Hodyl & Co

Pakington Street and Gordon Avenue Built Form Framework

Prepared for the City of Greater Geelong
August 2021

FINAL

Prepared by Hodyl & Co for the City of Greater Geelong

Project team:
Leanne Hodyl, Bec Fitzgerald, Alice Fowler and Bridget Liondas

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Version B

Hodyl & Co Pty Ltd
ABN 85 613 469 917
www.hodyl.co

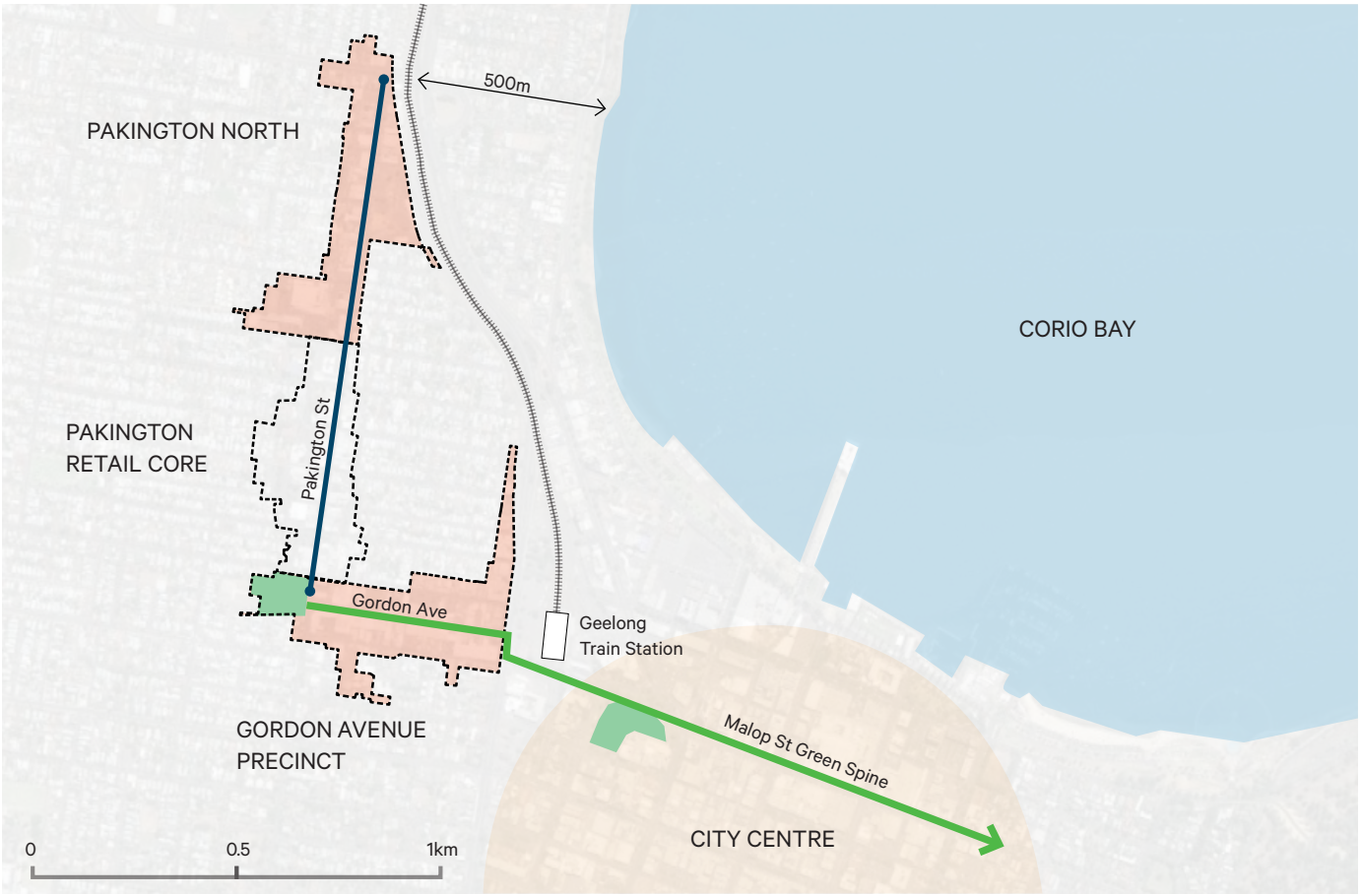


Figure 1. Context map

The Pakington North and Gordon Avenue precincts represent the opportunity to deliver a new form of residential and mixed-use development in central Geelong - mid-rise, sustainable apartment living set within a green, leafy environment that supports a diverse and inclusive community.

Project purpose

This report provides a built form vision for the Pakington North and Gordon Avenue precincts. The vision is supported by specific guidance on urban design outcomes sought in each area. This guidance will be integrated into the final Urban Design Framework that is being prepared by Council.

Project aspirations

Delivering on Clever and Creative Geelong

The Pakington Street and Gordon Avenue precincts have a key role to play in the realisation of the community's aspiration to deliver a clever and creative future for Geelong. Creating 'forward-looking, enterprising and adaptive' places that care for the people and the environment needs to be the over-arching ambition that drives this work.

Delivering on UN City of Design

Geelong is a designated city of design. This work must aim to deliver on this status, focusing on how to deliver high quality living and working environments and responding to the unique qualities of each precinct. Ensuring that new development responds adequately to the local context and creates an attractive, welcoming character is essential to the long-term wellbeing of the local communities and economic prosperity within central Geelong.

Supporting sustainable population growth

The population of Geelong is growing quickly. This is visible within the central city areas where a number of new multi-storey developments have recently been completed. Pakington North and the Gordon Avenue Precinct have the potential to become areas with high levels of amenity with relatively good access to public transport, shops, services and the Bay. These are suitable areas to accommodate an increase in population densities. This will also contribute to enhancing the vibrancy, safety and character of each of these precincts.

Enhancing the 'village feel' of Pakington Street

Pakington Street is a much-loved village. Is has a great deal of charm and community life that is created through the mix of shops, cafes and other businesses, and the scale and features of the heritage architecture and landscape design. The Pakington North precincts exhibits some of this charm in small pockets but also presents the opportunity to extend many of the valued characteristics of the existing village area. This work considers how this can best be achieved while also supporting a greater scale of development intensity than the heritage core precinct.

Transforming Gordon Avenue into a celebrated place

Gordon Avenue is a key connector between the Geelong Station, CBD and waterfront and the existing Pakington Street village. It is fronted by large commercial 'big box' buildings that include a mix of businesses. The area presents as industrial in character, dominated by vehicular traffic. There is a real opportunity to create a high-quality street that is fronted by well-designed buildings and which can become a celebrated place and destination. Ensuring that the future proposal for Gordon Avenue and La Trobe Terrace connects to the future vision for the station precinct will also be critical.

Managing the impact on adjacent sensitive residential areas

The Pakington North and Gordon Avenue precincts both interface directly with existing residential neighbourhoods. The future built form within each precinct needs to carefully consider how new buildings will be designed to minimise the impact on these neighbourhoods. This will require careful consideration of the overall visual bulk of new buildings, privacy (overlooking) and sunlight access.

Design objectives

Image 1. Arkadia by Breathe Architecture incorporates a significant amount of communal open space and laneways. Variations in building height and visual recesses between forms visually break up the large-scale building into smaller forms. Source: Breathe Architecture.

Geelong must deliver on its reputation as a City of Design by leading the way in exemplary public realm and building design in Gordon Avenue and Pakington North.

These design objectives set a high design standard

Image 2. 9 Smith Street by Neometro.

Image 3. Fairfield Nightingale 2.0 by Six Degrees Architects.

Design buildings that are sensitive to the context

- To reduce visual bulk on large-scale sites by using vertical recesses in buildings, changes in facade design and a mixed palette of materials to present larger-scale buildings as a series of smaller, complementary buildings.
- To minimise the scale of taller building elements and carefully locate them to minimise visual bulk and overshadowing as experienced from the public realm.
- To maintain solar access to identified streets and open spaces between 11am and 2pm at the spring equinox.
- To provide a distinction between the lower building levels and the upper building levels through changes in form, details and materials that create visually recessive upper levels (see Figure 3 on page 9).

  To design buildings that fit within the low-scale residential heritage context of predominantly 1-2 storey detached dwellings with front and back gardens.

- To design buildings that respond to the corner condition by providing an expanded public realm at intersections through the provision of chamfered corners.
- To provide street walls that relate to the overall width of the street and create a positive sense of enclosure.
- To moderately increase street wall heights at intersections (1-2 storeys) if the building facade is well-resolved and designed to minimise visual bulk.

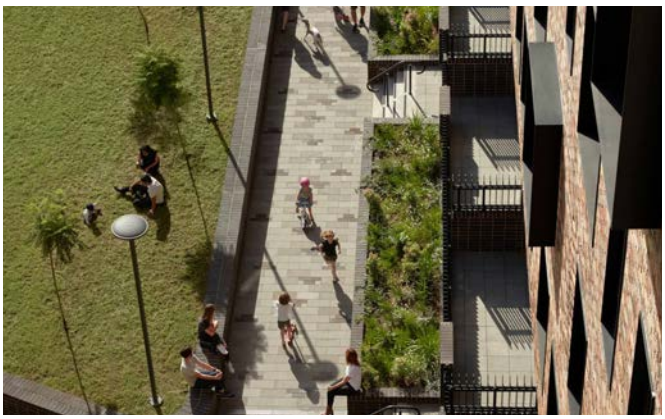
Create engaging streets and laneways

- To provide high-quality retail frontages (nominally 5-10m wide) along Pakington Street, the western portion of Gordon Avenue to extend the fine-grain character of the existing Pakington Street retail precinct.
- To encourage a mix of small and medium scale tenancies along Gordon Avenue, Spring Street and Autumn Street that support a mix of different uses.
- To provide high-quality frontages to laneways and maximise opportunities to locate active uses along them.
- To reduce the impact of servicing on the public realm by minimising the number of vehicle crossovers required and removing vehicle crossovers where appropriate.
- To minimise the extent of servicing located on primary street frontages and integrate the design of servicing into the overall design of the ground floor.
- To integrate signage into the design of the ground floor along and awning along Pakington Street to discourage signage treatments that obstruct windows and glazed doors.

Design objectives

Image 4. 122 Roseneath Street by Fieldwork Projects. Photo by Wulff Projects.

Image 5. Arkadia by Breathe Architecture. Photo by Tom Ross.



Deliver high-amenity housing and commercial tenancies.

- To deliver high quality buildings that range in height from 4-10 storeys and integrate landscape as a key driver of building design.
- To deliver internal amenity and development equity between sites by providing adequate building separation (see Figure 2).
- To ensure that internal privacy is well-managed in buildings through building separation, landscape interventions and the careful location of windows.
- To avoid reliance on screening to manage privacy issues at the ground floor and at upper levels.
- To provide an integrated design response to manage flood risk that integrates landscape and minimises the need for steps at the street interface.
- To provide dequte floor to floor heights that support good internal amenity outcomes and the adaptability of floorspaces over time (see Figure 4).

Integrate landscape as a key driver of building design

- To integrate landscape as a key driver of building design through the provision of functional open spaces (e.g. central courtyards) and landscaped areas to the front and rear of buildings.
- To provide landscaped setbacks along low-amenity arterial routes (La Trobe Terrace and Gordon Avenue) in order to improve public realm character and deliver internal amenity at the lower levels of buildings.
- To provide ground floor landscape setbacks at the interface to low-scale residential streets that reflect the consistent character of ground floor setbacks along the street.
- To provide rear landscape setbacks at interfaces to sensitive residential areas to manage the transition to low-scale residential areas.

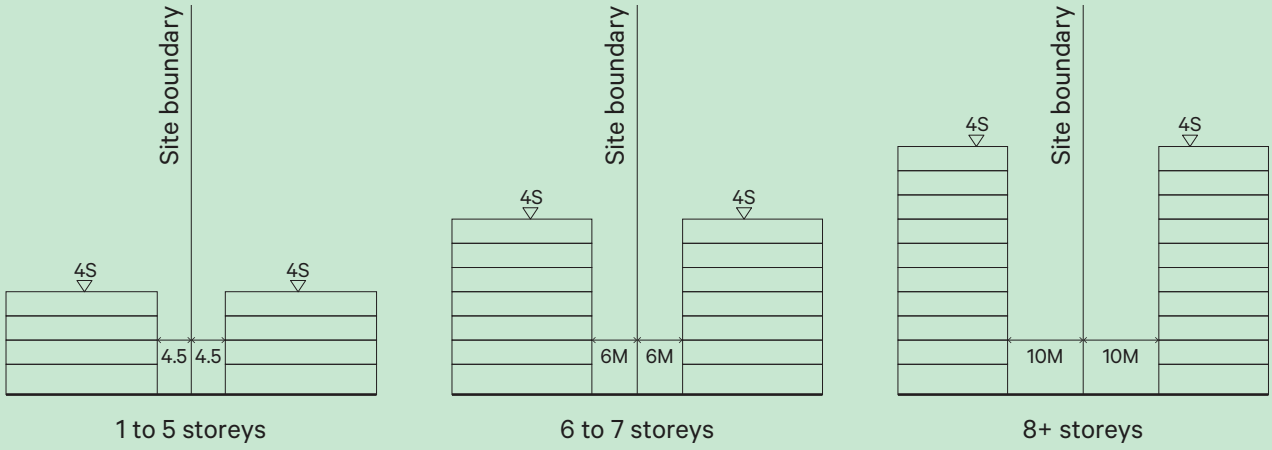


Figure 2. Building separation requirements.

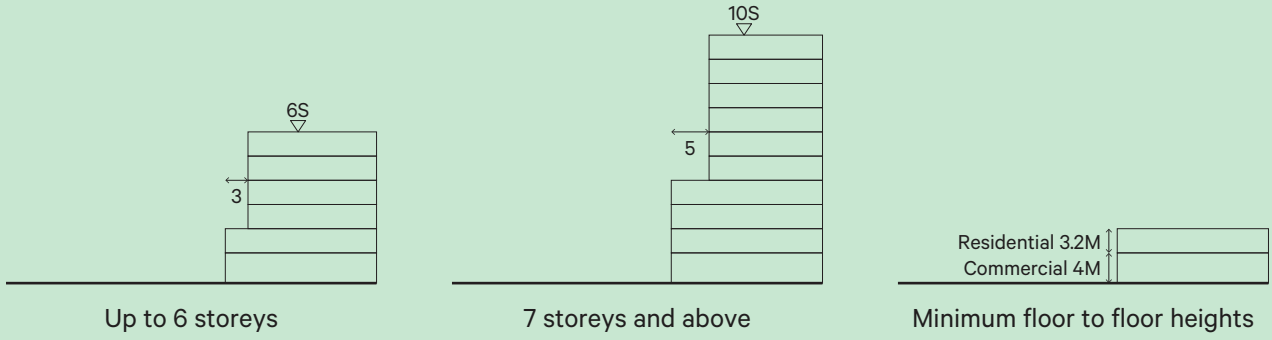


Figure 3. Upper level setback requirements

Figure 4. Minimum floor to floor height requirements

BUILDING SEPARATION

Adequate building separation distances are required to ensure that good levels of daylight and sunlight enter into buildings and into private or communal open spaces. Building separation also ensures that an outlook is provided from within buildings to connect occupants to the outside world.

Building separation is also important to provide development equity, ensuring that the way one site is developed does not diminish the potential to deliver a well-designed building on the adjacent site. Building separation is achieved by setting buildings back from side and rear boundaries and by separating buildings within sites.

