

KEY DEVELOPMENT AREAS

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4.0

4.0 KEY DEVELOPMENT AREAS

The analysis and consultation processes have generated specific areas to become the subjects of design studies as part of the UDF.

Three development opportunity areas have been identified for further investigation:

- South Geelong Station Hub (which also includes the Barwon Water site)
- Moorabool Street

4.1 SOUTH GEELONG STATION HUB

This key development area includes the railway station and its car parking areas, along with the former Barwon Water operations site and some private landholdings which interface these sites.

This section includes recommendations regarding adjacent and surrounding streets including Bellerine, Carr, Lonsdale, Verner and Yarra Streets.

The South Geelong railway station is a major transport node travelling to and from Melbourne, as well as for visitors attending sporting events at Kardinia Park. It has extensive commuter car parking and is also serviced by a major bus route within Geelong.

The former Barwon Water operations site is a vacant 1.16 ha land parcel with frontage to both Lonsdale and Carr Streets. It is less than 200 metres from the railway station.

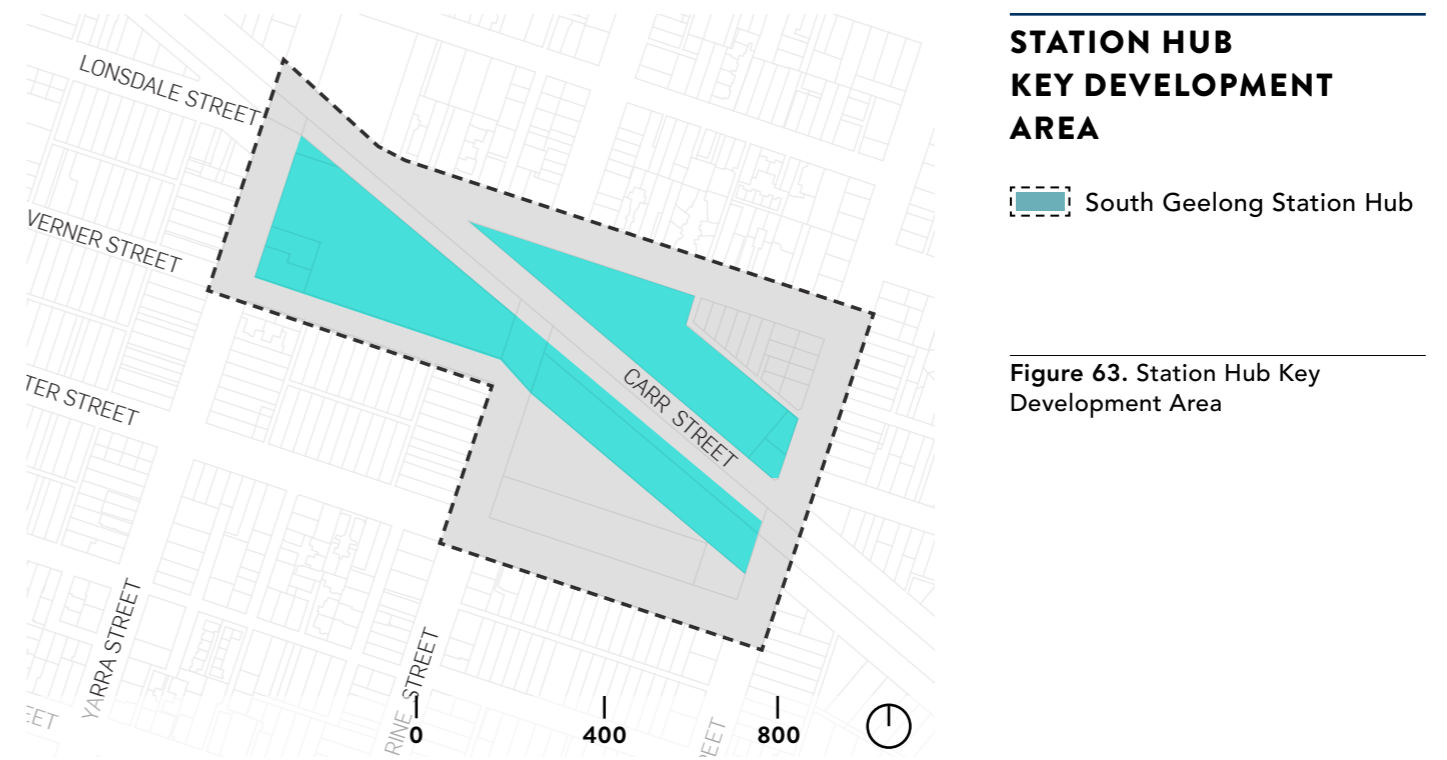
The South Geelong Station Precinct includes existing transport connections via the train to Melbourne and South Geelong and Warrnambool. The precinct will evolve over time to include a vibrant hub of activity including a small supermarket, and a combination of different uses including café's, restaurants, child care centres, and medical centres. Development in this area includes public squares and opportunities to improve the public realm and create effective pedestrian connections to the train station. The Barwon Water site will include medium to high density housing, spaces for people to enjoy including community spaces. The site will be open to all and include pedestrian connections through to the train station.

Moorabool Street area will evolve over time to include a residential focus and increased densities. Opportunities exist at the ground floor to create active frontages and provide commercial uses whilst providing effective urban spaces for people to rest and attend events at the GMHBA stadium. Development along Moorabool Street will include residential development with increased densities and also ensuring that the interface with existing residential areas is protected.

Proposed rail upgrades between South Geelong and Waurm Ponds and the recently closed and vacated Barwon Water site provide an excellent opportunity for a coordinated transit-oriented development. This would include land currently owned by Barwon Water, Vic Track and the City of Greater Geelong, along with some private land holdings.



Figure 62. Existing Station Precinct, prior to removal of Barwon Water Buildings



**STATION HUB
KEY DEVELOPMENT
AREA**
 [Dashed line] South Geelong Station Hub

Figure 63. Station Hub Key Development Area

4.1

DESIRED FUTURE CHARACTER

The Station Precinct including the Barwon Water site, will be a thriving community hub that can cater for the daily needs of residents and train commuters. The station hub will be a mixed use precinct with a combination of commercial, retail and high density housing options.

The Station Hub will provide high density residential buildings to maximise the number of people that can live close to the station.

The precinct will have a diverse range of high quality buildings and public spaces to support existing and future residents and visitors.

People will be encouraged to walk rather than drive a car. There will be green public places where people can spend time with friends or waiting to catch a train.

The Station Hub Precinct will become a destination point for commuters, users of the rail trail and the local community.

OPPORTUNITIES

Proposed rail upgrades between South Geelong and Waurin Ponds and the recently closed and vacated Barwon Water site provide an excellent opportunity for a coordinated transit-oriented development. This would include land currently owned by Barwon Water, Vic Track and the City of Greater Geelong, along with some private land holdings.

Close proximity to the railway station allows for residential, commercial and other land uses to capitalise on and benefit from excellent access by public transport. It is also less than 1km from central Geelong makes it particularly suitable for the provision of social housing as a component of new development.

Physical improvements in and nearby the South Geelong Station Hub can provide better pedestrian access between the railway station and Kardinia Park. Better access would encourage spectators to potential sports events to utilise public transport.

Its location also allows for improved pedestrian and cyclist connection to the Bellerine Rail Trail. The activities generated at the start and end point of journeys on that trail will contribute in activating the South Geelong Station hub.

Railway station car parking should be consolidated within a multi-level car parking facility to free up areas of on-street and off-street car parking for access and streetscape improvements as well as for new development in the long term.

An Increased Housing Diversity Area has been identified within 800 metres walking distance of the station. Its proximity to the station provides opportunity for residential intensification to higher density that will have excellent accessibility by public transport. Increased Housing Diversity has been identified for areas identified for 'substantial' change. The proximity to the station provides opportunity for residential intensification. Existing and proposed HO areas and minimal change areas will be removed from the IHDA.

CHALLENGES

The railway line is a physical barrier to movement through the area. There is no pedestrian crossing of the railway line between Yarra and Swanston Streets.

A desire for safe universal pedestrian and cycling access has been identified as a key issue through public consultation.

A universal access audit undertaken for Council by Galbraith Scott within the South Geelong UDF study area recommended a range of actions to achieve appropriate standards, particularly for people with limited mobility or vision impairment. These include:

- Additional safe crossing points such as pedestrian refuges on wide key pedestrian streets;
- Improved street lighting; and
- Upgraded access across the railway line to be wheelchair accessible.

As part of consultation, residents expressed concern in relation to the neighbourhood changing over time and subsequent impacts on existing services and infrastructure. A capacity study was completed following the Draft UDF and has identified that the South Geelong residential area can cater for approximately 3% of housing targets outlined within the Settlement Strategy. Changes proposed in relation to the new heritage overlays, neighbourhood character values and subsequent zoning is discussed in this report.

Development needs to ensure safe and functional vehicular access to the railway station and associated car parking is maintained.

There is high demand for existing commuter and on-street car parking spaces.

4.1

BUILT FORM AND DESIGN

OBJECTIVES

- To develop an ecologically sustainable precinct that incorporates best practice environmental management practices.
- To support high quality built form outcomes.
- To create high-quality landscaped and safe public spaces.
- To support the preservation and enhancement of existing Heritage areas.
- To provide improved pedestrian connections within and around the Station Hub.
- To support a staged approach to development.
- To ensure that car parking demand is appropriately managed.
- To upgrade local infrastructure to meet the needs of the community.
- To protect the internal residential amenity of new residents.

STRATEGIES

- Ensure that station hub consists of high-quality landscaped public spaces.
- Support the preservation and enhancement of existing Heritage areas.
- Upgrade local infrastructure to meet the needs of residents and provide spaces for residents to linger and enjoy.
- To provide improved pedestrian connections within and around the Station Hub.
- Ensure new development has an appropriate interface to their context and surrounding urban character.
- Ensure new development is designed to limit noise transmission from the train station and public spaces.

- Ensure the street network includes WSUD elements, attractive tree-lined streets and improved pedestrian and bicycle infrastructure.
- Support a staged approach to development consistent with the staging plan on page 68.
- Create new station forecourts/ public squares which are connected across the railway by an all access pedestrian overpass.
- Provide a legible and coherent structure of streets that complement the existing, adjacent street network and responds to key pedestrian and bicycle desire lines (principally from the Rail Trail and Bellerine Street), universal access considerations, stormwater management requirements and crime prevention through environmental design principles.
- Support the development of a new 'mini main street,' designed and landscaped to create high quality pedestrian and cycle priority streetscapes and very low vehicular traffic speeds.
- Improve access to the Station and bus stops, including improved street crossings and a new crossing of the railway line in the vicinity of Bellerine Street.
- Ensure the buildings located on the corner of Bellerine St/ Lonsdale St and Yarra St/ Lonsdale street are of the highest architectural quality as they form key view points and assist in orientating the Station. Ensure the style of the remaining architecture on the site is visually recessive and of high-quality construction.
- Support a variety of building heights and forms with a maximum of 6 storeys. Buildings above 4 storeys in height should be designed to minimise the visual impact of the upper levels. This could be achieved through upper level setbacks, dark recessive colours and material and minimising the visibility of roof forms and associated plant structures, lift overruns and the like.
- Support lower scale development at the eastern edge of the Barwon Water Site, towards Swanston Street. Development should be of maisonette and townhouse typologies.
- Encourage public view corridors from streets into and through sites.
- Support the partial closure of Carr Street to include increased space for the public domain including a public square.
- Support an upgrade to the surrounding street network to cater for the road closure with additional landscaping provided within car parking areas.
- Ensure appropriate public lighting is installed in and around the public spaces to provide use at all hours and include CPTED principles
- Ensure landscaping within public spaces and streetscapes is of a high quality, using appropriate species for the area, and include high-quality pavement design. Landscaping will provide natural shade and amenity to public spaces and streetscapes.
- Encourage the installation of public art and murals in the public domain to provide visual interest and a sense of community within the precinct.
- Support in the installation of public seating within the public realm.
- Ensure the design of new building include acoustics treatments to protect the internal amenity of residents from external noise sources.
- Ensure the design and development of the multi deck car park meets best practice guidelines.

4.1

LAND USE

OBJECTIVES

- To support a mix of land uses and actives which meet the needs of the community.
- To increase the supply of social and affordable housing.

STRATEGIES

- Encourage the development of a diverse, higher density and high quality residential and mixed-use precinct which capitalises on proximity to the station.
- Support a mix of land uses and actives which meet the needs of the community.
- Develop a community hub within the station precinct supporting a range of uses that will serve the new and surrounding neighbourhoods.
- Encourage development that supports a diverse population through an appropriate mix of dwelling types including accessible, adaptable, and affordable housing.
- Support a range of uses such as a small-scale supermarket, commercial spaces, medical centres and a child care centre.
- Encourage active ground floor areas to ensure a seamless flow from the public and private realms.
- Ensure that the commercial uses are appropriate in their context and do not have negative amenity impacts for surrounding residents in relation to proposed hours, noise, and odour.
- Include social housing options within the development.
- During the staging of the development, support interim uses on the western portion of the Barwon Water Site which will have a limited impact on the residential amenity of the surrounding area.

STATION HUB DEVELOPMENT AREA PRINCIPLES DIAGRAMS

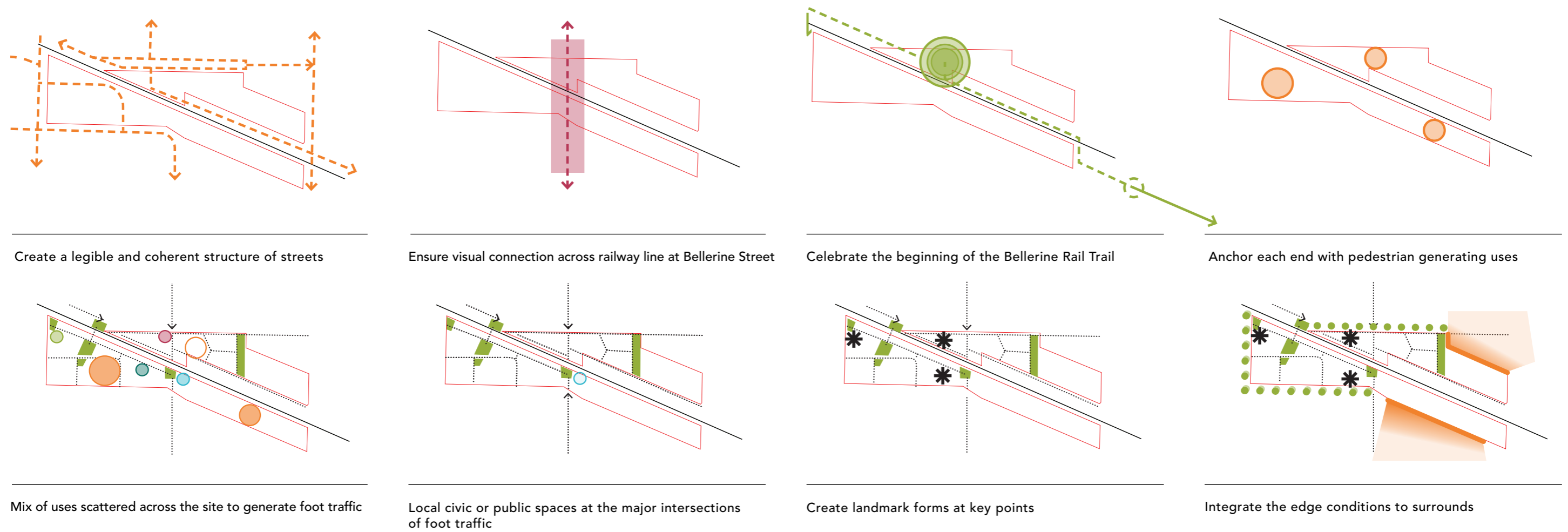


Figure 64. Station Hub development area principles diagrams

EXEMPLAR BUILT-FORM AND STATION DESIGN



Mid rise development, Victoria St, Brunswick

Courtyard development, Western Harbour Sweden

Sustainable housing, Copenhagen

Footscray Station Arcade Bridge

Platform design at Middle Gorge Station

Figure 65. Exemplar Built-form and Station Design

CONCEPT PLANS

The Draft UDF presented two options for development of the South Geelong Hub precinct and Barwon Water Site and provided concept plans for how development may occur. The two options included similarities such as a combination of different uses for the Barwon Water site such as public plazas, child care centres/medical centres and apartment living. Both options included the partial closure of Carr Street to improve the public realm and provide more opportunity for public spaces and pedestrian connections.

The difference in the two options relates to a difference in built form and height outcomes for the Barwon Water site. During consultation significant concern was raised from residents in relation to the 10 storey height and a preference for the reduced height option was outlined.

OPTION 1

Proposed landmark podium up to 10 storeys at the western part of the site and reducing to 6 and then 3 onto Carr and Lonsdale Street. Development addressing Swanston Street and existing lane would be up to 3 storey high townhouses. This development could potentially yield up to 245 dwellings.

OPTION 2

This option included a lower overall height of 6-7 storeys at the western edge and overall lower heights across the site, with a smaller number of townhouses at the eastern edge of the site. This development could potentially yield up to 356 dwellings, higher than option 1 due to an increase in the number of apartment buildings.

FINAL OPTION DISCUSSION

Option 2 (6 storey max) is the preferred outcome and is considered to balance the desires of the Community with the City's preference for the site to deliver a higher density outcome. As part of consultation following the Draft UDF, residents raised significant concern with the 10-storey option presented. The concerns related to neighbourhood character, increased height and associated amenity impacts. Option 2 has a maximum of 6 storeys, and whilst this may not be feasible in the current market, traditional town house developments up to 3 storeys are feasible.

Within the study area, heritage significance was identified, and additional areas are proposed to be included in a Heritage Overlay. A change/capacity assessment also indicated future development of the existing residential land in the study area is limited as a result of lot size/widths, location of car parking and siting of dwellings.

As there is limited capacity for the existing residential areas to cater for change and increased densities, the Barwon Water site presents a unique opportunity to provide for

future population growth and a diversity of built form outcomes, to compensate for the lack of opportunities in the remainder of the study area. The Barwon Water Site benefits from a location directly opposite the South Geelong Train Station and is within walking distance of the Geelong CBD, Barwon River and other existing amenities and services.

STAGED APPROACH

As detailed on page 31 of this report, An economic feasibility assessment was undertaken on the potential development of the Barwon Water Site. The assessment concluded that the town house developments in both scenarios are feasible with mixed results in relation to the medium density options (2-3 storeys), and higher density (5-10 storeys) having limited feasibility. The apartment developments presented in both options are not feasible in the current market, and it is difficult to determine a timeframe for when the market in Geelong will have greater demand for apartment living. Apartments may be feasible in 5-10 or 10-15 years, however it is difficult to put a timeframe on this.

Option 2 presents a maximum of 6 storeys at the western edge and lowers down to 2-4 storeys at the eastern part of the site. The site will be developed in a staged approach, beginning with the lower density townhouses which are considered financially viable at the eastern end, allowing the western portion of the site to be delivered when the market permits.

Whilst the site is being developed in stages, there is opportunity for the western portion to be used for a range of community uses including 'pop-up' initiatives such as Food Trucks, Community Gardens/Markets or the existing Blue Bird Foundation to use part of this site. When the market permits, the community uses could be incorporated into the ultimate design.

