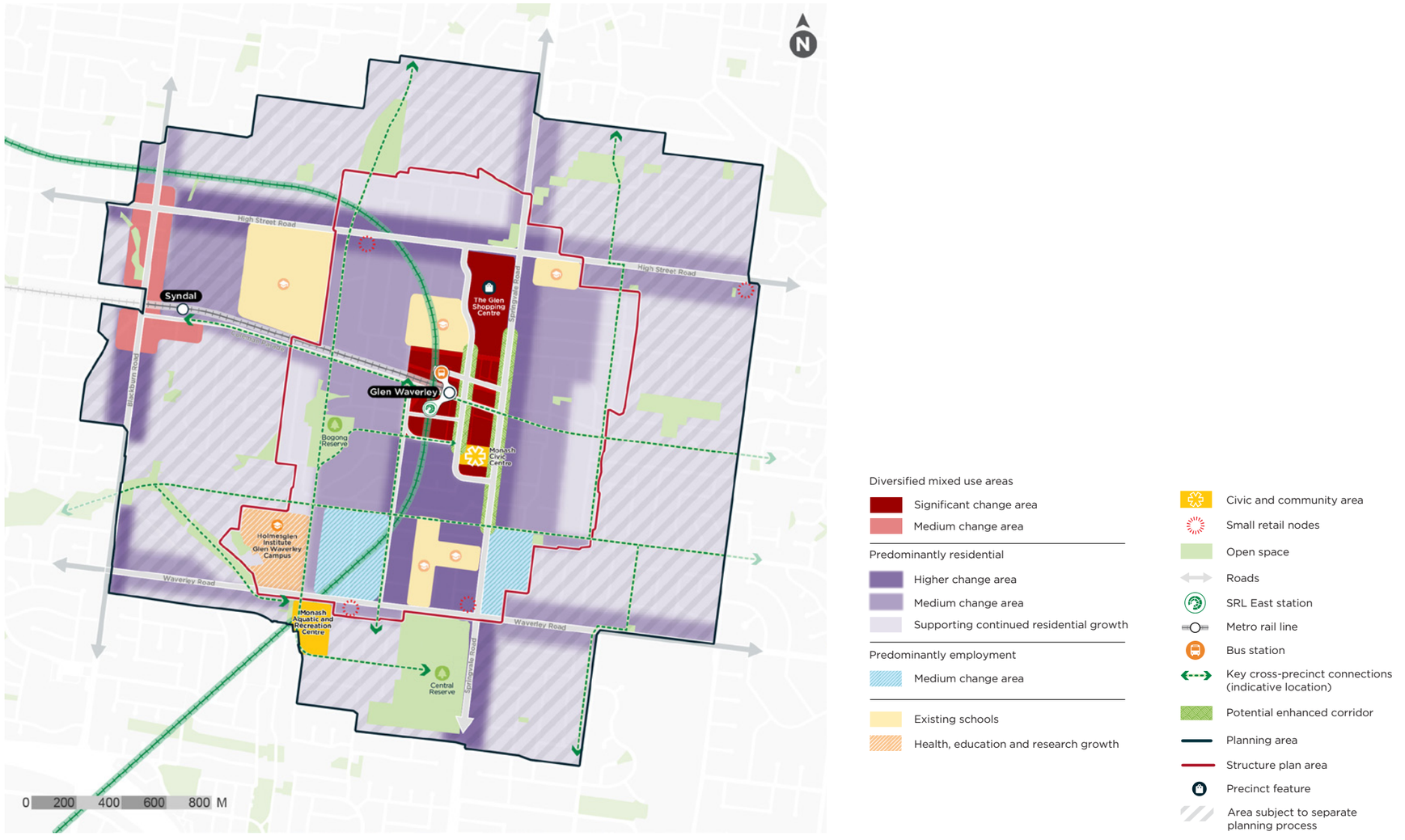


Figure 2.1: Glen Waverley Conceptual Precinct Plan

2.3 SRL Urban Design Principles and Objectives

The Urban Design Principles and Objectives establish important foundational ideas for SRL as set-out in the SRL Urban Design Framework. They guide the approach to urban design, to ensure SRL precincts will continue to be great places for people to live, visit and work as Melbourne grows.

Framed around the three SRL objectives of 'productivity', 'connectivity' and 'liveability', SRL Urban Design Principles and Objectives adopt a holistic design approach to promote positive environmental, social, cultural, and economic outcomes.

Productivity

To support population growth and a focus on jobs and investment closer to where people live; strengthen access to, and investment in regional Victoria

Principle 1
Enduring

Places that are functional now and for generations to come

- **Objective 1.1 Legacy**
  Create a design that is enduring and functional for generations to come, is easy to maintain and manage, is adaptable to changing uses with minimal reconstruction, and will age gracefully in concept and detail.
- **Objective 1.2 Future ready**
  Ensure the design catalyses urban renewal, encouraging the evolution of the precincts and changing uses over time.
- **Objective 1.3 Resilient**
  Ensure the infrastructure, buildings and places can survive, adapt and thrive when subjected to stresses and acute shocks such as changes in climate and technology, and extreme events.
- **Objective 1.4 Environmentally sustainable**
  Optimise environmental performance and embed sustainability initiatives into the design response of the infrastructure project and surrounding precinct.

Principle 2
Diverse

Places that are inclusive and offer a diverse range of experiences.

- **Objective 2.1 Strategic alignment**
  Facilitate integrated land use and transport solutions that respond to the precinct ambition and strategic transport and land use planning.
- **Objective 2.2 Functional urban structure**
  Create an urban structure that ensures the adequate provision of public spaces that support a complementary mix of activities.
- **Objective 2.3 Integration with context**
  Ensure new works accommodate travel routes and activities that connect to, integrate with and complement those in the wider precinct.
- **Objective 2.4 Welcoming**
  Design places and movement networks that are welcoming, inclusive and pleasant for the whole community and encourage diverse social and cultural interaction within public spaces.

Connectivity

To support the development of an integrated transport network that increases travel options and access to places, and enhances the passenger experience

Principle 3
Connected

Places that are connected physically and spatially

- **Objective 3.1 Linkages**
  Improve people's ability to walk, cycle and access public transport within a permeable urban structure that offers safe and efficient links and reduces barriers to movement.
- **Objective 3.2 Transport integration**
  Facilitate seamless intermodal transfers prioritising public transport, walking and cycling networks, and design movement networks for safe interactions between transport modes.
- **Objective 3.3 Legible**
  Reflect walking and cycling desire lines, promote intuitive wayfinding, reduce reliance on signage and minimise visual clutter and obstructions to key views.
- **Objective 3.4 Green network**
  Facilitate green networks that link public and private open space and support urban ecology, biodiversity and cooling.

Principle 4
Accessible

Places that are socially connected, enjoyable and easy to walk and wheel around

- **Objective 4.1 Universally inclusive**
  Enable all people to access, understand, use and enjoy spaces across the project area and surrounding precincts regardless of their age, size, ability or disability. To the greatest extent possible, move beyond baseline accessibility compliance towards support for genuine dignity, equity, social inclusion and independent mobility in the use of public places.
- **Objective 4.2 Twenty-minute neighbourhoods**
  Support and enhance convenient and desirable access to everyday services, facilities and key destinations within a 20-minute walking distance from home.
- **Objective 4.3 Active transport**
  Encourage walking and cycling for transport and recreation with integrated active transport infrastructure that can accommodate future growth and connects seamlessly with surrounding networks and with existing and proposed infrastructure.
- **Objective 4.4 Safer Design**
  Design places that feel safe for the community using them. Increase passive surveillance and decrease barriers to participation in public space by acknowledging and accommodating the specific needs and experiences of all population groups within the community.

Liveability

To create more sustainable and resilient precincts in Melbourne's suburbs to generate new social and economic opportunities.

Principle 5
Enhancing

Places that enhance the local environment and community

- **Objective 5.1 Heritage**
  Celebrate, respect and respond to Indigenous and non-indigenous cultural heritage, values and local history.
- **Objective 5.2 Responsive**
  Design to respond, connect and build on the unique and valued social, cultural, physical and economic aspects of the precinct.
- **Objective 5.3 Sensitive**
  Sensitively enhance landscape and urban realm outcomes; and minimise negative physical and visual impacts associated with the new infrastructure.
- **Objective 5.4 Healthy**
  Design infrastructure and green networks, spaces and places that support active lifestyles, and encourage social interaction to improve physical and mental health.
- **Objective 5.5 Quality design**
  Create a high-quality design that makes a positive contribution to the local built and natural environment.

Principle 6
Liveable

Places that are comfortable and welcoming

- **Objective 6.1 Amenity**
  Improve urban amenity by realising site specific opportunities to enhance environmental comfort and create pleasant and attractive places that feel safe and are safe for people to move through and spend time in.
- **Objective 6.2 Landscape values**
  Create a coherent and engaging landscape response that embraces natural qualities and community and cultural values.
- **Objective 6.3 User experience**
  Enhance the journey and precinct experience for local communities, visitors and transport users.
- **Objective 6.4 Places for people**
  Create inviting, people-friendly streets, open spaces and public places, and maximise the opportunities to create green places.
- **Objective 6.5 Activation**
  Create activated, memorable and diverse places in the short and long term; manage interfaces and encourage a range of activities to deliver vibrant mixed-use neighbourhoods.

2.4 Urban context

Regional context

The Glen Waverley Structure Plan Area is located approximately 19km east of Melbourne's CBD. It is in the City of Monash local government area.

It lies at the end of the Glen Waverley rail line, which provides access to Melbourne CBD and Mount Waverley Major Activity Centre (MAC) to the west.

Springvale Road is a principal north-south vehicle and bus corridor that connects it to the Burwood East Tally Ho MAC to the north, Brandon Park MAC and Monash Freeway to the south.

The Structure Plan Area is close to major education and enterprise activity in Burwood and the growing Monash National Employment and Innovation Cluster (NEIC) surrounding Monash University.

Dandenong Creek Valley is located approximately 2km east of the Structure Plan Area. The valley creates a strong north-south green wedge to the predominantly low-density residential urban fabric and includes multiple regional public open spaces, trails and destinations.

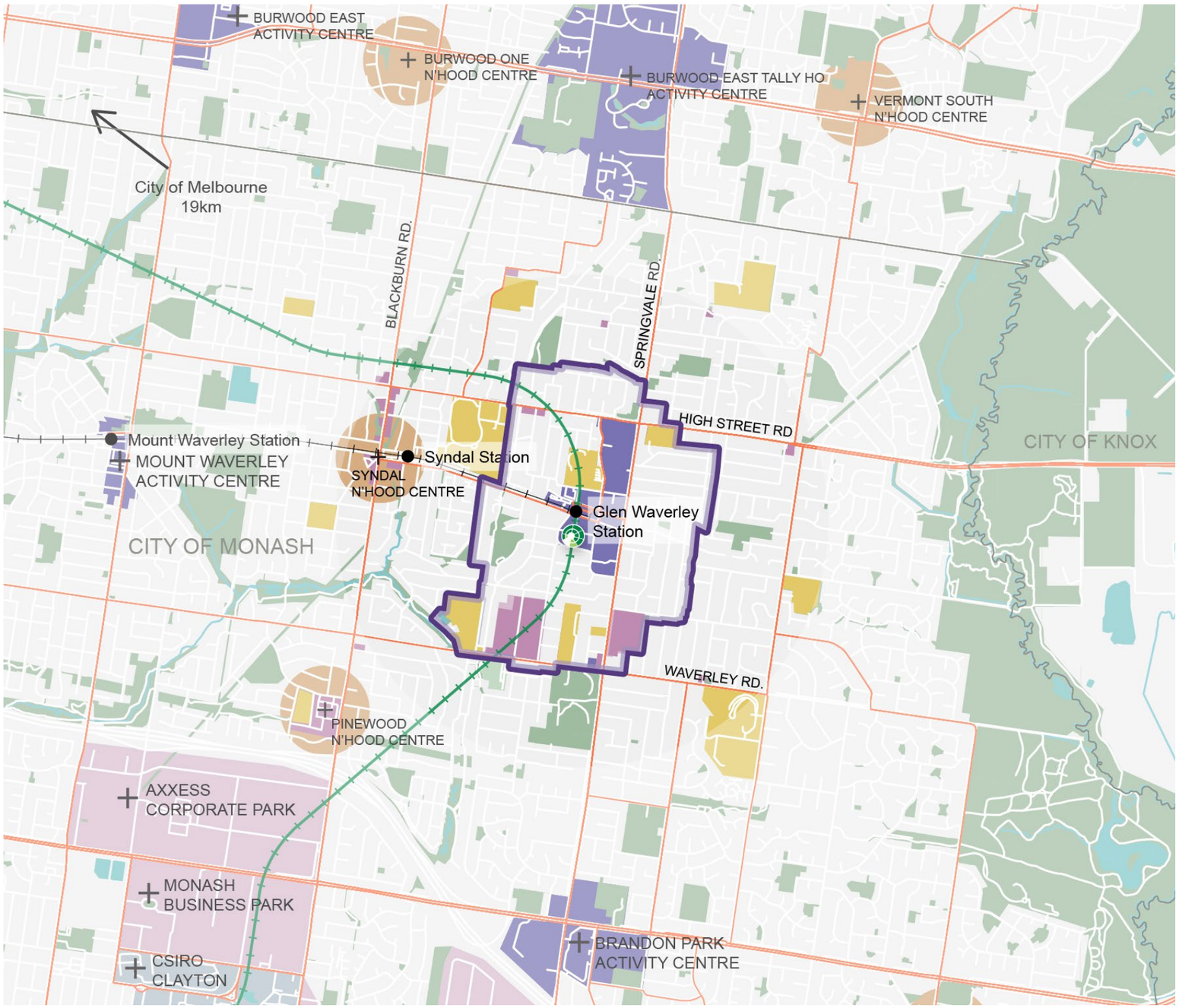


Figure 2.2: Regional context

2.5 Summary of existing conditions

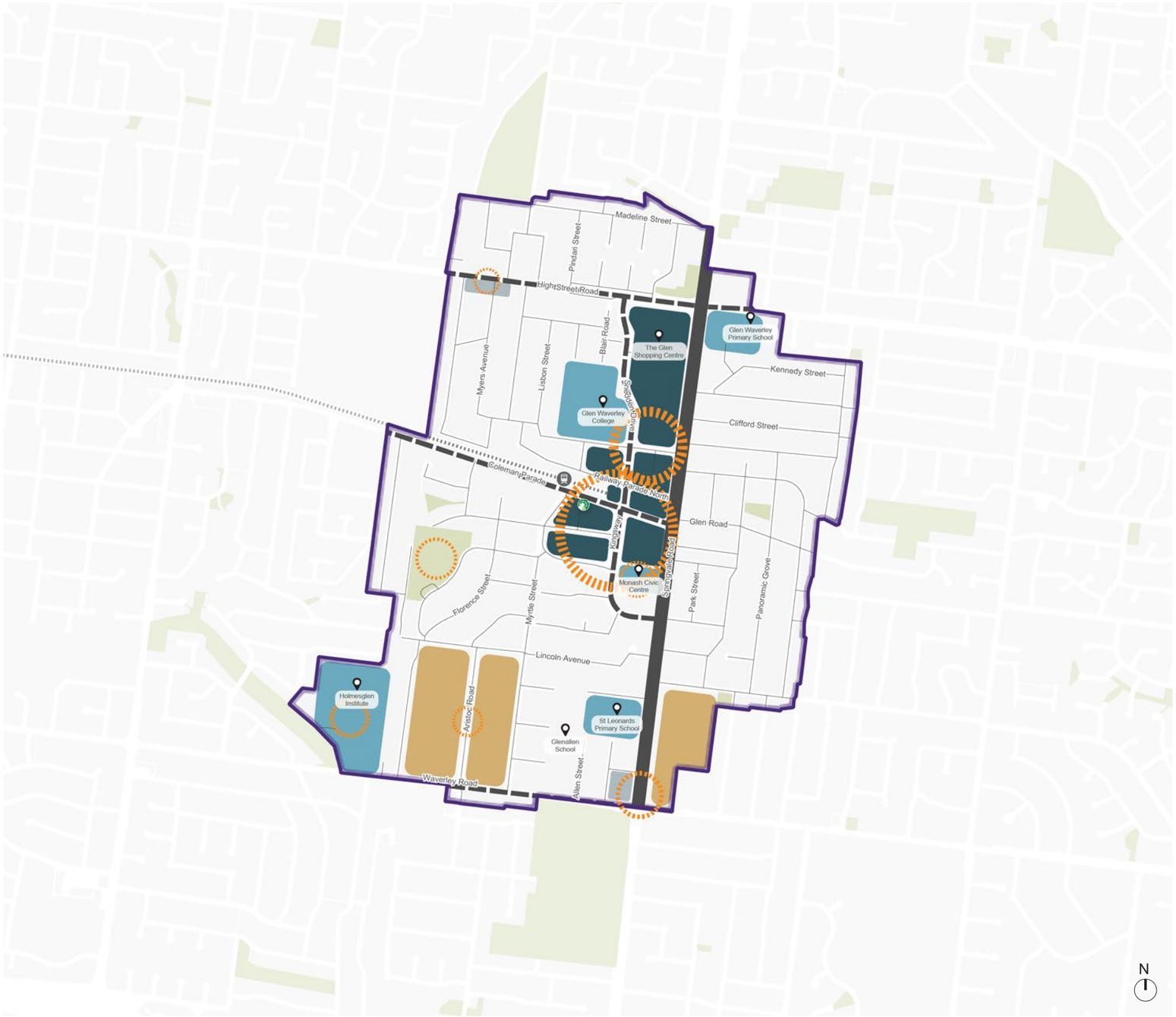
Urban structure

The Glen Waverley Structure Plan Area is centred around the existing rail line and Springvale Road as primary organising elements. Kingsway, High Street Road, Waverley Road and Coleman Parade are the other major roads in the urban structure. The Glen Shopping Centre is a major anchor, drawing activity north along the central spine of Kingsway. The Glen Waverley Activity Centre is also anchored by the Monash Civic Centre and Glen Waverley College, which flank it to the south and the west.

Kingsway is the primary north-south road in the heart of the Structure Plan Area. Glen Waverley Activity Centre is surrounded by residential neighbourhoods with generally low-rise dwellings.

Major open spaces are dispersed around the periphery of the Structure Plan Area, with limited open space located within the core.

Employment areas outside the activity centre include industrial pockets located to the south along Waverley Road.



Legend

- SRL station
- Existing Glen Waverley Station
- Structure Plan Area
- SRL East alignment
- Existing rail line
- Activity Node - place of high pedestrian activity and attraction
- Open space
- Commercial/retail core
- Civic, education and health
- Traditional retail
- Employment
- Highway
- Key street/arterial road

Figure 2.3: Urban structure

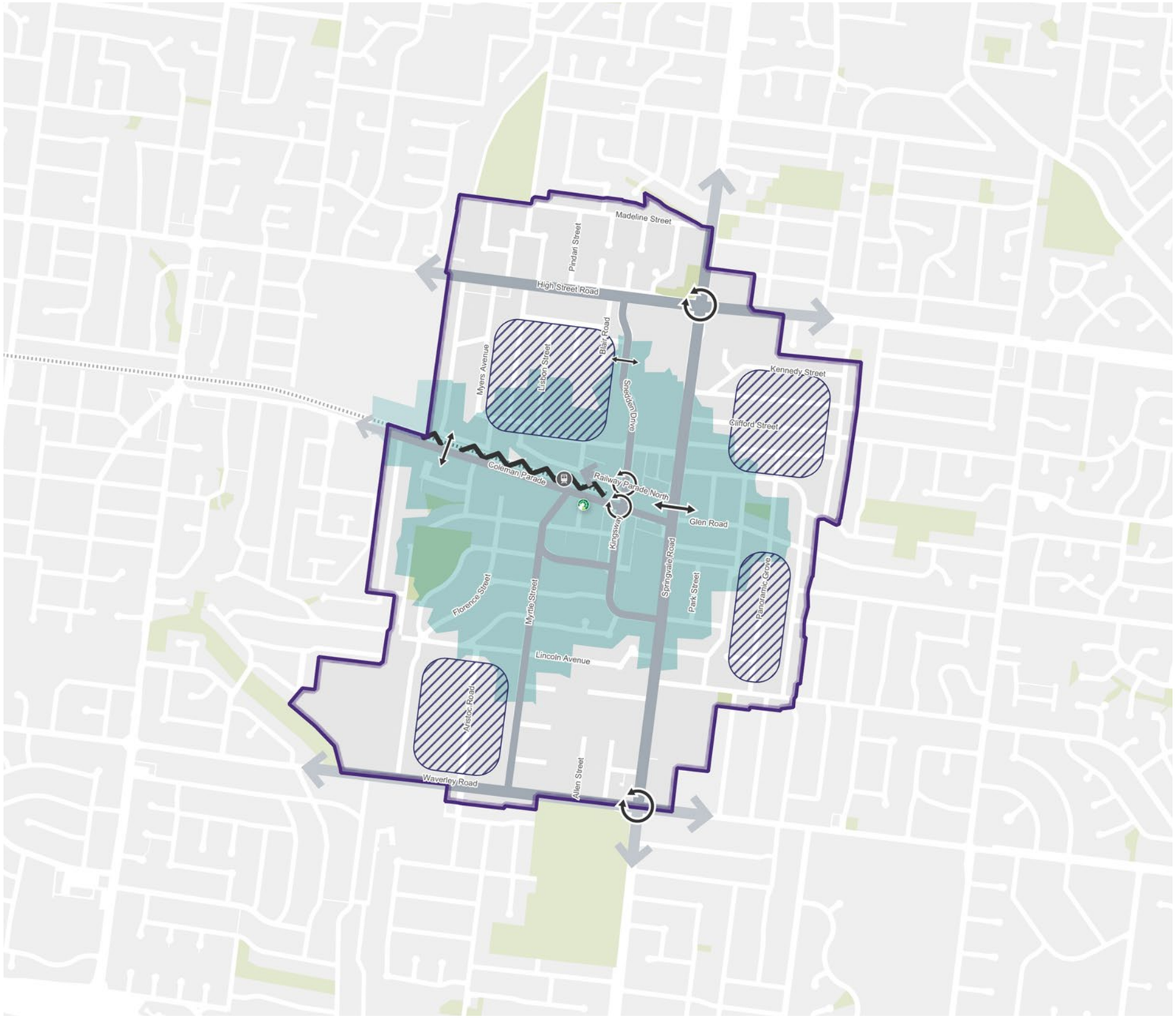
Movement and access

The Glen Waverley Structure Plan Area has movement networks for public transport, private vehicles and active travel. The existing Glen Waverley Station is a major transport node and a major destination located at the centre of the Structure Plan Area.

The fragmented street network and large urban blocks decrease the walkable catchment of the SRL station and the existing Glen Waverley Station and hinder pedestrian access to key destinations.

Barriers to pedestrian connectivity occur where vehicle-dominated key road connections and train corridors intersect with local streets and other pedestrian paths. Long crossing times and low pedestrian amenity at these intersections discourage pedestrian movement. While Springvale Road has a significant role in the broader vehicular traffic network, the scale of the arterial road (three or more lanes in each direction) poses a significant barrier to movement in a north-south direction, particularly for pedestrians and cyclists. Pedestrian crossings are more concentrated near the commercial and retail centre while four-way crossings are present at major intersections between Springvale Road, High Street Road and Waverley Road.

The lack of pedestrian permeability, along with the abundance of free car parking spaces around the central commercial/retail area and the existing Glen Waverley Station, discourages active transport and promotes the use of private vehicles.



Legend

- SRL station
- Existing Glen Waverley Station
- Structure Plan Area
- SRL East alignment
- Existing rail line
- Clusters of large blocks
- 800-metre walkable catchment from SRL station entrances
- Open space
- Key road connection
- At-grade pedestrian crossing point
- Barrier

Figure 2.4: Movement and access

Built form

The Glen Waverley Structure Plan Area is characterised by a mix of building typologies at varying scales. High-density built forms are consolidated within the commercial/retail core and decreases towards the edge of the Structure Plan Area.

Most of the Structure Plan Area is characterised by low density single/double storey suburban detached/semidetached houses and units. However, the commercial/retail core has higher-density (high and mid-rise) residential apartments and commercial buildings. The most prominent high-rise buildings are located between Kingsway and Springvale Road. These taller built forms are visible across the Structure Plan Area, especially from the streets oriented toward the high-density core.

A couple of local heritage buildings exist along Springvale Road including the Monash Civic Centre heritage building and the Glen Waverley Primary School heritage building.

Road widths vary across the Structure Plan Area with the greater widths occurring along Springvale Road, High Street Road and Kingsway. The rest of Structure Plan Area comprise a modified grid network of 15 to 20 metres wide streets.

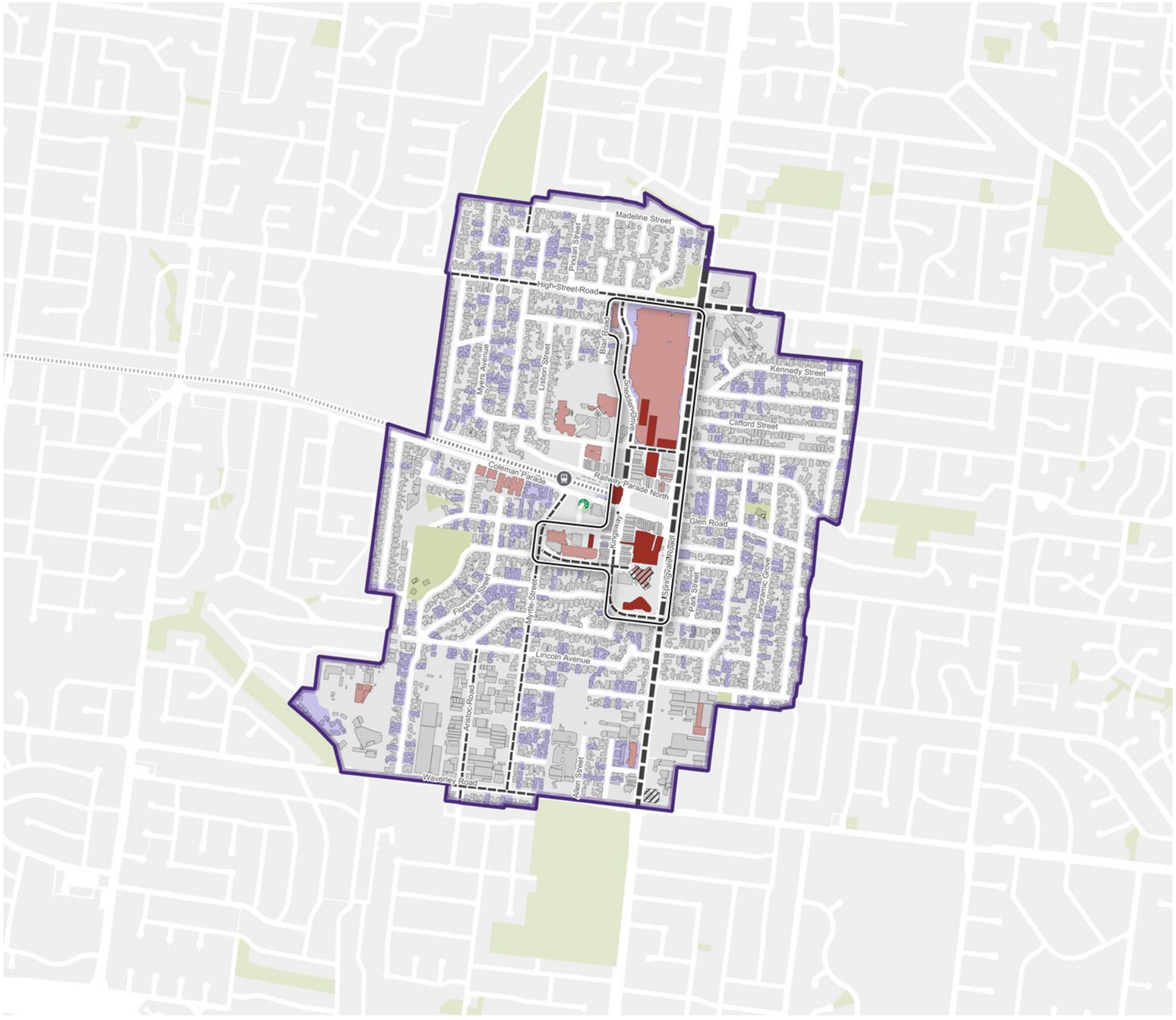


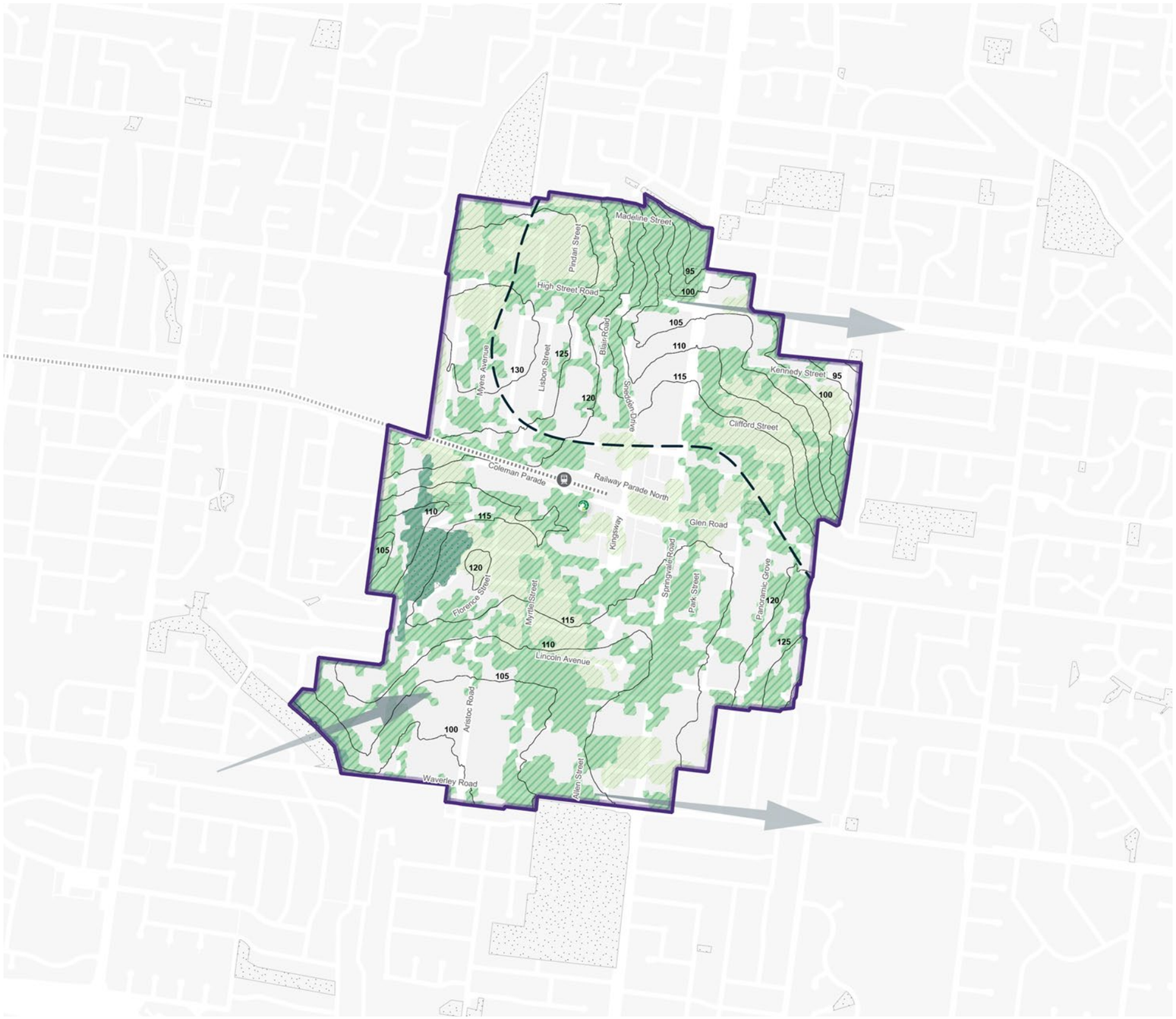
Figure 2.5: Built form

Topography and vegetation

The Glen Waverley Structure Plan Area has a gently undulating topography which reaches its high point north-west of the Structure Plan Area, along a north-west to south-east ridge line. There is a relatively flat central area which is a distinctive feature that enhances the walkability in the commercial/retail core.

The rest of the Structure Plan Area slopes down toward Dandenong Creek to the east and Scotchmans Creek to the south-west. This topography results in significant views toward Dandenong Creek and Dandenong Ranges along east-west and north-south streets.

The existing landscape in the Structure Plan Area comprises a mix of exotic and native vegetation including shrubs, garden beds, lawn areas, and many tall canopy trees in private gardens and regularly planted in local streets. The residential area east of Springvale Road is covered by a vegetation protection overlay to maintain the garden city character and significant canopy trees on the western slopes of Dandenong Valley.



Legend

- SRL station
- Existing Glen Waverley Station
- Structure Plan Area
- SRL East alignment
- Existing rail line
- Medium tree density
- Low tree density
- Open space
- Key distant views
- Ridgeline
- Contours every 5 metres

Figure 2.6: Topography and vegetation

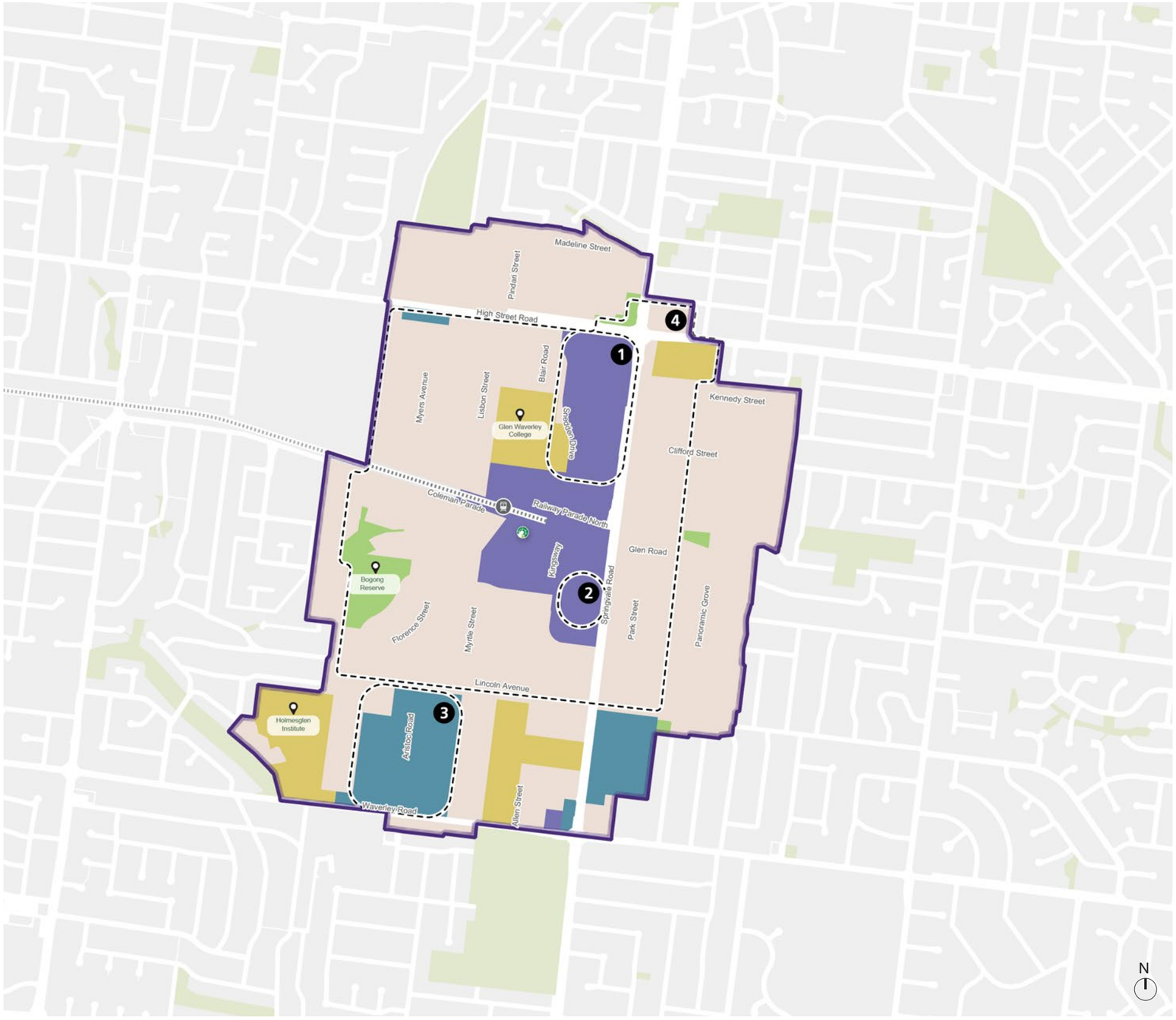
Land use

At the centre of the Glen Waverley Structure Plan Area is the Glen Waverley Major Activity Centre (MAC) which is comprised of a high concentration of mixed-use commercial/retail as well as civic activities along Kingsway and in the vicinity of the existing Glen Waverley Station.

The commercial/retail core surrounding the existing Glen Waverley Station, is an important destination for the City of Monash and Melbourne's eastern suburbs. It is characterised by a wide offer of multicultural retail entertainment and hospitality.

Outside the commercial/retail core, the Structure Plan Area is mainly characterised by suburban residential use with scattered open spaces and pocket parks, including Bogong Reserve, and educational facilities such as Glen Waverley College and Holmesglen Institute. These residential areas often include a fine-grain neighbourhood retail anchor as well as local civic services set along significant local or arterial roads.

Two industrial/commercial zones are located to the south of the Structure Plan Area along Waverley Road and Springvale Road. These zones include a mix of activities ranging from light industrial to community-serving businesses.



Legend

- SRL station
- Existing Glen Waverley Station
- Structure Plan Area
- SRL East alignment
- Existing rail line
- Residential
- Employment
- Education
- Mixed use
- Open space

Land use clusters

1. Retail area
2. Civic Centre
3. Industrial precinct
4. Glen Waverley Major Activity Centre

Figure 2.7: Land use

3 Public realm

AJM
Joint Venture

3.1 Introduction

This section summarises the public realm analysis and proposes the future public realm and open space network across the Structure Plan Area, to achieve the Glen Waverley Vision.

The Design Directions, Strategies and Public Realm Framework build upon the following strategies and background documentation developed by SRLA and Victorian Government, and useful precedents developed by the City of Melbourne (CoM):

- **Suburban Rail Loop East - Urban Design Strategy** (Suburban Rail Loop Authority 2023)
- **Open Space Assessment** (prepared by AJM Joint Venture for Suburban Rail Loop Authority 2024)
  Aboriginal Cultural Heritage Technical Report - SRL East Structure Plan (2023)
- **Flooding and Water Management Technical Report -SRL East Structure Plan** (2023)
- **Trees for Cooler and Greener Streetscapes:** Guidelines for streetscape planning and Design (Victoria State Government, Environment, Land, Water and Planning 2019)
- **Future Streets Framework:** To guide the design and Delivery of Streets in the Hoddle Grid (City of Melbourne, 2023)
- **Nature in the city:** Thriving Biodiversity and Healthy Ecosystems (City of Melbourne, 2017)
- **Living Melbourne:** Our metropolitan urban forest The Nature Conservancy and Resilient Melbourne, Melbourne (2019)
- **Movement and Place Framework** (Victorian State Government, Department of Transport)
- **Open Space for Everyone** (Victorian State Government, Department of Transport)
- **SRL Public Space and Public Life Study Report** (Gehl, 2023) (see SRL East Structure Plan - Gehl Public Space and Life Study - Attachment B)
- **SRL East Transport Technical Report** (Suburban Rail Loop Authority, 2024).

The Public Realm Framework has been informed by thorough analysis of the existing public realm conditions (See Appendix C) and extensive research of best-practice public realm typologies (see the SRL East Structure Plan - Urban Design Supporting Research - Attachment A).

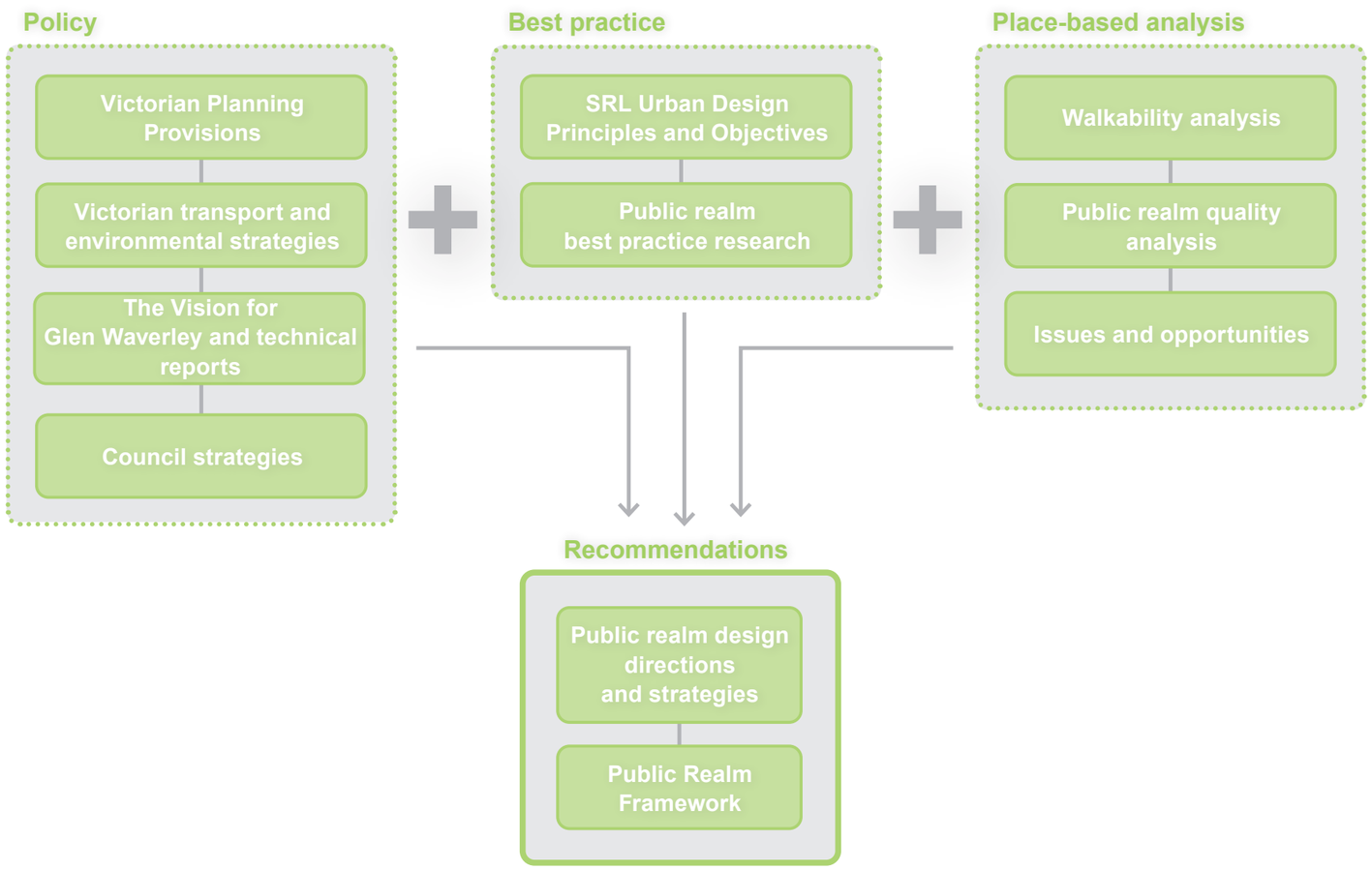


Figure 3.1: Public Realm Framework methodology summary

3.2 Summary of analysis

Extensive analysis has been conducted to identify the issues to be addressed and opportunities to be realised in delivering a public realm that supports the Vision for the Glen Waverley Structure Plan Area.

This summary focuses on the key elements that should be addressed to deliver a public realm that encourages active and public transport use, catering for the projected development growth within the Structure Plan Area.

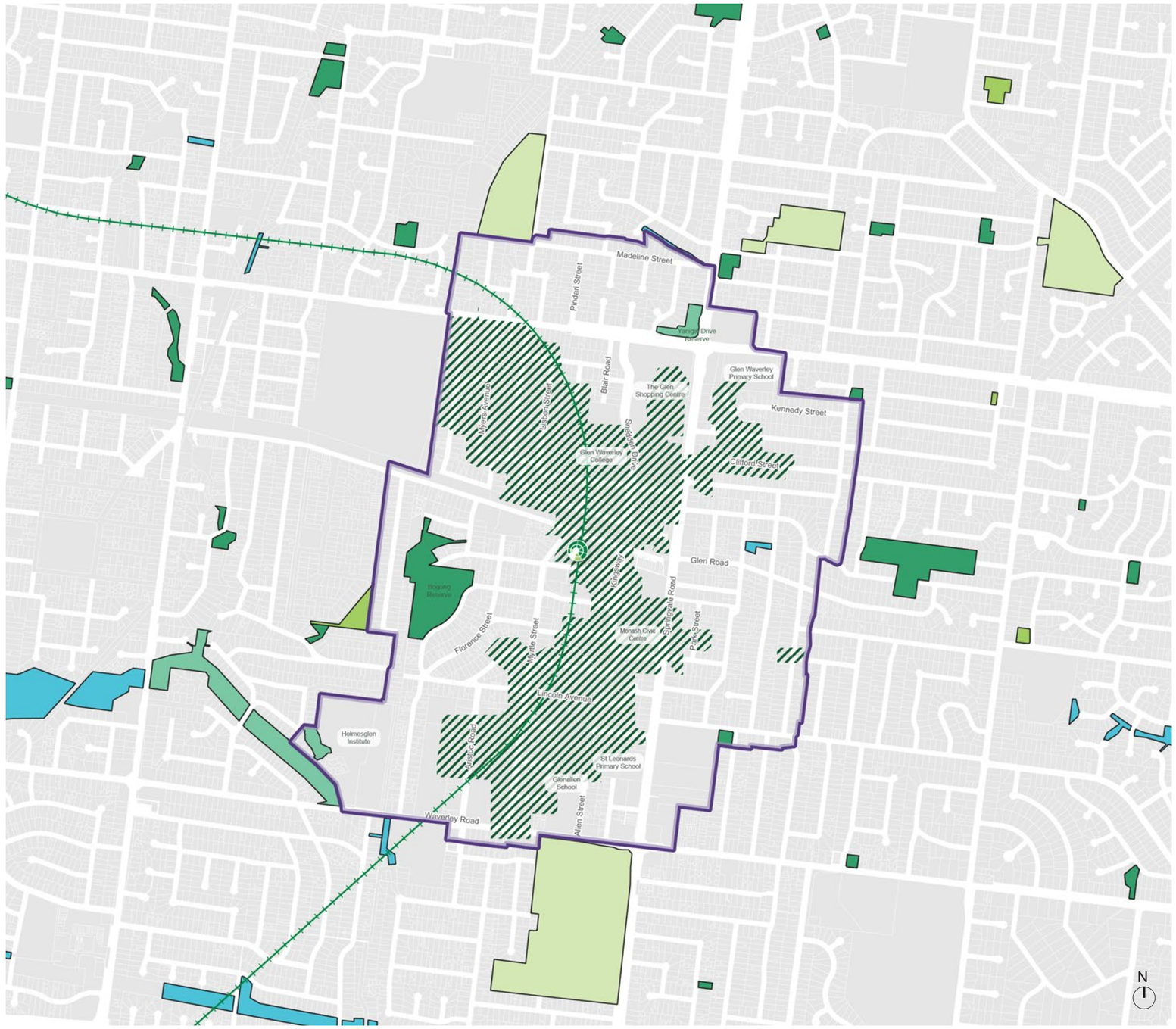
The Public Space and Public Life Study - Urban Baseline Study (Gehl, 2023) also informed this report (see SRL East Structure Plan - Gehl Public Space and Life Study - Attachment B). The Gehl study uses a similar method and has similar findings.

Open space distribution and walkable access

There are 29 separate public open spaces with a combined area of approximately 440,000 square metres in the Glen Waverley Structure Plan Area. These parks are owned and/or managed by Monash City Council, and include Pocket, Neighbourhood, Community, and one District catchment park.

There are some gaps in the walkable catchment to the SRL station, predominantly near the centre which has the existing Glen Waverley rail line as an access barrier, as well as near the Wesley College Glen Waverley Campus and Glen Waverley Secondary College. The large walkable access gap to the south-east of the area is in a primarily residential area.