Figure 3 demonstrates the building separation controls that will apply from side and rear boundaries in order to deliver sufficient building separation in the precinct.

UPPER LEVEL SETBACKS

The height of buildings at the street edge has a direct impact on the experience of pedestrians within the street. This element of the building is called the street wall height. Lowering the height of the building at the street interface creates a comfortable 'human-scale' where the building is most directly experienced from the public realm. Place specific street wall heights are specified in the precinct chapters.

Setting back the upper levels of buildings above the street wall enable the benefits of the preferred street wall height to be realised. Upper level setbacks need to be of a sufficient depth to ensure that there is a clear delineation between the street wall and the building elements above.

Applying a 3m upper level setback for buildings up to 6 storeys will create a sufficient visual distinction between the lower levels and upper levels of a building. The upper level setback is proposed to increase to 5m above 6 storeys as upper levels of buildings are more dominant as buildings increase in height.

Gordon Avenue

Overview

The Gordon Avenue Precinct extends along Gordon Avenue from Pakington Street to Latrobe Terrace. It currently has a mixture of large format retail, warehouse and office space. The precinct is predominantly in a Commercial 2 Zone with a few parcels in a Commercial 1 Zone opposite West Park.

The precinct is characterised by warehouse style buildings, frequent cross overs, front setbacks accommodating carparking and on-street carparking. There are limited trees or furniture in the street.

The precinct has the potential to accommodate sustainable development growth due to the large site sizes and proximity to the Geelong Railway Station.

Chapter structure

Figure 5 demonstrates the structure of this chapter which articulates a place-specific built form framework for Gordon Avenue.

The Gordon Avenue Precinct benefits from its close proximity to the Geelong Railway Station and the retail concentrated along Pakington Street.

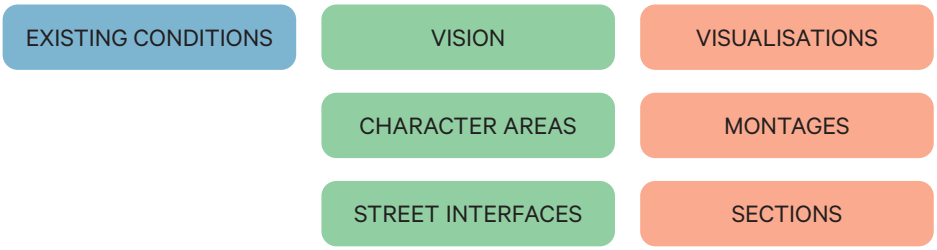


Figure 5. Chapter structure.

Existing conditions

Image 6. Two-storey corner building at the intersection of Pakington Street and Autumn Street with West Park adjacent.

Image 7. Looking east along Autumn Street, a street with a distinct mixture of commercial, industrial and residential buildings.

Image 8. Vacant contaminated lot on Autumn Street that allows for views through to Gordon Avenue.

Image 9. Two-storey townhouses with front gardens, industrial buildings and street trees looking east along Autumn Street.

Image 10. At-grade carpark owned by the City of Greater Geelong that has been identified as a location for future open space (looking south).

Image 11. Existing narrow north-south laneway that connects Spring Street in the south to Autumn Street in the north.

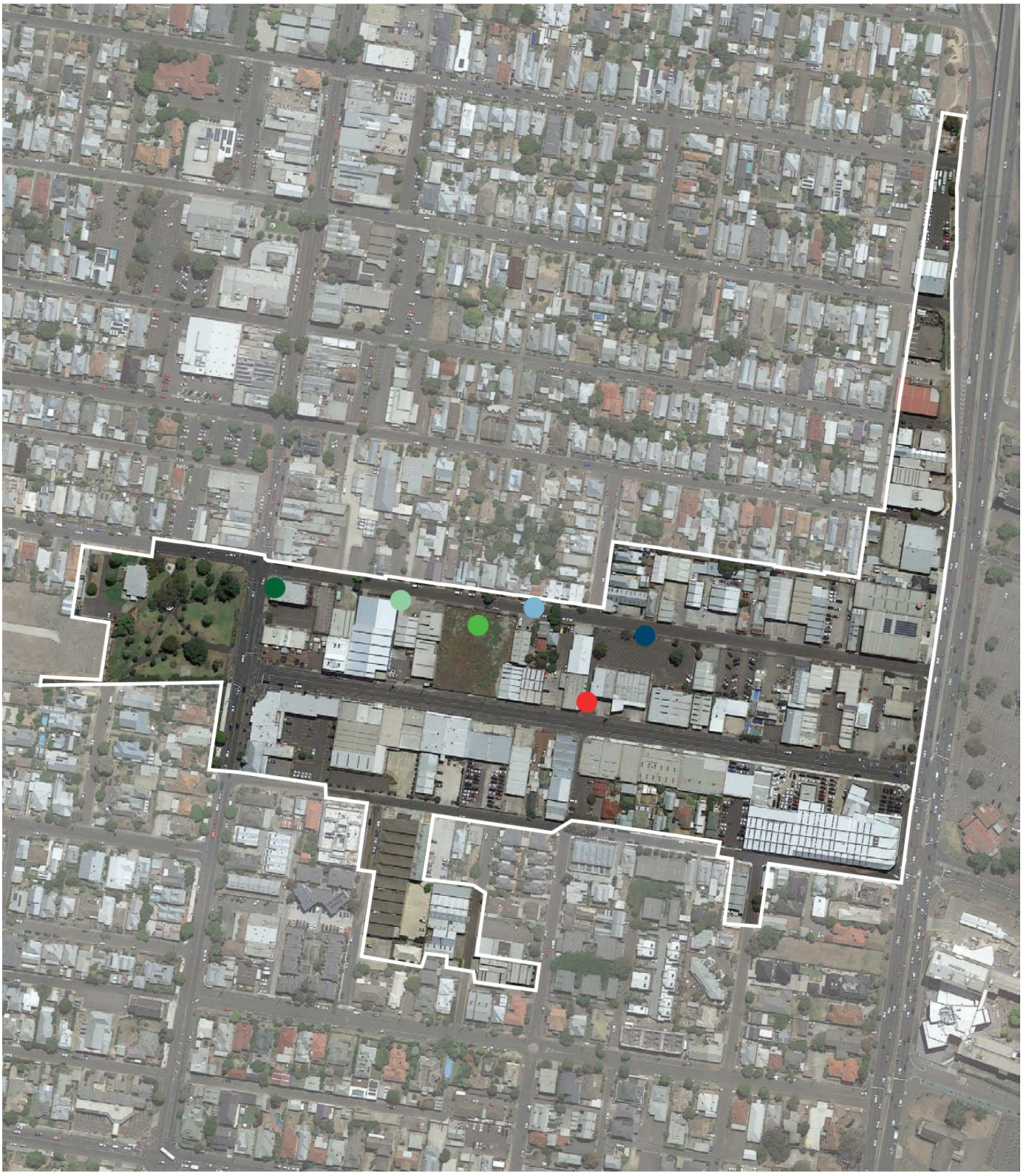


Figure 6. Gordon Street aerial map with photo locations

Existing conditions

Image 12. La Trobe Street is a very low-quality interface, the street has six lanes of traffic and is very difficult for pedestrians to cross.

Image 13. Looking west along Gordon Avenue which is predominantly commercial buildings with narrow footpaths and very limited street planting.

Image 14. Gordon Avenue buildings are frequently setback from the street interface in order to accommodate at-grade carparking within the setback.

Image 15. The public realm is very poor quality along Gordon Avenue - dominated by carparking and vehicle entrances and minimal street planting.

Image 16. Looking west along Spring Street which predominantly consists of residential buildings with front gardens to the south.

Image 17. Looking south-east along Spring Street where there is a cluster of single-storey residential buildings on the north side of the street.

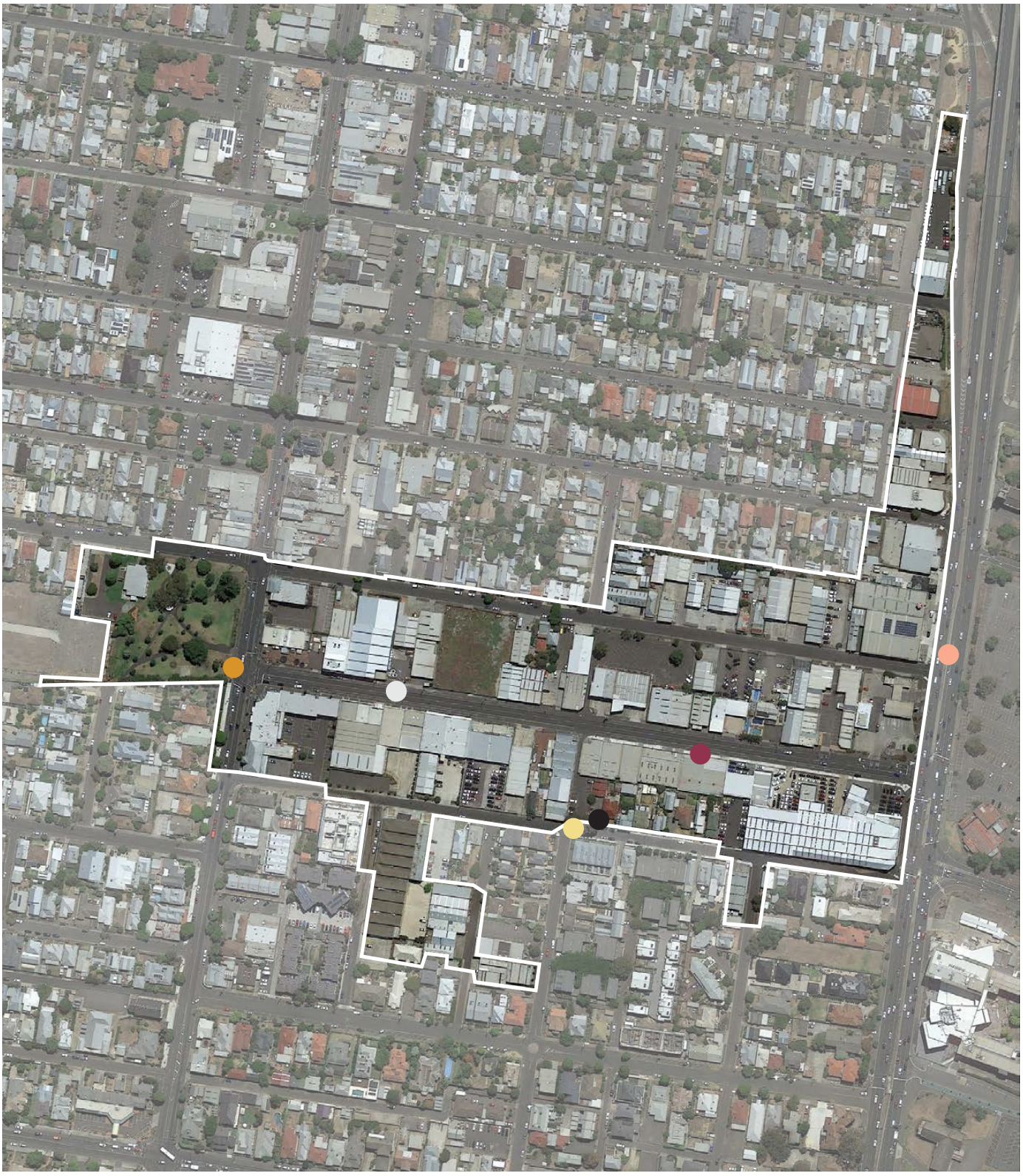


Figure 7. Gordon Street aerial map with photo locations

Vision

Figure 8. Gordon Avenue visualisation

The Gordon Avenue Precinct is a sustainable mid-rise precinct that provides a high-quality environment for living and working in Geelong West.

High-quality buildings range in height from 4-10 storeys. Generous communal and private open spaces and extensive landscaping within sites supports comfortable living at higher densities. At the edges of the precinct, buildings reduce in scale and landscape setbacks are introduced to create a buffer between the low-scale residential areas to the north and south. Buildings are setback from Gordon Avenue and La Trobe Terrace to allow for increased planting along the streets and to protect internal amenity at the lower levels as these streets transition into safer and more walkable environments. A new central park on Autumn Street provides a central meeting point for the community.

Figure 9. Key moves for the Gordon Avenue precinct.

Character Areas

The analysis of existing conditions led to the identification of three different character areas in the Gordon Avenue precinct - Gordon West, Gordon Central and La Trobe Terrace.

Gordon West

Gordon West includes sites fronting Pakington Street, several large-scale industrial sites along Gordon Avenue and a series of sites that sit south of Spring Street within the residential area. The existing buildings are predominanlty industrial buildings with some retail uses at the Pakington Street interface. The street quality is low with limited street trees and narrow footpaths.

Gordon Central

Gordon Central includes the majority of sites along Gordon Avenue, Spring Street and Autumn Street. these sites are moderate scale and interface with sensitive residential areas to the north and south. The existing buildings are predominantly industrial buidling interspersed between at-grade carparks. This includes a large at-grade carpark owned by Council on Autumn Street.

Latrobe Terrace

Latrobe Terrace predominantly includes the sites directly fronting La Trobe Terrace. these sites interface with sensitive residential areas to the west. Latrobe Terrace is a very low-amenity street with four lanes of traffic and limited street trees. The buildings include a mix of industrial and commercial buildings as well as aa petrol station at the entrance into Gordon Avenue.

Figure 10. Character areas.

Gordon West

Gordon West is a mixed use precinct of 4-6 storey buildings interspersed between new laneways and open spaces. Fine-grain frontages are provided at the ground floor along Pakington Street and Gordon Avenue to extend the valued character of Pakington Street into the precinct.

A ground floor landscape setback is provided at the southern interface to create a sensitive transition to lower-scale residential properties to the south.

Figure 11. Gordon West aerial

Image 20. Hawke & King, 6 Degrees

Image 19. Hawke & King, 6 Degrees

The Hawke & King development by 6 Degrees, uses varying forms, materials and setbacks to better intergrate with the surrounding fine grain residential context. The development has numerous breaks and pathways between the buildings, creating predestrian links and internal open spaces, see Image 19. These links and open spaces create relief from the built form and allow sunlight into the building.

Image 18. Cubic Houses, ADEPT

The different facade designs and overall building forms give the impression that the buildings are not all one development on the one site, this again reflects the fine grain context and contributes to a unimposing form.

Cubic Houses by ADEPT use varying setbacks and asymmertical stacking to break down form. Additionally the bu8ilding separation in the design brings in light to the buildings and creates a pedestrian pathway through the development.

Gordon Central

Gordon Central is a vibrant, green and predominantly residential precinct with 4-6 storey buildings that are well spaced and set within a thriving landscape. A broad range of housing supports a diverse population to live in close proximity to Geelong Railway Station. At the centre of the precinct is a sunny new open space that is surrounded by active dges.

Buildings interfacing Gordon Avenue are setback to allow for mature trees to establish and create shade. Solar access is protected to the south side of Gordon Avenue Spring Street and Autumn Street to ensure that the street remains sunny in the long-term.

Figure 12. Gordon Central aerial

Image 21. Balfe Park, Kirsten Thompson Architects.

Image 22. Oxford Street, Jackson Clements Burrow.

Image 23. Clifton House, Idle Architecture Studio

The Balfe Park apartments by Kerstin Thompson Architects demonstrate an approriate scale and height to protect solar access to Balfe Park. The varying size and positioning of the fenestration break up the facade to create a less imposing form and intergrate with the residential context.