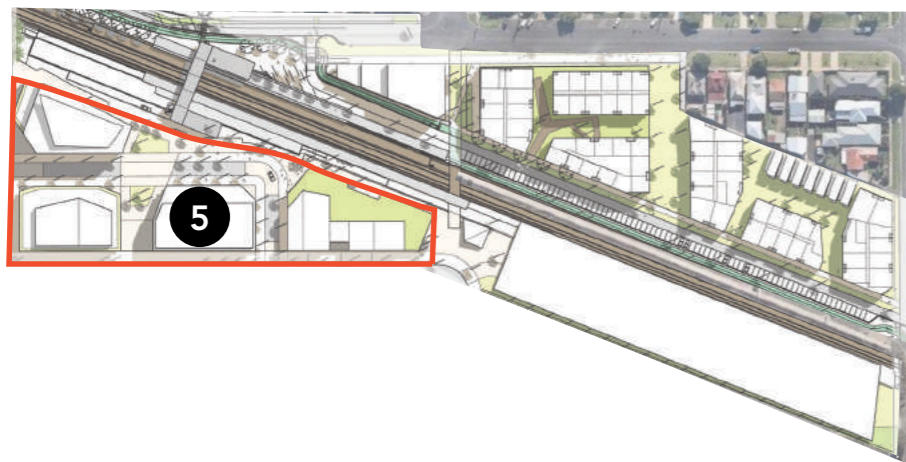
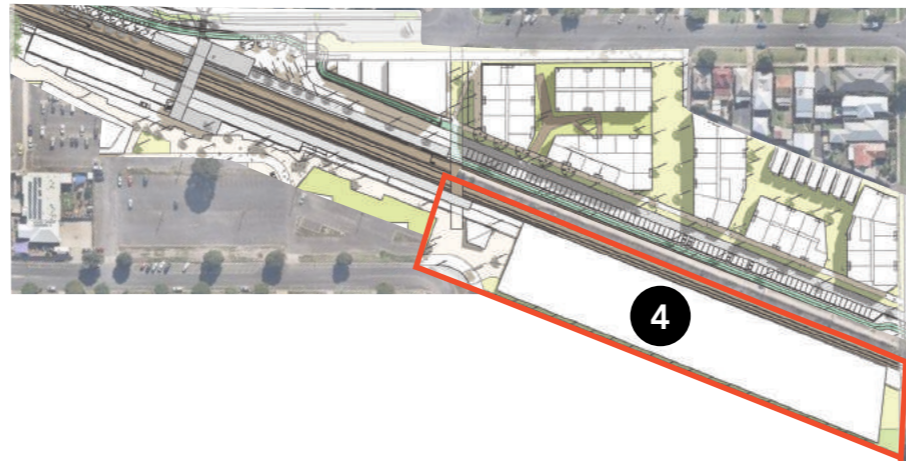
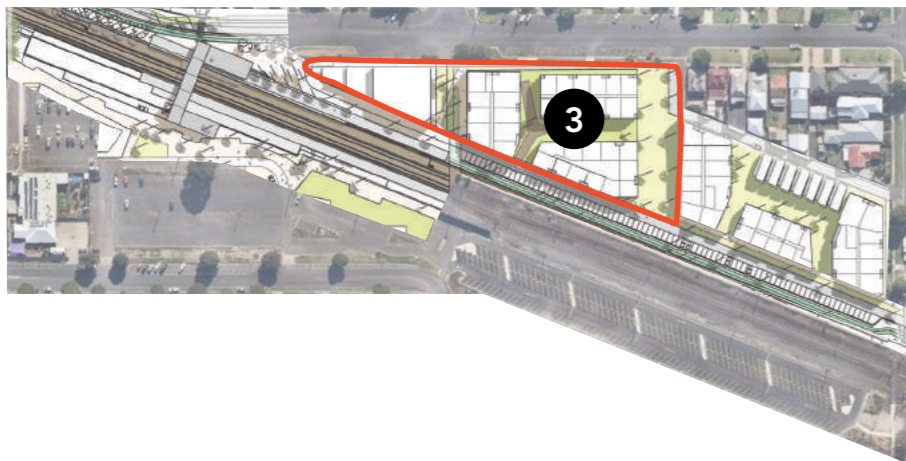
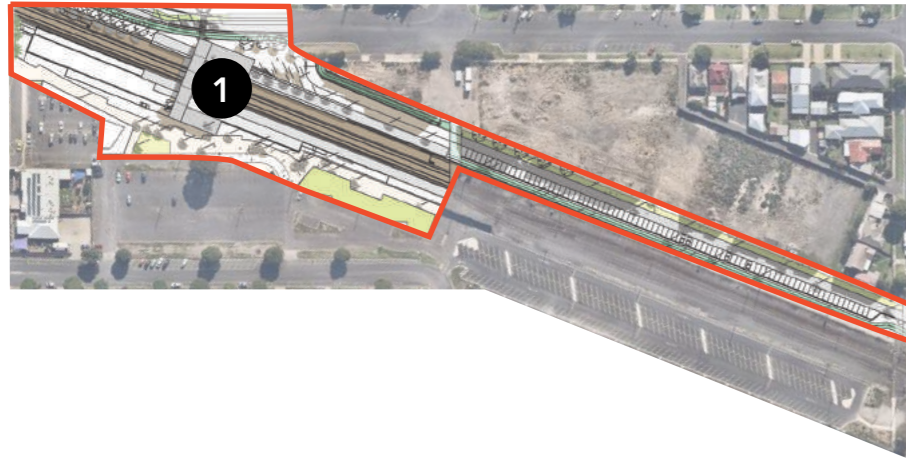
SOCIAL AND AFFORDABLE HOUSING

The Barwon Water site presents an opportunity for affordable and social housing to be included in the final housing options provided. During consultation, residents raised concern with the social housing aspect proposed in the Barwon Water site. The City is committed to providing social housing which is a required part of social infrastructure. The benefits of affordable/social housing include alleviating poverty, improving labour market functions and a diversity of local communities which can result in;

- Reduced social costs in the health, justice and social services and;
- Improved labour participation and productivity of tenants of affordable housing.

The proximity of this site close to essential services, transport and employment make this location an ideal site for social and affordable housing. Refer to page 35 for further information on social housing.

STATION HUB STAGING PLAN



The precinct will be developed in stages by different stakeholders. The timing and order of development is unknown and will depend on the commercial viability, state government and developer interest.

KEY

- 1 South Geelong Station upgrade and Carr St improvements by State Government of Victoria
- 2 Development of Barwon Water site (East) by Barwon Water or private developer
- 3 Development of Barwon Water site (West) including closure of Carr St (West) by Barwon Water or private developer
- 4 Development of multi decked commuter car park by State Government of Victoria
- 5 Development of mixed use transit oriented design with bus interchange. Verner Street and Bellerine Street public realm upgrades by State Government of Victoria

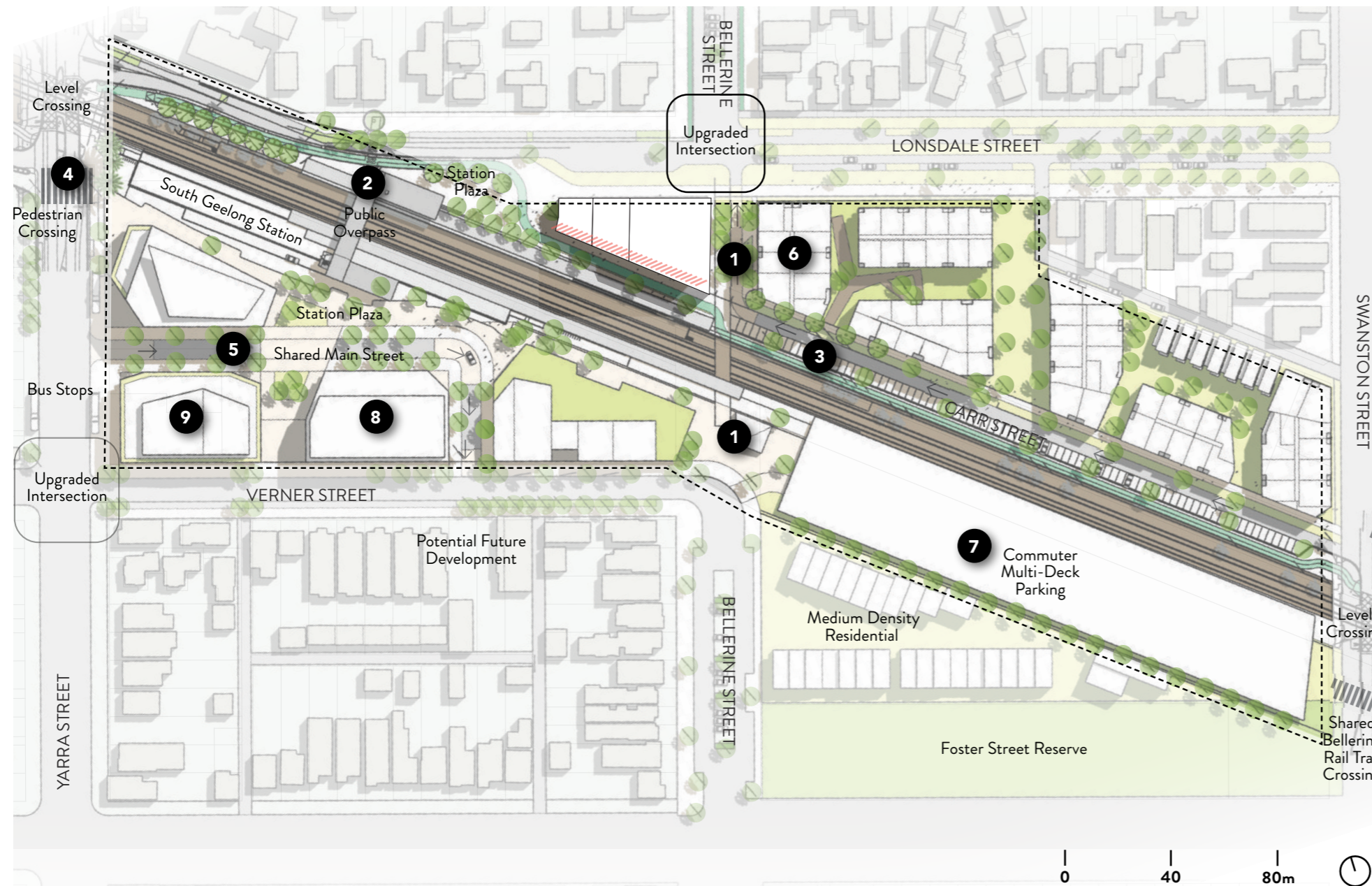
Figure 66. Staging Diagram



Figure 67. Artist perspective from Station forecourt looking towards Yarra Street

CONCEPT PLAN FOR STATION PRECINCT

A concept plan showing how the Station Hub Precinct could be developed overtime has been prepared. The following information provides details on possible future land use and built form outcomes for the Station Hub Precinct.

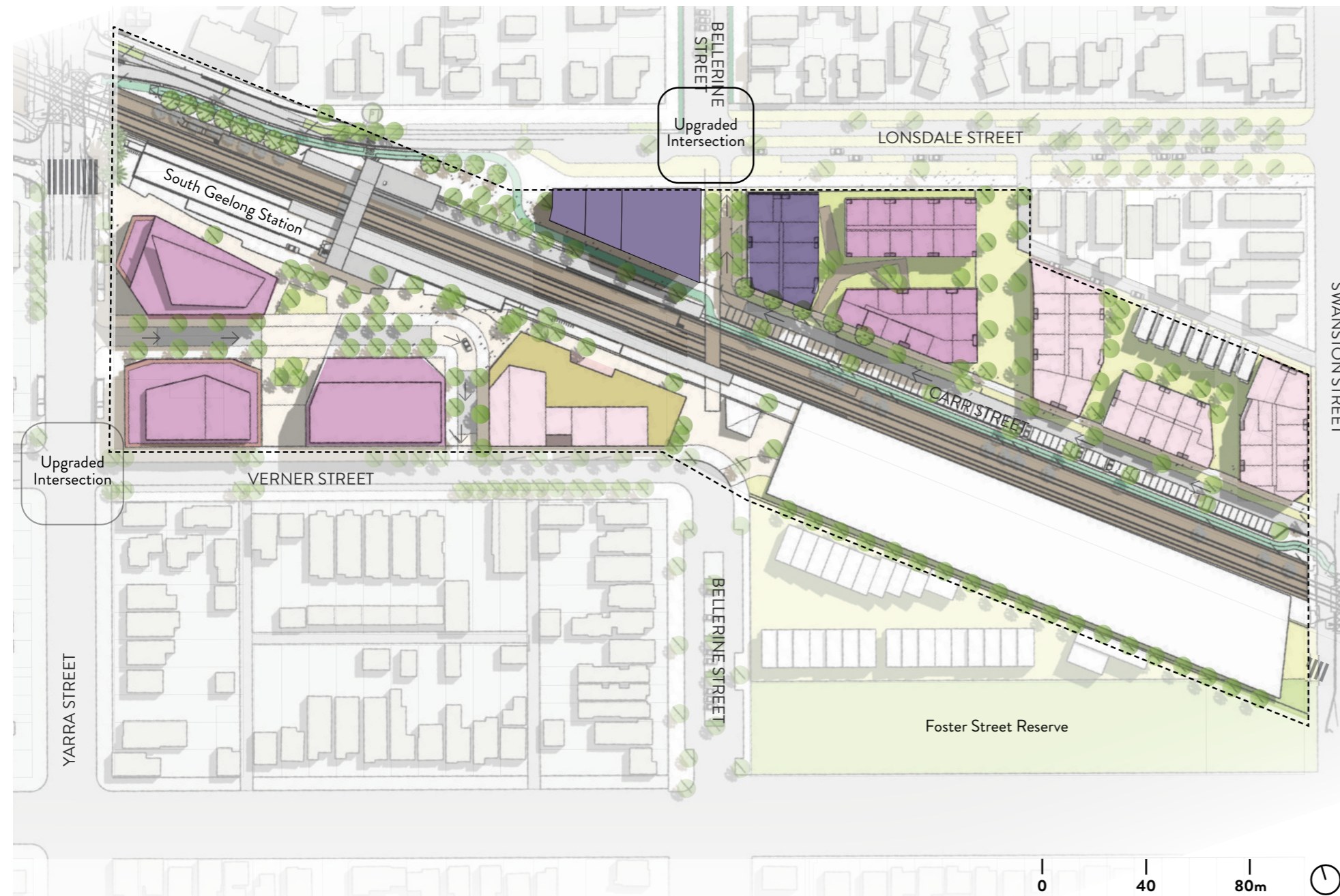


STATION HUB CONCEPT PLAN KEY

- 1 PUBLIC PLAZA AXIS**
Two new landscaped public plazas will be located adjacent to the Train Station entrances, which will form the heart of the precinct. Active edges will frame the plaza spaces and provide opportunities for outdoor dining and informal gathering. The northern plaza will be the start/end point for the Rail Trail with directional signage and end of trip facilities.
- 2 STATION REDEVELOPMENT**
The Station redevelopment will include platforms on the north and south, which are connected by a public pedestrian arcade bridge. New plazas will be developed at both the north and south entry to the station.
- 3 RECONFIGURATION OF CARR STREET**
Carr Street is proposed to be reconfigured to accommodate the new northern rail platform and provide opportunity for a pedestrian and cyclist priority forecourt space. The reconfiguration will allow for increased tree planting within 90 degree car parking spaces. Carr Street will be rerouted through the Barwon Water site (at Bellerine St).
- 4 YARRA STREET**
Bus stops will be relocated to Yarra street with a raised signalised crossing to allow safe pedestrian connection to the Station and surrounding neighbourhood. An intersection upgrade is proposed on the corner of Verner and Yarra Street to improve both pedestrian and vehicles crossings.
- 5 MINI MAIN STREET**
This new street will be a slow speed pedestrian priority street with taxi and 'kiss and ride' facilities.
- 6 BARWON WATER DEVELOPMENT**
The Barwon Water site could be developed for a variety of uses including high density residential, health and wellbeing, commercial and retail. The hashed area shown at the western end of the site indicates a future expansion of this land parcel through land acquisition, to facilitate the future diversion of Carr Street through the site
- 7 STATION CARPARK DEVELOPMENT**
Consolidation of the car parking allows opportunity for re-development of the remainder of the site. A mixed-use development is proposed with non-residential uses addressing a new 'mini main street', Yarra Street, and Verner St.
- 8 MIXED USE DEVELOPMENT**
A small-scale supermarket could be accommodated on the ground floor, which is sleeved in smaller scale retail/ commercial development. A combination of office and residential uses are proposed on the upper levels.
- 9 CHILDCARE REDEVELOPMENT**
The Childcare has been shown on the first floor of the development. While it would be preferable for the Childcare to be incorporated in a redevelopment as shown in the plan, the Childcare could remain in its current configuration until funds become available.

Figure 68. Concept Plan Station Hub Precinct

BUILDING HEIGHTS



BUILDING HEIGHT KEY

- 3 Storeys
- 5 Storeys
- 6 Storeys

This plan shows indicative future building heights within the Station Hub Precinct. Future Development applications will need to assess building heights.

There may be an opportunity to use the multi deck car parking as a share car parking facility which services the entire Station Hub Precinct.

A possible future pedestrian bridge linking the southern side of the station with the future development on the Barwon Water site could connect the two sites including car parking and future land uses. Construction of this bridge would likely be delivered by a developer, not by Council.

Figure 69. Heights



Figure 70. Artist perspective from Lonsdale Street, looking towards Station plaza and Barwon Water site

4.2A KEY DEVELOPMENT AREA: MOORABOOL STREET

Moorabool Street in South Geelong, between Fyans Street and the railway line has been identified as a redevelopment opportunity. The area is well serviced by open space, public and private transport and shopping facilities. The area is within a 20-minute walk of central Geelong, the Belmont sub regional shopping precinct and the Barwon River.

Moorabool Street currently operates as a major connector road into central Geelong. It carries a high volume of traffic and is the City's preferred bicycle route connecting central Geelong to Waurun Ponds. A dedicated bicycle path is to be constructed along Moorabool Street.

This section of Moorabool Street has a direct interface with Kardinia Park where the swimming pool, netball courts, open space and the GMHBA stadium are located. However, there is a lack of safe connections between the existing commercial uses, the stadium and beyond to the South Geelong Train Station and the Barwon River.

Existing development within this part of Moorabool Street consists of 1 and 2 storey commercial buildings, including a mix of restricted retail, cafés/restaurants, offices and car yards uses. There are several areas of heritage significance within and adjacent to Moorabool Street.

The area has a limited number of street trees and a large number of on-street car parking spaces.



Figure 72. Moorabool Street



KEY


-  Moorabool Street re-development area

Figure 71. Key Plan

4.2A

DESIRED FUTURE CHARACTER

Moorabool Street Precinct will transition to a high quality and sustainable precinct which, when fully realised could accommodate a diverse mix of housing that will help meet existing and future local housing demand.

Medium to higher-scale buildings will contribute to a distinctive boulevard character on Moorabool Street.

The precinct will accommodate some small commercial uses on the ground floor, particularly corner sites.

Mid-scale buildings will provide an appropriate transition in building heights, scale and setbacks to the existing residential development on the eastern side of the key development area.

Heritage buildings will form local community hubs accommodating a range of uses that serve the community. Development will maintain and enhance values of heritage buildings within the precinct by maintaining and enhancing the curtilage around the buildings.

Walking, cycling and public transport use will be encouraged through the provision of appropriate infrastructure. Private vehicle use will be discouraged by designing for slow circulation speeds, giving priority to other modes at intersections and constraining provision of private vehicle parking.



73.



74.



75.



76.

Figure 73. Example of blending heritage and new development, Victoria St, Brunswick

Figure 74. Example of building design showing setback upper storeys, defined street wall, and articulated facade, Harold Park apartments

Figure 75. Example of green landscaped streets, Dandenong

Figure 76. Example of safe separate cycle path, Dandenong

4.2A

OPPORTUNITIES

The Moorabool Street precinct is a key redevelopment area, with potential for strong pedestrian links along Moorabool Street, and between Kardinia Park, the Train Station, Belmont, the Barwon River and into Central Geelong.

Landscape and pedestrian links from the river to the bay can be strengthened through improvement in the public realm.

The function and quality of streetscapes within the area requires improvement. Streetscapes also provide opportunity for increased vegetation and tree planting within medians, or road edges.

Water Sensitive Urban Design should be incorporated into the street network and new development.

The area has been identified through the retail strategy as not suitable for modern restricted retail uses, creating an opportunity to explore other land uses for redevelopment.

Given the location's proximity to services, the area is considered suitable as a mixed use, predominantly residential precinct.

There are opportunities for retail and commercial activity at street level with residential uses above.

All new development should be environmentally sustainable and achieve a high level of energy efficiency.



Figure 77. Existing conditions along Moorabool Street

4.2A

CHALLENGES

Moorabool Street carries a significant amount of traffic. It is the only river crossing point which provides direct access to central Geelong from the southern Geelong suburbs.

Moorabool Street is a wide busy street, with limited street trees and pedestrian crossing points. It creates a physical barrier to access Kardinia Park.

There is a mixture of old and new buildings within the area, therefore it is likely some buildings will be retained in the long term.

Any future residential development along Moorabool Street will need to be appropriately sited to ensure it's scale and interface with the existing residential area is considered.

New residential development along Moorabool Street should consider acoustic treatments at detailed design stage to ensure any noise impacts from the GMHBA are mitigated.



Figure 78. Existing conditions along Moorabool Street

INDICATIVE CONCEPT

An indicative concept has been developed to show how the area may look in the future and to better understand the area's development potential. It is represented in adjacent artist perspective sketch.

Important aspects of the concept that need to be considered in any redevelopment of the area include local infrastructure provision, public domain, movement and access, land use and built form which are discussed on the following pages.

Figure 79. Artist impression Moorabool Street



4.2A

PUBLIC DOMAIN

OBJECTIVES

- Create a high-quality boulevard along Moorabool Street which caters for pedestrian and cyclists and low vehicular speeds.
- Support green streets and public places
- Provide an accessible and safe environment for pedestrian and cyclists along existing streets and within public open space.

STRATEGIES

- Maintain the former church as a key focal point along Moorabool Street by protecting the setting and space surrounding the former church.
- Encourage the adaptive reuse of heritage structures for a mixture of community, cultural, retail and commercial uses within the building envelopes and provide a high-quality landscape setting that enhances the building's presence and heritage values.
- Provide significant tree planting along Moorabool Street.
- Provide a high-quality separated cycle connection from Moorabool Street to South Geelong Station, via Lonsdale Street, and along Moorabool Street into the City Centre
- Provide open sightlines and landscaping between and around buildings that allows for high levels of passive surveillance by users and residents.
- Provide external lighting that makes pedestrian walkways, back lanes and access routes to public spaces visible.
- Ensure entrances and paths to public spaces are designed to cater for all people including those with mobility difficulties.
- Discourage tree planting over below ground level car parking.
- Support deep soil planting of all new trees.
- Ensure the design of all landscaping is of a high-quality, uses appropriate tree species, stainless steel, high quality precast concrete elements and high-quality pavement design.
- Ensure all streets in the precinct accommodate canopy tree planting and water sensitive urban design elements.

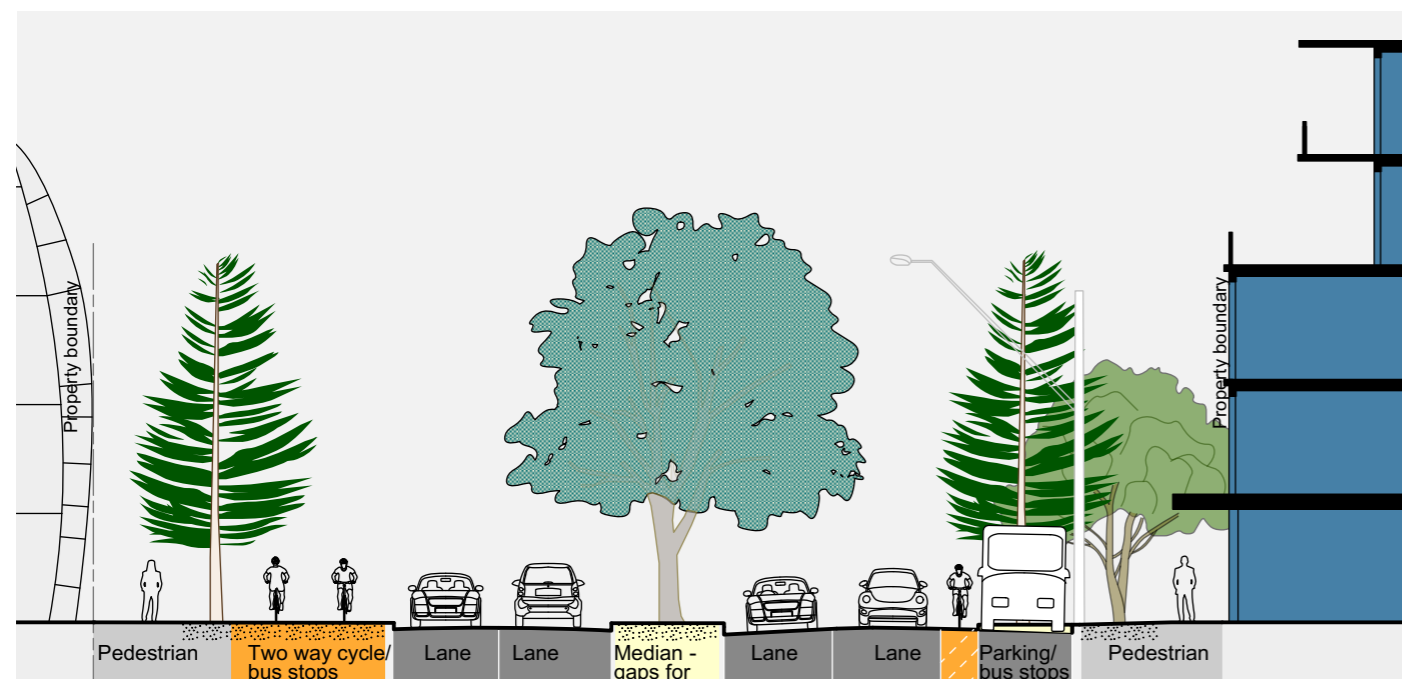


Figure 80. Moorabool Street, proposed typical cross section

4.2A

STREET NETWORK AND ACCESS

OBJECTIVES

- To create a walkable, pedestrian focused neighbourhood hub.
- To limit the number of vehicle crossing points on Moorabool Street.