Figure 3.2 provides an overview of the public open space that exists in the Structure Plan Area and the gaps in access to open space. These gaps may be addressed by improving access or providing new open space.



Legend

- SRL station
- Structure Plan Area
- SRL East alignment
- Community park
- Conservation park
- Landscape park
- Linear park
- Sports park
- Gap in 400-metre walkable access to public space

Note: Categorisation of open space sourced from Draft SRL Open Space Technical Report.
Note: This analysis does not include planned or proposed open spaces. Refer Public Realm Framework plan (Figure 3.8) for proposed open space.

Figure 3.2: Open space analysis

Walkability and strategic linkages

Good pedestrian connectivity to public transport (including the SRL station) and public open spaces will be critical in achieving the Vision and unlocking the development potential of the Glen Waverley Structure Plan Area.

The walkable catchment analysis of the Structure Plan Areas identifies locations with poor pedestrian access to the SRL station, gaps in the walkable catchment to public open spaces and the indicative location of strategic linkages required to address these issues.

Figure 3.3: Walkability analysis

Local permeability and optimal block sizes

Good permeability supports active transport and access to public transport within the Glen Waverley Structure Plan Area. Appropriate standards of permeability are outlined in Section 4.3: Public realm strategies, under Design Direction 2: Promote active transport access.

To achieve good permeability, the commercial/retail core should have a maximum block length of 100 metres. All other areas should have a maximum block length of 180 metres. The permeability analysis identifies blocks that do not achieve these standards, and therefore through-block links should be considered.

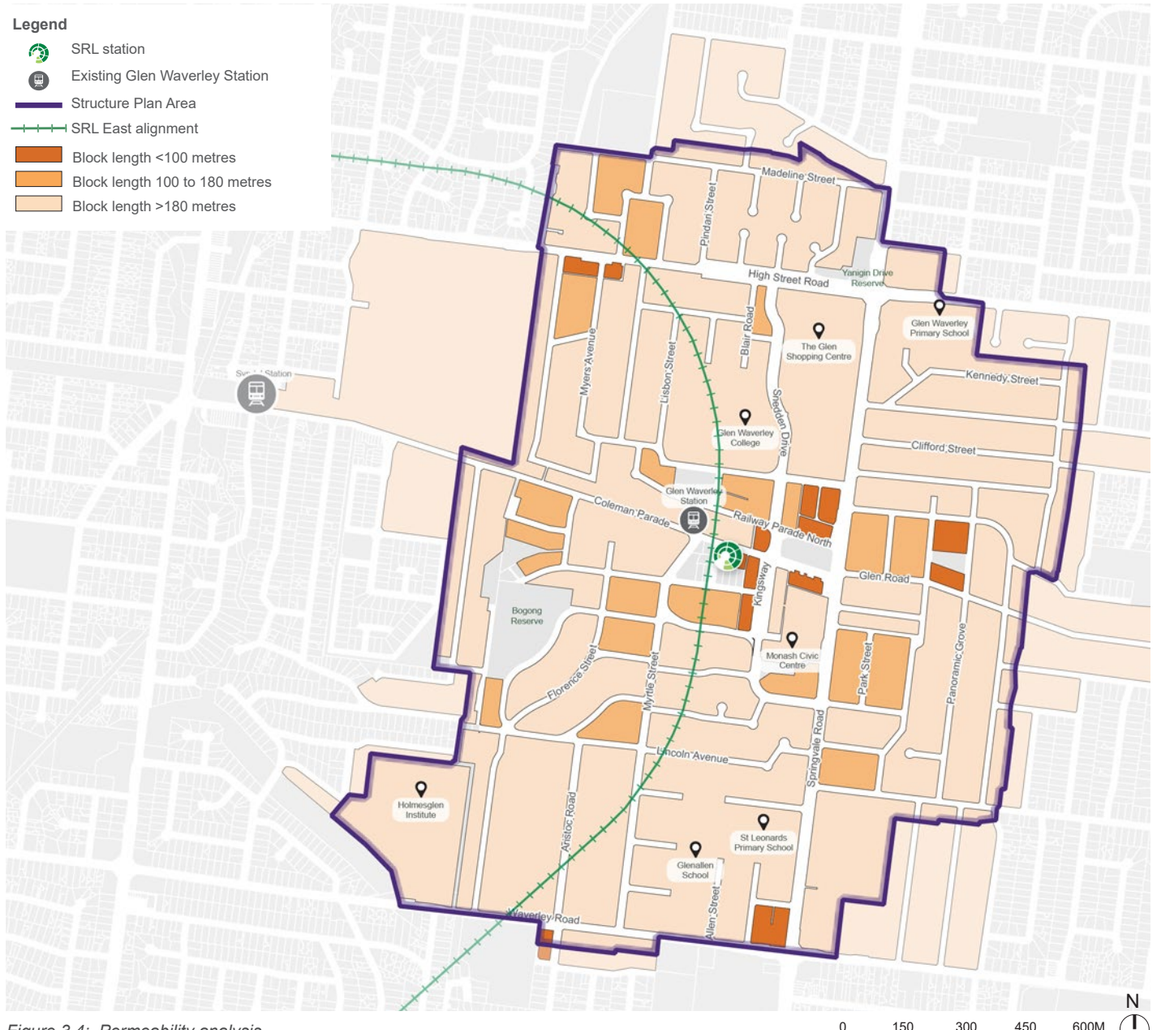


Figure 3.4: Permeability analysis

Public realm quality

An assessment of the quality of the pedestrian experience on all streets within the Glen Waverley Structure Plan Area has been undertaken. Figure 3.5 summarises the findings of this assessment. It provides a general indication of the public realm quality in the Structure Plan Area, and the variation between streets.

However, it should be noted that this qualitative assessment does not reflect the role of each street in the Public Realm Framework, which was identified subsequently. Therefore, further work is required before street improvement requirements can be determined.

More detail of the public realm quality assessment is provided in Appendix C.

The Public Space and Public Life Study - Urban Baseline Study (Gehl, 2023) also informed this report (refer to SRL East Structure Plan - Gehl Public Space and Life Study - Attachment B). The Gehl 'Public Space and Public Life Study' uses a similar method and has similar findings. For more details of this study refer to Attachment B.

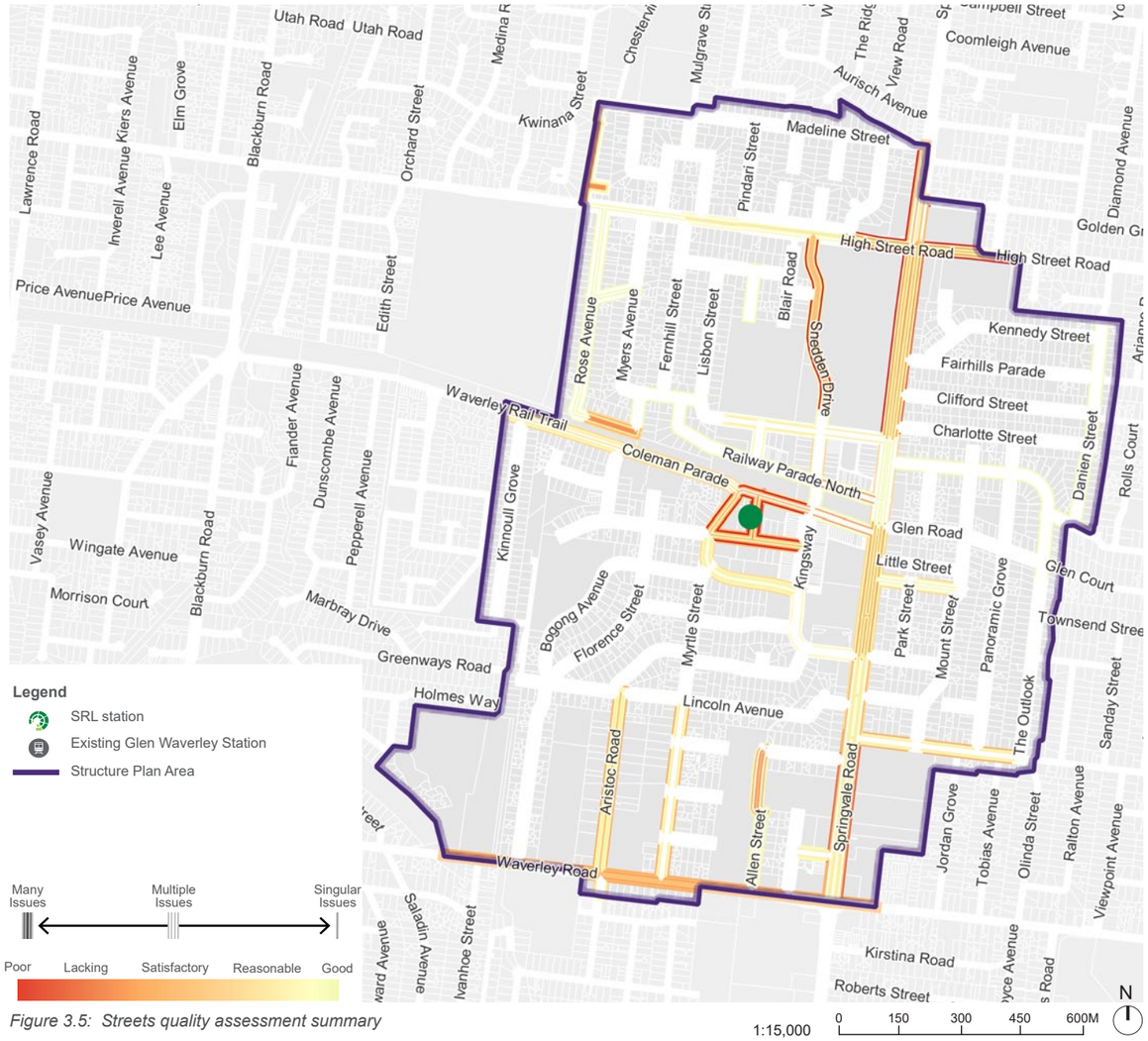


Figure 3.5: Streets quality assessment summary

Issues and opportunities

Figure 3.6 shows the key issues and opportunities the public realm analysis identified in the Glen Waverley Structure Plan Area.

These key issues and opportunities include:

Leverage existing key open spaces by increasing connectivity to them, and further enhancing the quality and facilities within the parks.

Leverage from and expand the existing street-based activity centre environment to deliver a renewed and expanded activated core and improve the streetscape/public space in key activity streets.

Opportunity to increase permeability through new links.

Overcome Springvale Road and Glen Waverley rail line as barriers and improve pedestrian amenity and landscape quality.

Improve quality of public realm.

Improve connectivity between the SRL station, retail core and surrounding area.

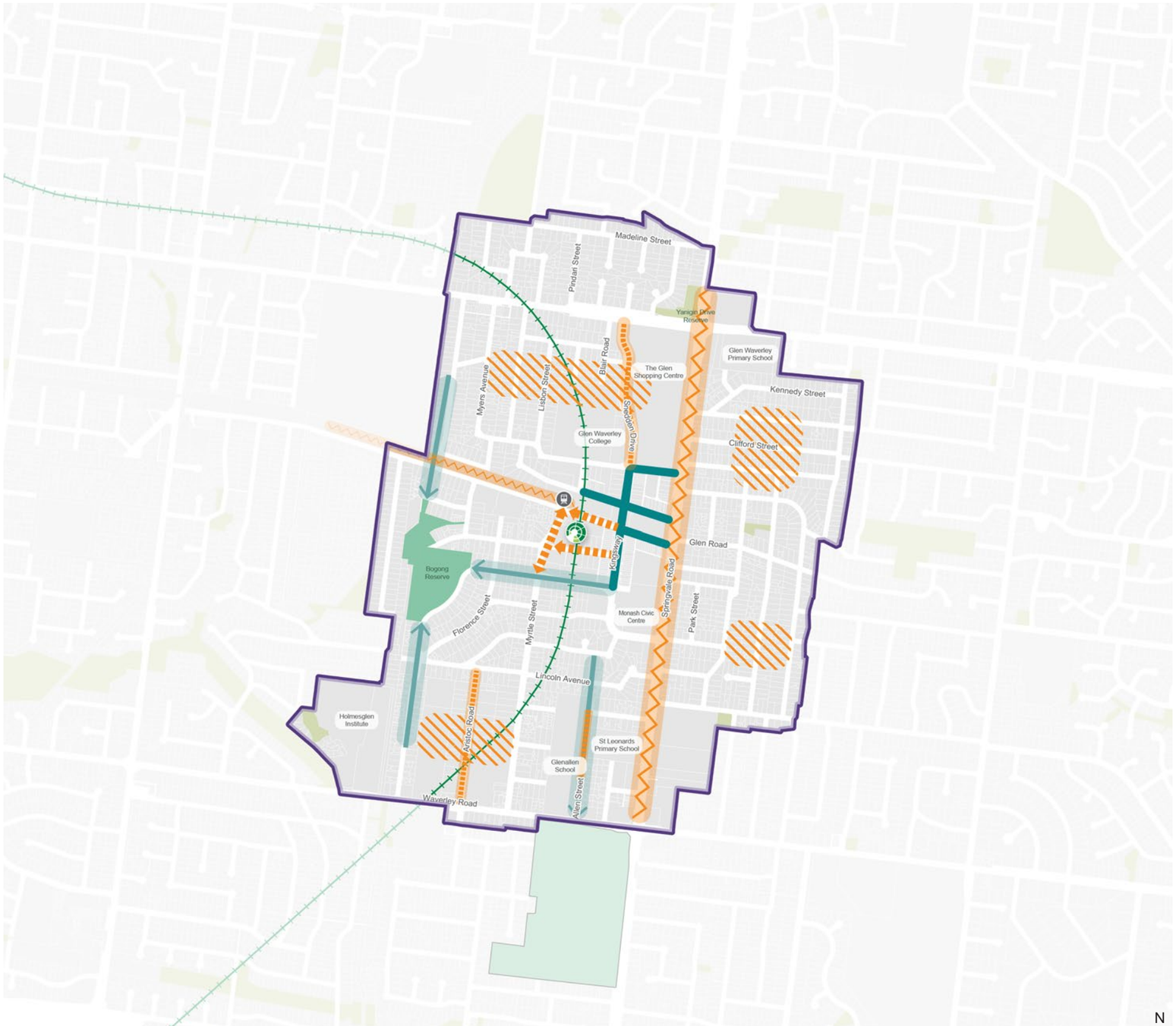


Figure 3.6: Issues and opportunities

3.3 Public realm design directions

The public realm design directions are proposed to achieve the Glen Waverley Vision.

The design directions informed the development of the Public Realm Framework in Section 3.4 and the public realm outcomes identified in Section 6.

The order of the design directions does not imply an order of priority.

Design Direction 1: Ensure streets are inviting places that support community life

Why is this important?

Attractive streets are important for a thriving public life and to encourage healthy active lifestyles – and to draw residents, workers, visitors, businesses, developers and investors to the Structure Plan Area.

People are more likely to inhabit the public realm and choose to cycle or walk if streets are welcoming, safe, attractive and comfortable. A well inhabited public realm is self-reinforcing, with the presence of people further contributing to its appeal, and the success of commercial enterprises.

Streets also provide the address and setting for development, so their quality influences the appeal of the area to attract investors and developers. Again, this is self-reinforcing – as density increases, so does public realm use and footfall, which in-turn further increase the attractiveness for development to locate to the area.

<u>Safety</u>

In order for streets to be inviting for walking and social life, they need to be safe and provide a feeling of safety. Safeguarding pedestrian safety includes ensuring pedestrians are protected from traffic movement and have safe and convenient opportunities to cross streets. Pedestrians also need to have a perception of safety from crime and antisocial behaviour during the day and night.

<u>Street experience</u>

Streets not only provide a means to travel to a destination, they also provide for a social and experiential journey. The opportunity for social interaction and an interesting experience is part of the attraction of a successful urban area, and reinforces the appeal of walking over other travel modes. This includes space for people to stand and linger, sit or gather, and an engaging sensory experience.

<u>Distinct streetscapes</u>

Distinct streetscapes are more memorable. This supports the legibility and appeal of a successful urban area for pedestrians and cyclists.

A memorable and appealing street has a range of qualities which may include:

- A human scale
- Street trees and landscaping
- Protection from sun in summer, rain and wind
- Clean and well maintained surfaces and street furniture
- A pleasant sensory experience.

Alignment with SRL Urban Design Framework:

Design Direction 1 will help to achieve the following SRL Urban Design Objectives:

- Objective UD1.1 Legacy
- Objective UD1.2 Future ready
- Objective UD2.3 Integration with context
- Objective UD2.4 Welcoming
- Objective UD3.1 Linkages
- Objective UD4.1 Universally inclusive
- Objective UD4.4 Safer design
- Objective UD5.1 Heritage
- Objective UD5.2 Responsive
- Objective UD5.4 Healthy
- Objective UD5.5 Quality design
- Objective UD6.1 Amenity
- Objective UD6.4 Places for people
- Objective UD6.5 Activation.

What is happening now in Glen Waverley?

Kingsway between Bogong Avenue and Coleman Parade successfully supports and encourages public life and activity. Kingsway is a key street providing a traditional 'main street' with a mix of uses. The level of vibrancy along Kingsway is reduced beyond Bogong Avenue and Coleman Parade due to inactive edges and an abundance of car parking.

Many streets do not provide the level of pedestrian, cycle, public transport priority or function desired. In particular:

- Springvale Road is dominated by vehicle traffic, detracting from its appeal for walking and cycling - this is especially problematic between Clifford Street and Wilton Road, where it forms the edge of the commercial/retail core
- Myrtle Street and Montclair Street
- The local streets do not provide especially inviting pedestrian links to key destinations such as the commercial/retail core, train stations and larger parks.

Kingsway

"The commercial centre and spine of Glen Waverley enjoys lots of public life." - SRL Public Space and Public Life Study Report (Gehl, 2023)

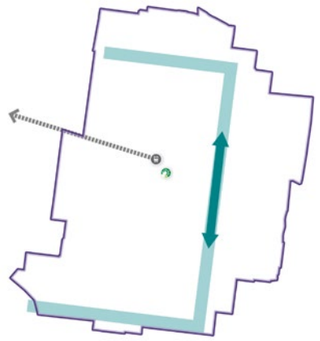
How can this direction be achieved in Glen Waverley?

Strategy PR1: Street hierarchy and identity

Establish a street hierarchy which supports each street's movement and place function, and place identity.

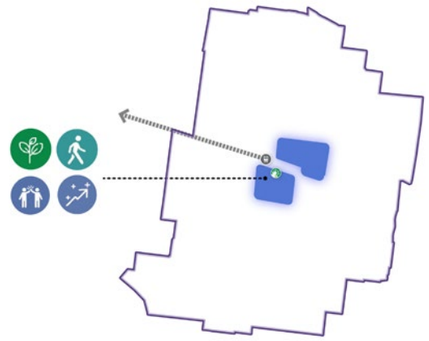
Strategy PR2: Boulevards and Avenues

Optimise main roads for pedestrian movement and amenity while maintaining access by other travel modes, ensuring distinct and attractive setting for public life and development.



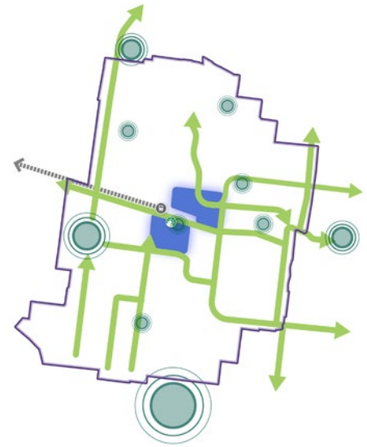
Strategy PR3: Activity streets

Prioritise pedestrian movement and activity in streets and lanes within the commercial/retail core, and ensure they provide distinctive and attractive places for public life.



Strategy PR4: Green streets

Provide a network of safe and inviting leafy streets for walking and cycling into the commercial and retail centres and to other key destinations. This is illustrated in Section 3.2: Summary of Public Realm Analysis.



Strategy PR5: Streets

Establish a minimum standard for streets to ensure they provide a safe and inviting environment which is appropriate for the future needs of the community.

All streets within the Structure Plan Area should provide a minimum level of amenity to respond to the significant increase in population and their role and function. For example, they should have footpaths on both sides of the road, appropriate lighting and canopy tree planting wherever possible.

Design Direction 2: Promote active transport access

Why is this important?

An inviting environment for walking, wheeling and cycling is critical to a successful urban area.

Key factors for encouraging walking, wheeling and cycling include direct connections to major destinations and key places of employment, general permeability to support everyday movement by foot and bike, and a safe and inviting public realm. The quality of the public realm is addressed by Design Direction 1: Ensure streets are inviting places that support community life.

Missing links to key destinations

The street network should provide legible, safe and convenient links to key destinations, including public transport nodes, activity nodes, employment areas, health and education facilities, key open spaces and community areas. Where areas lack such links, they should be introduced.

Connections to existing open space

In order to improve the liveability of neighbourhoods with poor access to open space, new links to existing open spaces should be created. The Public Realm Framework in Section 4.4 identifies where new links are recommended.

Permeability

Addressing barriers to active transport involves enhancing the permeability of the existing block structure. The appropriate standard of permeability in an activity centre is generally defined by block lengths no greater than 100 metres – for example, City of Melbourne DDO1 and DDO61. In higher-density urban areas outside activity centres, a maximum block length of 180 metres is considered appropriate. This is the mid-point of the range of block lengths promoted by the Urban Design Guidelines for Victoria (120 to 240 metres), approximately mid-way between the 100 metre block length for activity centres identified above and the maximum 240 metres required by Clause 56 of the Victorian Planning Provisions for typical subdivisions, and consistent with the maximum block length recommended by the NSW Movement and Place – Network Planning in Precincts Guide.

Links created by private development

Private development that incorporates new links should be designed to provide direct, attractive and well-lit public connections. They should be safe and free of entrapment areas, and be located at ground level. Passive surveillance should be maximised from both ground floor and upper levels. Consideration should be given to the function of the link and it's implementation to maintain safety and amenity.

Public realm quality

A successful walking, wheeling and cycling network also depends on the quality of the connections. Connections should be safe, attractive and designed for the specific purpose, as outlined in Design Direction 1: Ensure streets are inviting places that support community life.

What is happening now in Glen Waverley?

Within the Glen Waverley Structure Plan Area, walking, wheeling and cycling access is indirect, inconvenient and unsafe from some areas to key destinations including the existing Glen Waverley Station, The Glen, Kingsway shopping strip, Monash City Council offices, Glen Waverley Library and the Aristoc Road industrial/employment area to the south.

A key barrier to east-west movement is Springvale Road, offering long wait times and only a few east-west crossing points.

A number of areas have large block sizes, impacting the permeability of the area and discouraging walking and cycling.

Alignment with SRL Urban Design Framework:

Design Direction 2 will help to achieve the following SRL Urban Design Objectives:

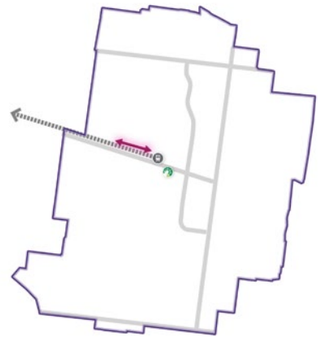
- Objective UD1.1 Legacy
- Objective UD1.2 Future ready
- Objective UD1.3 Resilient
- Objective UD1.4 Environmentally sustainable
- Objective UD2.1 Strategic alignment
- Objective UD2.3 Integration with context
- Objective UD3.1 Linkages
- Objective UD3.2 Transport integration
- Objective UD3.3 Legible
- Objective UD3.4 Green network
- Objective UD4.2 Twenty-minute neighbourhoods
- Objective UD4.3 Active transport.

How can this direction be achieved in Glen Waverley?

Strategy PR6: Critical and important links

Create new links to improve access to key destinations.

Critical and important links should be designed to provide direct, attractive, well-lit public connections, be safe and free of entrapment areas, reduce barriers to movement, and be located at ground level. Consideration should be given to the function and implementation of the link to support user safety and amenity.



Strategy PR7: Local links

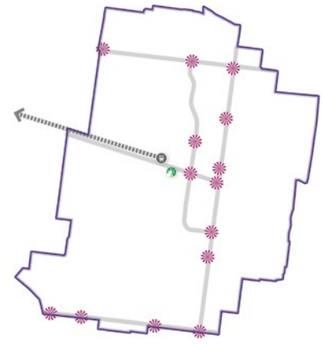
Require the provision of new mid-block links to enhance pedestrian permeability.

Local links should be designed to provide direct, attractive, well-lit public connections, be safe and free of entrapment areas, reduce barriers to movement, and be located at ground level. Consideration should be given to the function and implementation of the link to support user safety and amenity.

Strategy PR8: Pedestrian crossings

Introduce new controlled pedestrian crossings and improve existing crossings where needed to support walking, wheeling and cycling.

Opportunities to enhance pedestrian crossings or provide new crossings should be explored to reduce barriers to movement and create a convenient, safe and accessible active transport network.



Springvale Road

"A car-centric six lane road with no space for bicycle riders and an unfriendly environment for pedestrians." - SRL Public Space and Public Life Study Report (Gehl, 2023)

Design Direction 3: Foster resilient urban environments

Why is this important?

A healthy ecosystem is a critical component of healthy, liveable and resilient urban environments.

The street and open space system presents an opportunity to improve the environmental performance of the Structure Plan Area by thinking about it as part of the broader eco-system. This includes:

- Increased tree canopy and vegetation cover to reduce the urban heat island effect
- Landscaping to provide habitat and wildlife corridors and/or support urban biodiversity
- Water sensitive urban design treatments to sustainably treat and re-use water and to improve health of trees and vegetation
- Strengthening the metropolitan Melbourne open space network.

As urbanised environments are densified, urban forests play a critical role in mitigating the urban heat island effect, and contribute valuable ecological amenity such as water filtration, shade and habitat value. The SRL East Climate Response Plan has identified a tree canopy cover target of 30 per cent. Street tree planting is valuable in defining a sense of place and identity as well as providing thermal comfort for human and non-human communities. The management and conservation of trees in urban settings creates healthy and resilient ecosystems for a changing climate.

Alignment with SRL Urban Design Framework:

Design Direction 3 will help to achieve the following SRL Urban Design Objectives:

- Objective UD1.3 Resilient
- Objective UD1.4 Environmentally sustainable
- Objective UD3.4 Green network
- Objective UD5.2 Responsive
- Objective UD5.4 Healthy
- Objective UD6.2 Landscape values.

Corridors of diverse flora and fauna are essential to biodiversity. Protecting, enhancing and providing habitat in existing and new corridors can foster connection between people, plants and animals, and prevent habitat fragmentation. Biodiversity sensitive urban design principles should be integrated within the network of streetscapes and open spaces to provide for diverse animal species, including shelter (such as dense, protective shrubs), food (such as flowers, fruits, seeds, pollen, nectar), nesting sites (such as tree cavities), and water.

Water Sensitive Urban Design (WSUD) works to mitigate the impact of urbanisation on the surrounding environment and waterways. WSUD strategies treat and reduce stormwater flows, improve cooling, reduce potable water demand, increase soil moisture, and passively irrigate planting in urban environments. Embedding water sensitive design strategies across all public realm scales and typologies is critical to reducing flood risk, stormwater runoff, reducing the urban heat island effect, and improving the health and performance of trees and vegetation.

There is also opportunity in the Structure Plan Area to strengthen the metropolitan Melbourne open space network as critical green infrastructure. These open spaces provide a network of natural systems that support urban ecosystems across a broader area, while mitigating the impacts of urban heat.

Increasing canopy coverage within the private realm is discussed in Design Direction 8.

What is happening now in Glen Waverley?

The Glen Waverley Structure Plan Area has varying levels of tree canopy cover, with pockets of dense planting around the Scotchmans Creek Trail and Springvale Road to the north. Vegetation is characterised by mixed native and exotic species. Depending on land-use, the canopy and landscape character varies significant.

The existing rail area along Coleman Parade provides a corridor of canopy cover. This positively influences the area directly north of the existing Glen Waverley Station, with O'Sullivan Road and Snedden Drive exhibiting high canopy cover to the periphery of the Glen Waverley commercial/ retail core.

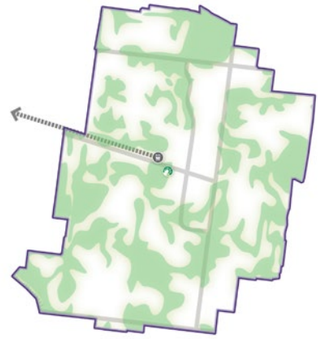
Bogong Reserve has dense canopy cover, while other open spaces have established tree canopy around the perimeter.

How can this direction be achieved in Glen Waverley?

Strategy PR9: Public realm landscaping

Optimising tree canopy cover and other planting in streets and public open spaces that support cooling, greening and urban biodiversity

The existing leafy streetscape character should be maintained and enhanced, particularly in areas which are a further distance from the SRL station. Streets and public open space should contribute to a broader ecosystem while providing local amenity and urban heat island relief.



Strategy PR10: Water sensitive urban design

Incorporate water sensitive urban design treatments into streets and public open spaces to optimise sustainable water management outcomes.

Streets and public open spaces should contribute to treating and reducing stormwater flows, improving cooling, reducing potable water demand, increasing soil moisture, and passively irrigating urban planting.

"A tree donut: a relatively leafy precinct with an absence of canopy coverage in the core." - SRL Public Space and Public Life Study Report (Gehl, 2023)

Design Direction 4: Facilitate outdoor recreation

Why is this important?

Access to distinctive and high quality open space increases the attractiveness of the Structure Plan Area to live and work.

A collection of diverse open spaces is required to fulfill the full range of human and environmental needs in the Structure Plan Area. This includes provision for recreation, social engagement, connectivity, biodiversity, habitat and integrated water management. In denser urban areas such as this, it is important to optimise the functionality of open spaces. This includes consideration of multi-purpose spaces.

The quality of open space enhances amenity and recreational opportunities. The programming, amenities and facilities provided by open spaces serve different people with the community with higher quality spaces supporting a large proportion of community need. Therefore, existing open spaces should be optimised to ensure they are providing the amenity and recreational needs required for the existing and future population.

When connected into a network, the value of a collection of public open spaces is greater than the sum of its parts, offering increased public realm opportunities and benefits than those provided by the spaces in isolation. A holistic network provides a diversity of experiences, landscape opportunities and outcomes which ensures that the public realm serves as many purposes as possible.

What is happening now in Glen Waverley?

Within the Structure Plan Area there are five public open spaces in Glen Waverley Structure Plan Area, with Bogong Reserve is the largest park to the east. None of these open spaces are in the core. Central Reserve, Scotchmans Creek Reserve, Glen Waverley North Reserve, and Hinkler Reserve are good-sized public open spaces located just outside the Structure Plan Area.

The SRL Open Space Technical Assessment (2023) identifies that while there are some areas that do not have walkable (400 metres) proximity to public open space, overall, there is a moderate to high walkable access to public open spaces within 400 metres within the Structure Plan Area. This is illustrated in Section 3.2: Summary of Public Realm Analysis.

To the south of the Structure Plan Area is the Glen Waverley Aquatic and Recreation Centre and Central Reserve which comprises a range of sporting facilities.

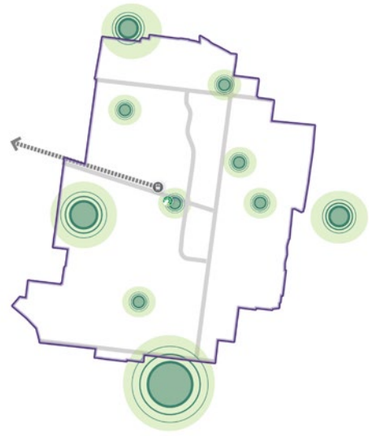
"Bogong Reserve is a spacious recreational reserve in a bushland setting, with a wetlands area. It is the closest public green space to the centre of Glen Waverley and offers a playground with a slide, swings and a dog off-leash area." - SRL Public Space and Public Life Study Report (Gehl, 2023)

How can this direction be achieved in Glen Waverley?

Strategy PR11: Enhance existing open spaces

Enhance the functionality, character and safety of existing public open spaces.

Open spaces should service and cater for the diverse needs of the existing and future community. These open spaces should have improved safety through passive surveillance, activation and lighting.

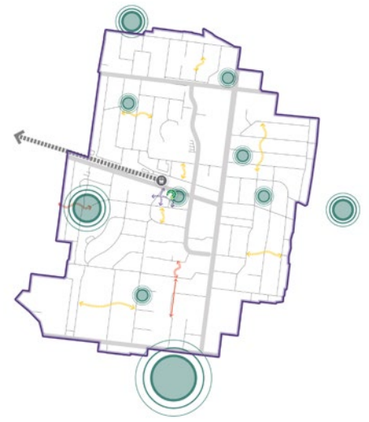


"Bogong Reserve is the largest public space close to the centre of the precinct, however Central Reserve, located to the south, is much more popular." - SRL Public Space and Public Life Study Report (Gehl, 2023)

Strategy PR12: Connections to open space

Create new connections that improve accessibility to open space and create a network of spaces.

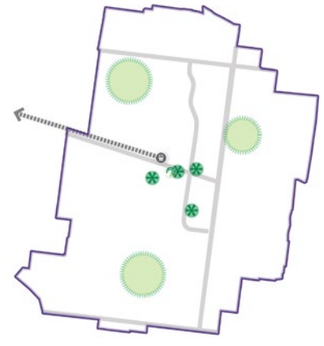
New open spaces should provide suitable opportunities for the community and address identified gap areas.



Strategy PR13: New open spaces

Introduce new open spaces where required.

New open spaces should provide suitable opportunities for the community and address identified gap areas.



Alignment with SRL Urban Design Framework:

Design Direction 4 will help to achieve the following SRL Urban Design Objectives:

- Objective UD1.1 Legacy
- Objective UD1.2 Future ready
- Objective UD1.4 Environmentally sustainable
- Objective UD2.1 Strategic alignment
- Objective UD2.2 Functional urban structure
- Objective UD2.4 Welcoming
- Objective UD3.4 Green network
- Objective UD4.1 Universally inclusive
- Objective UD4.2 Twenty-minute neighbourhoods
- Objective UD4.4 Safer design
- Objective UD5.2 Responsive
- Objective UD5.4 Healthy
- Objective UD5.5 Quality design
- Objective UD6.1 Amenity
- Objective UD6.2 Landscape values
- Objective UD6.4 Places for people
- Objective UD6.5 Activation.

3.4 Public Realm Framework

The Public Realm Framework has been developed by applying the relevant public realm design directions presented in Section 3.3. The key features of the framework are outlined below.

Public realm outcomes

Figure 3.7 outlines the broad strategic intent behind the public realm strategies proposed in this report. These are further detailed in the Public Realm Framework plan, Figure 3.8.

The actions needed to realise these strategies are detailed within Section 6: Outcomes.

Some of the key moves to enhance and integrate the public realm in the Structure Plan Area are outlined below.

- The dense mixed-use core will be supported by a network of vibrant and accessible streets to enhance and extend the existing vibrant regional destination
- Kingsway will improve and extend as a civic spine connecting the key public destinations and activities within the commercial retail core
- Accessibility and amenity of the Bogong Reserve will be improved to serve the increased population and activities within the high-intensity core
- A network of legible, high amenity, and intuitive active and public transport routes will connect the surrounding residential areas to the commercial/retail core and improve permeability and walkability across the Structure Plan Area
- Improved streetscape and new open spaces will maintain the 'Garden City' character of the suburb and enhance urban biodiversity links between public open spaces and reserves
- The communities on either side of Springvale Road will be integrated via improved pedestrian crossings.

Figure 3.7: Public realm outcomes

The following indicative sections illustrate the street typologies envisaged in the Public Realm Framework. Precedent case studies for each typology is provided in the SRL East Structure Plan - Urban Design Supporting Research - Attachment A.

Sections are typical and indicative only to communicate intended outcomes and to establish a hierarchy of streets. The final arrangement and design of the streets and associated infrastructure (including carparking, paths, landscaping etc) would be subject to further resolution that would consider the local context, site constraints, and other technical and relevant authority requirements.

Boulevard

Wide, generous primary road and public transport corridor that serves multiple uses and provides strong landscape and pedestrian outcomes including canopy trees and pedestrian crossing opportunities.

Figure 3.8: Indicative section, Boulevard

- Canopy tree planting and expanded understorey planting.
- Multi-modal transport opportunities.
- Pedestrian pathways, refuge and crossing points.
- Opportunities for public art.
- Potential threshold zones that promote pedestrian crossing / land use relationships.
- High quality furniture zones at regular intervals for pedestrians to pause and rest

Avenue

Wide and tree-lined ‘connector’ street that accommodates active and/or public transport with nodes of pedestrian amenity to create places for people to move and dwell.

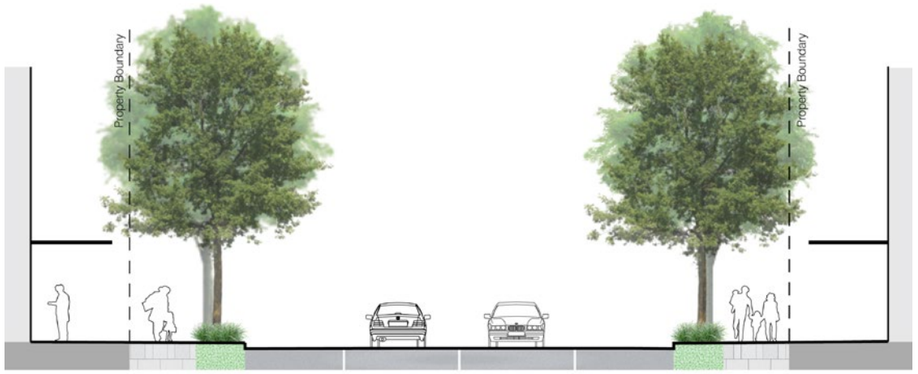


Figure 3.9: Indicative section, Avenue

- Public transport connectivity (bus stops / waiting zones)
- High amenity public transport waiting facilities for users
- Potential active transport link
- Streetscape and landscape outcomes
- Generous pedestrian zones
- Wayfinding, regular seating points and leafy shade

Activity Street

Highly urbanised street that supports public life and provides an attractive and comfortable pedestrian experience, with generous pedestrian circulation space, streetscape treatments that encourage activation of street frontages and provide durable, high quality materials.

Figure 3.10: Indicative section, Activity Street - Type A

Figure 3.11: Indicative section, Activity Street - Type B (Flush Kerb)

- High quality paving
- Street trees
- Expanded areas for outdoor dining and activity
- Awnings, shelter and lighting
- Under-storey planting and rain gardens
- Public street infrastructure (seating, lighting, drinking fountains, signage, creative and interpretive elements etc)
- PTV shelters and seating
- Micro mobility infrastructure storage (eg bicycle hoops)

Green Street

A broad classification for a collective network of local streets that should be prioritised for improvement due to their significance for sustainable travel and their ability to support pedestrian experience to key destinations (such as recreational facilities, public transport stops and stations and key employment areas), environmental outcomes, and bike and public transport routes.

Below is one example of how the intended outcomes for a Green Street could be achieved. Refer to SRL East Structure Plan - Urban Design Supporting Research - Attachment A.

Figure 3.12: Indicative section, Green Street - Type C - Cycling

- Street trees and biodiverse under-storey planting WSUD initiatives
- Active transport (walking and cycling) paths and connections
- Activity nodes and pause points with seating
- Street lighting to one side to light the full street
- Separation between transport modes
- Micro mobility infrastructure storage (eg bicycle hoops)
- Bus stop shelters and seating
- Indented parking for pick-up and drop off

Key links

New or improved links that provide connections to key destinations, or through large urban blocks or impermeable corridors (such as railway lines or arterial roads). These links typically have limited or no vehicular access, may include provision for cycling and seek to prioritise pedestrian circulation.

Critical links: connections that provide direct pedestrian access to the SRL station.

Important links: connections that reduce gaps in walking access to key destinations such as areas of employment or major open spaces and may support a biodiversity corridor.

Local links: connections that generally improve permeability and local walking access, particularly where there are long blocks or barriers preventing through movement.

Key links in the Public Realm Framework plan can be either ‘fixed’ or ‘flexible’. Fixed key links are where the location of the link has been established and it is unlikely to change. Whereas for flexible key links the exact location is still to be determined and may adjust to respond to an opportunity or circumstance, provided the link delivers on the intended outcome – whether this is to connect to a key destination (critical or important link) or to improve general permeability and walkability (local link).

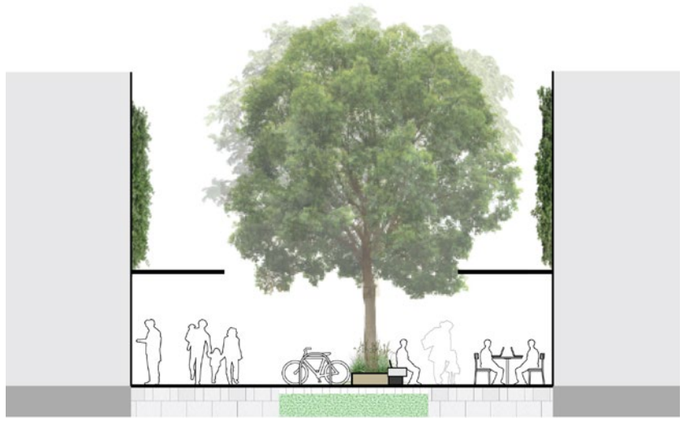


Figure 3.13: Indicative section - Type A - Urban amenity

Figure 3.14: Indicative section - Type C - Shared path

- CPTED, clear sight lines, lighting and wayfinding.
- Generous pedestrian and shared-use paths.
- Support activation through outdoor dining and urban furniture.
- WSUD and biodiverse vegetation.

Public Realm Framework

This plan illustrates the key elements of the public realm strategy.

Figure 3.15 shows the recommended new and improve pedestrian links and crossings in the Structure Plan Area, along with proposed new open spaces.

Legend

- SRL station
- Existing Glen Waverley Station
- Structure Plan Area
- SRL East alignment
- Boulevard
- Avenue
- Activity street
- Green street
- *Work with land manager / owner to improve links and access through site*
- Important key link (improved widened) - fixed / flexible
- Important key link (new) - flexible
- Local key link (new) - fixed
- Local key link (new) - flexible
- Existing open space
- Open space (new) - SRL Rail and Infrastructure project
- Open space (new) - planned / proposed
- Open space (new) - investigation area
- Pedestrian crossings (new or upgraded)
- Pedestrian crossings (new or upgraded) - SRL Rail and Infrastructure project

Transport Legend *

- Upgraded strategic corridor
- Active transport - C1, C2, C3

**Refer to the Structure Plan Transport Plan for more detail*

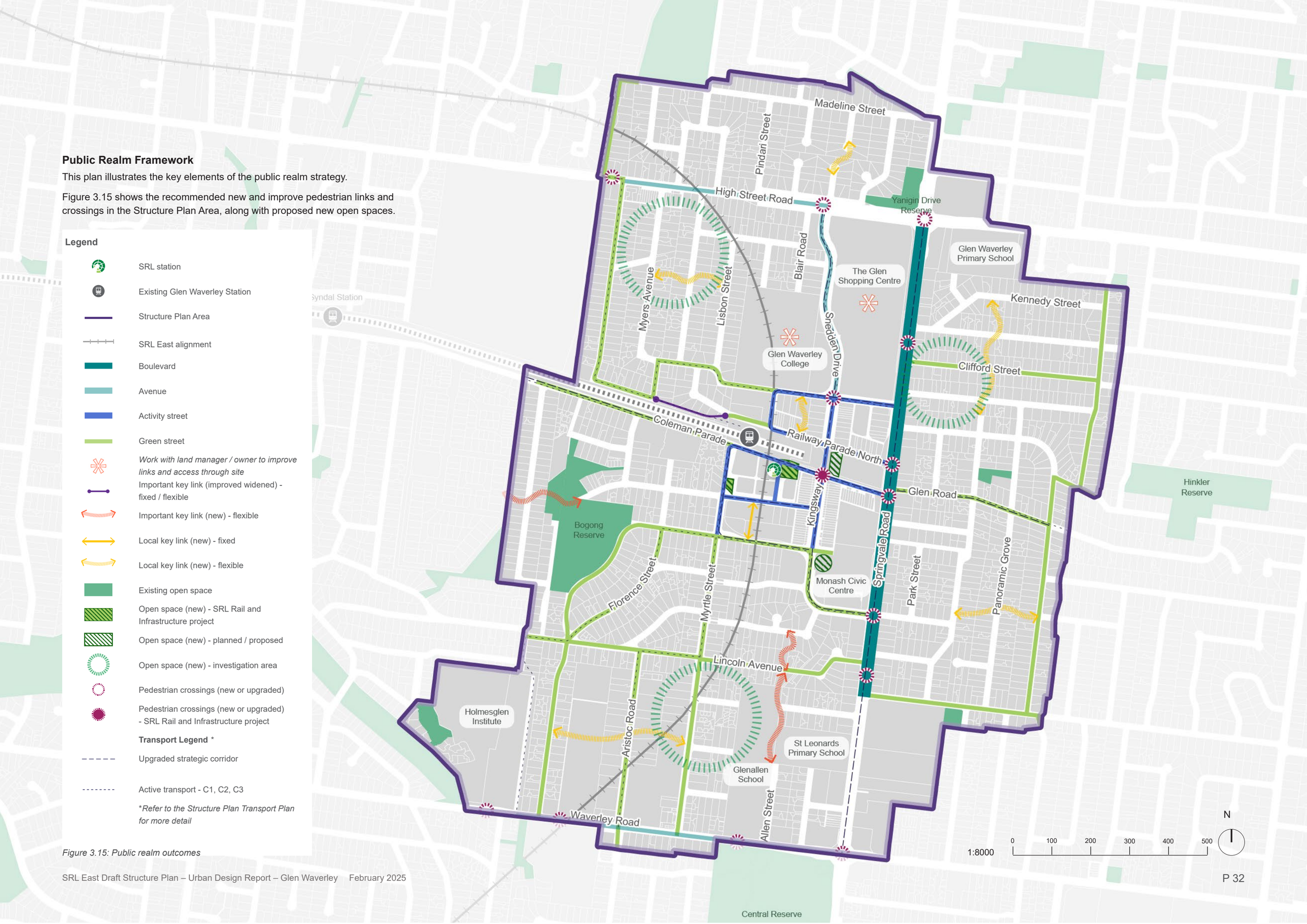


Figure 3.15: Public realm outcomes

4 Urban form

AJM
Joint Venture

4.1 Introduction

This section outlines an Urban Form Framework to achieve the Glen Waverley Vision. It summarises the analysis that underpins the framework, and sets out design directions and strategies.

The design directions, strategies and Urban Form Framework was informed by the SRL Urban Design Framework and the Glen Waverley Vision. This was supplemented by an analysis of the existing development conditions (see Appendix A) and extensive research into best practice urban development typologies provided in the SRL East Structure Plan - Urban Design Supporting Research - Attachment A.

The Urban Form Framework was developed concurrently with the Public Realm Framework, and Built Form Framework and each informs the other.

The methodology for developing the Urban Form Framework is summarised in Figure 4.1.

