



ACKNOWLEDGMENT TO COUNTRY

The City of Greater Geelong Municipality is located on the traditional lands of the Wadawurrung people.

The traditional boundaries of the Wathaurong people span the coastline from the Werribee River to Lorne Peninsula and traverse inland in a north westerly direction towards Ballarat. The Wadawurrung people have lived within these regions for more than 25,000 years.

The City acknowledges the Wadawurrung people as the Traditional Owners of this land who to this day practice their culture and uphold the dignity of their ancestors.

SUMMARY OF KEY CHANGES

From Draft to Interim Final UDF

Community consultation has been a key part of the development of the South Geelong Urban Design Framework.

Community consultation began with workshops in July/August 2019 and helped to establish the broader visions, key issues and challenges within the study area in discussion with residents. The consultation resulted in several key findings including;

- A need to improve access and connection generally via improved walking and cycling links
- Provision of adequate areas of open space and social infrastructure to support a growing population
- Protection of the neighbourhood character and heritage values of the area is a high priority of residents.
- Providing for a diversity of housing types whilst respecting the existing neighbourhood character values is envisaged.
- Concern with existing traffic concerns in relation to existing street networks and a lack of car parks generally
- A preference to beautify the area with increased landscaping, and by creating public spaces
- Support for vibrant shopping and café areas whilst protecting existing amenity of residents

Key Issues and Vision

The above themes were used to frame the key issues and visions which influenced the Framework for the first Draft of the UDF.

The second round of consultation was held following the exhibition of the Draft UDF, during August-September 2020. The consultation provided insight on resident's views with regards to key development sites including; The Barwon Water site, Station Hub re-development, Moorabool Street and Heritage areas.

Following consultation in 2020, the following changes have made to the Draft UDF:

- Clarified the role and purpose of the UDF
- Revised document structure to include a final option for the Barwon Water site, including a preferred maximum no. of 6 storeys.
- Updated zoning of residential areas as approved by Amendment GC172 to correct height inconsistencies that resulted from the implementation of the reformed residential zones through VC110 in 2017. Some of the maps within the Draft UDF have been updated to reflect the change that occurred in December 2020.
- Revised discussion in relation to the IHDA extending around the train station. An extended IHDA is proposed, however will not be located on areas identified as 'minimal' change and existing & proposed heritage areas. A more detailed site-by-site heritage assessment of individual properties was undertaken, including recommendations for new areas to have a Heritage Overlay
- A neighbourhood character and capacity assessment was undertaken to review character values
 within the area, including building forms, architectural styles. An assessment in relation to how the
 character study relates to recommended changes to zones/schedules etc. has been included in this
 report.
- Further detail on implementation options for key development areas including revised zones and other controls for; The Barwon Water site, Moorabool Street area, changes to zones and the introduction of Heritage areas
- Clarification in relation to the City's commitment to providing social housing purpose, and contributions.



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INTRODUCTION





South Geelong Station

Figure 1. Context Map

INTRODUCTION

What is a UDF

An Urban Design Framework (UDF) provides guidance for the future development of a specific area.

The South Geelong UDF has been developed in consultation with the aspirations of the community and seeks to create a strategic vision for the identified study area. This UDF has undertaken;

- A review of existing plans, policies, zones, overlays, strategies and infrastructure programs
- An analysis of the study area's use and movement patterns, and existing urban form
- Analysis of local strengths, weaknesses opportunities and threats
- Analysis of key development areas
- The design of buildings
- Public spaces
- Pedestrian and vehicle access
- Landscape themes
- Engagement with key stakeholders

A UDF is not a rigid master plan, and once endorsed will filter through to a Planning Scheme Amendment and be included in the broader strategic framework resulting in changes to existing policies, zones and overlays.

Purpose of the South Geelong UDF:

- To assist in implementing the City's settlement Strategy by investigating the area for high density development potential.
- To leverage opportunities for the Rail Duplication and Station upgrade project being undertaken by the Department of Transport.
- To prepare objectives, strategies, policies to support the vision for South Geelong which will filter through to a Planning Scheme Amendment and be included in the existing Strategic Framework.
- To provide background information to support detailed design guidelines and planning provisions for future development.
- To identify priority projects and an implementation plan to identify community needs, development potential.