STRATEGIES

- Ensure appropriate infrastructure is provided to enable walking, cycling and public transport use to occur.
- Discourage private vehicle use by designing streets for slow circulation speeds, giving priority to other modes at intersections and constraining provision of private vehicle parking.
- Discourage new vehicle crossings on Moorabool Street where an alternative access is available, to create a pedestrian friendly environment.
- Support the expansion Lamb Place to allow for rear loading vehicle access to development sites.
- Support a new signalised crossing at Lonsdale Street intersection to provide a formal crossing for pedestrians and cyclists accessing Kardinia Park.
- Support an unsignalised pedestrian crossing at the Foster Street intersection.

4.3A LAND USE & DEVELOPMENT

LAND USES

OBJECTIVES

- To provide a limited number of retail and commercial uses which service the needs of the local community and events occurring at Kardinia Park.

STRATEGIES

- Support non-residential uses on the ground floor particularly street corners.
- Encourage residential uses within development and limit the number of buildings used solely for commercial purposes, with the exception of Precinct A adjacent to the railway line.
- Ensure that retail/ commercial uses do not have an adverse impact on or undermine the role of an existing centre identified within the City of Greater Geelong Retail Hierarchy

4.3A

BUILDING FORM AND LAYOUT

The Moorabool Street Precinct has four distinct sub precincts, A,B,C D, as shown on Figure. 81. The built form guidance for these precincts relates to their context.

PRECINCT A

Located between Carr Street and Lonsdale Street is influenced by the relationship with the train line, adjacent residential development and adjoining streets.

PRECINCT B

Located between Lonsdale Street and Foster Street is influenced by the relationship to the Stadium height and built form.

PRECINCT C

Located between Foster Street and Balliang Street is influenced by the lower edge of Kardinia Park and surrounding land uses.

PRECINCT D

Located between Balliang Street and Fyans Street is influenced by both the existing heritage buildings and Fyans Street conditions.

OBJECTIVES

- To ensure an appropriate transition of building height and interface between the subject land and residential properties to the east of Moorabool Street.
- To reduce the dominance of car parking and access ways.
- To reduce the level of car ownership within residential properties.
- To promote contemporary design and built form that demonstrates design excellence and contributes to the desired neighbourhood character.
- To protect the amenity of adjacent residential properties.
- To encourage environmentally sound and energy efficient development.
- To encourage land consolidation.

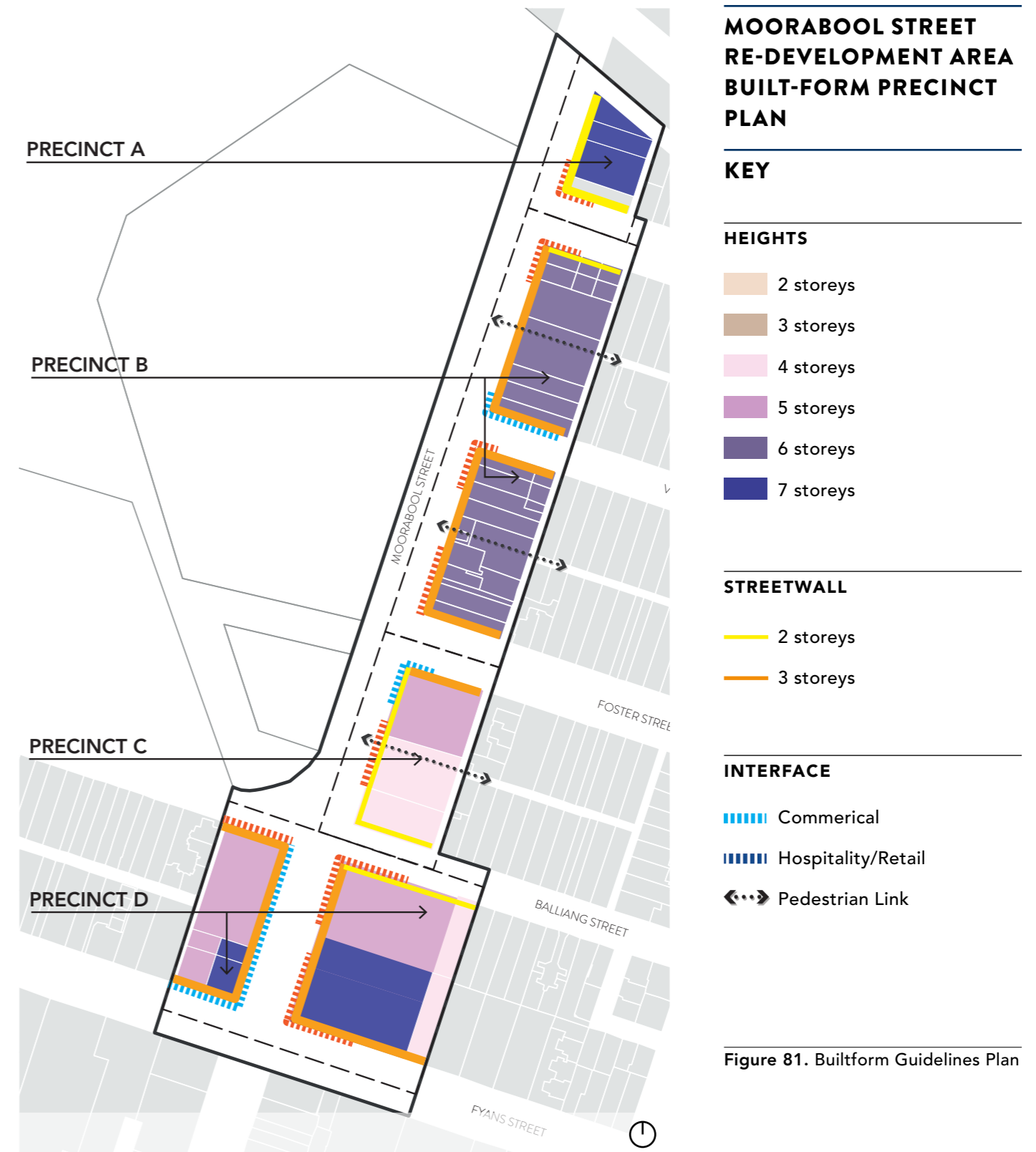
- To protect the internal amenity of future residents from activities occurring at Kardinia Park.
- To ensure access to sunlight between 9am and 2pm in Spring Equinox to residential properties to the rear of Moorabool Street key redevelopment area.

STRATEGIES

- Minimise the apparent height of development when viewed from Moorabool Street, Lonsdale Street, Verner Street, Foster Street, Balliang Street.
- Ensure new development does not result in unreasonable overlooking of surrounding residential developments
- Ensure new development does not significantly impact on the solar access of surrounding developments.
- Ensure development includes best practice environmental design, water sensitive urban design and active and passive ESD systems.
- Support consolidation of lots to maximise development potential, but only to extent that there are equitable development opportunities on adjacent lots.
- Support a reduced number of or shared car parking space for residential development due to the proximity of transport and essential services.
- Support a diversity of building characteristics within Moorabool Street to create visual variety.
- Ensure that the grain, rhythm and palette of materials used in the design of new buildings respond to the character of surrounding area.
- Provide a range of dwelling types and sizes to house a diverse population including accessible and affordable dwellings.
- Ensure that built form that relates to the scale of the public domain and creates strong definition for streets and public places.
- Require the use of high-quality façade design and finishes through-out the neighbourhood.
- Ensure new development incorporates acoustic treatments to limit the impact from noise as a result of activities occurring at Kardinia Park including the GMHBA stadium.

STRATEGIES

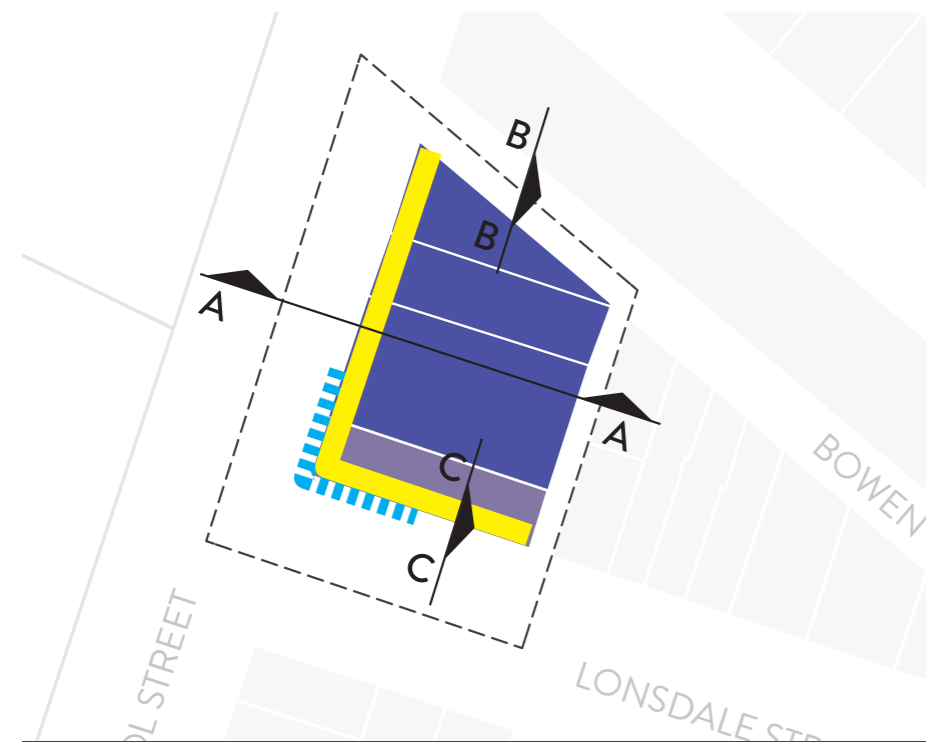
- Ensure that the layout of development blocks and buildings are consistent with the following principles:
 - Buildings should address the street and be aligned with streets to form broken perimeter blocks
 - Regular building breaks are to be provided along the street frontage to encourage visual permeability. Links must be direct and open to the sky.
 - Buildings should step down in height towards the east and west where they are adjacent to existing residential development.
 - Buildings opposite the Stadium, railway line and Fyans Street may have increased height.
 - Buildings should step down in height at residential streets - Lonsdale, Verner, Foster and Balliang Streets.
 - Building should step down in height, with the lowest point near the heritage building.
 - The maximum height in storeys are shown on the Height of Buildings – Storeys Map.
 - Setbacks are to be in accordance with setback diagrams.
 - Roof forms, plant and lift overruns are to be designed to be simple compact forms that are visually unobtrusive.
 - Building design must consider equitable development opportunities on adjacent lots.
 - The ground floor of corner sites should be on the property boundary with weather protection.



4.4A BUILDING CONTROLS

The following series of guideline diagrams relate to key interfaces with public streets, adjacent residential properties and heritage items.

PRECINCT A (BETWEEN BOWEN WAY AND LONSDALE STREETS)



KEY

HEIGHTS

7 storeys

STREETWALL

2 storeys

3 storeys

INTERFACE

Commerical

Hospitality/Retail

Pedestrian link

Figure 86. Precinct A building control plan

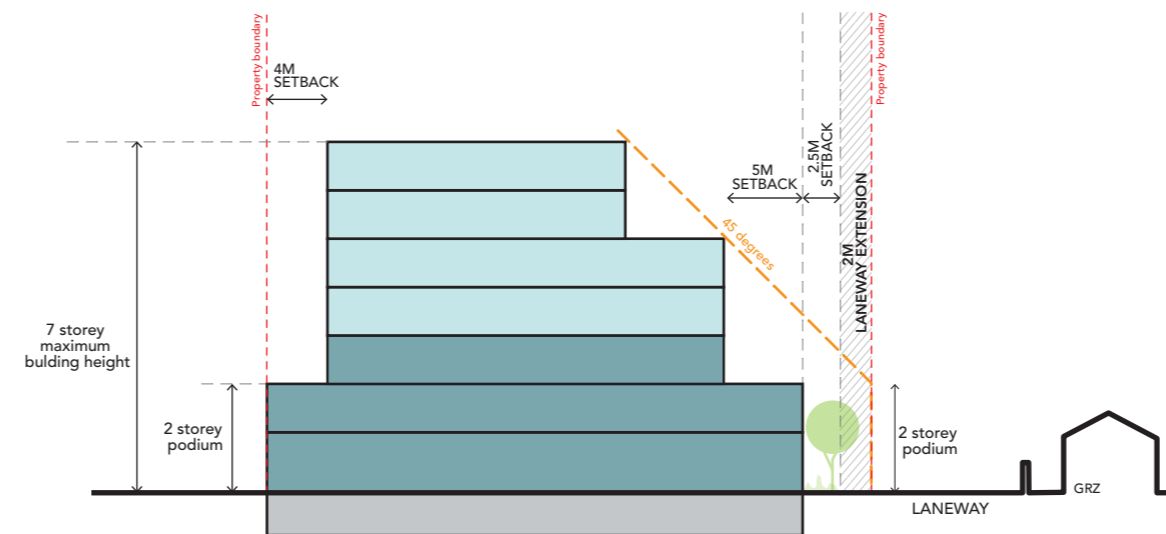


Figure 82. Guideline diagram for properties fronting Moorabool Street (Section A-A)

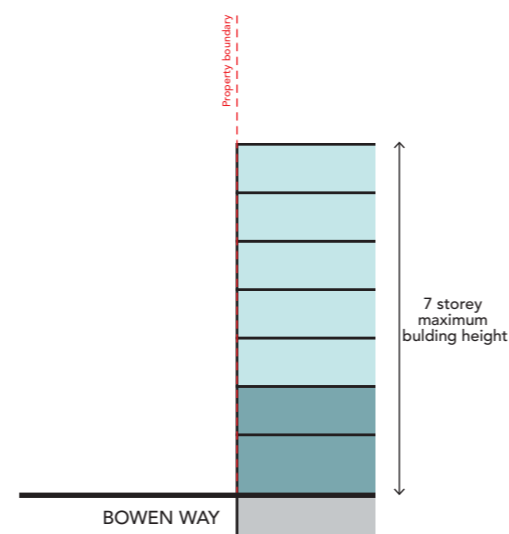


Figure 83. Guideline diagram for properties fronting Bowen Way (Section B-B)

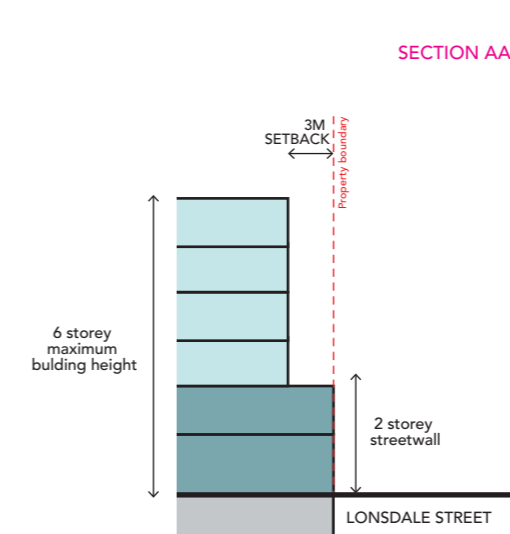


Figure 84. Guideline diagram for properties fronting Lonsdale Street (northern side) (Section C-C)

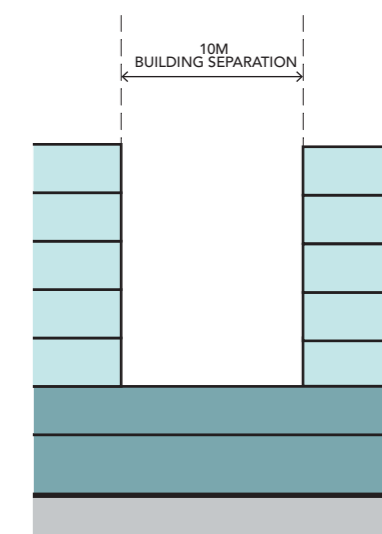
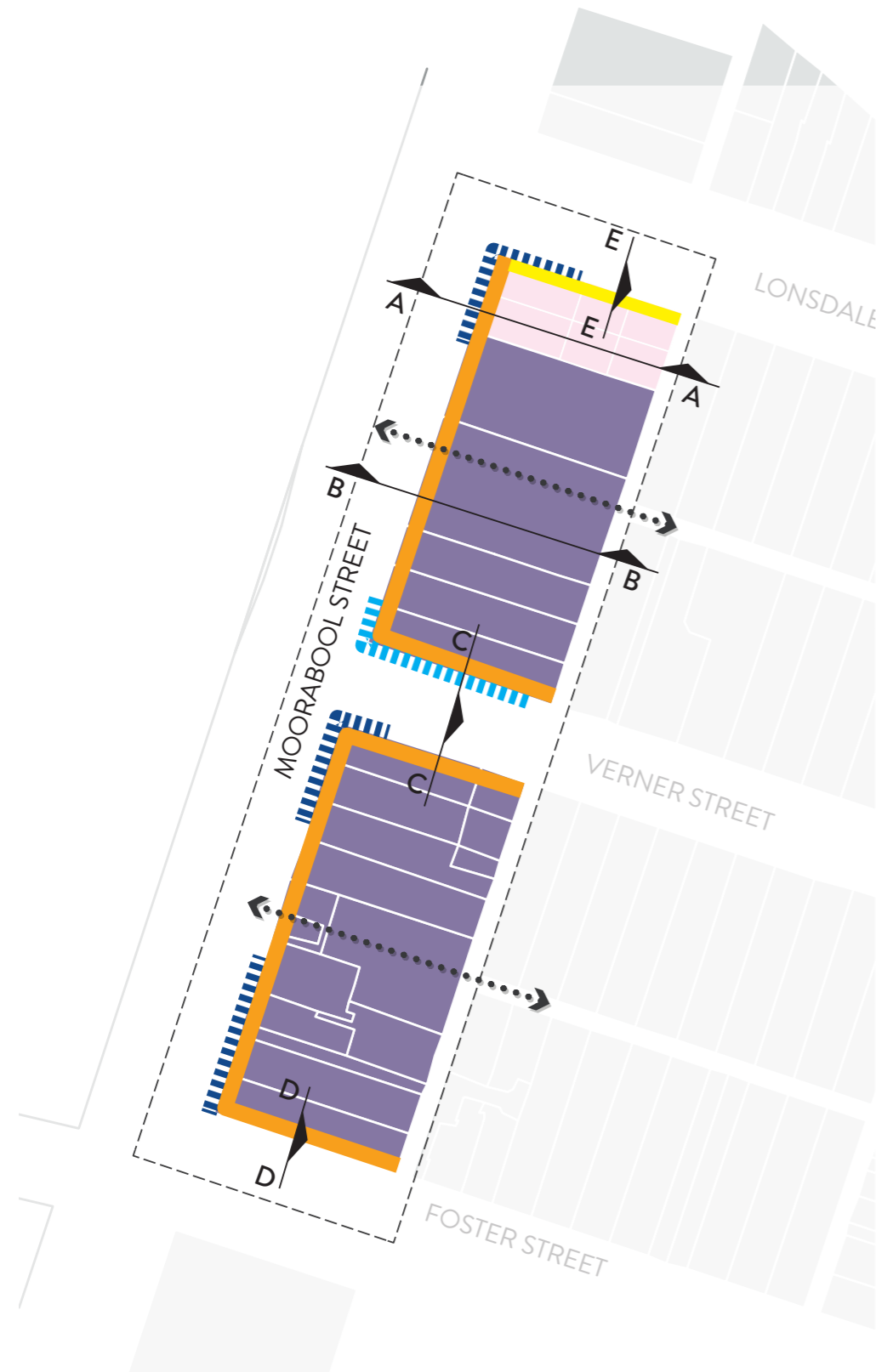


Figure 85. Guideline diagram for upper level well-separated building forms

4.4A

PRECINCT B (BETWEEN LONSDALE AND FOSTER STREETS)



KEY

HEIGHTS

- 6 storeys
- 7 storeys

STREETWALL

- 2 storeys
- 3 storeys

INTERFACE

- Commercial
- Hospitality/Retail
- Pedestrian link

Figure 87. Precinct B building control plan(Section A-A)

