THE MONASH BOULEVARDS

Urban Design Framework

Tract

Prepared by Tract for
Monash City Council

City of Monash

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QA.

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Part A: Vision and Framework

1 Introduction

1.1 Purpose of the Monash Boulevards Urban Design Framework

The Monash Boulevards Urban Design Framework (UDF) provides a bold and compelling vision to enhance the Boulevards of Dandenong Road and Springvale Road as great places to live. The framework is principally focused on residential development along Dandenong Road and Springvale Road, and provides built form controls and guidelines that aim to produce high quality, residential built form outcomes that enhance the Boulevards.

The UDF also provides principles and guidance for improved connectivity along the corridor, enhanced landscape amenity and sustainable design outcomes. Design guidelines and key projects are recommended in these areas with the aim of creating spaces that are more usable, pleasant and aesthetically pleasing for existing and future residents.

This UDF builds upon significant background analysis and opportunities identification outlined in the Monash Boulevards Discussion Paper. Community and stakeholder feedback on the Discussion Paper has also shaped the development of the UDF.

A key strategic driver for the UDF is the Monash Housing Strategy, which identifies the Boulevards as areas for future housing change and diversification. In addition, Plan Melbourne and the Monash National Employment Cluster Framework also seek to further enhance the Boulevards as locations for higher density housing.

The UDF also aligns with the principles of 20-minute neighbourhoods by encouraging well-designed walkable neighbourhoods that are connected through a mix of land-uses, housing types, open space and community facilities, and access to quality public transport.

1.2 Structure

The Monash Boulevards Urban Design Framework is a document that builds upon the key findings and opportunities outlined in the Discussion Paper.

The Monash Boulevards Discussion Paper was developed prior to the Urban Design Framework and provides analysis of the key issues and opportunities, and supporting strategic and technical information.

The Monash Boulevards Urban Design Framework comprises of three parts:

Part A: Vision and Framework

This section provides an overview of the project, this document and the key opportunities for the Boulevards.

The Vision and Principles provides a future vision for the growth and development of the Boulevards.

Each Framework provides recommendations across the two Boulevards to achieve the Vision and Principles.

Part B: Precinct Plans

Outlines public realm, and pedestrian and cycling improvements across twelve precincts.

Part C: Built Form Design Guidelines

Outlines the built form recommendations and guidelines for the residential properties along the Boulevards.

1.3 Study area

The Study Area includes the Dandenong Road and Springvale Road Boulevards within the City of Monash as identified in Figure 1. This encompasses 16.5km of road frontage across 12 precincts.

The Study area abuts land within the City of Stonnington in the north west corner, near Chadstone Shopping Centre and land within the City of Greater Dandenong in the southern section near the intersection of Dandenong Road and Springvale Road.

Springvale Road continues into the City of Whitehorse and Dandenong Road continues into the City of Glen Eira.

While the built form recommendations and design guidelines focus specifically on residential land fronting onto the boulevards and their service roads, the public realm and access opportunities will extend into the service roads and consider connections into the surrounding street and open space networks.

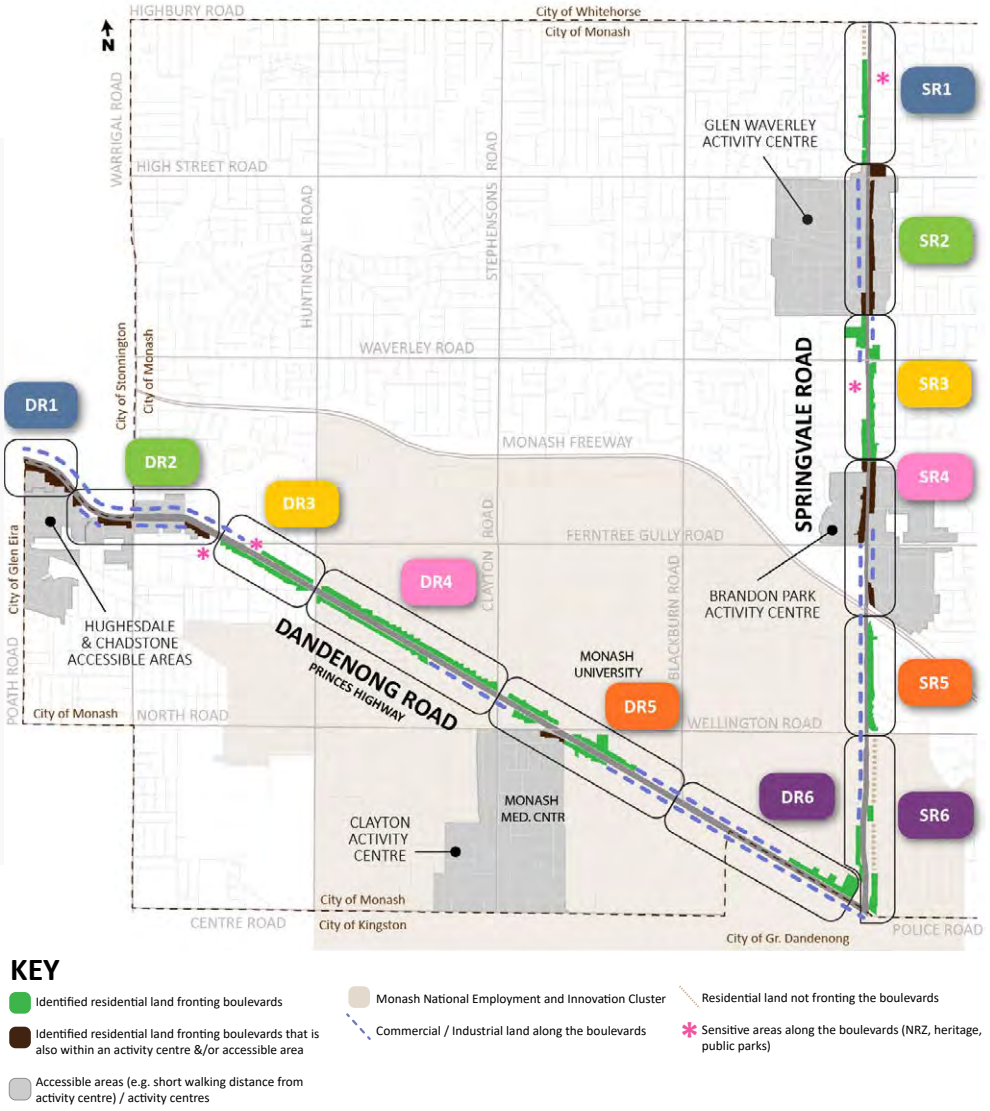


Figure 1. Study Area and Precincts

1.4 Key opportunities

The Monash Boulevards Discussion Paper outlined the following key opportunities for the Boulevards.

Opportunities to improve cycling priority and safety along the Boulevards

Development and Built Form

1. Opportunity to encourage and support denser forms of development in line with the policy strategies for the Boulevards. Opportunity to explore mechanisms and controls, which are required to deliver denser housing models.
2. Opportunity to encourage lot consolidation to allow for greater housing densities, limit off-site amenity impacts and provide consolidated access off side streets or service roads.
3. Opportunity to emphasise strategic locations along the Boulevards through additional building height.

Public Realm and Amenity

4. Opportunity to use the public realm and built form to create identifiable neighbourhoods with a strong sense of place.
5. Opportunity to mitigate amenity impacts of high traffic volumes to create the Boulevards as attractive housing destinations.

Landscape Character

6. Opportunity to strengthen the 'Garden City' character through high quality landscaping and canopy trees within new townhouse and apartment developments.
7. Opportunity to enhance service roads to provide a stronger landscape character and provide for usable open space.
8. Opportunities to enhance the landscape and improve cooling through canopy tree planting within VicRoads managed areas of the Boulevards.

Movement and Connectivity

9. Opportunities to support pedestrian and cyclist movement by providing a continuous and safe cycling route along both Boulevards.
10. Opportunity to enhance and provide higher priority to pedestrians, cyclists and public transport users whilst maintaining adequate access for private motor vehicles.

Opportunities for high quality residential built form along the Boulevards.

2 Vision and Principles

2.1 Vision for the Monash Boulevards

"The Monash Boulevards are great places to live. They are green, safe, well connected, and offer a range of housing choices for all."

Figure 2. An artist's impression of the Monash Boulevards

2.2 Urban Design Framework Principles

The urban design framework principles inform the approach to the Monash Boulevards and sets objectives that guide future design outcomes. The Frameworks, Precinct Plans and Built Form Guidelines have been developed with consideration of the Principles.

Opportunities for improved pedestrian spaces along the Boulevards

Principle 1

Built Form Diversity

High quality, contemporary buildings will line the boulevards providing a range of housing options for residents. Taller built form will be located at key gateways and nodes of activity creating identifiable neighbourhoods and sensitively transitioning to adjoining low-scale residential areas.

Principle 2

Movement & Connectivity

The Boulevards will be enhanced as safe and convenient places for people to walk and cycle between their homes and surrounding destinations. The service roads will be transformed into active transport spines that prioritise people and provide easy access to public transport hubs.

Principle 3

Landscape Character and Public Realm

The boulevards will play a key role in enhancing the garden city character of Monash. A leafy landscape outlook will dominate views along the boulevards, strengthened with additional tree and understorey planting. The service roads will play a vital role in greening the boulevards through canopy trees and pocket parks providing quieter places for residents. Front gardens will further strengthen the landscape dominated environment.

Principle 4

Sustainable and Resilient Communities

The boulevards will benefit from a range of environmental and social sustainability initiatives. New buildings will lead the way in energy efficiency and energy production while opportunities to capture, treat and re-use water within the boulevards will be maximised. Pocket parks, pedestrian and cycle links will provide places for people to gather and interact around concentrated nodes of activity, and will further strengthen a sense of belonging for residents.

3 The Frameworks

3.1 Built Form Diversity Framework

The boulevards currently have a low-scale character with limited examples of multi-storey residential buildings. One and two storey dwellings from the interwar and post-war periods are the predominant building style and are of mixed quality and condition. Where redevelopment has occurred, it is generally in the form of one and two storey townhouses that offer minimal increase in housing supply along the corridor and limited contribution to built form character.

There is a major opportunity to enhance the boulevards with high quality apartment buildings and townhouses that have a stronger presence to the street and are integrated with dense landscaping.

The Built Form Framework aims to locate buildings of up to 4-6 storeys in most areas and up to 8 storeys in some key areas such as at key road intersection gateways, on large redevelopment sites, or in locations where the building/s can contribute to creating a stronger urban character and wayfinding element for the Boulevards. The taller buildings will be supported by well designed built form at 4-6 storeys which will contribute to the amenity and character of local areas.

The built form framework and guidelines aim to encourage lot consolidation across the Boulevards. This will be achieved by supporting taller buildings on wider lots to allow for appropriate setbacks and a transition in scale to adjoining sites.

Figure 3 provides an overview of the proposed locations for future building heights increases across the Boulevards. These areas are shown in more detail in Part C.

There are a number of factors that have influenced the approach to building heights and density. These include:

- Gateway locations,
- Large scale redevelopment sites,
- Adjoining sensitive residential and heritage interfaces
- Provision of a service road, or a second frontage for access,
- Proximity to public transport stops and open space,
- Proximity to active transport links,
- Existing Strata titled lots,
- Existing parcel size (acknowledging that lot consolidation may occur), and
- Site topography.

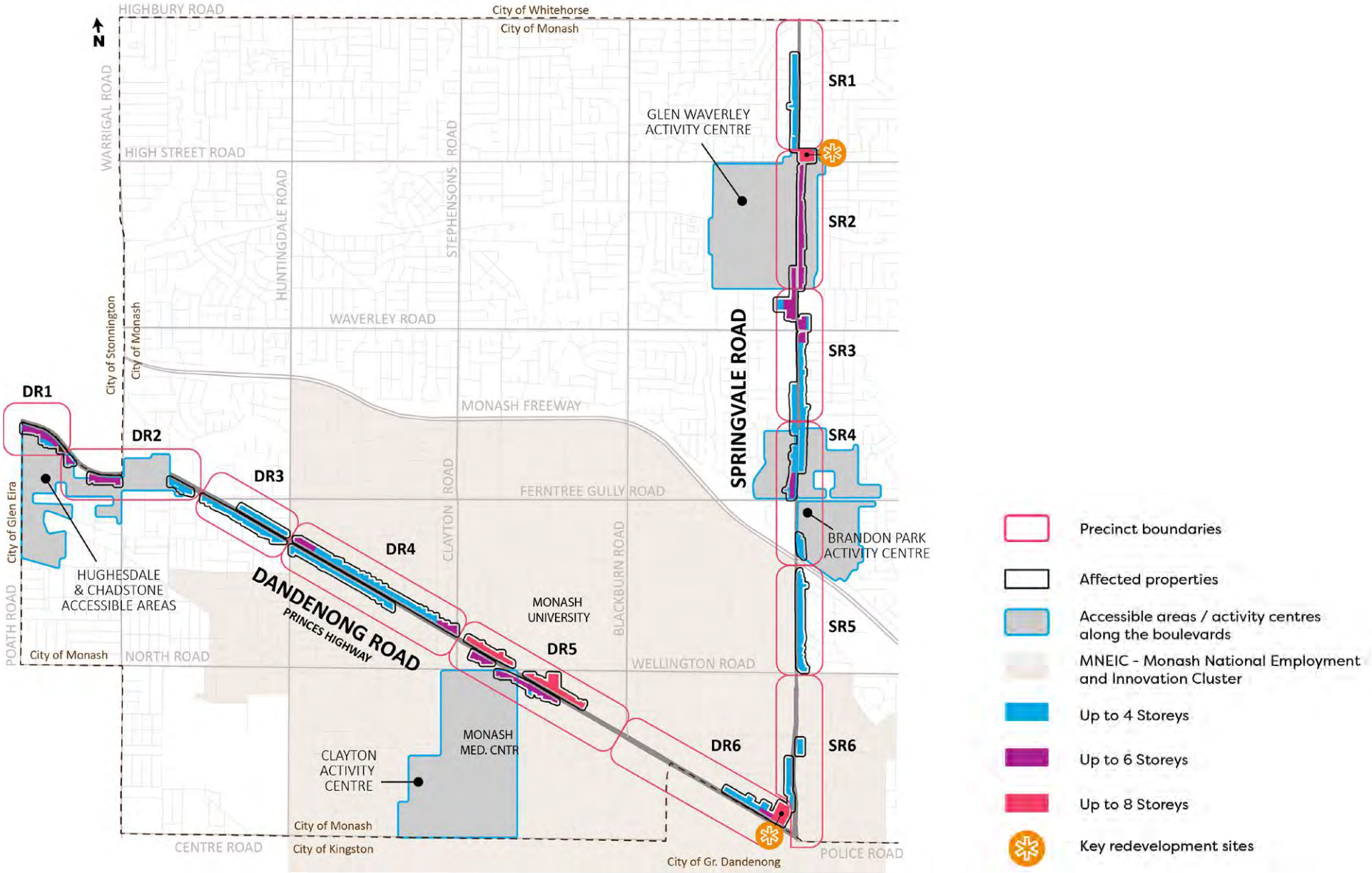


Figure 3. Built Form Framework Plan

Objective

To create a contemporary mid-rise residential character for the Monash Boulevards through high quality building design and architectural form that respects the surrounding context.

Strategies

- *Strengthen the sense of place and identity of local neighbourhoods with buildings of exemplary architectural quality on key gateway sites, and in locations adjacent to existing and proposed public spaces.*
- *Support additional building height on larger sites where interface issues can be minimised.*
- *Encourage consolidation of sites through greater height limits where interfaces allow.*
- *Provide for a transition in building height to adjacent sensitive interfaces.*
- *Ensure buildings contribute positively to streetscapes and public spaces by providing high quality, articulated façades and creating opportunities for passive surveillance.*
- *Provide generous landscaped front setbacks to support canopy trees, and strengthen the garden city character.*
- *Minimise the impact of car parking and car park access on the public realm and private landscaping opportunities.*
- *Ensure that development provides for high Environmental Sustainable Design (ESD) standards, including energy efficiency, water management and use of low embodied energy materials.*

Example of mid rise built form with landscaped frontage.

Examples of mid rise housing with built form articulation and low front fencing.

Examples of townhouses with planted front gardens.

Example of mid rise housing with canopy tree planting along frontage.

3.2 Movement and Connectivity Framework

Dandenong and Springvale Roads are major arterial roads that serve as a key connection to the eastern and south eastern suburbs, and surrounding destinations. Both roads have very high volumes of traffic during peak times, with congestion often occurring at major intersections.

Dandenong Road consists of three lanes of traffic running both east and westbound. Some sections include of four lanes in each direction, with service roads running along the northern and southern sides throughout most of the corridor. Springvale Road consists of 3 lanes running north and southbound, with service roads available at some sections.

Bus routes service both roads and provide connections to key destinations such as Monash University, Monash Medical Centre, Clayton Activity Centre and surrounding train stations.

Walking and cycling infrastructure is generally low quality and lacking across both roads. There are no bicycle lanes along Springvale Road, and infrequent cycles lanes along service roads to Dandenong Road. Where service roads are not provided, pedestrian footpaths are generally narrow and close to high volumes of vehicle traffic.

The Movement and Connectivity Framework aims to promote safe and convenient walking and cycling connections along the two corridors, improving access to employment centres, universities, open spaces and other key destinations. Additionally, the Framework advocates for a continuous bus route along the entire length of Dandenong Road.

Figure 4 provides an overview of the proposed active movement interventions across the Boulevards. These are further detailed in Part B.

Figures 5-8 provide examples of how additional cycle infrastructure can be accommodated through a typical service road/outer separator configuration.

There are a number of factors that have influenced the approach to movement and connectivity. These include:

- Reducing cycle/pedestrian/vehicle conflicts,
- Connecting existing destinations,
- Connecting into broader ‘low stress cycle’ street routes throughout the municipality,
- Focusing improvements on canopy tree planting to provide shade for riding and walking comfort,
- Introducing new walking and cycling infrastructure along service roads and outer separators where possible, and
- Locating infrastructure where risk to cyclists is not increased, or adversely affects primary traffic flow.