Key Stakeholder Engagement

A range of stakeholders are involved, and concepts will be developed to support a future vision for South Geelong. The South Geelong UDF key stakeholders include;

- Department of Transport Regional Rail Victoria
- Barwon Water
- Local Businesses
- Community Consultation with residents

The UDF presents an opportunity to link several public and private sector strategic projects together. The projects leverage off the South Geelong Train station, GMHBA stadium and the proximity of the location to services and infrastructure. Without the UDF these projects would occur in isolation of one another.

For the South Geelong residents and visitors, it is crucial that this UDF brings together their ideas and vision for their local neighbourhood. The UDF will seek to ensure the local area can continue to thrive, meeting community expectations and that the development and liveability potential of the area is unlocked.

SITE CONTEXT

Study Area

The study area is located south 1.2km south of central Geelong and is bisected by the South Geelong Train Station. The area has excellent transport connections to Metropolitan Melbourne. The area has good pedestrian links to Central Geelong and the Belmont Sub-Regional shopping centre, and existing transport links via major arterial roads including Moorabool, Fyans and Swanston Street. The Barwon River environs is within walking distance of the residential area and provides an excellent space for residents to enjoy.

The boundaries of the study area include:

- Moorabool Street existing commercial area at the western boundary and a small pocket of residential zoned land at the southern boundary of the GMHBA stadium
- Fyans Street residential area at the southern boundary
- Swanston Street and the residential area abutting the Industrial 1 Zone, and Richmond Crescent at the eastern boundary
- A section of the existing Garden Street residential area
- McKillop Street at the northern boundary.

The predominant land use within the study area is residential, with some existing heritage values recognised formally in the Planning Scheme. The area within Moorabool Street is zoned as Commercial 2 Zone and is opposite the GMBHA stadium. Larger commercial buildings with generous floor areas can be viewed along Moorabool street and include an eclectic combination of commercial uses.

The GMHBA stadium is located within the study area but directly adjoins the Moorabool Street study boundary. The stadium provides an important place for large sporting events and functions, and is surrounding by expansive areas of open space, providing areas for local sport and amenity to residents. There are two large swimming pools which also offers excellent recreation opportunities.



Figure 2. Aerial image showing some of the study area



Figure 3. Existing Moorabool Street Commercial area

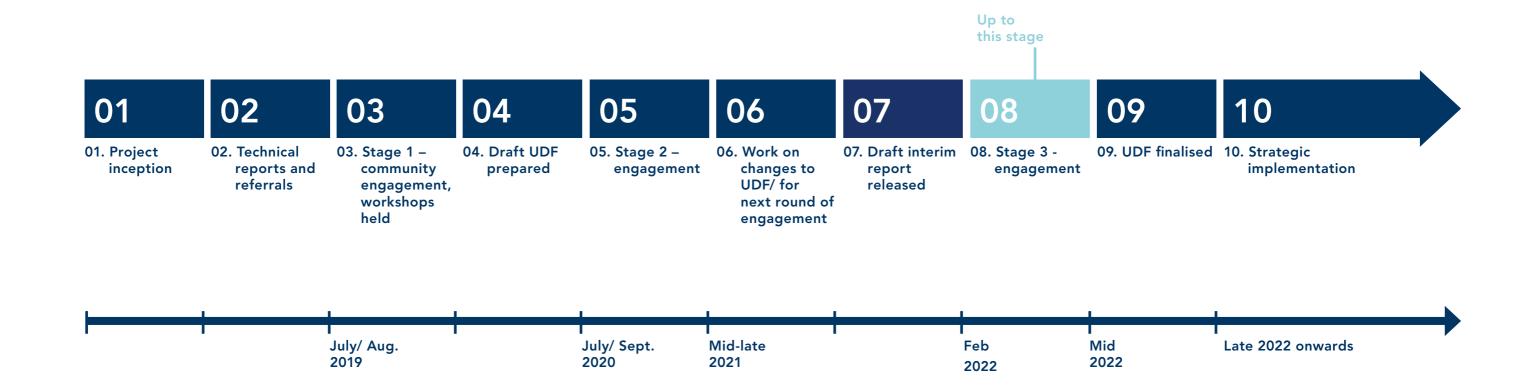


Figure 4. South Geelong Station



Figure 5. Aerial of Study Area

01



1st Phase of Consultation - August 2019

In July and August 2019, the City organised externally-facilitated South Geelong Station UDF community workshops - 110 community members took part. This gave residents an opportunity to highlight what the community values about the area; what's working well and not working so well and what the area should look and be like in the future.