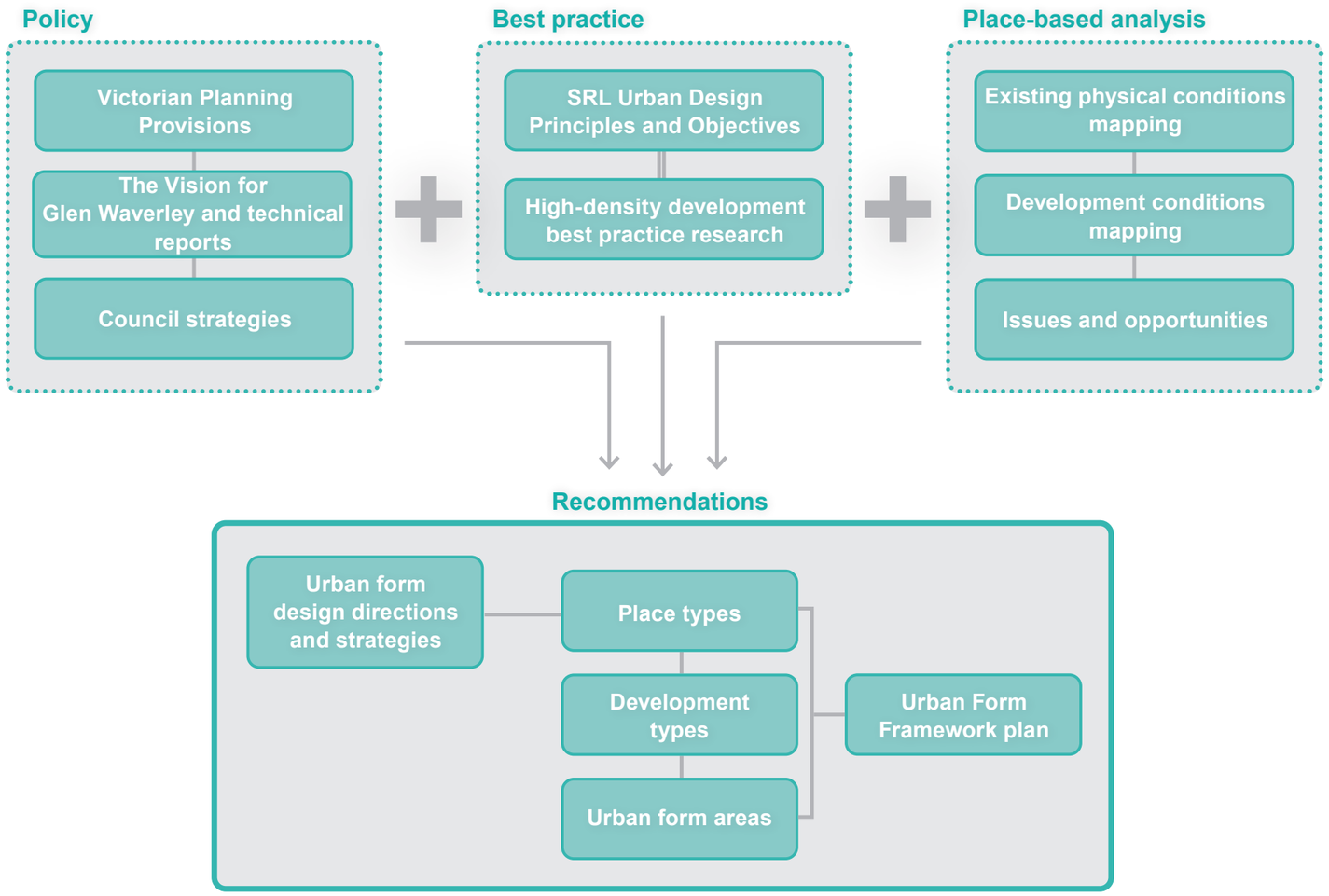


Figure 4.1: Methodology for developing the Urban Form Framework

4.2 Summary of analysis

Opportunities

Figure 4.2 shows the key opportunities the urban form analysis identified in the Glen Waverley Structure Plan Area.

These key issues and opportunities include:

1. Existing commercial/retail core between Kingsway and Springvale Road
2. Monash Civic Centre
3. Aristoc Road industrial area

Residential hinterland with an established landscape character and moderate tree density.

Open spaces within close proximity to the commercial/retail core.

Low rise residential area with lot sizes suitable to mid-rise building typologies.

Schools and educational facilities

Mixed use

Employment

Wide roads, which can accommodate mid-high density development and enhanced pedestrian infrastructure:

Highway

Key street / arterial road

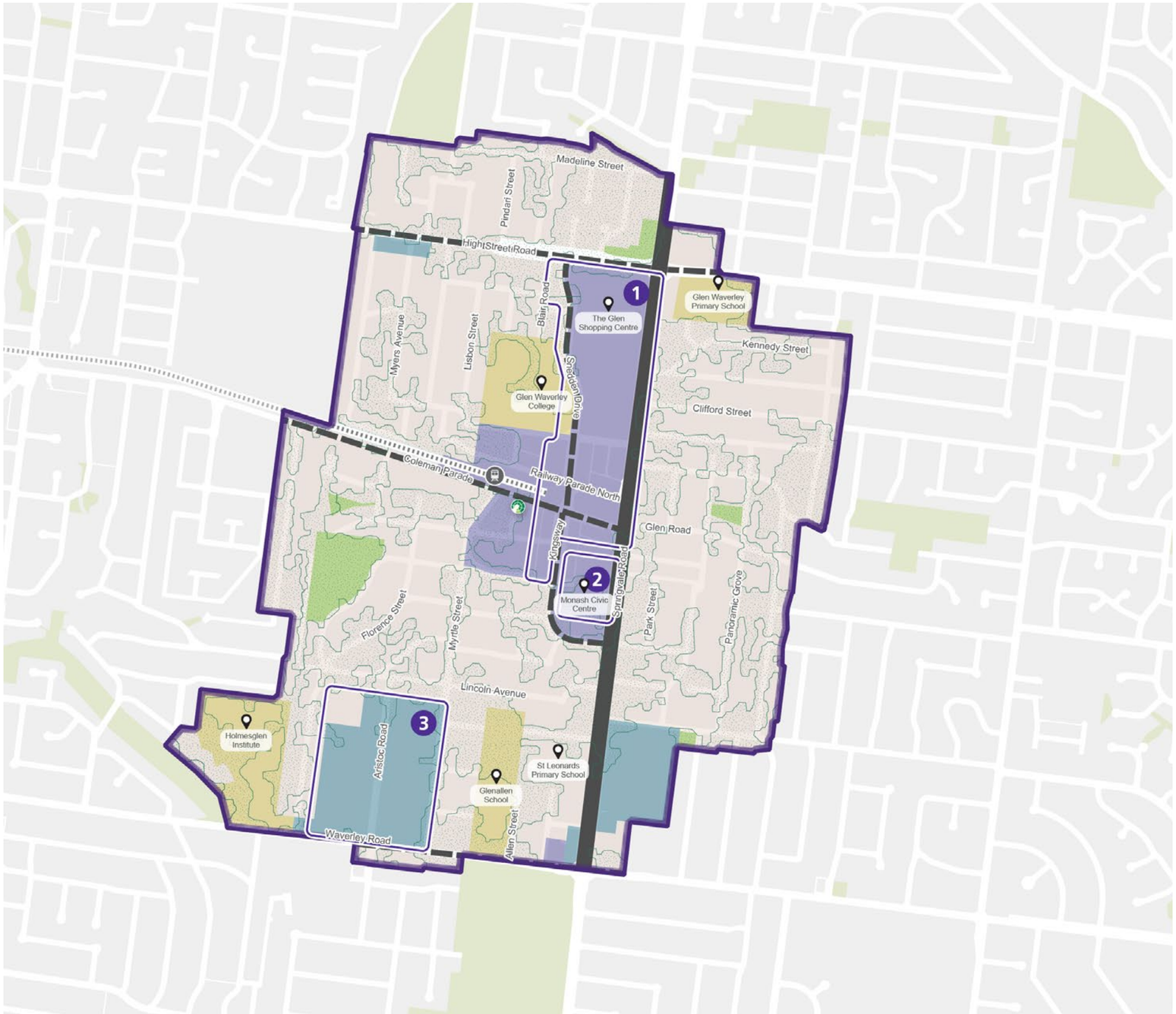


Figure 4.2: Opportunities for urban form

Legend

SRL station

Existing Glen Waverley Station

Structure Plan Area

SRL East alignment

Constraints

Constraints to change in urban form may relate to the lot pattern, lot ownership, existing development height or age, or character overlays associated with a specific property or group of properties within the Structure Plan Area. Combined, these constraints play a significant role in shaping the feasibility, nature of development and built form character that can be achieved within the Structure Plan Area.

Constraints to change in urban form have been categorised in order of significance (low to high) as follows:

- Lot size and ownership
- Character overlays
- Building heights
- Recently developed buildings.

Health and education land uses, existing buildings above 13 metres high and character restrictions, including heritage and significant landscape overlays, have also been included in the analysis.

The frequency and distribution of strata titled properties across the Structure Plan Area, will limit the development opportunities in some areas.

Small lots are found frequently in some areas, such as Clifford Street and Charlotte Street. The fine-grain retail strips along Kingsway, Coleman Parade and Railway Parade are also comprised of small lots which will hinder redevelopment.

There are some recent high-density developments concentrated near the existing Glen Waverley Station which are unlikely to be redeveloped in the short-medium term. Recent lower-density developments, including double-storey detached houses, are dispersed in residential areas which are also unlikely to be redeveloped in the short term.

Note: A range of constraints were identified across the Structure Plan Area. The more significant development constraints have been included on this page. Where a property is affected by multiple constraints, only the greater constraint is shown here. Further detail on the development constraints can be found in Appendix B.

Legend

- SRL station
- Existing Glen Waverley Station
- Structure Plan Area
- SRL East alignment
- Heritage Overlay
- Victorian Heritage Register
- Large landholders
- Large landholders - Education land use
- Small lots (0 to 400 square metres)
- Areas subject to flooding
- 2 to 3 residential strata titles
- 4 to 5 residential strata titles
- More than 6 residential strata titles
- Recent developments / unbuilt approvals > 12 storey
- Recent developments / unbuilt approvals < 12 storey
- Recent developments / unbuilt approvals < 8 storey
- Recent developments / unbuilt approvals < 4 storey
- Existing buildings > 13-metre height

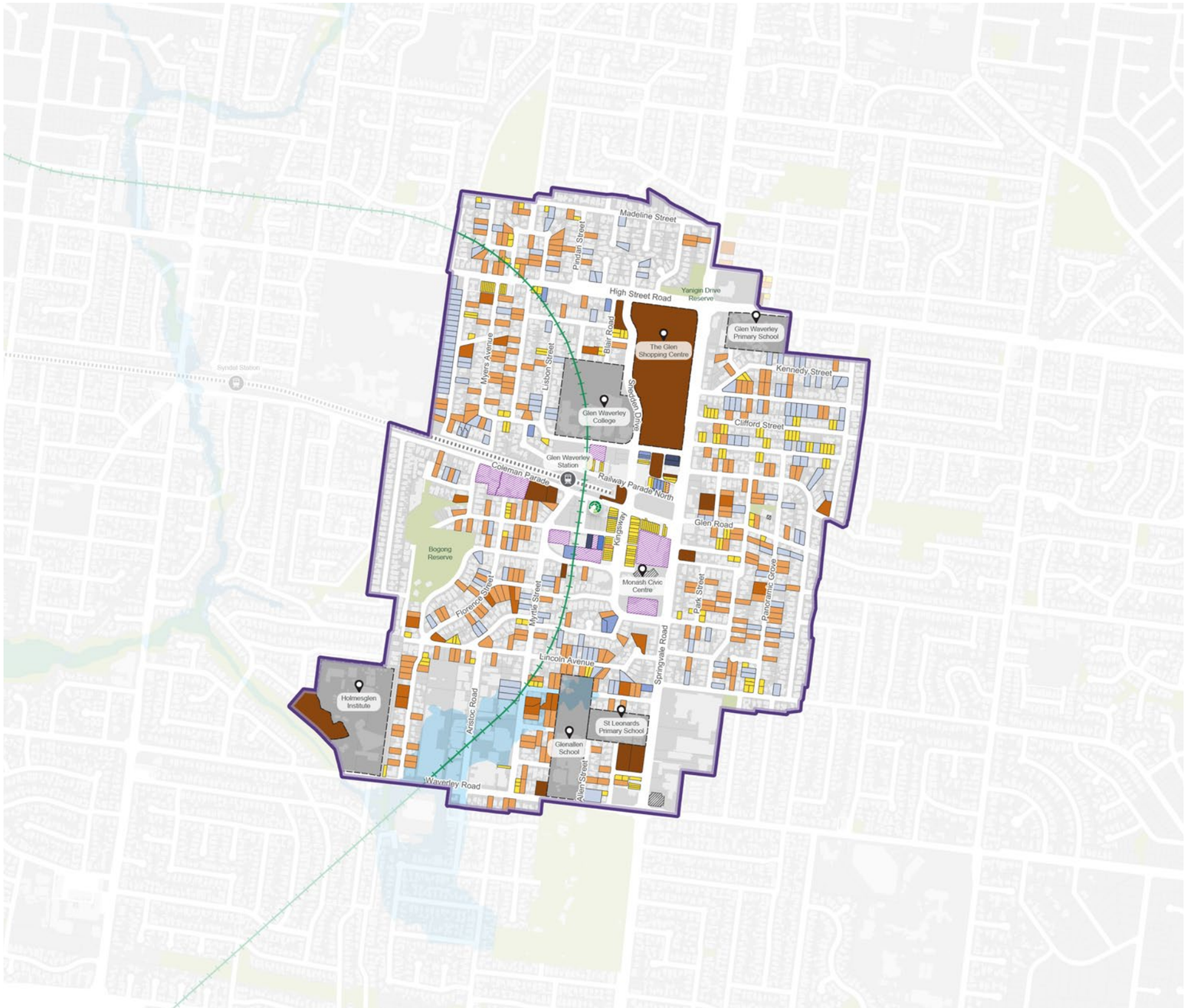


Figure 4.3: Constraints to change in urban form

4.3 Urban form design directions

This section outlines the urban form design directions to achieve the Glen Waverley Vision.

The design directions informed the development of the Urban Form Framework in Section 4.4 and the built form outcomes identified in Section 6.

The order of the design directions does not imply an order of priority.

Design Direction 5: Provide for growth in a form that delivers high amenity environments

Why is this important?

Substantial change

SRL will significantly amplify accessibility to employment, services, education and community facilities across Melbourne. Therefore, a substantial increase in residential development is warranted to enable more people to have good access to jobs and services. A significant increase in employment, health and / or education facilities close to the SRL station is also merited to improve accessibility to jobs and services for people elsewhere on Melbourne's rail network, further reinforcing the justification for increased residential density within the Structure Plan Area.

Denser areas with a mix of uses have an improved environmental performance, because they reduce travel distances and encourage sustainable modes of travel. They also increase support for local businesses, and make better use of existing infrastructure.

Increased residential density helps to create 20-minute neighbourhoods with local services within walking distance, supporting liveability and better health (as sought by Plan Melbourne 2017-2050). Denser areas offer a more vibrant environment and a more diverse range of opportunities for cultural and recreational experiences.

A significant increase in residential, commercial and employment uses within the Structure Plan Area is supported by Clause 11.01-1R of the Monash City Council Planning Scheme, which states that 'the Suburban Rail Loop will facilitate substantial growth and change in major employment, health and education precincts and activity centres beyond the central city at an appropriate scale to address the needs of Melbourne's rapidly growing population'.

The level of growth envisaged in the Structure Plan Area represents a transformative change in character. A significant uplift in development potential is also necessary to stimulate redevelopment.

Therefore, in general, existing character should not act as a constraint on the level of growth proposed. However, the built form design directions outlined in Section 5 seek to manage the transition over time between the existing and proposed future characters.

Development capacity

Demand for additional dwellings and jobs within the Structure Plan Area has been forecast to 2041. Consistent with orderly planning, the Structure Plan should provide for at least this level of growth, subject to acceptable amenity outcomes.

More specifically, the development capacity provided for by the Structure Plan should not be limited to the need to accommodate these forecasts for the following reasons:

- Demand is likely to continue to grow after 2041. If the Structure Plan sets built form parameters which limit growth to that needed to accommodate the forecast growth to 2041, it may not be possible to accommodate further demand given the likely predominance of strata-titled buildings that are difficult to redevelop
- Demand forecasting is an imperfect science - past experience indicates that the actual demand may be greater than forecast
- There is uncertainty about the rate of redevelopment and number of properties that will occur between now and 2024. If the Structure Plan relies on all properties being redeveloped to provide for the forecast demand but this does not occur, the demand will not be able to be accommodated
- It is State planning policy to encourage intensification close to public transport, jobs and other services to promote public transport and active transport over car dependency for a range of environmental, economic and social reasons.

Building scale

Given the Structure Plan Area's very high level of accessibility to education, jobs and public transport, and the benefits of urban density, it should generally have a level of intensification greater than that intended for the surrounding residential hinterland or close to most other passenger stations or activity centres within Melbourne (other than Central Melbourne and the other SRL Structure Plan Areas), which are less well served by jobs and public transport.

Residential zones generally support building heights of 2 to 4 storeys, and phase 2 of the *Future Homes* initiative is planned to support heights of 5 storeys in the General Residential Zone within 800 metres of a passenger station or any activity centre. Therefore, in general, building heights within the Structure Plan Area should be at least 6 storeys to capitalise on the planned accessibility to jobs and public transport.

Exceptions to this may include areas with heritage values, an identified special character, areas relatively distant or disconnected from the SRL station, or where development is relatively constrained.

Building form

As noted above, greater density has a range of benefits. However, if designed poorly, it can adversely affect the public and private amenity of an area, and therefore its attractiveness as a place to live, work and play. Tall buildings cause longer shadows and tend to have greater wind effects. Bulky buildings reduce access to daylight and sky views. These effects are increased in relatively narrow streets.

Therefore, higher-density development needs to be shaped to ensure a high standard of amenity.

What is happening now in Glen Waverley?

The majority of the Structure Plan Area is comprised of 1 to 2-storey dwellings. Some multi-unit infill mid-rise buildings are found in areas closer to the train line and main roads.

Larger footprint civic, commercial and industrial buildings are located in the centre and south of the Structure Plan Area. Taller residential podium towers are present along the western edge of Springvale Road and within the commercial/retail core. These are commonly 2 to 3 storey podiums with 14 storey towers on top (40 metres in total).

Most streets within the Structure Plan Area are 15 to 20 metres wide (road reserve width), and typical lot sizes are 15 to 20 metres wide and 30 to 45 metres deep.

Alignment with SRL Urban Design Framework:

Design Direction 5 will help to achieve the following SRL Urban Design Objectives (see Section 2.3):

- Objective UD1.1 Legacy
- Objective UD1.2 Future ready
- Objective UD1.3 Resilient
- Objective UD1.4 Environmentally sustainable
- Objective UD5.2 Responsive
- Objective UD5.3 Sensitive
- Objective UD5.5 Quality design.

How can this direction be achieved in Glen Waverley?

Strategy UF1: Substantial change

Provide for higher-density development throughout the Structure Plan Area, except in isolated, sensitive or constrained areas.

Strategy UF2: Mid-rise development

Promote mid-rise development throughout the Structure Plan Area, except immediately around the SRL station where high-rise buildings are preferred.

Higher-density development within the Structure Plan Area will deliver growth in this extremely well-serviced location, and the environmental, economic, liveability and health benefits of urban density.

In order to reflect the greater accessibility of this location to jobs and services, building heights should be generally greater than 5 storeys. However, a lower height may be appropriate in isolated, sensitive or constrained areas as follows:

1. Isolated areas are those more than approximately 10 minutes by foot or local public transport from a train station or major employment, health or education campus, which are considered to have lesser accessibility to public transport or jobs, and therefore less suitability for intensification. Exceptions to this include properties:
   - Fronting a large open space, whose amenity benefits should be capitalised upon
   - Large enough to form a distinct character pocket.
2. Sensitive areas are pockets of land with particular sensitivities that limit the appropriateness of greater height, including:
   - On the north side of a narrow open space
   - Affected by a Heritage Overlay and in the outer parts of the Structure Plan Area
   - Affected by a Neighbourhood Character Overlay
   - Adjacent to properties zoned GRZ or NRZ outside the Structure Plan Area.
3. Constrained areas are those where comprehensive redevelopment is relatively unlikely due to a high proportion of:
   - Properties with more than 3 strata-titled lots
   - Small or narrow lots.

Most streets within the Structure Plan Area are 15 to 20 metres wide (road reserve width), and typical lot sizes are 15 to 20 metres wide and 30 to 45 metres deep. Mid-rise buildings (those between 5 and 12 storeys) are the most appropriate way to provide for substantial growth in these circumstances because they can deliver higher densities while maintaining good public realm and internal amenity.

In particular, the typical street widths and lot sizes can accommodate mid-rise buildings without unreasonable shadow, visual and wind impacts[1]. Mid-rise buildings can also be sited and shaped in a way that manages their impact on the existing character of low-rise areas[2,3].

Mid-rise buildings have a range of other attributes that would complement the opportunities provided by higher-rise and lower-rise buildings. These include:

- Research indicates that mid-rise residential buildings have positive outcomes in terms of social connectedness and well-being[4,5]
- Mid-rise buildings are said to be suitable for families, because parents are able to supervise children's outdoor play[6]
- Mid-rise development is less expensive to build than taller buildings per square metre of sellable or leaseable area, likely because of the lesser requirements for structure and services[7]
- Mid-rise residential development is more likely to be owner-occupier standard than speculative investor-grade housing
- Mid-rise apartments offer a distinctly different housing choice, compared with high-rise buildings and townhouses[8,9]
- Fewer properties need to be amalgamated to create a mid-rise development site than a high-rise development site
- The same number of dwellings is spread across more mid-rise than high-rise buildings, increasing competition between developers and choice for purchasers and renters
- There is a greater number of developers and builders who can create mid-rise than high-rise buildings, increasing the capacity of the industry to deliver the desired number of dwellings and increasing competition between them.

Adopting a mid-rise development pattern across the Structure Plan Area would result in the same amount of growth being spread over a larger area. Given that the factors listed above are strongest for residential buildings, and commercial buildings have a stronger need to be close to the SRL station and activity centre, the mid-rise preference is not recommended to be applied in the vicinity of the SRL station.

Mid-rise buildings range from 5 to 12 storeys. Therefore, a general preference for this form of development does not preclude the potential for distinct characters within the Structure Plan Area.

Mid-rise precedents

1. *https://www.ausgrid.com.au/-/media/Documents/Reports-and-Research/Energy-use-research/Multi-Unit-Residential-Building spdf?la=en&hash=205EBFE983FCBB5B3545165D5E5C510520FFD18B*
2. *Gifford, Robert. (2007). The Consequences of Living in High-Rise Buildings. Architectural Science Review. 50. 2-17. 10.3763/asre.2007.5002. https://www.researchgate.net/publication/233490985_The_Consequences_of_Living_in_High-Rise_Buildings*
3. *Heenan, Dr Rachel (2017) Healthy Higher Density Living for Kids, NSW Government & City of Parramattapdf?la=en&hash=205EBFE983FCBB5B3545165D5E5C510520FFD18B*

Design Direction 6: Establish diverse, liveable and productive neighbourhoods

Why is this important?

Clusters of buildings with similar scale and massing contribute to distinct place identities. The variation between these identities enhances the experience and legibility of the broader urban area. Varied building types also contributes to a diverse range of housing and business accommodation types, creating a more mixed and balanced community.

As noted in Strategy UF2: Mid-rise development, mid-rise buildings generally range from 5 to 12 storeys and are no greater than 15 storeys. Therefore, a general preference for this form of development need not result in uniform character outside the area around the SRL station. Distinct characters can be created by adopting a more specific height range within the mid-range scale, along with particular building siting and setback parameters (and land use mixes).

These built form choices should be based on the particular characteristics of the area and factors such as:

- Accessibility to public transport, jobs and services
- Housing choice, affordability and diversity
- Desired land use, including an aspiration to connect distinct activity nodes
- Accessibility to parkland
- Valued existing character including urban structure and topography.

In summary, specific built form attributes should be promoted in different parts of the Structure Plan Area, to create places with distinct identities, contribute to legibility, facilitate housing and business accommodation diversity across the whole area, and to support the land use and transport aspirations for those urban form areas.

Main streets

Although the aspiration to accommodate growth generally outweighs that to maintain the existing character, activity centres featuring fine-grain main streets are an exception. This is because their narrow lots present a particular challenge for viable floorplates, disincentivising redevelopment compared with other locations. Their fine-grain subdivision pattern also creates a distinctive character of small tenancies that support local, independent retailers. This character contributes to a more engaging public realm and is generally highly valued by local communities.

Existing small retail strips have a different character and present an opportunity to be comprehensively redeveloped due to their relatively small size. Therefore, these areas are proposed to have bespoke outcomes that complement their surrounding retail character.

The challenges of redeveloping narrow lots mean that it is likely that many such lots in a strip will remain undeveloped for the foreseeable future. Therefore, the form of development that is promoted in such areas should complement the existing fine-grain, low-rise character.

Public transport oriented development

Denser development supports greater use of public transport that is within easy reach. However it can also change the character of an area and the amenity its public realm and private spaces.

In each part of the Structure Plan Area, there is a need to strike a balance between providing for growth and moderating change to amenity and character. This balance should be weighted towards growth in the central core and SRL station environs, where access to jobs and services is greatest, and the need for sensitivity to existing character within and immediately outside the Structure Plan Area is least.

In contrast, it should be weighted towards maintaining the existing amenity and complementing the existing character towards the edges of the Structure Plan Area (without ignoring the need for growth). The areas between the core and edge should have a more balanced weighting.

This pattern creates the classic cone form of increasing building scale towards the centre of the Structure Plan Area, which contributes to the legibility of the broader area. The gradient of this cone should respond to the scale of public transport, jobs and services in the core, such as reaching taller buildings in centres with more than one rail line and/or a particularly significant number of jobs, such as Box Hill / Monash / Clayton and lower buildings in centres with only one rail line and/or a lesser number of jobs, such as Burwood.

Main roads generally carry public transport and are wider than local streets. Public transport provides a high level of accessibility to jobs and services. Greater width enables taller buildings to be accommodated without overwhelming the street. Therefore, denser buildings should be provided for along main roads. A mix of commercial and residential uses is appropriate to capitalise on the higher level of accessibility, along with adaptable buildings able to respond to changes in market demand for different uses. Denser, mixed-use buildings will contribute to a distinct ‘boulevard’ character.

Land use facilitation

Different forms of development facilitate different land use outcomes. For example:

- Taller buildings contribute to more vibrant environments, suited to commercial uses, and lower buildings support quieter places with higher environmental amenity, suited to residential uses
- Larger floorplates support commercial uses and narrower floorplates support residential uses
- Some industrial uses require large to very large floorplates with generous loading areas
- Buildings that are built close to the street frontage support commercial uses (notably those forming a continuous street wall for retail uses) and those that are set back from the street and freestanding provide more privacy and amenity for residential uses.

Demand for different uses varies over time, and is not possible to predict with any accuracy. Designing adaptable buildings that can accommodate a land use change over time is one possible solution. Adaptable buildings facilitate changes in use without the need for redevelopment, which is environmentally and financially costly. Adaptability is supported by a modest street setback, ground floor facades oriented towards the street, generous floor-to-floor dimensions to support commercial uses, and relatively shallow floorplates to provide good internal residential amenity.

Areas immediately adjacent to the commercial / retail core with an existing medium-density character are most suited to accommodate mixed-use and adaptable buildings, because they are contiguous with existing commercial activity and because the change in built form character is less abrupt than it would be in lower-density areas.

Diversity of housing

As discussed in Design Direction 5, residential typologies need to provide a diversity of housing options, allowing for future residents to have access to suitable ‘right sized’ and affordable accommodation. Accommodating for these diverse housing options will result in different areas requiring a different place identity.

Employment neighbourhoods

Areas with a high concentration of employment uses require careful consideration of the ambitions and expectations of these industries to ensure the built form and public realm support them. To attract and foster technology-led life science, health and education sectors, these neighbourhoods need to be sustainable, connected and desirable places. These areas need to support the needs of all-hour workers by ensuring a safe and attractive public realm at night and day. The public realm and built form should also foster incidental social connections and transfer of knowledge between workers.

Alignment with SRL Urban Design Framework:

Design Direction 6 will help to achieve the following SRL Urban Design Objectives (see Section 2.3):

- Objective UD1.1 Legacy
- Objective UD1.2 Future ready
- Objective UD1.4 Environmentally sustainable
- Objective UD2.1 Strategic alignment
- Objective UD2.2 Functional urban structure
- Objective UD2.3 Integration with context
- Objective UD2.4 Welcoming
- Objective UD3.1 Linkages
- Objective UD3.2 Transport integration
- Objective UD3.3 Legible
- Objective UD3.4 Green network
- Objective UD4.2 Twenty-minute neighbourhoods
- Objective UD5.2 Responsive
- Objective UD6.1 Amenity
- Objective UD6.3 User experience
- Objective UD6.5 Activation.

What is happening now in Glen Waverley?

The Glen Waverley Activity Centre holds multiple key destinations, including The Glen Shopping Centre and Glen Waverley Library located along Kingsway, which is one of the main attractions in the area, with a diverse retail offer and hosting cultural events throughout the year.

Retail areas are generally characterised by commercial buildings built to the front boundary and may have shop top dwellings or offices.

Multi-storey and at-grade parking dispersed throughout the commercial/retail core significantly impacts the experience of the public realm environment and the perception of cohesive character along Kingsway.

Outside the commercial/retail core is predominantly residential areas which are characterised by low-rise detached dwellings in a garden setting.

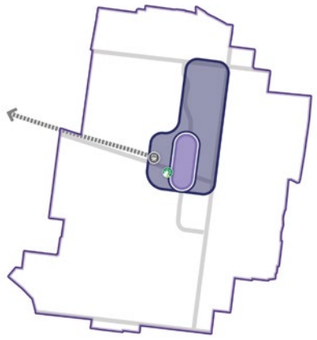
The employment area to the south of the Structure Plan Area preserves the built fine-grain industrial character, with a cluster of auto-repair shops and wholesale warehouses along Aristoc Road and Myrtle Street but with some areas transitioning to educational and personal services, including gyms, art schools, dance academies, badminton courts, martial arts centres, among others.

How can this direction be achieved in Glen Waverley?

Strategy UF3: Vibrant core

Promote higher-density mixed-use development in the Structure Plan Area core.

Taller built form should be facilitated within the commercial / retail core to complement the existing and desired built form intensity of the area, while supporting a range of land use types.

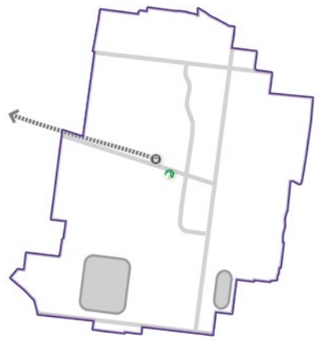


High-rise precedents

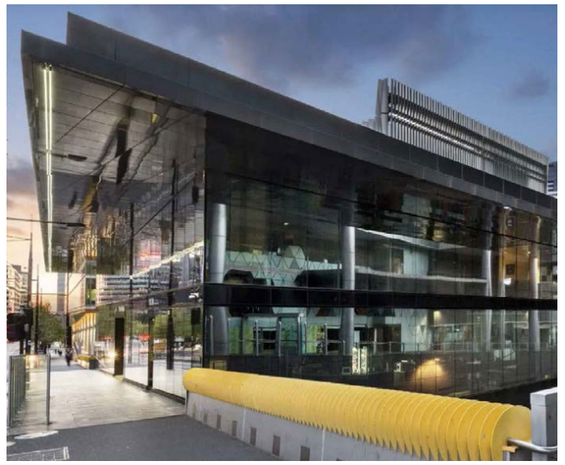
Strategy UF4: Enterprise neighbourhoods

Provide for fine-grain and large lot enterprise land uses.

The enterprise neighbourhood should support the moderate intensification of jobs growth, providing space for enterprise businesses in small or large footprint buildings. The landscape character and street level activation of this area should be enhanced.



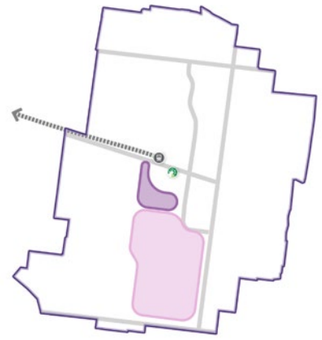
Enterprise neighbourhood precedents



Strategy UF5: Mixed-use neighbourhoods

Facilitate mid-rise mixed-use neighbourhoods adjacent to the urban core or nearby transport nodes.

An adaptable building typology which can accommodate a range of land uses and has a commercial-capable ground floor design should be provided in mixed-use neighbourhoods.

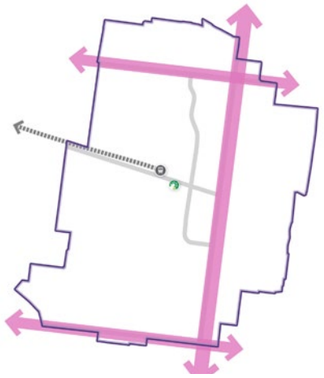


Mixed-use precedents

Strategy UF6: Boulevards and Avenues

Facilitate continuous, mixed-use, mid-rise built form along main roads.

Buildings should strongly frame the wide roads, and provide an adaptable building typology with commercial-capable ground floors.

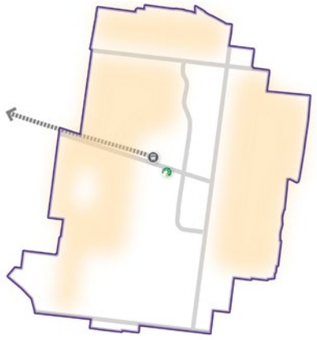


Boulevards and avenue precedent

Strategy UF7: Residential neighbourhoods

Promote low to mid-rise apartment buildings and townhouses in a garden setting in most residential neighbourhoods.

Buildings should promote the existing garden setting and feature front, side and rear landscape setbacks on single and consolidated lots.

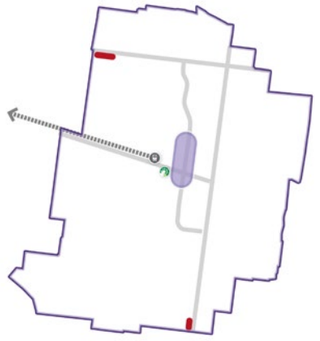


Residential precedent

Strategy UF8: Main streets and existing small retail strips

Complement the fine-grain, low-rise character of local shopping strips.

Main street buildings and buildings located within existing small retail strips should complement the existing scale and rhythm of the streetscape, maintain amenity to the public realm and support a retail ground floor.



Main street precedent

Place types

As a result of the urban form design directions and strategies, a pattern of distinct place types has emerged within the Structure Plan Area.

Each place type represents a different urban form outcome which capitalises on its existing attributes and supports its desired land use function, reinforcing their collective diversity, individual identity and sense of place.

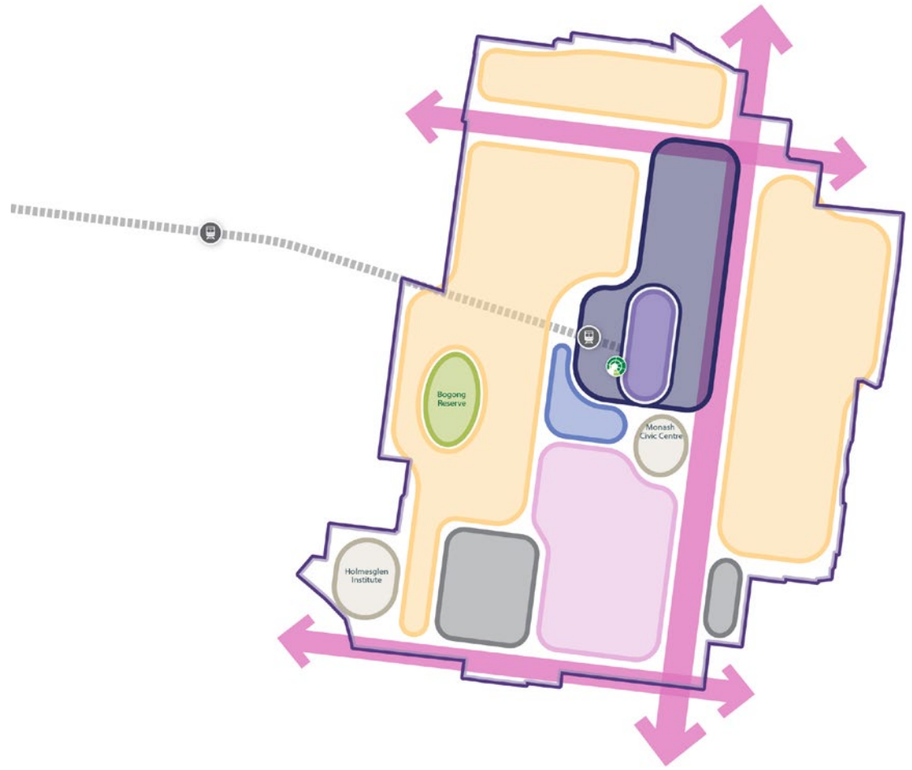


Figure 4.4: Urban form outcomes

Development types

A range of development types was explored for each place type based on their specific opportunities and constraints, and desired land use outcomes.

While the development types were employed to develop the Urban Form Framework for the Structure Plan Area, the proposed typologies are indicative and, in reality, a range of built form outcomes is likely to occur.

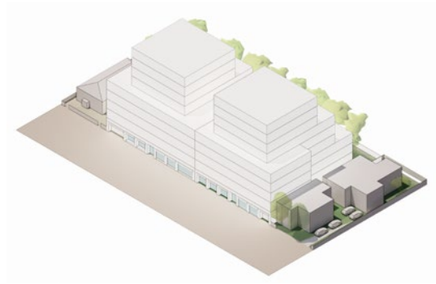
The development types were informed by research into best practice development typologies, contained in SRL East Structure Plan - Urban Design Supporting Research - Attachment A.

Place type: Central Core

The development type recommended in the Central Core is the high-rise podium-tower. Medium-high rise towers in the form of podium-tower buildings can deliver the level of intensification envisaged for the Central Core. Smaller lots will require lot amalgamation to enable the development of podium-tower buildings.

Provided it is appropriately-scaled, the podium provides a street-edge form that facilitates good public realm amenity in terms of human scale, sky views, sun and wind conditions, and complements the existing character, which generally comprises low-rise street walls. Best practice podium-tower design includes active street facades with any above-ground car parking ‘sleeved’ behind other uses, and well-separated towers with generous setbacks.

A mix of uses is necessary to deliver the desired vibrancy and activation. The podium-tower format enables a range of retail types in the podium and office and/or residential uses above.



Place type: Central Flanks

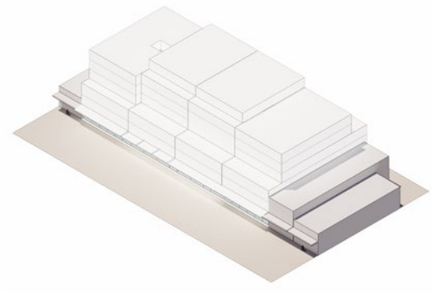
The development type recommended in the Central Flanks is the mid-rise podium-tower. It delivers high density while maintaining good solar provision to the public realm. This type typically requires a large lot or lot amalgamation.

The zero front setback and lack of side setbacks at the base of the building ensure a highly-activated and strongly-framed public realm. This will complement the prevailing existing character of low-rise buildings.

The strong relationship with the street also supports commercial uses at ground and potentially upper levels to provide the desired vibrancy and activation. Best practice design provides for car parking in a basement or ‘sleeved’ behind other uses.

Behind the street wall, the base of the building is set back from the side and rear boundary to provide space for tree planting. This typology provides a 5 to 10 per cent deep soil area at the sides and rear of the lot.

Above the street wall, the upper levels are setback from all sides to maintain sunlight, sky views and a sense of openness in the public realm. These setbacks also maintain good internal amenity and equitable development opportunities on neighbouring properties.



Place type: Main Streets

The development type recommended in the Main Street place type is shoptop infill.

This development type provides for employment and housing growth and increased vibrancy, particularly outside retail hours, while complementing the existing character and providing a high level of pedestrian amenity.

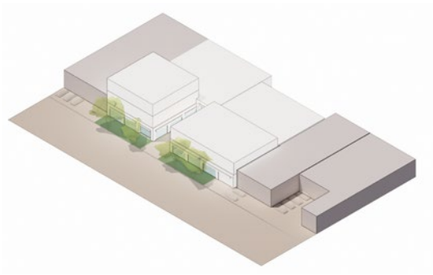
It relies on the amalgamation of up to three typical lots, to create a feasible site width.

The proposed type incorporates a 2 to 3-storey, zero setback, boundary-to-boundary street wall that will complement the existing vibrant and memorable character created by low-rise, continuous, active streetscapes.

The street wall is articulated to reflect the existing fine-grain character and activated by commercial ground floor uses.

Above the street wall, upper levels are set back to ensure an appropriate balance between openness and enclosure in the street, along with good solar access.

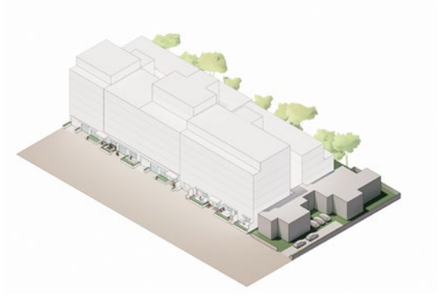
The proposed use-mix varies with the role and function of the urban form area.

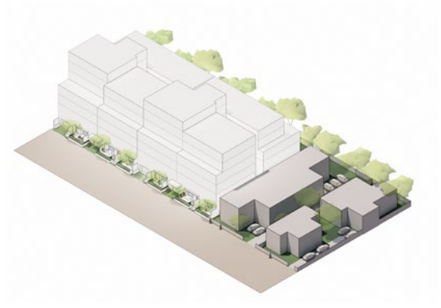


Place type: Enterprise Neighbourhood

A range of development types are envisaged in Enterprise Neighbourhoods. In order to host a wide range of employment uses. This may include a freestanding building on larger or amalgamated lots, or a boundary-to-boundary infill building on narrower lots.

Importantly, buildings in these areas should position loading and servicing activities away from the street frontage, and instead address the street with their most active uses and incorporates a modest landscaped setback. This will contribute to a more inviting streetscape, attracting new businesses to the area. This typology provides a 5 to10 per cent deep soil area at the front of the lot.





Place type: Residential Neighbourhoods

The development types recommended in the Residential Neighbourhoods are the garden apartments, which are apartments on amalgamated lots, generally equal or greater than 24 metres in width, and townhouses on single lots, generally less than 24 metres in width.

The garden apartment development type provides for the same type of development on amalgamated lots as proposed in Phase 2 of the Future Homes program or, going back further, the art deco apartment boom of the 1920s and 30s, but with a slightly increased density, which is considered appropriate because these areas are within walking distance of a higher order (SRL) station. However, the density is limited to mediate the transition in character and provide a different housing choice than that offered in other urban form areas. In particular, approximately 20 per cent of the apartments will have generous ground level gardens, making them suitable for families.

The development of 4 to 6-storey garden apartments rely on the amalgamation of two typical lots, generally equal or greater than 24 metres in width, which is necessary to deliver higher-density while providing good-quality internal amenity and providing a well-landscaped perimeter.

Importantly, lot amalgamation enables generous side and rear setbacks which will provide for high-quality on-site amenity and significant contribution to tree canopy cover. This typology provides a 35 per cent deep soil area across the front, sides and rear of the lot.

The substantial provision for canopy trees in front, side and rear setbacks will retain and strengthen the leafy character that predominates in these areas. These trees will significantly mitigate the visual presence of taller buildings on the existing streetscape and backyard character of these areas

The development of 3-storey townhouses with lesser side setbacks are appropriate on typical single lots, generally less than 24 metres in width. Low front fences and front doors and windows facing the street will provide passive surveillance of the street.

Place type: Key Movement Corridors and Urban Neighbourhoods

The development type recommended in the Key Movement Corridors and Urban Neighborhoods is urban infill. These highly adaptable buildings are able to accommodate commercial and / or residential uses. They deliver moderately high density along main roads, in accordance with Strategy UF6: Boulevards and Avenues, without the potentially adverse impacts of taller buildings on local character and amenity. Importantly, this development type can be developed on the vast majority of the lots found in these urban form areas without the need for lot amalgamation.

Urban infill development provides a vibrant and memorable urban character, good private amenity and protection of neighbouring amenity to the rear, adaptability for mixed and changing uses, and reasonable space for tree canopy cover. The minimal front setback and lack of side setbacks ensure a well-activated and strongly-framed public realm. The strong relationship with the street also supports commercial uses at ground or upper levels where desired.

The primary orientation of accommodation to the street and middle of the block enables differing uses to comfortably exist side-by-side where relevant. Generous rear setbacks ensure good amenity for accommodation facing towards the middle of the block, including adjacent properties to the rear, and space for tree planting.

As the Key Movement Corridors and Urban Neighbourhoods evolve through new urban infill development, they will experience a substantial change in character. As noted in Design Direction 5, this is considered to be an inevitable outcome of the vision for transformational change.

This kind of transition in character is consistent with other transforming areas such as Brunswick Activity Centre, Cremorne and Box Hill between Whitehorse Road and the hospital. Low-rise dwellings will no longer represent the preferred character, and will increasingly become anomalies.

The sheer on-boundary side walls of urban infill development will change the amenity of any neighbouring low-rise dwellings to the side However, the lack of side setbacks is necessary to enable viable development of appropriate density on single lots and avoid constraining development on neighbouring properties to the side, in accordance with Strategy BF11: Building orientation. The introduction of side setbacks to protect the existing amenity and character would mean that lot amalgamation is required to achieve a viable floorplate, and greater height is needed to maintain the density envisaged by Strategies UF5: Mixed-use neighbourhoods and UF6: Boulevards and Avenues.

The majority of lots in this place type are occupied by detached dwellings whose primary orientation is towards the street and a rear garden, rather than towards side boundaries. Therefore, the impact of sheer on-boundary side walls will be generally limited to the secondary rooms that face side boundaries.

Urban Infill development is proposed to have a generous rear setback, which will limit its impact on the amenity and equitable development of neighbouring rear gardens. The rear setbacks of existing and future development will ultimately combine to form a large green space in the middle of the block.

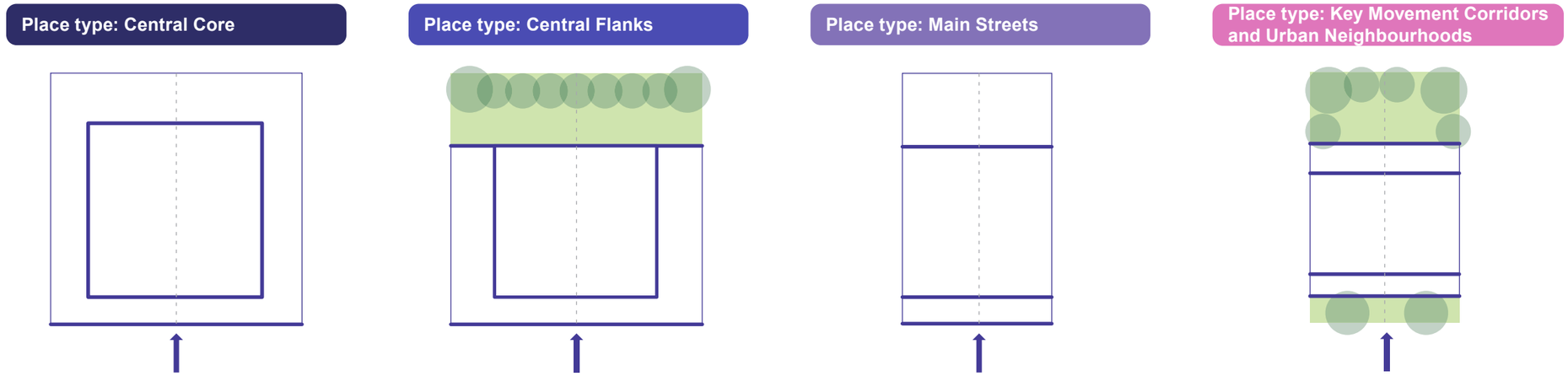
The building height and upper level street setbacks vary based on street width to ensure an appropriate balance between openness and enclosure in the street, along with reasonable solar access. In the Key Movement Corridors, urban infill provides a taller street wall, with upper levels maintaining a 1:1 ratio with the street. In the Urban Neighbourhoods, it provides a street wall equal to the street width, with upper levels setback to maintain an open character.

This development type includes a landscaped front setback as well as a generous, landscaped rear setback, resulting in a combined 10 to 15 per cent deep soil area.

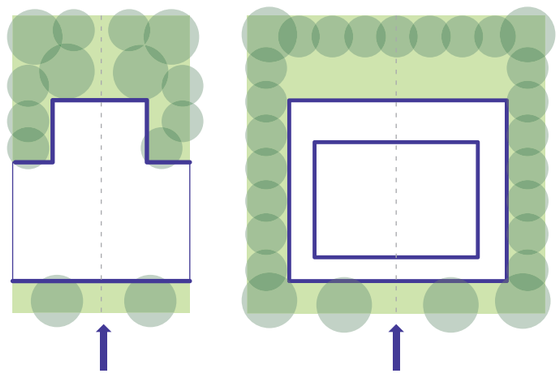
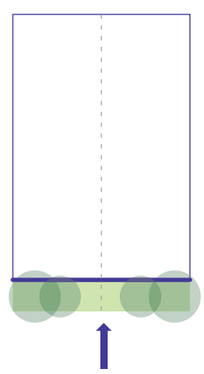
The proposed use-mix varies with the role and function of the urban form area.

Development type outcomes

The following diagram provides a comparison of the general outcomes achieved by each development type.