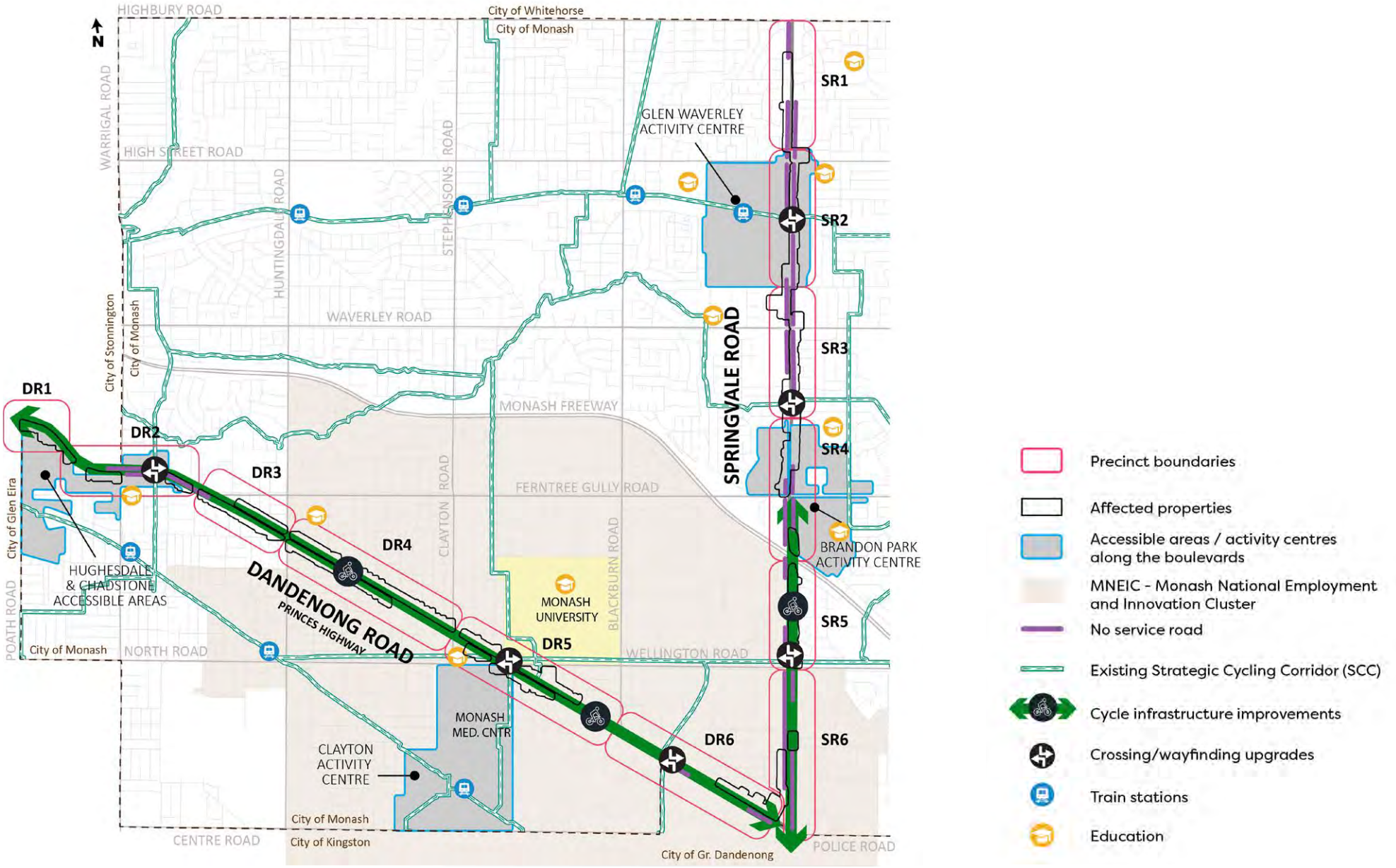


Figure 4. Movement and Access Framework

Objective

Create low stress walking and cycling environments through improved networks and infrastructure along the Boulevards.

Strategies

- *Strengthen walking and cycling priority within the services roads along the boulevards.*
- *Prioritise walking and cycling connections and crossings to surrounding education facilities, activity centres and employment hubs.*
- *Maximise connections into surrounding shared path, trails and cycle routes.*
- *Create a landscape that promotes walking and cycling through the planting of shady canopy trees.*
- *Consider opportunities for improving pedestrian crossing times at signalised intersections.*
- *Promote continuous bus routes along Dandenong Road.*

Opportunities for high quality cycling connections

Example of cycle path within outer separator Andersons Creek Rd – Doncaster East

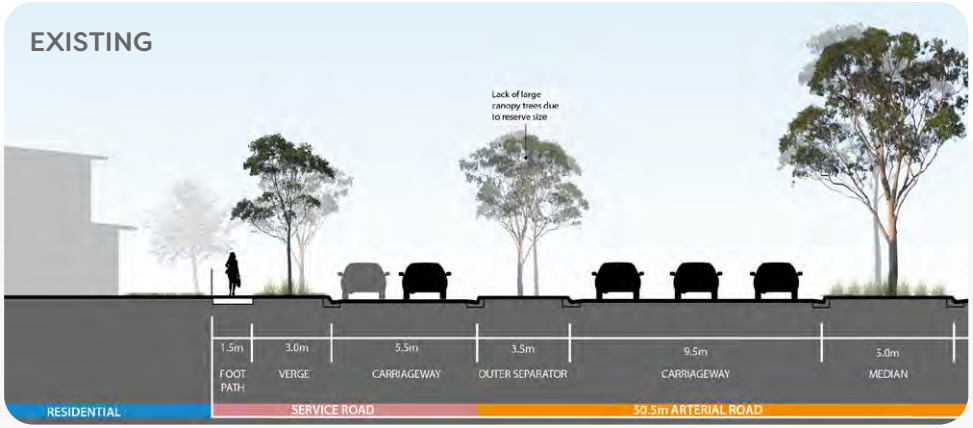


Figure 5. An example of a typical one-way service road, with on street car parking, a generous traffic lane, footpath, standard verge, and an outer separator (Typical - outer separator width varies)

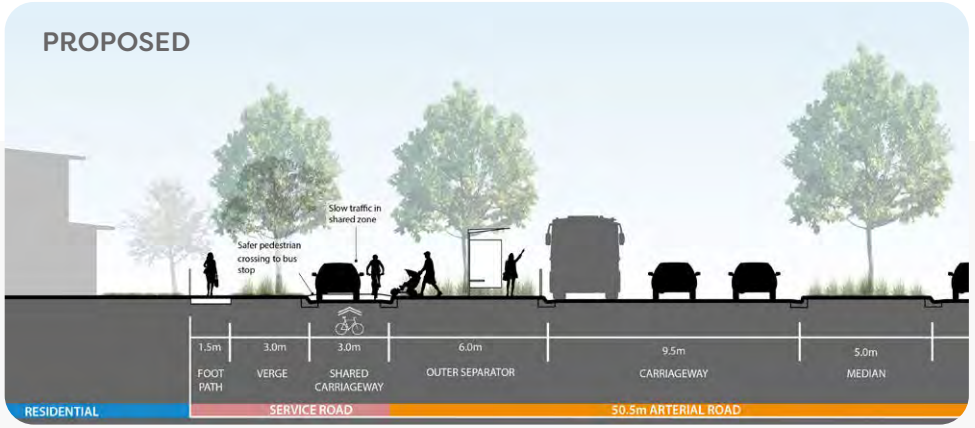


Figure 6. An example of a reconfigured service road, that could be utilised at key locations where pedestrian crossing movement should be prioritised - this example would provide traffic calming through a narrowed pavement, kerb outstands, line marking, and increased pedestrian activity.

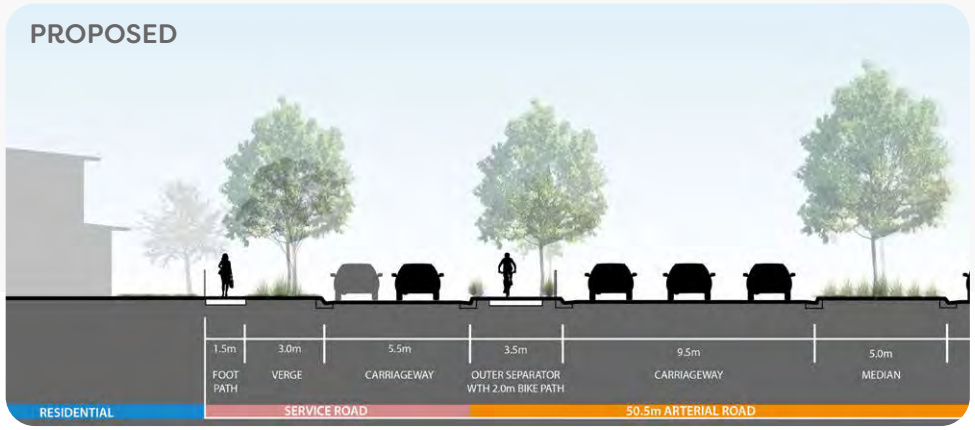


Figure 7. An example of a cycle path within the outer separator (where appropriate widths permit), which has no impact on service road traffic flow, and includes including low planting and a traffic barrier for safety. Cyclists would need to give way where vehicles enter/exit the service road. Example provided opposite, on Andersons Creek Road, Doncaster East.

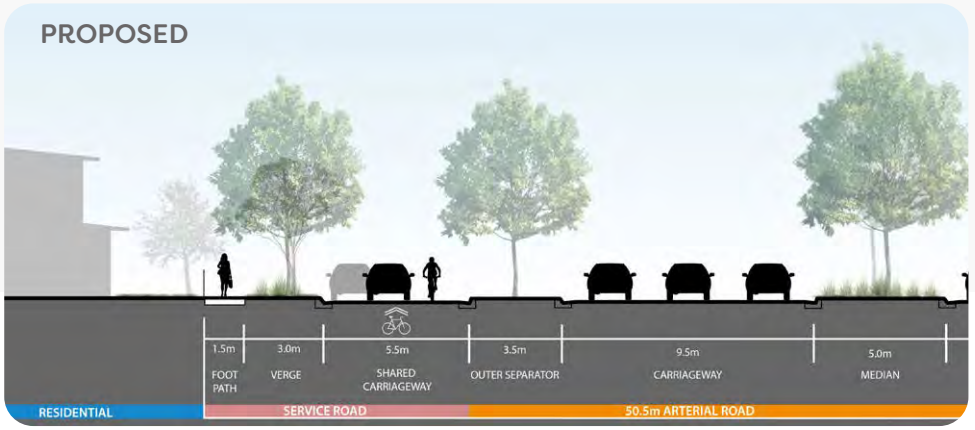


Figure 8. An example of a reconfigured service road showing a carriageway that supports on street parking, one way through traffic, and cycle movements in a shared road 'sharrow' environment. Regular traffic calming measures should be utilised to slow vehicle traffic on long service road lengths - options include kerb outstands, speed humps, line marking as potential options.

3.3 Landscape Character and Public Realm Framework

The City of Monash is known for its 'Garden City Character', as described in the Municipal Strategic Statement, as '...a general feeling of "greenness". This character is created by a combination of canopy trees, shrubs, garden beds and grass located across open space, streetscapes and private gardens.

The boulevards reflect this character in some sections, however the response is mixed. The western sections of Dandenong Road have a leafy character with large, exotic street trees lining the road while other sections locations lack street trees. Springvale Road has a stronger presence of native vegetation with large trees lining key sections, particularly in the northern and southern extents. Across both boulevards, front gardens are spacious however they have a limited presence of vegetation.

There are significant opportunities to strengthen the vegetated character of the boulevards to provide additional greening, shade and create a desirable destination for housing. The challenge along the Boulevards is finding methods to improve public realm while maintaining safe traffic movement. The service roads present good opportunities as they have lower volumes of traffic and are managed by Council. It is also recognised that front gardens will provide a critical role in greening the Boulevards and enhancing residential settings.

As the boulevards intensify, the role of parks, parklets and footpaths will become more critical. Apartments and townhouses tend to have smaller areas of private open space and residents become more dependant on public spaces for relaxation and recreation.

In terms of parks, there are a limited number that directly front onto the boulevards however there are a number of parks in the surrounding residential areas which will play an important role for existing and future residents and connections to these should be enhanced. There are also opportunities to create smaller areas of open space, particularly within service roads.

The Landscape Character and Public Realm Framework aims to increase the provision of open space across the boulevards whilst strengthening the leafy character through additional canopy tree planting in the service roads and outer separators. This will create a higher level of amenity for existing residents and enhance the boulevards as a destination for additional housing.

There are a number of elements that have influenced the landscape character and public realm response. These include:

- Road safety requirements and their impacts on tree planting,
- Location of overhead powerlines,
- Provision of existing access to open space,
- Existing gaps in canopy trees planting, and
- Locations where services roads are underutilised and can be narrowed/ removed.

Figure 9 provides an overview of the proposed open space improvement locations across the Boulevards. These are detailed further in Part B. Opportunities for further landscaping beyond what is outlines in this UDF may be investigated.

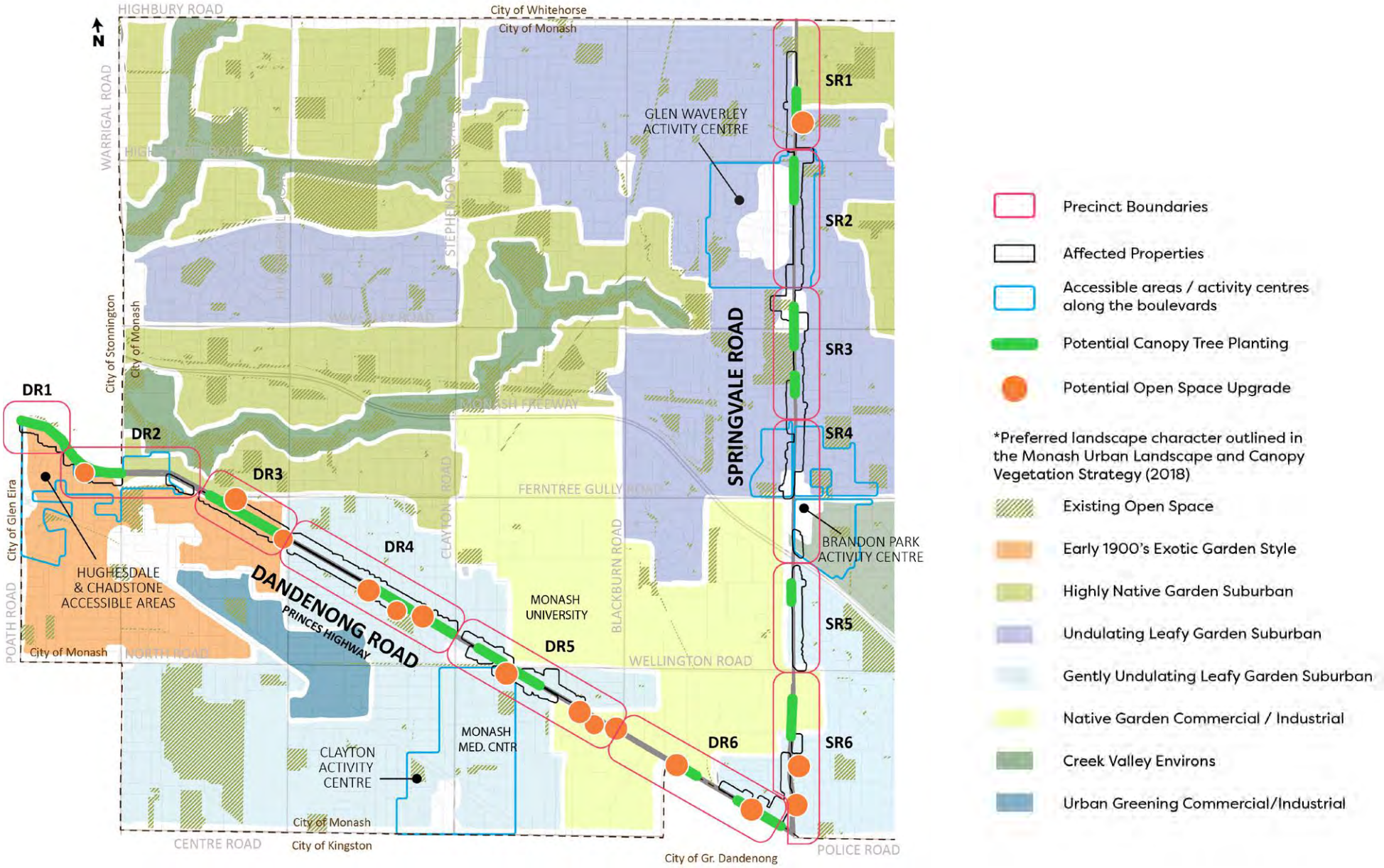


Figure 9. Landscape and Public Realm Framework Plan

Objective

Enhance the boulevard landscape character through high quality canopy tree planting, lush understorey landscaping and generous front gardens.

Strategies

- *Provide additional canopy trees and understorey planting within service roads.*
- *Increase shade and landscape amenity through canopy tree planting in key central medians/outer separators.*
- *Enhance the landscape character by considered selection of species based on existing vegetation, height and canopy spread, land use, physical conditions, and the preferred landscape character outlined in the Monash Urban Landscape and Canopy Vegetation Strategy (2018).*
- *Ensure that new development provides landscaped front setbacks that contribute positively to the 'Garden City Character' and boulevard character.*
- *Identify a hierarchy of 'nodes' along the Boulevards that include higher quality soft and hard surfaces to support the increased usage around high traffic pedestrian spaces, bus stops, and key cycling destinations.*
- *Enhance underutilised open spaces and street reserves to ensure maximum value to the local community.*
- *Enhance encumbered open space areas to provide higher levels of shade, cooling and an increased biodiversity role.*
- *Improve visual amenity along the Boulevards and minimise advertising clutter in high traffic locations/intersections where possible to create a cohesive visual landscape.*

Example of a pedestrian and cycling space, with understorey planting, and canopy cover, with lighting for safety.

Opportunity to enhance Hurst Reserve on Dandenong Road to provide a greater use of this significant (1.0ha+) open space and highlight the intersection as a wayfinding node.

3.4 Sustainable and Resilient Communities Framework

Creating sustainable and resilient communities requires changes and interventions on a number of fronts.

Improving the residential density and diversity along the Boulevards is one important step in increasing the sustainability of the area, however working hand-in-hand with that is ensuring that the distribution of land uses supports that increase in population. The Framework focuses on providing residential densities around nodes of existing activity where retail and other services are provided. This will provide the population with convenient access to daily needs and also strengthens the sense of community and 'localness'.

The use and re-use of natural resources is another key element of sustainability and resilience. The Frameworks support the capture and re-use of water in different ways to ensure this resource is not wasted. This could include the installation of passively irrigated tree pits and garden beds, that harvest stormwater run off from the road and pavement to irrigate trees. In addition, there is potential to incorporate WSUD into other parts of the Boulevard streetscape, such as within the verges, outer separators and median strips, or where space is available along the roadside.

Areas have been highlighted where water detention/treatment on a larger scale can be investigated through vegetated swales and biofiltration systems. These interventions could provide additional amenity and vegetation in areas of high heat stress in summer months.

Resilience also means contributing to the sense of 'localness'. This includes designing places that are inclusive and do not discriminate against age, ability, race, or identity. Places that have active edges, interactive components, and have visibility through passive surveillance to enable feelings of safety also contribute to community resilience. By providing opportunities for human interaction social isolation and anxiety can be reduced.

Figure 10 provides an overview of the proposed opportunities for sustainability and resilience across the Boulevards. These are further detailed in Part B.

There are a number of elements that have influenced the sustainable and resilient communities response. These include:

- Locating housing density around existing activity centres and retail uses to support daily needs of residents,
- Providing canopy tree planting and understorey planting to reduce heat stress,
- Locating WSUD and wetland systems in key locations to treat and re-use stormwater,
- Improving public realm opportunities, and
- Encouraging EV charging readiness in new apartment developments.