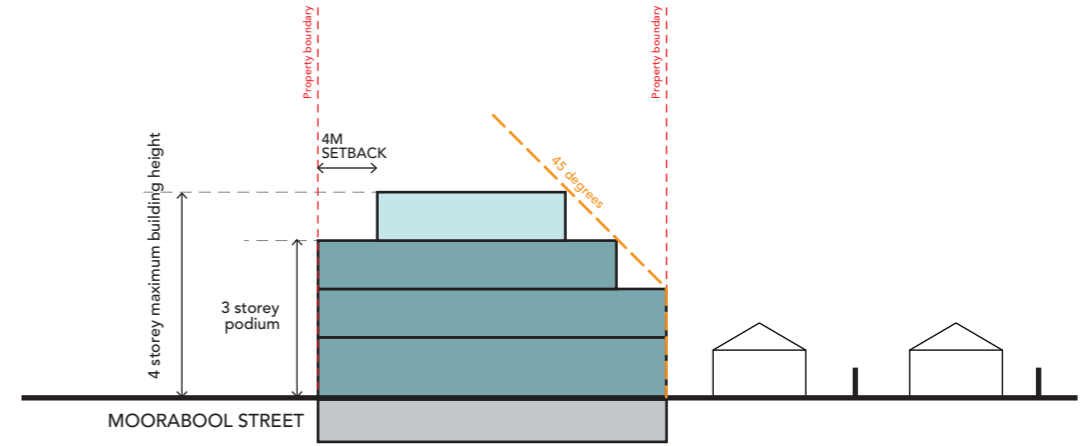


Figure 89. Precinct B Guideline diagram for properties fronting Moorabool Street, and residential interface. (Section A-A)

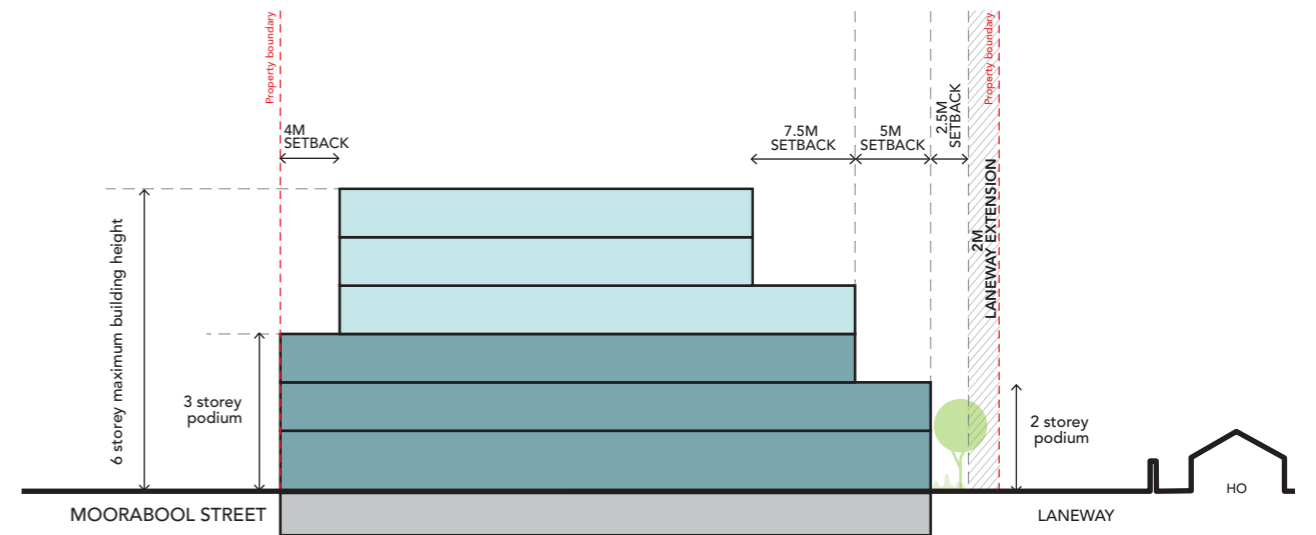
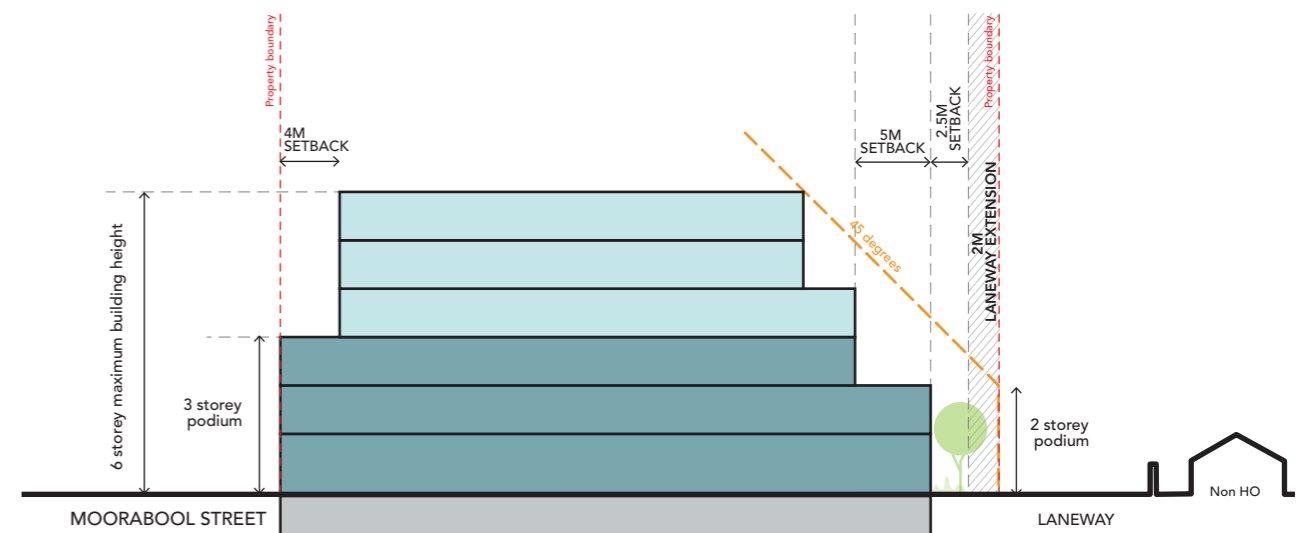


Figure 88. Precinct B Guideline diagram for properties fronting Moorabool Street, and residential interface. (Section B-B)



4.4A

PRECINCT B (BETWEEN LONSDALE AND FOSTER STREETS)

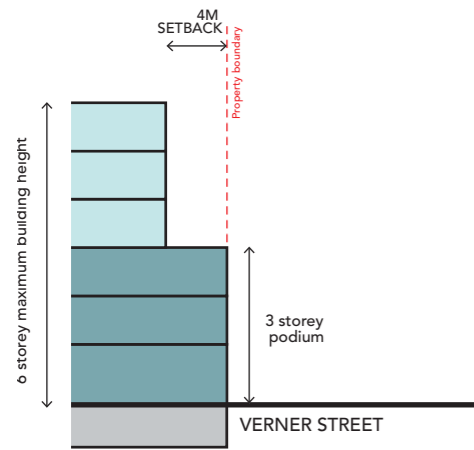


Figure 90. Precinct B Guideline diagram for properties fronting Verner Street (north and south). (Section C-C)

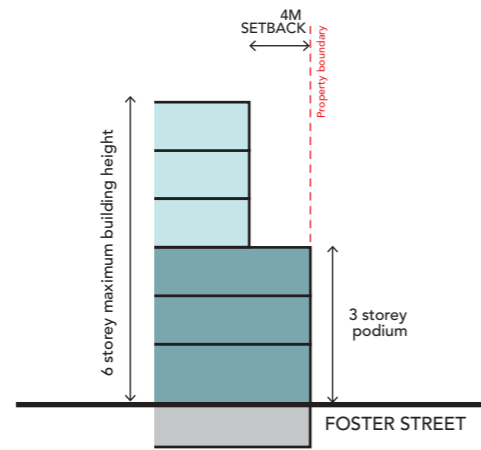


Figure 91. Precinct B Guideline diagram for properties fronting Foster Street. (Section D-D)



Figure 92. Precinct B Guideline diagram for properties fronting Lonsdale Street. (Section E-E)

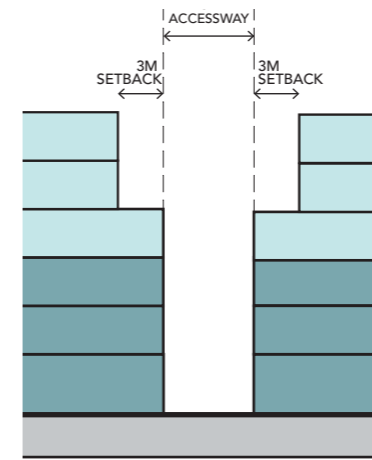
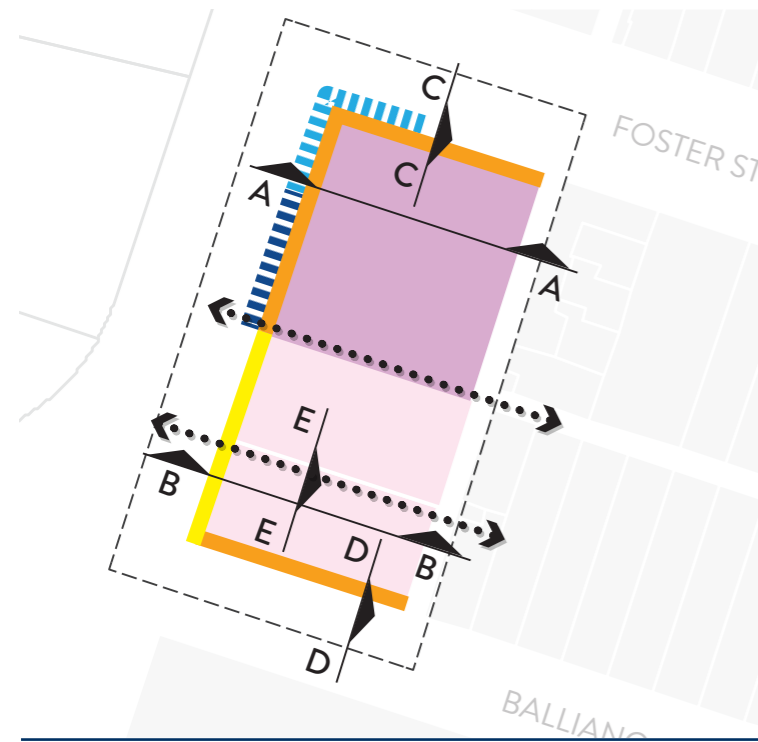


Figure 93. Precinct B Guideline diagram for pedestrian links

4.4A

PRECINCT C (BETWEEN FOSTER AND BALLIANG STREETS)



KEY

HEIGHTS

- 2 storeys
- 3 storeys
- 4 storeys
- 5 storeys
- 6 storeys
- 7 storeys

STREETWALL

- 2 storeys
- 3 storeys

INTERFACE

- Commerical
- Hospitality/Retail
- Pedestrian link

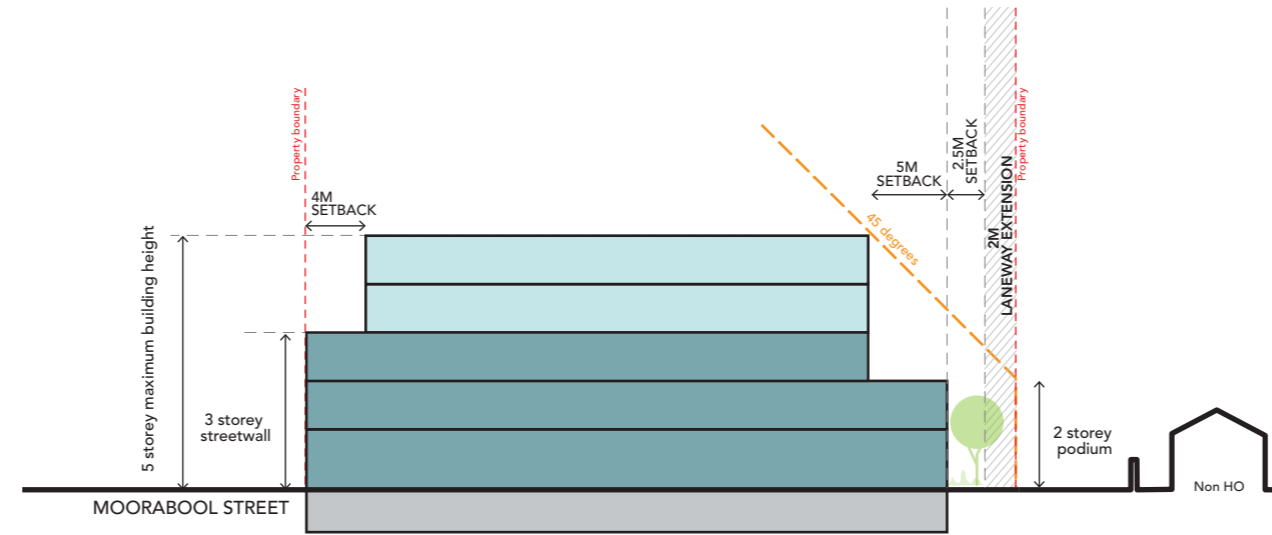


Figure 94. Guideline diagram for properties fronting Moorabool Street (Section A-A)



Figure 97. Guideline diagram for properties fronting Foster Street (Section C-C)

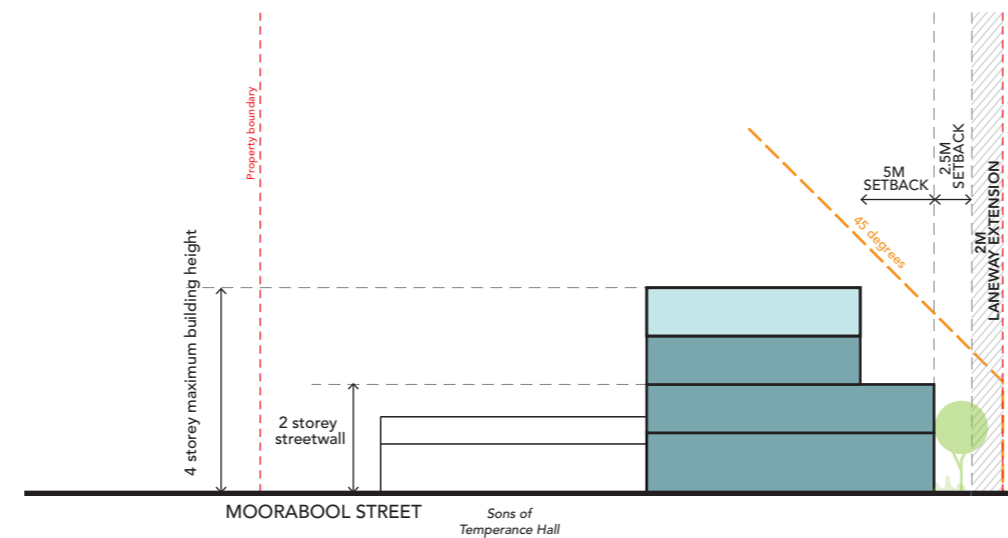


Figure 96. Guideline diagram for properties fronting Moorabool Street (Section B-B)

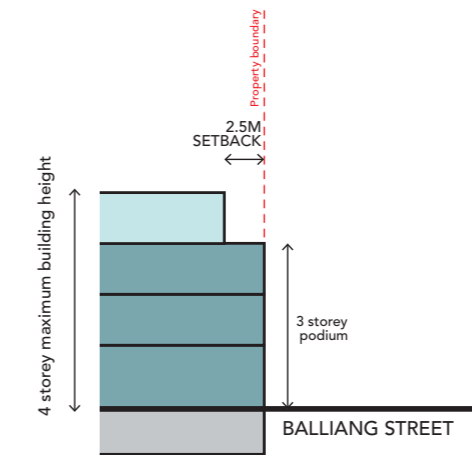


Figure 98. Guideline diagram for properties fronting Balliang Street (Section D-D)

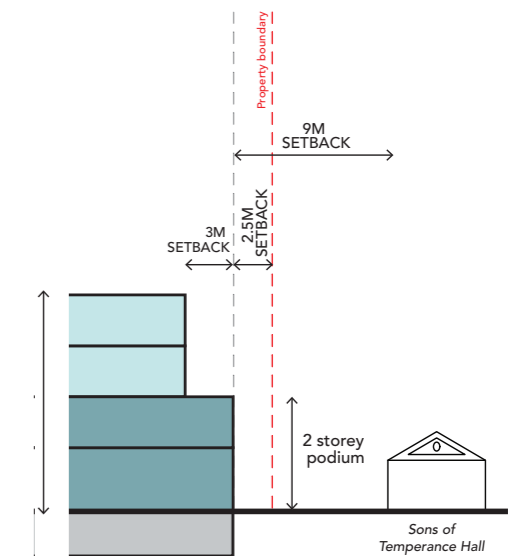
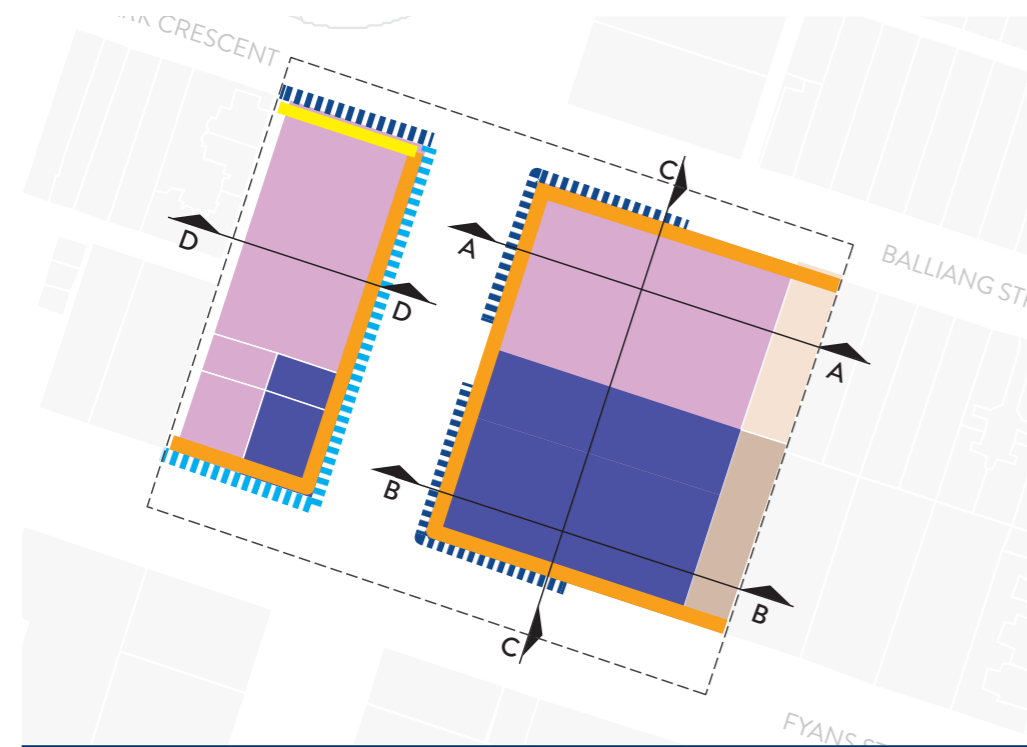


Figure 99. Guideline diagram for properties adjacent to the Sons of Temperance Hall (Section E-E)

Figure 95. Precinct C building control plan

4.4A

PRECINCT D (BETWEEN FYANS AND BALLIANG/ PARK CRESCENT STREETS)



KEY

HEIGHTS	STREETWALL
2 storeys	2 storeys
3 storeys	3 storeys
4 storeys	
5 storeys	INTERFACE
6 storeys	Commercial
7 storeys	Hospitality/Retail
	Pedestrian link

Figure 100. Precinct D building control plan

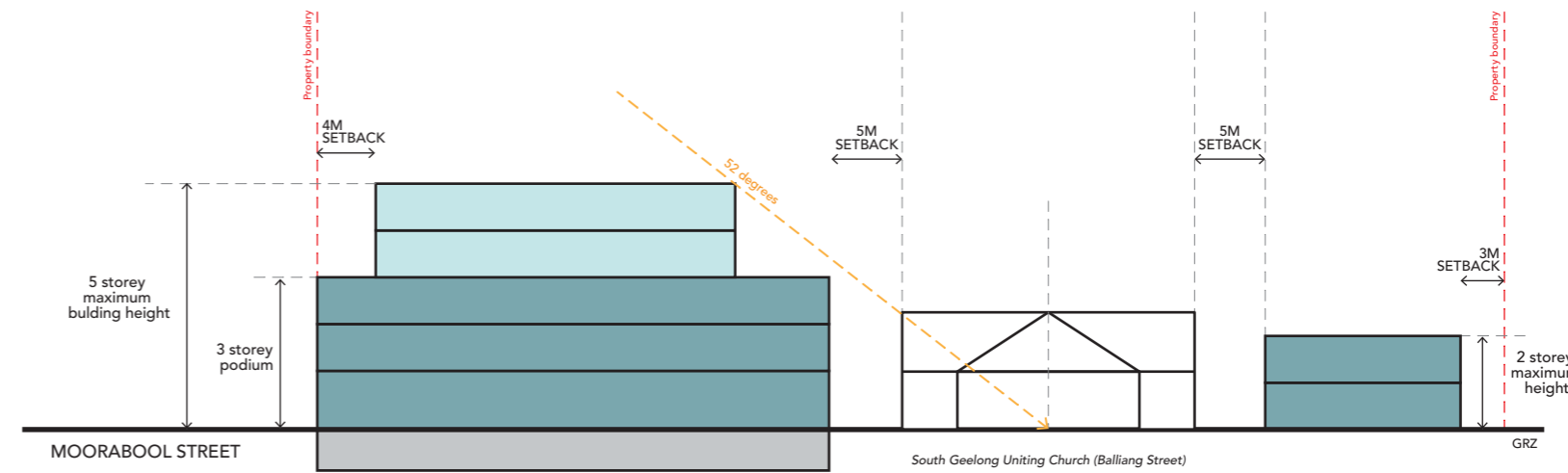


Figure 101. Precinct D Guideline diagram for properties fronting Moorabool Street, and Former South Geelong Methodist Chapel and residential interface. (Section A-A)