The Oxford Street apartments by Jackson Clements Burrow use building separation both within the development and at the interface to neighbouring sites to break down the form and transition sentively to the residential context. The difference in height of the two buildings further emphasise the transition in scale to the low residential buildings. The materiality of the development reflects the brick work of the heritage context to better integrate into the surrounding environment.

Similarly Clifton House uses materiality to integrate with the surrounding buildings. Futhermore the brickwork and fenestration layout break down the facade, reflecting the fine grain quality of the residnetial context.

Latrobe Terrace

Latrobe Terrace is a predominantly commercial precinct that benefits from its close proximity to Geelong Railway Station and the city centre. A landscaped setback at the ground floor protects internal amenity at the ground floor and contributes to the improvement of the Latrobe Terrace public realm.

Buildings reduce in height to the west in response to the sensitive residential interfaces to the west.

Figure 13. La Trobe Terrace aerial

Image 26. LA TROBE TERRACE - Arkadia, Breathe Architecture.

Image 25. LA TROBE TERRACE - Lumina Apartments, DKO Architects.

Arkadia by Breathe Architecture uses a ground floor setback and level change to create a buffer between the street at the entrance of the building. The varying fenestration size and layout as well as the building separation help to break down the facade and create an unimposing form. The curving facade further breaks down the building and creates relief from the street wall.

Image 24. Nightingale 2, 6 Degrees

Similarly the varying setbacks shown in the Lumina Apartments design by DKO Architects, also break down the facade and create areas where people can sit and improving the public realm. The varying materiality of the Lumina Apartments reflect the grain of the site context.

Nightingale 2 by 6 degrees uses varying materials to break down the facade of the building a reduce the sense of scale. The continuous balconies create a buffer between the building and the street, making it feel setback. The internal atrium creates building separation and brings light into the building.

Interfaces

Designing a high-quality street interface is an important aspect of the building design as this element of the building has the most significant influence on the public realm.

Buildings also need to provide a transition when they directly interface areas of single storey housing.

Preferred design outcomes have been established for all of the street interfaces and direct residential interfaces in the Gordon Avenue precinct. These have been established in response to:

- The width and function of streets.
- The desire to create a new landscape character along Gordon Street and Latrobe Terrace.
- The desire to create additional public space at busy intersections.
- The need to respond to the existing residential character of Spring Street and Autumn Street.
- The need to respond to the proposed new park.
- The need to respond to the existing retail character of Pakington Street.
- The need to transition between higher-scale buildings and low-scale residential areas along Ripley Street.
- The need to provide a buffer between proposed higher buildings and low-scale residential areas.

Table 1 is a summary of the proposed built form controls for each interface. These built form controls cumatively create the preferred design outcome for the streets in the Gordon Avenue precinct.

KEY	INTERFACE	GROUND FLOOR SETBACK	STREET WALL HEIGHT	UPPER LEVEL SETBACK
	Latrobe Terrace	5m	N/A	N/A
	Madden Street	0m	2 Storeys	0m
	Gordon Avenue	3m	6 Storeys	0m
	Pakington Street	0m	2 Storeys	5m
	Park interface	3m	6 Storeys	0m
	Ripley Street	5m	2 Storeys	5m
	Residential street interface	3m	2 Storeys	3m
	Direct residential interface	5m	2 Storeys	5m

Table 1. Interface requirements

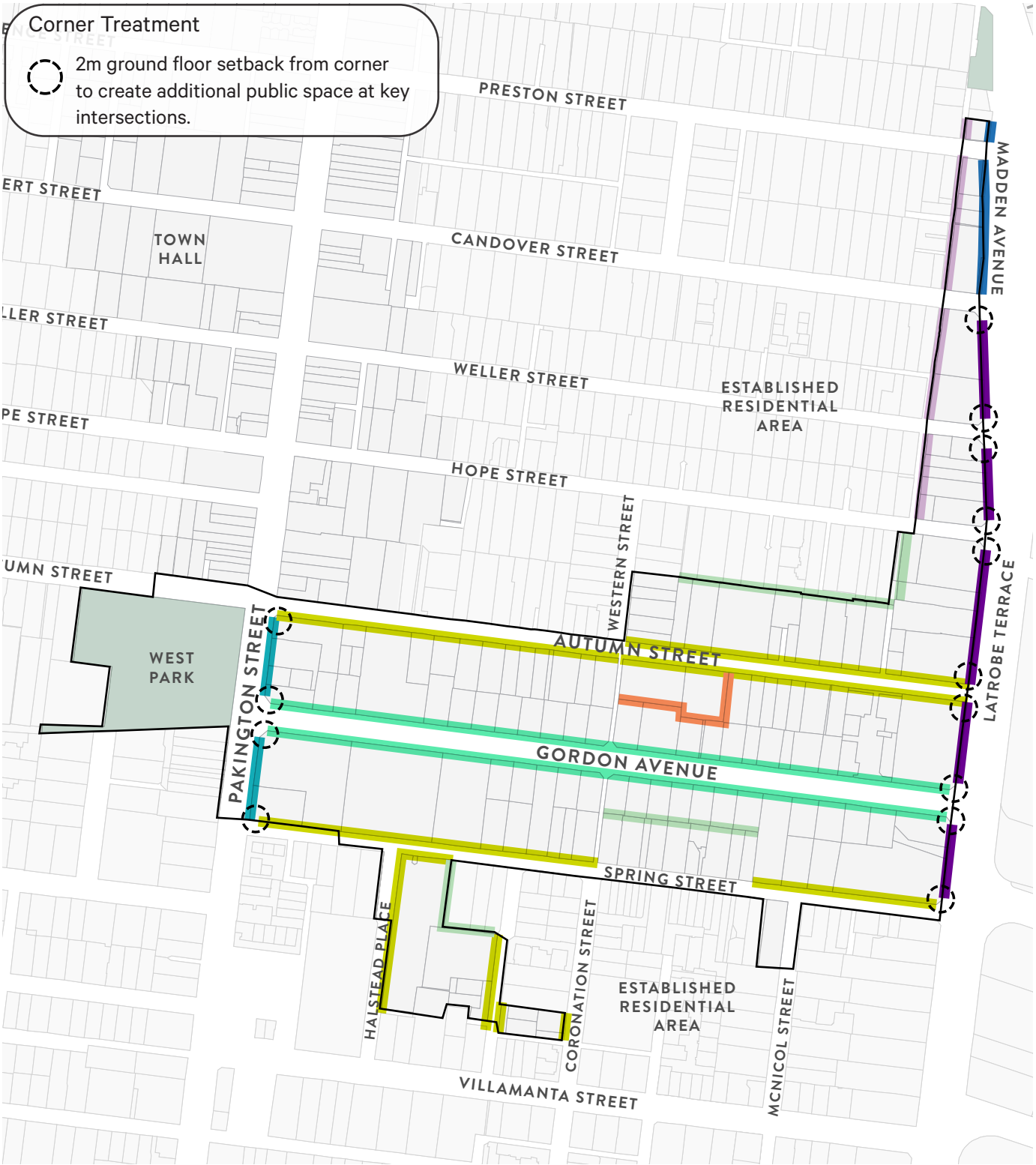


Figure 14. Interface design.

Interfaces

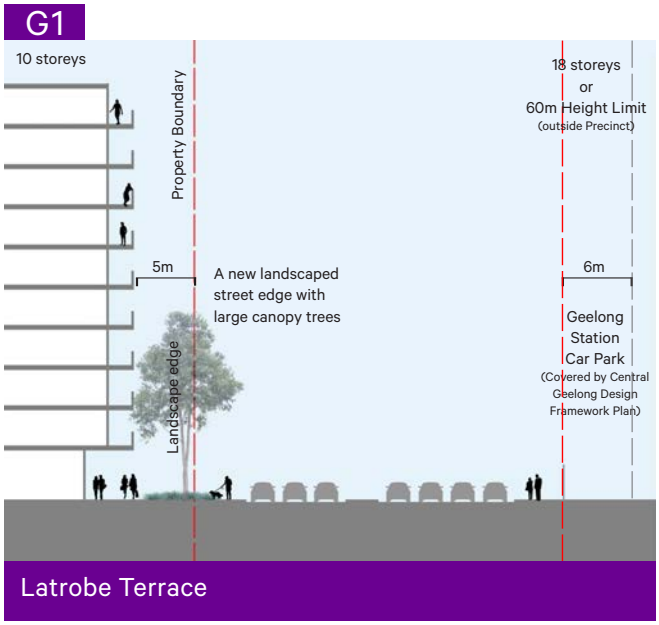


Figure 15. Latrobe Terrace indicative section demonstrating landscape buffer.

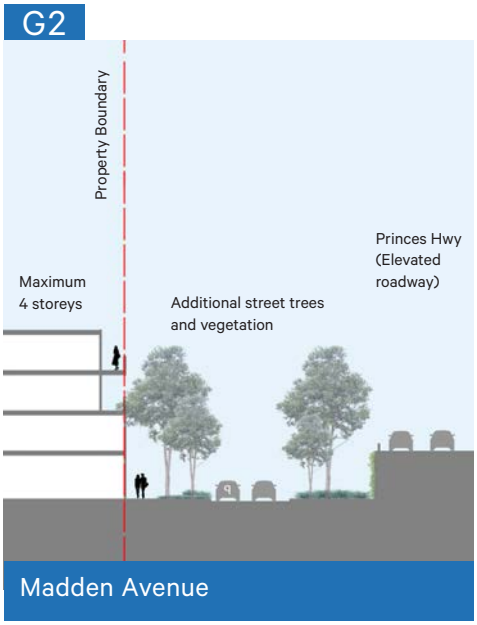


Figure 16. Madden Avenue indicative section demonstrating no ground floor setbacks or upper level setbacks.

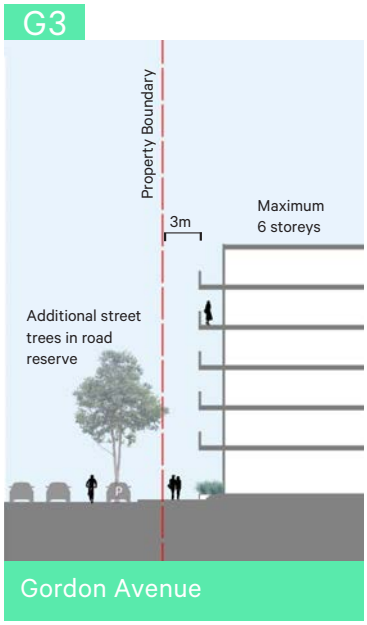


Figure 17. Gordon Avenue indicative section demonstrating landscaped edge.

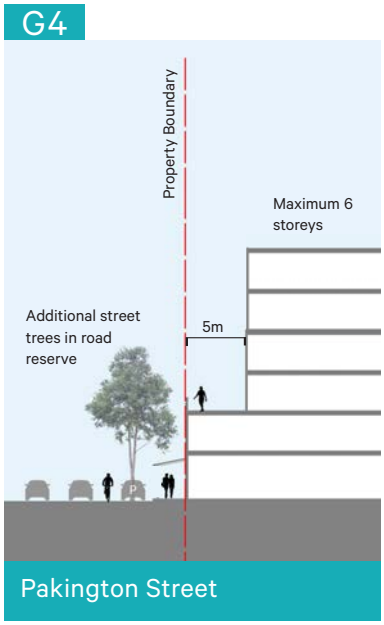


Figure 18. Pakington Street indicative section demonstrating no ground floor setback and awning at ground level.

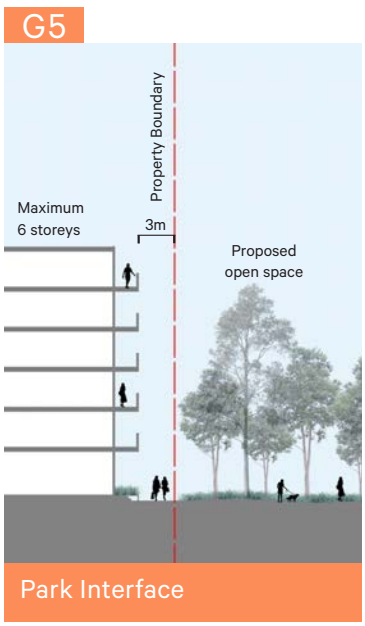


Figure 19. Park interface indicative section demonstrating landscaped edge.

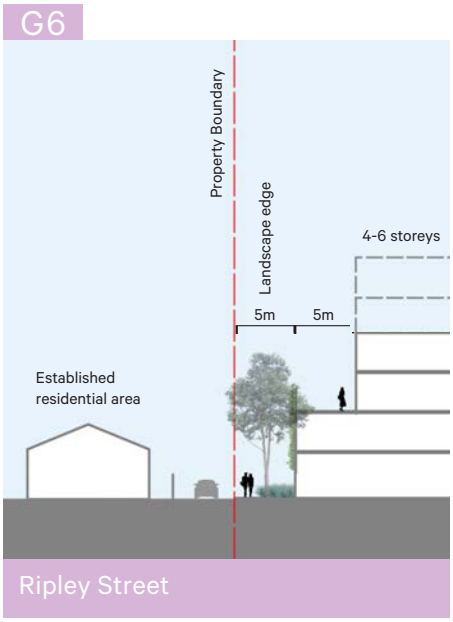


Figure 20. Ripley Street indicative section demonstrating rear lane access and landscaping to create a buffer to low-scale residential areas.

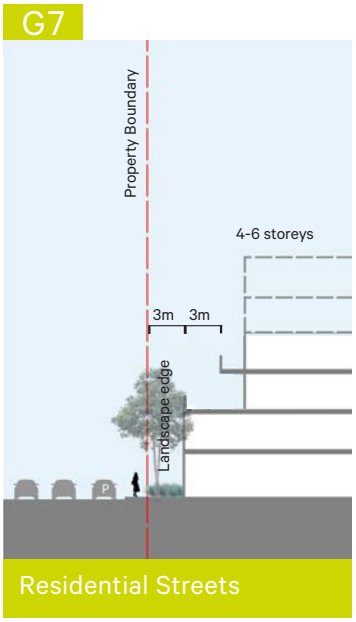


Figure 21. Residential streets indicative section demonstrating landscape setback that aligns with predominant street character.

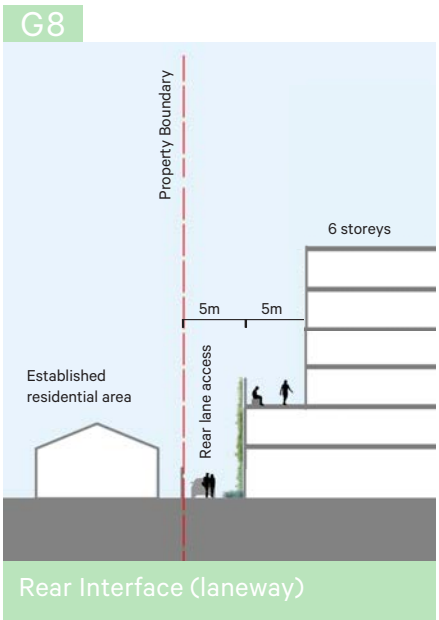


Figure 22. Direct residential interface indicative section. This section demonstrates the provision of a pedestrian walkway and a landscaped setback to provide a buffer to low-scale residential areas.