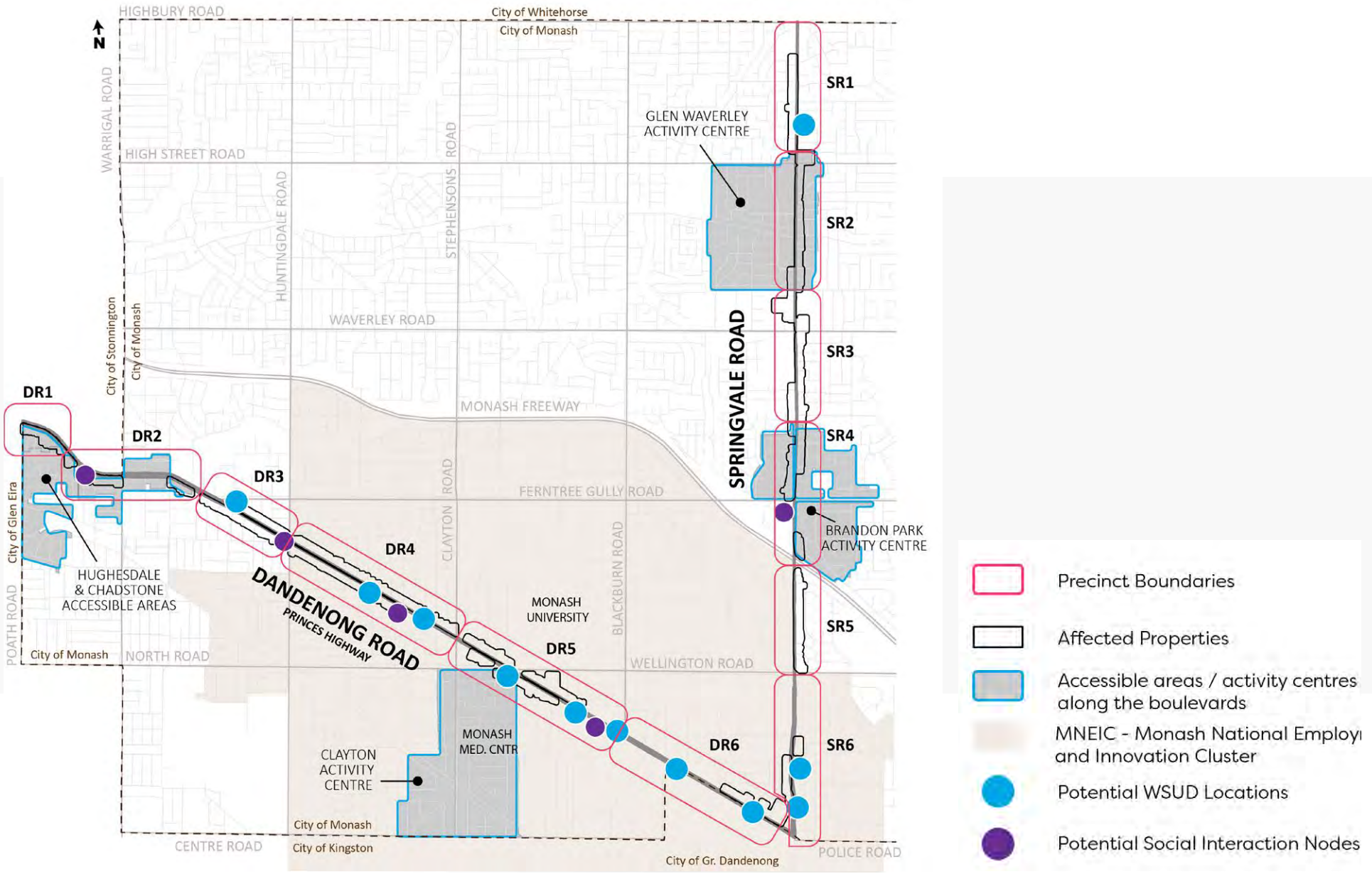


Figure 10. Sustainability and Resilience Framework Plan

Objective

To create a well-connected and sustainable community along the Boulevards.

Strategies

- *Focus housing densities around existing activity centres and retail uses to meet the daily needs of residents.*
- *Identify opportunities for Water Sensitive Urban Design initiatives that reduce water run off, and re-use water locally.*
- *Maximise opportunity for use of runoff for irrigation and improving soil moisture levels.*
- *Create opportunities for social interaction along the Boulevards where 'meetings' naturally occur to foster an inclusive community.*
- *Ensure infrastructure supports mobility needs of multiple age and ability groups.*
- *Co-locate bicycle infrastructure, seating, toilets and water stations to facilitate interaction and maximise use of facilities.*

Examples of high quality WSUD interventions in the public realm that contribute to the overall amenity of the place

Example of WSUD elements that contribute to the public realm in a play setting.

Pedestrian priority crossing, with understorey planting, and (future) canopy cover, with lighting and clear sight lines for safety.

Example of WSUD elements that contribute to the public realm in a play setting.

Part B: Precinct Plans

1 Introduction

1.1 Purpose

The purpose of the precinct plans is to outline public realm improvements, and access and movement recommendations across the twelve precincts.

The recommendations for each precinct are listed as key actions which are identified on a corresponding plan.

2 The Precincts

2.1 Dandenong Road - Precinct 01

2.1.1 Precinct Overview

DR01 is a well located residential precinct, connected to public transport (bus and train), with easy access to the Chadstone Shopping Centre, jobs and education facilities.

Additional housing opportunities will be provided through building heights of up to 6 storeys maximising the use of existing amenity and transport options.

Additional street tree planting will improve the local amenity and provide a buffer to traffic associated with Chadstone and Poath Road intersections. Understorey planting will soften and enhance the local character of the streetscape.

2.1.2 DR-01 Key Actions

DR01.01: Cycling Priority

- Painted 'sharrows' or other line marking to improve cycle safety and visibility along the southern service road.
- Enhanced cycle 'cut through' (at Dandenong Road and Fellows Street) to improve connectivity.
- Advocate for lower service road speeds (less than 30km/h) to improve cyclist safety and driver awareness in the shared environment.
- Potential linemarking of northern parking bays to delineate carriageway and improve safety for all road users.

DR01.02: Pedestrian Priority/Urban Integration

- Improve amenity at zebra crossings on service road, including canopy planting, kerb outstands, vehicle speed reduction, and traffic island upgrades.
- Potential for raised vehicle thresholds at pedestrian crossing locations.
- Potential for street furniture, amenity, and social interaction at high volume pedestrian crossings.

DR01.03: Landscape Amenity

- Canopy tree planting at pedestrian crossing locations.
- Narrow, upright canopy tree planting where outer separator cannot support a canopy tree.
- Select appropriate tree species for planting beneath powerlines.
- Additional low, native planting in outer separator that does not obstruct views into and out of service roads, instead of lawn/ concrete.
- Planted cycle 'cut through' to improve cycling amenity, and increase the user experience.
- Consider locations on the southern verge to include passively irrigated street trees and garden beds (where servicing and vehicle cross overs are not an issue).
- Species selected to consider extreme climatic conditions both in terms of robustness and providing increased shade for pedestrians.

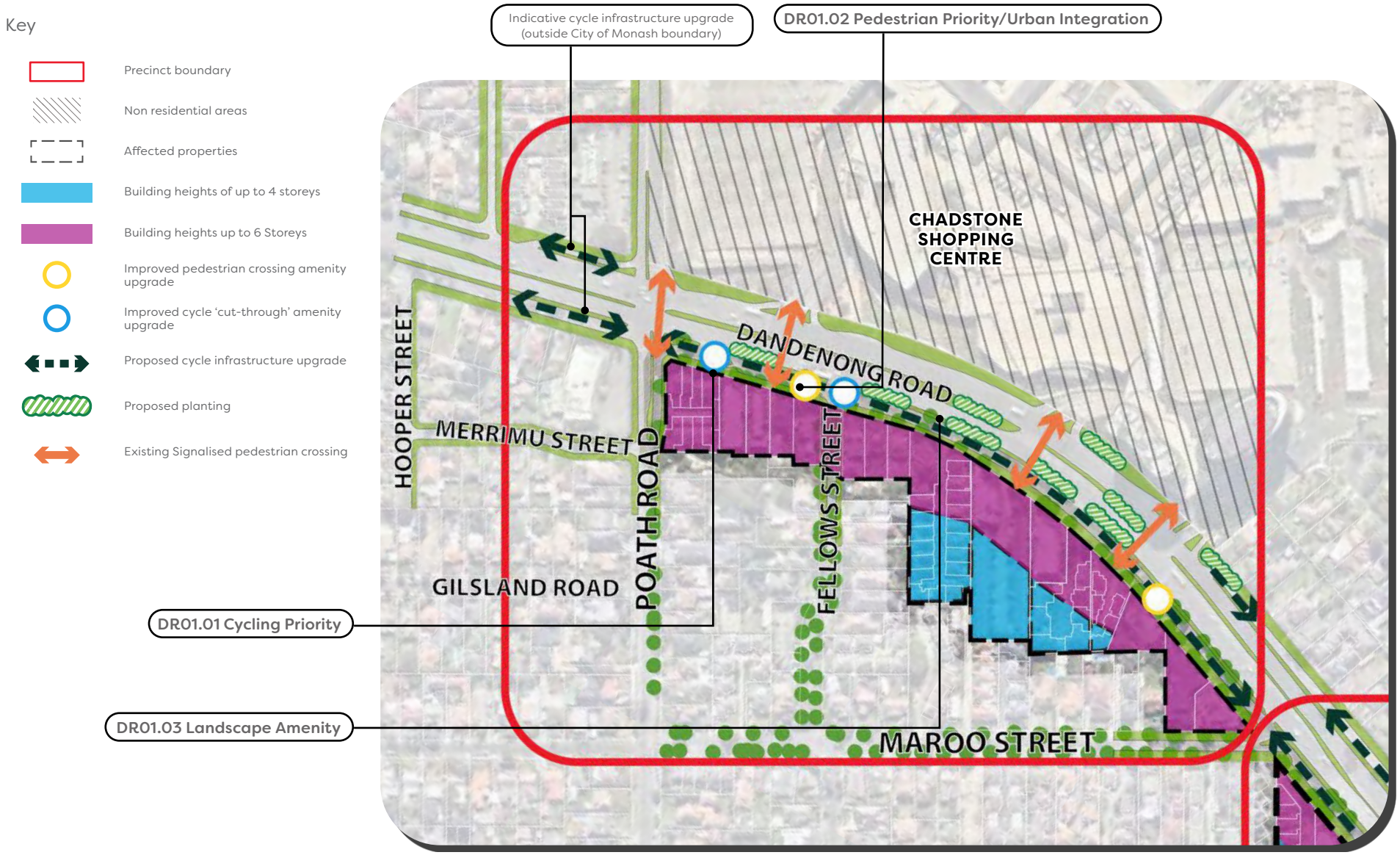


Figure 11. DR-06 Dandenong Precinct Plan 1

2.2 Dandenong Road - Precinct 02

2.2.1 Precinct Overview

DR02 consists of a mix of residential and commercial land uses, with a number of car dealerships and 'big box' retail located between Warrigal Road and Atkinson Street. This precinct has a range of existing low-rise dwellings with potential for re-development.

Proposed building heights across the precinct are 6 storeys which responds to existing taller development on the north side of Dandenong Road and proximity to Chadstone Shopping Centre and Oakleigh Station. Proposed heights scale down to two storeys at the eastern end where there is an adjoining Heritage Overlay.

Additional signalised crossings within the precinct will improve pedestrian connectivity across Dandenong Road. Additional street tree and understorey planting will improve the local amenity and enhance the streetscape.

2.2.2 DR-02 Key Projects

DR02.01: Cycling Priority

- Painted 'sharrows' or other line marking to improve cycle safety and visibility along the southern and northern service road.
- Enhanced cycle 'cut through' (at **Neerim Road and Paddington Road**) to improve connectivity and safety.
- Advocate for lower service road speeds (less than 30km/h) to improve cyclist safety and driver awareness in the shared environment.
- Potential connection to **Scotchmans Creek Trail** via the **Strategic Cycling Corridor** along **Atkinson Street**.
- Potential linemarking of parking bays along service roads to delineate carriageway and improve safety for all road users.

DR02.02: Pedestrian Priority/Urban Integration

- Potential for a signalised crossing at **Drummond Street** to improve pedestrian connectivity and safety.
- Improve amenity at zebra crossings on service road, including canopy planting, kerb outstands, vehicle speed reduction, and traffic island upgrades.
- Consider high volume crossings as key opportunities for street furniture, respite, and amenity.

DR02.03: Landscape Amenity

- Canopy tree planting at key pedestrian crossing locations, specifically **Drummond Street.**
- Narrow, upright canopy tree planting where outer separator cannot support a canopy tree.
- Select appropriate tree species for planting beneath powerlines.
- Retain the existing vegetation and palm trees along the central median.
- Additional low, native planting in outer separator that does not obstruct views into and out of service roads, instead of lawn/ concrete.
- Planted cycle 'cut through' at **Neerim Road** to improve cycling amenity and user experience.
- Consider locations on the southern verge to include passively irrigated street trees and garden beds (where servicing and vehicle crossovers are not an issue).
- Species selected to consider extreme climatic conditions exacerbated by climate change.

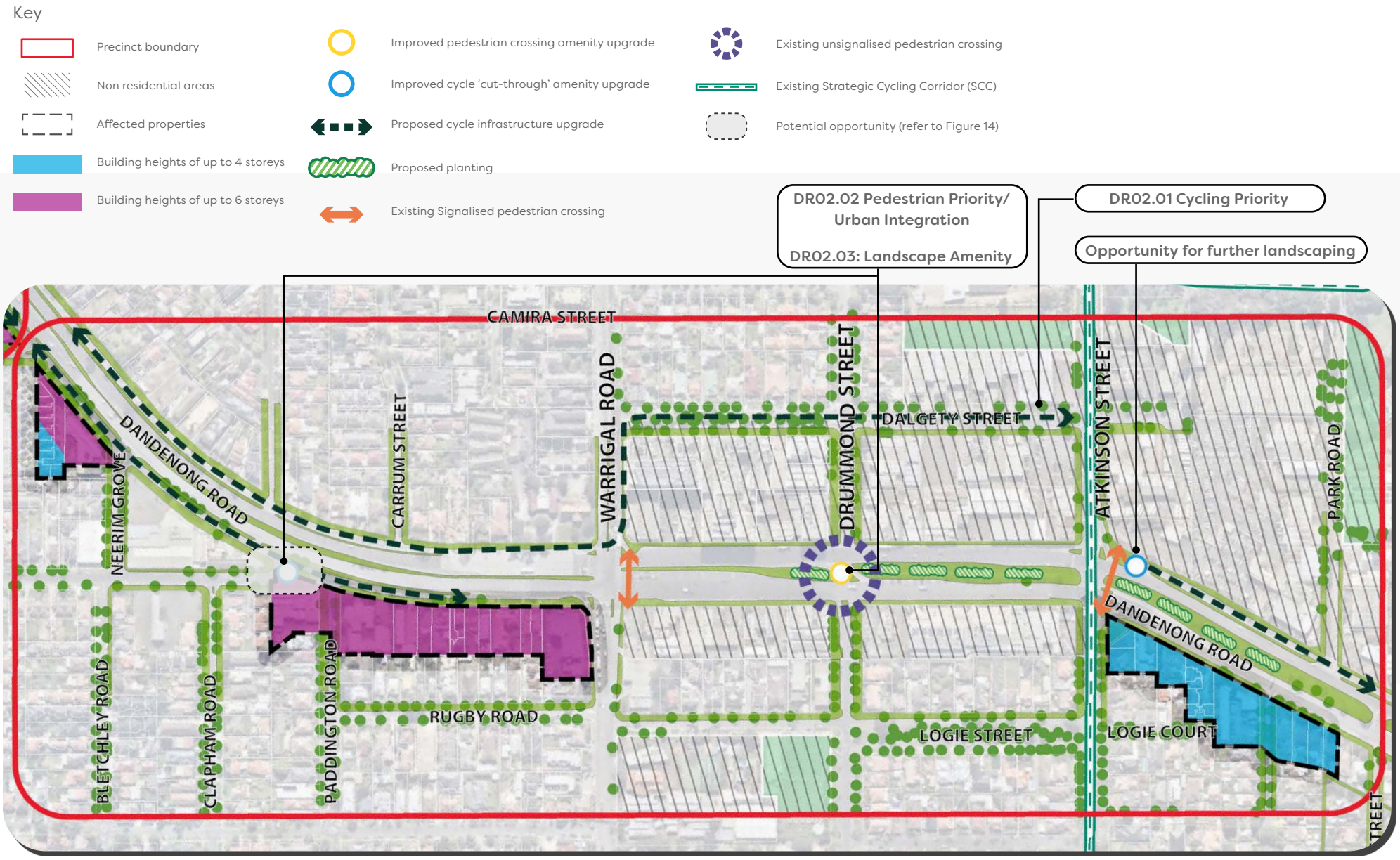


Figure 12. DR-06 Dandenong Precinct Plan 2

Potential Opportunity
1. Dandenong Road / Paddington Road / Neerim Road Intersection

This project provides the opportunity to create a new pocket park and improve cycling priority and safety through the reconfiguration of the intersection.

Figure 13. Existing conditions.

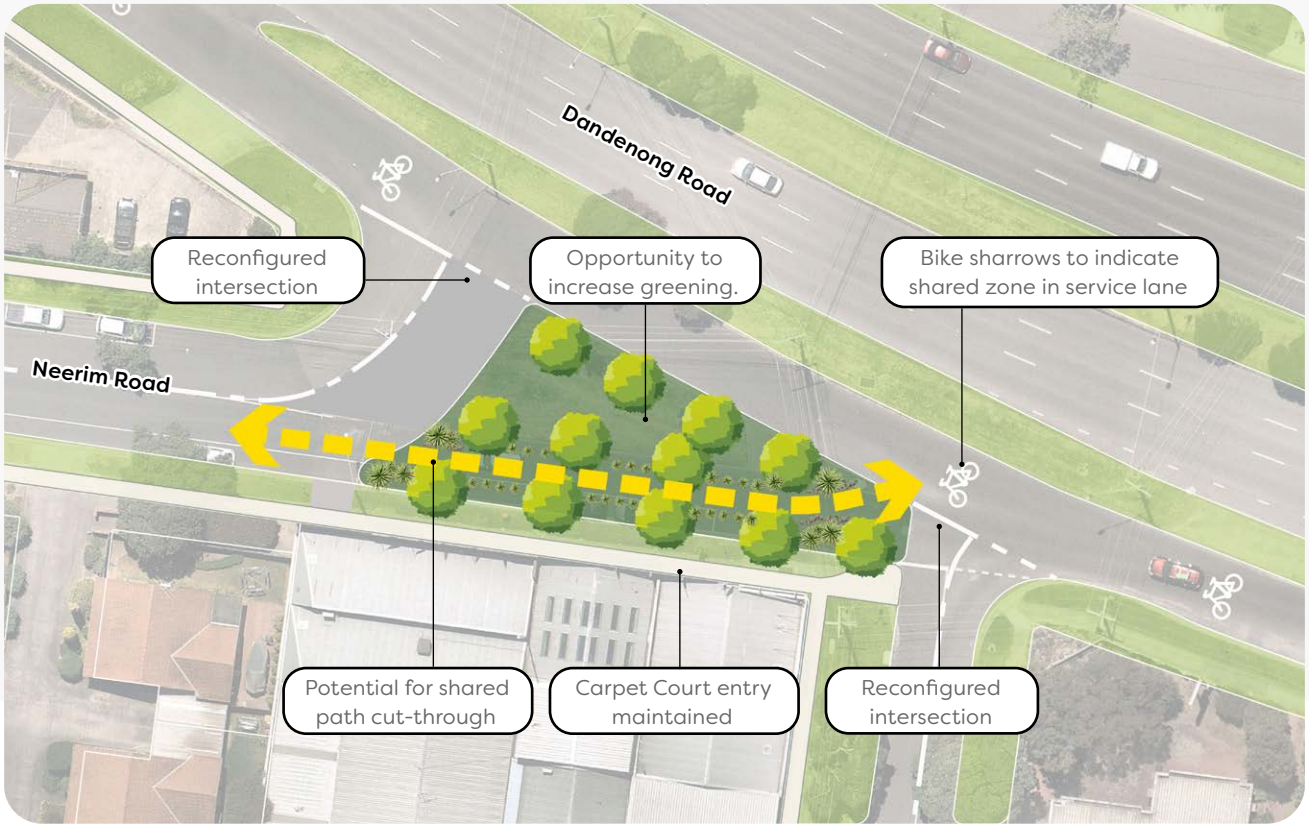


Figure 14. Opportunity to reconfigure intersection and improve public realm.