Height	More than 15 storeys	9 storeys	7 storeys	8 storeys
Density	More than 6:1	4:1	4.5:1	3.5:1
Deep soil area and canopy trees	0 per cent	5 to 10 per cent	0 per cent	10 to 15 per cent
Use mix	Mixed-use	Mixed-use	Mixed-use	Mixed-use
Application	Commercial/retail core / SRL station area	Outer core	Mixed-use or retail streets	Mixed-use or Higher-density area

	Place type: Residential Neighbourhoods		Place type: Enterprise Neighbourhood
			
Height	2 to 3 storeys	4 to 6 storeys	2 to 6 storeys
Density	1.2:1	2:1	-
Deep soil area and canopy trees	20 to 25 per cent	35 per cent	5 to 10 per cent
Use mix	Residential	Residential	Mixed-use
Application	Residential area - single lot	Residential area - two lots	Employment

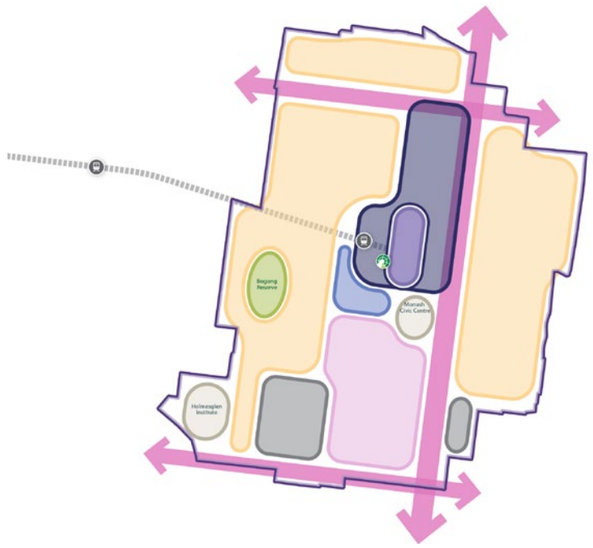
4.4 Urban Form Framework

The Urban Form Framework outlines the future urban form and land use attributes for the Structure Plan Area. It has been developed by refining the pattern of place types into collections of more precise urban form areas within the Structure Plan Area based on:

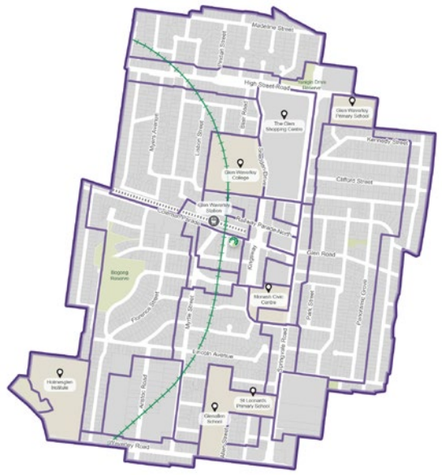
- Existing urban structure such as Key Movement Corridors barriers and key anchors (see Section 2.5)
- Existing character attributes
- Areas with a similar level of constraints to urban form change (see Figure 4.3)
- Existing land use pattern
- Glen Waverley Vision
- Land use directions.

The urban form areas are outlined on the following pages.

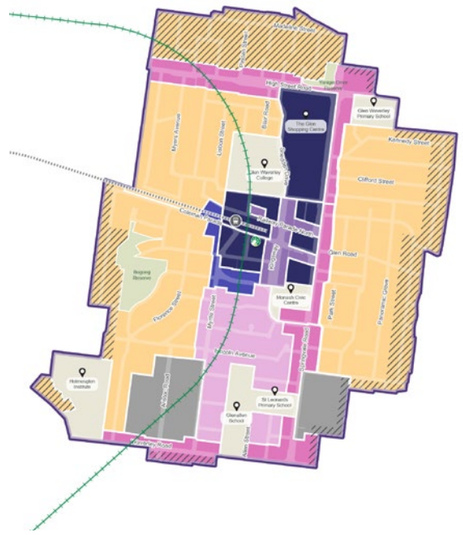
Place types



Urban form areas



Urban Form Framework



4.5 Urban form areas

Figure 4.5 identifies the future urban form areas and the following pages describe their attributes, grouped by place types.

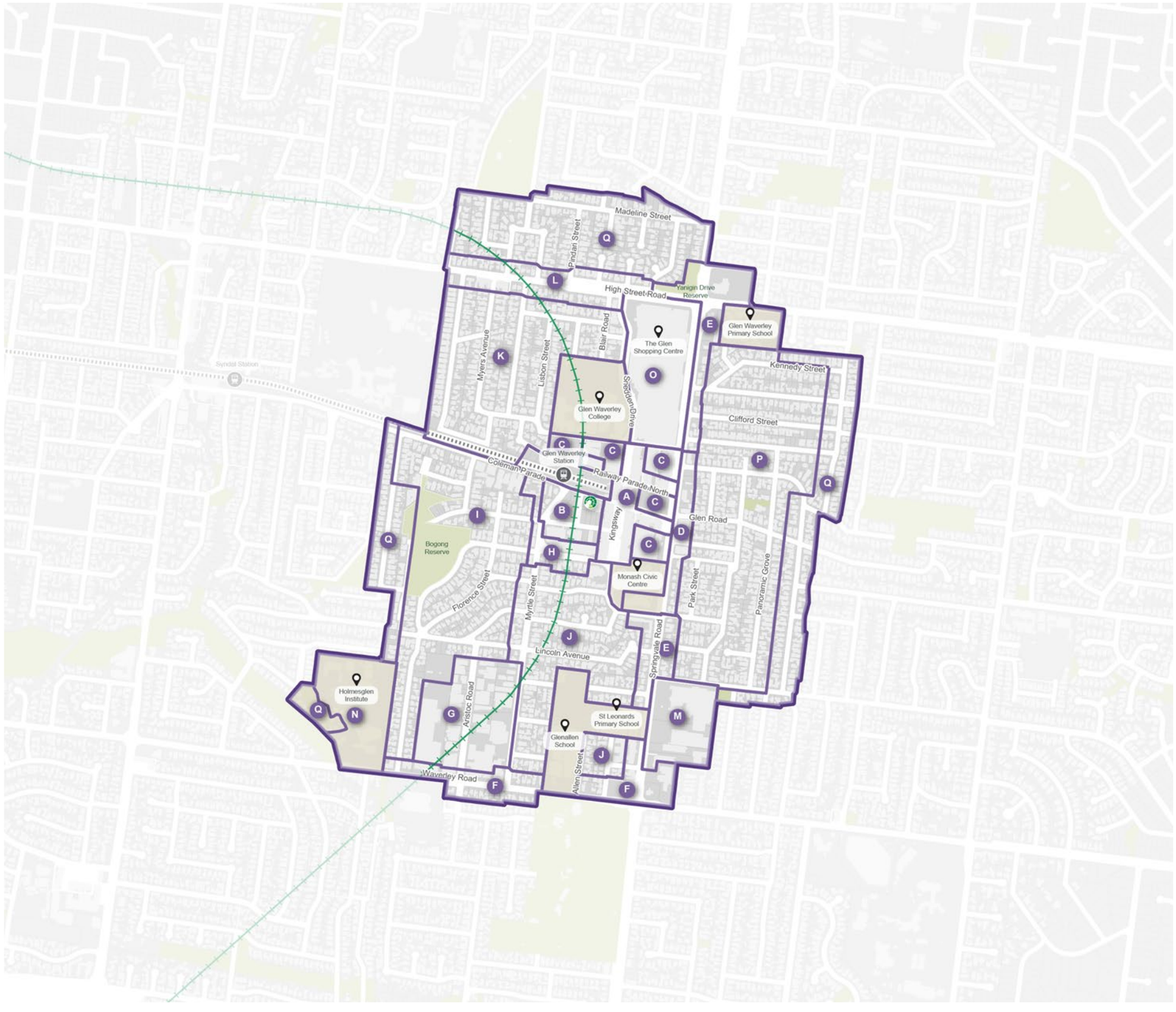


Figure 4.5: Future urban form areas

Legend

- SRL station
- Existing Glen Waverley Station
- Structure Plan Area
- SRL East alignment
- Future urban form area
- Civic areas - State or local government or institutional land not envisaged for substantial change.

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Place type: Central Core

The urban form areas within the Central Core are the most accessible and contain the SRL station, existing Glen Waverley Station and the majority of the centre's retail uses. To continue to provide for high-density employment and retail uses,and capitalise on the high level of accessibility and services available, a podium-tower development type is recommended.

B SRL station

SRL station contains the SRL station, the Station Development Areas (Strategic Sites) and is therefore the most accessible part of the Structure Plan Area. It also lies adjacent to the heart of the Glen Waverley Activity Centre. The land is currently occupied by a mix of commercial, civic and residential buildings and surface car parks. The accessibility provided by the SRL, adjacent Glen Waverley Station and position within the activity centre warrants high-density redevelopment. The area is currently zoned C1Z and RGZ.

C Kingsway core sites

This area comprises larger properties at the heart of the activity centre, behind the narrow lots fronting Kingsway, Railway Parade North and Coleman Parade.

These properties currently host a mix of surface car parks and low-rise commercial buildings. One property, on O'Sullivan Road, has been developed for a 15-storey mixed-use building. The remaining properties have relatively few development constraints. The position of these properties at the heart of the activity centre, adjacent to the SRL station and existing Glen Waverley Station, warrants higher-density development, consistent with the character established by the O'Sullivan Road development and the Glen. The land is currently zoned C1Z.

O The Glen

The Glen is an enclosed shopping centre with residential towers above its southern end. It forms part of the Glen Waverley Activity Centre, and lies close to the Glen Waverley Station and within walking distance of the future SRL station. The centre offers potential for further high-density development, consistent with the character established by the existing towers. The property is zoned C1Z.

Place type: Central Flanks

The urban form areas within the Central Flanks are highly accessible and comprise health, commercial, and residential land uses. To continue to provide for mid-density employment and retail uses, a mid-rise podium-tower development type is recommended. This form also supports pedestrian-favoured streets with good amenity and street life.

H Bogong Avenue

Bogong Avenue comprises properties at the western and southern edges of the activity centre, fronting Myrtle Street and Bogong Avenue, which form part of a ring road around the centre. It is characterised by a mix of commercial and residential uses and a multi-level car park. The properties have few development constraints. The proximity of the future SRL station and activity centre support an increase in density, which would help to moderate the change in scale between the SRL station development and surrounding residential hinterland. The land is currently zoned RGZ and C1Z.

Place type: Key Movement Corridors

The urban form areas within Key Movement Corridors have varying degrees of accessibility, and comprise a mix of low-rise commercial development and detached residential dwellings set along grand Boulevards and Avenues. To frame the public realm and provide adaptable buildings, the urban infill development type is recommended.

D Springvale Road core

Springvale Road core contains the central reach of the major road through the Structure Plan Area. It lies along the interface between the activity centre to the west and its residential hinterland to the east. This part of the road is addressed by a series of key anchors on the west side including The Glen, the Monash Civic Centre and two hotels. The properties on the east side of Springvale Road, which form the urban form area, are currently characterised by low-rise medical buildings. The width of the road and its adjacency to the activity centre present a distinct opportunity for taller buildings. There are relatively few development constraints other than sensitivity to the adjacent low-rise residential properties, presenting the opportunity for wholesale character change through widespread redevelopment to contribute to a new, higher-density character along both sides of the corridor. This would moderate the change in scale between the SRL station development and surrounding residential hinterland. The land is currently zoned RGZ and GRZ.

E Springvale Road

Springvale Road urban form area comprises land fronting the northern and southern ends of Springvale Road where it passes through the Structure Plan Area. The area is currently characterised by a mix of low-rise commercial buildings and detached dwellings. The width of Springvale Road creates an opportunity for an increase in scale. The properties have few development constraints, presenting the opportunity for wholesale character change through widespread redevelopment. The land is currently zoned RGZ and GRZ.

F Waverley Road

This area comprises land fronting Waverley Road east of Holmesglen Institute. It contains a mix of commercial, industrial and residential uses. The main road character of this street presents the potential for an increase in scale. There are relatively few development constraints, presenting the opportunity for wholesale character change through widespread redevelopment. This area is currently zoned INZ and GRZ.

L High Street Road

High Street Road comprises properties fronting that street in the northern part of the Structure Plan Area. It is currently characterised by a mix of detached dwellings and residential units, with a shopping strip towards the western end on the south side. The main road character of this street presents the potential for an increase in scale. There are relatively few development constraints other than narrow lots in the shopping strip, presenting the opportunity for wholesale character change through widespread redevelopment. This area is currently zoned RGZ and GRZ.

Place type: Main Streets

The urban form area comprises the traditional retail strip and commercial properties along Kingsway, Coleman Parade and Railway Parade North. To continue to provide mid-density uses while ensuring the ‘Main Street’ Character is maintained.

A Kingsway

Kingsway comprises narrow commercial properties fronting Kingsway at the core of the activity centre. It is currently characterised by small, 1 to 2 storey shops built boundary-to-boundary. The adjacency to the future SRL and existing Glen Waverley Station, and the width of Kingsway, create an opportunity for an increase in scale. However, the narrow width and small size of the majority of the properties will constrain redevelopment. The land is currently zoned C1Z.

Place type: Urban Neighbourhoods

The urban form areas within Urban Neighbourhoods are residential-focused, mixed-use neighbourhoods close to the commercial/retail core and/or public transport. To create a continuous, activated street wall which complements the scale of the street, with a landscape setback and mid-rise building form, the urban infill development type is recommended.

J Myrtle Street

Myrtle Street is a residential area bound by the activity centre to the north, Springvale Road corridor to the east, the Waverley Road corridor and schools to the south and, in part, by the Aristoc Road industrial area to the west. It is currently characterised by a mix of detached dwellings and residential units. The proximity of the SRL station and activity centre, and surrounding non-residential uses, support an increase in density. The detached dwellings have few development constraints, presenting the opportunity for redevelopment to create a more consistent mixed-use, higher-density character. The land is currently zoned GRZ.

Place type: Residential Neighbourhoods

The urban form areas within Residential Neighbourhoods are comprised of low-rise residential areas in the outer parts of the Structure Plan Area. To maintain the ‘leafy’ character while providing for increased residential density, the garden apartment development type is recommended. In places with specific character attributes requiring protection, or at the edge of the Structure Plan Area, a 4-storey garden apartment development type is recommended.

I Bogong Reserve (residential west)

Bogong Reserve urban form area is a broad residential neighbourhood is a broad residential neighbourhood west of the Myrtle Street corridor. It features Bogong Reserve at its heart. The area is currently characterised by a mix of residential units and detached dwellings in a garden setting. The detached dwellings have few development constraints, presenting the opportunity for redevelopment to respond to the proximity of the SRL station and activity centre. It is currently largely zoned GRZ.

K Myers Avenue

Myers Avenue is a broad residential neighbourhood west of The Glen and Glen Waverley College, and bound by the High Street Road corridor to the north and existing railway line to the south. It is currently characterised by a mix of residential units and detached dwellings in a garden setting. The detached dwellings have few development constraints, presenting the opportunity for redevelopment to respond to the proximity of the SRL station and activity centre. It is currently largely zoned GRZ.

P Mount Street and Q Madeline Street

Mount Street and Madeline Street are broad residential neighborhood outside the commercial retail core and major roads. These areas are currently characterised by a mix of residential units and detached dwellings in a garden setting. The detached dwellings have few development constraints, presenting the opportunity for redevelopment to respond to the proximity of the SRL station and activity centre. They are currently largely zoned GRZ and NRZ.

Place type: Enterprise Neighbourhood

The urban form areas within Enterprise Neighbourhood are comprised of low-medium rise light-industrial buildings with front setbacks set along streets. To support a wide range of employment uses, a specific development type is not recommended. However, buildings should enhance the public realm through front setbacks and by locating loading and servicing activities away from the street.

G Aristoc Road

Aristoc Road is an industrial area in the south-west of the Structure Plan Area. It is bound by Waverley Road to the south and residential land on other sides. It comprises a range of lot sizes, developed for low-rise buildings. The properties have few development constraints other than being subject to flooding, presenting an opportunity for redevelopment for higher-order employment uses. The land is currently zoned INZ.

M Industrial south-east

Industrial Southeast comprises industrial land fronting the east side of Springvale Road in the south of the Structure Plan Area. It is bound by Springvale Road to the west, residential land to the north and a funeral home immediately to the south. The land has few development constraints, other than a heritage building in the southwest corner, presenting an opportunity for redevelopment for higher-order employment uses. It is currently zoned INZ and GRZ.

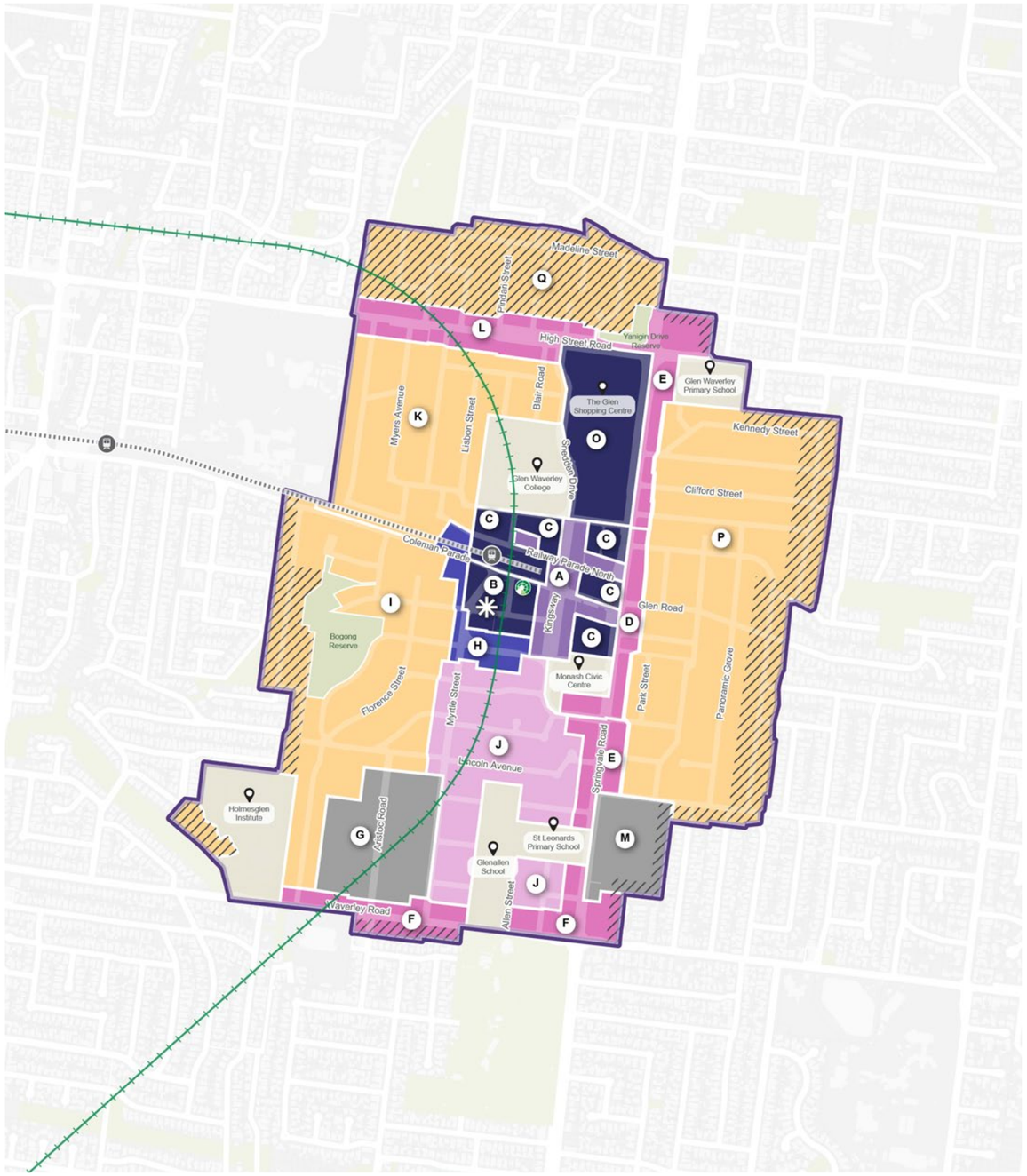


Figure 4.6: Urban Form Framework plan

Legend	Place type	Urban form area	Indicative density [1]	Indicative building height [2]	Land use priority
	Central Core	B - SRL station	FAR 8.5	68 metres (20 storeys)	Commercial
		C - Kingsway core sites			
		O - The Glen			
	Central Flanks	H - Bogong Avenue	FAR 4.0	33 metres (8 to 9 storeys)	Commercial
	Main Streets	A - Kingsway	FAR 4.5	25 metres (6 to 7 storeys)	Commercial
	Key Movement Corridors	D - Springvale Road core	FAR 3.5	27 metres (7 to 8 storeys)	Residential
		E - Springvale Road			Commercial
		F - Waverley Road			Residential/Employment
		L - High Street Road			Residential
	Urban Neighbourhoods	J - Myrtle Street	FAR 3.0	24 metres (6 to 7 storeys)	Residential
	Residential Neighbourhoods	I - Bogong Reserve	Garden apart. FAR 2.0	Garden apartments 21 metres (4 to 6 storeys)	Residential
		K - Myers Avenue			
		P - Mount Street	Townhouses FAR 1.2	Townhouses 11 metres (3 storeys)	
		Q - Madeline Street	Garden apart. FAR 1.5	Garden apartments 14 metres (3 to 4 storeys)	Residential
			Townhouses FAR 1.2	Townhouses 11 metres (3 storeys)	
	Enterprise Neighbourhoods	G - Aristoc Road		24 metres (2 to 6 storeys)	Employment
		M - Industrial south-east			

Figure 4.7: Urban Form Framework table

Legend

- SRL station
- Existing Glen Waverley Station
- Structure Plan Area
- SRL East alignment
- Strategic site - Station development area
- Civic Areas - State or local government or institutional land not envisaged for substantial change
- Sensitive / constrained / isolated areas [3]

1. *Indicative densities, which may vary based on specific circumstances. Densities are provided to indicate the intensity of development, not because they are proposed to be translated into planning controls.*
2. *Indicative heights, which may vary based on specific circumstances. Refer to Section 5.3 for preferred building heights.*
3. *These area are described in Strategy UF1: Substantial change.*

5 Built form

AJM
Joint Venture

5.1 Introduction

This section identifies the built form outcomes that will support an inviting public realm and shape high quality and responsive development.

The built form design directions, strategies and framework has been developed concurrently with the Urban Form and Public Realm Frameworks and each informs the other.

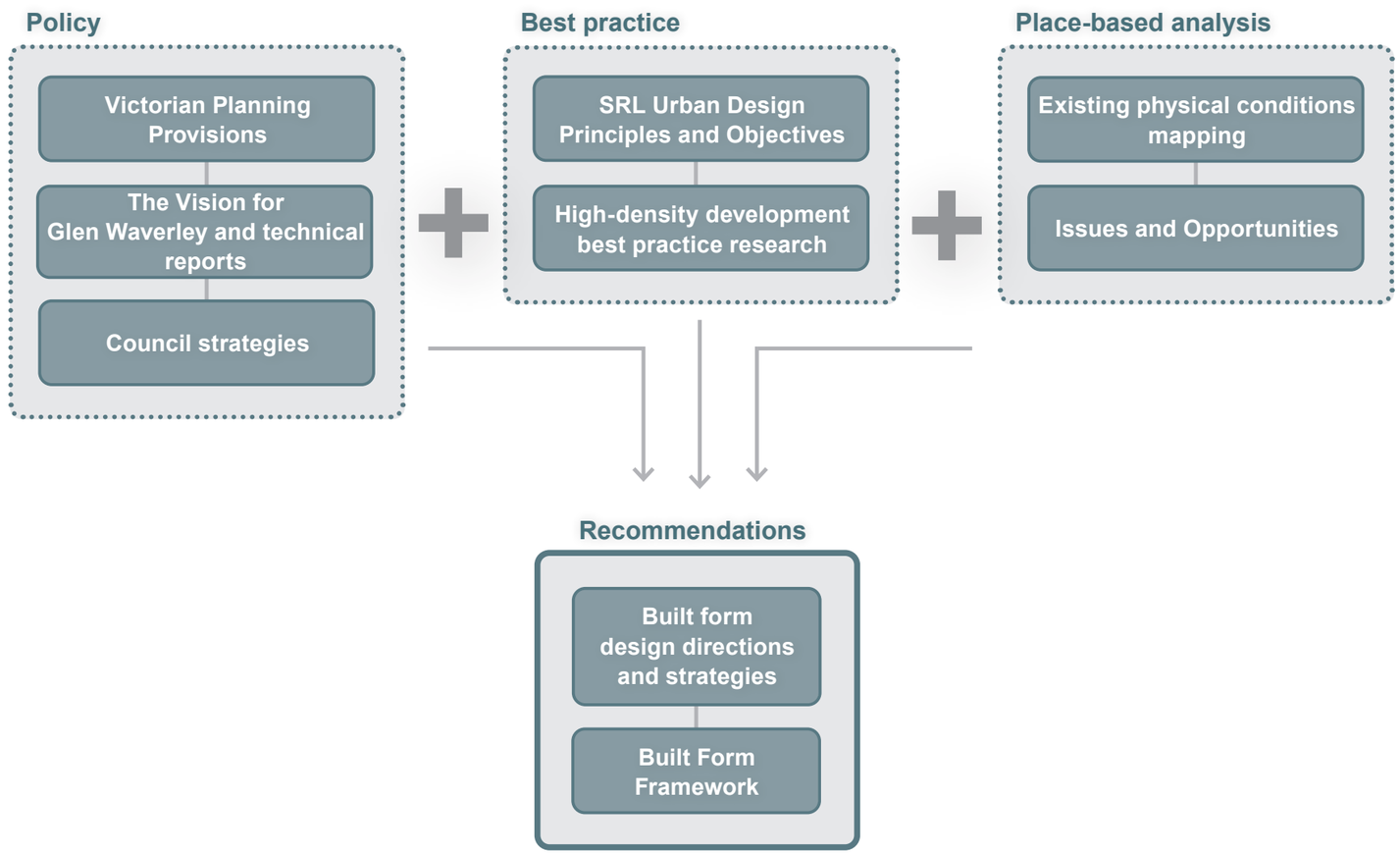


Figure 5.1: Built form methodology summary

5.2 Built form design directions

This section outlines the built form design directions proposed to achieve the Glen Waverley Vision. They have informed the built form outcomes identified in Section 6: Outcomes.

The order of the design directions in this section does not imply an order of priority.

Design Direction 7: Support an inviting public realm

Why is this important?

Built form should support an inviting and engaging public realm through the distribution of its mass and street edge detail.

Distribution of mass

Development shapes the public realm and strongly influences its amenity. The siting, height and massing of buildings can positively influence the amenity of the adjoining public realm by:

- Framing streets and open spaces, which makes them more memorable
- Maintaining a sense of openness including sky views
- Maintaining solar access to pedestrian spaces.

Continuous street walls provide a more engaging street wall.

Where taller buildings are needed to deliver the desired density, a sense of openness and reasonable access to daylight and sunlight should be achieved.

Engaging facades

Lower-level building facades should contain detail that is visually engaging to enhance the pedestrian experience.

Active building frontages are also key to an inviting and safe public realm. The level of activation that is appropriate varies between employment areas and residential areas.

This includes consideration of:

- Building alignment
- Building massing and composition including rhythm and grain
- Design detail and building facade materials.

Buildings in high pedestrian activity areas should have the highest level of activation, given their pedestrian density.

Employment areas tend to have lower levels of pedestrian activity, so a lesser level of activation is acceptable. However consideration should be given to employment areas needing to support 24-hour workers.

Residential areas benefit from a quieter environment. However, it is important that they provide passive surveillance to contribute to the safety of the public realm. 'Back of house' uses such as car parking and car park entries, building services cabinets and loading areas should be positioned away from the primary frontage.

Solar access in the public realm

Sunshine is an important component of people's attraction to and enjoyment of public space[1,2,] as well as their health and wellbeing[3]. It is essential for plants, enabling sunny open spaces to contribute to cooling, greening and biodiversity in accordance with Strategy PR9 - Public Realm Landscaping[4]. Sunshine is also said to boost local business by attracting more foot traffic[5].

An increase in urban density reduces people's access to sun in their private spaces. Therefore, it is important to complement this with good solar access to key public open spaces in higher density areas.

However, maintaining sunlight in the public realm imposes a limit on the potential for taller buildings to provide for growth. Therefore, a balance needs to be struck between these two aspirations, partly by targeting solar access protection to places and times where it is most important.

The different types of public realm, and the importance of solar access in each of them, are as follows:

- **Primary public open space(s) in the Central Core:** This category of spaces includes the centrally located space(s) that will provide the primary forum for public events such as festivals, performances, parades, markets, and so on. Year-round sunshine is important to ensure that the primary open space(s) in the Central Core attract people to support events and informal public activity
- **Activity Streets:** These streets generally lie within the Central Core and are where the highest level of public life is sought. Sunshine is important in the pedestrian areas in Activity Streets to support public life
- **Main Street footpaths:** Main Street footpaths are the primary streets within the Main Street place type. These streets are intensively used by pedestrians walking to shops and services, window-shopping and outdoor dining
- **Medium-large parks (>1ha):** Medium-large parks are those greater than 1ha. These have a District or Community catchment classification. Sunlight is important in these spaces as they provide an important year-round recreation function, including for sports activities
- **Small open spaces in Central Flanks:** These spaces are the secondary open spaces within the central area. These spaces provide an important, year-round recreation role for workers (at lunchtime) and residents (particularly on weekends)
- **Small and narrow parks outside the Central Core and Central Flanks:** This category includes a large number of open spaces smaller than 1ha, mainly in residential neighbourhoods. As Community Parks, they provide an important year-round recreation role for residents (particularly smaller children and their parents/ carers).

What is happening now in Glen Waverley?

Most of the Glen Waverley Structure Plan Area is characterised by low density suburban detached housing of 1 to 2 storeys. This type of built form is generally set back significantly from the street, limiting passive surveillance to the street, and a predominantly low level of street activation. Its contribution to the public realm is through architectural style and vegetation, rather than framing the streets.

The commercial/retail core includes higher-density (high and mid-rise) residential apartments and commercial buildings. The most prominent high-rise buildings are visible along Springvale Road. The taller built form is across the Structure Plan Area. The design quality of many of these towers varies and typically they are less contextually responsive to the surrounding residential character of Glen Waverley.

The abundance of at-grade carparking provides a lack of definition to the public realm.

Kingsway typically has active small grain frontages that contribute to creating a vibrant and human scale core in Glen Waverley.

Civic buildings along Kingsway provide generous landscape frontage which enhances the public realm experience.

Alignment with SRL Urban Design Framework:

Design Direction 7 will help to achieve the following SRL Urban Design Objectives:

- Objective UD2.4 Welcoming
- Objective UD4.4 Safer design
- Objective UD5.1 Heritage
- Objective UD5.5 Quality design
- Objective UD6.1 Amenity
- Objective UD6.3 User experience
- Objective UD6.4 Places for people
- Objective UD6.5 Activation.

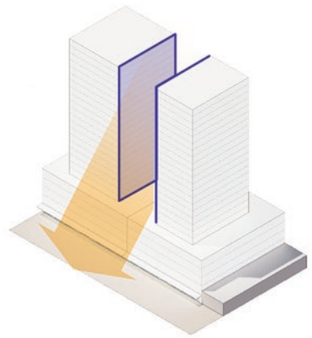
1. *Urban Studies Journal (2015): "The Impact of Sunlight on Social Interaction in Public Spaces: A Case Study of Urban Squares."*
2. *Journal of Urban Design (2016): "Sunlight and Place-making: Enhancing the Aesthetic Appeal of Urban Squares."*
3. *Journal of Environmental Psychology (2013): "The Role of Urban Green Spaces in Enhancing Human Health and Well-being: Effects of Sunlight Exposure on Vitamin D Levels."*
4. *Landscape and Urban Planning Journal (2015): "Sunlight and Urban Green Spaces: Enhancing Biodiversity and Ecological Sustainability."*
5. *International Journal of Retail & Distribution Management (2018): "The Economic Benefits of Sunlit Public Spaces: A Study of Foot Traffic and Retail Sales."*

How can this direction be achieved in Glen Waverley?

Strategy BF1: Tower separation A

Provide sky views and access to daylight in the public realm through setbacks to and gaps between towers in high-rise areas.

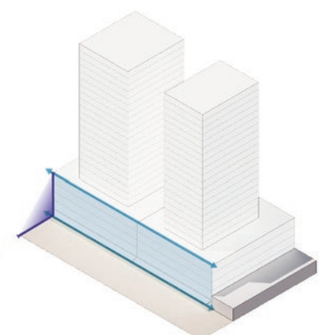
Towers should be set back and separated to support an attractive public realm, allowing for daylight, sky views and shafts of sunlight.



Strategy BF2: Podiums

Create a well-defined urban space in high-rise areas by providing continuous street wall of podium facades.

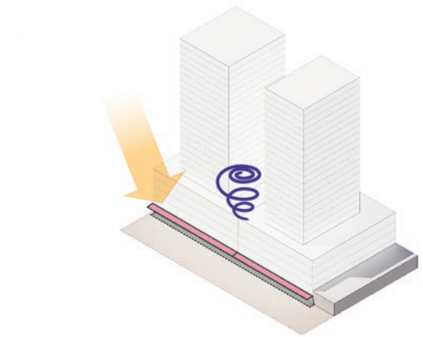
Podiums should be set on the front boundary and extend to both side boundaries to clearly frame the public realm and maximise passive surveillance and activation, with podium car parking 'sleeved' behind active land uses.



Strategy BF3: Weather protection

Podium facades should support pedestrian comfort by providing protection from rain, wind and summer sun.

Where appropriate, rain, wind and summer sun impacts should be minimised through the appropriate design of awnings, architectural articulation and building massing.

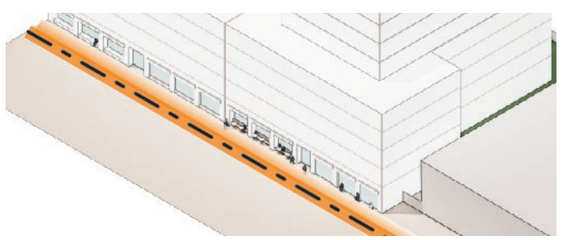


The Wind Technical Report (August 2024) found that when compared to today, the overall wind speeds in the highly-developed future scenario of Structure Plan Area will be reduced and overall wind comfort conditions improved. While some localised unsafe wind conditions were also found in this scenario, these conditions are proposed to be managed through building design at planning permit stage.

Strategy BF4: Footpath widening

Ensure buildings are set back from the street edge to widen the footpath where needed.

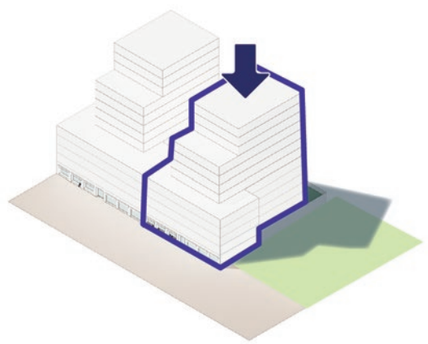
Where a wider footpath is sought, buildings should help to achieve the desired outcome by setting back from the street edge.



Strategy BF5: Sunlight to public realm

Require development to maintain reasonable solar access to key streets and open spaces.

Key streets and open spaces in the Central Core, Central Flanks and Main Streets, and residential parks, should be appropriately protected from overshadowing to support public life and outdoor recreation. A set of solar access standards have been developed which seek to balance the provision of solar access and growth for each type of street and open space. These are informed by recently introduced solar access planning provisions in Victoria, related studies and Planning Panel reports, and site-specific testing (see Attachment C - Assessment of Solar Access to the Public Realm).



Type of space	Recommended standard
Primary public open space(s) in Central Core	50 per cent of the open space for a minimum of 3 hours at mid-winter
Footpaths in Activity Streets	50 per cent of southern, eastern and western footpaths for a minimum of 3 hours at the spring equinox
Main Street footpaths	100 per cent of southern, eastern and western footpaths for a minimum of 3 hours at the spring equinox
Medium-large parks	70 per cent of the open space for a minimum of 3 hours at mid-winter
Small open spaces in Central Flanks	75 per cent of the open space for a minimum of 3 hours at the spring equinox
Small and narrow parks outside Central Core and Central Flanks	50 per cent of the open space for a minimum of 3 hours at the mid-winter

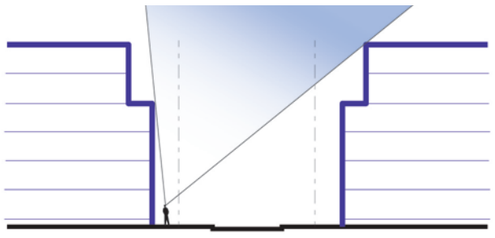
These standards are varied in specific circumstances where the size or configuration of the open space or street, and/or the scale of development envisaged around it, warrant a different solar access outcome.

Strategy BF6: Street scale

Balance street definition and openness outside the precinct core.

Buildings should be appropriately massed to define the street, and upper levels should allow for wider sky views. Upper-level setbacks should contribute to a legible composition, rather than adopting a profile that follows minimum setback requirements which can result in unattractive outcomes.

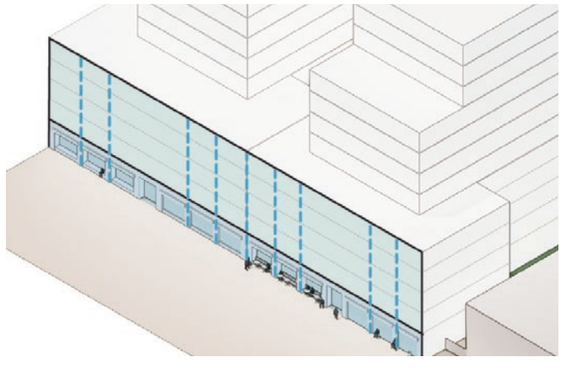
Street walls should be designed to minimise the impact of taller buildings on the public realm, and contribute a sense of enclosure.



Strategy BF7: Engaging facades

Ensure street walls provide visual interest at a pedestrian scale and pace.

Design detail of street walls should balance transparency and solid elements, create a fine-grain vertical rhythm and provide a level of depth, detail and texture to enhance the pedestrian experience.

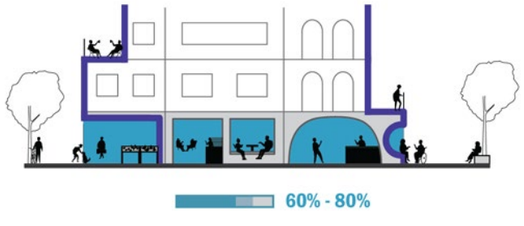


Strategy BF8: Active frontages

Ensure buildings contain active facades in commercial and Mixed-use areas to provide interest and activity through visual engagement between the street and the building and to ensure pedestrian links support safety and user experience.

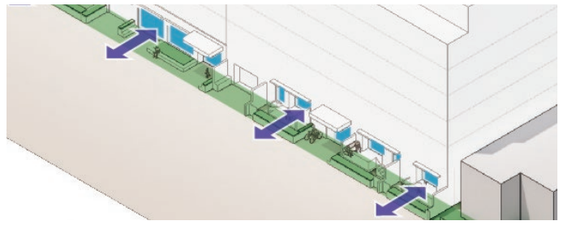
A **highly active frontage** should be provided in the commercial/retail core, main streets and existing small retail strips. This type of frontage should incorporate:

- Building frontages which are set on or within 0.4 metres of the public realm boundary except where an activated front setback is specified (such as outdoor dining or public realm widening)
- Primary ground floor functions that are relevant to passing pedestrians, such as shops and food and beverage outlets (retail, hospitality and entertainment uses)
- An at-grade connection between ground-level tenancies and the street- transitions in floor levels should not rely on external ramps and stairs in the public realm
- 60 to 80 per cent of the combined length of the ground-level interfaces of a building to streets and laneways as a pedestrian entry or clear glazing with regularly spaced solid elements to avoid a predominately glazed appearance along frontages
- A continuous fixed canopy that provides shelter from the rain and summer sun and maintains exposure to the winter sun
- Upper level uses that are active for the majority of the day and evening.



A **moderately active frontage** should be provided in the primary street interfaces of Mixed-use and employment areas. This type of frontage aims to improve the use, safety and experience of the public realm and ensure a high-quality interface between buildings and the street at ground level, which promotes pedestrian amenity and further activation as the precinct evolves. This type of frontage should incorporate:

- A minimum of 40 per cent of the combined length of the ground-level interfaces of a building to streets and laneways as a pedestrian entry or clear glazing
- A floor-to-floor height of at least 4 metres on the ground floor to allow for the adaptation of building uses over time
- Reduced number of vehicular access points to prioritise the experience and safety of pedestrians
- Provide an at-grade connection between usable space within ground-level tenancies and the street. Transitions in floor levels should not rely on external ramps and stairs in the public realm.



Strategy BF9: Residential frontages

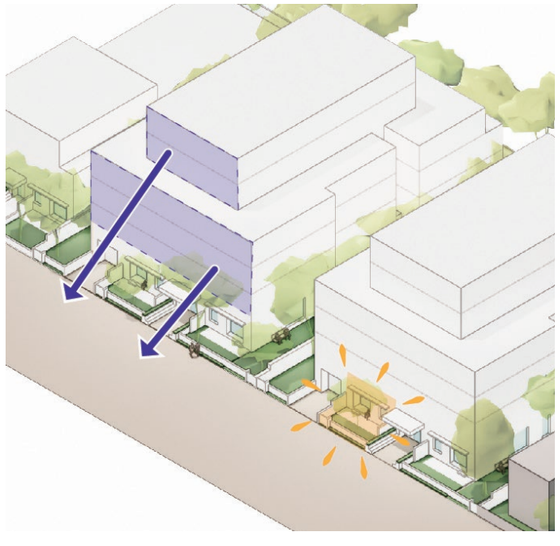
Ensure development within the Residential Neighbourhoods balances sense of address, passive surveillance and privacy, and contributes to street greening.

Residential frontages should enhance the street edge by:

- Orientating balconies and habitable rooms to the street
- Ensuring building facades identify individual dwellings
- Providing low front fences
- Providing ground floor entrances to individual ground floor dwellings facing the street
- Providing canopy trees and understorey planting to green the street and enhance privacy of ground floor dwellings.

Residential frontages should enhance pedestrian links by:

- Orientating balconies and habitable rooms to pedestrian links
- Providing ground floor entrances to individual ground floor dwellings facing the link where appropriate.



Design Direction 8: Ensure high quality and responsive built form

Why is this important?

Building orientation, solar access and set backs

Built form can strongly influence internal amenity and the amenity of neighbouring properties. The siting, height and massing of buildings can adversely affect amenity in terms of:

- Access to sunlight
- Access to daylight
- Visual bulk
- Overlooking.

In residential areas, setbacks are typically required from common boundaries with adjoining properties to avoid unreasonable impacts on their amenity and future development potential. Clause 55 (ResCode) provides setback standards for buildings up to 4 storeys high.

In higher-density areas, apartments facing side or rear boundaries often have relatively poor internal amenity due to the need for privacy screen and limited access to daylight. Mid-rise buildings can also have a significant effect on the amenity of neighbouring properties in terms of sunlight, daylight and outlook, and on their future development potential.

Clause 58 provide internal amenity standards, however it doesn't provide prescriptive set back guidance.

Therefore, strategies are needed to ensure good internal amenity for development and its neighbours.

Scale transition

Increased building heights can create inappropriate visual bulk at interfaces with lower-rise areas, either inside or outside the Structure Plan Area. Care is needed to manage these transitions.

Increasing tree canopy cover

Landscaping associated with new development can contribute to environmental performance, amenity, health and character outcomes. In particular:

- Increased tree canopy cover can reduce the urban heat island effect
- Landscaping can provide wildlife habitat and stormwater infiltration
- Trees can provide building shading and resident amenity
- Nature supports mental health
- Trees can complement the existing character of leafy areas and help to integrate new, denser development.

Realisation of these objectives will rely on forms of development that contribute to tree canopy cover, not only trees in the public realm.

Clause 58 contains requirements for deep soil planting. However, this is not sufficient to achieve the tree canopy cover target, nor does it apply to non-residential development.

What is happening now in Glen Waverley?

Within the Glen Waverley Structure Plan Area, high-rise buildings typically have a podium-tower typology. These developments typically have large floorplates which don't provide landscape setbacks or canopy trees.

The low-rise areas provide dwellings with a high internal amenity and good tree canopy cover.

Alignment with SRL Urban Design Framework:

Design Direction 8 will help to achieve the following SRL Urban Design Objectives:

- Objective UD1.1 Legacy
- Objective UD1.2 Future ready
- Objective UD1.3 Resilient
- Objective UD1.4 Environmentally sustainable
- Objective UD5.2 Responsive
- Objective UD5.3 Sensitive
- Objective UD5.5 Quality design.

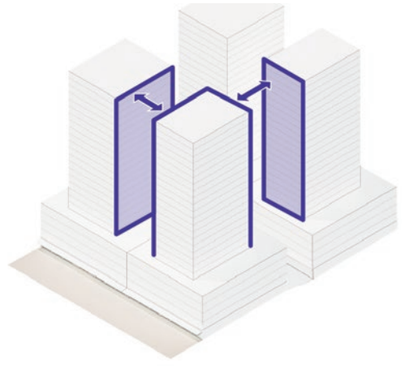
How can this direction be achieved in Glen Waverley?

Strategy BF10: Tower separation B

Ensure reasonable internal amenity and equitable development opportunities through side and rear tower setbacks.

Maintaining good internal amenity in towers requires consideration of access to daylight, outlook and overlooking. Ensuring appropriate upper level setbacks will help to achieve good internal amenity while maintaining equitable development opportunities for neighbouring lots.

Towers should be separated to avoid the need for privacy screening, and to ensure reasonable visual amenity and daylight. This separation should increase with the height of the towers.



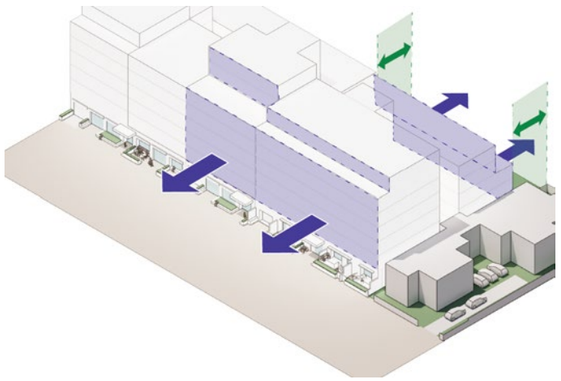
Strategy BF11: Building orientation

Encourage development to face the street and the rear of the property, and require generous rear setbacks.

In order to maximise internal amenity including access to daylight, outlook and privacy, habitable rooms (living, kitchen, dining, primary bedroom) should be orientated to the street or rear, and incorporate generous rear setbacks.

This helps to optimise development, as a wall without a window or balcony can be built to the side boundaries. Additionally, to maximise internal amenity and maintain equitable development, the primary outlook of a dwelling should be adequately setback from the side boundary. A primary outlook is defined as a balcony or habitable room window.

Where lower rise residential building typologies are envisaged, buildings should be designed to provide appropriate space between dwellings in order to maximise internal amenity while providing for density within a landscaped setting. However, apartments and townhouses should still maximise primary orientation towards the street and rear boundary.



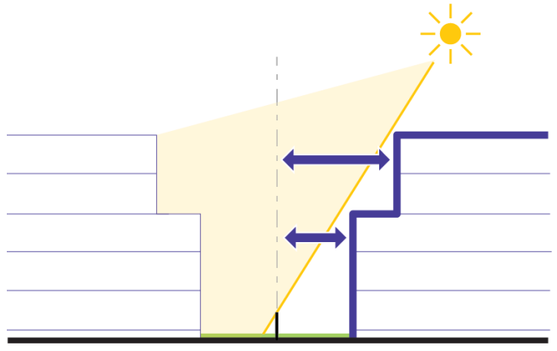
Strategy BF12: Rear amenity plane

Require rear setbacks to maintain good amenity in neighbouring properties.

Upper level setbacks should be established which ensure the appropriate protection of sunlight and daylight access and limit visual bulk to neighbouring properties.

The number of hours on the September equinox during which solar access to private open space should be maintained, should be consistent with ResCode where the affected property is outside the Structure Plan Area (5 hours), gradually reducing as development increases in density towards the centre, to reflect the different balance between intensification and environmental amenity.

In contrast, upper levels should only be required to be set back from side boundaries in Residential Neighbourhoods sufficiently to maintain reasonable daylight, and solar access to neighbouring ground floor dwellings or recessed terraces at the desired side setback in garden apartment buildings. This reflects the proposed urban morphology in which primary open spaces are generally sited at the rear of lots, rather than to the side, to enable efficient development of single lots.