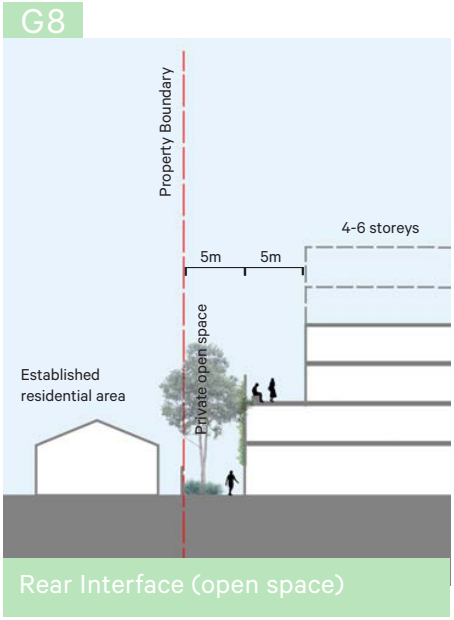


Figure 23. Direct residential interface indicative section. This section demonstrates the provision of a private garden at the ground level to provide a buffer to low-scale residential areas.

New laneways

The Gordon Avenue precinct will require new laneways to manage the increased service requirements of larger scale buildings and provide improved connectivity for walking and cycling.

Figure 24 demonstrates the preferred location of new one-way, two-way laneways and upgraded laneways. These have been strategically located to improve connectivity and maximise service access to multiple large-scale sites. Large-scale sites have been prioritised for the location of new laneways. These have been proposed to be delivered within sites in single ownership with the exception of two large-scale sites in the Gordon West character area that directly interface. This would require a 4.5m laneway to be delivered within both of these sites (see no.1 on Figure 24). The existing central laneway is proposed to be upgraded into a pedestrian walkway with a new pedestrian crossing providing direct access across Gordon Avenue.

Figure 25-Figure 27 demonstrate indicative designs of these new laneways. Image 27-Image 29 demonstrate existing laneways of a similar scale.

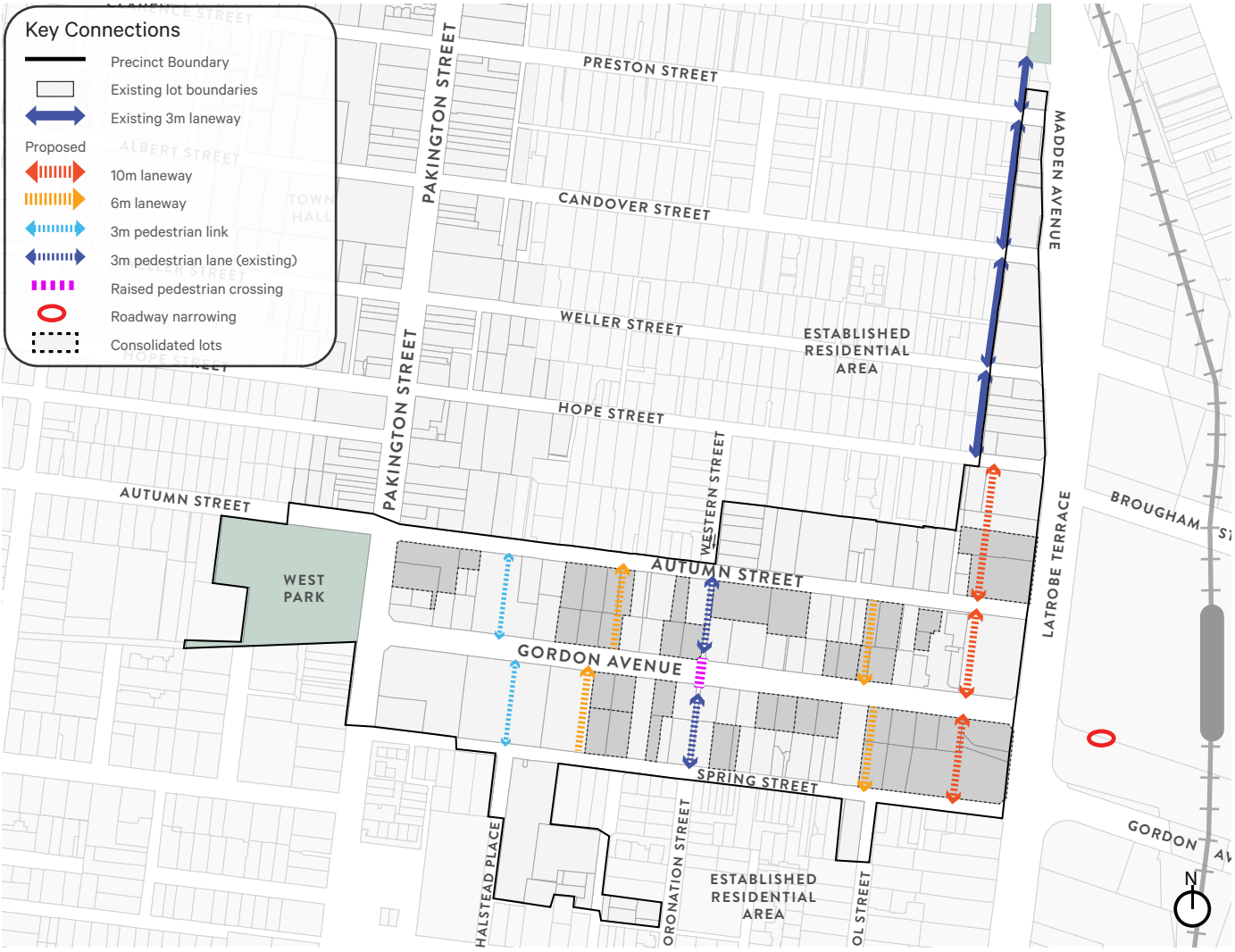


Figure 24. Preferred laneway locations.

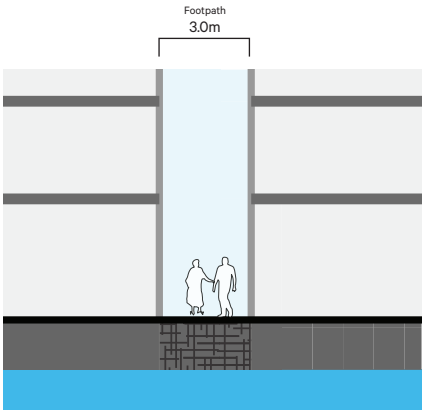


Figure 25. Pedestrian Link

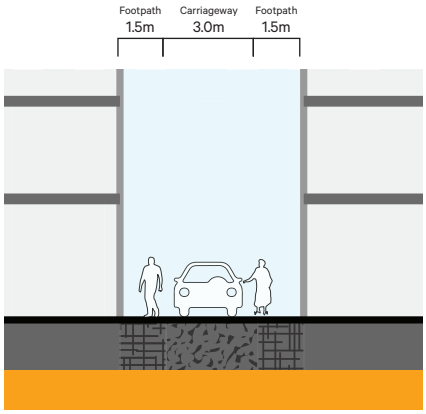


Figure 26. 6m Shared Laneway Link

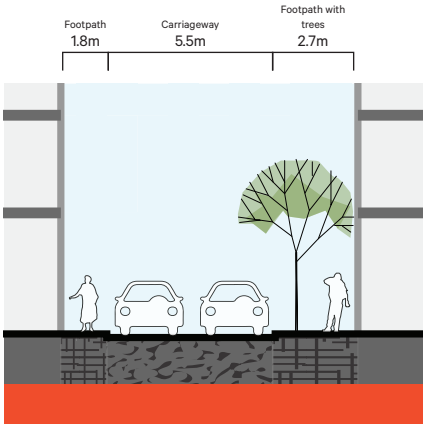


Figure 27. 10m Laneway Reserve

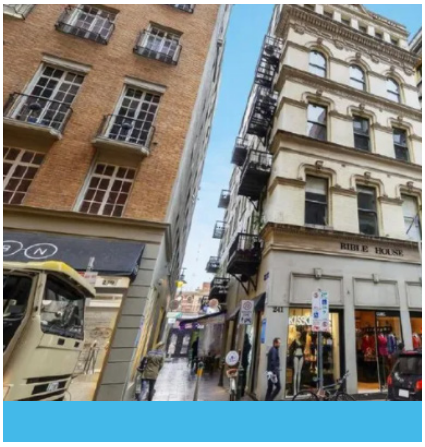


Image 27. Scott Alley in Melbourne demonstrates that this scale of built form can be supported along a narrow laneway due to the short length of the laneway.

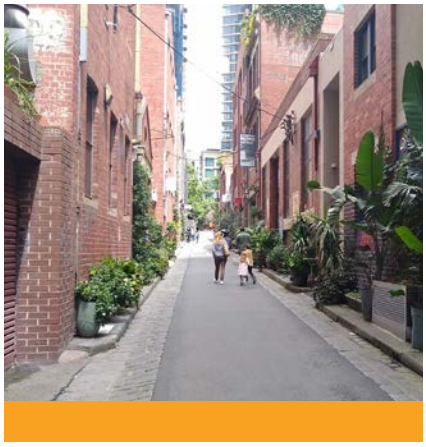


Image 28. Guildford Lane in Melbourne demonstrates a laneway of a similar width that includes one-way traffic and greening interventions.

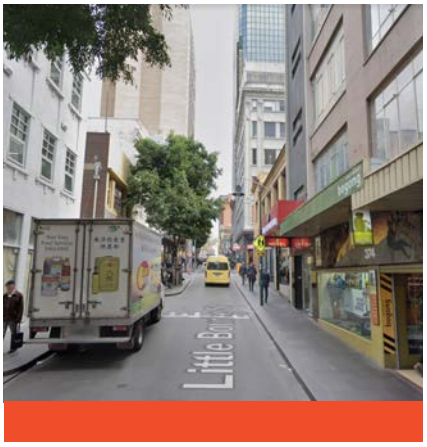


Image 29. Little Bourke Street in Melbourne demonstrates a laneway of similar width that includes two-way traffic and greening interventions.

Building heights and site coverage controls

Landscape is integral to the environmental performance and amenity of well-designed buildings.

Figure 28 communicates the overall height strategy for the Gordon Avenue Precinct. The proposed heights are predominantly mid-scale and intend to deliver a medium-scale of built form between 4-6 storeys. The tallest buildings are proposed at the Latrobe Terrace and Gordon Avenue intersection in response to the scale of development proposed on the east side of the street. Heights transition down to low-scale residential areas to the north and south.

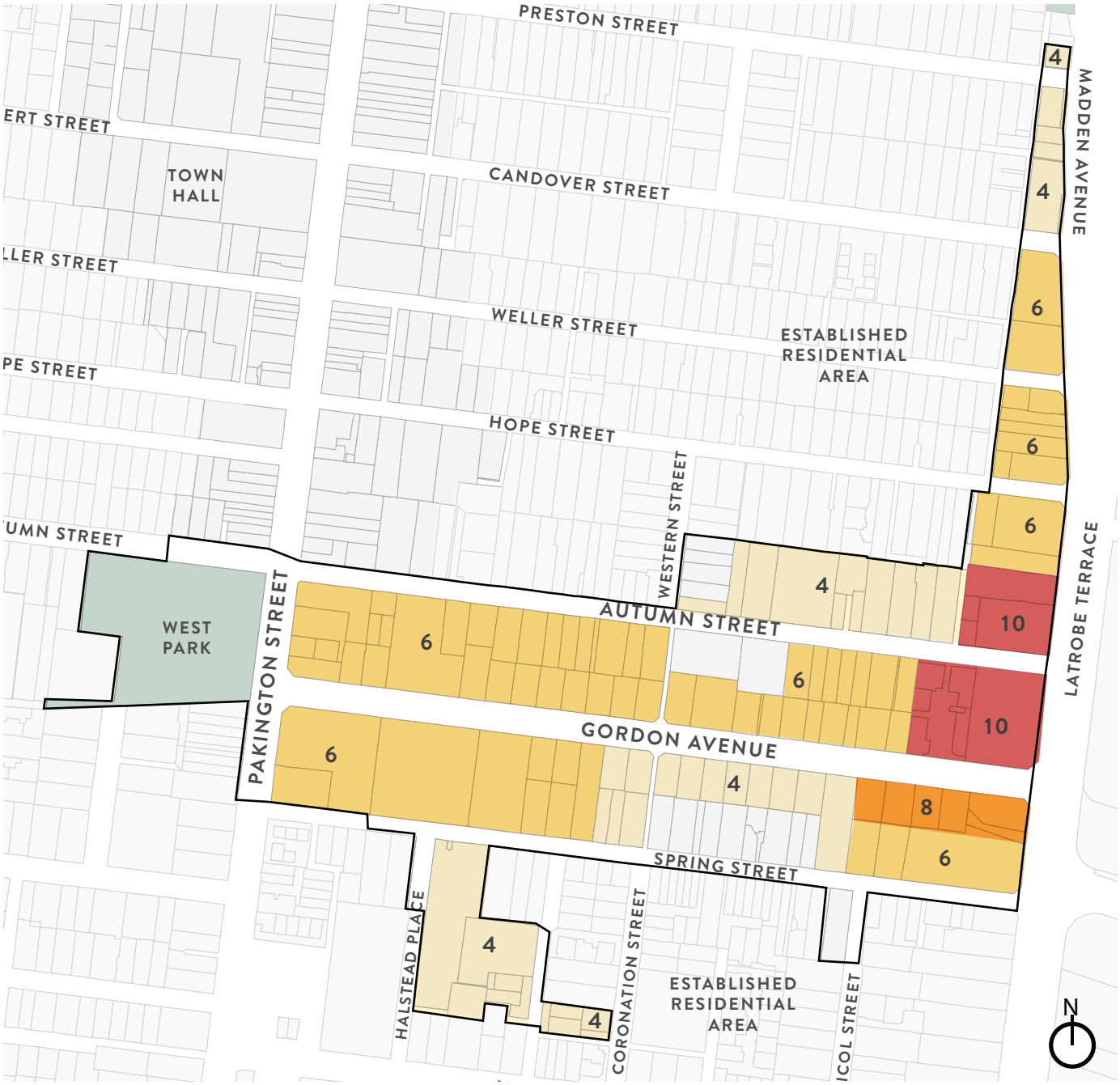


Figure 28. Building heights.

Figure 29 proposes site coverage controls that respond to the characteristics and context of the sites in each precinct. The highest level of site coverage (80%) is proposed to Latrobe Terrace where landscape will predominantly be delivered to the front and rear of sites. A moderate site coverage contro (70%) is proposed in Gordon Central to support landscape at interfaces and internal courtyards.

The lowest site coverage control (60%) is proposed in Gordon West where the sites are large and significant open space will be required to deliver sufficient amenity within these sites.

Solar access controls are proposed to be introduced to protect Autumn Street, Gordon Avenue and Spring Street. This will ensure that these important public spaces will remain high-amenity in the long-term.