Figure 15. Example of cycle path within outer separator at Andersons Creek Rd in Doncaster East.

Figure 16. Example of cycle cut through on Dandenong Road, Oakleigh East.

2.3 Dandenong Road - Precinct 03

2.2.3 Precinct Overview

DR03 is a residential precinct consisting mostly of detached single and double story dwellings. The precinct is well serviced by buses, with routes running along Ferntree Gully Road, Huntingdale Road and Atherton Road.

Additional housing opportunities will be provided through building heights of up to 4 storeys. This height responds to the existing low-scale residential surrounds and the absence of major transport and retail land uses in the area.

Public realm improvement opportunities exist within this precinct in the form of verge widening and additional tree planting.

Additional street tree and understorey planting will improve the local amenity, provide shade and enhance the streetscape.

2.2.4 DR-03 Key Actions

DR03.01: Cycling Priority

- Painted 'sharrows' or other line marking to improve cycle safety and visibility along the service roads.
- Introduction of a cycle 'cut through' (at **Huntingdale Road and Atherton Road** intersection) to improve connectivity.
- Advocate for lower service road speeds (less than 30km/h) to improve cyclist safety and driver awareness in the shared environment.
- Potential to line mark parking bays to delineate carriageway and improve safety for all road users.

DR03.02: Pedestrian Priority/Urban Integration

- Potential signalised and accessible crossing at **York Avenue and Cheel Street.**

DR03.03: Landscape Amenity

- Additional tree planting within **Hurst Reserve** to provide shade and visual amenity.
- Canopy tree planting at pedestrian crossing locations and within widened verges.
- Planting of canopy trees along cycle 'cut through' to improve cycling amenity and provide shade.
- Narrow, upright canopy tree planting where outer separator cannot support a canopy tree.
- Select appropriate tree species for planting beneath powerlines.
- Additional low, native planting in outer separator that does not obstruct views into and out of service roads, instead of lawn/ concrete.
- Species selected to consider extreme climatic conditions both in terms of robustness and providing increased shade for pedestrians.

Key

- Precinct boundary
- Non residential areas
- Affected properties
- Building heights of up to 4 storeys
- Improved pedestrian crossing amenity upgrade
- Improved cycle 'cut-through' amenity upgrade
- Proposed cycle infrastructure upgrade
- Proposed planting
- Existing signalised pedestrian crossing
- Existing unsignalised pedestrian crossing
- Potential opportunity (refer to Figure 19)

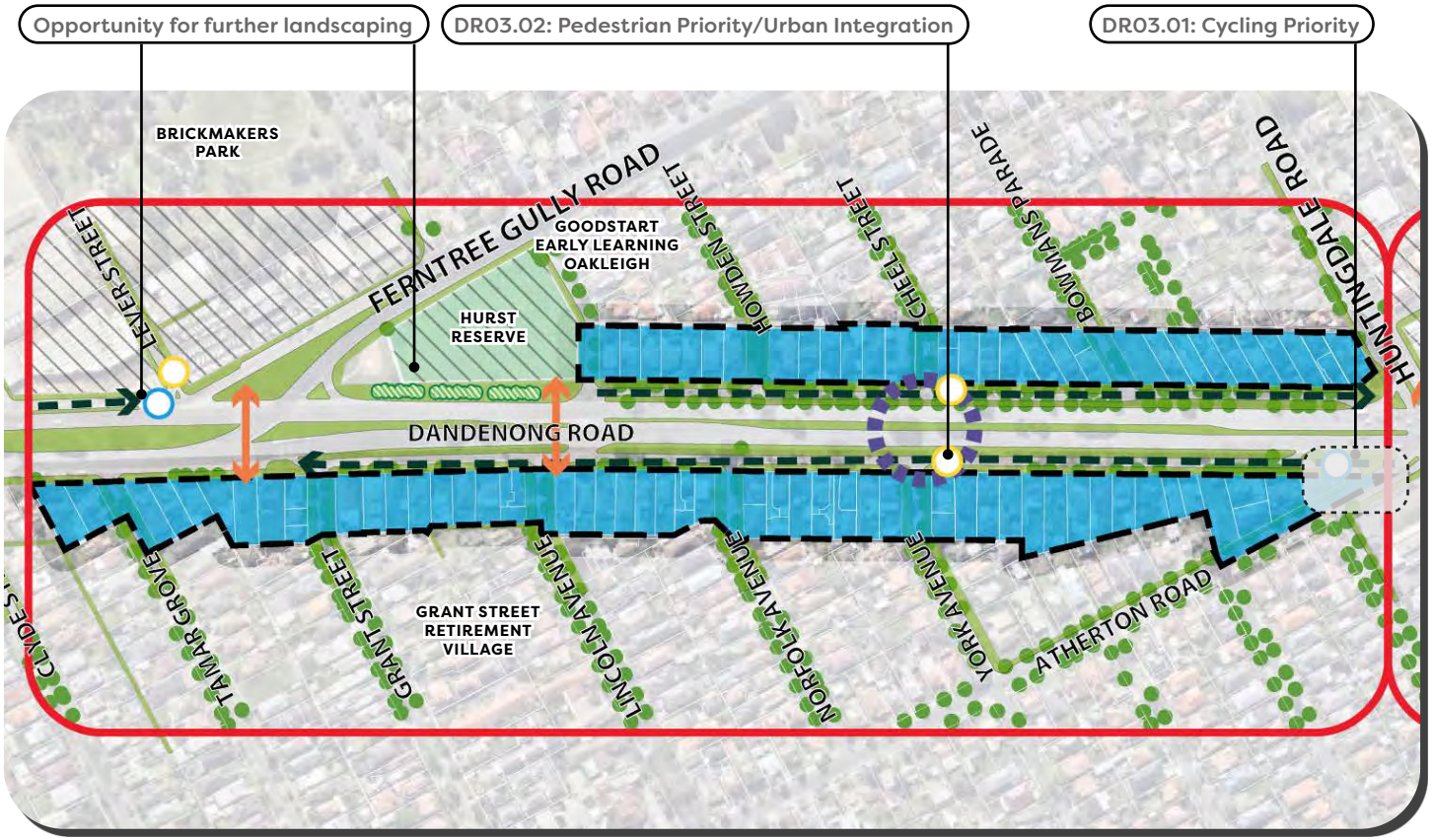


Figure 17. DR-06 Dandenong Precinct Plan 3

Potential Opportunity
2. Atherton Road / Huntingdale Road intersection

This project provides the opportunity to create a new pocket park and improve cycling priority and safety through the reconfiguration of the intersection.

Opportunity for adjoining cafe to activate the space with outdoor dining.

Figure 18. Existing conditions.

Figure 19. Opportunity to widen the existing verge and reconfigure intersection to improve public realm.

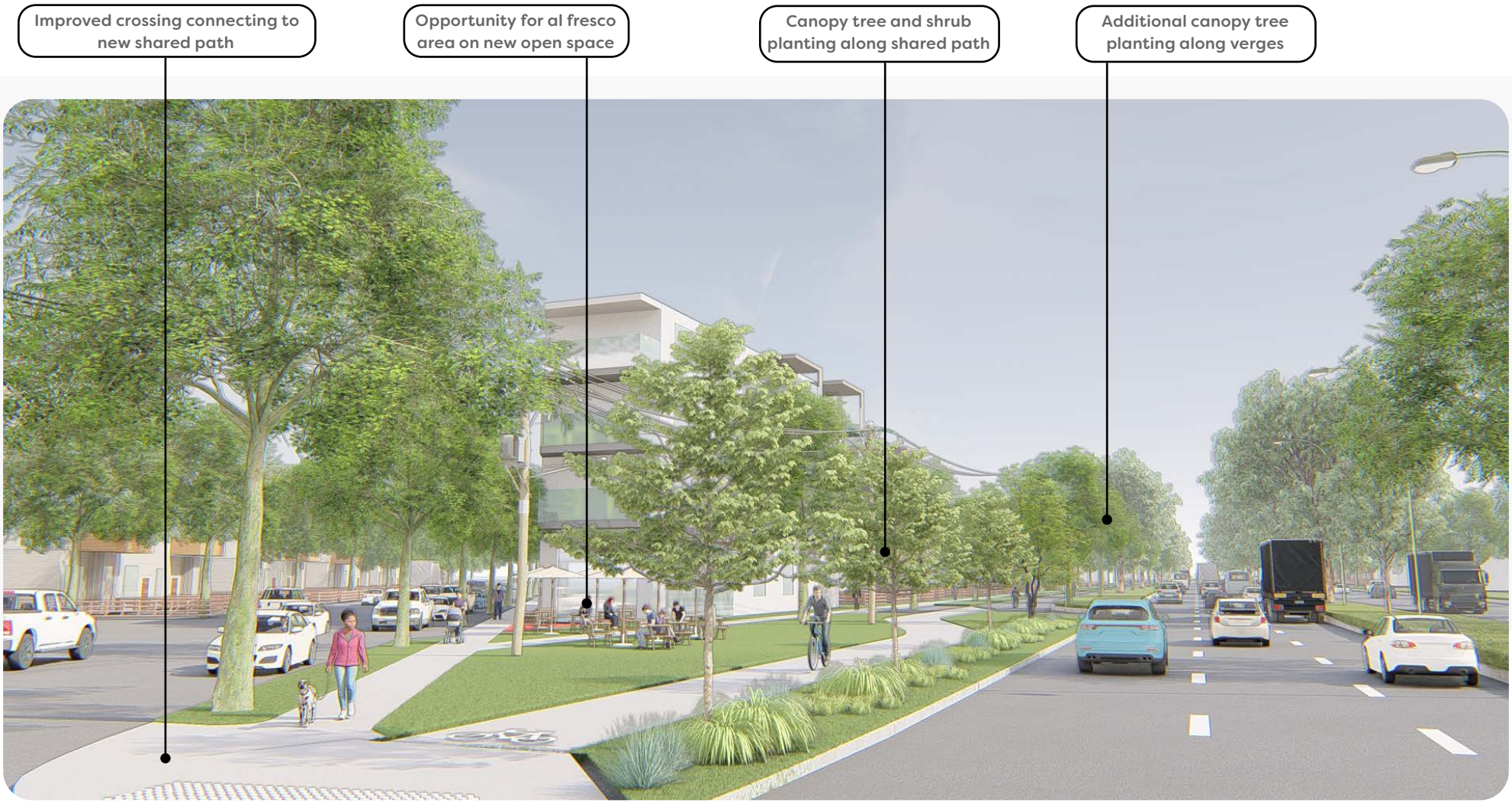


Figure 20. Illustration of potential public realm improvements at Dandenong Road/Atherton Road.

2.4 Dandenong Road - Precinct 04

2.3.1 Precinct Overview

DR04 extends from Huntingdale Road to Clayton Road. It is predominately a residential area with of a mix of single storey detached dwellings and newer contemporary apartment buildings.

Additional housing opportunities will be provided through building heights of up to 6 storeys at either end of the precinct near the major road intersections. Building heights of up to 4 storeys are proposed elsewhere across the precinct.

Improvements to existing pedestrian crossings will enhance cross corridor movements and connectivity to open space.

2.3.2 DR-04 Key Actions

DR04.01: Cycling Priority

- Painted 'sharrows' or other line markings to improve cycle safety and visibility along the southern and northern service roads.
- Enhanced cycle 'cut through' (at Princes Highway Reserve) to improve access to open space and connectivity along the Boulevard.
- Advocate for lower service road speeds (less than 30km/h) to improve cyclist safety and driver awareness in the shared environment.
- Potential for linemarking of parking bays along service roads to delineate carriageway and improve safety for all road users.

DR04.02: Pedestrian Priority/Urban Integration/Access to Public Transport

- Improve amenity and accessibility to bus stops, specifically at **Princes Highway Reserve.**
- Improve amenity at zebra crossings on service road, including canopy planting, kerb outstands, vehicle speed reduction, and traffic island upgrades.
- Potential for raised vehicle thresholds at pedestrian crossing locations.
- Consider high volume crossings as key opportunities for street furniture, respite, amenity, and social interaction.

DR04.03: Landscape Amenity

- Additional canopy tree planting at pedestrian crossing locations.
- Narrow, upright canopy tree planting where outer separator cannot support a canopy tree.
- Select appropriate tree species for planting beneath powerlines.
- Additional low, native planting in outer separator that does not obstruct views into and out of service roads, instead of lawn/ concrete.
- Planted cycle 'cut through' to improve cycling amenity.
- Consider locations on the southern verge to include passively irrigated street trees and garden beds, specifically at Princes Highway Reserve.
- Species selected to consider extreme climatic conditions both in terms of robustness and providing increased shade for pedestrians.

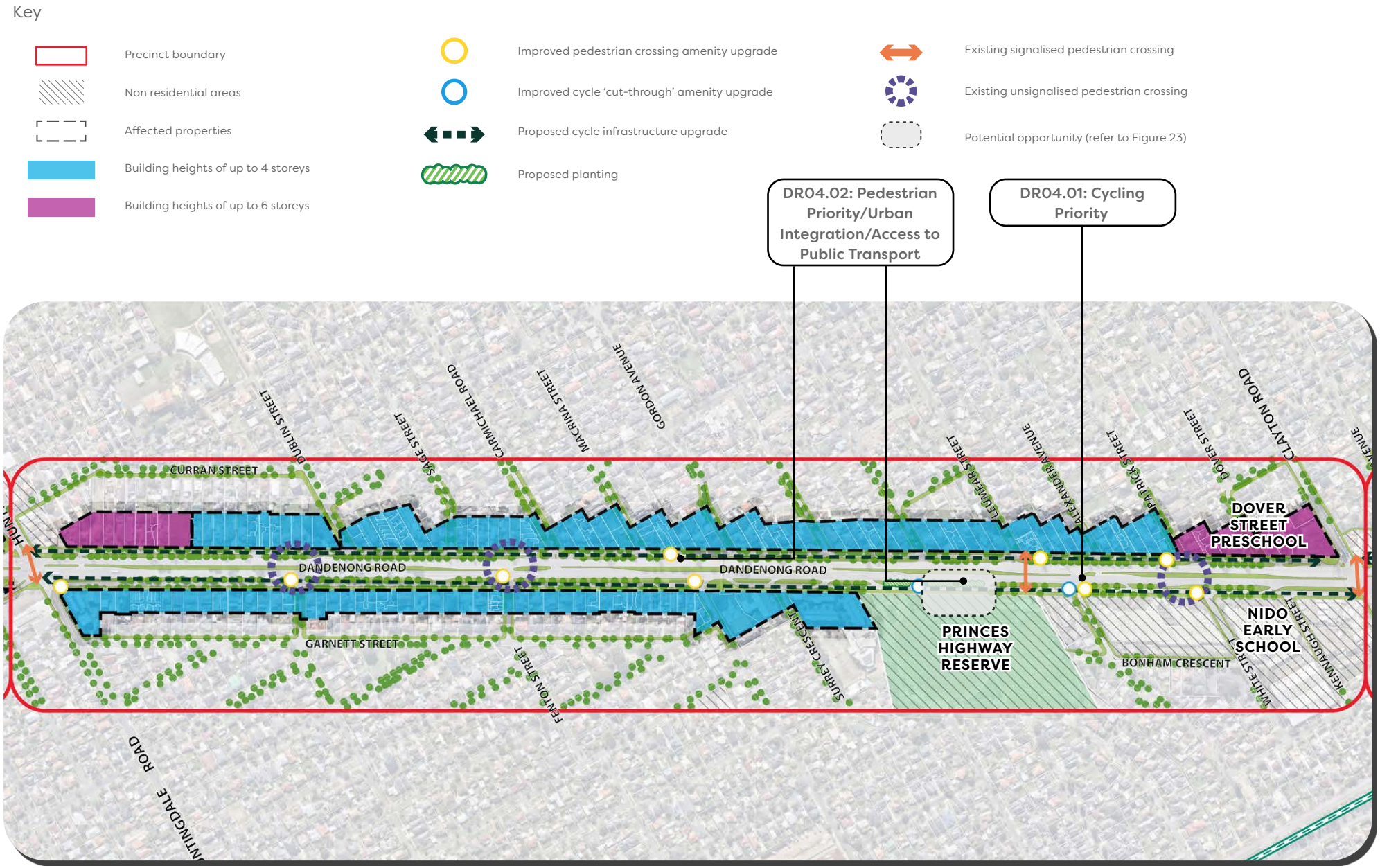


Figure 21. DR-04 Dandenong Precinct Plan 4

Potential Opportunity
3. Princes Highway Reserve

This project would provide for an expansion to Princes Highway reserve by removing the service road at the northern edge of the reserve. Cycling and pedestrian priority will be reinforced through a new shared user path.

Figure 22. Existing conditions.

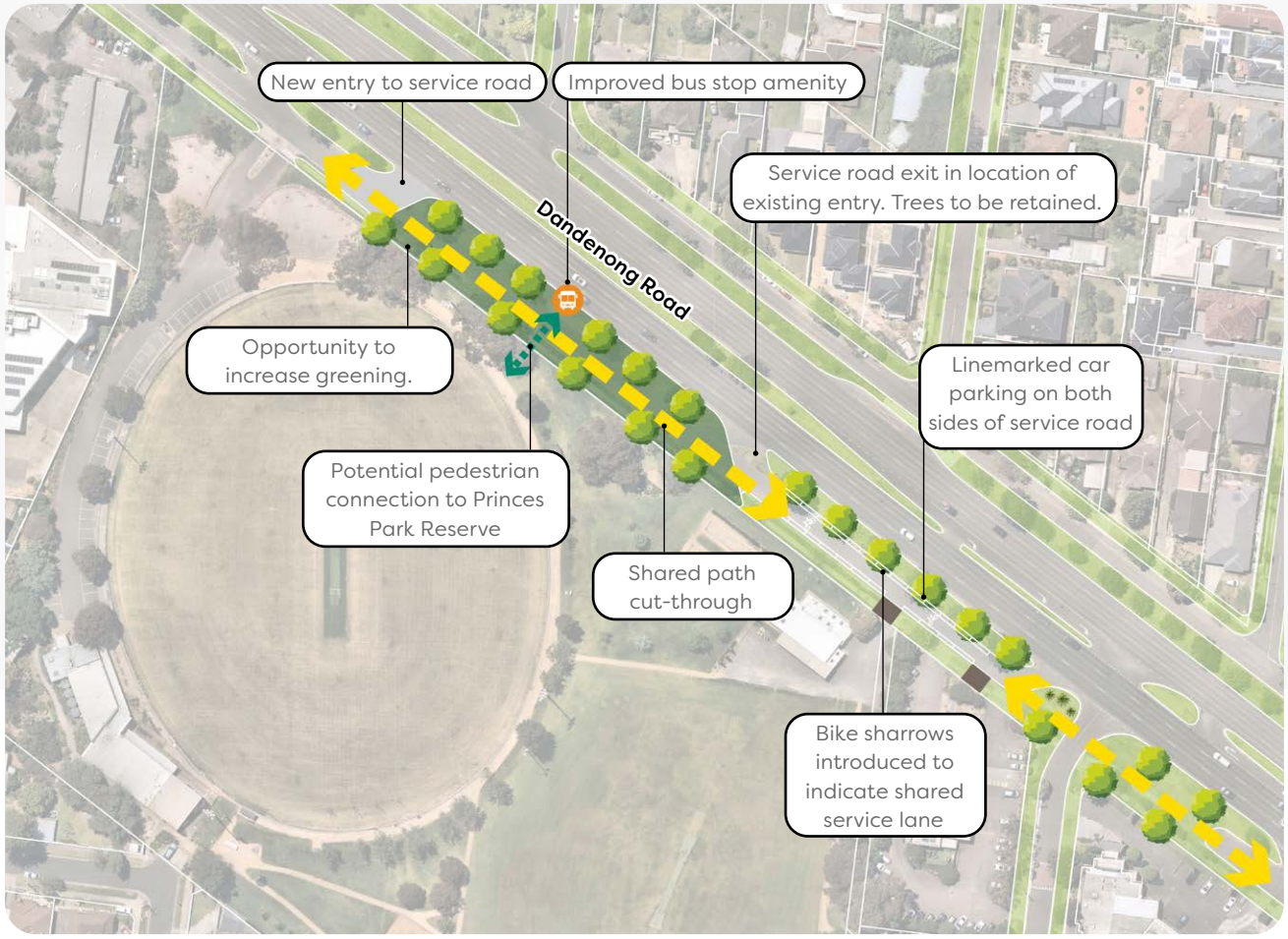


Figure 23. Opportunity to widen verge, implement a cycle cut-through and improve amenity around the bus stop.