Alongside the workshops, 376 community members provided their feedback through an online survey.

The following table highlights the key community and stakeholder strategic outcomes expressed in the consultation.

2019 JULY & AUGUST

In July and August 2019, the City organised externally-facilitated South Geelong Station UDF community workshops

110 COMMUNITY MEMBERS

Took part in community workshops

376
COMMUNITY MEMBERS

Provided their feedback through an online survey.

The analysis is based on four broad subject areas:



LOCAL CHARACTER AND DEVELOPMENT

including landscape setting, building form and scale, heritage elements, key activities and public spaces.



MOVEMENT AND ACCESS

including traffic and pedestrian circulation, parking, safety and linkages between activities.



ACTIVITIES

including land use economic development, recreation and social and community activities.



ENVIRONMENT

including public streetscapes and built form.

The analysis work has incorporated field work, heritage character assessment, policy analysis, community feedback. From this foundation a set of design principles have been formulated to guide the development. These principles underpin the Vision and proposed improvement actions for the area.

COMMUNITY CONSULTATION







Figure 6. Consultation workshops

Table 1: Summary of community consultation future directions and strategic outcomes

Future Direction	Strategic Outcomes		
Access and connections	 Easy universal access connections within the neighbourhood and to the central business district, riverfront, hospitals, rail trail, surrounding coast and hinterland. 		
	 Easy and safe to move around with clear signage, way-finding and lighting including clever and creative pedestrian crossing lighting. 		
	Comprehensive walking and cycling network.		
	Safe area where people come first.		
	Well managed and safe traffic intersections.		
	Clever and creative public transport options.		
Social	Clever and creative responses to changing social infrastructure needs.		
	Maximised use of existing social infrastructure which meets needs.		
	Open spaces for people and pets.		
Development and housing	The definitions, implications and decision-making processes in approving housing developments are understood and inclusive.		
	 Developments reference the 'character and identity' of the area and provide the future heritage. 		
	• Mixed use development with housing options, retail and open, urban spaces.		
Traffic and	Traffic moves through the neighbourhood slowly and safely.		
parking	Available parking for the cars and bicycles of commuters.		
Character and	Leafy, evergreen trees define our streets.		
identity	An active and healthy community.		
	A connected and engaged community.		
	• Community gardens and orchards are part of neighbourly interactions.		
	 Developments reference the character of the areas to create the community's future heritage. 		
Businesses	People living and working locally.		
	Vibrant shopping, cafés and nightlife.		

COMMUNITY CONSULTATION

2nd Phase of Consultation - August/ September 2020

Engagement occurred in August/September 2020, 52 residents participated online or over the phone, and 163 written submissions were received overall. Including 87 female & 76 male submissions. The consultation identified that residents have a fear regarding loss of neighbourhood character due to increased high-rise development, and subsequent impacts in relation to increased pressure on infrastructure and traffic concerns.

Consultation occurred following the release of the Draft UDF and the subsequent actions are summarised below.

2020 AUGUST & SEPTEMBER



52 RESIDENTS

Participated online or over the phone



163
SUBMISSIONS

Written submissions were received



87
FEMALE
SUBMISSIONS



76MALE
SUBMISSIONS

Issue summary

Comment/Theme raised Loss of neighbourhood character Opposition to 4 storey development within the existing residential area Neighbourhood character/Capacity assessment undertaken Loss of heritage character The loss of potential heritage properties that a not currently covered by a heritage Action following the Draft UDF Neighbourhood character/Capacity assessment undertaken A heritage assessment was undertaken and recommends a number of properties to be

Social infrastructure required

overlay.