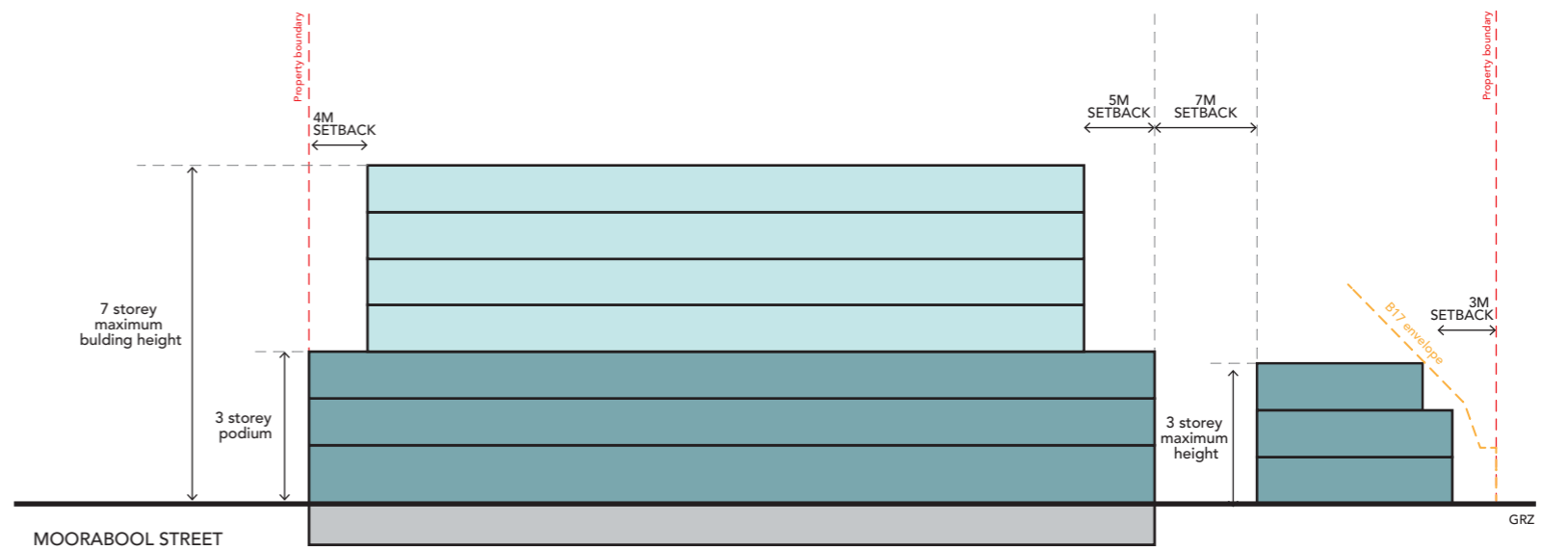


Figure 102. Precinct D Guideline diagram for properties fronting Moorabool Street, and residential interface. (Section B-B)

4.4A

PRECINCT D (BETWEEN FYANS AND BALLIANG/ PARK CRESCENT STREETS)

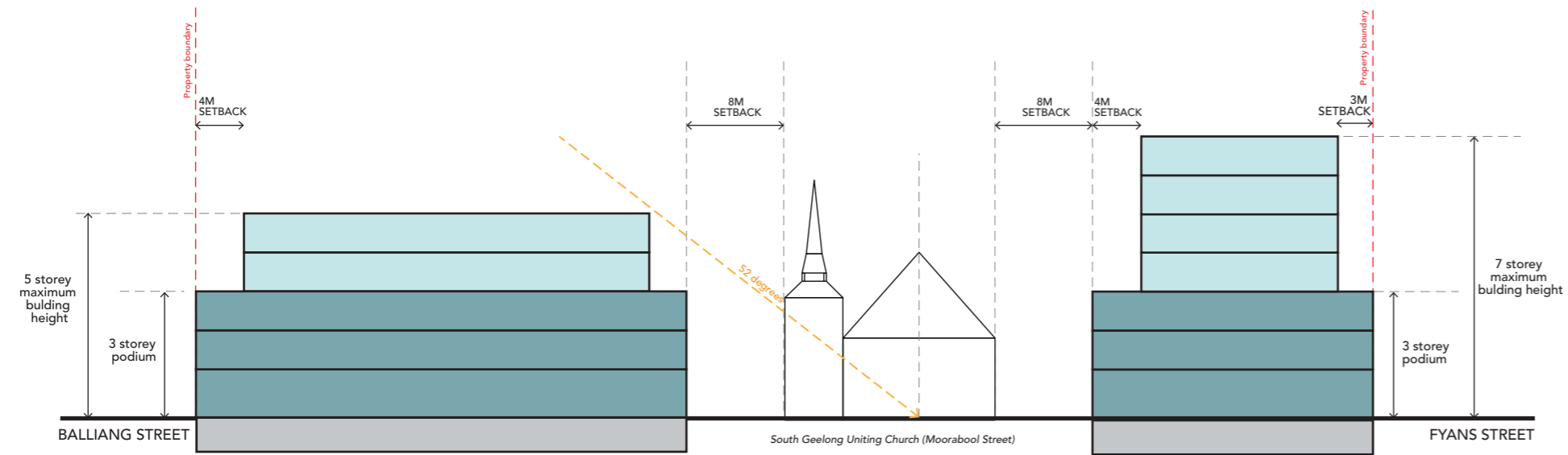


Figure 103. Precinct D Guideline diagram for properties fronting Balliang Street, interface with Former South Geelong Uniting Church and Fyans Street. (Section C -C)

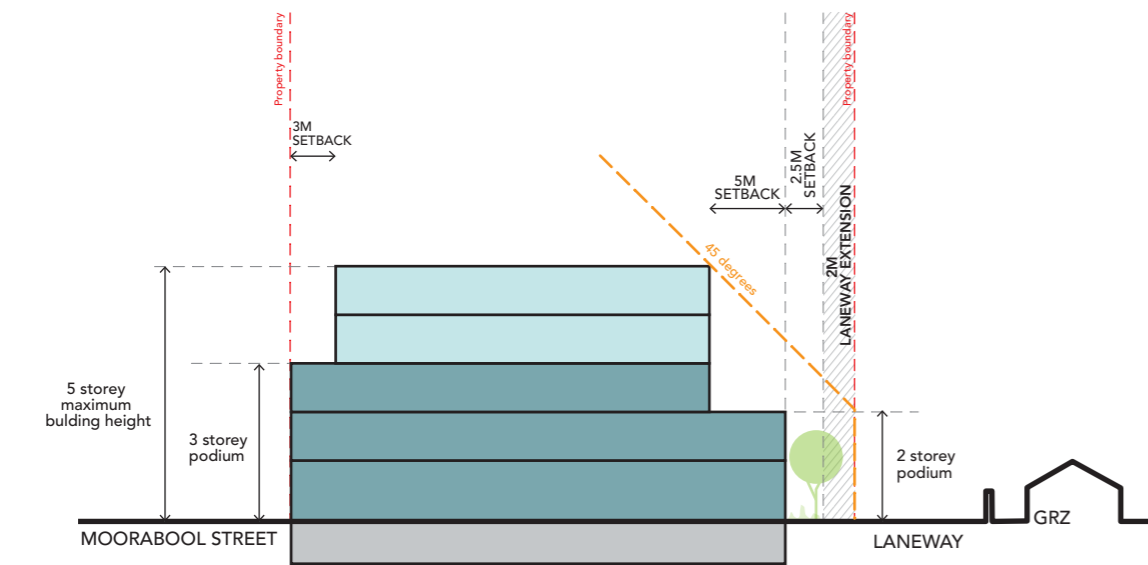


Figure 104. Precinct D Guideline diagram for properties fronting Moorabool Street, and residential interface. (Section D-D)

4.4A

SAFETY AND DESIGN

OBJECTIVES

- To minimise opportunities for anti-social behaviour.

STRATEGIES

- Ensure building entries have a 'front door address' that is visible and directly accessible from the pedestrian path.
- Ensure buildings area designed to maximise opportunities for casual surveillance of the public domain or common space.
- Ensure a high level of passive surveillance is achieved from upper levels of building adjacent to public open space including the Church plaza.
- Ensure the design of the ground floor of a building minimises the opportunity for areas where there is potential for concealment.
- Ensure new development adjoining public areas provide external lighting.

SUN ACCESS

OBJECTIVES

- To limit the deterioration of direct sunlight access to public spaces and neighbouring properties.
- To require new development to have a high level of internal solar amenity.

STRATEGIES

- The development application must demonstrate no loss of solar access to neighbouring properties between 10 and 2pm on the September equinox.
- Ensure shading devices and privacy screens do not substantially reduce the potential for daylighting or views for residents.
- Avoid extensive glazing that is unprotected from mid-summer sunlight.

BUILDING FAÇADES, ENTRANCES AND ARTICULATION

OBJECTIVES

- To ensure the design of buildings provides a high level of articulation, safe entry ways and reduces the dominance of vehicle entry ways.
- The appearance of new developments must define and enhance the public domain through design measures such as building modulation, massing, articulation and use of materials.

STRATEGIES

- Ensure new buildings are to be designed to address the street and to enhance the public domain through entrances, transparent glass, internal uses at ground level, good quality finishes and well resolved architectural design.
- Ensure building façades are articulated into smaller elements or distinctive treatments.
- Avoid extensive expanses of blank glass or solid walls.
- Encourage ground floor dwelling units facing the street and public domain to have individual entries from the street.
- Ensure all basement access entries for development are located on minor streets or at the rear of the property.
- Ensure entries to basements are minimised in size and visual impact from the public domain.
- Ensure ground floor car parking areas are internalised, such that other active uses front the street.

4.4A

GROUND FLOOR FRONTAGES

OBJECTIVES

- To provide a diverse range of ground floor frontages in appropriate locations.

STRATEGIES

- Ensure tenancies along an active frontage are diverse in size, to accommodate a range of uses including retail, cafés, restaurants, and have an average width of 5m to 8m.
- Ensure buildings setback on the ground floor, corner sites must have a ground floor level generally at footpath level, no level changes in the public realm, have consistent footpath pavement treatments and no fixed private structures
- Support active uses adjoining street corners, public plazas and around heritage buildings.

LANDSCAPING

OBJECTIVES

- To provide landscaping in appropriate locations

STRATEGIES

- Ensure that landscaping is integrated with the building layout and design, is of a high quality and appropriate to its location, and designed by a suitably qualified professional.
- Support the use of indigenous species, high quality precast concrete elements, and high-quality pavement design.
- Require new development to contribute to street tree planting adjacent to their site.

PRIVATE OPEN SPACE

OBJECTIVES

- To provide useable, easily accessible open space for each occupant.

STRATEGIES

- Ensure private open space areas have a northern aspect where practicable.
- Ensure private open space is directly accessible from the living area.
- To ensure private open space is of adequate size and dimension, to meet the accommodation needs of occupants.

4.4A

COMMUNAL OPEN SPACE

OBJECTIVES

- To provide communal open space within apartment developments to supplement private open space.

STRATEGIES

- Provide communal open space to supplement private open spaces within apartment developments
- Ensure communal open space is designed to maintain safety, amenity, privacy and sun light access to users.
- Ensure communal open space is designed to present as a private area for residents use only, include passive surveillance from adjacent internal living areas/ pathways, have a northerly aspect where possible and be separate to any public thoroughfares.

GREEN ROOFS

OBJECTIVES

- To provide green roofs on buildings in appropriate locations

STRATEGIES

- Encourage green roofs and walls to improve air quality, amenity, air temperature, building insulation and aesthetic quality of the urban environment.
- Encourage green roofs on all apartment buildings and designed by a suitably qualified person.
- Support the use of Australian native plants on green roofs.
- Ensure green roofs are located in accessible, serviceable and visible parts of the roof such as the roof of lower parts of a development with varying heights.

FENCES

OBJECTIVES

- To provide fencing in appropriate locations

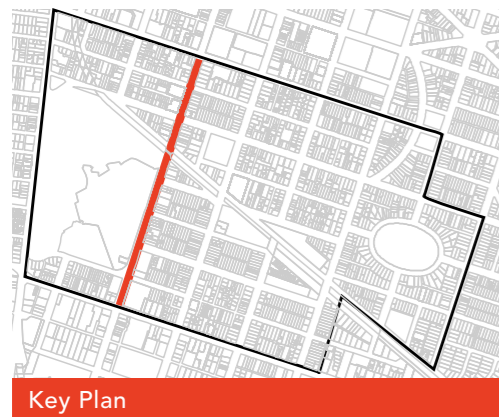
STRATEGIES

- Ensure fencing maintains passive surveillance between public and private spaces, make a positive contribution to the character of the street and where relevant to the style of the building.
- Ensure the height of a front fence does not exceed 900mm above the footpath level.
- Ensure a front fence is located the property boundary.
- Where a side or rear fence is provide it must not exceed 1800mm in height above ground level and must step down/ follow any change in level along the property boundary.
- Ensure gates do not open directly over a footpath or road.

4.5A MOORABOOL STREET REDEVELOPMENT AREA PUBLIC REALM WORKS

An integrated, staged public realm and streetscape upgrade program is proposed within the Moorabool Street development area. The first stage of work would be the Better Bikes cycle path.

MOORABOOL STREET



Key Plan

EXISTING CONDITION

- Wide asphalt carriageway in good condition.
- Asphalt footpaths in average condition with multiple vehicular crossing points.
- Brush Box on the eastern side of the road.
- Hoop Pine on the western side of the road (adjacent to the Stadium).
- A 30m wide road reservation.
- An established bus route.

STRATEGY PLAN

- Provide better opportunities for increased pedestrian, bicycle and public transport links.
- Provide large canopy trees along both sides of the road and median where possible.
- Develop WSUD solutions where possible, in the centre median, and the road edges and footpath especially where they can support better tree growth.
- Provide quality materials in footpaths including paving and street furniture.

MOORABOOL STREET PUBLIC REALM VISION

Moorabool Street can be redeveloped as a boulevard with new trees along both sides and within a central median.

Moorabool Street will provide a separate bike path along the western edge.

A new signalled crossing at Lonsdale Street intersection will provide a formal crossing for pedestrians and cyclists accessing Kardinia Park.

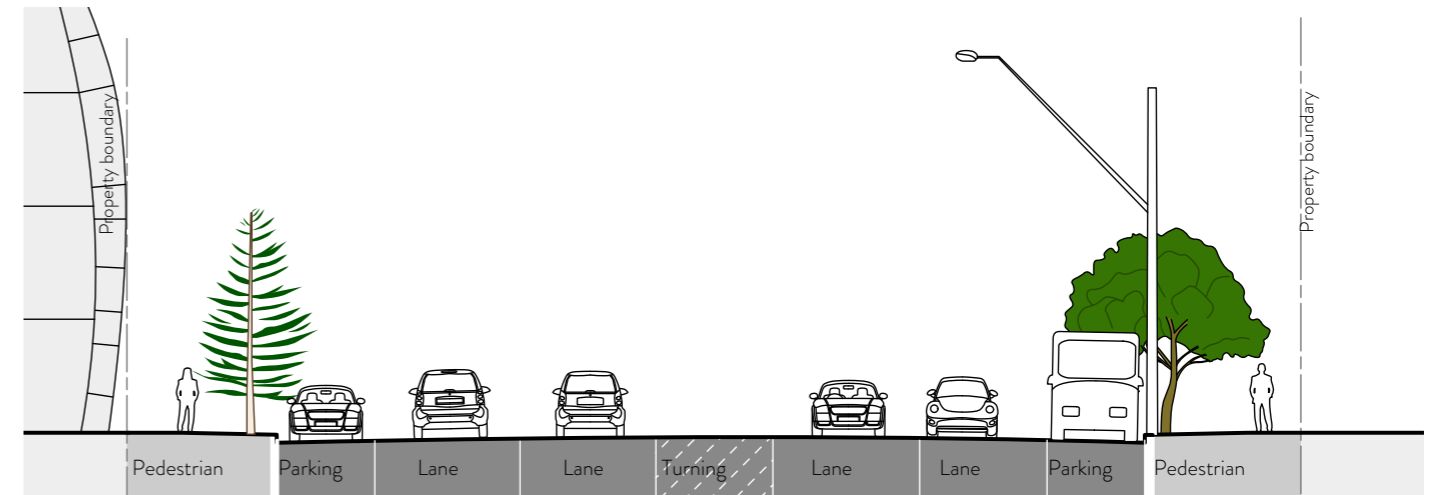


Figure 105. Moorabool Street, existing typical cross section

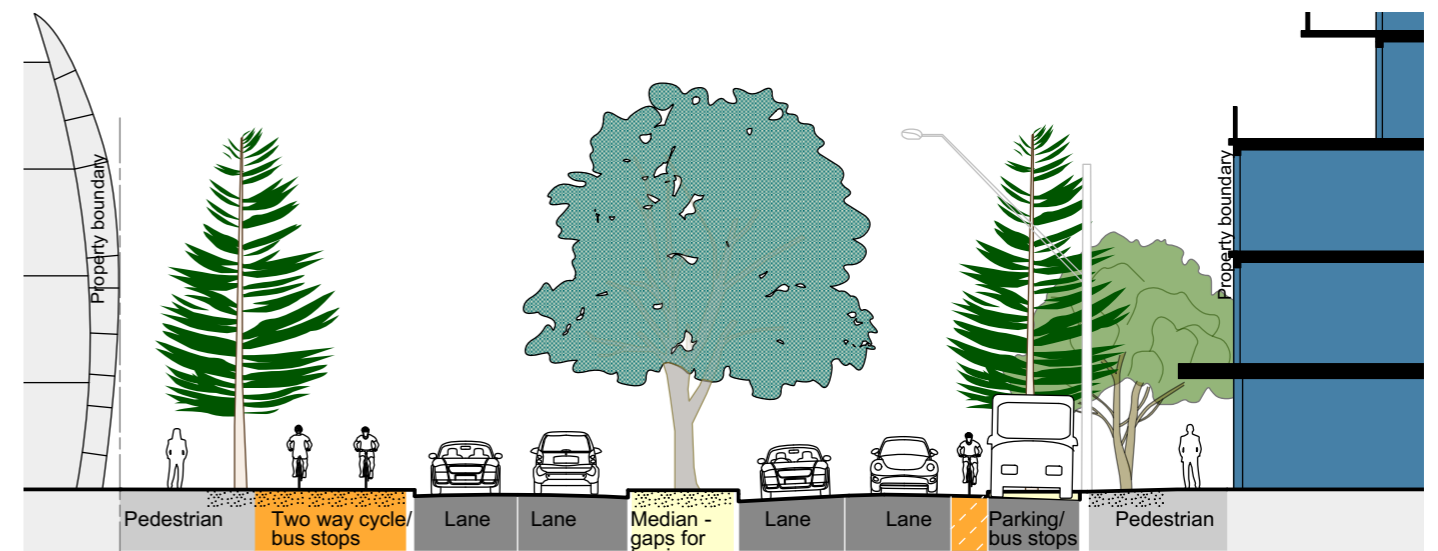


Figure 107. Moorabool Street, proposed typical cross section

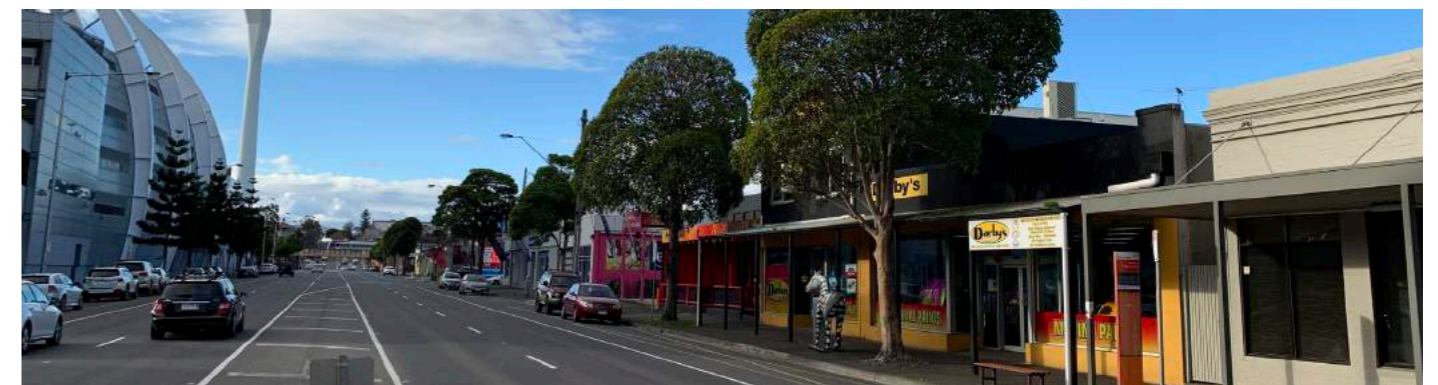


Figure 106. Looking north up Moorabool Street

4.5A

MOORABOOL STREET

Figure 108. Existing

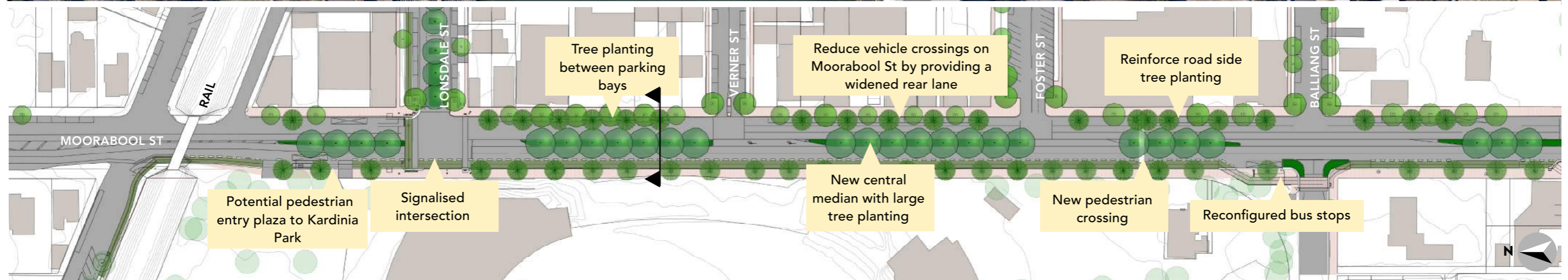


Figure 109. Proposed

MATERIALS

- Asphalt footpaths, possible feature bluestone.
- Trees within footpaths and median established within wide trenches of structural soil.
- Porous pavements for trees within footpath to support tree growth.
- Pedestrian lights within footpath zone.
- Lonsdale Street threshold crossing treatment could include asphalt flat-top with rough bluestone pitchers on edges.