Figure 24. Example of cycle path cut through at street intersection Stud Road, Wantirna

Figure 2. Figure Caption

2.5 Dandenong Road - Precinct 05

2.4.1 Precinct Overview

DR05 is well located within educational, commercial and residential precinct, with Monash University Clayton Campus located on Wellington Road and Mannix College located along Dandenong Road.

Additional housing opportunities will be provided through building heights of up to 8 storeys on the northern side of Dandenong Road to meet potential future increased demands for student accommodation. Proposed building heights of up to 6 storeys are proposed on the southern side of Dandenong Road which reflects the building heights identified in the Clayton Precinct Plan

Key upgrades in pedestrian crossing points will improve safety and connectivity across the road, allow for better access to Monash University and commercial areas.

2.4.2 DR-05 Key Actions

DR05.01: Cycling Priority

- Painted 'sharrows' or other line marking to improve cycle safety and visibility along the northern and southern service road.
- Enhanced cycle 'cut through' (east of Winterton Road) to improve connectivity.
- Advocate for lower service road speeds (less than 30km/h) to improve cyclist safety and driver awareness in the shared environment.
- Potential for linemarking of parking bays to delineate carriageway and improve safety for all road users.

DR05.02: Pedestrian Priority/Urban Integration

- Improve amenity at zebra crossings on service road, including canopy planting, kerb outstands, vehicle speed reduction, and traffic island upgrades.
- Potential for raised vehicle thresholds at pedestrian crossing locations.
- Consider high volume crossings as key opportunities for street furniture, respite, amenity, and social interaction.

DR05.03: Landscape Amenity

- Canopy tree planting at pedestrian crossing locations.
- Narrow, upright canopy tree planting where outer separator cannot support a canopy tree.
- Select appropriate tree species for planting beneath powerlines.
- Additional low, native planting in outer separator that does not obstruct views into and out of service roads, instead of lawn/ concrete.
- Planted cycle 'cut through' to improve cycling amenity, and increase the user experience.
- Potential for locations on the southern verge to include passively irrigated street trees and garden beds, particularly along the potential cycle cut-through east of Winterton Road).
- Species selected to consider extreme climatic conditions both in terms of robustness and providing increased shade for pedestrians.

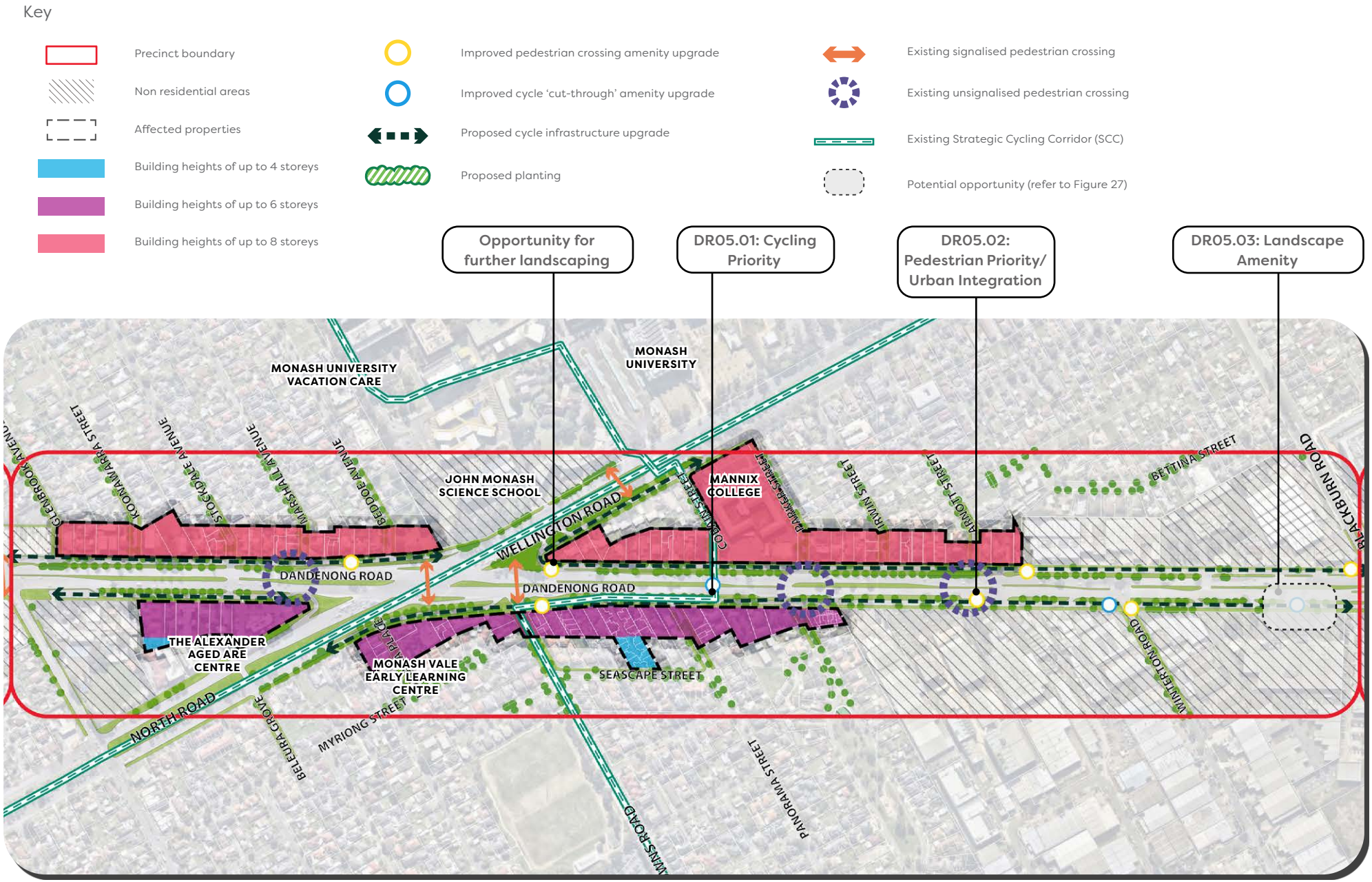


Figure 25. DR-05 Dandenong Precinct Plan 5

Potential Project - East of Winterton Road

This project would provide for a new 800m² park by removing a small section of the service road whilst maintaining access to properties. This park could be utilised by local workers and residents.

Cycling and pedestrian priority will be reinforced through a new shared user path.

Figure 26. Existing conditions.

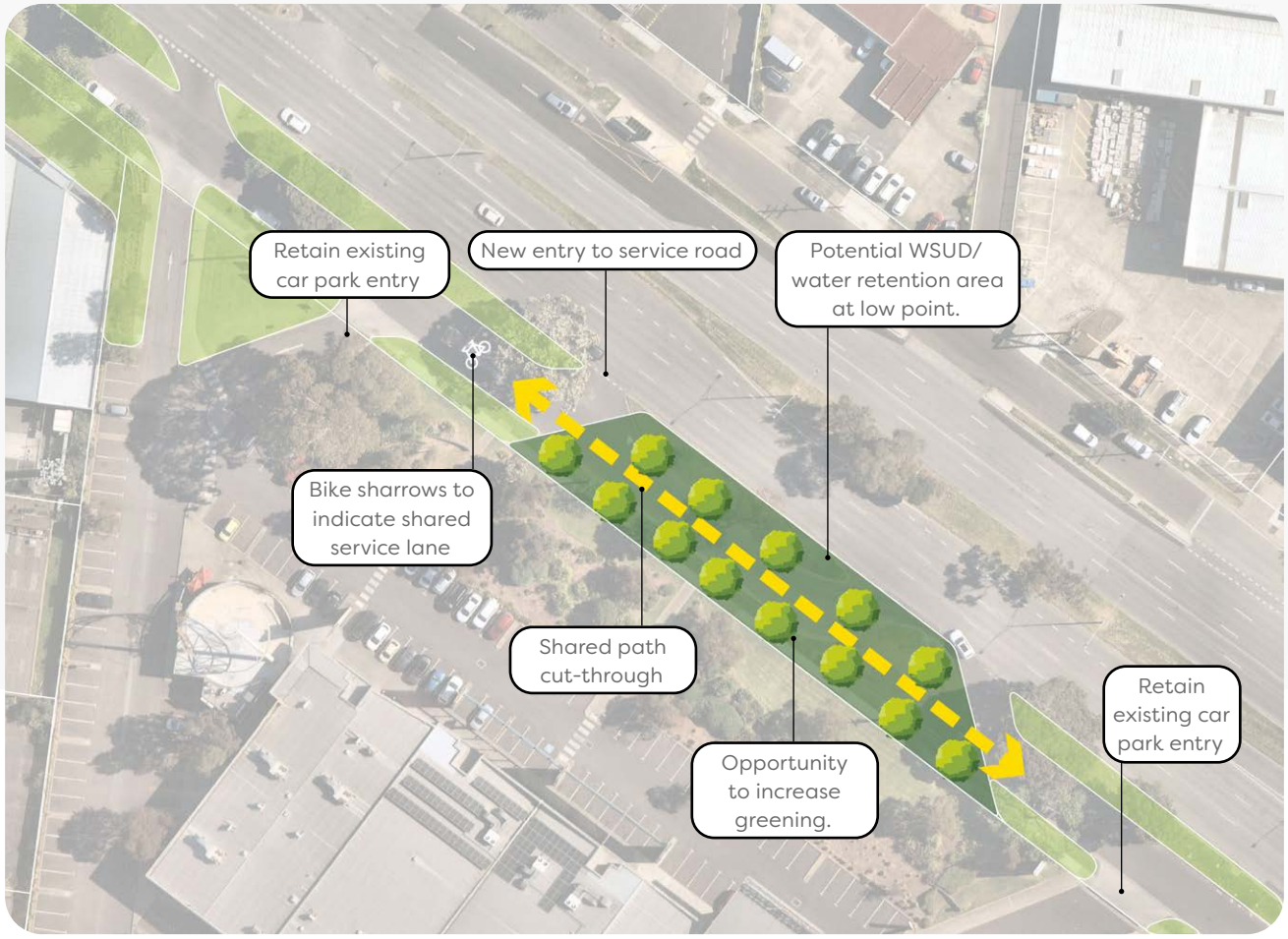


Figure 27. Open space opportunity east of Winterton Road.

Figure 28. Example of cycle path with canopy tree and shrub planting, Yan Yean Pipeline, Preston VIC.

2.6 Dandenong Road - Precinct 06

2.6.1 Precinct Overview

DR06 consists mainly of commercial and industrial land uses, with residential areas concentrated to the east near Springvale Road.

Additional housing opportunities will be provided through building heights of up to 8 storeys near the intersection of Springvale Road on a strategic redevelopment site with close proximity to transport and retail uses. Building heights transition to adjoining low scale residential uses.

A key development opportunity exists on the corner of Dandenong Road and Springvale Road. Key directions for this site are outlined in Part C: Built Form Design Guidelines.

Upgrades to public realm will include additional canopy tree planting and enhanced pedestrian priority at existing crossings.

2.6.2 DR-06 Key Actions

DR06.01: Cycling Priority

- Painted 'sharrows' or other line marking to improve cycle safety and visibility along the northern and southern service road.
- Advocate for lower service road speeds (less than 30km/h) to improve cyclist safety and driver awareness in the shared environment.
- Potential for linemarking of parking bays to delineate carriageway and improve safety for all road users.
- Potential for a shared path cut-through within the verge along the frontage of the Bunnings site.

DR06.02: Pedestrian Priority/Urban Integration

- Improve amenity at zebra crossings on service road, including canopy planting, kerb outstands, vehicle speed reduction, and traffic island upgrades.
- Potential for raised vehicle thresholds at pedestrian crossing locations.
- Consider high volume crossings as key opportunities for street furniture, respite, amenity, and social interaction.

DR06.03: Landscape Amenity

- Canopy tree planting at pedestrian crossing locations.
- Narrow, upright canopy tree planting where outer separator cannot support a canopy tree.
- Select appropriate tree species for planting beneath powerlines.
- Additional low, native planting in outer separator that does not obstruct views into and out of service roads, instead of lawn/ concrete.
- Planted cycle 'cut through' to improve cycling amenity, east of Kalimna Avenue and near Springvale Road.
- Consider locations on the southern verge to include passively irrigated street trees and garden beds, particularly along the potential cycle cut-through east of Winterton Road).
- Species selected to consider extreme climatic conditions both in terms of robustness and providing increased shade for pedestrians.

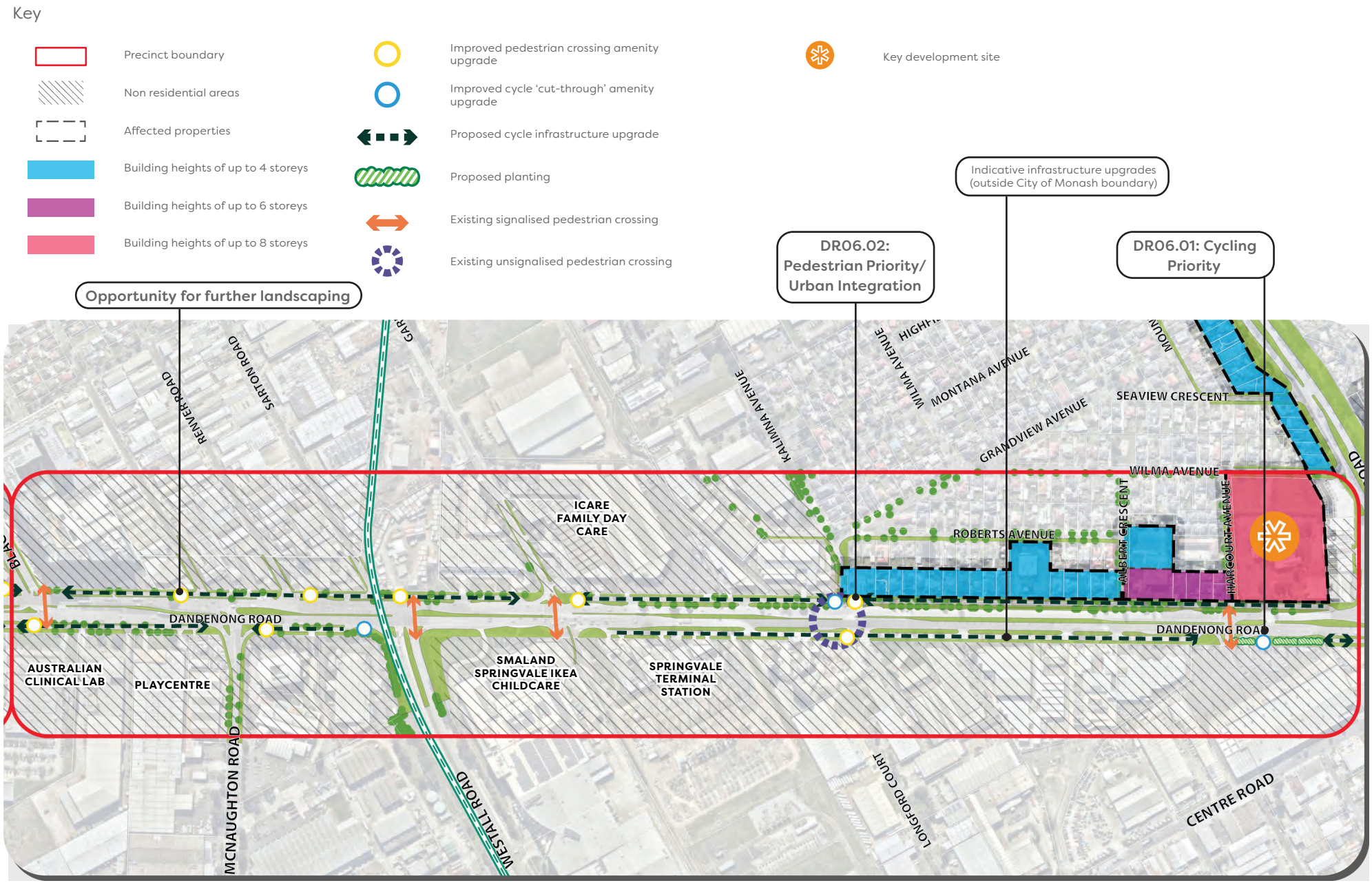


Figure 29. DR-06 Dandenong Precinct Plan 6

2.7 Springvale Road - Precinct 01

2.7.1 Precinct Overview

SR01 is a residential area consisting primarily of single and double storey detached dwellings. A service road runs along both sides, with the western service road sitting on top of an embankment. A heavily planted embankment runs along the western side, contributing the unique landscape character of the Boulevard.

Additional housing opportunities will be provided through built form of up to 4 storeys along the western side of the Boulevard. This will provide a slightly taller building height than the adjoining General Residential Zoning which allows 3 storeys.

Upgrades to cycling infrastructure along the service road will improve safety along the corridor. Additional street tree planting where possible will enhance the landscape character of the area.

2.7.2 SR-01 Key Projects

SR01.01: Cycling Priority

- Painted 'sharrows' or other line marking to improve cycle safety and visibility along the eastern service road.
- Advocate for lower service road speeds (less than 30km/h) to improve cyclist safety and driver awareness in the shared environment.
- Cycle cut-throughs where grades are achievable.

SR01.02: Pedestrian Priority/Urban Integration

- Improve amenity at existing signalised crossings on service road, including canopy planting, kerb outstands, vehicle speed reduction, and traffic island upgrades.
- Potential for raised pedestrian crossing at crossing locations.
- Consider high volume crossings as key opportunities for street furniture, respite, and amenity.

SR01.03: Landscape Amenity

- Canopy tree planting at key pedestrian crossing location.
- Narrow, upright canopy tree planting where outer separator cannot support a canopy tree.
- Select appropriate tree species for planting beneath powerlines.
- Additional low, native planting in outer separator that does not obstruct views into and out of service roads, instead of lawn/ concrete.
- Planted cycle 'cut through' to improve cycling amenity, and increase the user experience.
- Consider locations on the southern verge to include passively irrigated street trees and garden beds (where servicing and vehicle cross overs are not an issue).
- Species selected to consider extreme climatic conditions exacerbated by climate change.