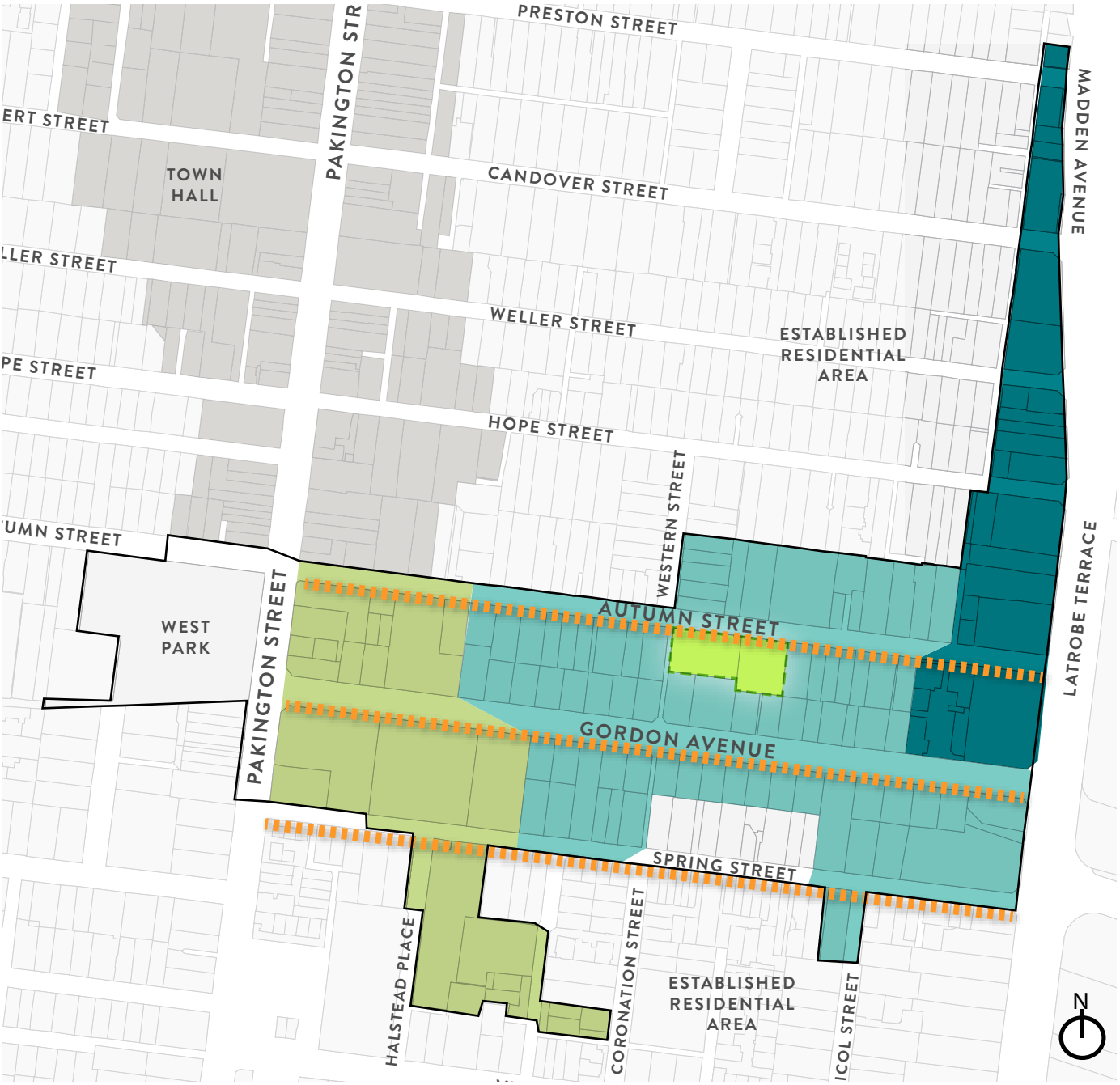


Figure 29. Site coverage requirements and solar requirements.

Autumn Street

Image 30. BEFORE - Autumn Street looking south-east towards a Council owned carpark.

Figure 30. AFTER - Visualisation demonstrating the same view along Autumn Street representing upgrades to the public realm, indicative built form and a future open space.

Gordon Avenue

Image 31. BEFORE - Looking east along Gordon Avenue.

Figure 31. AFTER - Indicative built form and public realm upgrades when looking east along Gordon Avenue.

Sections

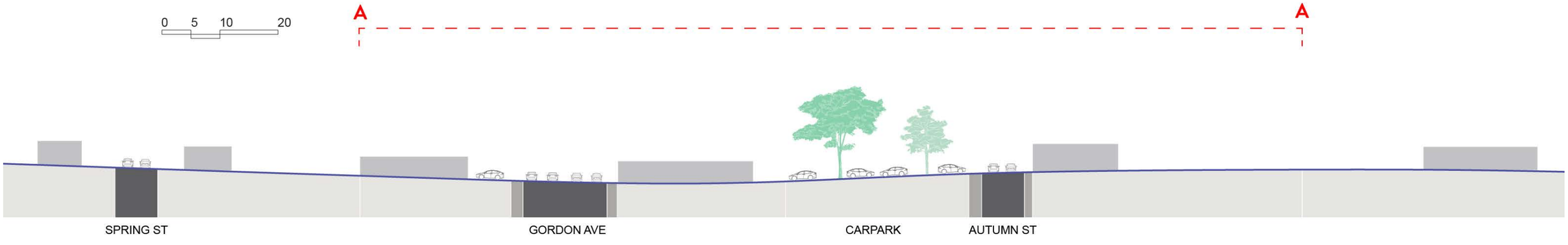


Figure 32. BEFORE - Section AA

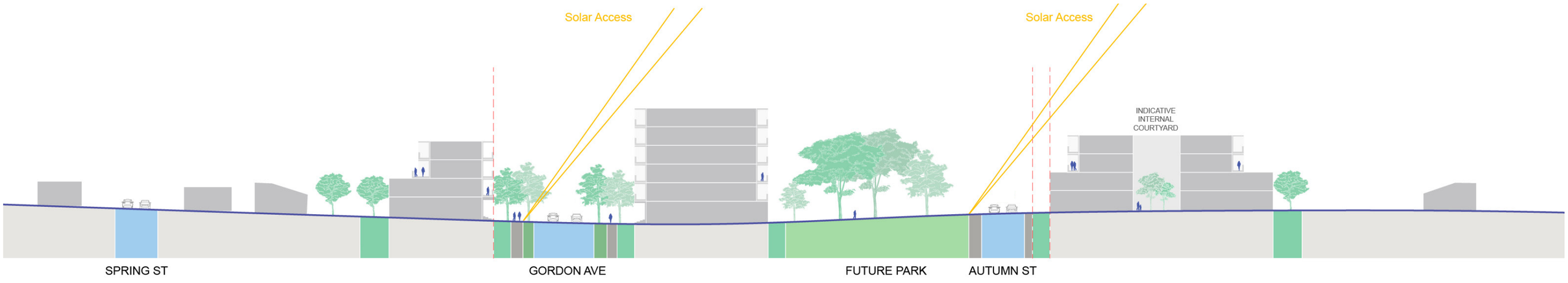


Figure 33. AFTER - Section AA

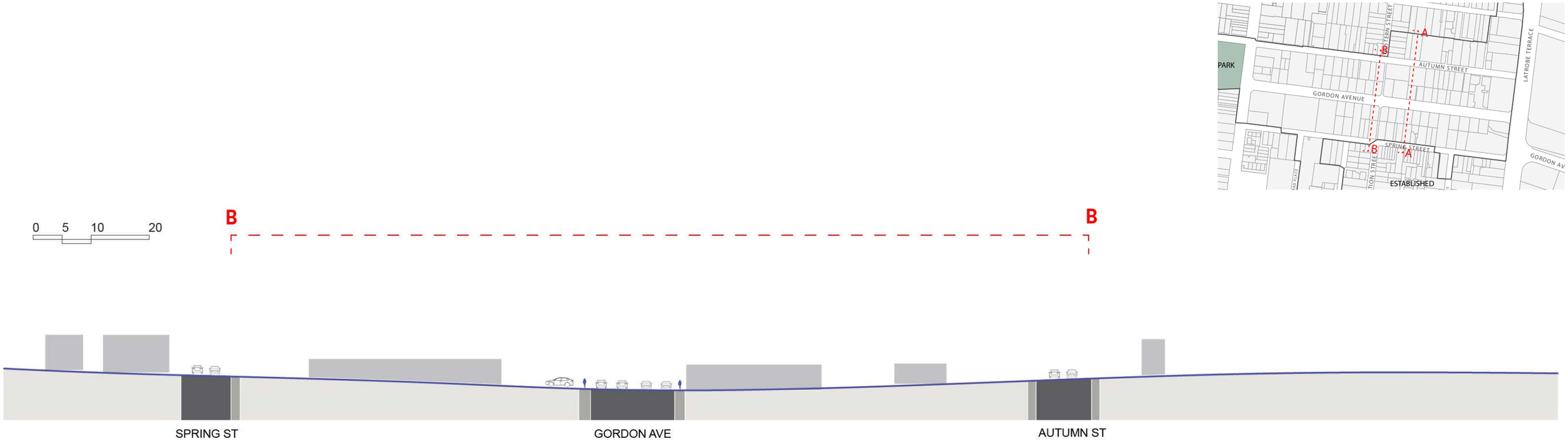


Figure 34. BEFORE - Section BB

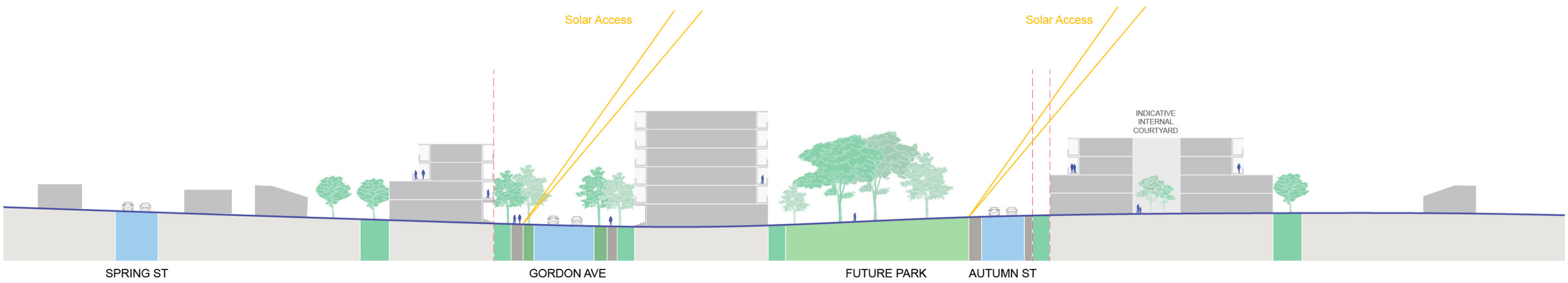


Figure 35. AFTER - Section BB

Pakington North

Overview

The Pakington North Precinct extends along Pakington Street from Church Street to Waratah/Wellington Street. The precinct has developed over time as a peripheral area to the Pakington Street heritage core. The area traditionally had office uses with a small amount of retail but has gradually transitioned to accommodate more retail and hospitality uses. The precinct is in a Commercial 2 Zone.

As you move away from the retail core in central Pakington Street, the quality of the public realm deteriorates. There are less trees, inconsistency in the built form, inactive interfaces and a greater dominance of carparking. There is an opportunity to extend elements of the valued character of central Pakington further north to improve the amenity of the street.

Pakington North benefits from local retail and its close proximity to the waterfront which is less than ten minutes walk along Church Street.

Chapter structure

Figure 36 demonstrates the structure of this chapter which articulates a place-specific built form framework for Pakington North.

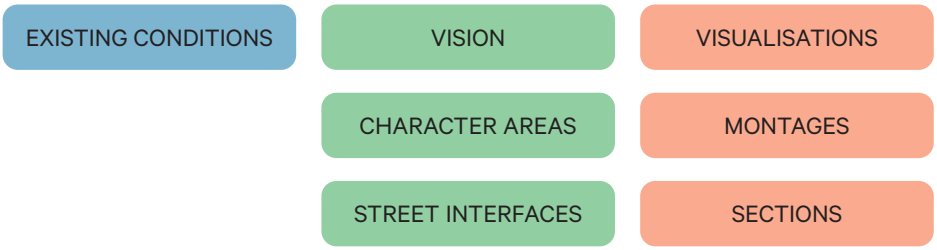


Figure 36. Chapter structure.


ARMIDALE ROAD 22
PT
SOLTUS

Existing conditions

Image 32. A mixed character of 1-2 storey commercial and industrial buildings in Pakington North. This northern portion of the street has no trees or street furniture.

Image 33. Inconsistent footpath treatments and a mixture of buildings with and without awnings along the street.

Image 34. Dual carriageway with carparking along both sides of the street. Brick pavement treatment particular to Pakington Street.

Image 35. A mix of building typologies along the street, some of which directly interface the street and others which have ground floor setbacks dedicated to landscaping or carparking.

Image 36. There are some examples of corner buildings which are chamfered at the corner and create more public space at intersections.

Image 37. Large-scale sites such as the fresh food market have large setbacks dedicated to at-grade carparking.

Figure 37. Pakington Street north aerial with photo locations

Image 38. 'Little Pakington' in the Pakington Street central precinct is an example of the fine-grain shop fronts common to Pakington Street.

Image 39. Low-scale residential areas of predominantly single storey dwellings are located to the east and west. These include areas of high heritage value.

Image 40. Existing interfaces between commercial and residential buildings are in some instances buffered by rear laneways.

Image 41. Existing interfaces between commercial and residential buildings are in other instances built to the boundary.

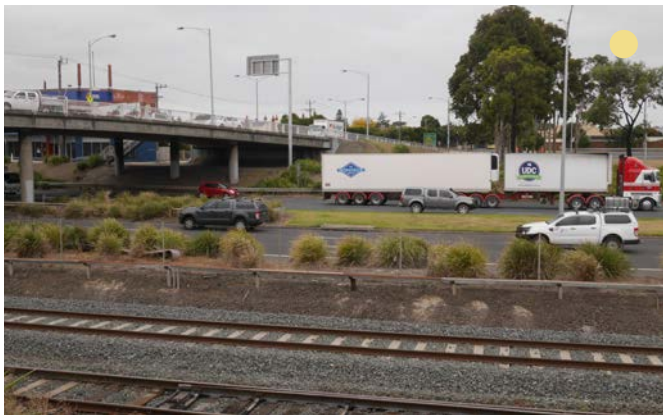


Image 42. North-east of the precinct interfaces the railway line and freeway.

Image 43. The railway sidings currently represent a large void to the east of the study area. The site signifies a major redevelopment opportunity when its current purpose is longer strategically required.

Figure 38. Pakington Street north aerial with photo locations

Vision

Figure 39. Indicative built form and public realm upgrades when looking north-east along Pakington Street towards Church Street.

The Pakington North Precinct centres on vibrant Pakington Street and is a hub of sustainable shop-top living. Shops, offices and communal spaces are found at lower levels with high-quality apartments above.

Buildings predominantly range in height from 4-8 storeys with lower heights at the southern end of the street gradually increasing towards the Church Street intersection. Buildings along Pakington Street reduce in scale at the rear where they interface to low-scale residential precincts. Landscape is used to create a transition between higher building forms and these areas of predominantly 1-2 storey buildings. The lower levels of buildings have rich material detail, awnings to provide shelter to the street and easily identifiable entrances. A new park in the Railway Yards provides a central meeting point for those that live and work on Pakington Street.

Figure 40. Key moves for the Pakington North precinct.

Character Areas

The analysis of existing conditions led to the identification of three different character areas in the Pakington North precinct - Church Street Junction, Pakington Retail and Strategic SIte s.

Church Street Junction

Church Street Junction includes the sites that interface the Church Street junction and the sites to the east of Pakington Street that directly interfce the railway line. The junction is a car centric area and is characterised by a large roadway, large off street car parks, a petrol station and other road related infrastructure. There is a lack of public amenity or greening within the precinct.

Pakington Retail

Pakington Retail is characterised by a mix of one and two storey retail buildings that address Pakington Street. Buildings are generally located on the footpath edge, however some sites provide off street car parking with built form set back from the street edge. The sites are relatively uniform in depth and width and abut sensitive residential areas to the east and west. There are several heritage buildings in this precinct.