TREE SPECIES

- Hoop Pine retained and reinforced on road edges.
- Queensland Brush Box retained on the east side of Moorabool Street.
- Central median species, options include; Lemon Scented Gum, Spotted Gum, Smooth-barked Apple Myrtle.

PUBLIC REALM

5.1	Public Realm Works	95
5.2	Lonsdale Street	98
5.3	Bellerine Street South	99
5.4	Bellerine Street North	101
5.5	Station Hub	102
5.6	Carr Street	103
5.7	Yarra Street	104

5.0

5.0 PUBLIC REALM

Streetscapes outside the key development areas also present opportunity to be improved as part of a staged public realm and streetscape upgrade program.

A coordinated streetscape improvement program is proposed to significantly improve the walking environment of the suburb as well as reducing the heat island effect of large expanses of bitumen.

The main intervention proposed is the introduction of a central median which will dramatically improve pedestrian and cyclist crossing experience as well as provide opportunities for centre road tree planting.

Undergrounding of power throughout the study area is recommended as funds /grants become available to improve the appearance of the study area and assist in providing a consistent canopy cover.

Key corners kerb outstands are proposed to accommodate pedestrians wanting to cross the road and provide space for local activities relating to the social or commercial potential of the corner. The kerb extension can also tame dangerous driver behaviour.

Kerb outstands can also be used mid-block at key locations such as school crossings.

A consistent, elegant and adaptable palette of planting, pavement, public furniture, pedestrian lighting is envisaged.

Council is already progressing some of these public realm upgrades through the STiLS project. These upgrades were informed by the phase 1 consultation on the UDF.



Figure 110. Example of a central median. Rathdowne Street, Carlton

Figure 111. Example of a central median with water sensitive urban design treatment, City of Sydney

Figure 112. Example of water sensitive urban design, Dandenong



113.



114.



115.

Figure 113. Example of planted central median, City of Sydney

Figure 114. Example of a raised pedestrian crossing with 'rumble' pavement, Moreland

Figure 115. Example of a raised pedestrian crossing with 'rumble' pavement edges and kerb outstands. Taradale, New Zealand

5.1

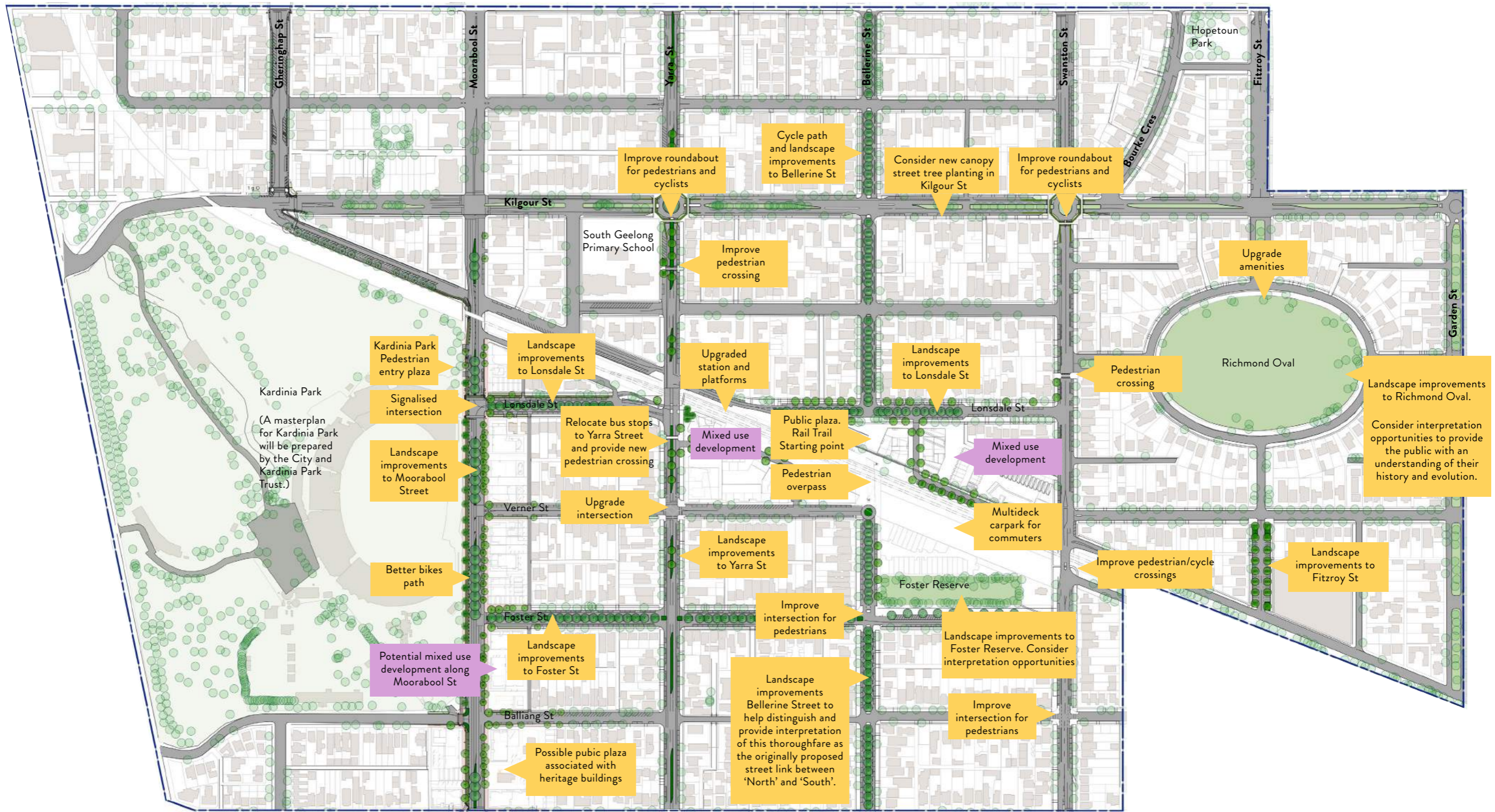
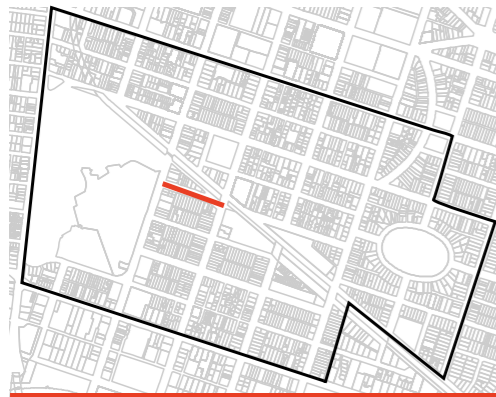


Figure 116. Public Realm Concept Plan Short - medium term scenario

5.2 LONSDALE STREET WEST



Key Plan

Lonsdale Street is an important link between the Station Hub Precinct and Moorabool Street Precinct/ Kardinia Park. Improvements to the pedestrian and cyclist experience between these two nodes is considered very important.

EXISTING CONDITION

This section of Lonsdale Street is between Moorabool Street and Yarra Street key features include;

- Wide asphalt carriageway in good condition.
- Two-way cycle path.
- Concrete footpaths.
- Brush Box planting to road edges.
- A 30m wide road reservation.

STRATEGY PLAN

- Provide for pedestrians, bicycles, buses and traffic.
- Provide parking to support Moorabool Street retail precinct and residents.
- Provide canopy trees.
- Reduce speed limit to 40 km/hr.
- Staged introduction of vegetated central medians is recommended. This will require careful strategy of removal of car parking generally starting furthest away from key destinations, such as commercial areas.
- Develop WSUD solutions, especially where they can help support better tree growth.

LONSDALE STREET (WEST) PUBLIC REALM VISION

Lonsdale Street West will be maintained substantially in its present form, using existing pavement, trees and drainage. The cycle way will be maintained in its current form, with improved connections proposed to Moorabool Street and the Rail Trail.

Centre of the road parking is proposed to cater for retail, residential and commuter car parking demands. Sections of car parking zone will include planted medians with large canopy trees.

Note: Long term staged removal of centre road car parking and introduction of vegetated medians.

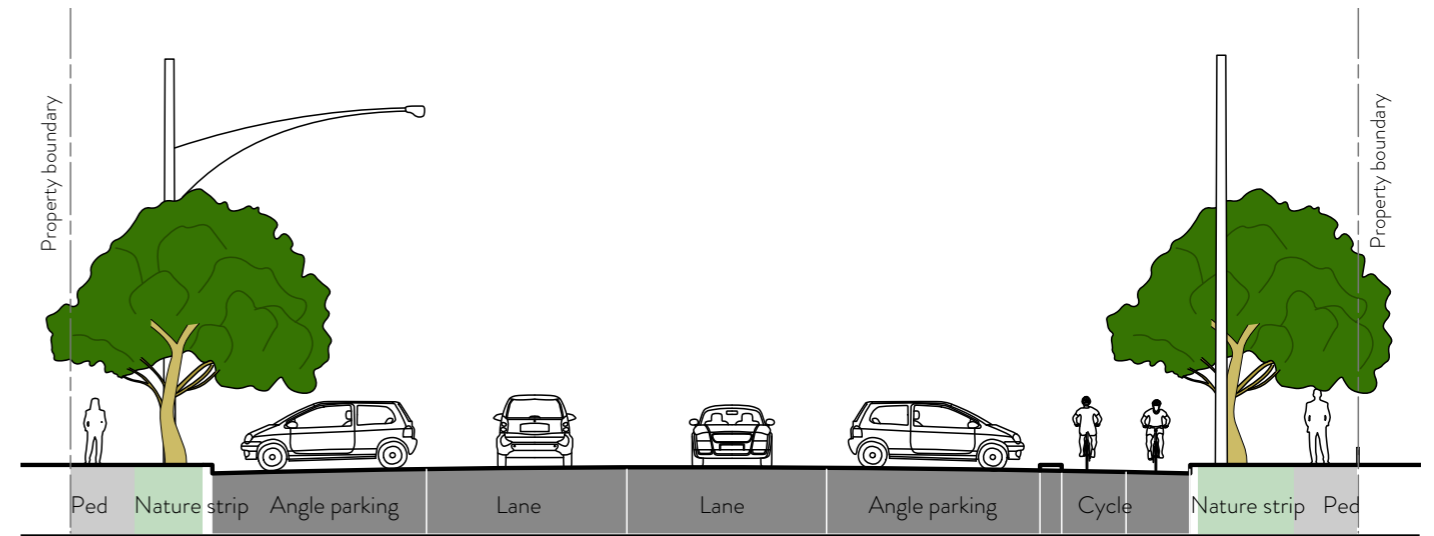


Figure 117. Lonsdale Street (West), existing typical cross section

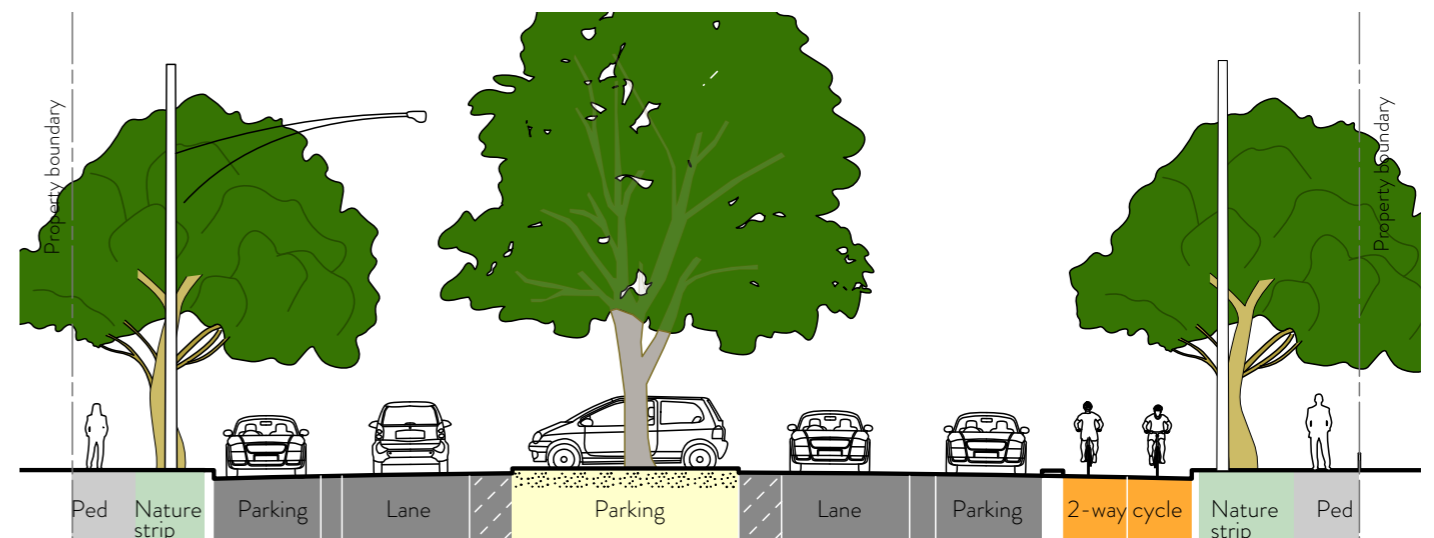


Figure 118. Lonsdale Street (West), proposed typical cross section

MATERIALS

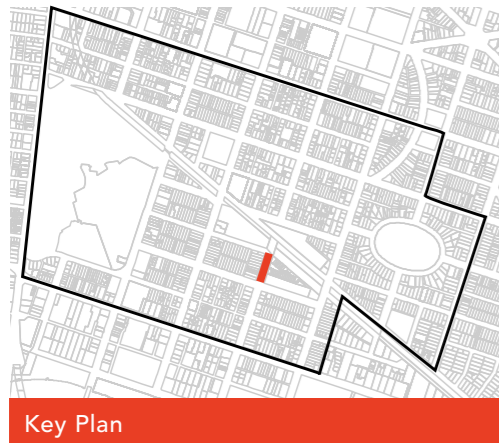
- Concrete footpaths.
- Trees within parking bays, established within wide trenches of structural soil.
- Trees within nature strips.
- Pedestrian lights within footpath zone.
- Pedestrian crossing threshold treatment could include asphalt flat top with rough bluestone pitchers.

TREE SPECIES

- Brush Box planting maintained and reinforced in northern nature strip.
- Central median species, options including; Lemon Scented Gum, Spotted Gum, Smooth-barked Apple Myrtle.

5.3 BELLERINE STREET SOUTH

BELLERINE STREET SOUTH (1)



Bellerine Street is an important historical street, being the first road connection between 'North' and 'South' Geelong. There is potential interpret this through landscape improvements along the length of this street and create a 'green' link right into the city.

EXISTING CONDITION

This section of Bellerine Street is between Verner Street and Foster Street key features include;

- Wide asphalt carriageway in good condition.
- Gravel 90-degree parking on eastern road edge.
- Poorly defined edge to the park.
- Concrete footpaths on western property boundary.
- Brush Box on western road edge.
- A 30m wide road reservation.

STRATEGY PLAN

- Develop Bellerine Street as a green link between the City and South Geelong.
- Provide for pedestrian, traffic and parking, including a pedestrian crossing over the railway lines.
- Provide large canopy trees along eastern side of the road and within a central median.
- Develop WSUD solutions where possible in the road and nature strip especially where they can support better tree growth.
- Underground power.
- Reduce speed limit to 40 km/hr.

BELLERINE STREET (SOUTH -1) PUBLIC REALM VISION

Bellerine Street will become an important green street which provides interpretation of the historical first street connection between 'north' and 'south' Geelong.

Car parking in this section of the street will support the train station. The central road space will be reconfigured to provide a vegetated median with new canopy tree planting. Sections of centre median will allow for 90 degree car parking.

The street will be maintained substantially in its present form using existing pavement, trees and drainage. Upgrade of the eastern gravel section is required.

Note: Long term staged removal of centre road car parking and introduction of vegetated medians.

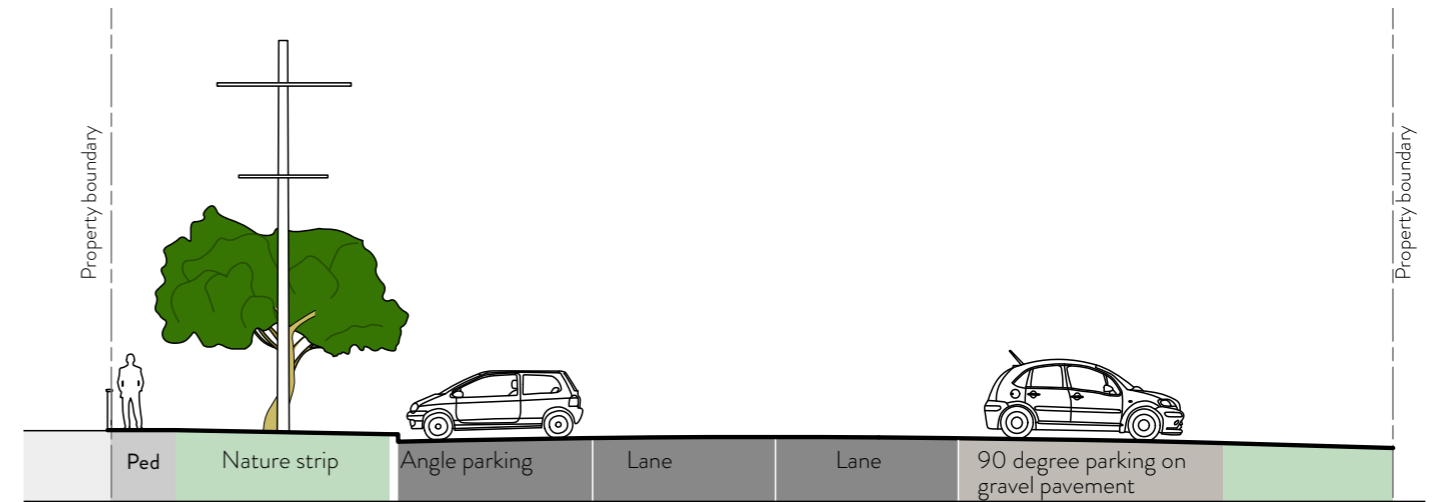


Figure 120. Bellerine Street South (1), existing typical cross section

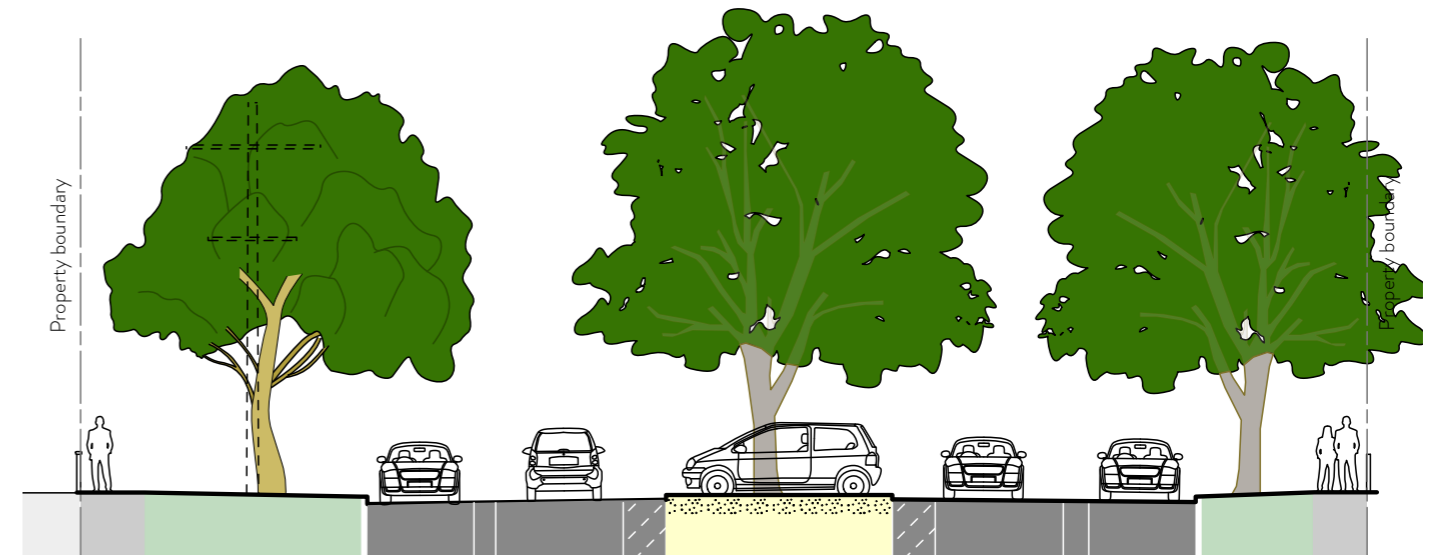


Figure 119. Bellerine Street South (1), proposed typical cross section

MATERIALS

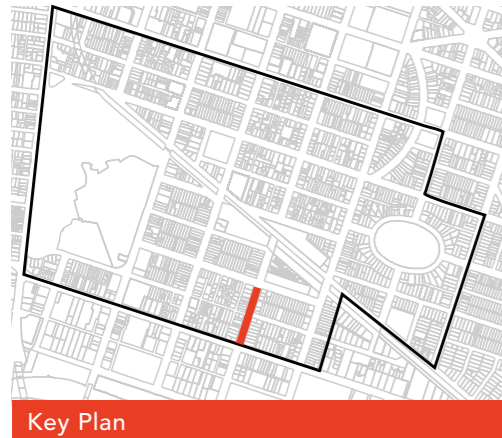
- Concrete footpaths, including a new footpath adjacent to the park.
- Trees within parking bays, established within wide trenches of structural soil.
- Trees within nature strips.
- Pedestrian lights within footpath zone.