Key

- Precinct boundary
- Non residential areas
- Affected properties
- Building heights of up to 4 storeys
- Building heights of up to 8 storeys
- Improved pedestrian crossing amenity upgrade
- Improved cycle 'cut-through' amenity upgrade
- Proposed cycle infrastructure upgrade
- Existing signalised pedestrian crossing

Figure 30. SR-01 Springvale Precinct Plan 1

2.8 Springvale Road - Precinct 02

2.7.3 Precinct Overview

SR02 is anchored by the Glen Waverley Activity Centre, with residential uses located to the east and south. Glen Waverley train station is situated in close proximity.

Additional housing opportunities will be provided through building heights of up to 6 storeys along the majority of Springvale Road, reflecting its close proximity to shops, services and transport. Building heights of up to 8 storeys are proposed on the Mountain View Hotel site in line with existing planning controls. Key directions for this development site are outlined in Part C: Built Form Design Guidelines.

As service roads are not present within this precinct, key improvements will mainly involve additional planting and pedestrian amenity upgrades where possible.

2.7.4 SR-02 Key Actions

SR02.01: Pedestrian Priority/Urban Integration

- Improve amenity at signalised crossings including canopy planting, kerb outstands, vehicle speed reduction, and traffic island upgrades.
- Potential for raised vehicle thresholds at pedestrian crossing locations.
- Consider high volume crossings as key opportunities for street furniture, respite, amenity, and social interaction, for example at The Glen shopping centre.

SR02.02: Landscape Amenity

- Canopy tree planting at pedestrian crossing locations.
- Select appropriate tree species for planting beneath powerlines.
- Additional low, native planting in outer separator that does not obstruct views into and out of service roads, instead of lawn/ concrete.
- Species selected to consider extreme climatic conditions both in terms of robustness and providing increased shade for pedestrians.

Key

- Precinct boundary
- Non residential areas
- Affected properties
- Building heights of up to 4 storeys
- Building heights of up to 6 storeys
- Building heights of up to 8 storeys
- Improved pedestrian crossing amenity upgrade
- Improved cycle 'cut-through' amenity upgrade
- Existing signalised pedestrian crossing
- Key development site

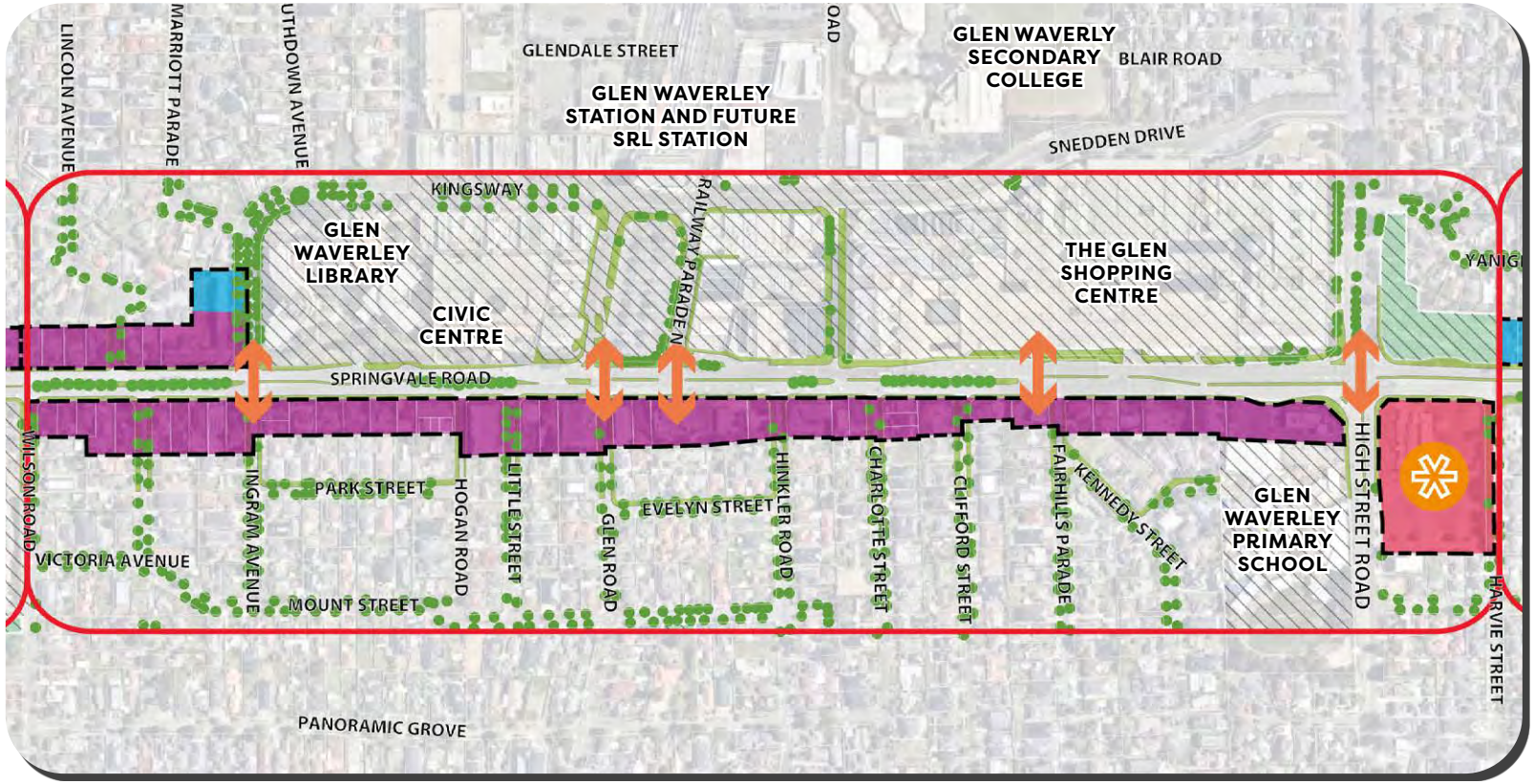


Figure 31. SR-02 Springvale Precinct Plan 2

2.9 Springvale Road - Precinct 03

2.8.1 Precinct Overview

SR03 is a primarily a residential precinct, with significant open space located on the western side. A service road with a well planted outer separator is present on the western side

Additional housing opportunities will be provided through building heights of up to 6 storeys in close proximity to the Glen Waverley Activity Centre maximising the access to existing amenity and transport options. Building heights transition to four storey further south.

Additional low, native planting will enhance the landscape character and improve visual amenity along the Boulevard.

2.8.2 SR-03 Key Actions

SR03.01: Cycling Priority

- Upgrade signage and wayfinding to Scotchmans Creek trail.
- Painted 'sharrows' or other line marking to improve cycle safety and visibility along the service road.
- Advocate for lower service road speeds (less than 30km/h) to improve cyclist safety and driver awareness in the shared environment.

SR03.02: Pedestrian Priority/Urban Integration

- Improve amenity at crossings on service road to access bus stops, including canopy planting, kerb outstands, vehicle speed reduction, and traffic island upgrades.
- Potential for raised vehicle thresholds at pedestrian crossing locations.
- Consider high volume crossings as key opportunities for street furniture, respite, amenity, and social interaction.

SR03.03: Landscape Amenity

- Canopy tree planting at pedestrian crossing locations.
- Narrow, upright canopy tree planting where outer separator cannot support a canopy tree.
- Select appropriate tree species for planting beneath powerlines.
- Additional low, native planting in outer separator that does not obstruct views into and out of service roads, instead of lawn/ concrete.

Key

- Precinct boundary
- Non residential areas
- Affected properties
- Building heights of up to 4 storeys
- Building heights of up to 6 storeys
- Improved pedestrian crossing amenity upgrade
- Improved cycle 'cut-through' amenity upgrade
- Proposed cycle infrastructure upgrade
- Existing signalised pedestrian crossing

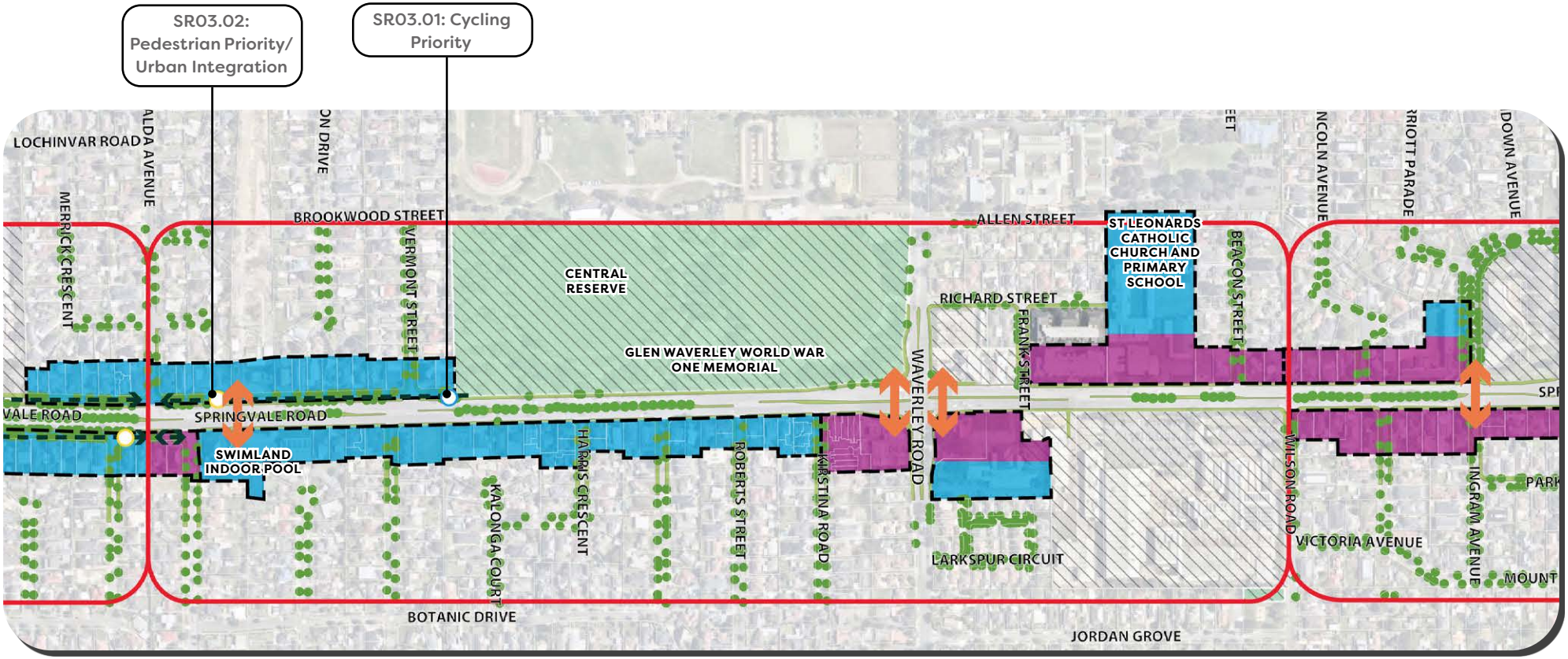


Figure 32. SR-03 Springvale Precinct Plan 3

2.10 Springvale Road - Precinct 04

2.9.1 Precinct Overview

SR04 is a commercial and residential precinct, which is anchored by the Brandon Park Shopping Centre. Residential properties are located to the west, north and south of commercial uses.

Additional housing opportunities will be provided through building heights of up to 6 storeys opposite the Brandon Park Shopping Centre. Building heights transition in scale to 4 storeys for the balance of the precinct.

Additional street tree planting will significantly improve the local amenity and enhance the landscape character in this area.

2.9.2 SR-04 Key Actions

SR04.01: Cycling Priority

- Painted 'sharrows' or other line marking to improve cycle safety and visibility along the western service road.
- Widening of footpaths and introducing shared paths where possible, specifically towards the south of the precinct, near the Monash Freeway.
- Advocate for lower service road speeds (less than 30km/h) to improve cyclist safety and driver awareness in the shared environment.
- Potential for linemarking of parking bays to delineate carriageway and improve safety for all road users.

SR04.02: Pedestrian Priority/Urban Integration

- Widen footpaths where possible.
- Potential for raised vehicle thresholds at pedestrian crossing locations.
- Consider high volume crossings as key opportunities for street furniture, respite, amenity, and social interaction.

SR04.03: Landscape Amenity

- Canopy tree planting at pedestrian crossing locations and along existing footpaths.
- Narrow, upright canopy tree planting where outer separator cannot support a canopy tree.
- Select appropriate tree species for planting beneath powerlines.
- Additional low, native planting in outer separator that does not obstruct views into and out of service roads, instead of lawn/ concrete.
- Planted cycle 'cut through' to improve cycling amenity, and increase the user experience, near the Monash Freeway.
- Species selected to consider extreme climatic conditions both in terms of robustness and providing increased shade for pedestrians.

Key

- Precinct boundary
- Non residential areas
- Affected properties
- Building heights of up to 4 storeys
- Building heights of up to 6 storeys
- Improved pedestrian crossing amenity upgrade
- Improved cycle 'cut-through' amenity upgrade
- Proposed cycle infrastructure upgrade
- Existing signalised pedestrian crossing

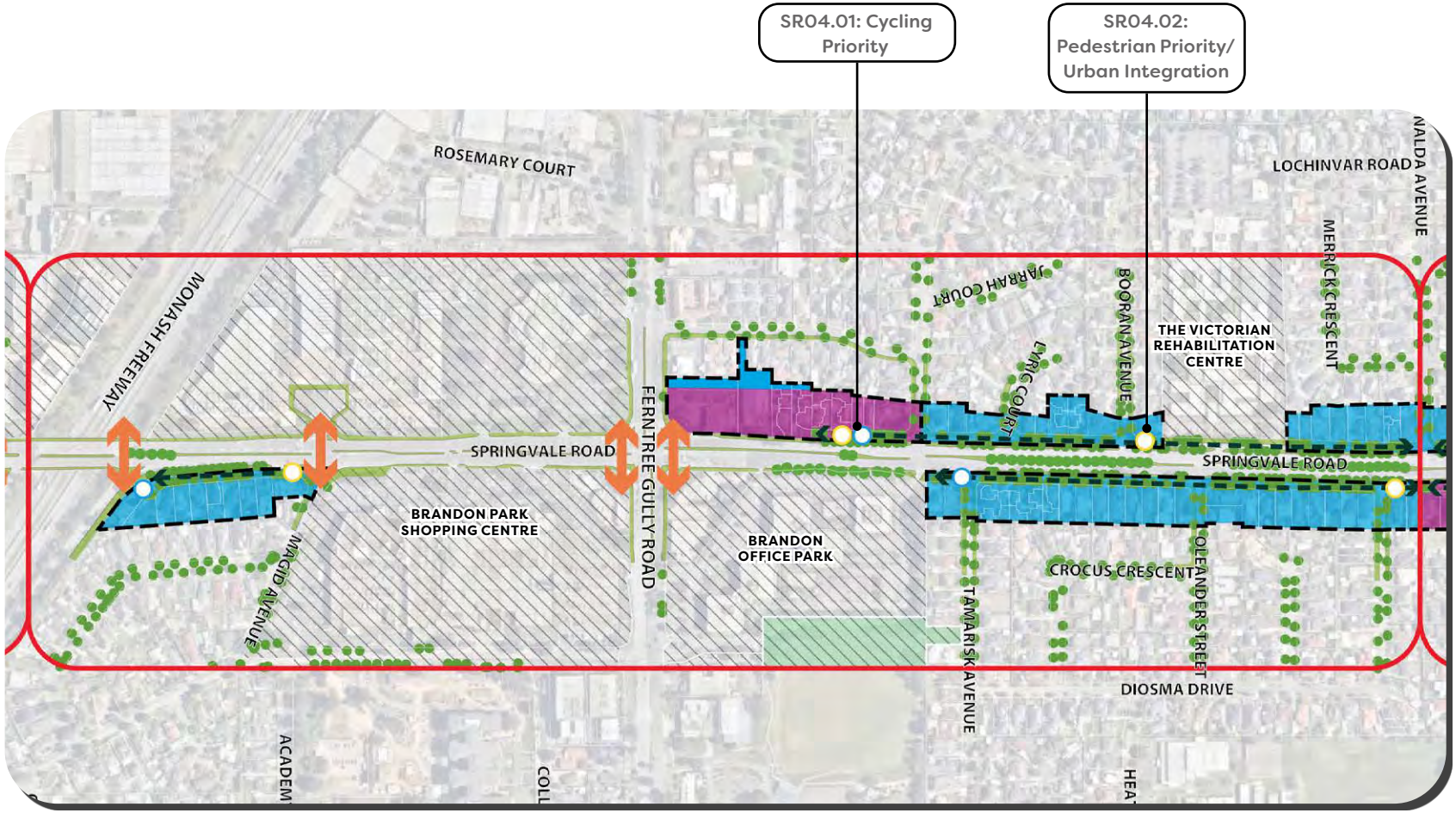


Figure 33. SR-04 Springvale Precinct Plan 4

2.11 Springvale Road - Precinct 05

2.10.1 Precinct Overview

SR05 is a commercial and residential precinct, with dwellings located along the eastern side and commercial buildings, offices and showrooms located along the west. Service roads are present along both side of the Boulevard.

Additional housing opportunities will be provided through building heights of up to 4 storeys. This height will help to reinforce the boulevard character whilst providing an appropriate transition to General Residential Zoned properties to the east.

Introduction of bike sharrows or potential addition of an on-road bike lane along service roads will significantly improve cycling visibility and safety. Understorey planting will soften and enhance the local character of the streetscape.

2.10.2 SR-05 Key Actions

SR05.01: Cycling Priority

- Painted 'sharrows' or an on road bike lane to improve cycle safety and visibility along the service roads.
- Advocate for lower service road speeds (less than 30km/h) to improve cyclist safety and driver awareness in the shared environment.
- Potential for linemarking of parking bays to delineate carriageway and improve safety for all road users.

SR05.02: Pedestrian Priority/Urban Integration

- Improve amenity at crossings on service road, specifically at bus stops, including canopy planting, kerb outstands, vehicle speed reduction, and traffic island upgrades.
- Potential for raised vehicle thresholds at pedestrian crossing locations.
- Consider high volume crossings as key opportunities for street furniture, respite, amenity, and social interaction.

SR05.03: Landscape Amenity

- Canopy tree planting at pedestrian crossing locations and bus stop locations.
- Narrow, upright canopy tree planting where outer separator cannot support a canopy tree.
- Select appropriate tree species for planting beneath powerlines.
- Additional low, native planting in outer separator that does not obstruct views into and out of service roads, instead of lawn/ concrete.
- Consider locations on the southern verge to include passively irrigated street trees and garden beds (where servicing and vehicle cross overs are not an issue).
- Species selected to consider extreme climatic conditions both in terms of robustness and providing increased shade for pedestrians.