Strategy BF13: Transition

Transition building heights at the interface between taller and lower built form areas.

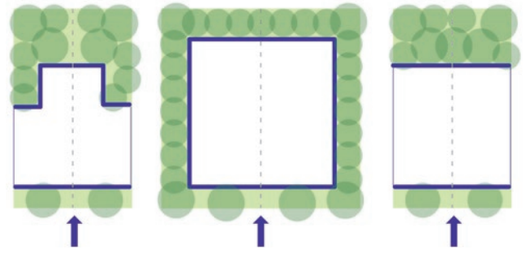
Buildings heights should step down from a higher area to a lower area to manage amenity impacts.

Strategy BF14: On-site landscaping

Encourage landscaping and canopy trees as part of new development, outside the Central Core.

Landscaping and canopy trees should be encouraged across all non-core areas, to enhance canopy cover, buffer built form transitions and contribute to outlook from dwellings.

However, the provision of on-site open space for trees is in competition with the aspiration for intensification, particularly given the preference for mid-rise development types. Therefore, the greatest opportunity for tree canopy cover is in the outer areas of the Structure Plan Area, where there is less aspiration for intensification.



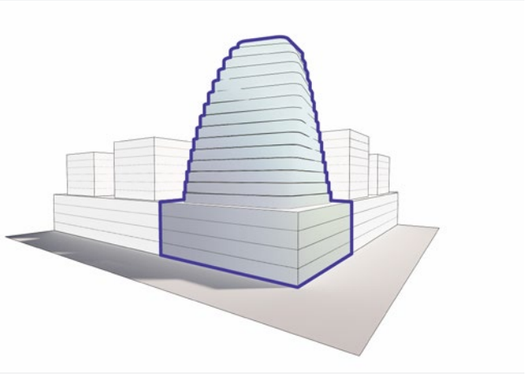
Strategy BF15: Landmark buildings

Transition building heights at the interface between taller and lower built form areas.

Encourage taller buildings to mark key locations in the urban structure.

Landmarks are natural or built elements that stand out from their surroundings. They contribute to the legibility of an area by creating memorable incidents on a journey through it.
Built landmarks can be formed by a particularly notable use, such as a library, a distinctive design, or greater height than their surroundings.

In order to reinforce the legibility of the Structure Plan Area, landmark buildings should be encouraged at key points in the urban structure, such as station entries, major intersections and gateways or entries to key places. In the absence of a notable use, landmarks can be created by greater height and lesser setbacks than those of the surrounding buildings. However, greater height should be complemented by a higher level of design excellence.



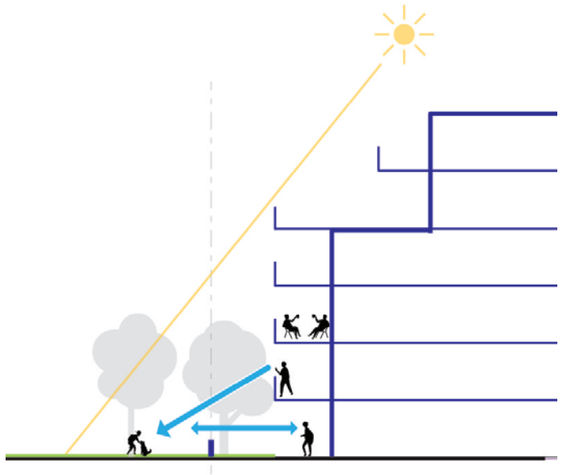
Strategy BF16: Public open space interface

Ensure buildings with an interface to public open space provide passive surveillance and a well-designed building profile.

Building facades facing public open space, including those abutting a public open space on a rear or side boundary, should balance privacy and activation through a generous, landscaped setback combined with windows and balconies.

These interfaces should be designed to maximise passive surveillance on the open space without privatising it and avoid unreasonable overshadowing of the open space. This includes orienting ground-floor active uses, communal spaces, habitable rooms and balconies towards the open space, ensuring fence design and height retain visual links to the open space, and providing a gate to access the open space.

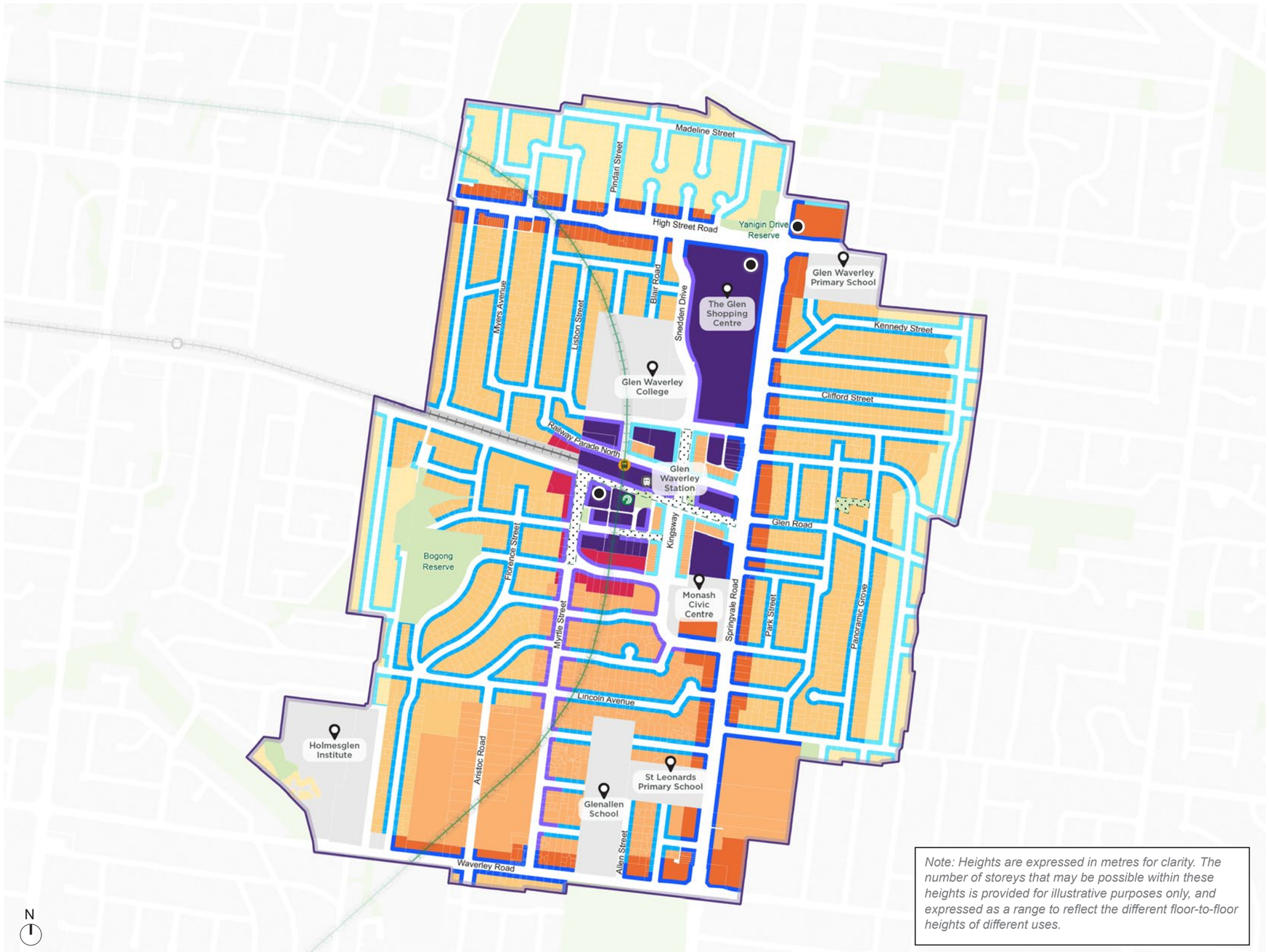
Building facades facing open space are highly visible from the public realm. Therefore, it is important that they have visual appeal and a legible composition. For example, by avoiding multiple setbacks of the upper levels (e.g. a ‘wedding cake’ effect) and avoiding visible blank exposed walls.



5.3 Built Form Framework

Preferred building heights

This plan illustrates the distribution of preferred maximum heights and street wall heights across Glen Waverley. These heights have been developed by applying the preferred forms of development to each urban form area and considering specific interface conditions. They are explained in Section 6.



Legend

- SRL station
- Existing Glen Waverley Station
- Bus interchange
- SRL East alignment
- Existing rail line
- Open space - existing and planned/proposed
- Landmark buildings, which may exceed the maximum height by 20 per cent, and have lesser or no tower street setbacks, provided wind effects are managed and they achieve design excellence as supported by independent design review or a design competition that endorses the proposed design (see Strategy BF15).
- In addition to the preferred heights and setbacks, surrounding development should consider solar access to public realm. Refer to overshadowing guidelines in Section 6

Preferred maximum building heights

- 68 metres (20 storeys)
- 33 metres (8 to 9 storeys)
- 27 metres (7 to 8 storeys)
- 24 to 25 metres (6 to 7 storeys)
- 21 metres (5 to 6 storeys)
- 14 metres (4 storeys)

Preferred maximum street wall heights

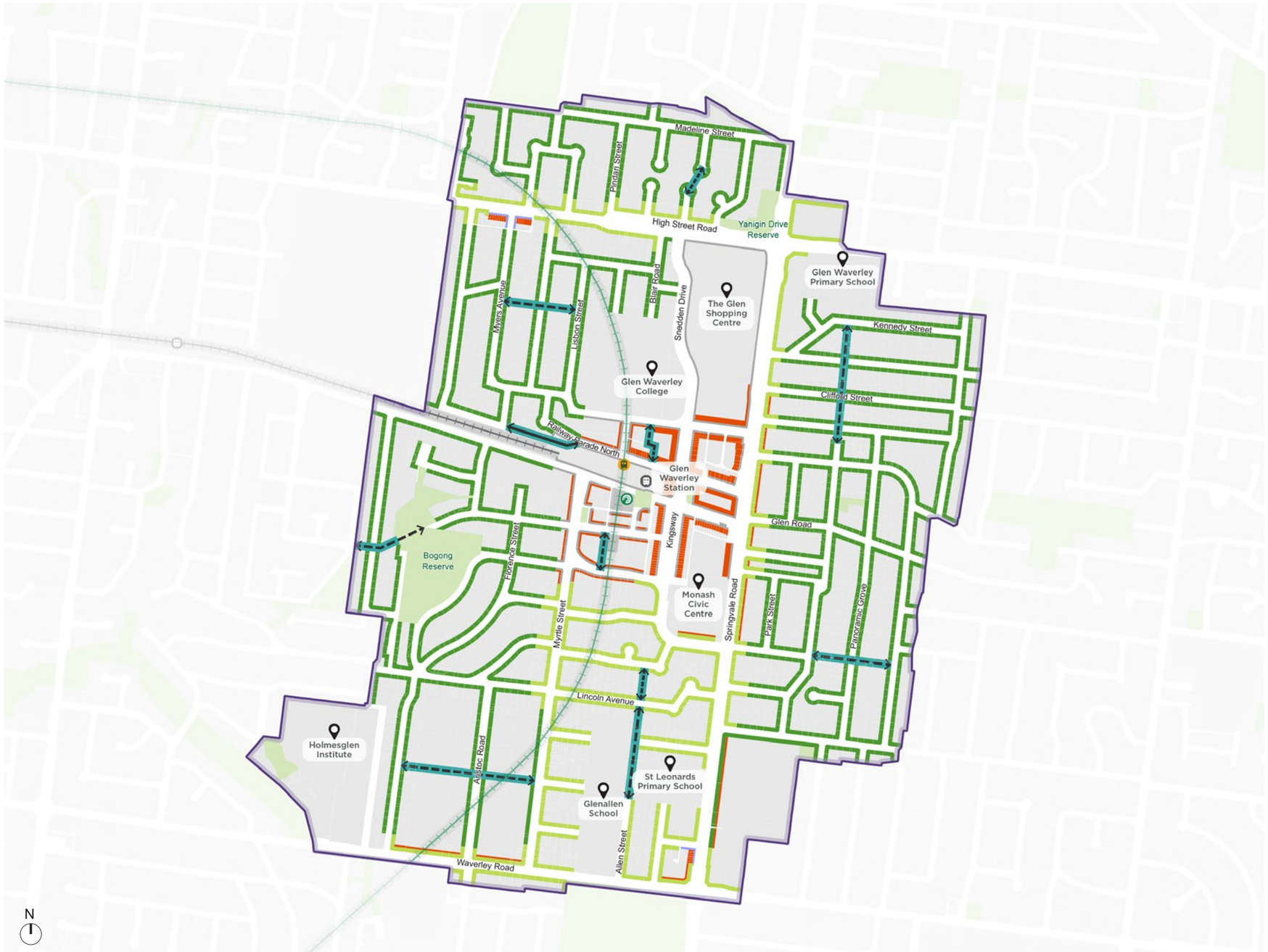
- 21 metres (5 to 6 storeys)
- 17 metres (4 storeys)
- 14 metres (4 storeys)
- 11 to 12 metres (3 storeys)

Note: Heights are expressed in metres for clarity. The number of storeys that may be possible within these heights is provided for illustrative purposes only, and expressed as a range to reflect the different floor-to-floor heights of different uses.

Figure 5.2: Preferred heights plan

Preferred street frontage types and setbacks

This plan illustrates the preferred street frontage types and setbacks throughout Glen Waverley. These have been developed by applying the built form strategies to each street, taking account of the desired role and function of each urban form area. They are explained in Section 6.



Legend

- SRL station
- Existing Glen Waverley Station
- Bus interchange
- SRL East alignment
- Existing rail line
- Open space - existing/planned/proposed

Front setbacks

- Zero setback
- Match the prevailing building line
- 3-metre setback
- 4-metre setback

Interfaces

- Highly active frontages
- Moderately active frontages
- Indicative link interface

Key links

- Key links - fixed
- Key links - flexible

Note: Where a building abuts an open space, additional setback controls apply. See Section 6 for further information.

Figure 5.3: Preferred street frontages and setbacks plan

Preferred side, rear and front upper-level setbacks

This plan illustrates the distribution of side, rear and front upper-level setbacks throughout Glen Waverley.

These have been developed by applying the preferred forms of development and built form strategies to each urban form area. They are explained in Section 6.

In addition to the setbacks summarised below, overshadowing provisions are proposed to protect solar access to neighbouring properties. These are outlined in Section 6.

Setbacks

	Side and rear - podium	Zero metres or 4.5 metres (primary outlook)
	Side and rear - tower	4.5 metres for towers up to a height of 27 metres 6 metres for towers up to a height of 41 metres 7.5 metres for towers height of 66 metres 10 metres for towers higher than 66 metres
	Front - upper level	5 metres from the podium facade
	Side - podium	Zero metres or 4.5 metres (primary outlook)
	Side - tower	4.5 metres for towers up to a height of 27 metres 6 metres for towers up to a height of 41 metres 7.5 metres for towers higher than 66 metres
	Rear - podium and tower	6 metres
	Rear - at interface with Key Movement Corridors or Residential Neighbourhoods	6 metres plus 0.6 metres per metre of height above 17 metres
	Front - upper level	3 metres plus 0.6 metres per metre of height above 33 metres from the podium facade
	Side	Zero
	Rear	Zero metres or 4.5 metres (primary outlook)
	Front - upper level	3 metres plus 1 metre per metre of height above 21 metres from the podium facade
	Side	Zero metres or 4.5 metres (primary outlook) (1)(2)
	Rear	6 metres plus 0.7 metres per metre of height above 11 metres (2)
	Front - upper level	4 metres from the podium facade
	Side	Zero metres or 4.5 metres (primary outlook) (1)
	Rear	6 metres plus 0.7 metres per metre of height above 11 metres
	Front - upper level	Remain below a 45° plane from opposite street boundary
	Side - lots ≥ 24 metres wide	4.5 metres plus 0.8 metres per metre of height above 14 metres
	Side - lots < 24 metres wide, front half of site	Zero metres for buildings up to a height of 6.9 metres 2 metres for buildings higher than 6.9 metres
	Side - lots < 24 metres wide, rear half of site	2 metres plus 1 metre per metre of height above 6.9 metres
	Rear	6 metres plus 0.7 metres per metre of height above 11 metres
	Front - upper level	0.5 metres per metre of height above street wall from the podium facade
	Side and rear - where abutting a property where dwellings are permissible	1 metre for every metre above ground floor
	Front - upper level (Interfaces with Springvale Road and Wilson Road)	4 metres from the podium facade

1. *4.5 metres applies to the parts of the building that provide a primary outlook to the rear and side boundaries. If interfacing with side/rear service lanes, the setback is measured from the centre of the laneway.*
2. *Setback standard does not apply to existing small retail strips in this area - refer to Section 6 for existing small retail strips setbacks.*
3. *Where a building abuts an open space, additional setback controls apply. See Section 6 for further information.*

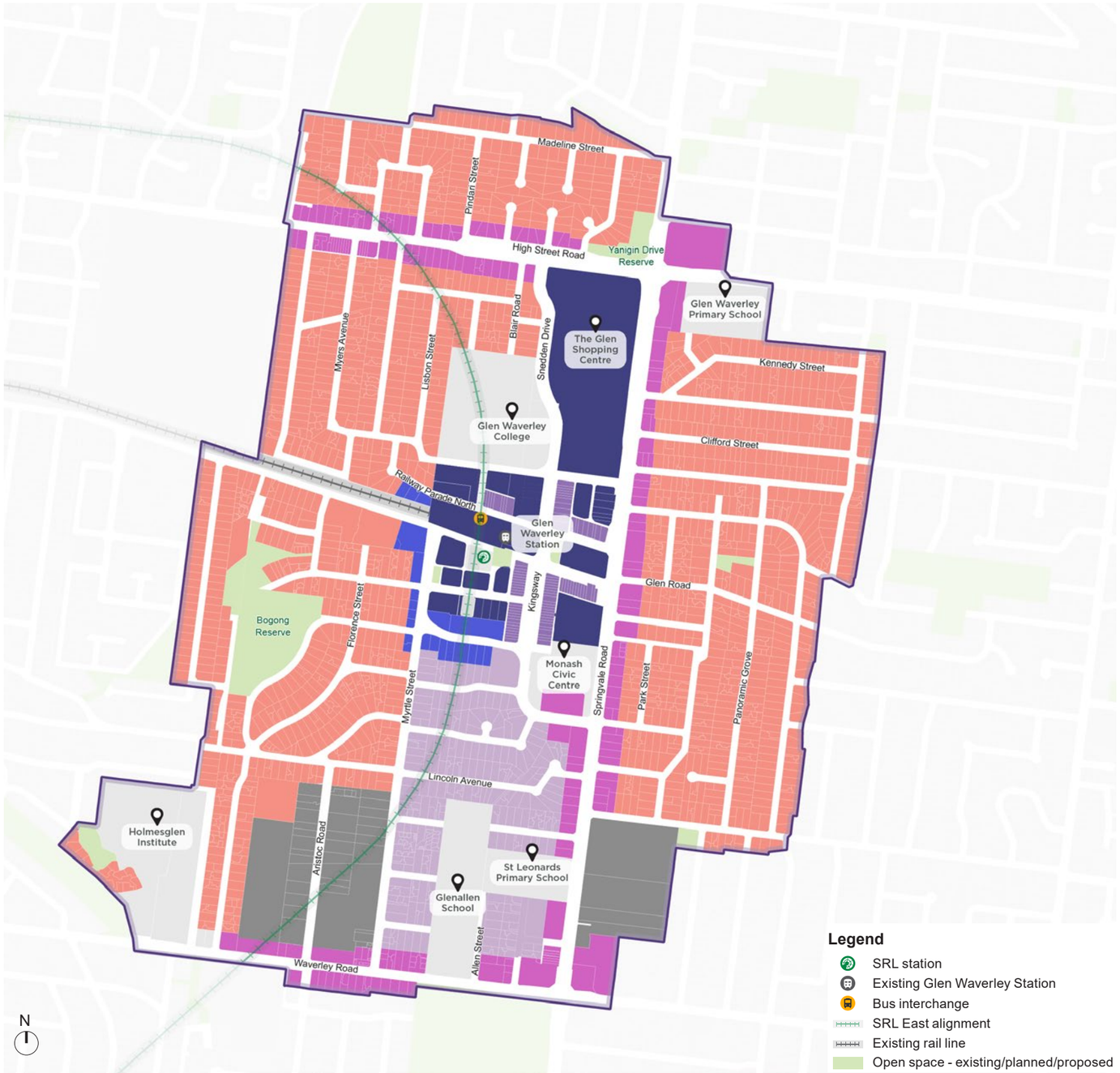


Figure 5.4: Preferred side, rear and front upper-level setbacks

6 Outcomes

AJM
Joint Venture

6.1 Introduction

This section presents the specific urban form and public realm initiatives proposed to achieve the Glen Waverley Vision. It is largely organised by place type, followed by a summary of the urban development typology testing method, and an examination of each Place interface.

The initiatives in this section are informed by the analysis in the Appendices, and the urban development and public realm typologies research provided in the SRL East Structure Plan - Urban Design Supporting Research - Attachment A.

Place types

Place types have been derived by grouping urban form areas, as described in Section 4, into six categories as illustrated in Figure 5.1.

Preferred forms of development have been identified for each place type, based on the urban form strategies. The place types are illustrated here and explored further in Sections 6.2 to 6.9.

For each place type, this section presents:

- A statement outlining the future character of place types based on existing conditions and key drivers
- A summary of the public realm and built form outcomes required to deliver the future character
- Cross sections combining the typical building and public realm profile
- Cross-sections of specific places particularly where there is a variation to the standard development type is proposed to achieve the desired public realm outcome.

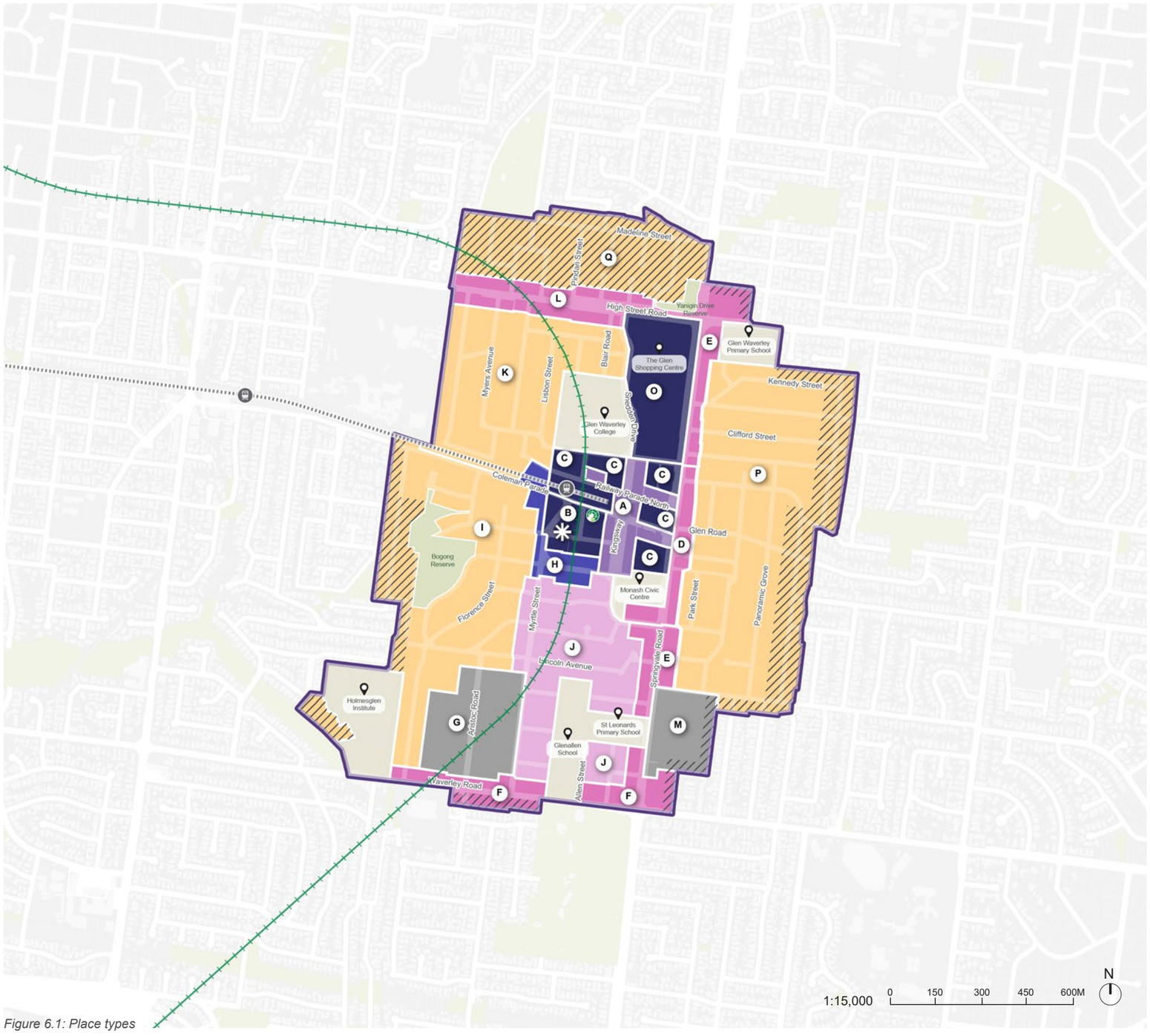


Figure 6.1: Place types

Legend

- SRL station
- Existing Glen Waverley Station
- Structure Plan Area
- SRL East alignment
- Civic facilities, schools and hospitals
- Sensitive / constrained / isolated areas

Place types

- Central Core
- Central Flanks
- Main Streets
- Key Movement Corridors
- Urban Neighbourhoods
- Residential Neighbourhoods
- Enterprise Neighbourhoods
- Strategic site - Station development area

6.2 Central Core

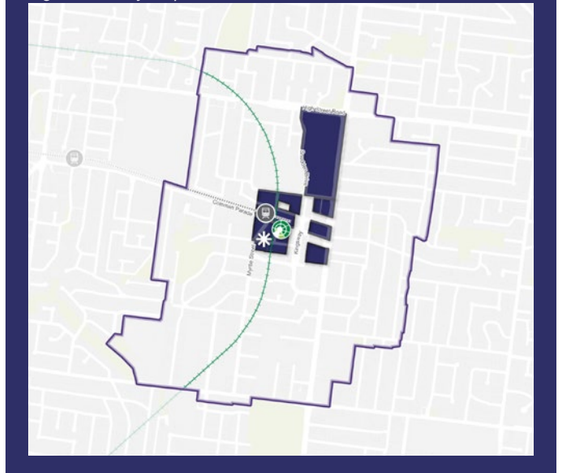
The core of the precinct

The urban form areas identified as belonging to this place type include:

- B – Central Core
- C – Kingsway core sites
- O – The Glen.

Refer to Section 4.5 for a detailed description of these urban form areas.

Figure 6.2: Key map - Central Core



Future role and function

Substantial change of built form, delivering mixed-use neighbourhoods which provide space for jobs growth and local services

The Central Core will provide the greatest accessibility to jobs and services from the SRL catchment. Therefore, it is where the level of intensification and provision of jobs and services should be highest, except where valued character and fragmented land ownership limit the potential for growth.

Some residential floorspace should be provided to ensure that the Central Core is vibrant outside business hours.

Future drivers

Recognise existing moderate to high level of intensification

The Central Core is already developed to a higher intensity than the remainder of the Structure Plan Area. Therefore, future development should generally complement this more intense urban form character.

High level of activation to the street

The Central Core is where the highest level of pedestrian activity will occur as a result of its intensity of development and people accessing public transport, jobs and services. This includes activity in the evening and weekends. Therefore, it is critical that a high level of activation is provided to ensure safety, consistent with SRL Urban Design Strategy objectives 6.5:‘Activation’ and 4.4:‘Safer design’.

Maintain solar amenity to key public spaces

Solar access remains important in the Central Core. However, the desire for intensification means that solar access is only prioritised in the key public spaces to achieve a balance between development and public realm quality.

Future urban form

The Central Core will contain a fine-grain network Activity Streets supporting pedestrian permeability around the SRL station and providing opportunities for dining and retail activities and public life. An upgraded pedestrian link is proposed along the railway corridor connecting Railway Parade North to Rose Avenue enhancing access to the SRL station. A proposed new public space at the SRL station and an improved entrance at the existing Glen Waverley Station will be well-connected through improvements to Coleman Parade.

The Central Core will provide the majority of the retail activity in the Structure Plan Area, along with high-density employment and housing in the form of high-rise buildings. These buildings will maintain an activated and continuous street wall. Towers will be set back above the street wall to ensure good amenity in the public realm and neighbouring buildings.

Figure 6.3: Example of the form of development envisaged for Central Core

Built form outcomes

The development type recommended in the Central Core is the podium-tower. Medium to high-rise towers in the form of podium-tower buildings can deliver the significant level of intensification envisaged for the activity centre. Smaller lots will require amalgamation to enable the development of podium-tower buildings.

Provided it is well designed, the podium-tower format provides for a street-edge scale that facilitates good public realm amenity in terms of human scale, sky views, sun and wind conditions, and complements the existing character. Best practice podium-tower design includes active street facades, with any above-ground car parking 'sleeved' behind other uses, and well-separated towers with generous setbacks.

A mix of uses is necessary to deliver the desired vibrancy and activation. The podium-tower format enables a range of retail types in the podium and office and/or residential uses above.

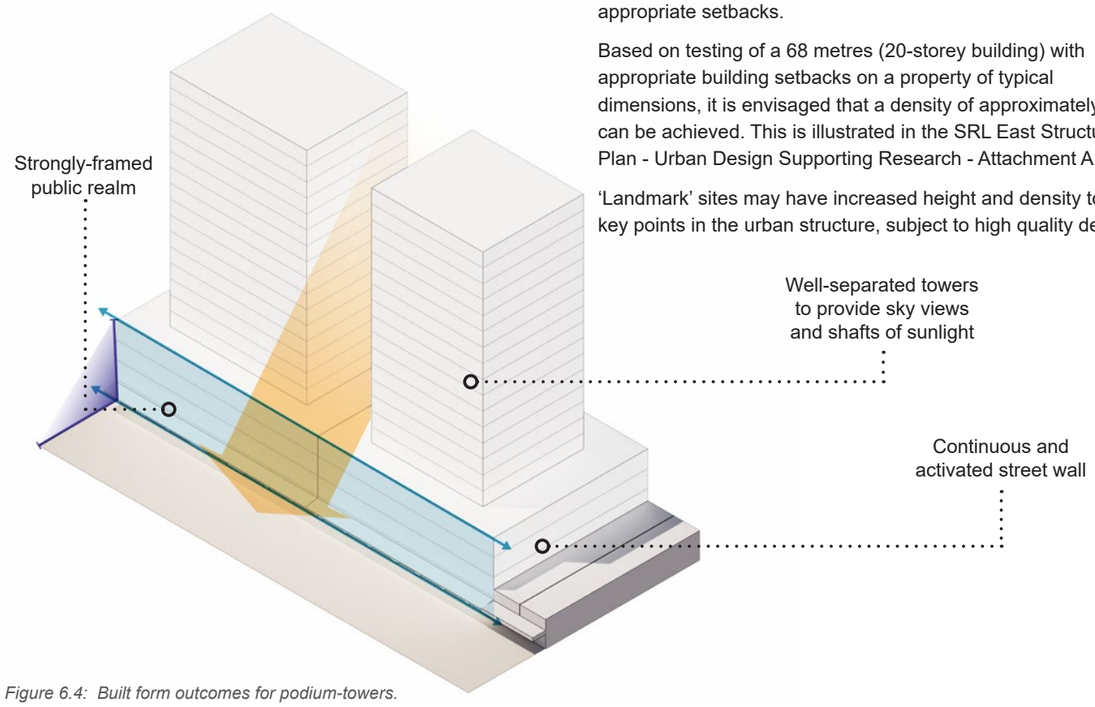


Figure 6.4: Built form outcomes for podium-towers.

Building height and density

The maximum building height has been determined based on:

- Aviation airspace regulations
- The importance of the Central Core in terms of its envisaged provision of jobs and retail floorspace, which should be expressed by building scale
- The number of rail lines serving the Central Core area, which is an indicator of its public transport accessibility and consequent suitability for growth
- Proximity to sensitive interfaces, such as Urban or Residential Neighbourhoods which should temper heights
- The width of abutting roads, which influence the capacity of the public realm to accommodate height without unreasonable amenity impacts
- Emerging built form character, which new development should complement.

The Central Core comprises the SRL Rail and Infrastructure project, The Glen Shopping Centre and other larger sites in the activity centre. The area has an emerging character of high-rise podium-tower buildings reaching heights in the order of 68 metres (20 storeys). It is considered appropriate to enable future development that reinforces this emerging character, provided good amenity outcomes are ensured through appropriate setbacks.

Based on testing of a 68 metres (20-storey building) with appropriate building setbacks on a property of typical dimensions, it is envisaged that a density of approximately 8.5:1 can be achieved. This is illustrated in the SRL East Structure Plan - Urban Design Supporting Research - Attachment A.

'Landmark' sites may have increased height and density to mark key points in the urban structure, subject to high quality design.

Street wall height

A minimum street wall height of 12 metres (3 storeys) is proposed to ensure the public realm is well framed. The preferred maximum street wall heights within the Central Core vary in response to the width and characteristics of the streets. The maximum street wall height for Springvale Road and High Street Road is 21 metres (5 to 6 storeys) to balance between spatial definition and sense of openness. A maximum street wall height of 12 m (3 storeys) is proposed along Kingsway, Railway Parade North, Coleman Parade, O'Sullivan Road west of Kingsway and Euneva Avenue to complement the valued character street network. The preferred maximum street wall height for all other streets is 17 metres (4 storeys) to maintain a reasonable level of openness and solar access in the public realm in accordance with the Strategy BF2: Podiums.

Building setbacks

The following setbacks are proposed:

Podium

- A zero street setback to frame the public realm and support public realm activation, in accordance with Strategies BF2. Podiums and BF7. Engaging facades
- Zero side and rear setbacks where there is no primary outlook
- A 4.5-metre side and rear setbacks where there is a primary outlook. Wherever applicable, side and rear setbacks should be measured from the centreline of an adjoining laneway.

Tower

Front setbacks above the podium of:

- 5 metres up to a height of 66 metres (17 to 20 storeys)
- 7.5 metres above a height of 66 metres
- Front tower setbacks are designed to distinguish towers from the street wall, maintain a sense of openness and manage wind effects, in accordance with Strategy BF2: Podiums and BF3: Weather protection. This may be relaxed on the intersection of two major streets to express the urban structure, provided wind effects are managed.

Side and rear setbacks of:

- 4.5 metres for towers up to a height of 27 metres
- 6 metres for towers up to a height of 41 metres
- 7.5 metres for towers up to a height of 66 metres
- 10 metres for towers higher than 66 metres
- Side and rear setbacks are designed to maintain a sense of openness and sky views, allow solar access to the public realm, ensure reasonable amenity for tower occupant and to maintain equitable development opportunities for neighbouring properties, in accordance with Strategies BF1. Tower separation and BF2. Podiums
- For all floor levels above the height of the street wall where the building exceeds a height of 41 metres, a maximum tower floorplate of 900 square metres for residential uses and 1,350 square metres for office uses.

Building separation

Within a site, buildings should be separated by a minimum of:

- 9 metres for towers up to a height of 27 metres
- 12 metres for towers up to a height of 41 metres
- 15 metres for towers up to a height of 60 metres
- 20 metres for towers up to a height of 100 metres.

Overshadowing

Solar access can be achieved to 30 per cent of the primary public open spaces for 3 hours per day in mid-winter without unreasonable cost to the provision for growth. Therefore, a solar access standard of 50 per cent of the open space for a minimum of 3 hours at mid-winter is recommended for SRL station new public space and Monash Civic Centre.

The recommended building scale and massing will achieve a solar access standard to Glen Waverley Central Car Park public space at 281 Springvale Road of 30 per cent of the open space for a minimum of 3 hours at mid-winter.

Activity Streets are intended to support the highest level of street life. However, they are also where development is most intense, in response to the accessibility created by the SRL station. A balance needs to be struck between ensuring solar access and providing for growth. In response, it is proposed that development should maintain solar access to 50 per cent of the southern, eastern or western footpaths of Activity Streets for a minimum of 3 hours at the spring equinox. The exception to this is western half of Montclair Avenue where no solar access standard is recommended given the availability of sunny streets and public open spaces nearby.

Summary of built form outcomes

The Built Form Outcomes for the podium-tower development type are summarised below.

Building height and density	
Maximum height	68 metres (20 storeys)
Maximum density	8.5:1
Street wall	
Minimum height	12 metres (3 storeys)
Maximum height Springvale Road and High Street Road	21 metres (5 to 6 storeys)
Maximum height Kingsway, Coleman Parade and Railway Parade North	12 metres (3 storeys)
Maximum height (all other streets)	17 metres (4 storeys)
Activation	Moderate to High
Building setbacks	
Minimum street - podium	Zero metres
Minimum street - tower	5 metres from podium facade up to a height of 66 metres 7.5 metres from podium facade above a height of 66 metres
Minimum side and rear - podium (non-primary outlook)	Zero metres
Side and rear - podium (primary outlook)	4.5 metres
Minimum side - tower	4.5 metres for towers up to a height of 27 metres, 6 metres for towers up to a height of 41 metres 7.5 metres for towers up to a height of 66 metres 10 metres for towers higher than 66 metres
Maximum tower floorplate area	
All floor levels above the height of the street wall where the building exceeds a height of 41 metres	900 square metres for residential uses 1,350 square metres for office uses
Building separation	
Towers up to a height of 27 metres	9 metres
Towers up to a height of 41 metres	12 metres
Towers up to a height of 60 metres	15 metres
Towers up to a height of 100 metres	20 metres

Figure 6.5: Indicative streetscape typical only

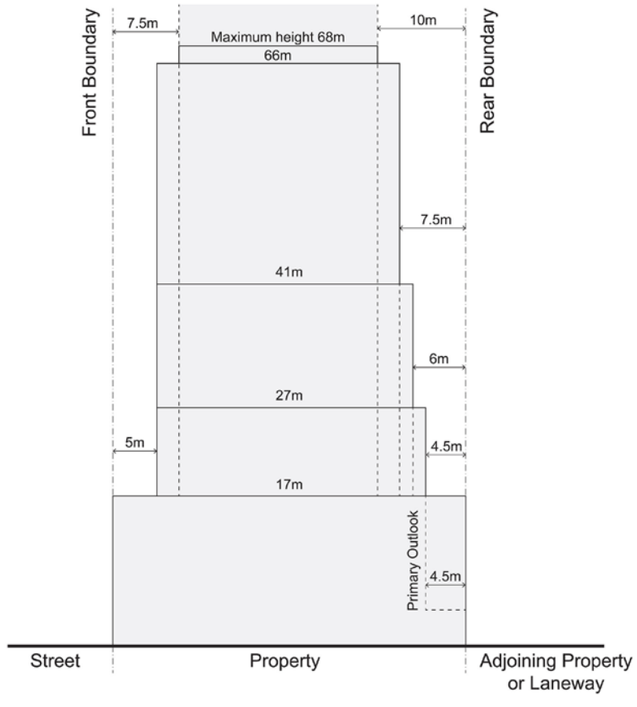


Figure 6.6: Built form outcomes section - front to rear

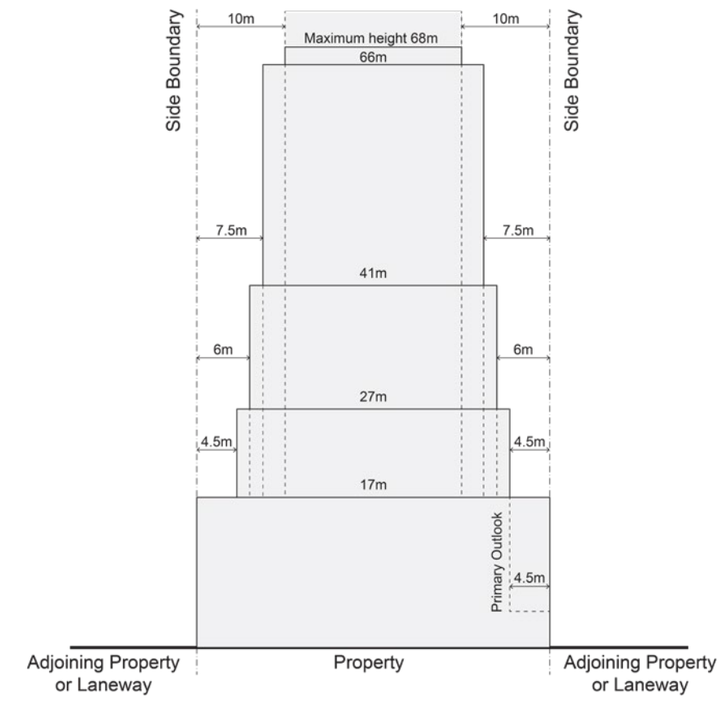


Figure 6.7: Built form outcomes section - side to side

Public realm outcomes

The Public Realm Framework identifies the future aspiration for the public realm in the Central Core. Realising this aspiration relies on development and public realm projects that vary in scale and importance as outlined below.

SRL Rail and Infrastructure

Public realm elements within the SRL Rail and Infrastructure works.

- Open space (new) - SRL Rail and Infrastructure Project
- Pedestrian crossings (new or upgraded)

Key public realm projects

Key projects to create an accessible and permeable Central Core, as part of Design Direction 2: Promote active transport access.

- Local key link (new) - fixed
- Local pedestrian link - flexible

Public realm enhancements

Enhancements to deliver Design Direction 1: Ensure streets are inviting places that support community life.

- Streetscape improvements - Green Street
- Railway Parade North, O'Sullivan Road (west of Kingsway) and Euneva Avenue upgrades - Activity Street
- Snedden Drive upgrades - Avenue
- Springvale Road transformation - Boulevard

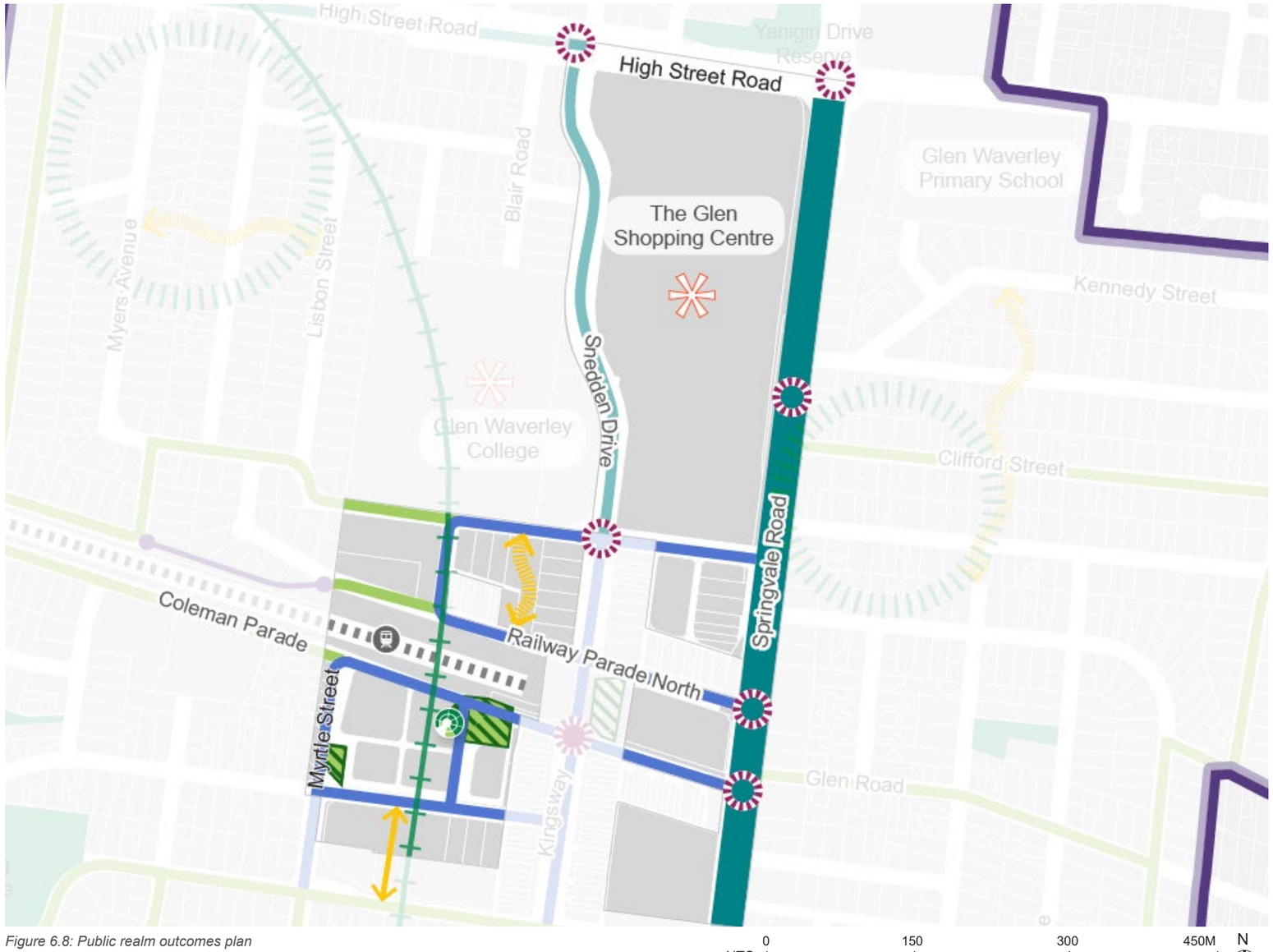


Figure 6.8: Public realm outcomes plan

Typical building and public realm profile

This cross-section shows typical Central Core buildings facing an Activity Street to provide an illustration of the future built form and public realm outcomes for this area.

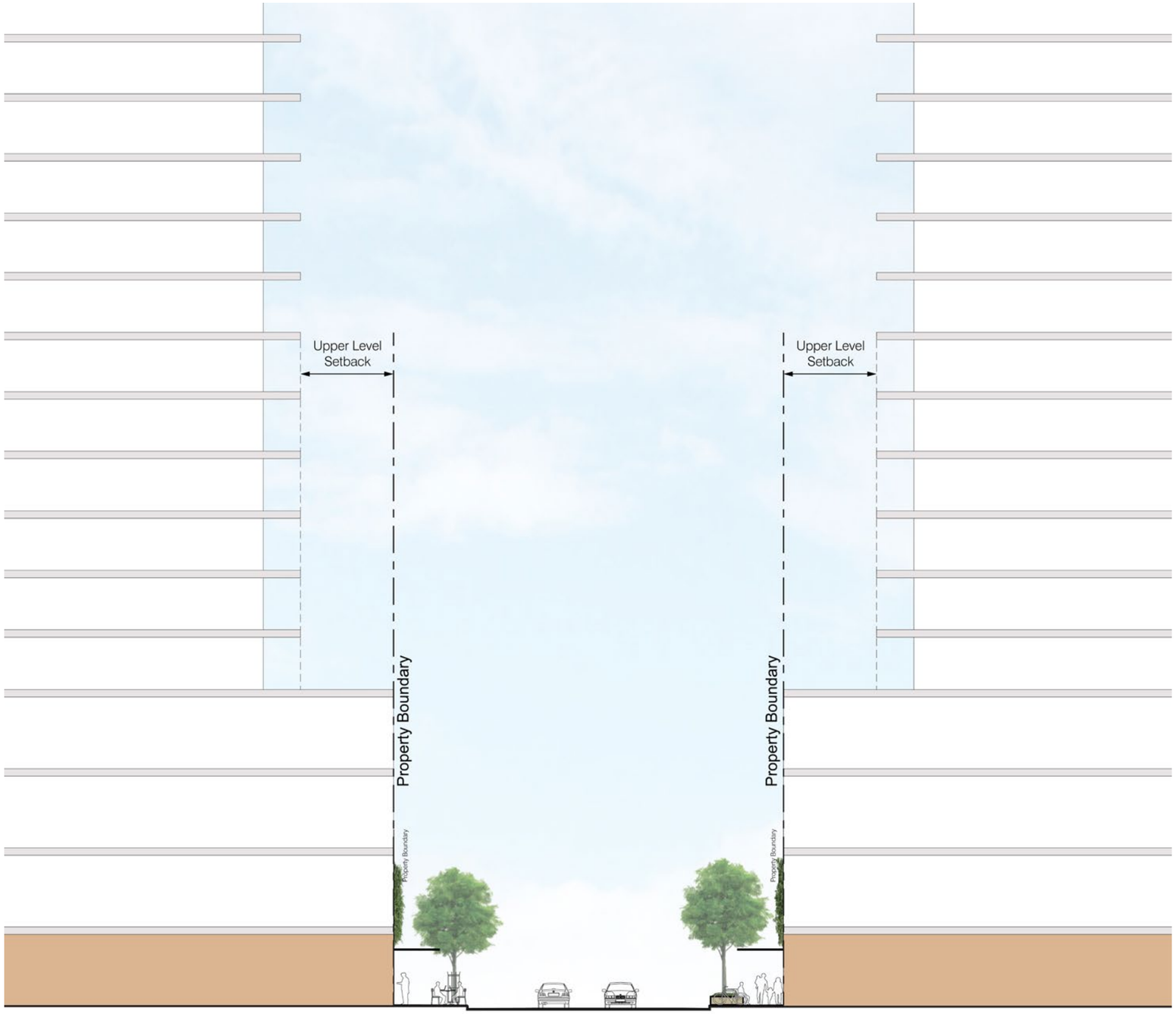


Figure 6.9: Potential cross-section - Central Core

6.3 Central Flanks

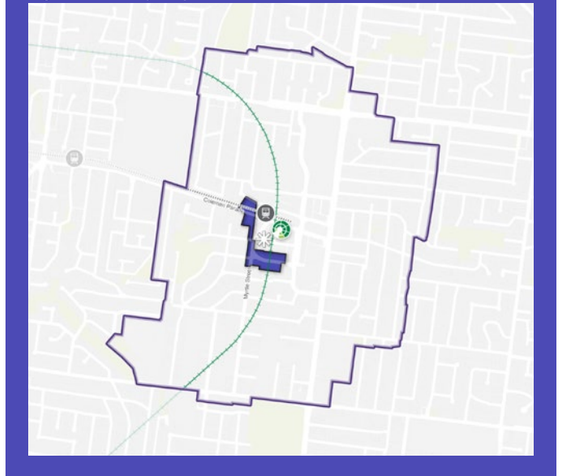
The remainder of the central areas beyond the Core

The urban form area identified as belonging to this place type include:

- H – Bogong Avenue.