Strategic Sites

Strategic Sites include the The Rail Stabling Yard and the Pakington Strand Shopping Centre. The Rail Stabling Yards are bound by the rail corridor to the east, Pakington Street to the west (200m frontage) and an established residential area to the south. The Pakington Strand Shopping Centre site includes a supermarket, a large at-grade carpark, a number of smaller retailers and the heritage protected Kinners Ropeworks building.

Figure 41. Character areas.

Church Street Junction

La Trobe Terrace is a predominantly commercial precinct that benefits from its close proximity to Geelong Railway Station and the city centre. A landscaped setback at the ground floor protects internal amenity at the ground floor and contributes to the improvement of the La Trobe Terrace public realm.

Buildings reduce in height to the west in response to the sensitive residential interfaces to the west.

Figure 42. Church Street Junction aerial

Image 44. Gertrude Street Apartments, Jackson Clement Burrows.

Image 45. Breese Street, Breathe Architecture.

Image 46. Breese Street, Breathe Architecture.

The angular roof form of the Gertrude Street Apartments by Jackson Clement Burrows follows the transition in heights to the surrounding buildings, this allows for the street wall to appear to follow the context and intergrate well into the surrounding environment. The change in materiality reflect the change in building use of the ground floor commercial space to the upper level residential apartments.

Breese Street by Breather Architecture use materiality and an upper level setback to continue the exsting street wall height of the neighbouring buildings. The upper level setback allows the full height of the building to not be seen on ground level, creating an unimposing form. Additonally the setback allows for large open balcony space for residents. Additonally the greenery coming from the roof of the building suggest an internal open space.

The sawtooth roof profile of the Breese Street building breaks down the form and allows for solar panel installation contributing the the overally sustainability of the building.

Pakington Street Retail

Pakington retail is a mixed use precinct with fine-grain retail tenancies (nominally 5-10m wide) at the lower levels and residential uses at upper levels. A consistent two storey street wall and ground level awnings extend the valued retail character of Pakington Street to the north.

Ground floor setbacks to the rear of buildings support the transition in scale down to low-scale residential precincts in the east and west. Corners buildings integrate landscape and ground floor setbacks in order to increase the quality of the public realm and soften views of higher built form from low-scale surrounding areas.

Figure 43. Pakington Street Retail aerial

Image 47. 1 Wilson Avenue, Fieldwork.

Image 48. 121 Lygon Street, Fieldwork.

1 Wilson Avenue by Fieldwork incorporates awnings over the ground floor, representing a key feature of a typical retail typology. The setback allows for on street seating and planting, contributing to the public realm. The upper level setback and change in materiality break up the form and create a unimposing design.

Image 50. Affinity Apartments, Idle Architecture Studio

This approach can also be seen in Fieldwroks 121 Lygon Street and the Affinity Apartments by Idle Architecture Studio. Both of these designs also incporporate an awning, again emphasising the commercial use of the ground floors.

Strategic sites

A village of buildings of varying scale and use are integrated into a landscape setting. The master plan for each site prioritises sustainable development outcomes, celebrates heritage buildings and provides new public open space for the growing community.

A new network of streets and laneways seamlessly integrates these sites into the surrounding built form fabric and invites people in. Buildings transition in scale down to low-scale residential areas and higher built form is sensitively designed to minimise visual impact on surrounding areas.

Figure 44. Strategic Sites aerials

Image 49. Nightingale Bowden, Breathe Architecture.

Image 51. COPA Building, CA Arquitectura

Image 52. Assembly Apartments, Woods Bagot

Nightingal Bowden by Breathe Architecture use varying colours to create two distinct parts to the design, breaking up the form and reflecting the grain of the surrounding context. The form is further broken down through the varying scale and shape of the fenestrations and the building separation. The ground floor setback allows creates undercover spaces and allows for outdoor seating and additional planting. The large amount of glazing on the ground floor distinguishes the commercial use the to the upper level residential apartments.

The COPA Building by CA Arquitectura incporporates a large open space between the built form. The creates relief from the buildings and a sunny spot for the residents.

Assembly Apartments by Woods Bagot is an apartment development that is made up of a series of individual buildings with open space and pathways in the negative space. This building separation brings light into the buildings and creates relief from the built form.

Interfaces

Designing a high-quality street interface is an important aspect of the building design as this element of the building has the most significant influence on the public realm.

Buildings also need to provide a transition when they directly interface areas of single storey housing.

Preferred design outcomes have been established for all of the street interfaces and direct residential interfaces in the Pakington North precinct. These have been established in response to:

- The width and function of streets.
- The desire to create a new landscape character at the Church Street and Pakington Street intersection.
- The desire to create additional public space at busy intersections.
- The need to respond to the existing retail character of Pakington Street.
- The need to sensitively transition between commercial streets and residential streets.
- The need to provide a buffer between proposed higher buildings and low-scale residential areas.

Table 2 is a summary of the proposed built form controls for each interface. These built form controls cumatively create the preferred design outcome for the streets in the Pakington North precinct.

KEY	INTERFACE	GROUND FLOOR SETBACK	STREET WALL HEIGHT	UPPER LEVEL SETBACK
P1	Pakington Street	0m	2 Storeys	5m
P2	Railway interface	3m	8 Storeys	N/A
P3	Church Street	3m	N/A	N/A
P4	Residential transition	2m	N/A	2m
P5	Residential street interface	3m	N/A	N/A
P6	Direct residential interface	5m	2 Storeys	5m

Table 2. Interface requirements.

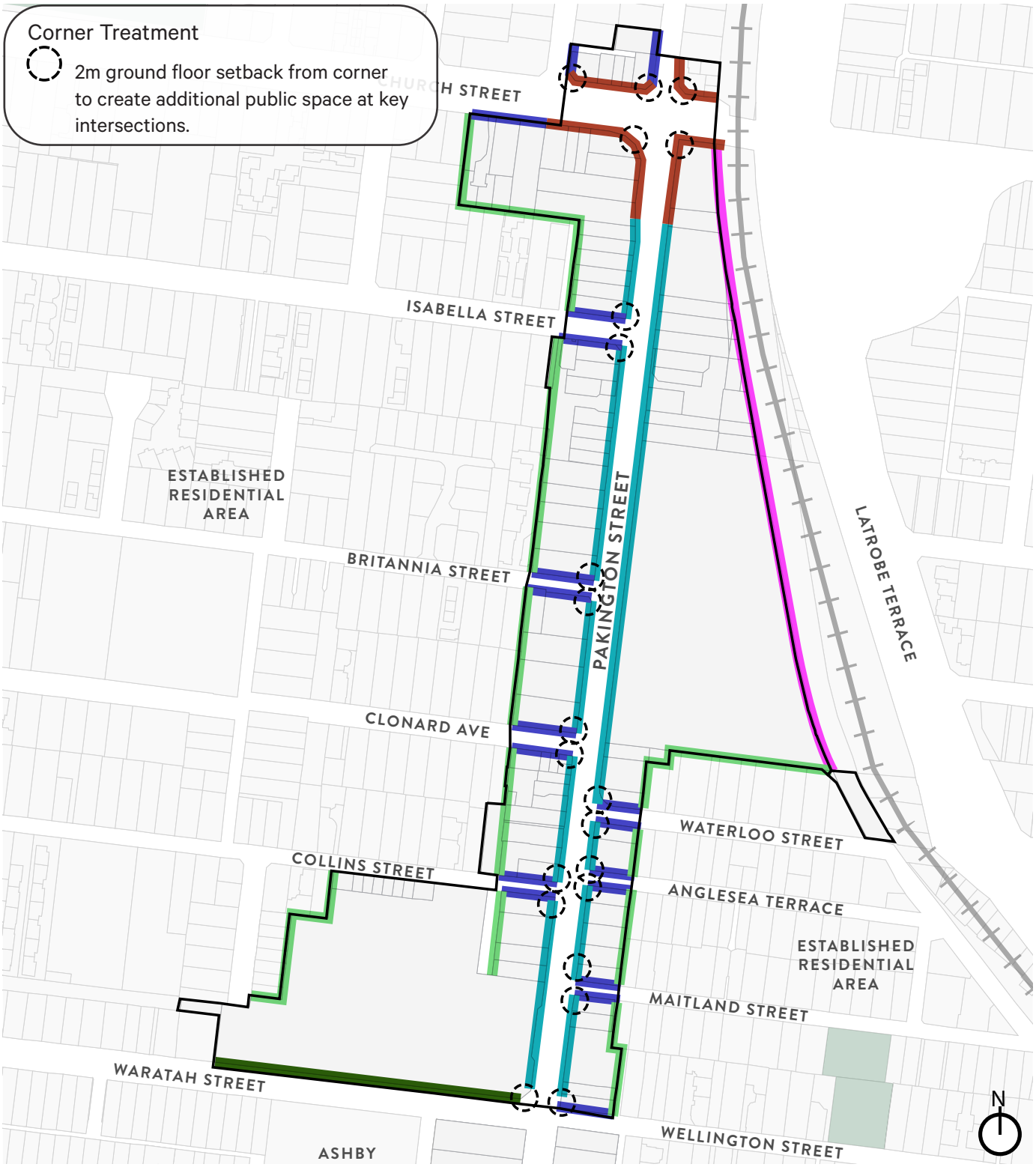


Figure 45. Interface design.

Interfaces

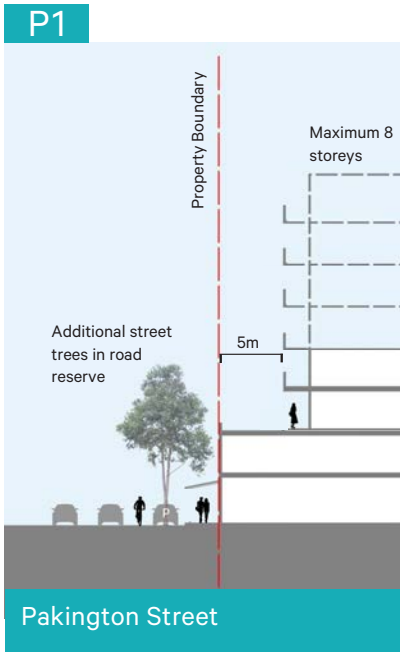


Figure 46. Pakington Street indicative section demonstrating no ground floor setback and awning at ground level.

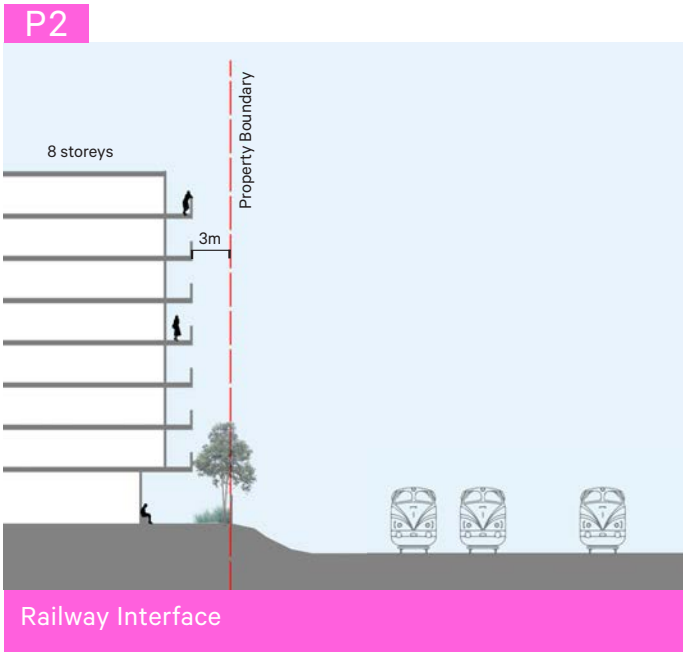


Figure 47. Railway interface indicative section demonstrating landscape buffer.

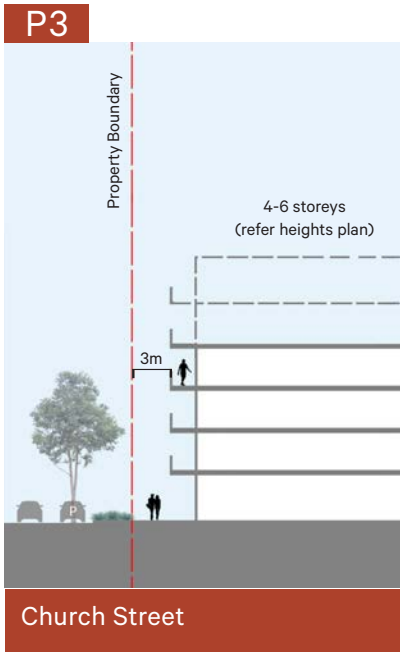


Figure 48. Church Street indicative section demonstrating landscape buffer.

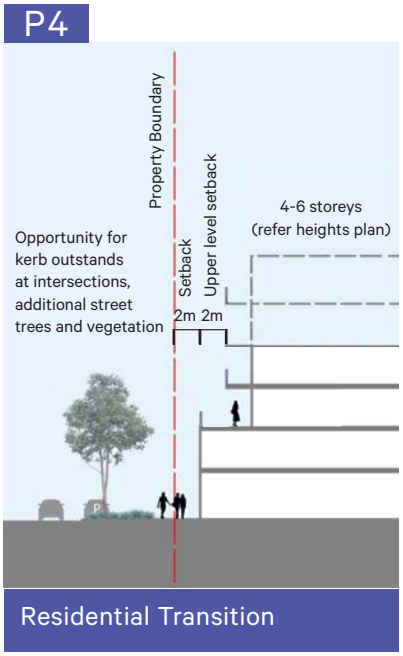


Figure 49. Residential transition indicative section that proposes a transitional ground floor setback of 2m to unify intersecting residential streets with commercial streets.

P5

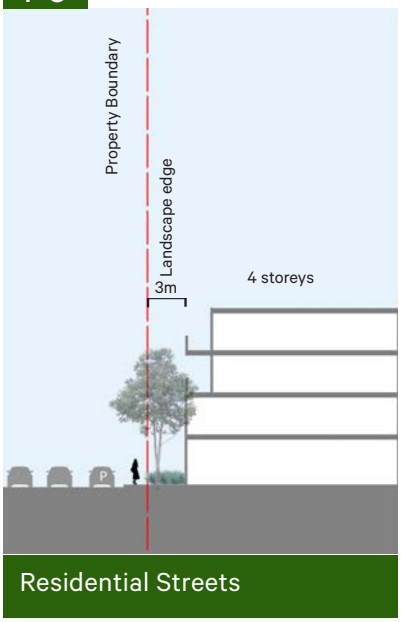


Figure 50. Residential streets indicative section demonstrating landscape setback that aligns with predominant street character.

P6

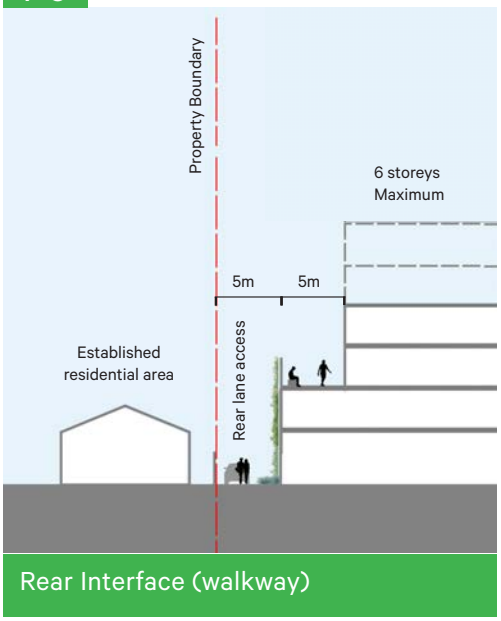


Figure 51. Direct residential interface indicative section. This section demonstrates the provision of a pedestrian walkway and a landscaped setback to provide a buffer to low-scale residential areas.