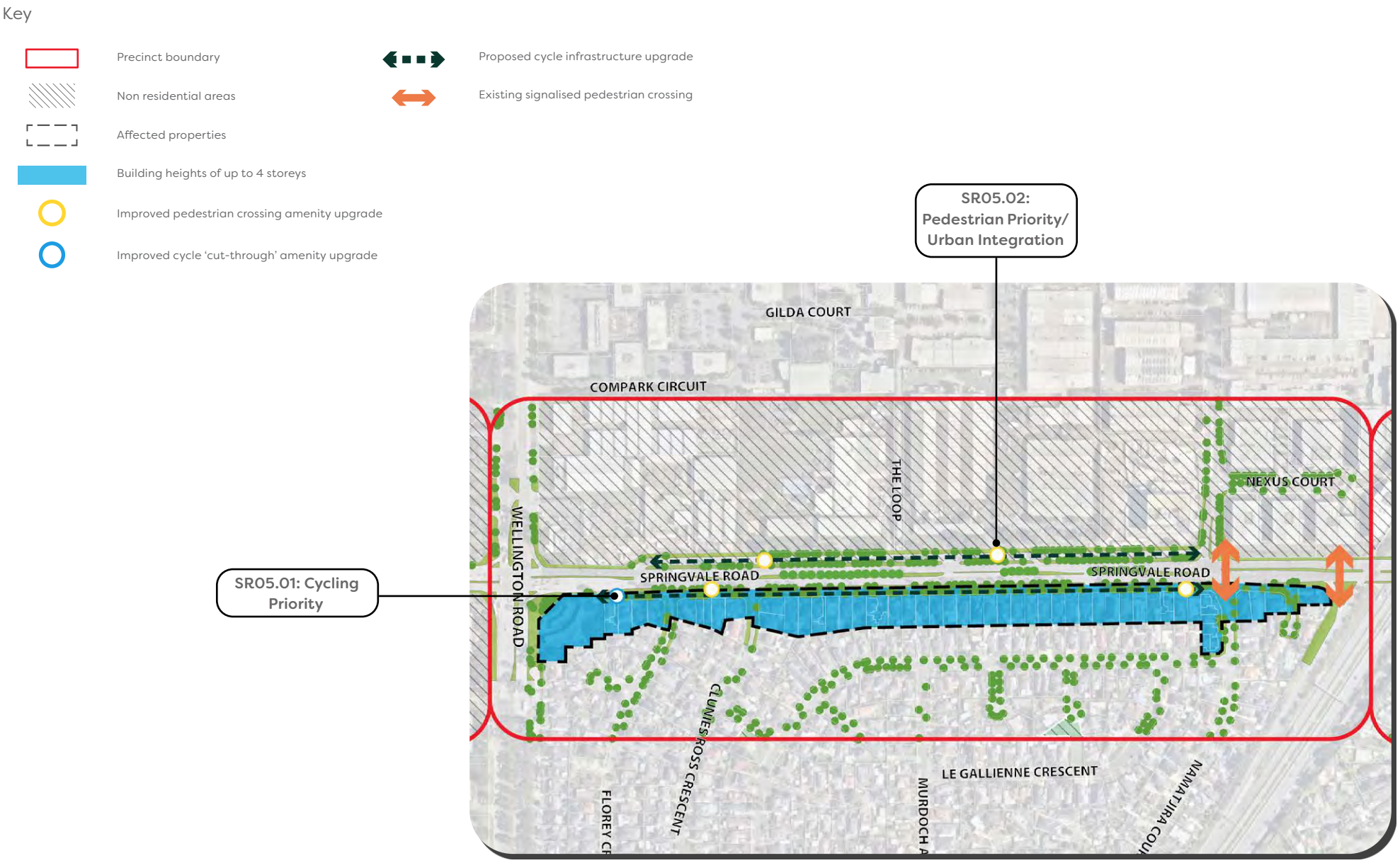


Figure 34. SR-05 Springvale Precinct Plan 5

2.12 Springvale Road - Precinct 06

2.11.1 Precinct Overview

SR06 is a residential and commercial precinct, with dwellings concentrated to the south of the Boulevard, near the Dandenong Road intersection.

Additional housing opportunities will be provided through building heights of up to 4 storeys. This height will help to reinforce the boulevard character whilst providing an appropriate transition to General Residential Zoned properties to the east.

The precinct is characterised by a strong native character that is seen through regular tree planting along the central median. A large, vegetated drainage easement on the eastern side of the Boulevard provides a significant buffer to the residential properties.

2.11.2 SR-01 Key Actions

SR06.01: Cycling Priority

- Painted 'sharrows' or other line marking to improve cycle safety and visibility along the eastern service road between Wellington Road and Miles Street.
- Enhanced cycle 'cut through' near Miles Street to improve connectivity.
- Advocate for lower service road speeds (less than 30km/h) to improve cyclist safety and driver awareness in the shared environment.

SR06.02: Pedestrian Priority/Urban Integration

- Improve amenity at existing crossings on service road, including canopy planting, kerb outstands, vehicle speed reduction, and traffic island upgrades.
- Potential for raised vehicle thresholds at pedestrian crossing locations.
- Consider high volume crossings as key opportunities for street furniture, respite, amenity, and social interaction.

SR06.03: Landscape Amenity

- Consider WSUD infrastructure and opportunities for passive irrigation at drainage easement.
- Additional canopy tree planting at pedestrian crossing locations.
- Narrow, upright canopy tree planting where outer separator cannot support a canopy tree.
- Select appropriate tree species for planting beneath powerlines.
- Additional low, native planting in outer separator that does not obstruct views into and out of service roads, instead of lawn/ concrete.
- Planted cycle 'cut through' to improve cycling amenity, and increase the user experience.
- Species selected to consider extreme climatic conditions both in terms of robustness and providing increased shade for pedestrians.

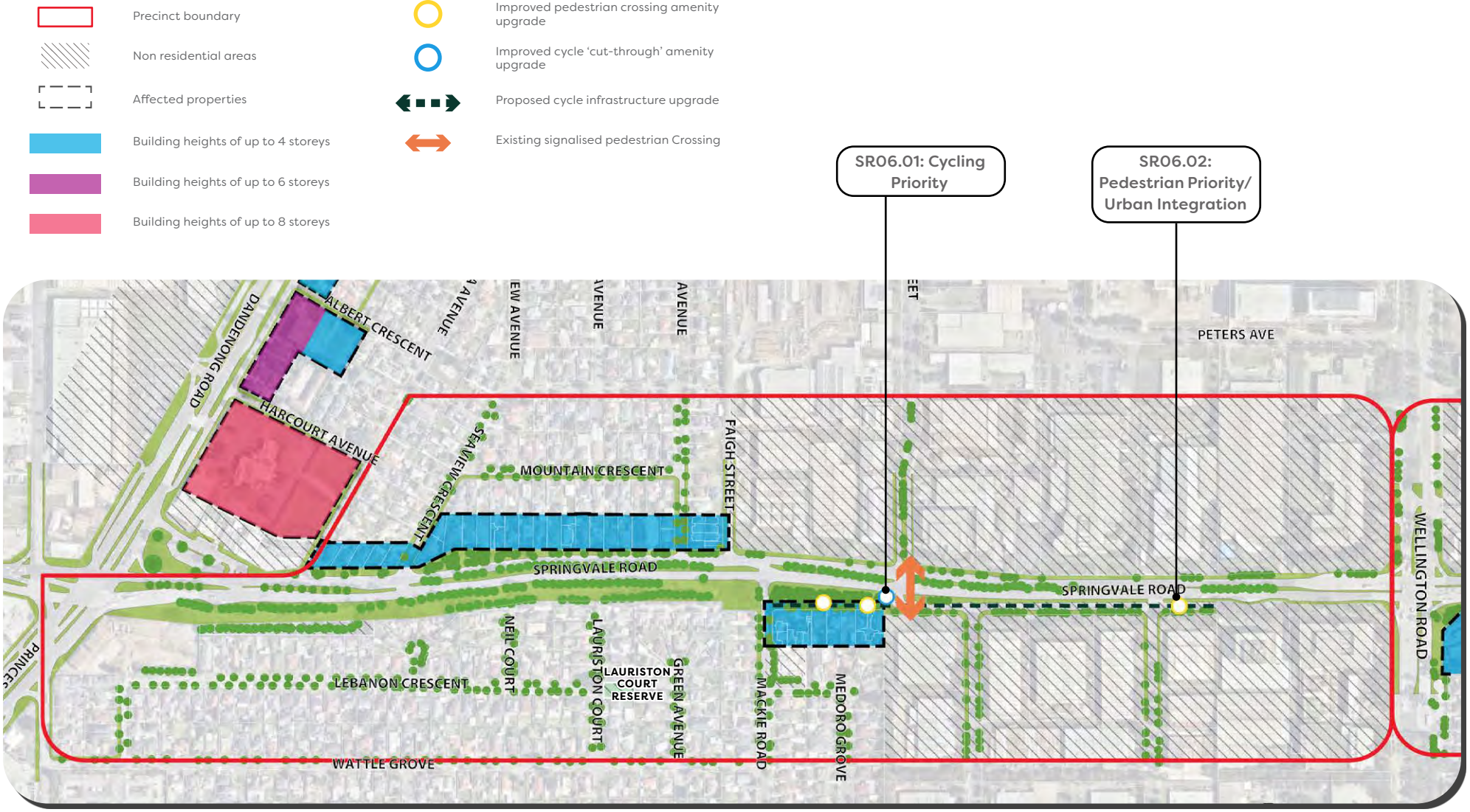


Figure 35. SR-06 Springvale Precinct Plan 6

Part C: Built Form Design Guidelines

1 Introduction

1.1 Purpose

The purpose of these guidelines is to provide guidance for the development of higher density housing along the Dandenong Road and Springvale Road Boulevards. The guidelines apply to the areas outlined in Figure 36 and 37.

The guidelines will be used to guide the design of developments, in the preparation of planning permit applications and by Council for the assessment of permit applications.

The objectives of the Guidelines are:

- To ensure new development contributes to a high quality Boulevard character.
- To ensure that the highest level of amenity is provided for existing and new residents within the Boulevards.
- To respond to a variety of housing needs both now and into the future.
- To ensure that development provides excellence in the standard of architecture and ESD.
- To support existing State and Local planning objectives.

1.2 How to use the guidelines

The guidelines are intended to be used in conjunction with Better Apartments Design Standards and Apartment Design Guidelines for Victoria.

The guidelines aim to enhance the desired Garden City character, and achieve the overall Vision for the Boulevards.

Where they apply

The Guidelines apply to Precincts 1 through 6 along Dandenong and Springvale Road, as identified in the Monash Boulevards Urban Design Framework.

How they apply

The guidelines must be considered for development where a permit application is required for:

- Construction of two or more dwellings on a lot
- Construction of a residential building

2 The Guidelines

2.1 Building Heights

Figure 36. Dandenong Road - Built Form Plan

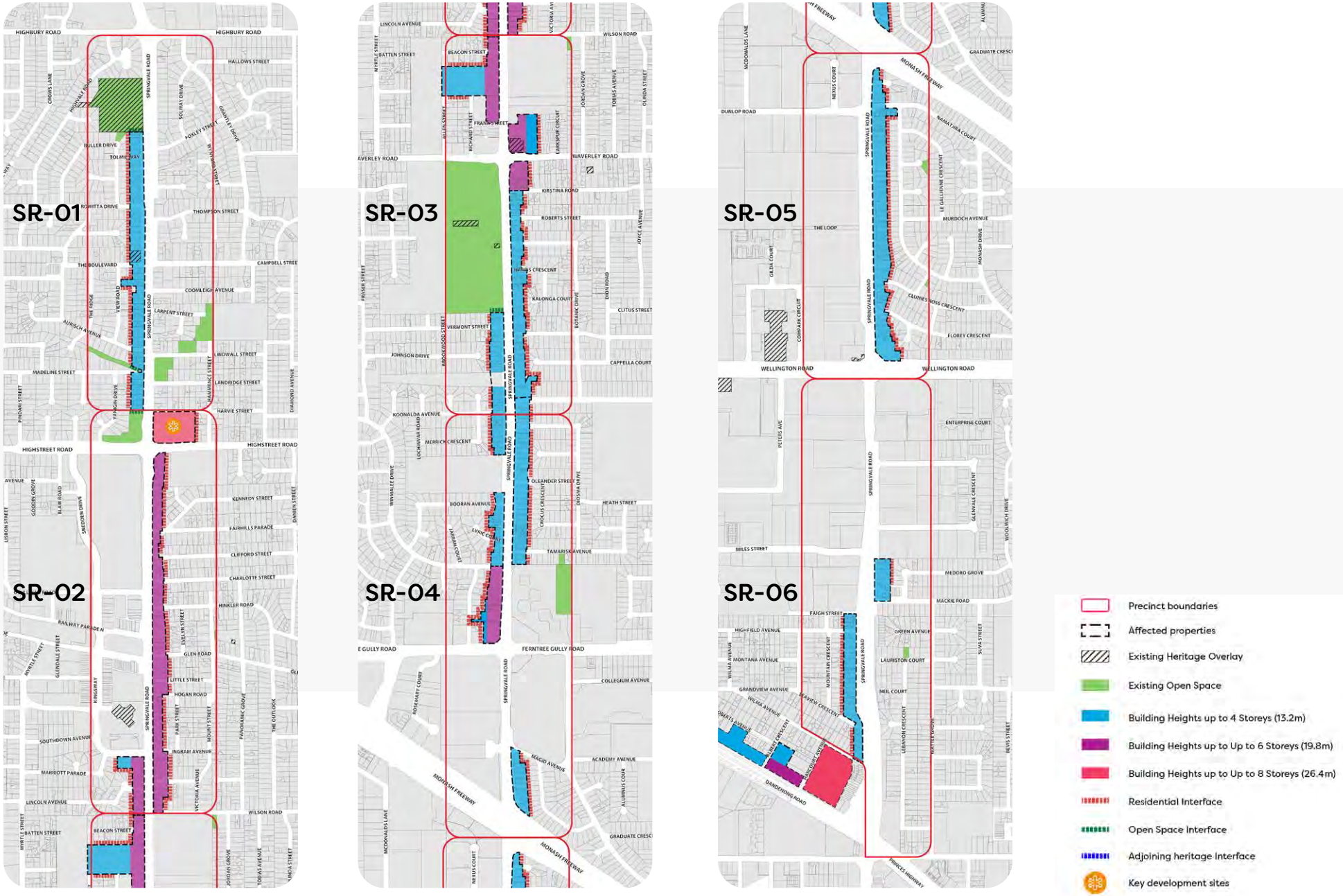


Figure 37. Springvale Road - Built Form Plan

Design Objectives		Guidelines	
O1.	To ensure new development creates a boulevard character along Dandenong Road and Springvale Road.	**G1.**	*Building should not exceed the heights identified in Figure 36 and Figure 37 and should meet the lot width requirements below*:* • *Lots less than 24 metres in width – Building heights up to 3 storeys (9.9m)* • *Lots of 24 metres and greater in width, and less than 30 metres in width – Building heights up to 4 storeys (13.2m)* • *Lots 30 metres in width or greater – Building Heights 5 storeys or greater (16.5m or greater)*
O2.	To encourage consolidation of lots along the Boulevards.	***Boulevard Setback***	
		G2.	*Provide 7.6m landscaped setback from the Boulevards for development up to 4 storeys (13.2m). An additional 3.0m upper level setback for development above four storeys (13.2m) is required (10.6m in total).*
		G3.	*For corner sites provide a street setback of 3.0m from the intersecting side street. An additional 3.0m upper level setback for development above four storeys (13.2m) is required (6.0m in total).*
		Secondary Frontage	
		G4.	*For dual frontage sites, the rear component of the building should be integrated with the surrounding built form on the secondary (non-Boulevard) frontage.*
		Side Setbacks	
		G5.	*Provide 1.0m setback, plus 0.3m for every metre of height over 3.6m up to 3 storeys (9.9m, plus 1 metre for every metre of height over 9.9m, up to 16.5m)*
		G6.	*Where a 6 storey recommended building height abuts a 3 or 4 storey recommended building height (as identified in Figure 36 and 37), ensure the 6 storey building provides for a transition in height to the 3 or 4 storey building.*
		Rear Setbacks	
		G7.	*Provide 4.0.m rear setback for development up to 3 storeys (9.9m), plus 1.0m additional setback for every metre of height over 3 storeys (9.9m) up to five storeys (16.5m). Rear setback to be established from the rear boundary, and not centre of laneway (if applicable).*
		G8.	*Where a habitable room window, balcony, terrace, deck or patio faces a common side or rear boundary, provide a setback of 4.5m to the common boundary.*
		G9.	*Where a site directly abuts a property within the Neighbourhood Residential Zone, provide 4.0.m rear setback for development up to 2 storeys (6.6m), plus 1.0m additional setback for every metre of height over 2 storeys (6.6m) up to four storeys (13.2m).*

Design Objectives		Guidelines	
O3.	To minimise amenity impacts on adjoining residential areas.	***Building design***	
		G10.	*On consolidated sites provide stepped front setbacks and/or increased side setbacks to create additional opportunities for landscaping and to reduce the visual bulk of buildings.*
		G11.	*Upper levels should set back in a maximum of two steps to avoid 'wedding cake' built form outcomes.*
O4.	To provide opportunities for deep soil zones and canopy trees within front setbacks.	**G12.**	*For sites adjoining Heritage Overlay precincts or properties provide a considered transition in scale and form to respect and integrate with the heritage character and significance of the adjoining heritage buildings/places.*
		G13.	*For sites that exceed a depth of 50m (with exception to Key Development sites shown in Figure 36 and 37) in 6-8 storey areas, the maximum building height can only be reached up to a depth of 50m from the Boulevard interface. Beyond 50m, the building heights are limited to 4 storeys.*

2.2 Interfaces and Building Setbacks

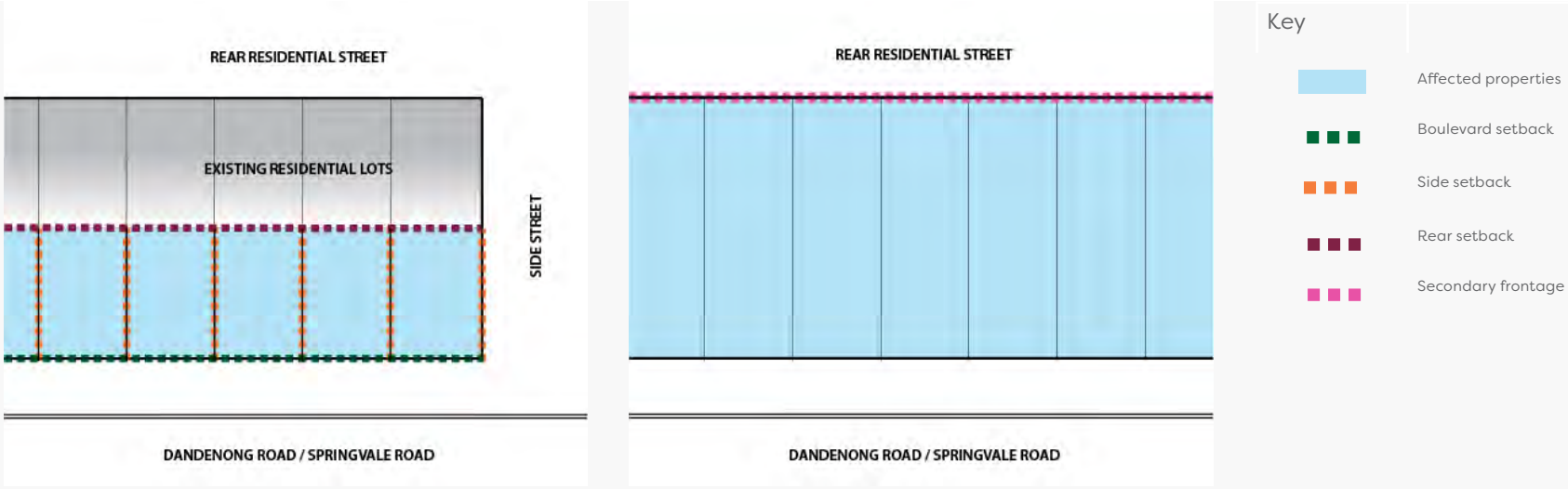
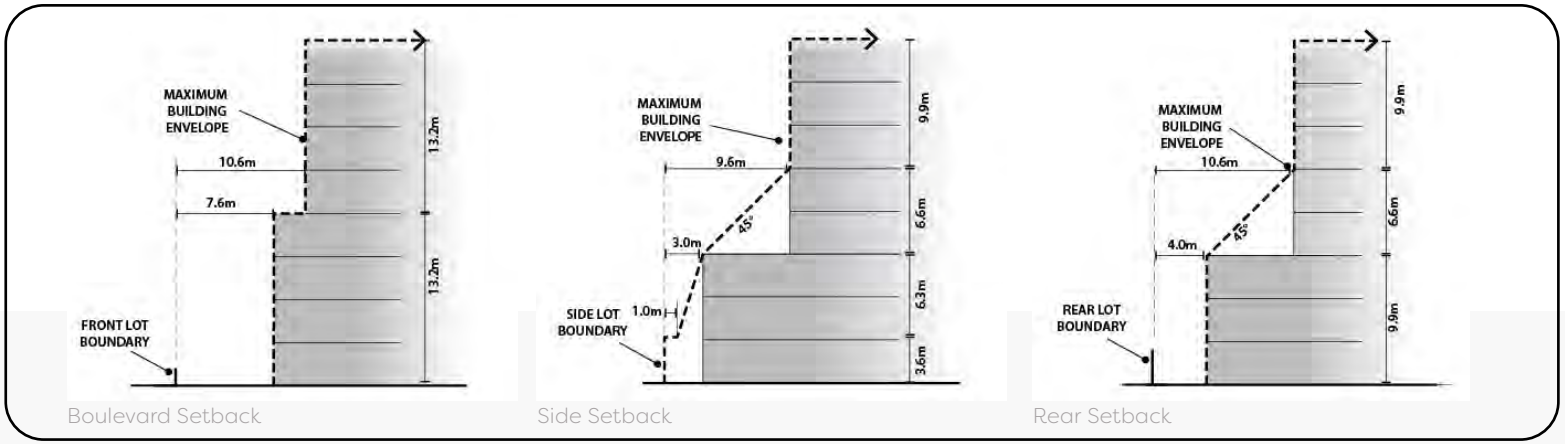