Refer to Section 4.5 for a detailed description of this urban form area.

Figure 6.10: Key map - Central Flanks



Future role and function

Substantial change of built form providing space for jobs growth, local services and housing surrounding the core

This area will provide a high level of accessibility to jobs and services within the Central Core, and the next highest level of accessibility to jobs from the SRL catchment after the Central Core. Therefore, it should provide for substantial growth of jobs and dwellings. As it lies adjacent to areas of lower intensity, it should also have a more moderated level of intensification than the Central Core.

Future drivers

High level of activation to the street

There will be a high level of pedestrian activity in this area as a result of its intensity of development and people accessing public transport, jobs and services in the Central Core. This includes activity in the evening and weekends. It is critical that a high level of activation is provided to ensure safety, consistent with SRL Urban Design Strategy objectives 'Activation' and 'Safer design'.

Maintain sunlight amenity to the public realm

The slightly less focus on intensification compared with the Central Core allows for a greater focus on ensuring sunlight in the majority of the public realm, consistent with the SRL Urban Design Strategy objective of Amenity.

Recognise existing moderate to high level of intensification

This area is already developed to a higher intensity than the surrounding parts of the Structure Plan Area. Future development should complement this more intense urban form character.

Future urban form

The Central Flanks urban form area is proposed to frame the Activity Street at Myrtle Street and the Green Street at Bogong Avenue adjacent to the Central Core urban form area, supporting a high-quality streetscape for pedestrian and cycling.

This urban form area will provide high-density employment and housing in the form of mid-rise buildings. These buildings will respond to the emerging mid-rise urban development character, and maintain an activated and continuous street wall. Upper level built form will be set back from the street wall to protect sunlight access to the public realm and neighbouring properties. A zero street setback at podium level will frame the public realm and will support its activation, except in narrow streets, where buildings are proposed to be set back to create a wider footpath.

Figure 6.11: Examples of the form of development envisaged for the Central Flanks.

Built form outcomes

The development type recommended in the Central Flanks is the mid-rise podium-tower. This development type delivers high density while maintaining good solar provision to the public realm. This type typically requires a large lot or lot amalgamation.

The zero front setback and lack of side setbacks at the base of the building ensure a highly-activated and strongly-framed public realm. The strong relationship with the street also supports commercial uses at ground and potentially upper levels to provide the desired vibrancy and activation. Best practice design provides for car parking in a basement or 'sleeved' behind other uses.

Behind the street wall, the base of the building is set back from the side and rear boundary to provide space for tree planting. This typology provides a 5 to 10 per cent deep soil area at the sides and rear of the lot.

Above the street wall, the upper levels are set back from all sides to maintain sunlight, sky views and a sense of openness in the public realm. These setbacks also maintain good internal amenity and equitable development opportunities on neighbouring properties.

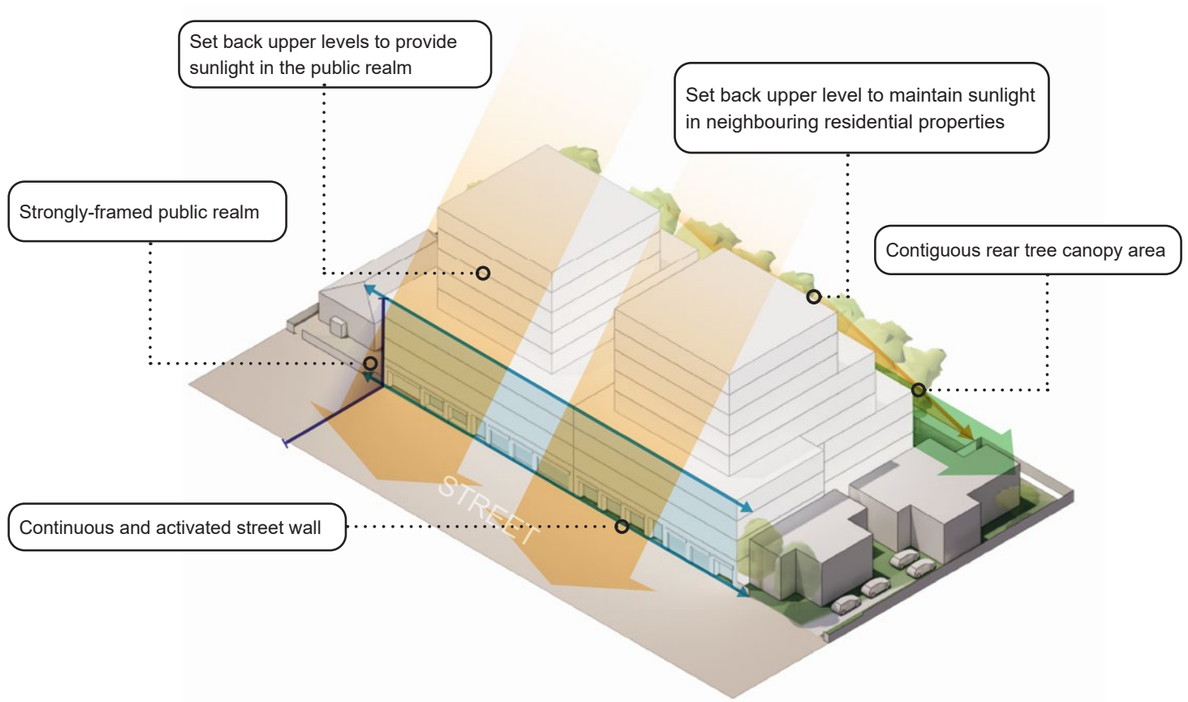


Figure 6.12: Built form outcomes for mid-rise podium-towers

Building height and density

Building heights are determined by the application of a September equinox solar plane to protect sunlight access to the footpath on the opposite side of the street, in accordance with Strategy BF5: Sunlight to public realm.

Based on testing of typical property sizes within this place type, it is envisaged that heights of 33 metres (8 to 9 storeys) and a density of approximately 4:1 can be achieved. Testing of mid-rise podium-tower development in typical Central Flanks lots is illustrated in the SRL East Structure Plan - Urban Design Supporting Research - Attachment A.

Street wall height

A minimum street wall height of 12 metres (3 storeys) is proposed to ensure the public realm is well framed, in accordance with BF2: Podiums. The maximum street wall height is proposed to be 17 metres (4 storeys), to balance spatial definition and a sense of openness, and to maintain solar access in the streets.

Building setbacks

The following minimum setbacks are proposed:

Podium

- A zero street setback to frame the public realm and support public realm activation, in accordance with Strategy BF7: Engaging facades. Exceptions to this are streets where public transport, active transport and street activation are proposed. In these locations, a front setback is proposed to create a more generous pedestrian environment. Refer to Figure 5.3 Preferred street frontages and setbacks plan
- Zero side setbacks where there is no primary outlook
- A 4.5-metre side setbacks where there is a primary outlook. Whenever applicable, side and rear setbacks should be measured from the centreline of an adjoining laneway
- A rear setback of 6 metres to provide for canopy trees, in accordance with Strategy BF14: On-site landscaping. It is envisaged these rear setbacks will combine to create a green spine along the rear of all lots in this place type, establishing valuable habitat and potentially communal amenity.

Tower

- A 3-metre front setback from the podium facade, to distinguish towers from the street wall, maintain a sense of openness and manage wind effects, in accordance with Strategies BF2. Podiums and BF3. Weather protection
- Side setbacks of:
  - 4.5 metres for towers up to a height of 27 metres
  - 6 metres for towers up to a height of 41 metres
  - 7.5 metres for towers higher than 41 metres
- A rear setback of 6 metres, aligned with podium rear setback
- Where adjacent to the rear boundary of land in a Key Movement Corridor or Residential Neighbourhoods, a rear setback of 6 metres plus 0.6 metres per metre of height above 17 metres
- These setbacks may be measured from the centreline of an adjoining laneway. They are designed to ensure reasonable amenity for tower occupants and to maintain equitable development opportunities for neighbouring properties, in accordance with Strategies BF1. Tower separation and BF2. Podiums.

Building separation

Within a site, buildings should be separated by a minimum of:

- 9 metres for towers up to a height of 27 metres
- 12 metres for towers up to a height of 41 metres
- 15 metres for towers up to a height of 60 metres
- 20 metres for towers up to a height of 100 metres.

Overshadowing

Activity Streets are intended to support the highest level of street life. However, they are also where development is most intense, in response to the accessibility created by the SRL station. A balance needs to be struck between ensuring solar access and providing for growth. In response, it is proposed that development should maintain solar access to 50 per cent of the eastern or western footpaths of Activity Streets for a minimum of 3 hours at the spring equinox.

The recommended building scale and massing will achieve the recommended solar access standard to ensure good amenity in the public realm and to complement the existing character of the other streets. The solar access standard recommended will maintain sunlight to southern, eastern and western footpaths in typical streets at the September equinox. This is considered to strike an appropriate balance between solar access and providing for growth.

The building scale and massing will also limit additional shadow to private open space in the rear setbacks of properties in Key Movement Corridors, Urban Neighbourhoods and Residential Neighbourhoods.

Summary of built form outcomes

The urban form outcomes for the mid-rise podium-tower development type are summarised below.

Building height and density	
Maximum height	33 metres 8 to 9 storeys
Maximum density	4:1
Street wall	
Minimum height	12 metres (3 storeys)
Maximum height	17 metres (4 storeys)
Activation	Moderate-high
Building setbacks	
Minimum street - podium	Zero metres
Minimum street - tower	3 metres from podium facade plus 0.6 metres per metre of height above 33 metres, except 0.8 metres per metre of height above 23 metres on the north side of east-west streets
Minimum side - podium (non-primary outlook)	Zero metres
Minimum side - podium (primary outlook)	4.5 metres
Minimum side - tower	4.5 metres for towers up to a height of 27 metres 6 metres for towers up to a height of 41 metres 7.5 metres for towers higher than 41 metres
Minimum rear - podium and tower	6 metres, landscaped
Minimum rear - at interface with Key Movement Corridors or Residential Neighbourhoods	6 metres plus 0.6 metres per metre of height above 17 metres
Building separation	
Towers up to a height of 27 metres	9 metres
Towers up to a height of 41 metres	12 metres
Towers up to a height of 60 metres	15 metres
Towers up to a height of 100 metres	20 metres

Figure 6.13: Indicative streetscape typical only to illustrate potential outcomes

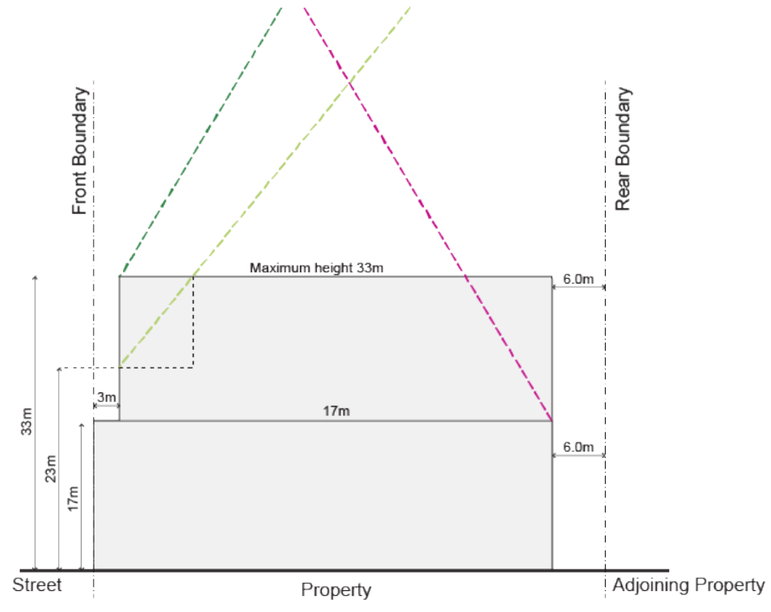


Figure 6.14: Built form outcomes section - front to rear

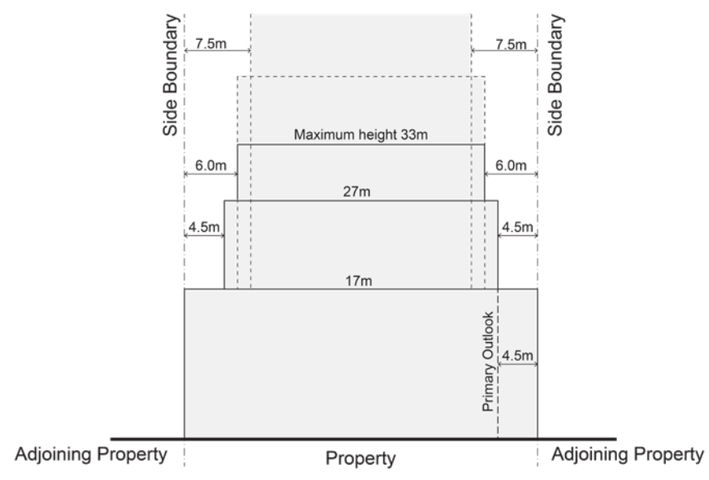


Figure 6.15: Built form outcomes section - side to side

Public realm outcomes

The Public Realm Framework identifies the future aspiration for the public realm in the Central Flanks. Realising this aspiration relies on development and public realm projects that vary in scale and importance as outlined below.

SRL Rail and Infrastructure

Public realm elements within the SRL Rail and Infrastructure Works.

- Myrtle Street (part) streetscape upgrades - Activity Street

Public realm enhancements

Enhancements to deliver Design Direction 1: Ensure streets are inviting places that support community life.

- Important key link (improved widened) - fixed
- Local key link (new) - fixed
- Streetscape improvements - Green Street

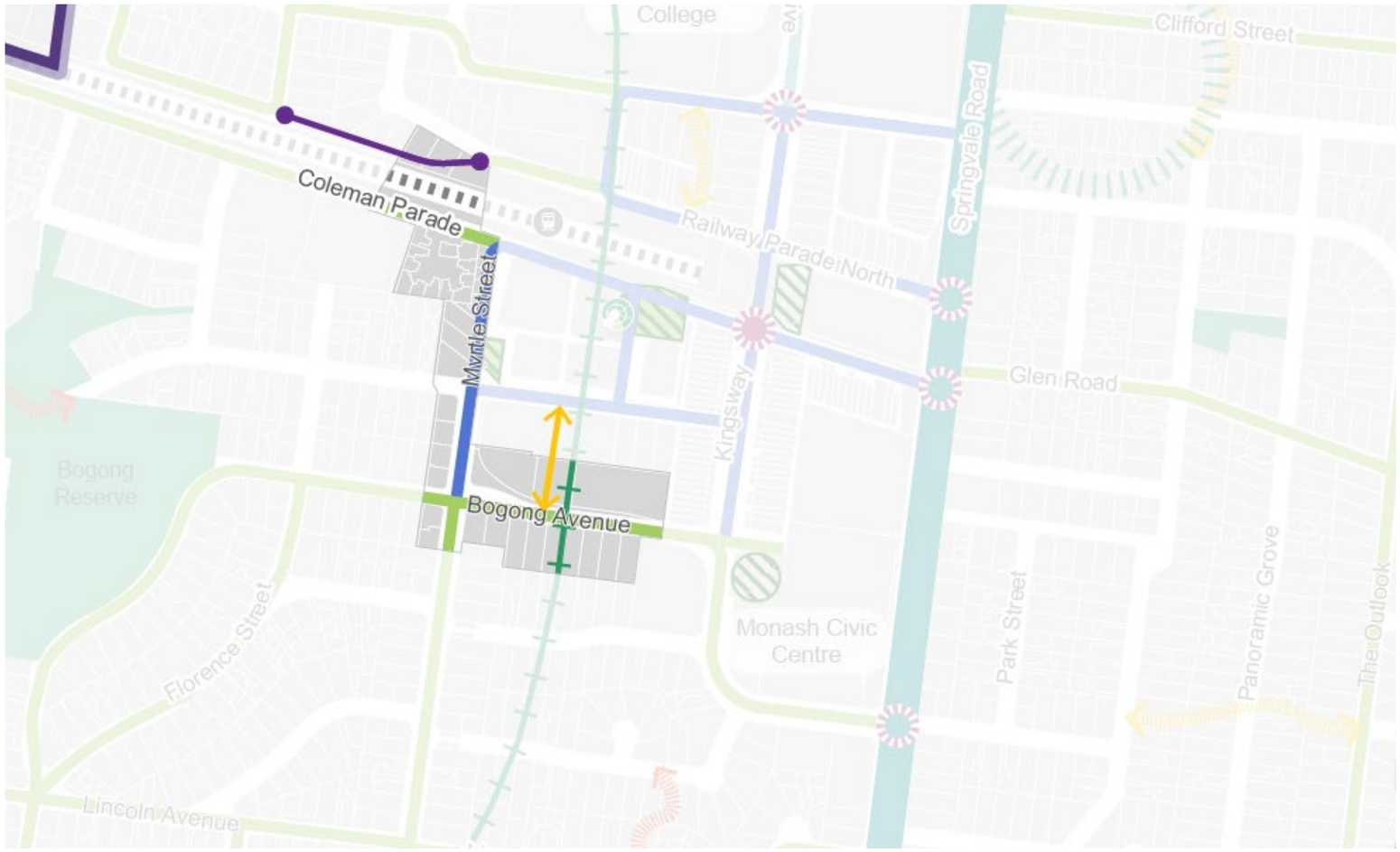


Figure 6.16: Public realm outcomes plan

Typical building and public realm profile

This cross-section shows typical Central Flanks buildings interfacing with the street to provide an illustration of the potential future built form interface with the public realm.

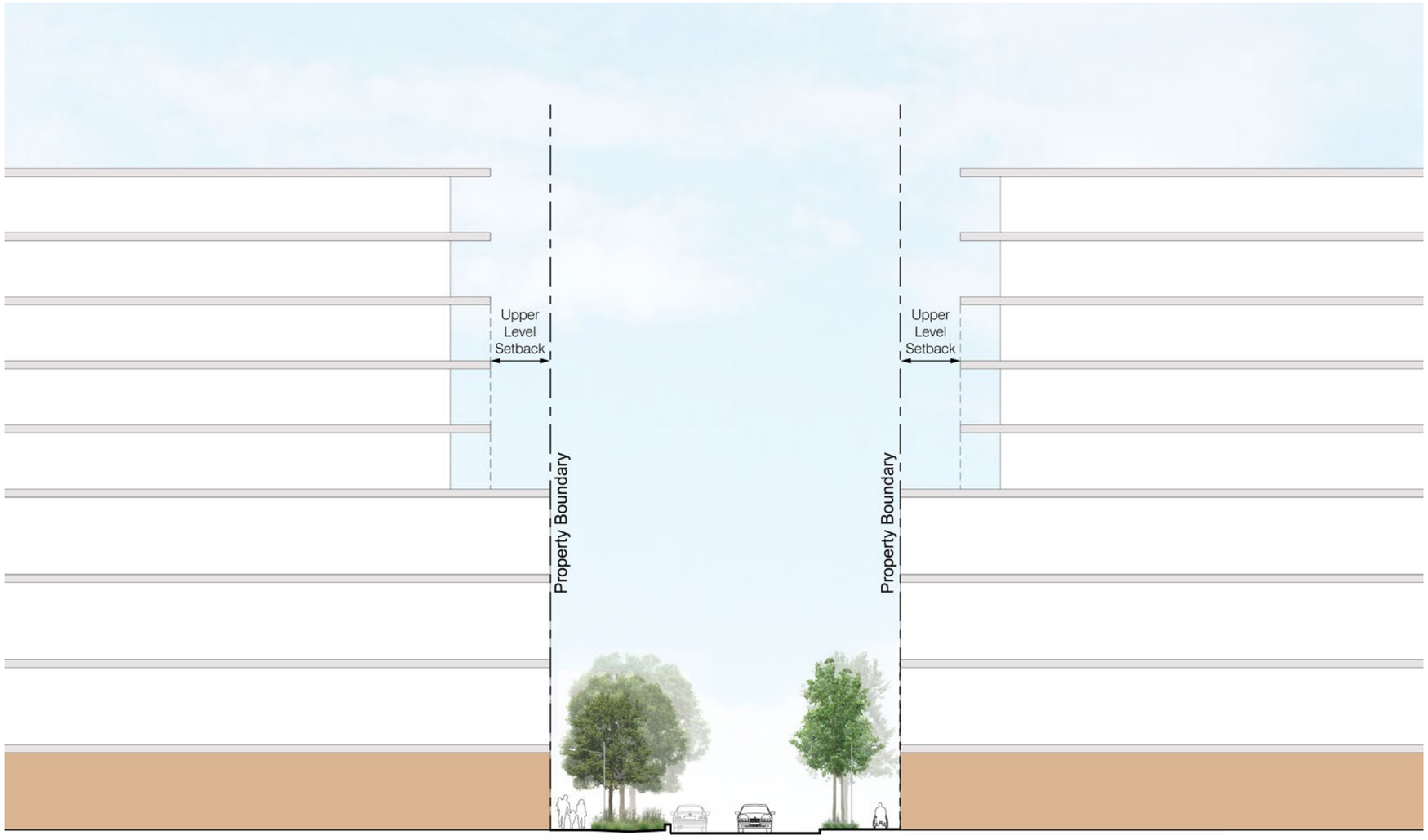


Figure 6.17: Potential cross-section - Central Flanks

6.4 Main Streets

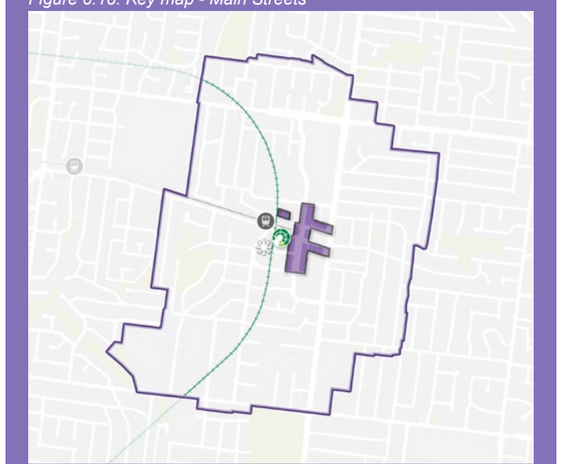
Existing Main Street shopping strips

The urban form area identified as belonging to this place type include:

- A – Kingsway.

Refer to Section 4.4 for a detailed description of this urban form area.

Figure 6.18: Key map - Main Streets



Future role and function

Moderate intensification of built form providing space for more housing

This urban form area has a highly valued, low-rise character and a high level of pedestrian activity, requiring a high level of public realm amenity. Together with fragmented ownership, these factors limit its development potential despite lying within the heart of the activity centre.

While there may be sporadic opportunities for more significant redevelopment through amalgamation of many lots, the likelihood this would not occur uniformly within the urban form area means that allowing such development would result in an in-cohesive built form character. It would also likely adversely affect the fine-grain character. Therefore, only a moderate level of intensification is envisaged.

Future drivers

Respect the low-rise and fine-grain character of the shopping strip

This urban form area is characterised by narrow lots, resulting in a distinct character of small, low-rise shops. Future development should complement this character through its massing and facade design.

Maintain sunlight amenity to the public realm

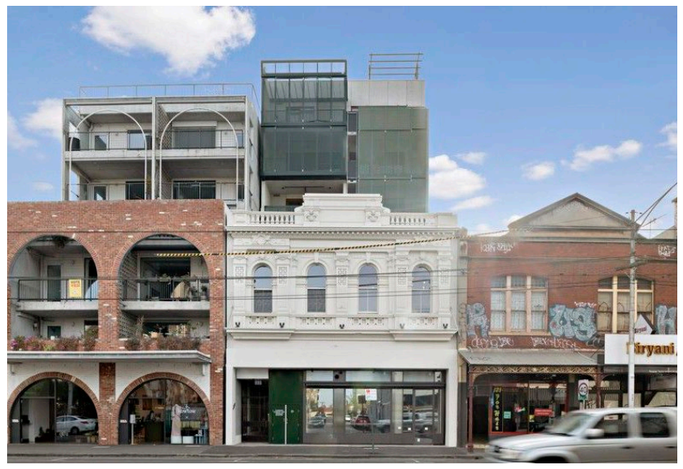
There is a high level of pedestrian activity in this urban form area as a result of its retail uses, including outdoor dining. It is important that sunlight is maintained to southern, eastern and western footpaths, consistent with SRL Urban Design Strategy objectives ‘Activation’ and ‘Places for people’.

Future urban form

The Main Street area is proposed to have highly pedestrianised Activity Streets along Kingsway, Coleman Parade and Railway Parade North, supporting retail and hospitality activities. A new public open space within the Central car park site is envisaged to interface Kingsway while the other urban spaces such as the entrance plaza to the Glen Shopping Centre, the new public space at the SRL station and the urban space at the Civic Centre will punctuate the Activity Streets. Upgraded pedestrian crossings will ensure a seamless pedestrian network in the public realm network. Upgrades are proposed to Kingsway between Coleman Parade and Bogong Avenue to further enhance its role as a high-quality street for pedestrian and public life.

The Main Street area will be developed into mixed-use buildings which maintain a sense of openness and solar access to the public realm. New buildings will complement the existing low-rise character, providing a low-scale street wall which will frame the public realm. The built form will be set back above the street wall to distinguish upper forms and maintain visual prominence of the street wall. Rear setbacks will minimise shadow and visual bulk impacts on neighbouring properties.

Figure 6.19: Example of the form of development envisaged for Main Streets



Built form outcomes

The development type recommended in the Main Street place type is shoptop infill. This development type provides for employment and housing growth and increased vibrancy, particularly outside retail hours, while complementing the existing character and providing a high level of pedestrian amenity. It relies on the amalgamation of up to three typical lots, to create a feasible site width (see Urban Development Typologies in the SRL East Structure Plan - Urban Design Supporting Research - Attachment A).

The proposed type incorporates a 2 storey, zero setback, boundary-to-boundary street wall that will complement the existing vibrant and memorable character created by low-rise, continuous, active streetscapes.

The street wall is articulated to reflect the existing fine-grain character and activated by commercial ground floor uses. Above the street wall, upper levels are set back to ensure an appropriate balance between openness and enclosure in the street, along with good solar access.

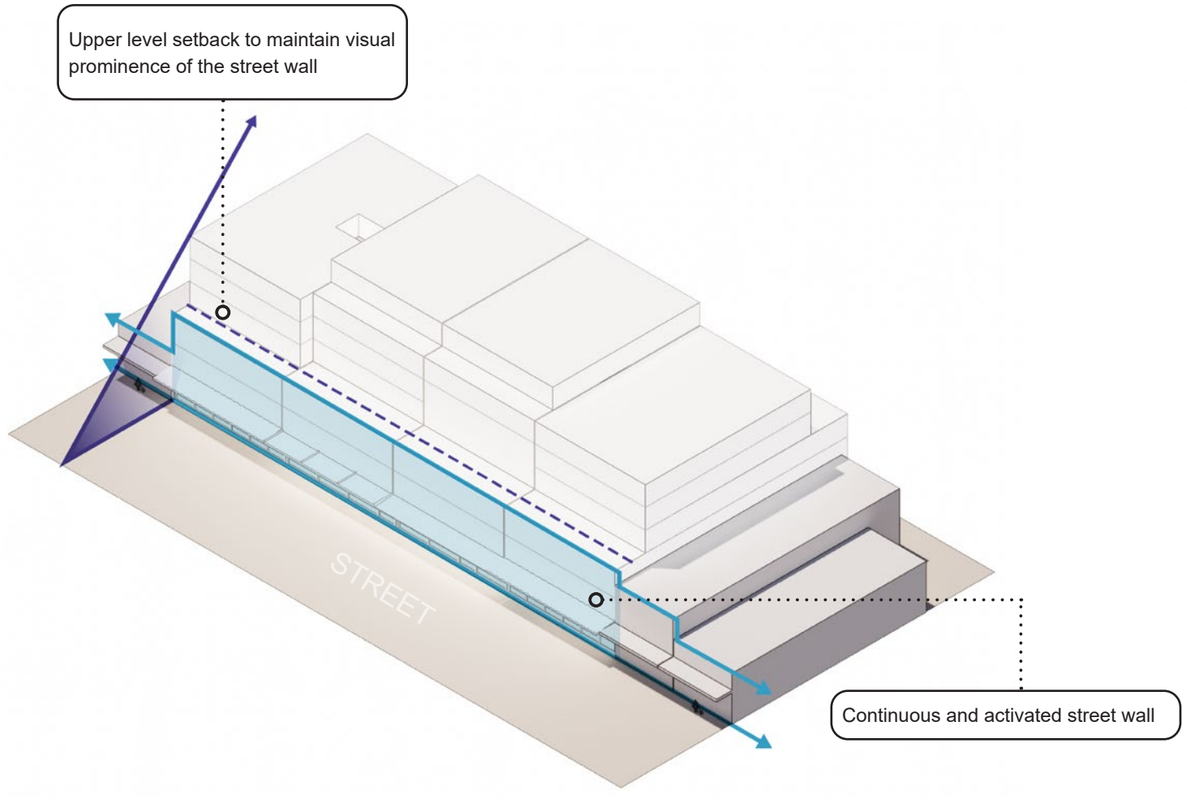


Figure 6.20: Built form outcomes for the shoptop infill typology

Building height and density

Main Streets are characterised by narrow, 1 to 2-storey buildings. The narrow width of the lots and their fragmented ownership means it is likely that not all lots will be redeveloped. Therefore, maximum building heights are influenced by the need to complement the scale of existing buildings, in accordance with Strategy UF8: Main streets and existing small retail strips.

Based on testing of typical property sizes in each urban form area within this place type, it is envisaged that heights of 25 metres (6 to 7 storeys) can be achieved, resulting in a density of approximately 4.5:1. This will also maintain a sense of openness and solar access to the opposite footpath, in accordance with Strategy BF2: Podiums. Testing of shoptop infill development on typical Main Street lots is illustrated in the SRL East Structure Plan - Urban Design Supporting Research - Attachment A.

Street wall height

A minimum street wall height of 9 metres (2 storeys) is proposed to ensure the public realm is well framed, in accordance with Strategy BF6: Street scale. The maximum street wall height is proposed to be 12 metres (3 storeys) to complement the existing low-rise character, in accordance with Strategy BF6: Street scale. This may be increased to 14 metres (4 storeys) at intersections to contribute to a visually diverse streetscape and recognise the characteristic feature of bigger buildings on street corners.

Building setbacks

The following minimum setbacks are proposed:

Podium

- A zero street setback at podium level, to frame the public realm and support public realm activation, in accordance with Strategy BF7: Engaging facades
- A zero side setback
- A zero rear setback where there is no primary outlook
- A 4.5-metre rear setback where there is a primary outlook.

Above Podium

The following minimum setbacks are proposed:

- A 3-metre setback from the podium façade up to a height of 21 metres
- An additional setback of 1 metres per metre of height above 21 metres, to distinguish upper forms from and maintain the visual prominence of the street wall and to maintain a sense of openness in accordance with Strategy BF6: Street scale.

Overshadowing

The recommended building scale and massing will achieve the recommended solar access standard to ensure good amenity to Kingsway. The proposed standard will provide solar access to 100 per cent of the footpaths for a minimum of 3 hours at the spring equinox.

The building scale and massing will also limit additional shadow to private open space in the rear setbacks of properties in Key Movement Corridors, Urban Neighbourhoods and Residential Neighbourhoods.

Building separation

Within a site, buildings should be separated by a minimum of 9 metres.

Summary of built form outcomes

The urban form outcomes for the mid-rise podium-tower development type are summarised below.

Building height and density		
Maximum height	25 metres (6 to 7 storeys)	
Maximum density	4.5:1	
Street wall		
Minimum height	9 metres (2 storeys)	
Maximum height	12 metres (3 storeys)	
Maximum height at intersections	14 metres (4 storeys)	
Activation	High	
Building setbacks		
Street	Zero metres	
Street - above podium	3 metres up to a height of 21 metres 1 metres per metre of height above a height of 21 metres	
Side	Zero metres	
Rear	Zero metres or 4.5 metres (primary outlook)	
Building separation		
Minimum building separation	9 metres	
Place type of neighbouring property	**Number of hours between 9am and 3pm at the September equinox during additional shadow is to be avoided**	**Minimum area of open space to which additional shadow is to be avoided**
Key Movement Corridors, Urban Neighbourhoods	3 hours	40 square metres or 75 per cent of any open space in a rear setback, whichever is the lesser.

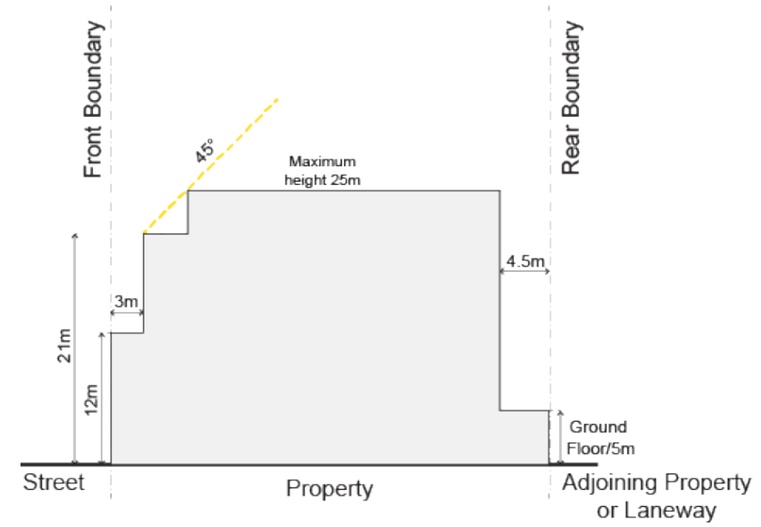


Figure 6.21: Built form outcomes section - front to rear

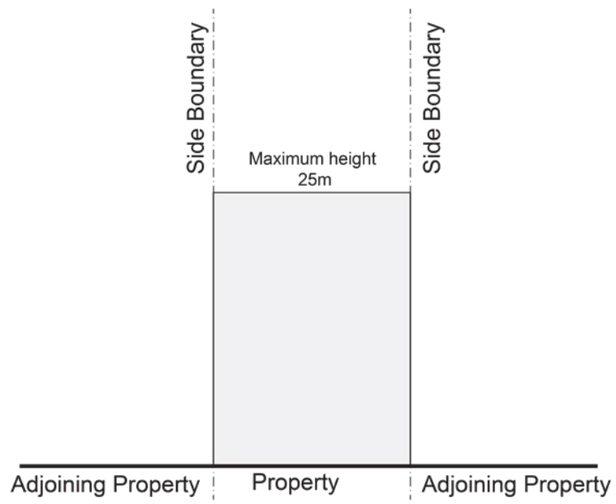


Figure 6.22: Built form outcomes section - side to side

Public realm outcomes

The Public Realm Framework identifies the future aspiration for the public realm in the Main Street. Realising this aspiration relies on development and public realm projects that vary in scale and importance as outlined below.

SRL Rail and Infrastructure

Public realm elements within the SRL Rail and Infrastructure Works.

- Pedestrian crossings (new or upgraded)

Catalyst public realm projects

These are major public realm interventions with the potential to have a substantial and positive influence on the transformation of the broader area.

- Planned/proposed open space at Central Car Park site

Public realm enhancements

Enhancements to deliver Design Direction 1: Ensure streets are inviting places that support community life.

- Springvale Road transformation - Boulevard
- Activity Street - upgrades
- Local key link (new) - flexible
- Pedestrian crossings (new or upgraded)

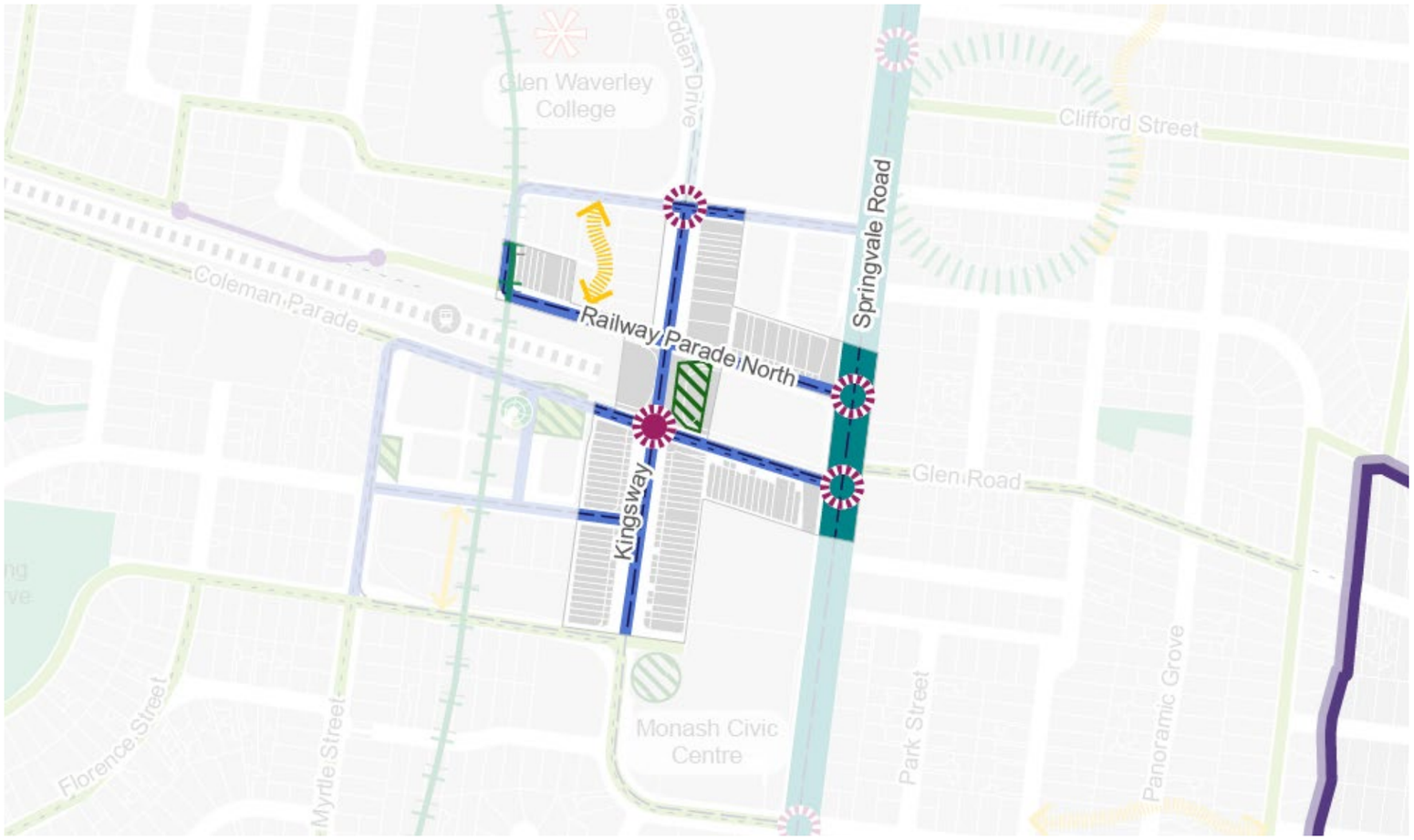


Figure 6.23: Public realm outcomes plan

Typical building and public realm profile

This cross-section shows a typical cross section of Kingsway with buildings facing the Activity Street to provide an illustration of the future built form and public realm outcomes for this area.

Figure 6.24: Potential cross-section - Main Streets

6.5 Key Movement Corridors

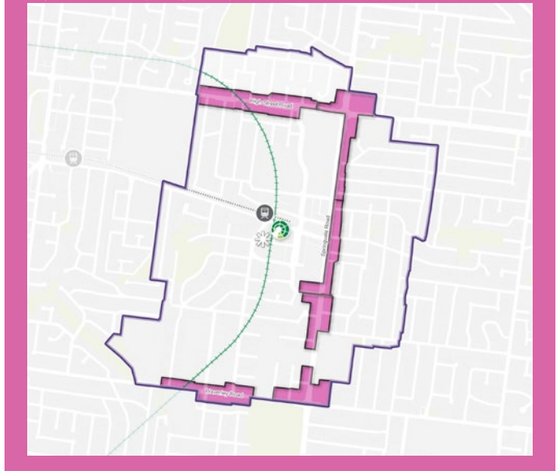
Main Roads

The urban form areas identified as belonging to this place type include:

- D – Springvale Road core
- E – Springvale Road
- F – Waverley Road
- L – High Street Road.

Refer to Section 4.4 for a detailed description of these urban form areas.

Figure 6.25: Key map - Key Movement Corridors



Future role and function

Balance between openness and enclosure of the street

These urban form areas are outside the core of the Structure Plan Area and generally border the residential hinterland. Their development should seek to deliver moderate growth in a form that gives consideration to amenity and character.

Enhance landscape character and amenity within the street

In urban form areas where ground floor commercial activity is not sought, development should contribute to the amenity of the street through a landscaped front setback.

Moderate level of activation to the street

These streets are intended to have commercial activity at ground floor, comprising a mix of retail services, office and showroom uses. There will be a moderate level of pedestrian activity in this area as a result of people walking to these uses. Therefore, it is critical that a good level of street activation is provided to ensure safety, consistent with SRL Urban Design Strategy Objectives 6.5: Activation and 4.4: Safer design.

Future urban form

Springvale Road, High Street Road and Waverley Road will continue to have a high movement function with public transport connecting the Structure Plan Area to the broader context. Closer to the Central Core, a high-quality Boulevard streetscape is proposed to provide an accessible environment for pedestrians walking along and across Springvale Road to access the Central Core. Upgraded pedestrian crossings are proposed on key pedestrian desire lines to facilitate pedestrian movement from the outskirts of the Structure Plan Area to the Central Core.

The Key Movement Corridors are proposed to include mid-rise apartment buildings with pockets of mixed-use buildings. Upper levels will be set back from the street wall to maintain solar access and the sense of openness to the public realm, while rear setbacks will maintain solar access and minimise visual bulk impacts on neighbouring properties. A modest street setback will provide definition and activation to the public realm, and maintain privacy to ground floor dwellings.

Figure 6.26: Example of the form of development envisaged for Key Movement Corridors

Built form outcomes

The development type recommended in the Key Movement Corridors is the urban infill. This is a traditional form of development that delivers highly adaptable buildings able to accommodate commercial and/or residential uses.

This development type delivers moderately high density along main roads, in accordance with Strategy UF6. Boulevards and Avenues, without the potentially adverse impacts of taller buildings. Importantly, it can be developed on the vast majority of the lots found in these places without the need for lot amalgamation (see Best Practice Urban Development Typologies report in SRL East Structure Plan - Urban Design Supporting Research - Attachment A).

This development type provides a vibrant and memorable urban character, good private amenity and protection of neighbouring amenity to the rear, adaptability for mixed and changing uses, and reasonable space for tree canopy cover. The minimal front setback and lack of side setbacks ensure a well-activated and strongly-framed public realm. The strong relationship with the street also supports commercial uses at ground or upper levels where desired.

Figure 6.27: Built form outcomes for Key Movement Corridors

The primary orientation of accommodation to the street and middle of the block enables differing uses to comfortably exist side-by-side where relevant. Generous rear setbacks ensure good amenity for accommodation facing towards the middle of the block, including adjacent properties to the rear, and space for tree planting.

As the Key Movement Corridors evolve through new urban infill development, they will experience a substantial change in character. As noted in Design Direction 5, this is considered to be an inevitable outcome of the vision for transformational change. This kind of transition in character is consistent with other transforming areas such as Brunswick Activity Centre, Cremorne and Box Hill between Whitehorse Road and the hospital. Low-rise dwellings will no longer represent the preferred character, and will increasingly become anomalies.

The sheer on-boundary side walls of urban infill development will change the amenity of any neighbouring low-rise dwellings to the side However, the lack of side setbacks is necessary to enable viable development of appropriate density on single lots and avoid constraining development on neighbouring properties to the side, in accordance with Strategy BF11: Building orientation. The introduction of side setbacks to protect the existing amenity and character would mean that lot amalgamation is required to achieve a viable floorplate, and greater height is needed to maintain the density envisaged by Strategies UF5: Mixed-use neighbourhoods and UF6: Boulevards and Avenues.

The majority of lots in this place type are occupied by detached dwellings whose primary orientation is towards the street and a rear garden, rather than towards side boundaries. Therefore, the impact of sheer on-boundary side walls will be generally limited to the secondary rooms that face side boundaries.

Urban Infill development is proposed to have a generous rear setback, which will limit its impact on the amenity and equitable development of neighbouring rear gardens. The rear setbacks of existing and future development will ultimately combine to form a large green space in the middle of the block.

The building height and upper level street setbacks vary based on street width to ensure an appropriate balance between openness and enclosure in the street, along with reasonable solar access. In the Key Movement Corridors, urban infill provides a taller street wall, with upper levels maintaining a 1:1 ratio with the street.

This development type includes a landscaped front setback as well as a generous rear setback, resulting in a combined 10 to 15 per cent deep soil area across the front and rear of the lot.

The proposed use-mix varies with the role and function of the urban form area.

Building height and density

Building heights are proposed to be determined by the street width and lot depth, up to a maximum of 8 storeys. In order to balance spatial definition and a sense of openness, building form is proposed to be limited by two variables:

- A 45° plane from the opposite street boundary, in accordance with Strategy BF6: Street scale.
- An angled plane at the rear to or limit visual bulk impacts to neighbouring properties, while enabling taller buildings on deeper lots, and to avoid unreasonable shadow impacts on neighbouring properties in accordance with Strategy BF12: Rear amenity plane.

Based on testing of typical property sizes in each urban form area within this place type, it is envisaged that heights of 27 metres (7 to 8 storeys) can be achieved, resulting in a density of approximately 3.5:1. Testing of urban infill development in typical Key Movement Corridors is illustrated in SRL East Structure Plan - Urban Design Supporting Research - Attachment A.

In sensitive areas, a maximum building height of 21 metres (5 to 6 stroreys) is proposed. Sensitive areas are shown in Figure 6.1.

Street wall height

A minimum street wall height of 14 metres (3 to 4 storeys) is proposed to ensure the public realm is well framed, in accordance with Strategy BF6: Street scale. The maximum street wall height is proposed to be 21 metres (5 to 6 storeys), to balance spatial definition and a sense of openness, and to maintain solar access in the streets. An 11-metres street wall height is proposed along Harvie Street to manage the interfaces with the residential land outside the Structure Plan Area.