TREE SPECIES

- Brush Box planting on western road edges maintained and reinforced.
- Central median species, options include; Lemon Scented Gum, Spotted Gum, Smooth-barked Apple Myrtle.

5.3 BELLERINE STREET SOUTH

BELLERINE STREET SOUTH (2)



EXISTING CONDITION

This section of Bellerine Street is between Foster Street and Fyans Street, key features include;

- Wide asphalt carriageway in good condition.
- Gravel 90-degree parking on eastern road edge.
- Poorly defined edge to the park.
- Concrete footpaths on western property boundary.
- Brush Box on western road edge.
- A 30m wide road reservation.

STRATEGY PLAN

- Develop Bellerine Street as a green link between the 'north' and 'south' Geelong.
- Provide for pedestrian, traffic and parking.
- Provide large canopy trees along eastern side of the road and within a central median.
- Develop WSUD solutions where possible in the road and nature strip especially where they can support better tree growth.
- Underground power.
- Reduce speed limit to 40 km/hr.

BELLERINE STREET (SOUTH -2) PUBLIC REALM VISION

This section of the street will be maintained substantially in its present form using existing pavement, trees and drainage.

The central road space will be reconfigured to provide a vegetated median with new canopy tree planting.

Note: This section of roadway demonstrates the preferred long term condition for other streets within the study area, with no central parking and a vegetated median.

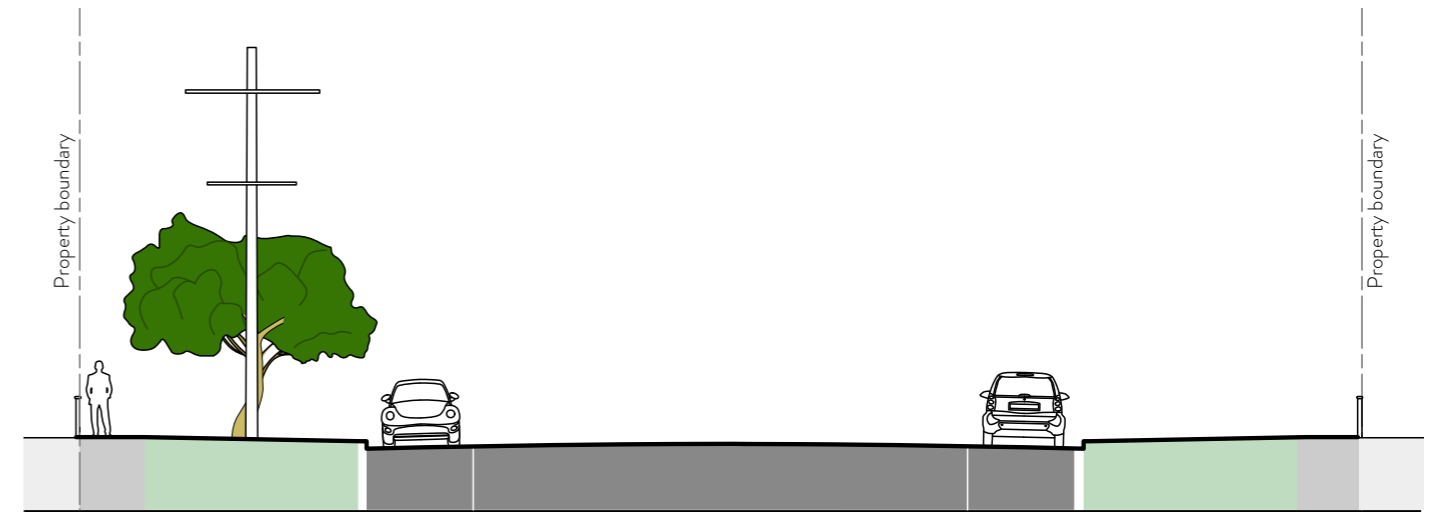


Figure 121. Bellerine Street South (2), existing typical cross section

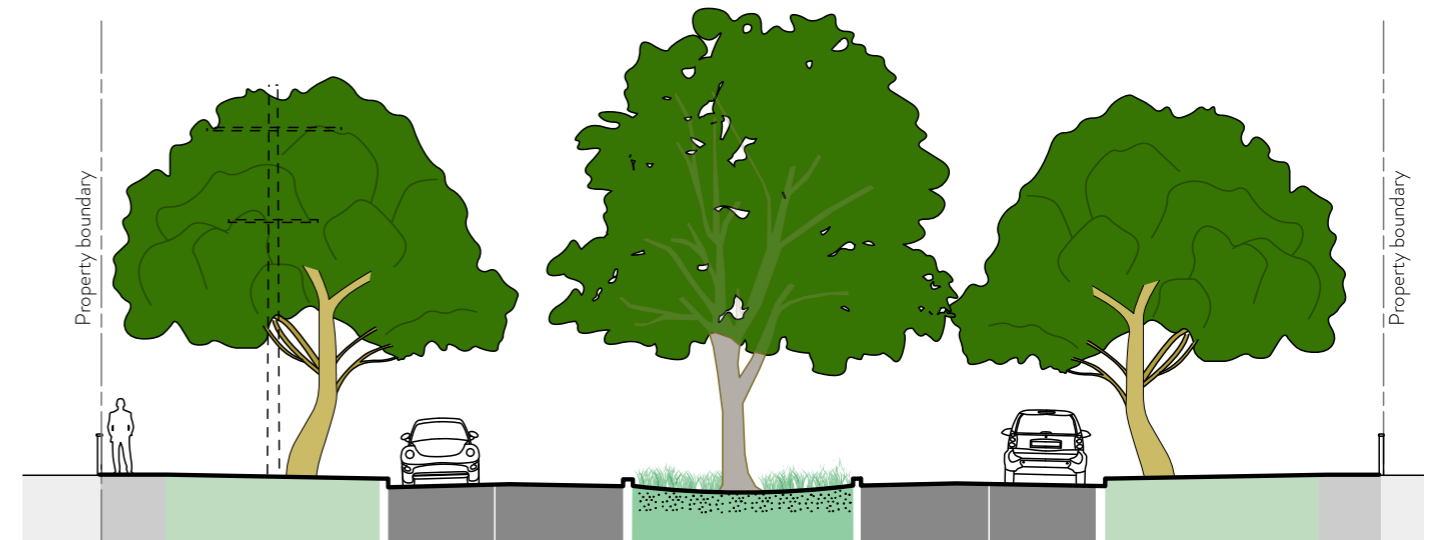


Figure 122. Bellerine Street South (2) , proposed typical cross section

MATERIALS

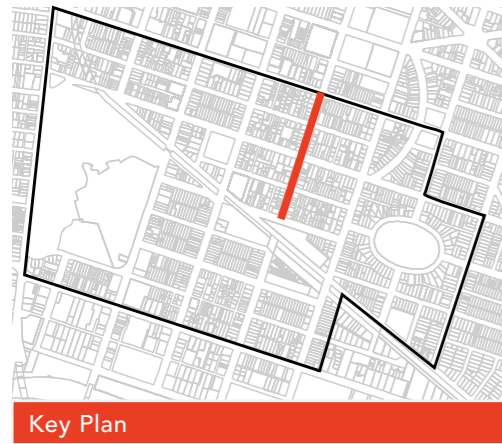
- Concrete footpaths.
- Trees within a central median. Consider water sensitive design solutions, slight regrading of laneways may be required.
- Trees within nature strips/ rain gardens.
- Pedestrian lights within footpath zone.

TREE SPECIES

- Brush Box planting on road edges maintained and reinforced.
- Central median species, options include; Lemon Scented Gum, Spotted Gum, Smooth-barked Apple Myrtle.

5.4 BELLERINE STREET NORTH

BELLERINE STREET NORTH



EXISTING CONDITION

This section of Bellerine Street is from Lonsdale Street to McKillop Street.

- Wide asphalt carriageway in good condition.
- Concrete footpaths.
- Brush Box on western road edge.
- A 30m wide road reservation.

STRATEGY PLAN

- Provide for pedestrian, bicycles, traffic and parking.
- Provide large canopy trees along eastern side of the road and within a central median.
- Develop WSUD solutions where possible in the road and nature-strip especially where they can support better tree growth.
- Undergrounding of power throughout the precinct.
- Staged introduction of vegetated central medians is recommended as we shift away from private vehicles in favour of modes such as walking, cycling, street level mass transit, trains and shared vehicles. This will require a careful strategy of removal of car parking, generally starting furthest away from the train station.
- Reduce speed limit to 40 km/hr.

BELLERINE STREET NORTH PUBLIC REALM VISION

Bellerine Street will become an important green street which provides interpretation of the historical first street connection between 'north' and 'south' Geelong.

This section of the street will be maintained substantially in its present form using existing pavement, trees and drainage. The roadway will be reconfigured to include separated bike paths, which connect to the Station, Rail Trail and proposed pedestrian crossing over the railway.

The central road space will be reconfigured to provide a vegetated median with new canopy tree -planting. Sections of centre median will allow for 90 degree car parking.

Note: Staged removal of car parking over time and introduction of vegetated medians. Some visitor car parking will remain in Bellerine Street in the long term.

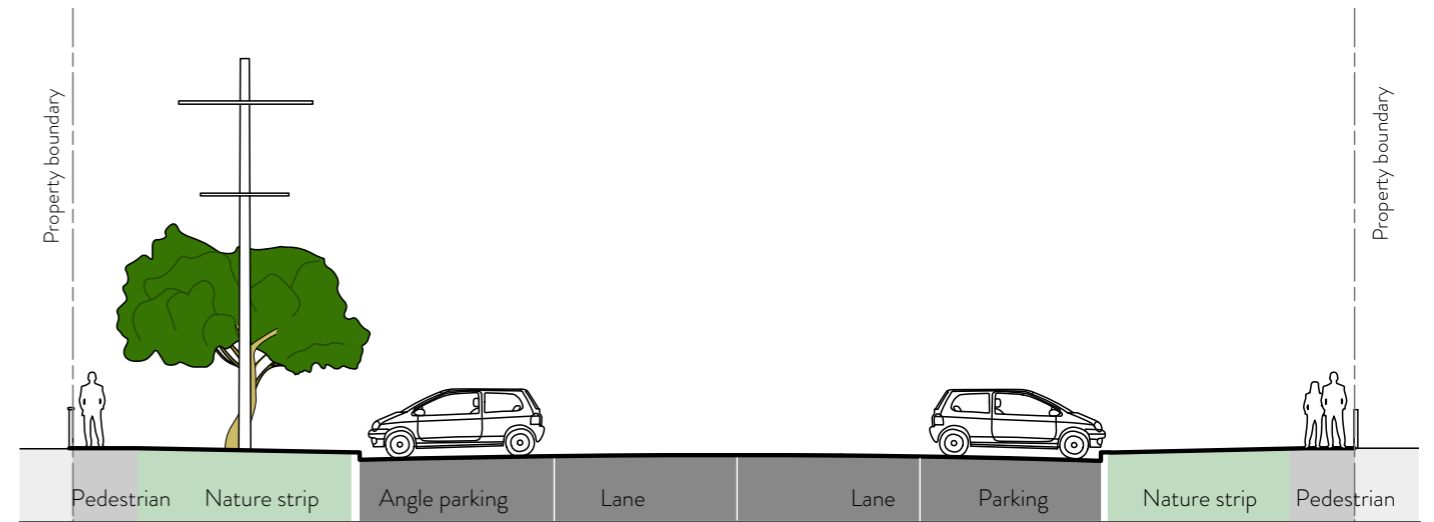


Figure 124. Bellerine Street north, existing typical cross section



Figure 123. Bellerine Street north, proposed typical cross section

MATERIALS

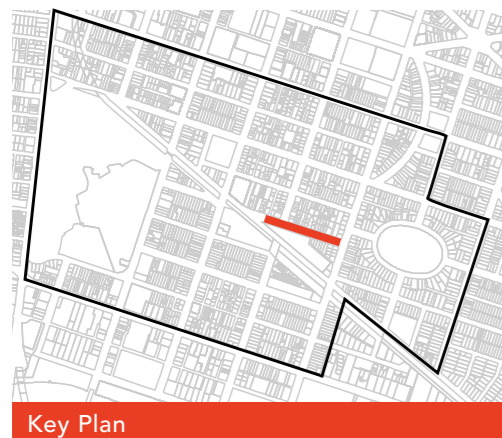
- Concrete footpaths.
- Trees within parking bays, established within wide trenches of structural soil.
- Trees within nature strips/ rain gardens.
- Pedestrian lights within footpath zone.

TREE SPECIES

- Brush Box planting on western road edges maintained and reinforced.
- Central median species, options include; Lemon Scented Gum, Spotted Gum, Smooth-barked Apple Myrtle).

5.5 STATION HUB

STATION HUB PUBLIC REALM WORKS



An integrated, staged public realm and streetscape upgrade program is proposed within the Station Hub key development area, which utilises the wide street reserves for biodiversity, pedestrian and cycle benefits.

EXISTING CONDITION

This section of Lonsdale Street is between Swanston Street and Carr Street.

- Wide asphalt carriageway in good condition.
- Concrete footpaths.
- Brush Box planting to road edges.
- A 30m wide road reservation.

STRATEGY PLAN

- Provide parking for residents, short stay shopping and commuters.
- Provide canopy trees.
- Provide space for sitting, resting and meeting on the southern (sunny) side of the street.
- Develop WSUD solutions, especially where they can help support better tree growth.
- Underground power.
- Reduce speed limit to 40 km/hr.

LONSDALE STREET (EAST) PUBLIC REALM VISION

The northern side of Lonsdale Street will be maintained substantially in its present form using existing pavement, trees and drainage. The south side will be reconstructed to include expanded footpath and nature strip which allows provision for pedestrians, new canopy trees and WSUD treatments. A combination of centre of road and kerb side parking will service both residents and commuters.

Note: Long term staged removal of centre road car parking is proposed. To be replaced with vegetated medians.

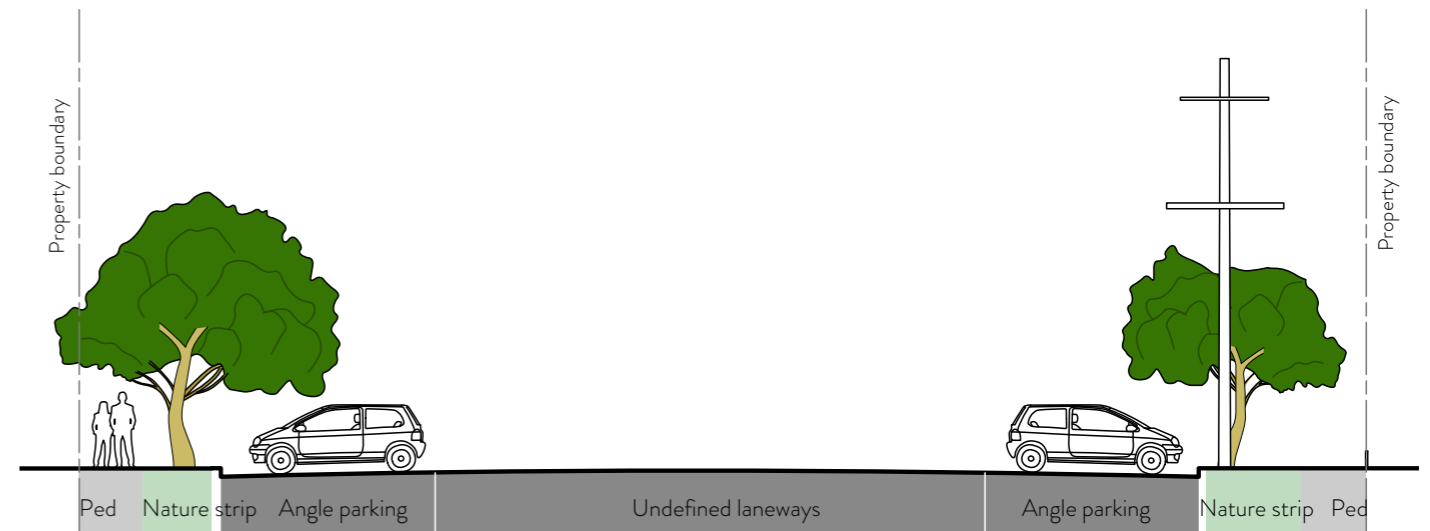


Figure 125. Lonsdale Street (East), existing typical cross section



Figure 126. Lonsdale Street (East), proposed typical cross section

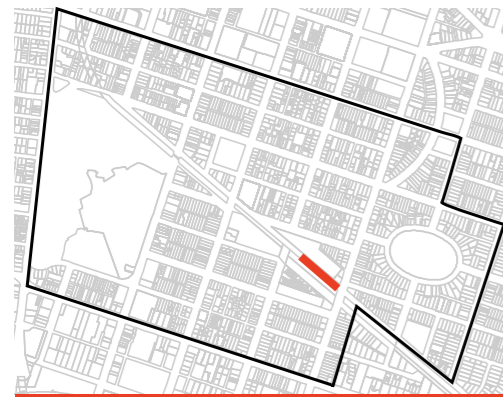
MATERIALS

- Concrete footpaths.
- Trees within a central median. Consider water sensitive design solutions, slight regrading of laneways may be required.
- Trees within nature strips/ rain gardens.
- Pedestrian lights within footpath zone.

TREE SPECIES

- Brush Box planting on road edges maintained and reinforced.
- Central median species, options include; Lemon Scented Gum, Spotted Gum, Smooth-barked Apple Myrtle.

5.6 CARR STREET



Key Plan

EXISTING CONDITION

- Wide asphalt carriageway in good condition.
- Concrete shared path.
- Sparring planting with inadequate scale (bottlebrush) on northern road edge.
- Sparring Brush Box planting on the southern road edge.
- A 20m wide road reservation.

STRATEGY PLAN

- Divert Carr Street through the Barwon Water redevelopment site.
- Close a section of Carr Street to improve pedestrian connections to the station and proposed pedestrian overpass.
- Provide for one way traffic and efficient carparking.
- Improve conditions for pedestrian and cyclists.
- Develop a 'starting point' for the Rail Trail with associated infrastructure and end of trip facilities.
- Provide large canopy trees within car parking bays.
- Develop WSUD solutions where possible in the road especially where they can support better tree growth.
- Reduce speed limit to 40 km/hr.

CARR STREET PUBLIC REALM VISION

Carr Street will continue to perform its role as a parking street. It will be reconfigured to accommodate 90-degree parking and one-way traffic (entry from Swanston Street).

The northern footpath and nature strip will be expanded to provide opportunities for improved landscape and amenities associated with new residential development.

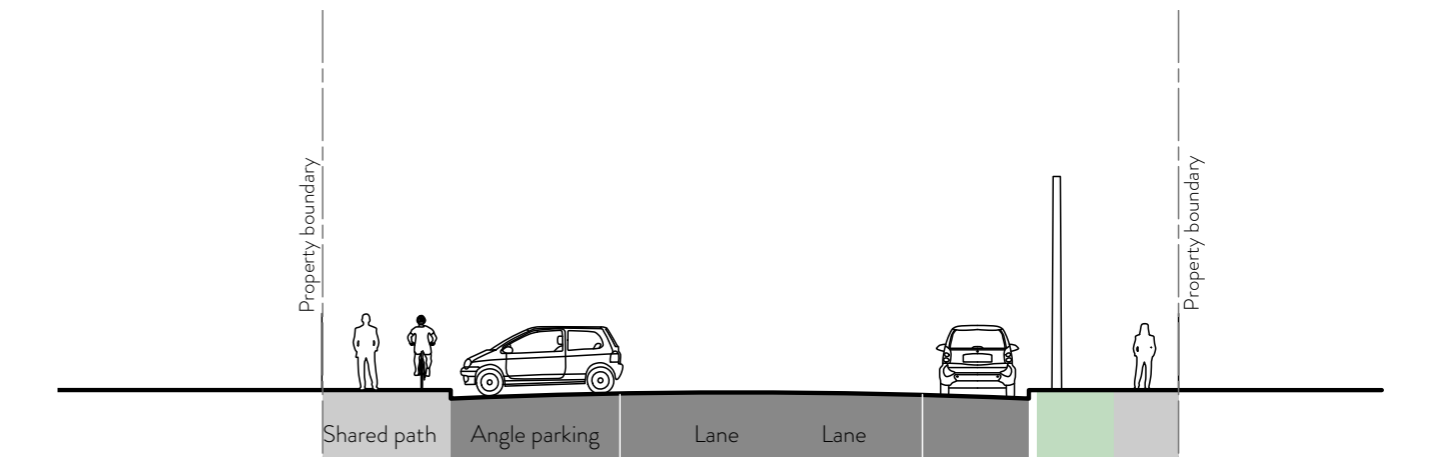


Figure 128. Carr Street, existing typical cross section

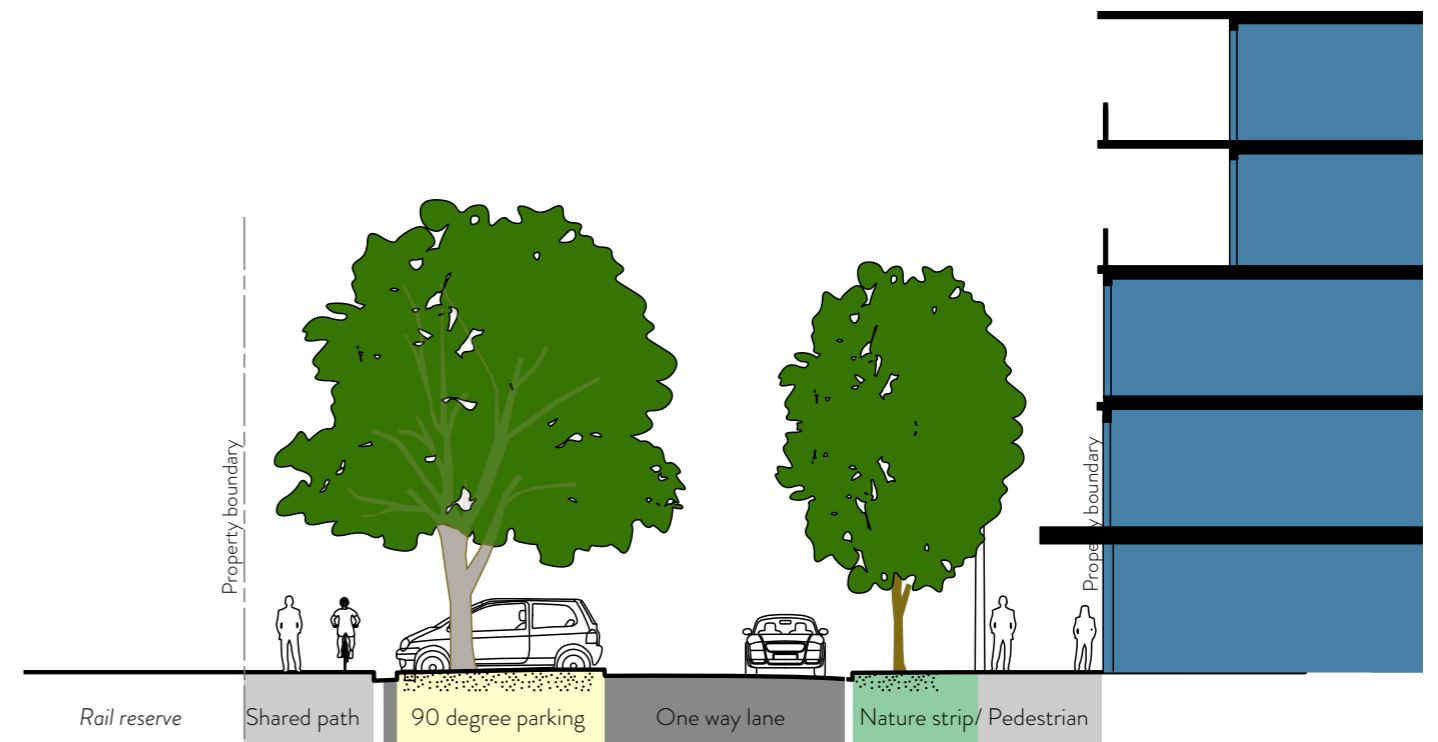


Figure 127. Carr Street, proposed typical cross section

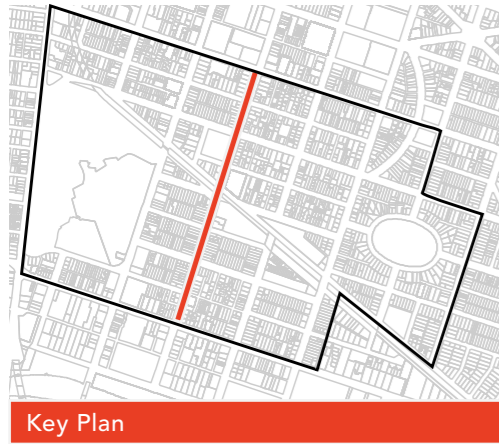
MATERIALS

- Concrete footpaths.
- Trees within median and parking bays, established within wide trenches of structural soils.
- Pedestrian lights within footpath zone.