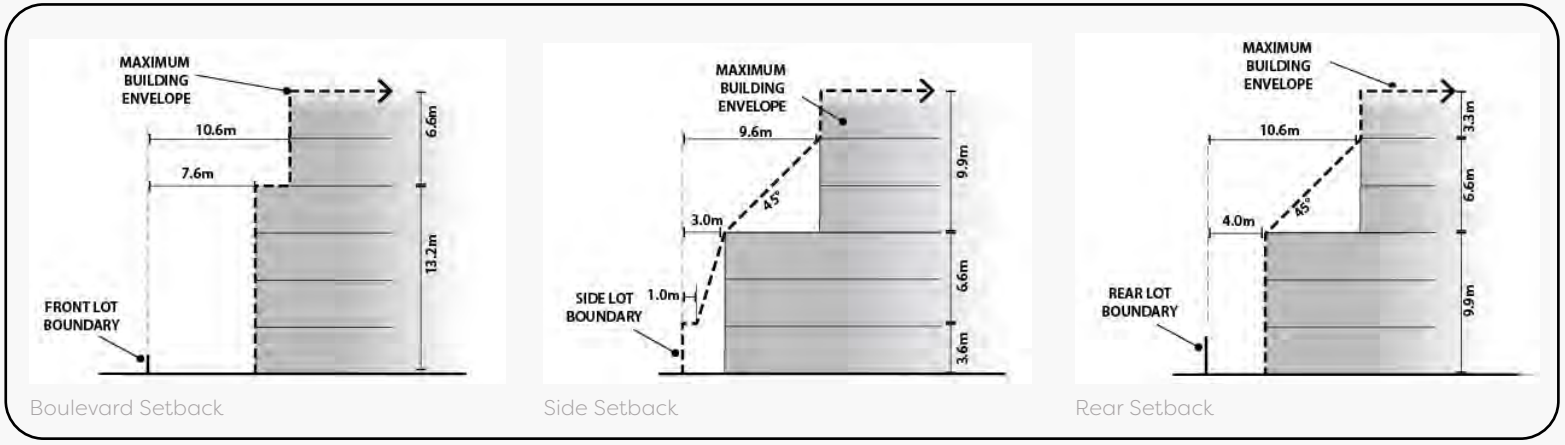
Figure 38. Interface diagram

Figure 39. 8 storeys setbacks



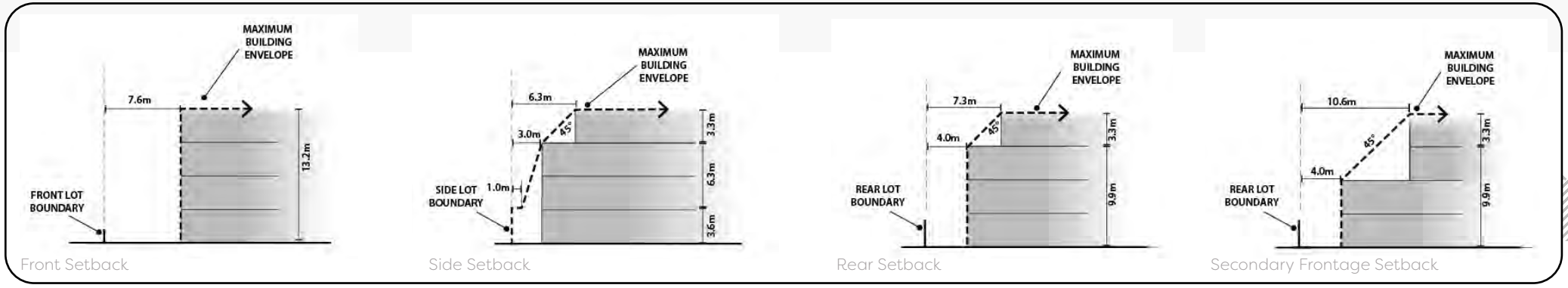
Boulevard Setback | Side Setback | Rear Setback

Figure 40. 6 storeys setbacks



Boulevard Setback | Side Setback | Rear Setback

Figure 41. 4 storeys setbacks



Front Setback | Side Setback | Rear Setback | Secondary Frontage Setback

2.3 Key Development Sites

2277 Dandenong Road

Key

- Site boundary
- Laneway interface
- Front setback interface
- Provide pedestrian access

Figure 42. Key Development Site - Dandenong Road

Key Outcomes

- *Provide pedestrian access between the site and shops.*
- *Provide building modulation to Dandenong Road, Springvale Road and Harcourt Avenue that reflects the grain of the adjoining land subdivision to the north west and north east. Avoid monolithic forms.*
- *Vary ground level setbacks to reduce visual bulk and create additional opportunities for landscaping.*
- *Provide ground level setback of 3m to the existing laneway along the south eastern boundary of to support laneway widening and provide buffer to adjoining retail uses.*
- *Focus vehicle access to car parking from Harcourt Avenue and Wilma Avenue.*

186 Springvale Road

Key

- Site boundary
- Side setback interface
- Front setback interface
- Provide pedestrian access

Key Outcomes

- *Provide a north-south pedestrian link through the site.*
- *Provide building modulation to High Street Road, Springvale Road and Harvie Street that reflects the grain of the adjoining land subdivision to the east and north. Avoid monolithic forms.*
- *Vary ground level setbacks to reduce visual bulk and create additional opportunities for landscaping.*
- *Provide architectural feature element to emphasise the corner of Springvale Road and High Street Road.*
- *Focus vehicle access to car parking from High Street Road and Harvie Street.*

Figure 43. Key Development Site - Springvale Road

2.4 Car Parking and Building Access

Design Objectives	Guidelines
O5. To ensure the location, design and layout of car parking and access is integrated with the overall site planning and building design.	*Car Parking*
O6. To minimise the visual impact of car parking entrances and access from the street so that it does not adversely affect streetscape character.	**G14.** *Design garages and carports to be recessive elements within the streetscape, set behind the dwellings and integrated into the overall building design.* **G15.** *Provide one vehicle crossover per site. This applies to standard single lots and consolidated lots.* **G16.** *Locate new or widened vehicle crossovers away from existing street trees to avoid root damage and/or removal.* **G17.** *On corner lots, provide access to the car park from the intersecting side street rather than service roads or the Boulevard.* **G18.** *Minimise the size of basement car park entries and on-site car parking areas to reduce impacts on street tree planting and footpaths.* **G19.** *Maximise planting at car park entries to enhance the landscape character of the Boulevards and minimise visual impacts.*

Example of well-articulated building entry with low fencing and good street address.

Example of poor street interface dominated by services and car park entry

Design Objectives		Guidelines
O7.	To provide safe, convenient and attractive access throughout developments by people with bikes, wheelchairs and prams.	*Building Access, Pedestrians and Cycling* **G20.** *Pedestrian routes to public areas, site facilities and car parking, should be visible, and accessible to all people, including those with limited mobility, and those with bikes, prams, wheelchairs and mobility scooter.* **G21.** *When required, pedestrian access ramps and stairs should be integrated into the design of the building and not compromise the extent of landscaping within the street setback.* **G22.** *Design driveway access to minimise vehicle and pedestrian / cyclist conflicts by maintaining clear viewlines.* **G23.** *The location of bicycle parking should be easily accessible from the street and at ground level and should be in an area subject to passive or active surveillance.* **G24.** *Pedestrian entry routes should be easy to locate and orientated to address the Boulevard frontage.* **G25.** *Utilise planting and landscape treatments around entryways to enhance the Garden City Character.* **G26.** *New buildings should facilitate ease of evacuation to side and rear streets in the event of high pressure gas pipeline failure along Dandenong Road.*

Landscaped pedestrian path with lighting and passive surveillance

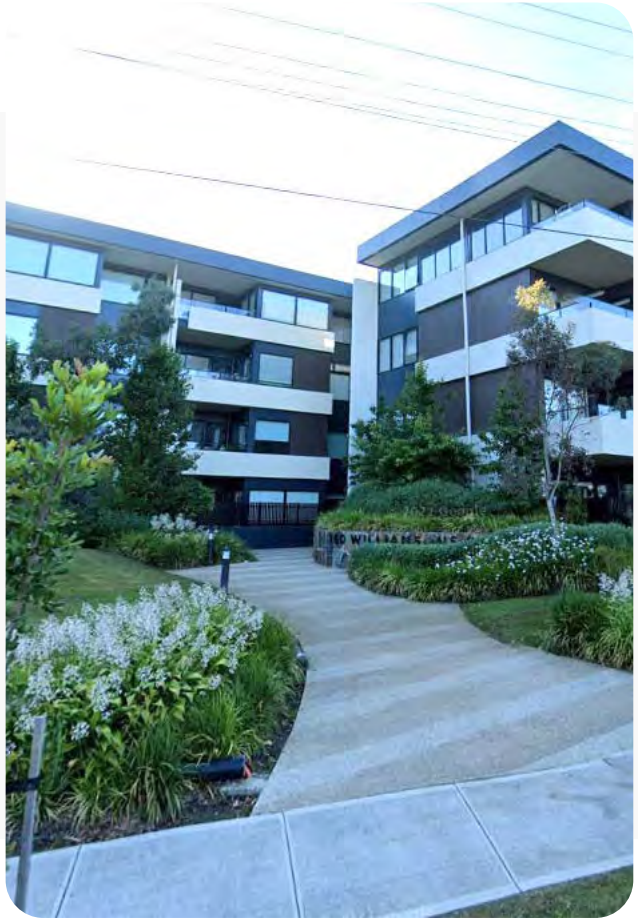
2.5 Landscaping

Design Objectives		Guidelines
O8.	To reinforce the garden city character and build a strong boulevard presence through the planting of significant canopy trees.	*Canopy Trees & Planting* **G27.** *Maximise deep soil planting zones within front and rear setbacks (excluding basement access) in accordance with* Better Apartments Design Standards *to support canopy trees and contribute to the Boulevard's landscape character.* **G28.** *Canopy vegetation is to be of a suitable size and height which emerges above the roofline of proposed built form in the residential areas. This will provide shading and greening to the built form including the roof form, which achieves an urban heat mitigation and visual improvement.* **G29.** *Refer to the Australian Standards AS2870-2011 for Residential slabs and footings to determine the minimum area required for the tree to establish in terms of minimum off-set from adjoining built form.*

Example of canopy tree planting in front setback, Bulimba Hawthorne Project.

Example of canopy tree planting in communal open space, Malvern Hill Apartments.

Design Objectives		Guidelines
O9.	To ensure buildings are within a strongly landscaped setting.	*Landscape Design* **G30.** *Refer to **Monash Urban Landscape and Canopy Vegetation Strategy - Preferred Landscape Character Types** for guidance on landscape design and species selection.* **G31.** *The front setback should incorporate grassed and planted areas comprising a minimum of 60 per cent of the total area. This can include a combination of garden beds with dense planting, grassing and/or vegetation and excludes permeable paving and synthetic grass/painted paved surfaces as part of the minimum 60 per cent.* **G32.** *The side setback should incorporate some vertical greening to create the effect of the buildings sitting in a landscaped setting. This will preferably include trees with a narrow canopy to suit the side setback environs, however where trees are not feasible, as a minimum shrubs or climbers on fences/ walls are to reach a minimum of 1.8 metres high.* **G33.** *Utilsing green roofs, walls and balconies to provide additional landscaping and soften the visual impact of buildings.* **G34.** *Where paved surfaces are required position trees and built form to ensure these are at least partially shaded during Summer. Encourage the use of permeable paving surfaces where feasible to assist with overall soil moisture content.*



Open front setback incorporating canopy trees and high proportion of permeable surfaces

Design Objectives	Guidelines
O10. To retain existing canopy trees.	*Vegetation Retention* **G35.** *Prioritise the retention of significant and large canopy trees on private land. Where there are a number of trees on the site, the retention of high value canopy trees is to be prioritised over lower value canopy trees.* **G36.** *Developments are to incorporate the requirements of Australian Standards AS 4970-2009 Protection of trees (or its equivalent current Australian Standard) and AS 4373-2007 Pruning of amenity trees for remedial works to the tree canopy.*

Buildings designed to retain established trees and create an attractive outlook from dwellings.

Example of large trees retained and incorporated into open space.

Design Objectives	Guidelines
O11. To minimise the need for fencing through appropriate landscaping and building design. **O12.** To ensure where front fencing is required it does not dominate the streetscape or reduce visibility or integration of landscaped front setbacks with the street. **O13.** To ensure front fencing is designed to promote passive surveillance of the street and provides views and connection between public and private landscaping.	*Front Fencing* **G37.** *Front fences should not exceed a maximum fence height of 1.2m. Fencing should be designed to incorporate landscaping and permeability to contribute greenery and provide a level of passive surveillance to the street.* **G38.** *Where practical, front setbacks should include areas with no fencing to create open and welcoming entrances. Continuous high fencing along footpaths should be avoided.* **G39.** *Fencing solutions must be designed as a part of the landscape design solution, not independently.*

Example of where part of the front setback is open and supporting canopy trees.

2.6 Building Form & Design

Design Objectives		Guidelines	
		Building Form & Roof Design	
O14.	To provide high quality buildings that strengthen the Boulevard character, allow for the integration of functional architectural elements into the overall building design.	**G40.**	*Articulate building facades through the considered design of openings, balconies, varied materials, recessed and projected elements, and revealing structural elements such as columns and beams.*
		G41.	*On consolidated lots the streetscape interface of the development should break up the building bulk through significant recession into the building mass. Utilise modulation to delineate individual dwellings.*
O15.	To ensure roof design is integrated with the proportions and facade of the building.	**G42.**	*On larger buildings articulate or divide roof forms into distinct sections in order to minimise visual bulk and respond to the roof proportions of existing buildings.*
		G43.	*Services and equipment such as plant, lift cores, heating and cooling should be contained within the roof form or screened behind a parapet so that they are not visible.*
		G44.	*Consider site orientation in the design of roof forms so that element such as eaves can respond to solar access and shading needs.*

Considered use of simple materials

Building composed from detailed materials with minimal areas of rendered surface

Design Objectives		Guidelines	
O16.	To provide front building entries that are easily identifiable and complement the overall architectural design.	*Street Interface*	
O17.	To enable passive surveillance of streets and public space through considered window composition and active uses facing the street.	**G45.**	*Provide opportunities for engagement with the street through ground level occupation and the presence of habitable rooms and balconies at all levels. Inactive uses, such as laundries, garages and bathrooms, should be located away from street-facing facades where practicable.*
		G46.	*On corner allotments both street frontages should provide activated and landscaped interfaces. This may include separate entries to individual dwellings.*
		G47.	*The building entries should directly front the street and be clearly defined and accessed from the public realm.*
		G48.	*Lift cores should be well integrated into the building and should not face the street.*
		G49.	*Where private open space is located at ground floor, innovative techniques should be used to define and give privacy to area. This may include the use of raised garden beds or decorative screening and permeable fencing.*
		G50.	*Site services, such as meter boxes, fire fighting equipment and mail boxes, should be incorporated into the design of the building or development and not be dominant or harsh elements in the streetscape.*

Example of positive street interface with ample planting, Malvern Hill Apartments.

Design Objectives		Guidelines	
O18.	To provide high quality and visually interesting built forms along the Boulevards.	*Materials & Detailing*	
		G51.	*Building facades should be clad with materials, such as brickwork, weatherboards or other cladding to provide an articulated built form. Large areas of rendered wall surface is discouraged.*
		G52.	*Building facades should be simple and articulated, and not rely on excessive use of materials to achieve visual interest.*
		G53.	*Architectural detail of eaves should be considered as part of the design.*
		G54.	Building facades should be designed to allow for the interpretation or reading of each floor level of the building.

Example of simple materiality along a well-articulated facade, Burwood Brickworks.

2.7 Environmental Sustainable Design

Design Objectives		Guidelines	
O19.	To ensure all new development incorporates best practice Environmentally Sustainable Development (ESD) initiatives.	**G55.**	*Buildings to include provide for rainwater capture and storage. Water run-off from impervious surfaces should be collected, cleaned and re-used through passive irrigation where practical.*
O20.	To provide good opportunities for solar access to dwellings.	**G56.**	*Buildings should be sited appropriately to consider the orientation of windows and openings to facilitate natural light and ventilation.*
O21.	To ensure that new buildings have regard to the future development potential of adjoining sites and the ability for future development to gain reasonable solar access.	**G57.**	*Buildings should be sited to mitigate noise and air pollution from the main road environment and, in some cases, nearby industrial uses.*
		G58.	*Buildings to include a portion of sustainable materials in the building design.*
		G59.	*Development should respond to existing conditions including adjoining uses, topography, vegetation and views.*
		G60.	*Orientation of balconies should protect amenity from traffic noise.*
		G61.	*Ensure new apartment developments have capacity and readiness for EV charging points.*
		G62.	*Siting of development should allow for adequate light and sun penetration to existing and future development on adjoining properties.*
		G63.	*Buildings and rooms should be designed and orientated to maximise opportunities for solar access to living areas and private open space.*
		G64.	*On lots with a generally east-west orientation, driveways should be located to the south of the lot where practicable to maximise solar access to habitable spaces and minimise overshadowing of neighbouring properties.*
		G65.	*Maximise orientation of the building and dwellings to benefit from cross-ventilation breezes.*