Building setbacks

The following setbacks are proposed:

- A 3-metre street setback, to balance spatial definition and public realm engagement with the privacy of ground floor dwellings, in accordance with Strategies BF8. Active frontage and BF9: Residential frontage
- In the existing small retail strips the street setback should match the prevailing building line in accordance with Strategy BF8: Active frontages – see Figure 5.03 Preferred street frontages and setbacks plan. These include:
    - Glen Waverley North small retail strip (Glen Waverley North Shopping Centre)
    - Springvale Road / Frank Street small retail strip
- An additional 4-metre setback above 21 metres to maintain a sense of openness and solar access
- Side setbacks of zero where there is no primary outlook to enable the development of single lots with buildings that face the street and the rear of the lot – This will also maintain equitable development opportunities for neighbouring properties, in accordance with Strategy BF11: Building orientation
- Side setbacks of 4.5 metres where there is a primary outlook to an adjacent private property. Wherever applicable, side setbacks should be measured from the centreline of an adjoining laneway
- Side setback of 3 metres where abutting public open space
- A 6-metre rear setback to provide for deep soil planting, in accordance with strategy BF14: On-site landscaping. It is envisaged that these rear setbacks will combine to create a green spine along the rear of all lots in this place type, establishing valuable habitat and potentially communal amenity. This does not apply at ground floor in existing small retail strips
- Additional rear setbacks of 0.7 metres per metre of additional height above 11 metres, or above 14 metres where abutting public open space, to manage visual bulk impacts.

Building separation

Within a site, buildings should be separated by a minimum of 9 metres.

Summary of built form outcomes

The urban form outcomes for the mid-rise podium-tower development type are summarised below.

Building height and density		
Maximum height	27 metres (7 to 8 storeys)	
Maximum height - sensitive areas	21 metres (5 to 6 storeys)	
Maximum density	3.5:1	
Street wall		
Minimum height	14 metres (3 to 4 storeys)	
Maximum height	21 metres (5 to 6 storeys)	
Maximum street wall height - Harvie Street	11 meters	
Activation	Moderate	
Building setbacks		
Street - general	3 metres, landscaped, 7 metres above 21 metres.	
Street - Existing small retail strips	Match the prevailing building line plus 4 metres above a height of 21 metres	
Rear - general	6 metres landscaped plus 0.7 metres per metre of height above 11 metres, or above 14 metres where abutting public open space	
Rear- Existing small retail strips	6 metres above ground floor + 0.7 metres per metre of height above 11 metres	
Side - non-primary outlook	Zero metres	
Side - primary outlook	4.5 metres	
Side – abutting public open space	3 metres	
Building separation		
Minimum building separation	9 metres	
Place type of neighbouring property	**Number of hours between 9am and 3pm at the September equinox during additional shadow is to be avoided**	**Minimum area of open space to which additional shadow is to be avoided**
Key Movement Corridors, Urban Neighbourhoods	3 hours	40 square metres or 75 per cent of any open space in a rear setback, whichever is the lesser.
Residential Neighbourhoods	4 hours	40 square metres or 75 per cent of any open space in a rear setback, whichever is the lesser.
Adaptability		
Minimum ground level floor-to-floor height	4 metres	

Overshadowing

The recommended building scale and massing will achieve the recommended solar access standard to ensure good amenity in the public realm and to complement the existing character of typical streets. The solar access standard recommended will maintain sunlight to southern, eastern and western footpaths in typical streets at the September equinox. This is considered to strike an appropriate balance between solar access and providing for growth.

The building scale and massing will also limit additional shadow to private open space in the rear setbacks of properties in Key Movement Corridors, Urban Neighbourhoods and Residential Neighbourhoods.

Figure 6.28: Indicative streetscape - typical only to illustrate potential outcomes

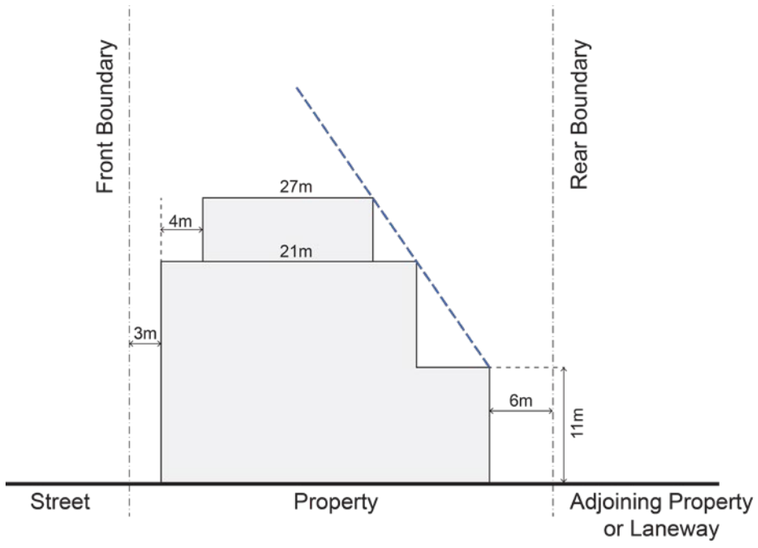


Figure 6.29: Built form outcomes section - front to rear

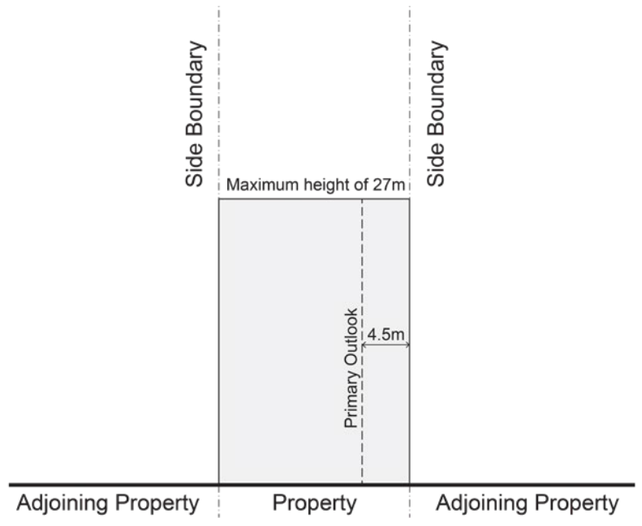


Figure 6.30: Built form outcomes section - side to side

Public realm outcomes

The Public Realm Framework identifies the future aspiration for the public realm in the Key Movement Corridors. Realising this aspiration relies on development and public realm projects that vary in scale and importance as outlined below.

Development

Development features key to creating accessible and permeable Urban Neighbourhoods, as part of Design Direction 4: Facilitate outdoor recreation.

Open space (new) - investigation area

Public realm enhancements

Enhancements to deliver Strategy
Design Direction 1: Ensure streets are inviting places that support community life.

Springvale Road transformation - Boulevard

High Street Road upgrades - Avenue

Streetscape improvements - Green Street

Pedestrian crossings (new or upgraded)

Legend

SRL station

Existing Glen Waverley Station

Structure Plan Area

SRL East alignment

Urban form area boundary

Existing open space

Figure 6.31: Indicative illustration

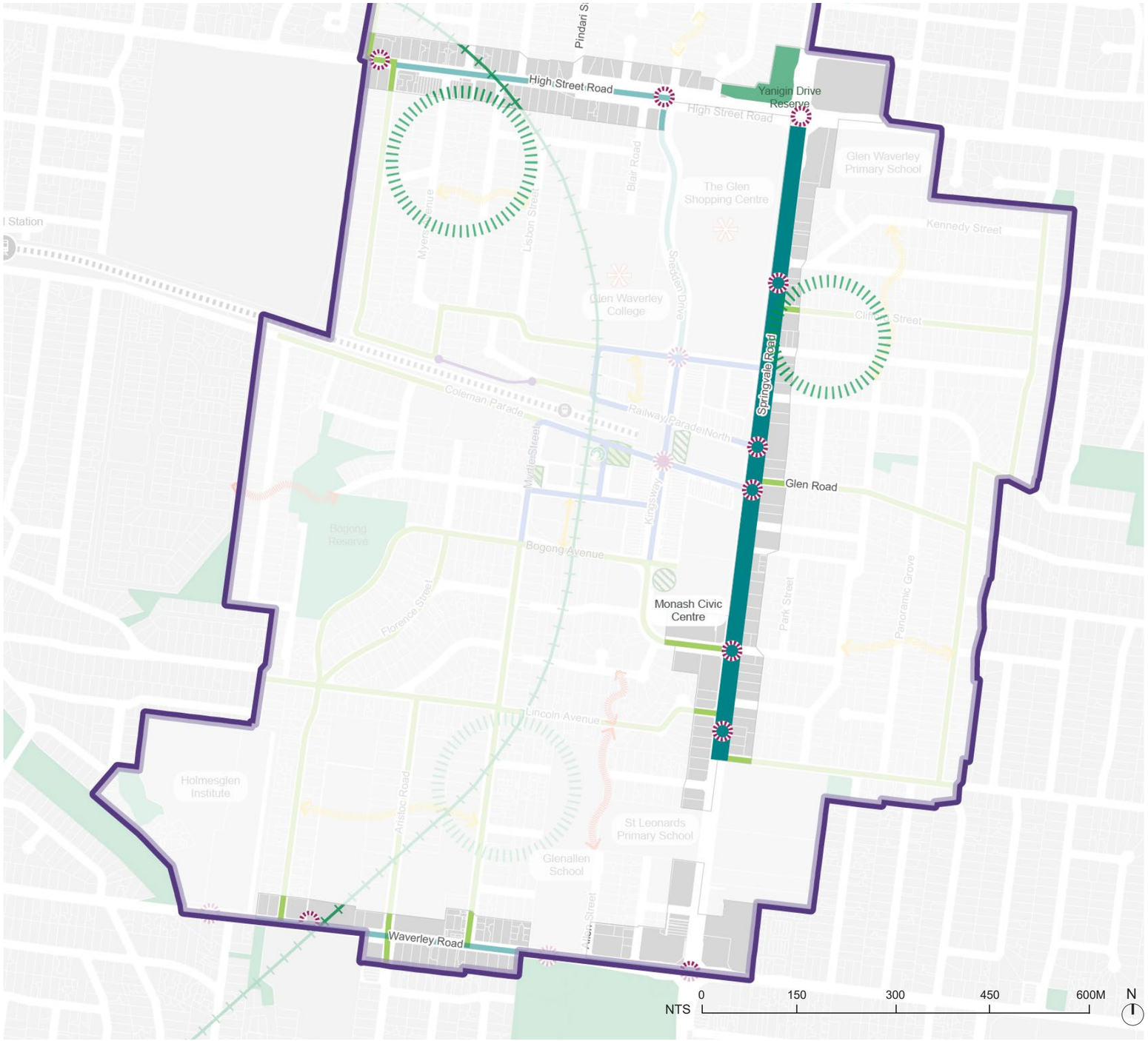


Figure 6.32: Public realm outcomes plan

Typical building and public realm profile

This cross-section shows typical Key Movement Corridor buildings facing an Avenue to provide an illustration of the future built form and public realm outcomes for this area.

Figure 6.33: Potential cross-section - Key Movement Corridors

6.6 Urban Neighbourhoods

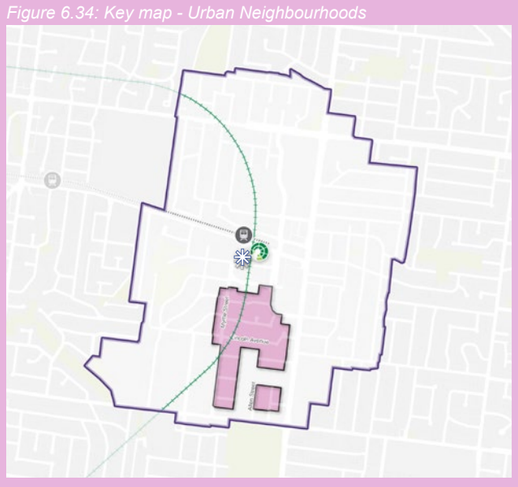
Well-served residential areas immediately close to the Central Core

The urban form area identified as belonging to this place type include:

- J – Myrtle Street

Refer to Section 4.4 for a detailed description of this urban form area.

Figure 6.34: Key map - Urban Neighbourhoods



Future role and function

Substantial change of built form providing space for jobs growth, local services and housing surrounding the core

This urban form area lies immediately adjacent to and is well integrated with an activity centre. It offers a high level of accessibility to jobs and services. Therefore, it is an appropriate location for a higher level of intensification and mixed-use.

Future drivers

Balance between openness and enclosure of the street

These urban form areas are outside the core of the Structure Plan Area and generally border the residential hinterland. Their development should seek to deliver moderate growth in a form that gives consideration to amenity and character.

Enhance landscape character and amenity within the street

In urban form areas where ground floor commercial activity is not sought, development should contribute to the amenity of the street through a landscaped front setback.

Future urban form

The Urban Neighbourhood is proposed to have Green Streets and new complementary links to improve walking access to the precinct core. An important pedestrian link is proposed extending Allen Street to the Central Core to improve walking access to Central Reserve and into the precinct core. Myrtle Street is proposed to be improved to achieve a high pedestrian amenity. Another important pedestrian link is proposed extending from Allen Street to the Central Core.

The Urban Neighbourhood is proposed to provide mid-rise apartment and mixed-use buildings which maintain solar access and the sense of openness to the public realm. The street wall will frame the public realm, while a street setback will balance spatial definition and public realm engagement, and ensure privacy to ground floor dwellings. Built form at the rear will be set back to minimise visual bulk impacts to neighbouring properties.

Figure 6.35: Example of the form of development envisaged for Urban Neighbourhoods

Built form outcomes

The development type recommended in the Urban Neighbourhoods is the urban infill. This is a traditional form of development that delivers highly adaptable buildings able to accommodate commercial and/or residential uses.

This development type delivers moderately high density along main roads, in accordance with Strategy UF6. Boulevards and Avenues, without the potentially adverse impacts of taller buildings. Importantly, it can be developed on the vast majority of the lots found in these places without the need for lot amalgamation (see Best Practice Urban Development Typologies report in SRL East Structure Plan - Urban Design Supporting Research - Attachment A).

This development type provides a vibrant and memorable urban character, good private amenity and protection of neighbouring amenity to the rear, adaptability for mixed and changing uses, and reasonable space for tree canopy cover. The minimal front setback and lack of side setbacks ensure a well-activated and strongly-framed public realm. The strong relationship with the street also supports commercial uses at ground or upper levels where desired.

The primary orientation of accommodation to the street and middle of the block enables differing uses to comfortably exist side-by-side where relevant. Generous rear setbacks ensure good amenity for accommodation facing towards the middle of the block, including adjacent properties to the rear, and space for tree planting.

As the Urban Neighbourhoods evolve through new urban infill development, they will experience a substantial change in character. As noted in Design Direction 5, this is considered to be an inevitable outcome of the vision for transformational change. This kind of transition in character is consistent with other transforming areas such as Brunswick Activity Centre, Cremorne and Box Hill between Whitehorse Road and the hospital. Low-rise dwellings will no longer represent the preferred character, and will increasingly become anomalies.

The sheer on-boundary side walls of urban infill development will change the amenity of any neighbouring low-rise dwellings to the side However, the lack of side setbacks is necessary to enable viable development of appropriate density on single lots and avoid constraining development on neighbouring properties to the side, in accordance with Strategy BF11: Building orientation. The introduction of side setbacks to protect the existing amenity and character would mean that lot amalgamation is required to achieve a viable floorplate, and greater height is needed to maintain the density envisaged by Strategies UF5: Mixed-use neighbourhoods and UF6: Boulevards and Avenues.

The majority of lots in this place type are occupied by detached dwellings whose primary orientation is towards the street and a rear garden, rather than towards side boundaries. Therefore, the impact of sheer on-boundary side walls will be generally limited to the secondary rooms that face side boundaries.

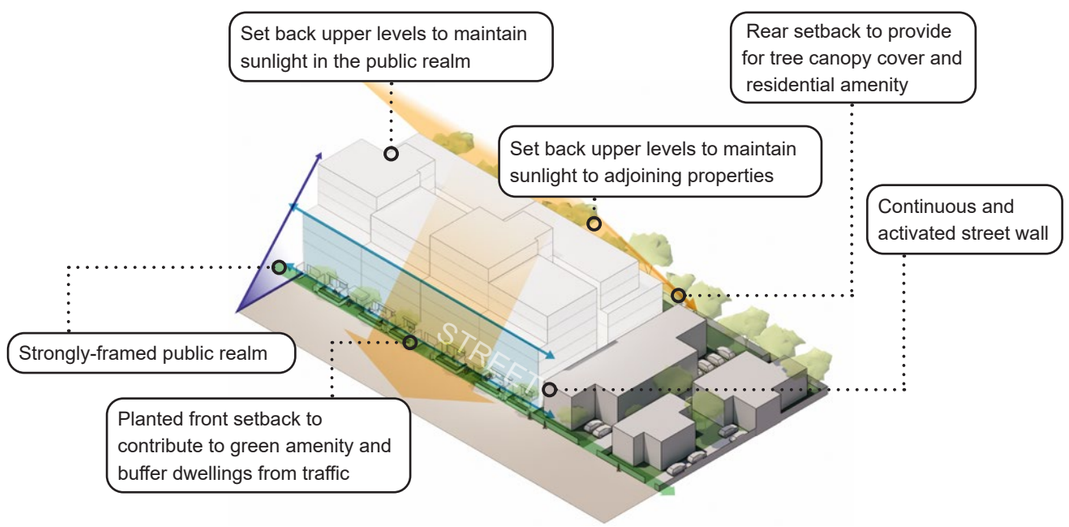


Figure 6.36: Built form outcomes for Urban Neighbourhoods

Urban Infill development is proposed to have a generous rear setback, which will limit its impact on the amenity and equitable development of neighbouring rear gardens. The rear setbacks of existing and future development will ultimately combine to form a large green space in the middle of the block.

The building height and upper level street setbacks vary based on street width to ensure an appropriate balance between openness and enclosure in the street, along with reasonable solar access. In the Urban Neighbourhoods a building height of 24 metres with a 4-storey street wall and upper level setback is proposed to maintain an open character.

This development type includes a landscaped front setback as well as a generous rear setback, resulting in a combined 10 to 15 per cent deep soil area across the front and rear of the lot.

The proposed use-mix varies with the role and function of the urban form area.

Building height and density

Building heights are proposed to be determined by the street width and lot depth. In order to balance spatial definition and a sense of openness, building form is proposed to be limited by two variables:

- A 45° plane from the opposite street boundary, in accordance with Strategy BF5: Sunlight to public realm
- A September equinox solar plane from the top of a typical rear boundary fence to avoid unreasonable impacts on neighbouring residential properties, in accordance with Strategy BF12: Rear amenity plane. This will limit visual bulk impacts to neighbouring properties at the rear, while enabling taller buildings on deeper lots.

Based on testing of typical property sizes in each urban form areas within this place type, it is envisaged that heights of 24 metres (6 to 7 storeys) can be achieved, resulting in a density of approximately 3:1. Testing of urban infill development in typical Urban Neighbourhoods is illustrated in SRL East Structure Plan - Urban Design Supporting Research - Attachment A.

Street wall height

A minimum street wall height of 11 metres (3 storeys) is proposed to ensure that the public realm is well framed, in accordance with BF6: Street scale. The maximum street wall height is proposed to be 14 metres (4 storeys), to complement the existing lower-rise buildings in these areas.

Building setbacks

The following minimum setbacks are proposed:

- A 3-metre street setback to balance spatial definition and public realm engagement with the privacy of ground floor dwellings, in accordance with Strategies BF8. Active frontages and BF9. Residential frontages
- An additional street setback above 14 metres to remain below a 45° plane from the opposite street boundary, to maintain a sense of openness and solar access
- Zero side setbacks where there is no primary outlook to enable the development of single lots with buildings that face the street and the rear of the lot. This will also maintain equitable development opportunities for neighbouring properties, in accordance with Strategy BF11: Building orientation
- A 4.5-metre side setbacks where there is a primary outlook to an adjacent private property. Whenever applicable, side setbacks should be measured from the centreline of an adjoining laneway
- Side setback of 3 metres where abutting public open space
- A rear setback of 6 metres to provide for canopy trees, in accordance with Strategy BF14: On-site landscaping – it is envisaged that these rear setbacks will combine to create a green spine along the rear of all lots in this place type, establishing valuable habitat and potentially communal amenity
- Additional rear setbacks of 0.7 metres per metre of additional height above 11 metres, or above 14 metres where abutting public open space, to manage visual bulk impacts.

Building separation

Within a site, buildings should be separated by a minimum of 9 metres.

Summary of built form outcomes

The urban form outcomes for the urban infill development type in Urban Neighbourhoods are summarised below.

Building height and density		
Maximum height	24 metres (6 to 7 storeys)	
Maximum density	3:1	
Street wall		
Minimum height	11 metres (3 storeys)	
Maximum height	14 metres (4 storeys)	
Maximum height - Myrtle Street and Kingsway south of Bogong Avenue	17 metres (4 to 5 storeys)	
Activation	Moderate	
Building setbacks		
Street	3 metres Landscaped; additional set-back above 14 metres of 2 metres or that required to remain below a 45° plane from opposite street boundary, whichever is greater	
Rear	6 metres, landscaped plus 0.7 metres per metre of height above 11 metres , or above 14 metres where abutting public open space	
Side - non-primary outlook	Zero metres	
Side - primary outlook	4.5 metres	
Side – abutting public open space	3 metres	
Building separation		
Minimum building separation	9 metres	
Place type of neighbouring property	**Number of hours between 9am and 3pm at the September equinox during additional shadow is to be avoided**	**Minimum area of open space to which additional shadow is to be avoided**
Key Movement Corridors, Urban Neighbourhoods	3 hours	40 square metres or 75 per cent of any open space in a rear setback, whichever is the lesser
Residential Neighbourhoods	4 hours	40 square metres or 75 per cent of any open space in a rear setback, whichever is the lesser
Adaptability		
Minimum ground level floor-to-floor height	4 metres	

Overshadowing

The recommended building scale and massing will achieve the recommended solar access standard to ensure good amenity in the public realm and to complement the existing character of typical streets. The solar access standard recommended will maintain sunlight to southern, eastern and western footpaths in typical streets at the September equinox. This is considered to strike an appropriate balance between solar access and providing for growth.

The building scale and massing will also limit additional shadow to private open space in the rear setbacks of properties in Key Movement Corridors, Urban Neighbourhoods and Residential Neighbourhoods.

Figure 6.37: Indicative street-scape - typical only to illustrate potential outcomes

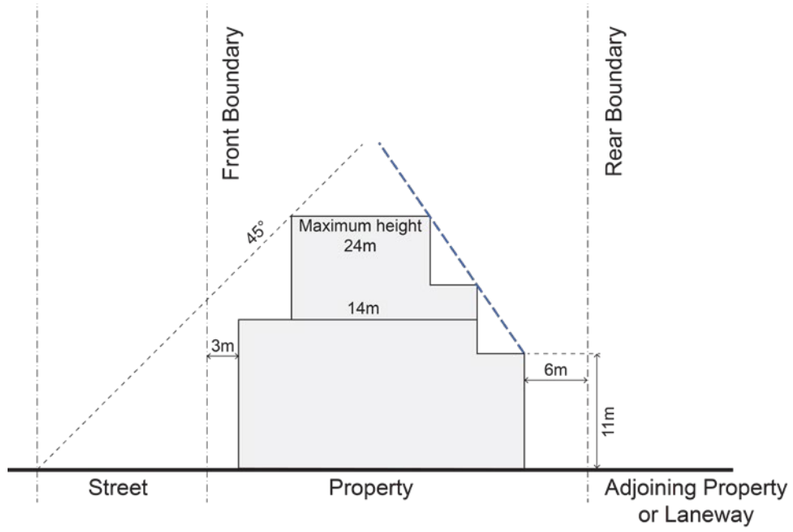


Figure 6.38: Built form outcomes section - front to rear

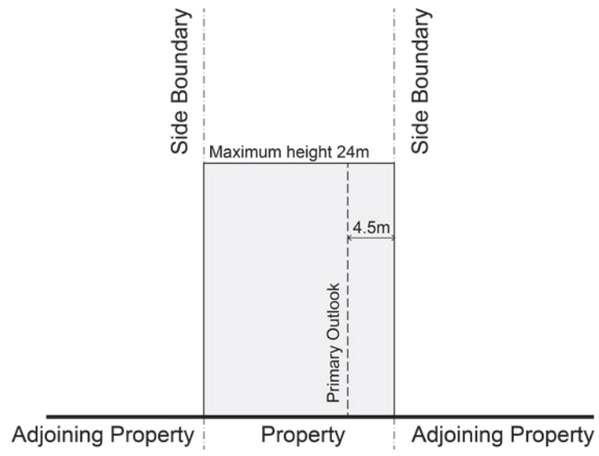


Figure 6.39: Built form outcomes section - side to side

Public realm outcomes

The Public Realm Framework identifies the future aspiration for the public realm in the Urban Neighbourhoods. Realising this aspiration relies on development and public realm projects that vary in scale and importance as outlined below.

Development

Development features key to creating accessible and permeable Urban Neighbourhoods, as part of Design Direction 2: Promote active transport access.

- Important key link (new) - flexible
- Open space (new) - investigation area

Public realm enhancements

Enhancements to deliver Design Direction 1: Ensure streets are inviting places that support community life.

- Streetscape improvements - Green Street

Legend

- SRL station
- Existing Glen Waverley Station
- Structure Plan Area
- SRL East alignment
- Urban form area boundary

Figure 6.41: Public realm outcomes plan

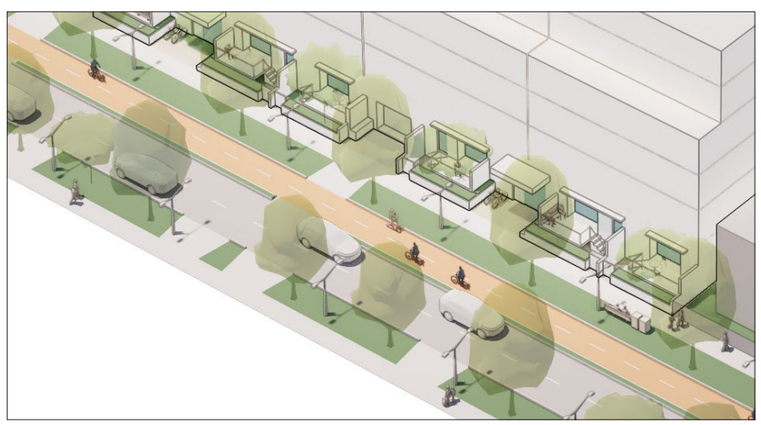


Figure 6.40: Indicative illustration showing a Green Street within Urban Neighbourhoods

Typical building and public realm profile

This cross-section shows typical Urban Neighbourhood buildings facing a Green Street to provide an illustration of the future built form and public realm outcomes for this area.

Figure 6.42: Potential cross-section - Urban Neighbourhoods

6.7 Residential Neighbourhoods

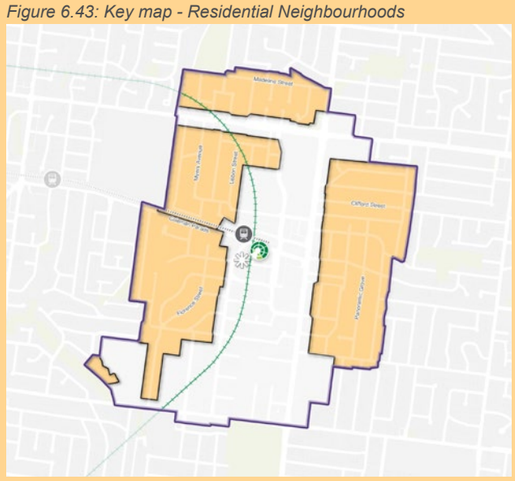
Low-rise Residential Neighbourhoods

The urban form areas identified as belonging to this place type include:

- K – Myers Avenue
- I – Bogong Residential
- P – Mount Street
- Q – Madeline Street

Refer to Section 4.4 for a detailed description of these urban form areas.

Figure 6.43: Key map - Residential Neighbourhoods



Future role and function

Moderate intensification of built form providing space for more housing

These areas have a low-rise residential character and lie adjacent to the lower-rise residential hinterland. Therefore, only a moderate level of intensification is sought to balance aspirations for growth with responsiveness to existing character, consistent with the SRL Urban Design Strategy Objective Responsiveness.

Future drivers

Retain garden setting

These areas are characterised by detached dwellings in a garden setting. This delivers high quality amenity and tree canopy cover, and manages the impact of dwellings on neighbouring amenity. Therefore, new development in these urban form areas should retain the garden setting attribute to maintain these outcomes.

Maintain sense of openness in the street

These urban form areas generally lie towards the edge of the Structure Plan Area and have a low-rise existing character. Therefore, future development should maintain a sense of openness in the street to mediate the transition in character.

Future urban form

The Residential Neighbourhoods are proposed to have a network of standard streets with a number of Green Streets to enhance urban biodiversity and provide inviting pedestrian routes to key destinations including open spaces.
A number of local new pedestrian links are proposed to enhance pedestrian permeability.

The Residential Neighbourhoods are proposed to provide mid-rise apartment buildings and low-rise townhouses within a garden setting. Generous building setbacks will manage the change in scale from the existing built form. The built form at the street will be set back to provide for canopy trees, while the upper levels will be set back to lessen their visual impact on the public realm. Side setbacks will provide for canopy trees and will lessen the visual and shadow impact of the upper levels on neighbouring properties.

Figure 6.44: Example of the form of development envisaged for Residential Neighbourhoods

Built form outcomes

The development types recommended in the Residential Neighbourhoods are the garden apartments on amalgamated lots and townhouses on single lots.

Garden apartments provide for the same type of development on amalgamated lots as proposed in phase 2 of the Future Homes program, or, going back further, the art deco apartment boom of the 1920s and 30s, but with a slightly increased density, which is considered appropriate because these areas are within walking distance of a higher-order (SRL) station. However, the density is limited to mediate the transition in character and provide a different housing choice than that offered in other urban form areas. In particular, approximately 20 per cent of the apartments will have generous ground level gardens, making them suitable for families.

The development of 4 to 6-storey garden apartments rely on the amalgamation of two typical lots, which is necessary to deliver higher density while providing good-quality internal amenity, and providing a well-landscaped perimeter (see Urban Development Typologies in SRL East Structure Plan - Urban Design Supporting Research - Attachment A).

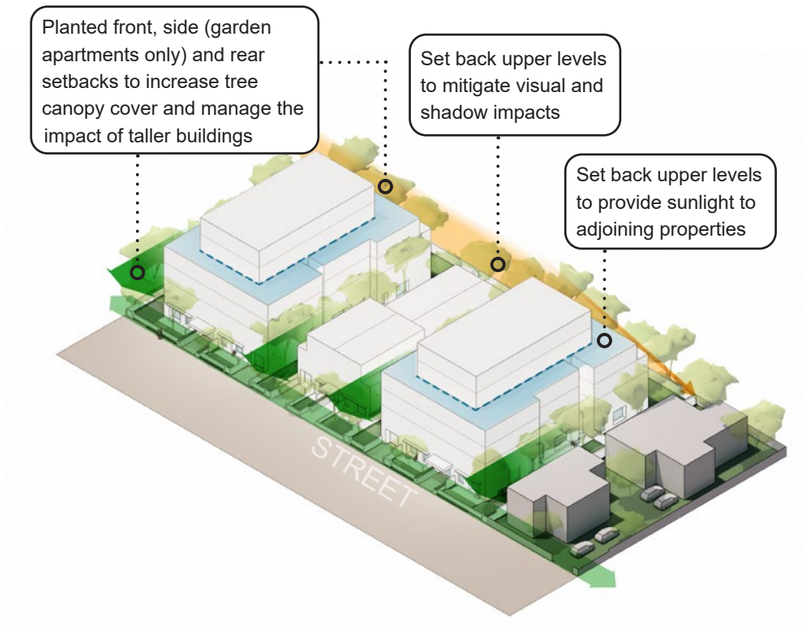


Figure 6.45: Built form outcomes for Residential Neighbourhoods

Importantly, lot amalgamation enables generous side and rear setbacks which will provide for high-quality on-site amenity and significant contribution to tree canopy cover. This typology provides a 35 per cent deep soil area across the front, sides and rear of the lot.

The substantial provision for canopy trees in front, side and rear setbacks will retain and strengthen the leafy character that predominates in these areas. These trees will significantly mitigate the visual presence of taller buildings on the existing streetscape and backyard of these areas.

The landscaped setbacks from all boundaries will also offset the impacts of taller built form on the amenity of neighbouring properties.

Garden apartments are proposed to be limited to 4 storeys in sensitive, isolated or constrained areas, in accordance with Strategy UF1: Substantial change.

The development of 3-storey townhouses with lesser side setbacks are appropriate on typical single lots.

Low front fences and front doors and windows facing the street will provide passive surveillance of the street.

Building height and density

The height of garden apartments in most parts of Residential Neighbourhoods is determined by solar planes intended to protect the amenity of neighbouring properties, resulting in an indicative maximum height of 6 storeys. Although this substantially exceeds the existing building heights, generous landscaped setbacks are proposed to manage this change in character and limit amenity impacts. The proposed maximum height and minimum setbacks delivers a density of approximately 2:1.

In sensitive, isolated or constrained areas, garden apartments are proposed to be limited to 4 storeys for the reasons outlined in Strategy UF1: Substantial change. The areas where garden apartments are proposed to be limited to 4 storeys are shown in Figure 4.6 in Section 4. Where appropriate, the boundaries between areas of 4 or 6 storeys have been adjusted to maintain coherent character areas. This delivers a density of approximately 1.5:1.

Lots less than 24 metres wide (most single lots) are not able to accommodate the proposed side setbacks. Therefore, lesser side setbacks are allowed on these lots. However, they are limited to a height of 3 storeys to manage the impacts of those modest side setbacks. This delivers a density of approximately 1.2:1, which is hoped to incentivise lot amalgamation to enable higher amenity and greening outcomes.

Street wall height

The maximum street wall height is proposed to be 14 metres (4 storeys) for garden apartments, except 11 metres (3 storeys) in sensitive, isolated or constrained areas and for Townhouses, to complement the existing lower-rise buildings in these areas.

Building setbacks

The following minimum setbacks are proposed:

- A 4-metre street setback, to provide for canopy trees, in accordance with Strategy BF14: On-site landscaping
- An additional setback above the street wall of 0.5 metres per metre of height above 14 metres to lessen the visual impact of the upper form
- A rear setback of 6 metres to provide for canopy trees, in accordance with Strategy BF14: On-site landscaping
- Additional rear setbacks of 0.7 metres per metre of additional height above 11 metres, or above 14 metres where abutting public open space to manage visual bulk impacts.

Lots equal or greater than 24 metres in width (including where abutting public open space):

- A 4.5-metre side setback to provide for canopy trees, in accordance with Strategy BF14: On-site landscaping
- For buildings higher than 14 metres, a further side setback of 0.8 metres per metre of height to lessen the visual and shadow impact of the upper form.

Lots less than 24 metres in width, front half of the site:

- Zero side setback for buildings up to a height of 6.9 metres
- A 2-metre side setback for buildings higher than 6.9 metres to lessen the visual and shadow impact of the upper form
- Side setback of 2 metres where abutting public open space.

Lots less than 24 metres in width, rear half of the site (including where abutting public open space):

- A 2-metre side setback for buildings up to a height of 6.9 metres
- For buildings higher than 6.9 metres, a further side setback of 1 metre per metre of height to lessen the visual and shadow impact of the upper form.

Side street:

- A 4-metre setback for lots equal or greater than 24 metres in width, to provide for canopy trees.
  A 2-metre setback for lots less than 24 metres in width, to provide for canopy trees.

Building separation

Within a site, buildings should be separated by a minimum of 9 metres.

Overshadowing

The recommended building scale and massing will achieve the recommended solar access standard to ensure good amenity in the public realm and to complement the existing character of typical streets. The solar access standard recommended will maintain sunlight to southern, eastern and western footpaths in typical streets at the September equinox. This is considered to strike an appropriate balance between solar access and providing for growth.

The building scale and massing recommended at the edges of:

- Bogong Reserve and Yanigin Drive Reserve will maintain 70 per cent solar access to these spaces for a minimum of 3 hours at mid-winter.
- Blakeview Court Reserve, Jordan Grove Reserve will maintain solar access to 50 per cent of the open space for a minimum of 3 hours at mid-winter.
- Built form north of Mount Street Neighbourhood House Reserve will need to have increased setbacks or lowered height to achieve this standard.

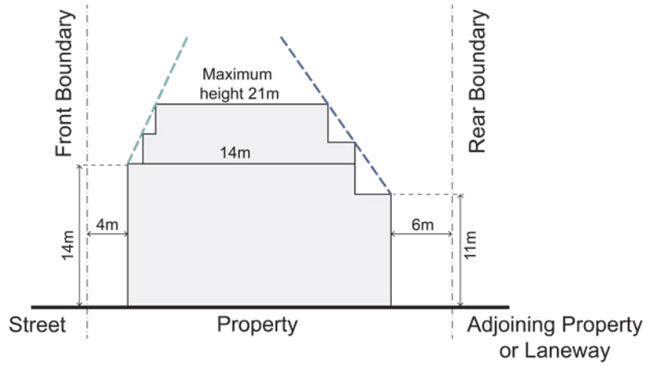
Summary of built form outcomes

The built form outcomes for are summarised below.

Lots equal to or greater than 24 metres in width (garden apartments)	
Building height and density	
• Maximum height • Maximum height - Sensitive, isolated or constrained areas	• 21 metres (6 storeys) • 14 metres (3 to 4 storeys)
• Maximum density • Maximum density - Sensitive, isolated or constrained areas	• 2:1 • 1.5:1
Street wall - street and side street	
• Maximum height • Maximum height - Sensitive, isolated or constrained areas	• 14 metres (4 storeys) • 11 metres (3 storeys)
Activation	Passive surveillance
Building setbacks	
Street	4 metres landscaped
Side street	4 metres landscaped
Above street wall	Additional 0.5 metres per metre of height above 14 metres
Side (including where abutting public open space)	4.5 metres landscaped plus 0.8 metres per metre of height above 14 metres
Rear - adjacent to developable property	6 metres landscaped plus 0.7 metres per metre of height above 11 metres
Rear - abutting public open space	6 metres landscaped plus 0.7 metres per metre of height above 14 metres

Lots less than 24 metres in width (townhouses)	
Building height and density	
Maximum height	11 metres (3 storeys)
Maximum density	1.2:1
Street wall - street and side street	
Maximum height	11 metres (3 storeys)
Activation	Passive surveillance
Building setbacks	
Street	4 metres landscaped
Side street	2 metres landscaped
Side - Front half of the site adjacent to developable property	Zero metres up to a height of 6.9 metres, 2 metres above heights of 6.9 metres
Side - Front half of the site abutting public open space	2 metres
Side - Rear half of the site (including where abutting public open space)	2 metres plus 1 metre per metre of height above 6.9 metres
Rear - adjacent to developable property	6 metres landscaped plus 0.7 metres per metre of height above 11 metres
Rear – abutting public open space	6 metres landscaped plus 0.7 metres per metre of height above 14 metres

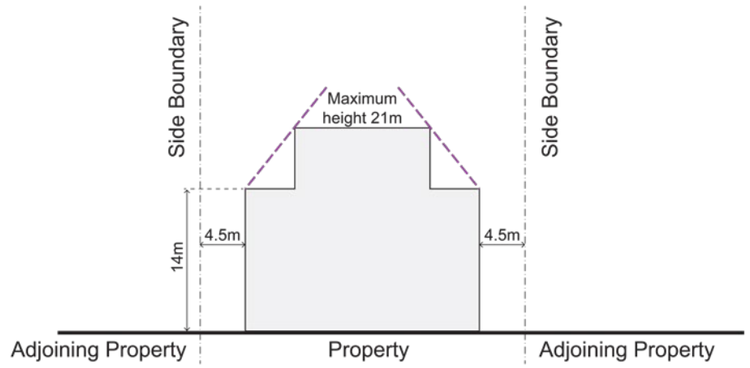
All lots		
Building separation		
Minimum building separation	9 metres	
Overshadowing		
Place type of neighbouring property	**No. of hours between 9am and 3pm at the September equinox during additional shadow is to be avoided**	**Minimum area of open space to which additional shadow is to be avoided**
Key Movement Corridors, Urban Neighbourhoods	3 hours	40 square metres or 75 per cent of any open space in a rear setback, whichever is the lesser.
Residential Neighbourhoods	4 hours	40 square metres or 75 per cent of any open space in a rear setback, whichever is the lesser.
Residentially-zoned properties outside the Structure Plan Area	5 hours	40 square metres or 75 per cent of secluded open space whichever is the lesser.



Set back additional 0.7 metres per metre of height above 11 metres

Set back additional 1.5 metres per floor above 14 metres

Figure 6.46: Garden apartment section front and rear



Set back additional 0.8 metres per metre of height above 14 metres

Figure 6.47: Garden apartment section sides

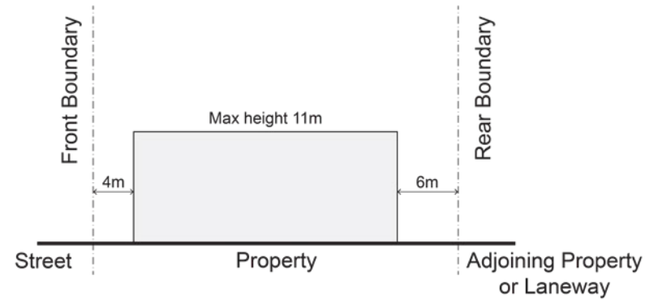


Figure 6.48: Townhouse section front and rear

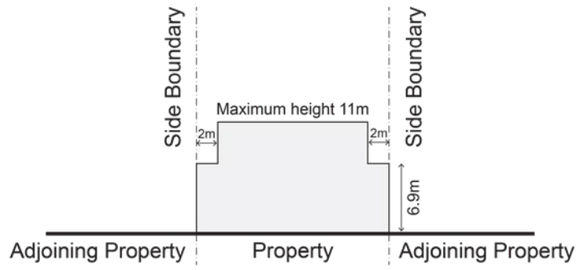
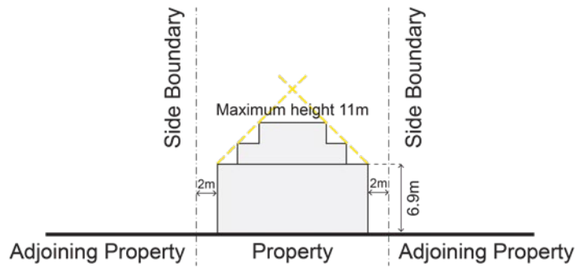


Figure 6.49: Townhouse section side interfaces in the front half of the site

Figure 6.51: The illustration shown on this page are typical only to illustrate potential outcomes



Set back additional 0.8 metres per metre of height above 14 metres

Figure 6.50: Townhouse section side interfaces in the rear half of the site

Public realm outcomes

The Public Realm Framework identifies the future aspiration for the public realm in the Residential Neighbourhoods. Realising this aspiration relies on development and public realm projects that vary in scale and importance as outlined below.

Development

Development features key to creating accessible and permeable Residential Neighbourhoods, as part of Design Direction 2: Promote active transport access.

- Open space (new) - investigation area
- Important key link (improved widened) - fixed
- Important key link (new) - flexible
- Local key link (new) - flexible
- Active frontages to open space - See Bogong Reserve cross-section overleaf

Public realm enhancements

Enhancements to deliver Design Direction 1: Ensure streets are inviting places that support community life.

- Streetscape improvements - Green Street
- Pedestrian crossings (new or upgraded)

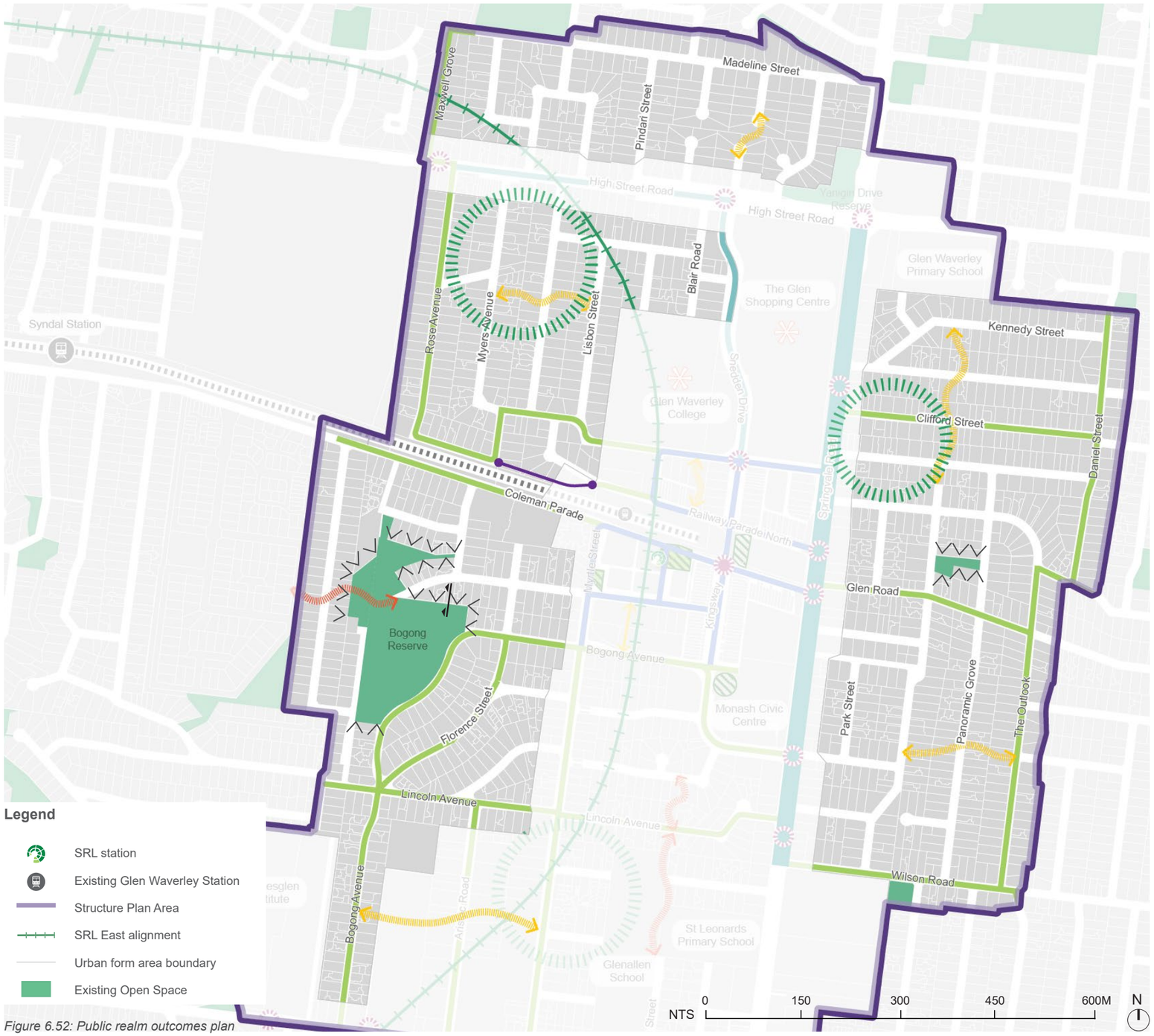


Figure 6.52: Public realm outcomes plan

Cross section: Bogong Reserve

Development at the edge of Bogong Reserve should adopt a design response which provides residential activation to the park edge and passive surveillance. Depending on orientation, development should be appropriately set back to limit overshadowing of the park. Private communal spaces at ground floor and rooftops are oriented to Bogong Reserve and provide visual connection to active facilities within the reserve.

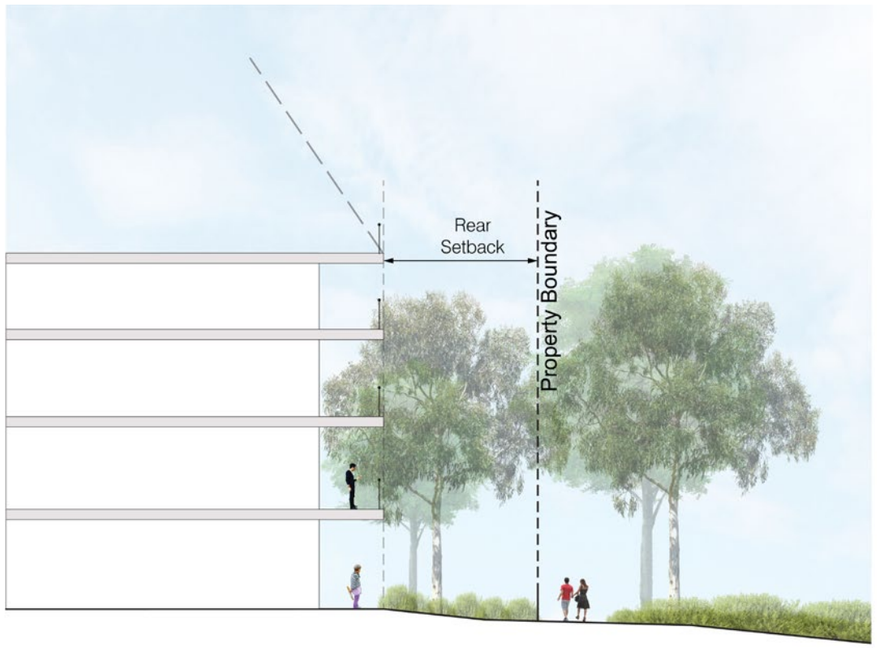


Figure 6.53: Bogong Reserve - Western interface section

Typical building and public realm profile

This cross-section shows typical Residential Neighbourhoods buildings facing a standard street to provide an illustration of the future built form and public realm outcomes for this area.