P6

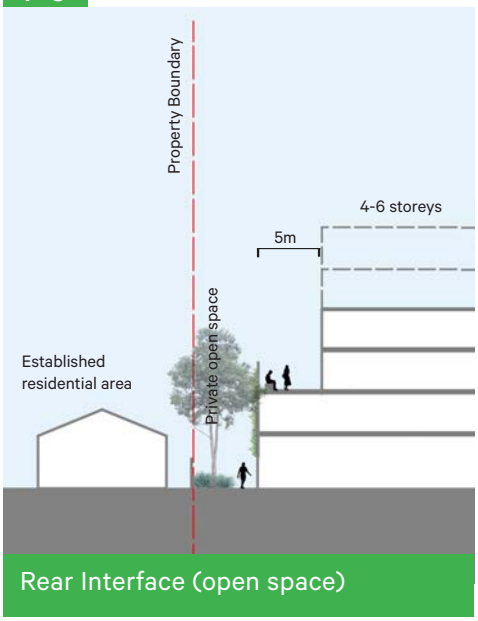


Figure 52. Direct residential interface indicative section. This section demonstrates the provision of a private garden at the ground level to provide a buffer to low-scale residential areas.

Building heights and site coverage controls

Building heights must be responsive to the context and sensitive to the adjacent low-scale residential areas.

Figure 53 communicates the overall height strategy for the Pakington North Precinct. The proposed heights are predominantly mid-scale and intend to deliver a medium-scale of built form between 4-6 storeys. The tallest buildings are proposed on the two strategic sites in the precinct - the rail sidings yard and the Woolwroths site. This is because height can be accommodated on these sites while managing the impact to low-scale residential areas. There is also an area where heights are proposed at 8 storeys along the raailway interface. This is because the development of these sites would have minimal impacts on neighbouring properties.

Pakington North Precinct

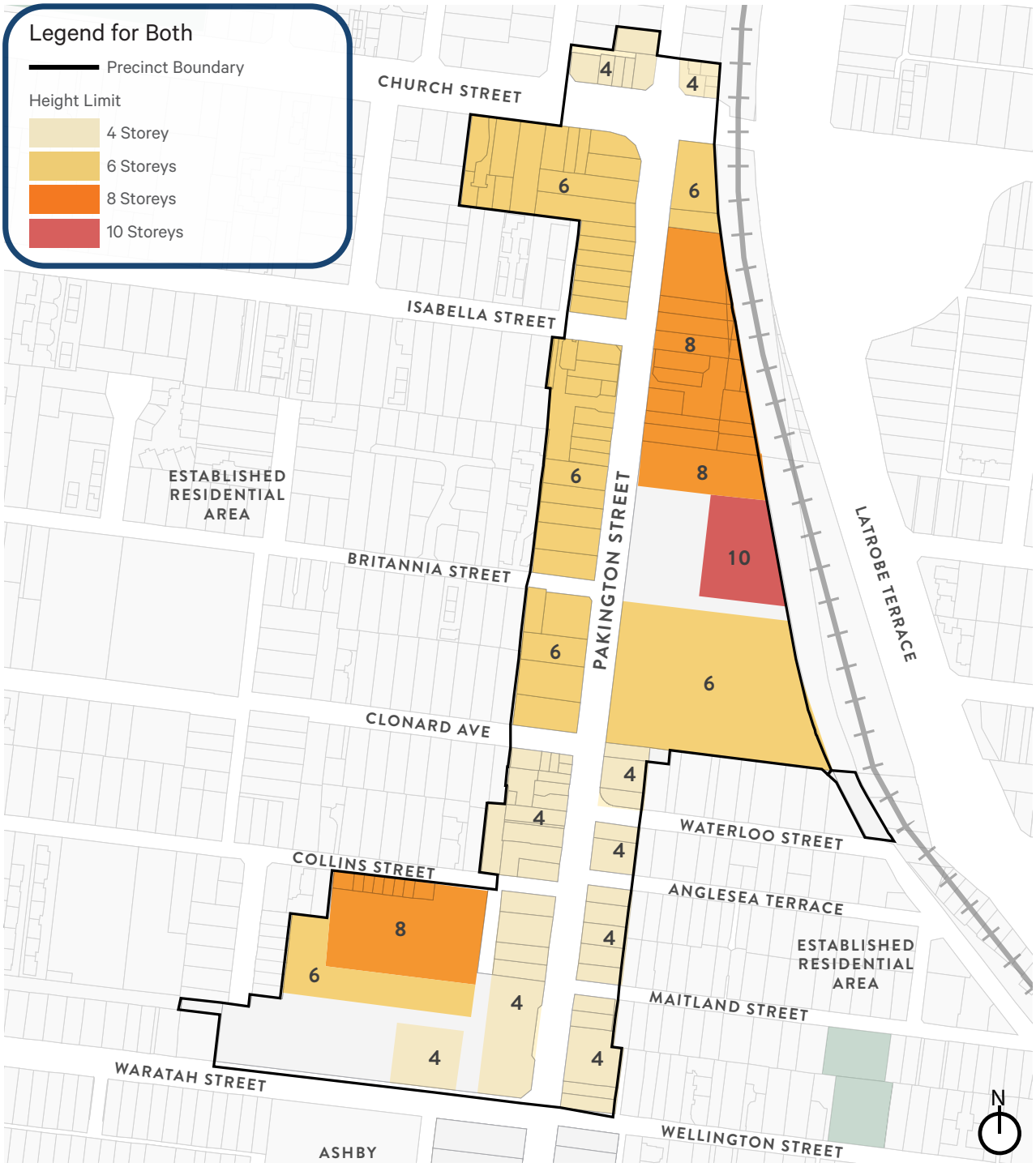


Figure 53. Building heights.

Landscape is integral to the environmental performance and amenity of well-designed buildings.

Figure 54 proposes site coverage controls that respond to the characteristics and context of the sites in each precinct. The highest level of site coverage (80%) along Pakington Street where landscape will predominantly be delivered to the rear of sites. A moderate site coverage control (70%) is proposed at the Church Street junction to support landscape to the front and rear of sites and internally. The lowest site coverage control (60%) is proposed on strategic sites where the sites are very large and significant open space will be required to deliver sufficient amenity within these sites.

Solar access controls are proposed to be introduced to protect Pakington Street and to the primary school. This will ensure that these important public/semi-public spaces will remain high-amenity in the long-term.

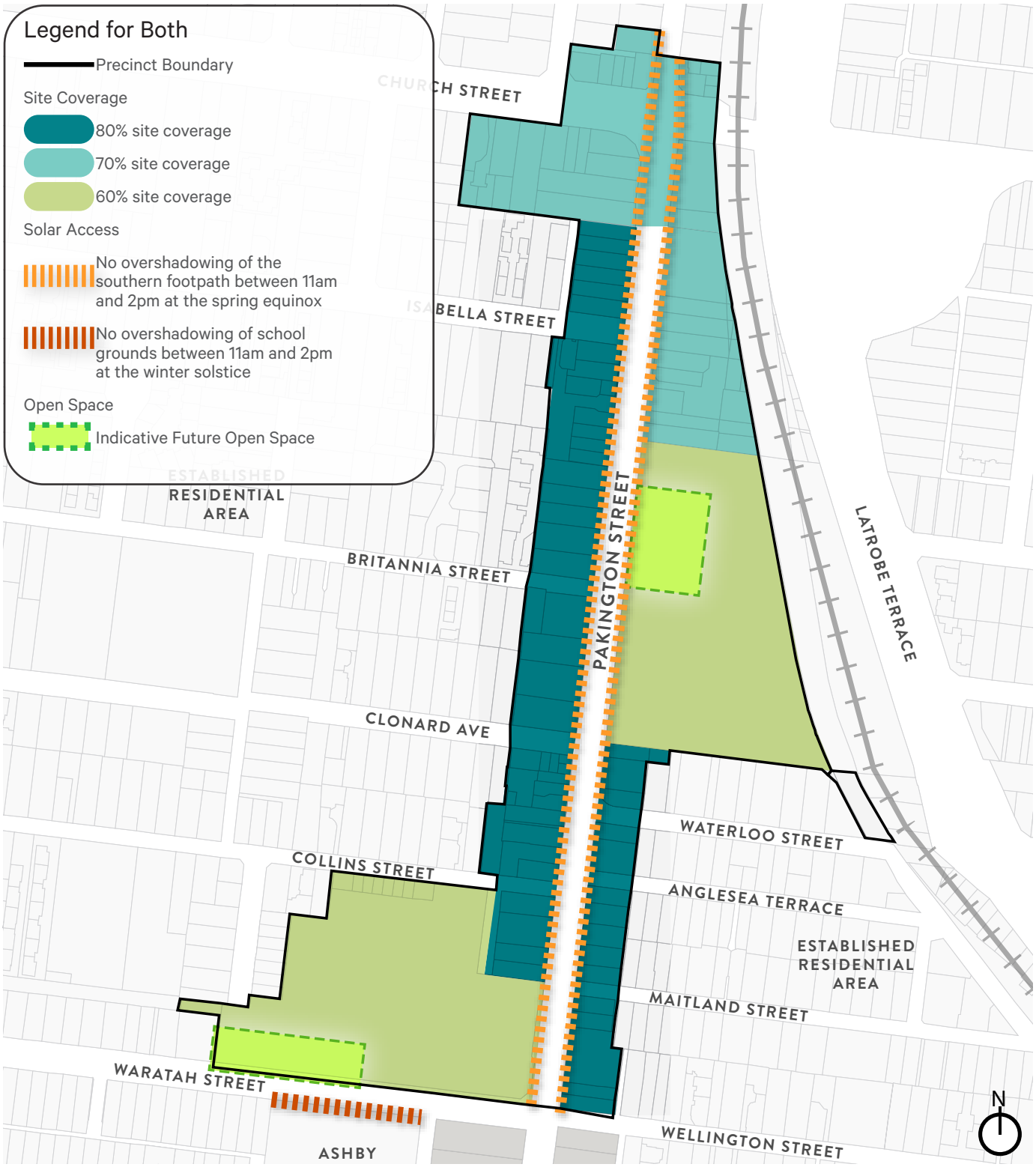


Figure 54. Site coverage requirements and solar requirements.

Pakington Street

Image 53. BEFORE - Looking north-east along Pakington Street towards Church Street.

Figure 55. AFTER - Indicative built form and public realm upgrades when looking north-east along Pakington Street towards Church Street.

Waterloo Street

Image 54. BEFORE - Looking west along Waterloo Street towards Pakington Street.

Figure 56. AFTER - Indicative built form and public realm upgrades when looking west along Waterloo Street towards Pakington Street.

Sections

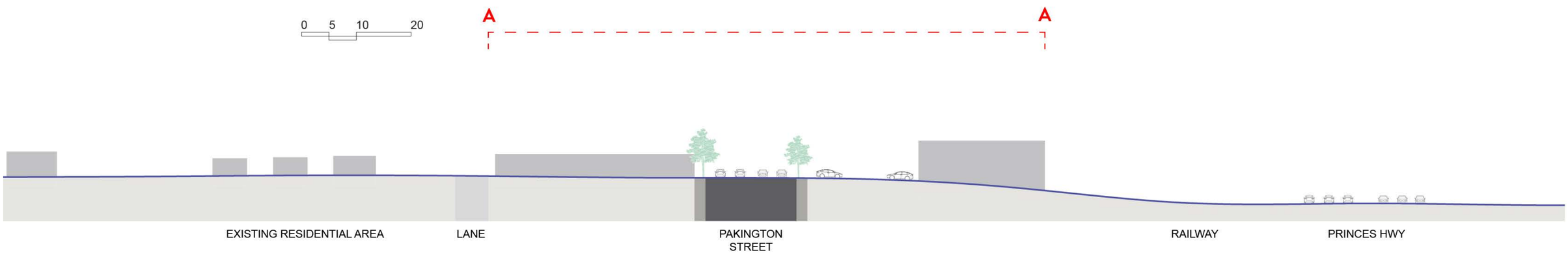


Figure 57. BEFORE - Section AA

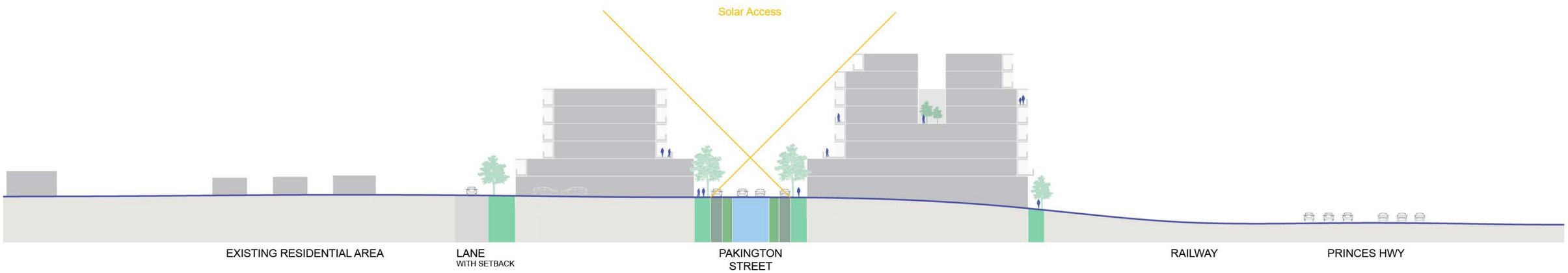


Figure 58. AFTER - Section AA

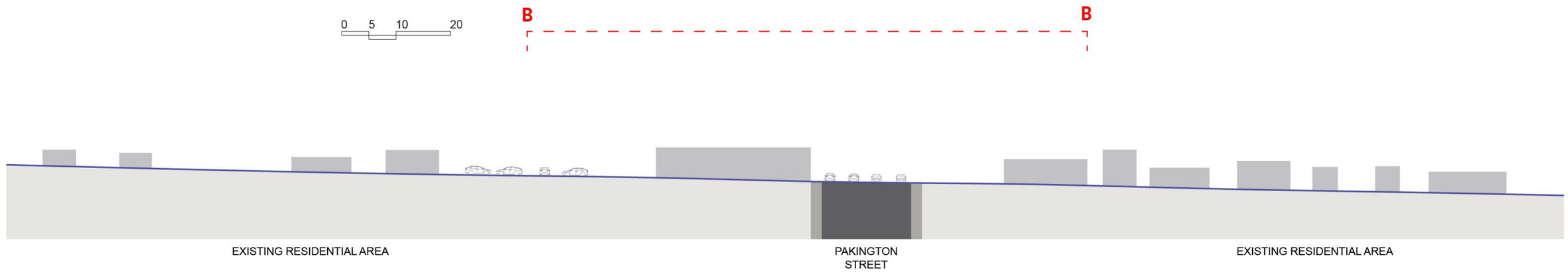


Figure 59. BEFORE - Section BB

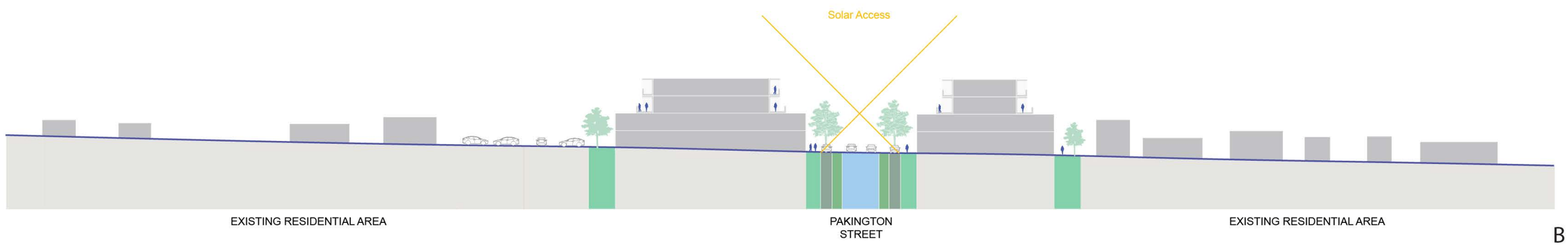


Figure 60. AFTER - Section BB

The importance of selecting appropriate controls to deliver the vision and design objectives

The following overarching design objectives have been established through this work:

- Design buildings that are sensitive to the context
- Create engaging streets and laneways
- Deliver high-amenity housing and commercial tenancies.
- Integrate landscape as a key driver of building design.