TREE SPECIES

- Large canopy tree planting within parking zone and nature strips. TBC Species, including large scale eucalyptus.

5.7 YARRA STREET



EXISTING CONDITION

- Wide asphalt carriageway in good condition.
- Concrete footpaths in good condition.
- Brush Box on road edges.
- A 30m wide road reservation.

STRATEGY PLAN

- Provide for pedestrian, bicycles and traffic.
- Provide large canopy trees along both sides of the road and median where possible.
- Develop WSUD solutions where possible in the road and nature strips especially where they can support better tree growth.
- Underground power.

YARRA STREET PUBLIC REALM VISION

Yarra Street will be maintained substantially in its present form using existing pavement, trees and drainage.

The central road space will be reconstructed to provide for new canopy trees and water sensitive urban design treatments.

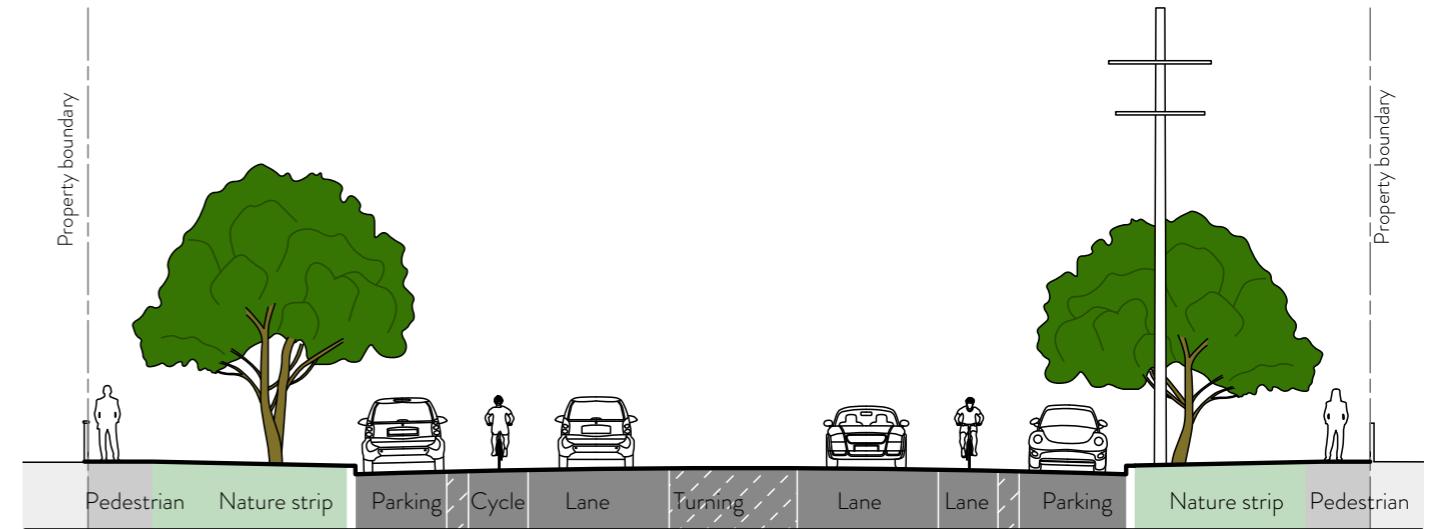


Figure 129. Yarra Street, existing typical cross section

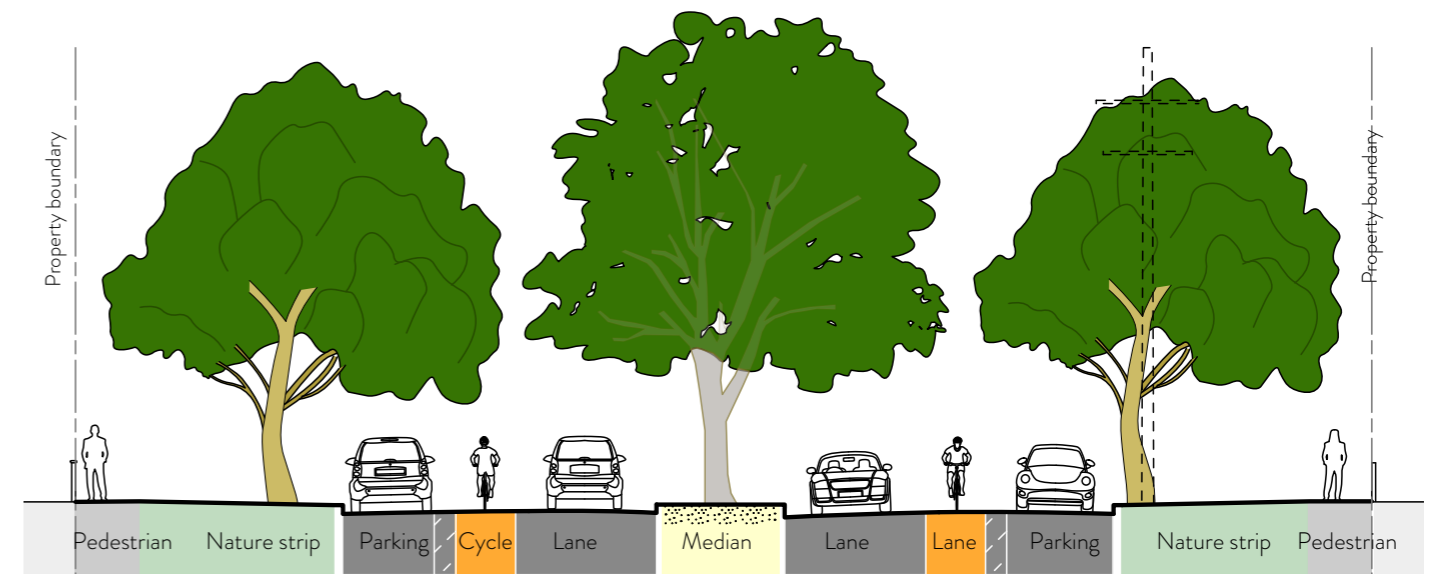


Figure 130. Yarra Street, proposed typical cross section

MATERIALS

- Concrete footpaths.
- Trees within median, established within wide trenches of structural soil.
- Pedestrian lights within footpath zone.

TREE SPECIES

- Brush Box planting on road edges maintained and reinforced.
- Central median species, options include; Lemon Scented Gum, Spotted Gum, Smooth-barked Apple Myrtle.



Figure 131. Artist impression of Moorabool Street precinct looking north from Fyans Street

IMPLEMENTATION

6.0

6.0 IMPLEMENTATION

INTRODUCTION

This section provides a summary of recommendations, policies and projects that have been identified in the UDF for three identified areas including the existing residential zones (including proposed Heritage Overlay areas), Key Development Areas including Moorabool Street and the Station Precinct (including the Barwon Water Site).

For each area, the table outlines short (1-5 years), medium (5-10 years) and long (10+ years) term implementation actions to be achieved over the next 10+ years for each precinct including; South Geelong Station Hub (which also includes the Barwon Water site)

- A Framework for capital works expenditure on priority projects for the public realm. Subject to the preparation of concept plans and detailed design plans for construction. These works may be carried out according to the availability of funds.
- Changes to the Planning Scheme and Overlays have been considered that will assist in achieving the strategic and design outcomes sought for South Geelong.

CONCEPT PLANS

The analysis and consultation processes from the Draft UDF have generated specific projects to become the subject of concepts plans as part of the Urban Design Framework.

Each concept plan will need another phases of design refinement, consultation and documentation before it can be implemented. The big picture ideas within this document have been translated into specific objectives and guidelines that will be transferred into the Planning Scheme.

It is important to note that the UDF provides overarching principles and guidelines for each particular area and individual decision-making on particular sites will occur in the future via a planning permit or scheme amendment.

6.0

IMPLEMENTATION OF THE MOORABOOL STREET PRECINCT

To achieve The City’s desired outcome for the Moorabool Street Precinct a number of changes to the planning controls affecting the area will be required;

The area should be rezoned to allow a mixture of commercial and residential uses to occur within the precinct.

The City will work cooperatively with the Department of Transport, Kardinia Park Trust and other relevant stakeholders to realise the vision and objectives for the area.

Significant public investment at local and state level will be required to upgrade key pedestrian routes to connect South Geelong Station and Kardinia Park.

Development contributions can help provide the public realm and streetscape improvements as well as social housing as identified for the precinct.

MOORABOOL STREET – IMPLEMENTATION TIMING

PROJECT	TIMEFRAME	COMMENT	RESPONSIBLE FOR DELIVERY
Moorabool Street – Better Bikes	1-5 years	Funding has been provided for the Moorabool Street Better Bike Project.	Council - Engineering Services - Transport
Moorabool Street Beautification	5-10 years	<ul style="list-style-type: none"> Detailed Design plans are required for Moorabool Street which will take into consideration the Kardinia Park Master Plan, Stage 5 redevelopment of GMHBA stadium and the Rail Duplication Project including connections to the station. Redevelopment of Moorabool Street will be funded through a combination of Council, State and Federal Government budget bids. Land developers on Moorabool Street should contribute to infrastructure upgrades adjacent to their property. Items such as on street car parking alterations, street trees, footpath changes, seating etc. Council will need to undertake further investigation regarding the most effective and efficient way to deliver infrastructure contributions resulting from the development of sites on Moorabool Street. 	Council - Strategic Planning and Urban Design
Moorabool Street rezoning and policy changes	1-5 years	<ul style="list-style-type: none"> Rezone the Commercial 2 Zone to the Mixed Use Zone Introduce a new local planning policy for the UDF which includes preferred land use and built form outcomes for Moorabool Street. Amend Clause 2 16.02-1L - Increase Housing Diversity Areas, to identify the Moorabool Street as a Key Development area. 	Council - Strategic Planning and Strategic Implementation
Overlay Changes - New Design and Development Overlay (DDO)	1-5 years	<ul style="list-style-type: none"> Apply a DDO to the Moorabool Street Precinct. The DDO should implement design principles from the UDF relating to built form controls, building height, setbacks, widening of the lane way, protection of heritage buildings and the residential interface, separation between buildings, vehicle and pedestrian access, noise attenuation, WSUD and ESD requirements. 	Council - Strategic Planning and Strategic Implementation
Moorabool Street Laneway - Public Acquisition Overlay (PAO)	When Required	<ul style="list-style-type: none"> Apply a 2m wide PAO to the rear of the properties fronting Moorabool Street to facilitate the widening on the existing rear lane way to cater for deliveries and vehicle parking and movements. Overtime the number of vehicle crossings on Moorabool Street should be reduced. 	Council - Strategic Planning and Strategic Implementation
Environmental Audit Overlay	1-5 years	Apply an Environmental Audit Overlay to land in Moorabool Street in accordance with Planning Practice Note 30 - Potentially Contaminated Land	Council - Strategic Planning and Strategic Implementation
Social Housing	1-5 years	Developer lead social housing contributions should be included within the planning scheme. Council will need to liaise with the State Government to determine the most appropriate mechanism to deliver social housing outcomes.	Council - Strategic Planning and Strategic Implementation

6.0

IMPLEMENTATION OF THE SOUTH GEELONG STATION HUB KEY DEVELOPMENT AREA

The City will work cooperatively with Barwon Water, the Department of Transport and other relevant stakeholders to realise the vision and objectives for the area.

Significant public investment at local and state level will be required to upgrade key pedestrian routes to connect South Geelong Station and Kardinia Park.

Development contributions can help provide the public realm and streetscape improvements identified for the precinct as well as social housing outcomes.

The partial closure of Carr Street should be facilitated as part of the station and Barwon Water site redevelopments.

Plan for the staging of development and delivery of public infrastructure upgrades by different stakeholders as funds become available.

Future development of Carr and Lonsdale Streets and the Barwon Water Site should take into consideration the South Geelong Station upgrade. Public realm, building design and changes to streets should compliment the station design through the use of similar materials, finishes and plantings.

6.0

STATION HUB - IMPLEMENTATION TIMING			
PROJECT	TIME-FRAME	COMMENT	RESPONSIBLE FOR DELIVERY
Barwon Water Site rezoning	1-5 years	<ul style="list-style-type: none"> The site is currently within the Public Use Zone – Schedule 1 and will need to be rezoned prior to being re-developed. The site should be rezoned to a Mixed Use Zone to facilitate high density housing and a mix of commercial uses which can service the surrounding community. Apply a Design and Development Overlay to facilitate built form outcomes consistent with the objectives and strategies contained in the UDF, which would include: <ul style="list-style-type: none"> Guidelines around built form outcomes including acoustic measures, materiality, and expected heights which should include a preferred height of 6 storeys at the western portion of the Barwon Water site Requirement to deliver public spaces and infrastructure/improvements to the public realm adjacent to the site. High quality urban design outcomes, transit oriented development with opportunities to reduce car parking requirements if appropriately justified Barwon Water have been working with the EPA to resolve contamination issues on their site. If this matter is not resolved prior to the land being rezoned an Environmental Audit Overlay should be applied to the land. 	Council - Strategic Implementation and Barwon Water
Future Road Through Barwon Water Site	5-10 years	<ul style="list-style-type: none"> The UDF identifies an opportunity to divert Carr Street through the easement on the Barwon Water site. Detailed design and costings, including intersection changes required at Bellerine Street and reinstatement of infrastructure associated with the station plaza area will need to be prepared to understand the viability of delivering this option. This option proposes the best long term development strategy for the northern side of the station hub. Council will need to undertake further investigation regarding the most effective and efficient way to deliver infrastructure contributions resulting from the development of the site. 	Council and Barwon Water
Station land redevelopment and multi-deck car park	10 + years	<ul style="list-style-type: none"> RPV have indicated there are no current plans to redevelop the Station Car Park. The redevelopment of the car parking area would be a long term plan for the precinct. A local planning policy should reflect the long term objectives and strategies for the station hub precinct. Investigate opportunities with RPV, Barwon Water and Council for a shared car parking outcome for the station precinct. The multi deck car park could be brought forward or completed in stages, as demand for car parking changes. Further investigation into whether the multi deck car park could be shared with the future development of the Barwon Water site should be undertaken. 	Council, State Government and Barwon Water
Pedestrian Bridge Over Railway line	10+ years	<ul style="list-style-type: none"> The UDF identifies an opportunity to construct a pedestrian bridge over the railway line (linking Bellerine Street). This bridge would be a long term opportunity and could be delivered by the developer of the Barwon Water Site or local or state government. This bridge could help facilitate a shared precinct wide car parking and land use outcome should the multi deck car park be developed. 	Developer or Council
South Geelong Street Safety upgrades (STiS)	1-5 years	<ul style="list-style-type: none"> Funding has been granted for this project and the majority of safety upgrades are now complete. 	Council - Engineering Services
Carr Street Changes and Public Realm	1-5 years	<ul style="list-style-type: none"> To be delivered as part of the Rail Duplication project. If changes are required to Carr Street as a result of development on the Barwon Water site, they will be completed at the time the site is developed. This could be determined through the planning permit stage. 	State Government, Council and Barwon Water
Beautification of Streets surrounding the station, including Lonsdale Street	5-10 years	<ul style="list-style-type: none"> The rail duplication project will deliver on partial upgrades to the western end of Lonsdale Street. Development of the Barwon Water site should contribute to upgrades to Lonsdale Street adjacent to their site consistent with the UDF. Council will need to undertake further investigation regarding the most effective and efficient way to deliver infrastructure contributions associated with delivering changes to eastern end of Lonsdale Street. Council will need to seek funding through Council budget bids as well as State and Federal Government funding opportunities to complete the balance of the streets. 	Council - Engineering Services Barwon Water
Revise the IHDA mapping and policy to include the Barwon Water site and Train Station as a Key Development Area	1-5 years	<ul style="list-style-type: none"> Amend Clause 16.02-1L - Increases Housing Diversity Areas, to identify the South Geelong Station Hub and the Barwon Water Site as a Key Development area. 	Council - Strategic Planning and Strategic Implementation
173 Agreements, Social Housing other Overlays	1-5 years	<ul style="list-style-type: none"> To capture upgrades to key pedestrian routes, possible closure of Carr Street, areas of public open space, changes to and reinstatement of infrastructure etc These changes would be negotiated as part of a planning permit process. Incorporate staging for the Barwon Water Site, including what infrastructure improvements are to be delivered in which stage. Investigate with assistance from the State Government a requirement to provide social and affordable housing within the development. 	Council - Strategic Planning and Engineering Services Barwon Water

6.0


CHANGES TO RESIDENTIAL ZONES

The community have indicated a preference to retain significant heritage values and expressed strong desires to protect the existing neighbourhood character value within the study area. To balance the desire to protect character while still encouraging higher density housing growth it is proposed to rezone the area to reflect the different scales of development identified in the South Geelong Capacity and Change Areas Review and Heritage Study.

The subdivision pattern within South Geelong which includes rear laneways, provides opportunities for development at the rear of properties within minimal impact on streetscapes within the heritage precinct. There are also opportunities for new housing on sites with non-contributory buildings.

The Richmond Crescent area, has been identified for incremental change, upon further review of this area it is recommended that the area be rezoned from a Neighbourhood Residential to General Residential Zone to better reflect the preferred growth outcomes for this area.

CHANGES TO RESIDENTIAL ZONES			
PROJECT	TIMEFRAME	COMMENT	RESPONSIBLE FOR DELIVERY
Apply a Heritage Overlay to properties identified within the Heritage Study.	1-5 years	<ul style="list-style-type: none"> Introduce Heritage Overlay to areas identified within Heritage Study outlined within this report. This process will be subject to a Planning Scheme Amendment and further consultation with landowners. The process will identify the key heritage features of each dwelling and recommended heritage listing (B,C,D, non-contributory) Review existing HO 1641 as it relates to corner shops, to provide opportunity for these buildings to be reused for a mixture of residential and commercial purposes which would provide services to the local community. 	Council - Strategic Planning and Strategic Implementation
Changes to zones and schedules to reflect significant neighborhood character elements as outlined within the Capacity and Change Area review	1-5 years	<ul style="list-style-type: none"> Prepare a new local policy for the UDF, the policy should protect significant elements identified as part of the Capacity and Change Area Review. Retain the use of the General Residential Zone for Minimal change areas. This use of this zone will balance the need to support housing growth around the South Geelong Train station while still protecting heritage character. Rezone land in the Incremental Change Areas to General Residential Zone. Rezone land in the Substantial Change Area to a Residential Growth Zone. 	Council - Strategic Planning and Strategic Implementation
Changes to policy	1-5 years	<ul style="list-style-type: none"> Amend Clause 16.02-1L Increased Housing Diversity Area to include the substantial change areas as an increase housing diversity area. Update the planning scheme where relevant to reflect the objectives and strategies contained within the UDF. 	Council - Strategic Planning and Strategic Implementation
Richmond Crescent Area	1-5 years	<ul style="list-style-type: none"> Rezone land around Richmond Crescent from the Neighbourhood Residential Zone to the General Residential Zone. The Capacity and Change area review identified that this area could accommodate a moderate level of change and is within 800m of the train station as sites in this location did not present cohesive character attributes. The use of General Residential Zone will support additional housing outcomes close to the train station. 	Council - Strategic Planning and Strategic Implementation



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CUSTOMER SERVICE CENTRE

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