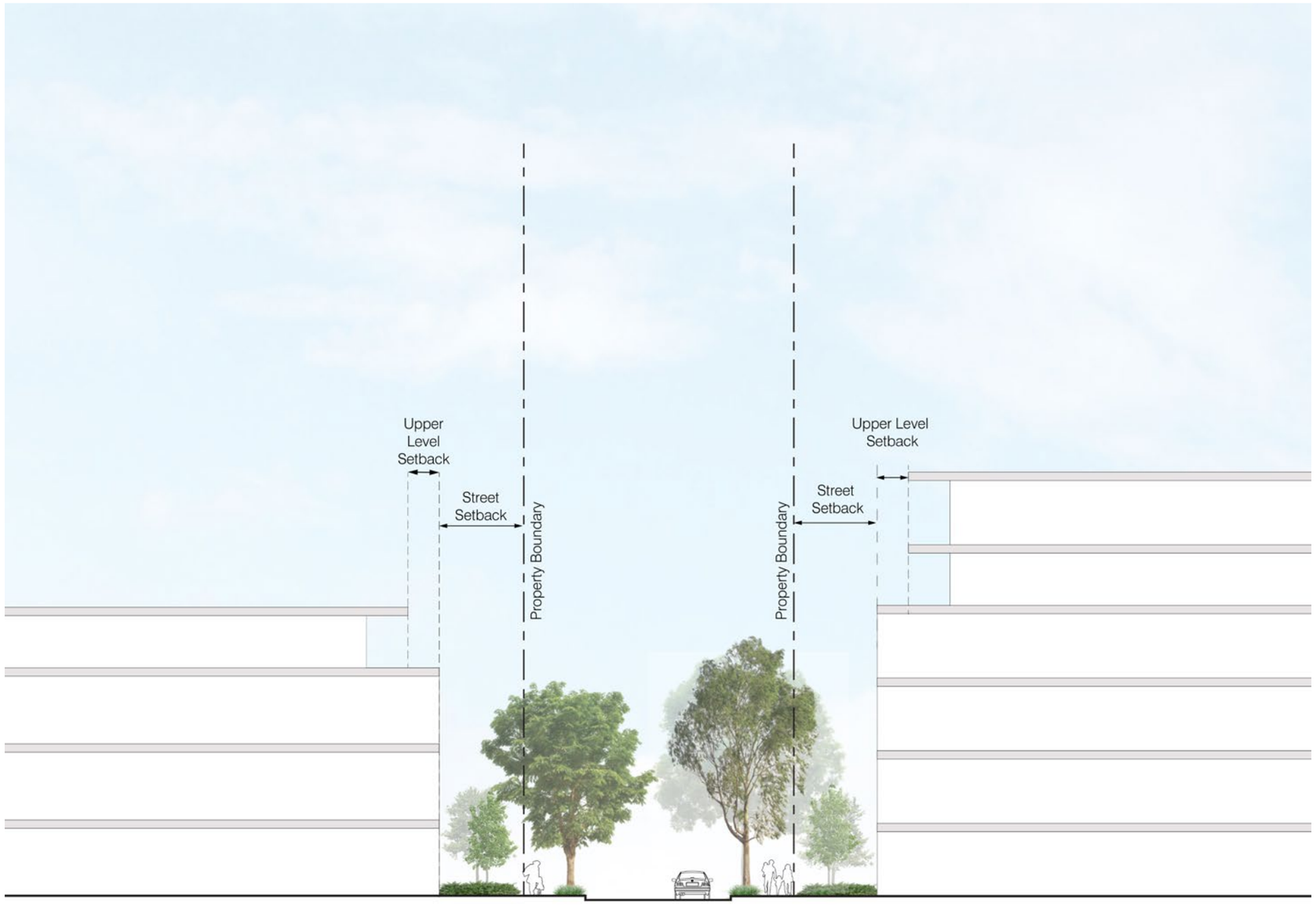


Figure 6.54: Potential cross-section - Residential Neighbourhoods

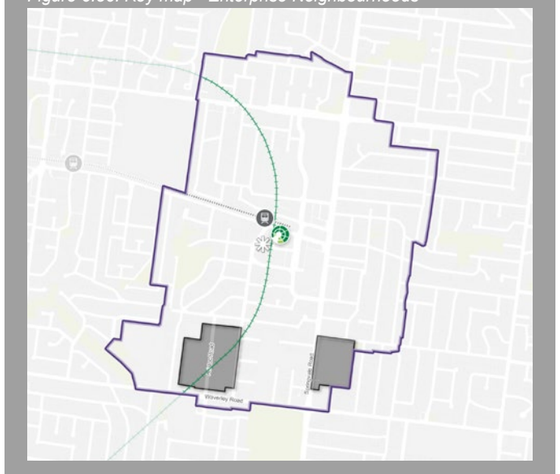
6.8 Enterprise Neighbourhoods

The urban form areas identified as belonging to this place type include:

- M – Springvale Road Strategic Site
- G – Aristoc Road

Refer to Section 4.4 for a detailed description of these urban form areas.

Figure 6.56: Key map - Enterprise Neighbourhoods



Future role and function

Moderate intensification of built form providing space for jobs growth

These urban form areas currently host predominantly light industrial uses. However, given their proximity to the SRL station, they offer the potential for employment uses that deliver a higher jobs density.

Future drivers

Enhance landscape character and amenity within the street

It is important to upgrade the appearance and amenity of the streetscape to attract higher-order businesses. Development can contribute to this through landscaped front setbacks.

Moderate level of activation to the street

It is important to upgrade the amenity of the streetscape to attract higher-order businesses. Development can contribute to this through moderately activated building frontages.

Future urban form

The Aristoc Road Enterprise Neighbourhood is proposed to have local new pedestrian links to connect the area to the residential area to the east.

The Enterprise Neighbourhood is anticipated to be developed into low-rise employment use buildings which will maintain solar access to the public realm, although proposals for mid-rise buildings should be welcomed provided they will not detract from the vibrancy of the precinct core. A street setback will provide for canopy trees while ensuring activation to the public realm.

Figure 6.55: Future character precedent image

Built form outcomes

The development type recommended in the Enterprise Neighbourhoods is the Hybrid Employment.

This development type can host a wide range of employment uses. It can take the form of a freestanding building on larger or amalgamated lots, or a boundary-to-boundary infill building on narrower lots.

Importantly, the development type positions loading and servicing activities away from the street frontage, and instead addresses the street with its most active uses and incorporates a modest landscaped setback. This will contribute to a more inviting streetscape, attracting new businesses to the area. This typology provides a 5 to 10 per cent deep soil area at the front of the lot.

Building height and density

The proposed maximum building height and setback will maintain solar access to the opposite footpath in north-south streets, and the southern footpath in east-west streets, between 11am and 2pm at the September equinox, in accordance with Strategy BF5: Sunlight to public realm. Development is also proposed to be required to limit additional shadow to private open space in adjoining properties, in accordance with Strategy BF12: Rear amenity plane.

Street wall height

Maximum street wall height of 21 metres (6 storeys) is proposed for Enterprise Neighbourhoods at the interfaces with Springvale Road and Wilson Road.

No street wall height provision is proposed for other street interfaces of this urban form area.

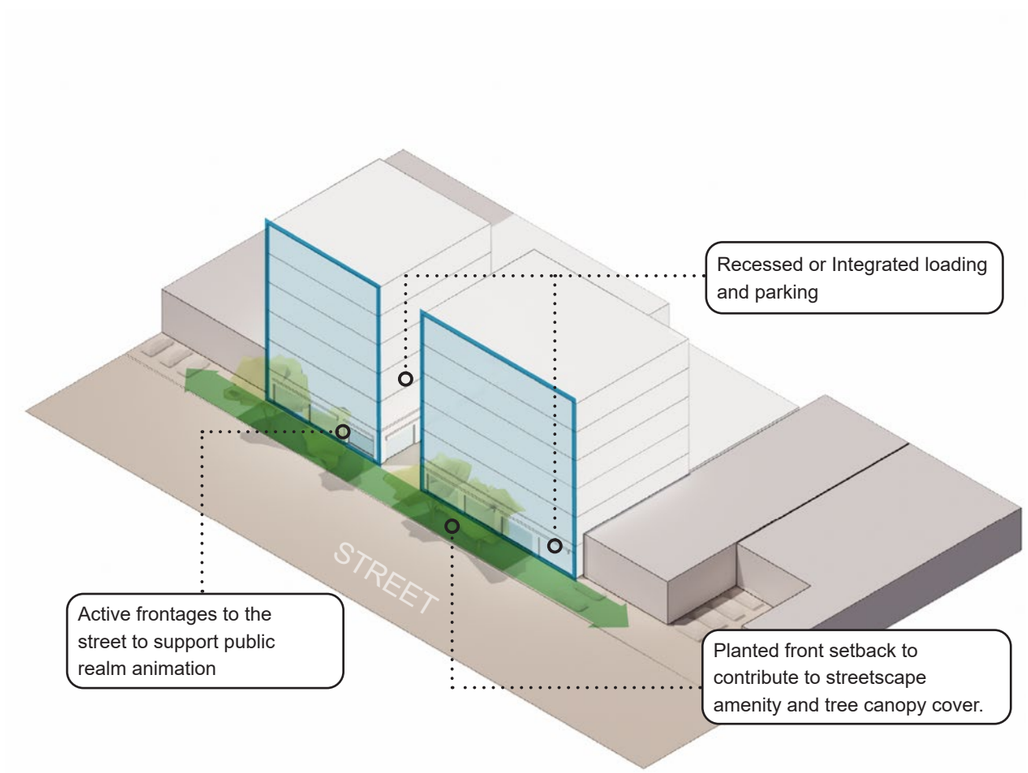


Figure 6.57: Built form outcomes for Enterprise Neighbourhoods

Building setbacks

The following setbacks are proposed:

- A minimum 4 metres street setback to provide for canopy trees, in accordance with Strategy BF14: On-site landscaping
- At least 70 per cent of the front lot width should have a minimum 4 metres and maximum 5 metres street setback to frame the public realm and support public realm activation, in accordance with Strategies BF6. Street scale and BF7: Engaging facades – This allows the remaining 30 per cent of the lot width to accommodate loading and parking if required
- A rear setback equal to the height above ground floor where abutting properties are permissible equal to the height above ground floor, to manage visual impacts in accordance with Strategy BF11: Building orientation.

Overshadowing

The recommended building scale and massing will achieve the recommended solar access standard to ensure good amenity in the public realm and to complement the existing character of typical streets. The solar access standard recommended will maintain sunlight to southern, eastern and western footpaths in typical streets at the September equinox. This is considered to strike an appropriate balance between solar access and providing for growth.

The building scale and massing will also limit additional shadow to private open space in the rear setbacks of properties in Key Movement Corridors, Urban Neighbourhoods and Residential Neighbourhoods.

Additional guidelines

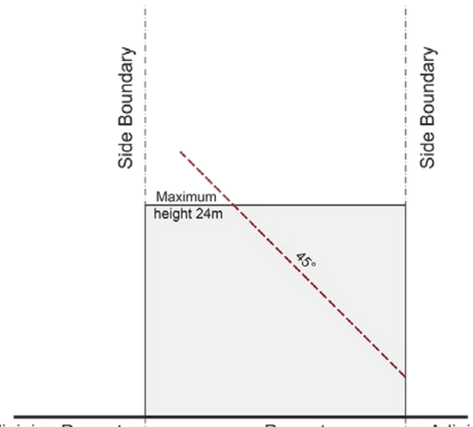
The following additional provisions are proposed to contribute to an appealing public realm, in accordance with Strategy BF8: Active Frontage:

- Locate vehicle access at the rear or side of the lot where possible and if not possible, minimise the crossover width
- Position office and/or showroom uses at the front of the building
- Provide a dedicated and legible pedestrian access direct from the street
- Locate car parking, loading areas, truck queuing and parking, and outdoor storage areas within, to the side or to the rear of the building
- Avoid front fences. Where this is not possible, ensure they are of good design quality, visually permeable, and softened by landscaping.

Summary of built form outcomes

The urban form outcomes for the Hybrid Employment development type are summarised below.

Building height and density		
Maximum height	24 metres (6 Storeys)	
Street wall		
Activation	Moderate	
Maximum height - at the interfaces with Springvale Road and Wilson Road	21 metres	
Building setbacks		
Street - minimum	4 metres - landscaped	
Street - maximum	5 metres for 70 per cent of the lot width	
Upper level side and rear	1 metre for every metre above ground floor where abutting a property where dwellings are permissible	
Street - upper level	At the interfaces with Springvale Road and Wilson Road 4 metres from the podium facade	
Place type of neighbouring property	**Number of hours between 9am and 3pm at the September equinox during additional shadow is to be avoided**	**Minimum area of open space to which additional shadow is to be avoided**
Key Movement Corridors, Urban Neighbourhoods	3 hours	40 square metres or 75 per cent of any open space in a rear setback, whichever is the lesser.
Residential Neighbourhoods	4 hours	40 square metres or 75 per cent of any open space in a rear setback, whichever is the lesser.
Outside the Structure Plan Area	5 hours	40 square metres or 75 per cent of secluded private open space, whichever is the lesser



Set back 1 metres for every metre above ground floor where abutting a property where dwellings are permissible

Figure 6.58: Enterprise section sides

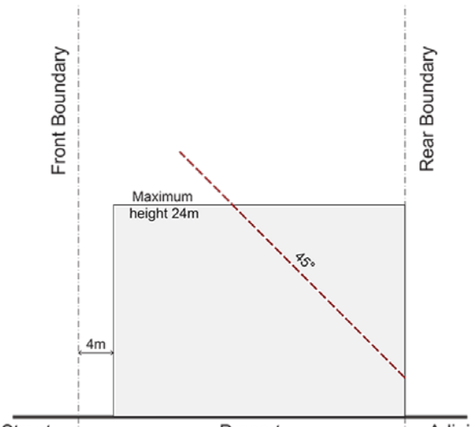


Figure 6.59: Enterprise section front and rear

Public realm outcomes

The Public Realm Framework identifies the future aspiration for the public realm in the Enterprise Neighbourhoods. Realising this aspiration relies on development and public realm projects that vary in scale and importance as outlined below.

Development

Development features key to creating an accessible and permeable Large Opportunity Site, as part of Design Direction 2: Promote active transport.

Local key link - flexible

Public realm enhancements

Enhancements to deliver Design Direction 1: Ensure streets are inviting places that support community life.

Streetscape improvements - Green Street

Pedestrian crossings (new or upgraded)

Legend

SRL station

Existing Glen Waverley Station

Structure Plan Area

SRL East alignment

Urban form area boundary

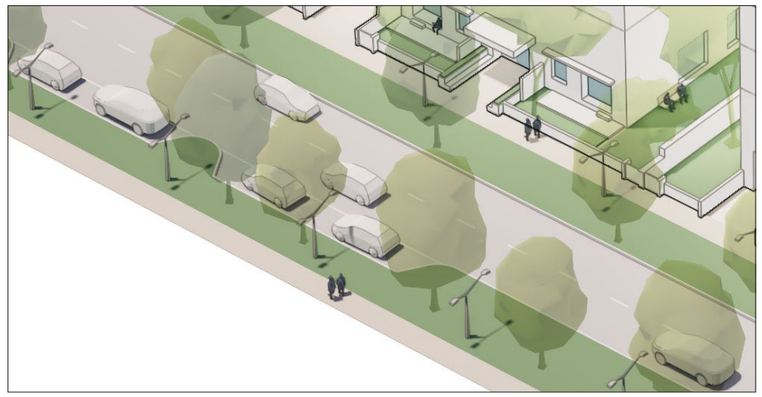


Figure 6.61: Indicative illustration showing a Green Street within an Enterprise Neighbourhood

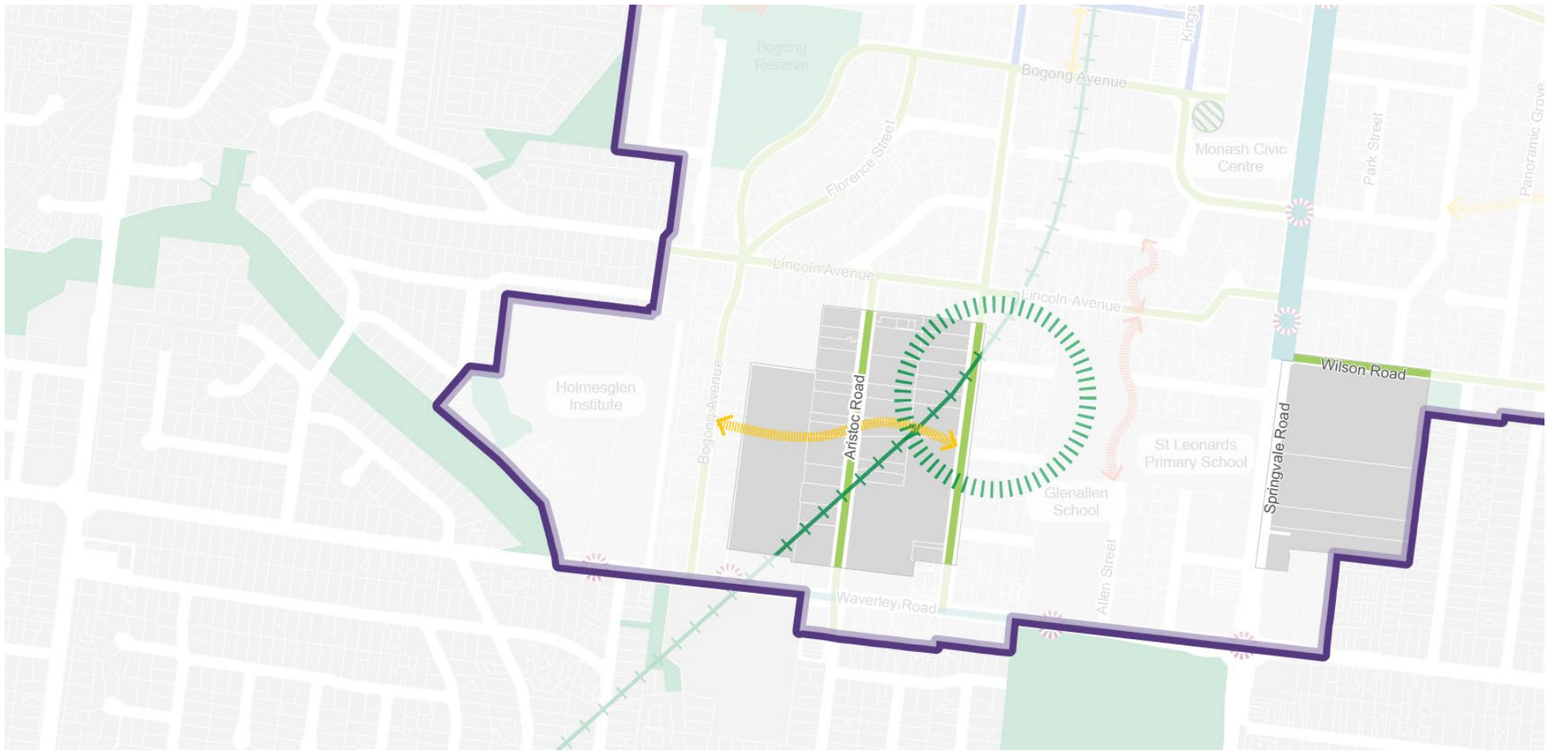


Figure 6.60: Public realm outcomes plan

Typical building and public realm profile

This cross-section shows an Enterprise Neighbourhood building with a typical street to provide an illustration of the future built form and public realm outcomes for this area.

Figure 6.62: Proposed section - Enterprise Neighbourhoods

6.9 Strategic Sites

Strategic Sites have increased capacity for intensification and strong potential to deliver SRLA policy objectives and/or public benefit outcomes

The Strategic Sites in Glen Waverley:

- Station Development Area

This site is shown on the Urban Form Framework plan in Section 4.4.

What is a Strategic Site?

Strategic Sites have increased capacity for intensification and strong potential to deliver SRLA policy objectives and/or public benefit outcomes.

A Strategic Site should meet at least two of the below criteria:

- Complexity of issues to resolve including land use, built form, movement that require a bespoke planning control or process to achieve desired outcomes
- Opportunity for strategic public benefit (including significant contribution towards housing or employment growth) and/or support Government policy outcomes, that would be lost if the site was not clearly identified as strategic
- Capacity and scale – ability for significant investment or benefit to be unlocked within the lifespan of the Structure Plan (i.e. by 2041).

Strategic Sites that meet the criteria and require the application of bespoke planning controls to provide direction on their future development, and are as follows:

- Station Development Area

Station development areas

These are sites where future development is proposed on land surplus to SRL East operations in the core of the Structure Plan area. These sites will include adjacent or over SRL stations and station buildings that leverage the high level of accessibility and services available by directing intensified built form closest to the SRL station.

6.10 Urban development typology testing

Calculating floor area ratio

An indicative floor area ratio (FAR) was calculated for each urban development type based on 3D modeling on typical lot sizes within the relevant urban form area.

The FAR was determined by calculating the total gross floor area (GFA) of a building above ground level, measured from the outside of external walls, and includes all roofed areas (in accordance with GFA definition at Clause 73.01 of the VPP) divided by the area of the site).

The envelope includes:

- All enclosed areas
- Covered balconies
- Services
- Voids associated with lifts, car stackers and similar service elements (considered as multiple floors of same height as adjacent floors).

The envelope does not include:

- Basements
- Any uncovered communal outdoor areas.

This is consistent with the approach taken in the City of Melbourne.

As this report is focused on urban design outcomes, it seeks to understand the overall building volume that may be possible with each development type, and makes no assumptions about the degree to which this volume may be occupied by car parking.

Any calculation of useable residential or commercial floor areas would need to make appropriate adjustments to allow for car parking.

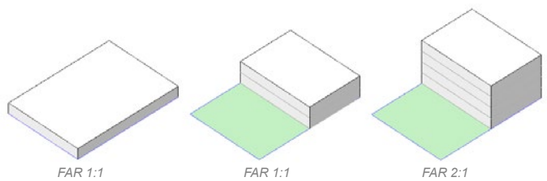
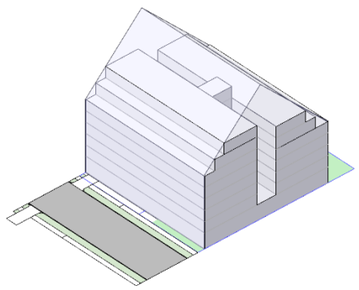


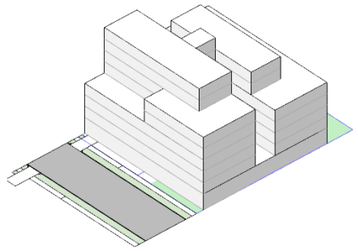
Figure 6.63: Floor area ratio (FAR) principle

Architectural articulation efficiency

A likely building volume was modeled within the maximum permissible envelope on each site based on the proposed maximum height and minimum setbacks, and the floor-to-floor assumptions. Thereafter, 10 per cent of that FAR was deducted to allow for further architectural design flexibility and massing articulation, such as reducing the number of upper-level setbacks or adaption to specific site conditions.



Permissible building envelope



Architectural articulation reduces yield by 10 per cent

Figure 6.64: Architectural articulation principle

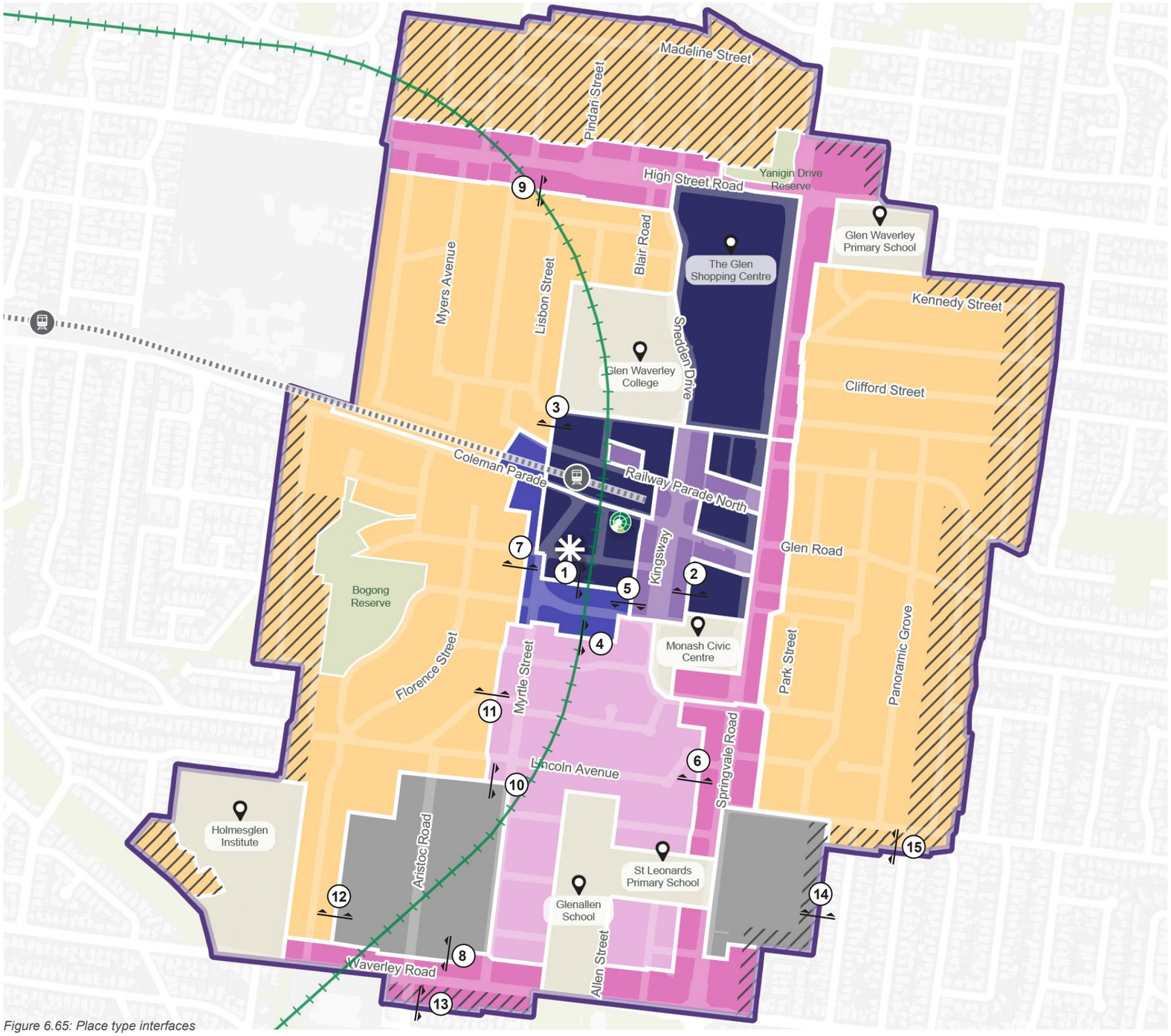
Floor height assumptions

The development types were defined according to current best-practice and compatibility with Clause 58 as a minimum standard.

Building floor-to-floor height	
Residential levels	3.2 metres
Residential ground floor (raised floor or high ceilings for adaptability)	4 metres
Commercial ground floor	4.5 metres
Commercial upper floor	3.8 metres (4 metres in purely commercial buildings)

6.11 Place type interfaces

This section illustrates the built form interfaces between different place types through a series of section drawings. Figure 6.64 indicates the location of each section.



Legend

- Section line
- SRL station
- Existing Glen Waverley Station
- SRL East alignment
- Structure Plan Area
- Sensitive / Constrained / Isolated areas

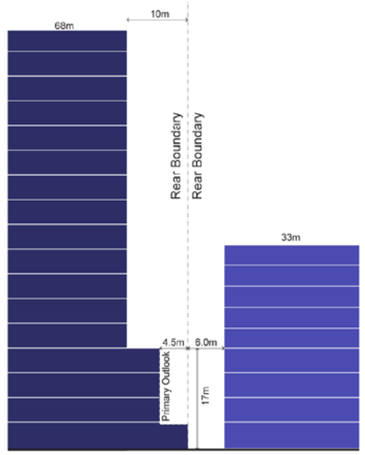
Place types

- Central Core
- Central Flanks
- Main Streets
- Key Movement Corridors
- Urban Neighbourhoods
- Residential Neighbourhoods
- Enterprise Neighbourhoods
- Strategic site - Station Development Area

NTS 0 150 300 450 600M N

Figure 6.65: Place type interfaces

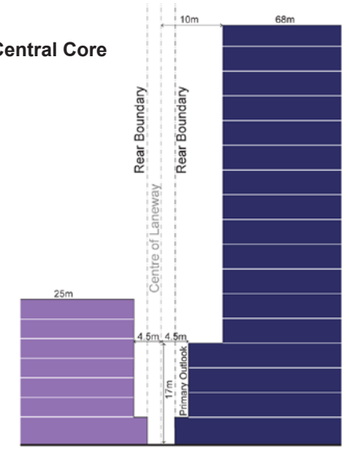
1 Central Core to Central Flanks



Central Core | Central Flanks

Figure 6.66: Interface section 1. Typical interface section indicative only

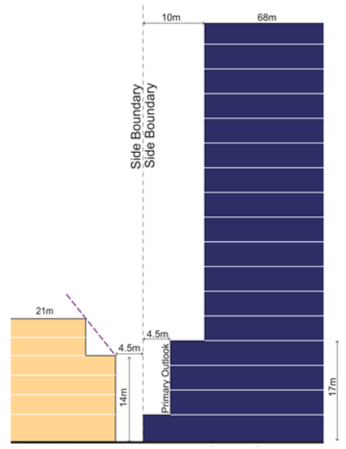
2 Main Streets to Central Core



Main Streets | Central Core

Figure 6.67: Interface section 2. Typical interface section indicative only

3 Residential Neighbourhoods to Central Core

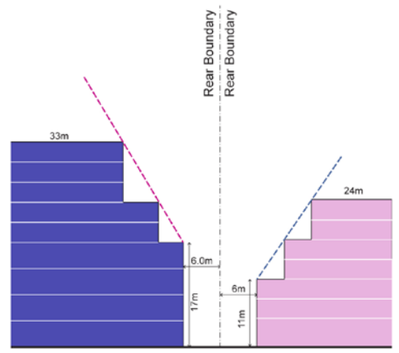


Residential Neighbourhoods | Central Core

Set back additional 0.8 metres per metre of height above 14 metres

Figure 6.68: Interface section 3. Typical interface section indicative only

4 Central Flanks to Urban Neighbourhoods



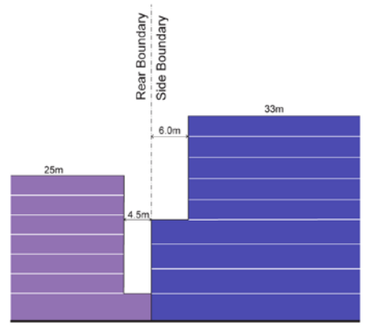
Central Flanks | Urban Neighbourhoods

Set back additional 0.7 metres per metre of height above 11 metres

Adjacent Key Movement, Urban Neighbourhoods and Residential Neighbourhoods set back additional 0.6 metres per metre per height above 17 metres

Figure 6.69: Interface section 4. Typical interface section indicative only

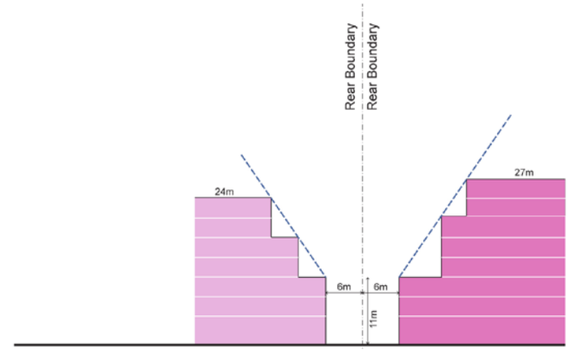
5 Main Streets to Central Flanks



Main Streets | Central Flanks

Figure 6.70: Interface section 5. Typical interface section indicative only

6 Urban Neighbourhoods to Key Movement Corridors

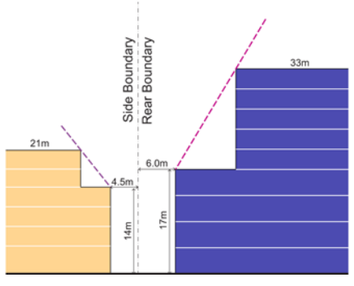


Urban Neighbourhoods | Key Movement Corridors

Set back additional 0.7 metres per metre of height above 11 metres

Figure 6.71: Interface section 6. Typical interface section indicative only

7 Residential Neighbourhoods to Central Flanks

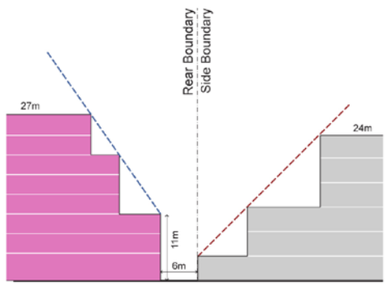


Residential Neighbourhoods | Central Flanks

- Set back additional 0.8 metres per metre of height above 14 metres
- Adjacent Key Movement, Urban Neighbourhoods and Residential Neighbourhoods set back additional 0.6 metres per metre per height above 17 metres

Figure 6.72: Interface section 7. Typical interface section indicative only

8 Key Movement Corridors to Enterprise Neighbourhoods

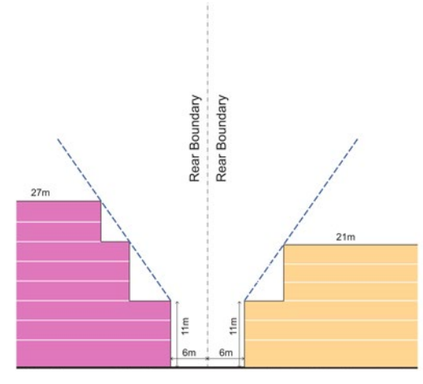


Key Movement Corridors | Enterprise Neighbourhood

- Set back additional 0.7 metres per metre of height above 11 metres
- Set back 1 metres for every metre above ground floor where abutting a property where dwellings are permissible

Figure 6.73: Interface section 8. Typical interface section indicative only

9 Key Movement Corridors to Residential Neighbourhoods

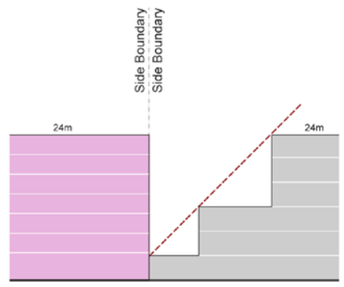


Key Movement Corridors | Residential Neighbourhoods

- Set back additional 0.7 metres per metre of height above 11 metres

Figure 6.74: Interface section 9. Typical interface section indicative only

10 Urban Neighbourhoods to Enterprise Neighbourhoods

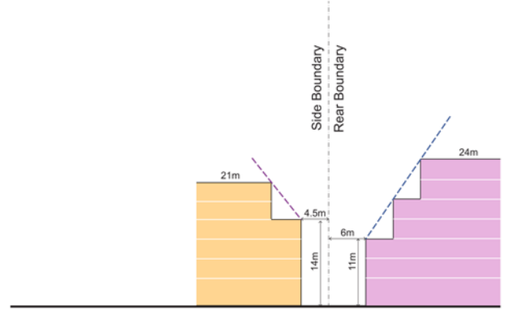


Urban Neighbourhoods | Enterprise Neighbourhood

- Set back 1 metres for every metre above ground floor where abutting a property where dwellings are permissible

Figure 6.75: Interface section 10. Typical interface section indicative only

11 Residential Neighbourhoods to Urban Neighbourhoods

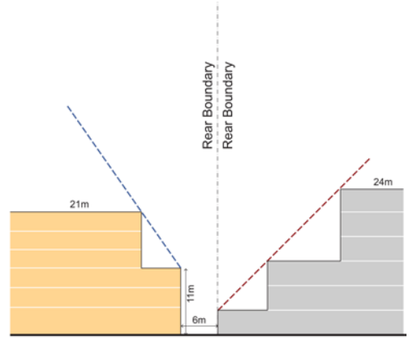


Residential Neighbourhoods | Urban Neighbourhoods

- Set back additional 0.7 metres per metre of height above 11 metres
- Set back additional 0.8 metres per metre of height above 14 metres

Figure 6.76: Interface section 11. Typical interface section indicative only

12 Residential Neighbourhoods to Enterprise Neighbourhoods

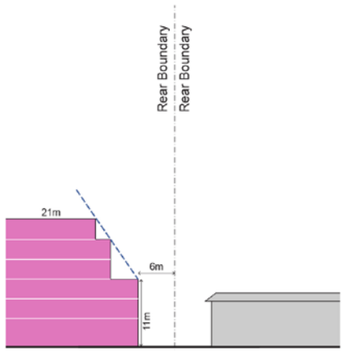


Residential Neighbourhoods | Enterprise Neighbourhood

- Set back additional 0.7 metres per metre of height above 11 metres
- Set back additional 0.8 metres per metre of height above 14 metres

Figure 6.77: Interface section 12. Typical interface section indicative only

(13) Key Movement Corridor to residential land outside Structure Plan Area

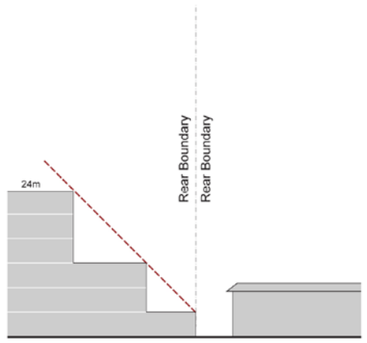


Key Movement Corridor | **Residential land outside Structure Plan Area**

- - - - - Set back additional 0.7 metres per metre of height above 11 metres

Figure 6.78: Interface section 13. Typical interface section indicative only

(14) Enterprise Neighbourhoods to residential land outside Structure Plan Area

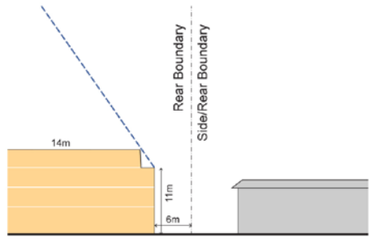


Enterprise Neighbourhood | **Residential land outside Structure Plan Area**

- - - - - Set back 1 metres for every metre above ground floor where abutting a property where dwellings are permissible

Figure 6.79: Interface section 14. Typical interface section indicative only

(15) Residential Neighbourhoods to residential land outside Structure Plan Area



Residential Neighbourhoods | **Residential land outside Structure Plan Area**

- - - - - Set back additional 0.7 metres per metre of height above 11 metres

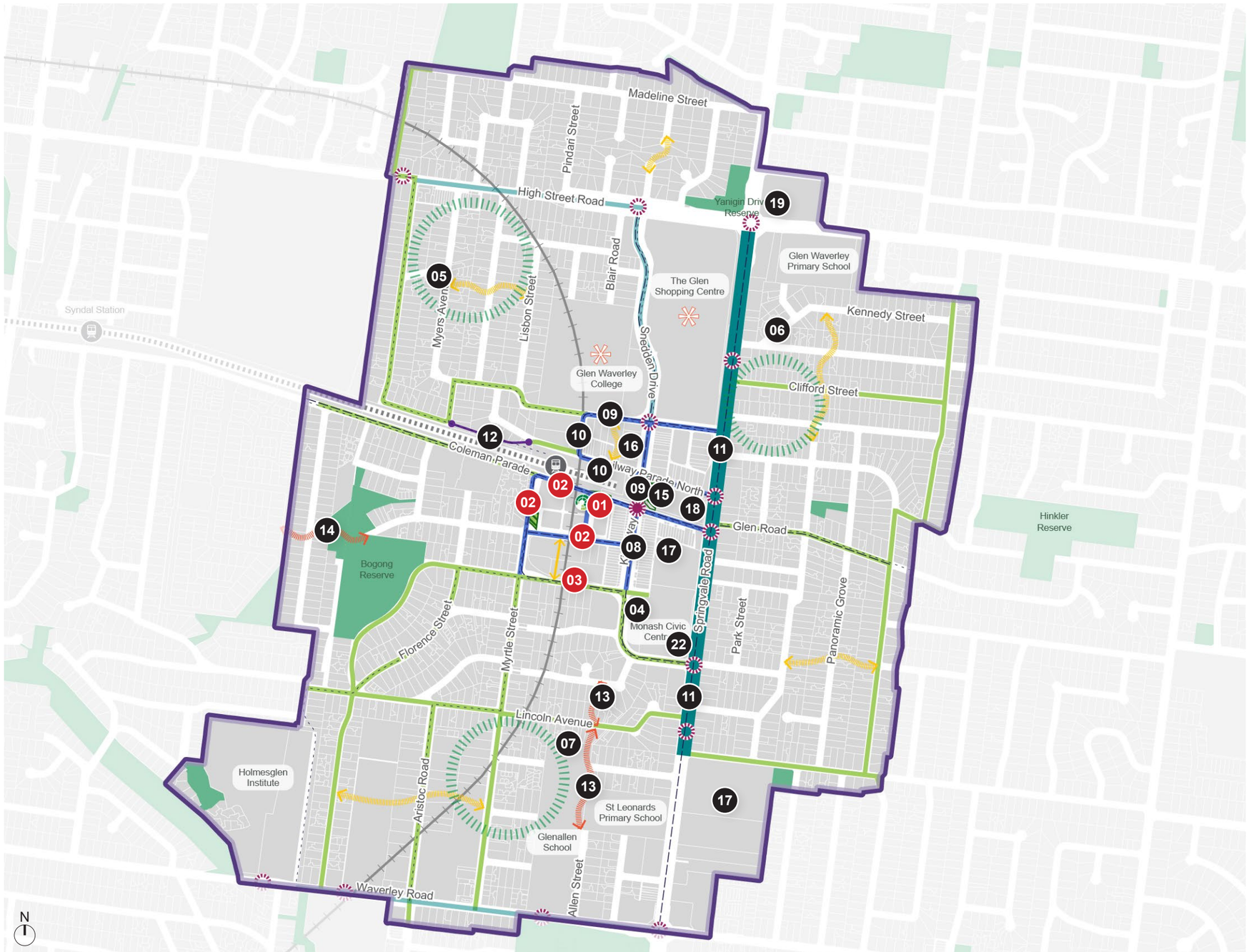
Figure 6.80: Interface section 15. Typical interface section indicative only

7 Recommendations summary

Joint Venture

This report recommends a range of urban design initiatives to be incorporated within the Glen Waverley Structure Plan. These initiatives will deliver a permeable and inviting public realm that promotes walking and street life, and a series of new urban character areas that will deliver the level of growth and diversity appropriate for this highly accessible and jobs-rich location.

The urban design initiatives are summarised below.



- SRL Rail scope
- Structure Planning scope initiative / recommendation
- SRL station
- Structure Plan Area
- SRL East alignment
- Boulevard
- Avenue
- Activity Street
- Green Street
- Green Street - new
- *Work with land manager / owner to improve links and access through site*
- Critical new pedestrian link - fixed
- Important new pedestrian link - flexible
- Local new pedestrian link - fixed
- Local new pedestrian link - flexible

Figure 7.1: Implementation plan (with public realm outcomes diagram base)

Ref.	Urban Design Initiatives / Recommendations
01.	**New and enhanced public spaces at SRL station** Deliver attractive and well-designed new public spaces as part of the approved SRL station development including at the SRL station, Coleman Parade road closure and the Glen Waverley metro station forecourt.
02.	**Montclair Avenue, Coleman Parade and Myrtle Street streetscape upgrades** Deliver a high-quality street network in the precinct core as part of the approved SRL station development at Montclair Avenue, Coleman Parade and the realigned Myrtle Street.
03.	**Bogong Avenue streetscape enhancements** Deliver streetscape (Green Street) improvements at Bogong Avenue to support pedestrian and cycling connectivity and access.
04.	**New public space at the Monash Civic Centre forecourt** Deliver a new public space at the Civic Centre forecourt as part of the Civic Centre redevelopment by Monash Council.
05.	**New open space to 'close the gap' near Myers Avenue** Facilitate provision of a new high-quality open space in the near Myers Avenue to address the gap in 400-metre open space walkable access.
06.	**New open space to 'close the gap' near Fairhills Parade** Facilitate provision of a new high-quality open space in the around the west end of Fairhills Parade to address the gap in 400-metre open space walkable access.
07.	**New open space to 'close the gap' near Lincoln Avenue** Facilitate provision of a new high-quality open space in near Lincoln Avenue to address the gap in 400-metre open space walkable access.
08.	**Kingsway upgrades (south)** Enable an upgraded Kingsway between Coleman Parade and Bogong Avenue as a high-quality street for activity that supports public life and provides an attractive and comfortable pedestrian experience.
09.	**Kingsway upgrades (north)** Plan for upgraded Kingsway between O'Sullivan Road and Coleman Parade as a high-quality street for activity that supports public life and provides an attractive and comfortable pedestrian experience.
10.	**Activity Street upgrades to Railway Parade North, Coleman Parade (east), O'Sullivan Road (west) and Euneva Avenue** Plan for streetscape improvements to ensure high-quality streets for activity that support public life and provide an attractive and comfortable pedestrian experience at Railway Parade North, Coleman Parade, O'Sullivan Road and Euneva Avenue.

Ref.	Urban Design Initiatives / Recommendations
11.	**Springvale Road transformation** Enable upgrades to Springvale Road with improved pedestrian and cyclist crossings and greening.
12.	**Improved important link for pedestrians between Railway Parade North and Rose Avenue** Plan for an improved and widened pedestrian link (important key link) between Railway Parade North and Rose Avenue to provide direct and convenient access to the stations and precinct core.
13.	**New pedestrian links connecting Allen Street to Marriott Parade** Plan for new pedestrian links (important key links) from Allen Street to Lincoln Avenue; and between Lincoln Avenue; and Marriott Parade to improve walking access to Central Reserve and into the precinct core.
14	**New link for pedestrians between Montclair Avenue and Avendon Boulevard** New important pedestrian link (important key link) from Montclair Avenue through Bogong Reserve to Avendon Blvd to improve walking access to open space and into the precinct core.
15.	**Glen Waverley Central Car Park** Investigate public realm enhancements including a new public space as part of any redevelopment of the car park site at 281 Springvale Road.
16.	**Dan Murphy's and car park** Investigate public realm enhancements at the Dan Murphy's site at 5-35 Kingsway – particularly to Kingsway and Railway Parade, and new links to SRL station.
17.	**Century City Walk** Investigate public realm enhancements including new links to SRL station at Century City Walk at 285-289 Springvale Road.
18.	**Wilson Transformer site** Investigate public realm enhancements to improve interface with Springvale Road at the Wilson Transformer site at 310-336 Springvale Road.
19.	**Mountain View Hotel** Investigate public realm enhancements, including to Springvale Road and High Street Road interface at Mountain View Hotel at 186 Springvale Road.

Ref.	Urban Design Initiatives / Recommendations
	Green Streets improvements Enable streetscape improvements to existing local streets that support pedestrian connectivity and access to recreation facilities, enhanced environmental/biodiversity outcomes, and/or the potential to accommodate cycle and bus routes as appropriate at: • Aristoc Road • Bogong Avenue • Clifford Road • Danien Street • Hinkler Road (between The Outlook and Danien Street) • Kingsway • Florence Street (south of Bogong Avenue) • Glen Road • Lincoln Avenue • Myrtle Street • Osullivan Road • Rose Avenue • The Outlook • Wilson Road.
	New local pedestrian links Investigate new local pedestrian links (local key links) within development sites to improve permeability and local walking access.
-	**Built form planning provisions** Provide built form provisions to achieve future character, public realm amenity and off-site amenity outcomes.
-	**Public realm amenity planning provisions** Provide design provisions to achieve public realm amenity outcomes.