A range of place-specific, preferred design outcomes have been developed through this work which are focused on delivering these objectives. They include:

- Ground level setbacks to public spaces (streets, laneways and parks)
- Upper level setbacks to streets and laneways
- Buildings setbacks to adjacent residential uses
- Site coverage
- Overall building heights
- Solar access to streets and parks

While all of these outcomes are important and collectively contribute to the design objectives, some have a more direct, and therefore more critical, relationship with specific objectives. These relationships are illustrated in Table 3.

The ground level setbacks to streets, laneways and parks have a direct relationship to delivering all of the design objectives. This reflects the high degree of importance that this design outcome has in achieving the overall vision for each precinct.

	DEIGN OBJECTIVES			
PREFERRED DESIGN OUTCOMES	Design buildings that are sensitive to the context	Create engaging streets and laneways	Deliver high-amenity housing and commercial tenancies	Integrate landscape as a key driver of building design
Ground level setbacks to streets, laneways and parks	Direct	Direct	Direct	Direct
Upper level setbacks to streets and laneways	Direct	Indirect	Direct	Indirect
Buildings setbacks to adjacent residential uses	Direct	Indirect	Direct	Direct
Site coverage	Direct	Indirect	Direct	Direct
Overall building heights	Direct	Indirect	Indirect	Indirect
Solar access controls to streets and parks	Direct	Direct	Indirect	Indirect

Table 3. Relationship between the design objectives and the preferred design outcomes that have been identified to deliver them.

Density controls

The need to balance design flexibility and design certainty.

The proposed built form outcomes have been developed through a site analysis of existing conditions and the application of the design objectives within each precinct and character area. Attention has been paid to the holistic design outcomes that are sought and to the specific relationships between new development and the existing context, for example, to the street, or to adjacent low-scale residential areas.

The specific site conditions of an individual site may support variations to the proposed built form outcomes. Providing opportunities for flexible design responses to these localised conditions can lead to enhanced design outcomes.

Table 4 assesses the potential impacts of variations to the preferred design outcome. This assessment demonstrates that variations to the ground level building setbacks and the solar access controls would result in an unacceptable outcome. A mandatory built form control is therefore proposed to apply to ground floor setback requirements and solar access requirements.

However, minor variations to buildings heights, upper level setbacks to streets and laneways, setbacks to adjacent residential uses and site coverage could be acceptable if it could be demonstrated that the design objectives could still be met. This would need to be demonstrated through a site specific design response.

The need to manage the scale of variation from preferred design outcomes.

There is a need to manage the extent of variations from the proposed built form outcomes. This is because significant variations will undermine the delivery of the vision and design objectives.

This is exacerbated when significant variations from the preferred design outcome occur on multiple sites. This hs the cumultive effect of eroding the overall vision for each precinct and reducing the character and liveability of an area.

Considering the location of the two precincts adjacent to Geelong's CBD and the waterfront, development pressure is likely to escalate once the proposed rezoning of these two precincts occurs. This will result in developers seeking to accommodate increased yield on their sites which will lead to applications for increased building heights and reductions in setbacks and/or increases in site coverage. This scale of development pressure exposes the weakness in the use of discretionary controls to shape the overall building design and its relationship to its context.

The use of mandatory building heights, upper level setbacks, setbacks from low-scale residential neighbours and site coverage control would provide a clear method of addressing this issue, however, this would result in a loss of design flexibility to support site specific design responses.

A development control that manages the overall yield that is allowable on a site is a more direct way to address this problem. This is because it is the pressure to deliver of excess yield is driving significant variations away from preferred design outcomes. A Floor Area Ratio (FAR) control is therefore proposed to manage the overall density allowable within sites.

The proposed building height and site coverage outcomes can be readily converted into an appropriate FAR control. These are listed in Table 5. A developer would need to determine which FAR applies based on the building height and site coverage control that applies to their site. This FAR needs to be a mandatory control to have meaningful effect.

	Are minor variations on individual sites acceptable?	Explanation	Proposed method of regulating the outcome
Ground level setbacks to streets, laneways and parks	No	A reduction in the setback would have a number of negative consequences: • Varied building setbacks will create an incoherent, visually cluttered streetscape resulting in a precinct of poor character. • This could also introduce safety issues due to the introduction of concealed spaces. • Loss of dedicated landscape areas which would undermine the delivery of the vision and design objectives, • Poor amenity internally for ground level apartments.	Mandatory
Upper level setbacks to streets and laneways	Yes	A minor variation to these setbacks could be acceptable on some sites in response to existing adjacent conditions or as a result of detailed building design that reduces the visual bulk of upper levels.	Preferred (discretionary)
Buildings setbacks to adjacent residential uses	Yes	A minor variation to these setbacks could be acceptable on some sites in response to existing adjacent conditions.	Preferred (discretionary)
Site coverage	Yes	A minor variation could be acceptable, however, a high degree of landscape planting would need to be delivered, including large scale canopy trees (on sites with 60 or 70% coverage) and sufficient communal and public space.	Preferred (discretionary)
Overall building height	Yes	A minor variation in building height is likely to be acceptable on some sites (e.g. 1-2 additional levels) without compromising the overall character of each precinct. This would need to consider impacts on heritage and amenity outcomes.	Preferred (discretionary)
Solar access controls to streets and parks	No	No variation is acceptable as the incremental loss of sunlight to public space would permanently reduce the quality of the environment for pedestrians and park users.	Mandatory

Table 4. Potential for minor variations of built form outcomes in response to site specific context and the resultant proposed method of regulating that outcome.

	SITE COVERAGE		
BUILDING HEIGHTS	60%	70%	80%
4	2.4	2.8	3.2
6	3.6	4.2	4.8
8	4.8	5.6	6.4
10	6	7	8

Table 5. Proposed Floor Area Ratio controls

Delivering new laneways & open space

New laneways and open spaces are proposed on privately owned land. This requires the commitment to dedicate existing private land for public use and access.

The method of delivering this outcome is complex as it requires negotiation with individual land owners. This issue occurs in almost all settings where development intensification is being considered at a precinct scale. It is a significant challenge that needs to be considered through state-level policy reform.

However, until this is progressed, the following four options are available to deliver the new laneways and open spaces that are designated in this work.

1. Delivery through current open space provisions

   This would involve a landowner providing the laneway or open space as part of their open space contribution that is triggered through subdivision application.

2. Public acquisition

   This would involve the City of Greater Geelong (or potentially state government) purchasing the land directly from the private owner and committing it to a public open space or laneway use.

3. Developer contributions

   Two options are available:

- Including the purchase and delivery of public space in a Development Contributions Plan that is developed for the area. This would enable Council to receive funds from developers that could be used to purchase the land required. Council would need to be in a financial position to purchase the land at a time that suited the landowner's needs, regardless of whether the moneys had been received by that time from development within the precinct.
- Developers could be incentivised to deliver the laneways and open space through an incentive mechanism, such as a Floor Area Uplift which enables additional yield to be delivered on a site in recognition of the transfer of the private land needed for the laneway or open space into public ownership.

4. Publically accessible private space

   This would involve the delivery of the laneway or open space, however instead of being transferred into public ownership, the land would remain privately owned. Public access would need to be secured for 24 hours/ day and the design and management of the space would need to be carefully executed in order to make the spaces welcoming and accessible to all members of the community.

Appendix

Solar testing - Pakington North

Solar testing was undertaken to ensure that the proposed built form controls in Pakington North would not overshadow low-scale residential properties that interface the study area. Solar tests were undertaken at hourly intervals between the hours of 9am and 3pm at September 22.

This solar testing demonstrated that the proposed built form controls support the adequate retention of solar access to private open spaces to each property interfacing the study area as per Standard A14/B21 in ResCode which protects existing private open space from overshadowing from new developments.

Figure 61 demonstrates the findings from the solar testing which indicates that:

- Properties that directly interface the study area to the west (A/B) of Pakington Street are unable to meet the standard at 9am, but they are able to meet the overarching objective of maintaining five hours of sunlight access between 9am and 3pm.
- Properties that directly interface the study area to the east of Pakington Street (D) are unable to meet the standard at 3pm, but they are able to meet the overarching objective of maintaining five hours of sunlight access between 9am and 3pm.
- There is one commercial property to the south-west of the Railway Yards (C) that is significantly overshadowed between 9am and 1pm. This is considered acceptable due to the commercial use of the site. Further to this, the density control would allow massing to be redistributed within the site in order to maintain solar access to this property.
- The modelling demonstrates the worst case scenario. The proposed density control will allow buildings massing to be redistributed within sites to further reduce any overshadowing impacts on properties immediately adjacent to the study area.

STANDARD A14 AND B21

Where sunlight to the secluded private open space of an existing dwelling is reduced, at least 75 per cent, or 40 square metres with minimum dimension of 3 metres, whichever is the lesser area, of the secluded private open space should receive a minimum of five hours of sunlight between 9 am and 3 pm on 22 September. If existing sunlight to the secluded private open space of an existing dwelling is less than the requirements of this standard, the amount of sunlight should not be further reduced.

Figure 61. Solar testing findings.

Figure 62. 9am shadow diagram at September 22.

Appendix

Figure 63. 10am shadow at September 22.

Figure 64. 11am shadow at September 22.

Appendix

Figure 65. 12pm shadow diagram at September 22.

Figure 66. 1pm shadow diagram at September 22.

Appendix

Figure 67. 2pm shadow diagram at September 22.

Figure 68. 3pm shadow diagram at September 22.

Appendix

Solar testing - Gordon Avenue

Solar testing was undertaken to ensure that the proposed built form controls in Gordon Avenue would not overshadow low-scale residential properties that interface the study area. Solar tests were undertaken at hourly intervals between the hours of 9am and 3pm at September 22.

This solar testing demonstrated that the proposed built form controls support the adequate retention of solar access to private open spaces to each property interfacing the study area as per Standard A14/B21 in ResCode which protects existing private open space from overshadowing from new developments.

Figure 69 demonstrates the findings from the solar testing which indicates that:

- Properties that directly interface the study area west of Latrobe Terrace (A) are unable to meet the standard at 9am, but they are able to meet the overarching objective of maintaining five hours of sunlight access between 9am and 3pm.
- Properties that directly interface the study area to the north of Autumn Street (B) are unable to meet the standard at 9am and 10am, but they are able to meet the overarching objective of maintaining five hours of sunlight access between 9am and 3pm.
- Two properties that directly interface the study area to the north of Spring Street (C) are unable to meet the standard at 9am and 10am, but they are able to meet the overarching objective of maintaining five hours of sunlight access between 9am and 3pm.
- One of the three properties that directly interfaces the study area to the north of Villamanta St (D) is unable to meet the ResCode Standard beween 9am and 3pm. However, the modelling demonstrates the worst case scenario, the proposed density control will allow buildings massing to be redistributed within sites to minimise any overshadowing impacts on properties immediately adjacent to the study area.
- One of the three properties that directly interfaces the study area to the north of Villamanta St (D) is unable to meet the ResCode Standard beween 9am and 3pm. However, the modelling demonstrates the worst case scenario, the proposed density control will allow buildings massing to be redistributed within sites to minimise any overshadowing impacts on properties immediately adjacent to the study area.

Figure 69. Solar testing findings.

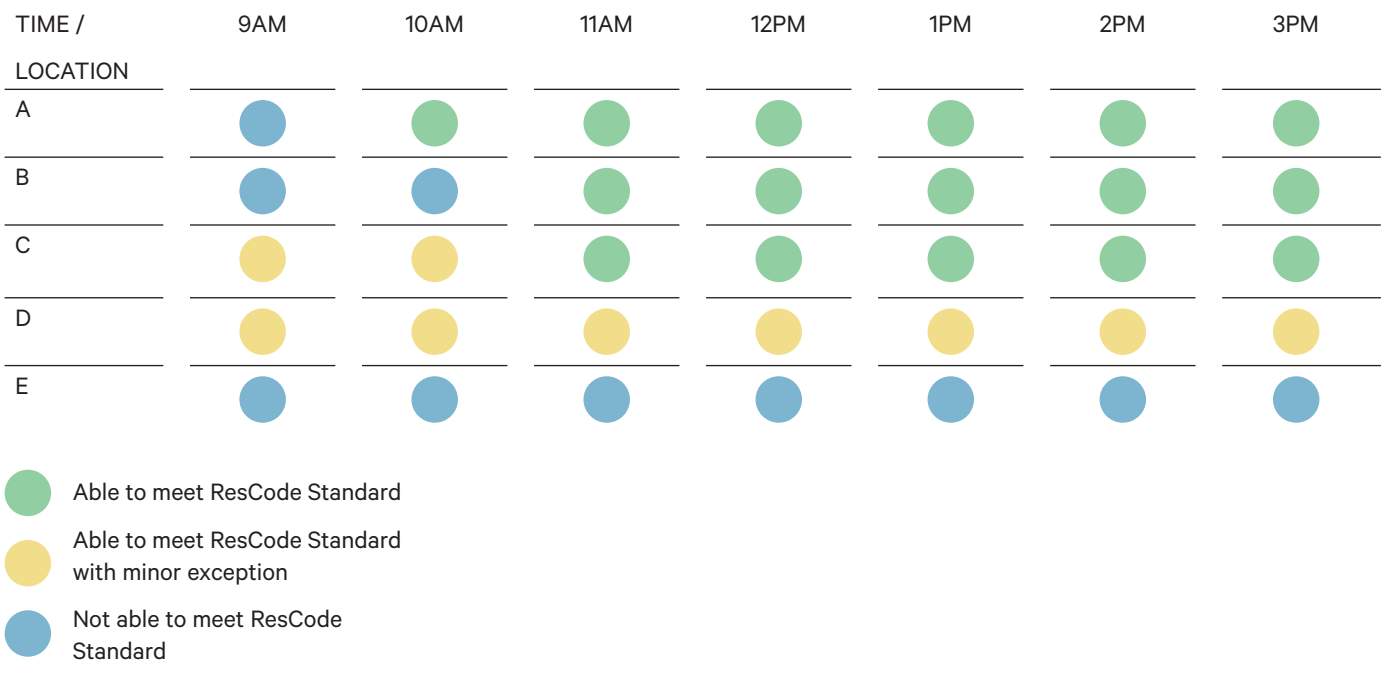


Figure 70. 9am shadow diagram at September 22.

Appendix

Figure 71. 10am shadow at September 22.

Figure 72. 11am shadow at September 22.

Appendix

Figure 73. 12pm shadow diagram at September 22.

Figure 74. 1pm shadow diagram at September 22.

Appendix

Figure 75. 2pm shadow diagram at September 22.

Figure 76. 3pm shadow diagram at September 22.

Hodyl & Co