- Additional upgrades required for schools, roads, sewerage to support increased densities and pressure on existing infrastructure and traffic impacts
- Individual assessments will review existing infrastructure on a site-by-site basis

included within a Heritage Overlay

- Key public realm works have been documented including upgrades to roads, increased landscaping
- In relation to Barwon Water site, upgrades to the roads etc. and indented parking will be undertaken through future agreements between developers and Council

Increased density

- Negative views expressed in relation to increased densities around existing residential areas, and more support for density in Moorabool Street and around the train station
- Capacity study undertaken and neighbourhood character informs changes to zone schedules
- Growth directed towards key development areas including Barwon Water site and Moorabool Street area

Comment/ theme raised	Action following the Draft UDF
Moorabool Street	
 Support for increased development and density within this area 	 Remove existing C2Z and replace with control to have a focus on residential uses and increased density
Station Hub development	
 Noise concern from trains surrounding future duplication of the rail line More parking is required around the train station 	 Recommendations for future development on the Barwon Water site to have acoustic mechanisms Parking assessment to be undertaken as part of detailed design The site has excellent access to public transport and amenities
Barwon Water site	
 Strong opposition to 10 storey development, preference indicated for 6 storeys Opportunity for a diversity of housing and quality environmental design Suggestion for the multi-storey car park area be relocated 	options is found in the Key Development Section. A maximum of 6 storeys is preferred to balance the concerns of the community and provide opportunities for
Social Housing	
 Mixed views in relation to social housing opti with some fears expressed with regards to safety and perceived risks 	and Council commitment to providing social housing via opportunities for Homes Victoria outcomes.
	0.14 % total Greater Geelong Housing Stock

Comment/ theme raised

Action following the Draft UDF

Traffic concerns and parking

- Existing traffic concerns and concern with higher densities adding to this
- UDF should include a traffic management plan
- More reliable bus service is viewed as a strategy to ease traffic/car parking issues
- Increased street lighting
- Mixed support for parking in median strips some viewing as 'dangerous' and questioning feasibility – and concern with parking during large events at the stadium
- Better Bikes project is being undertaken to improve cycling within Geelong
- Central median parking and increased landscaping to promote pedestrian/cycling benefits and improve the streetscape

Public realm improvements and increased landscaping

- Increased greenery/public spaces viewed positively with a character of green tree-lined streets and open spaces, public art works and links to history to reflect Aboriginal and heritage
- Increased street lighting, community spaces and community aspects including gardens/increased street lighting
- General support for increased pedestrian safety, and cycling improvements etc.

- Capital Projects works/infrastructure to follow
- Increased landscaping proposed within streetscapes along with improved pedestrian crossings
- Opportunities to provide public plaza spaces and improved car parking, streets more pedestrian friendly within the Barwon Water site

Retail and Business

- Some concern in relation to commercial viability of increased retail – some support for a smaller supermarket
- Opportunities for active retail mixed-use frontages along Moorabool Street combined with residential development

is required as social housing infrastructure

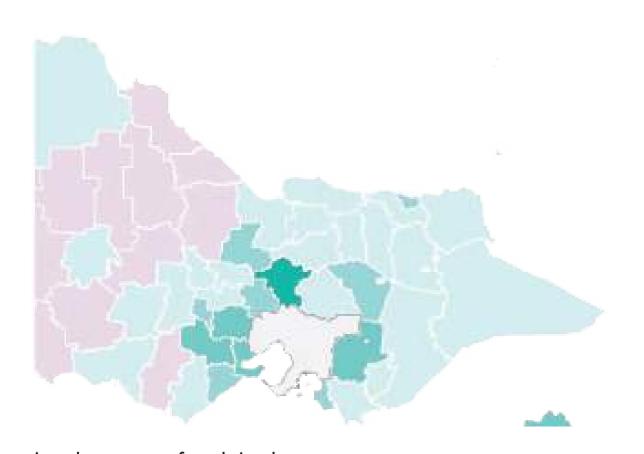
Population: Regional context	
Strategies	1
Strategic Policies & Relevant Projects	1
Heritage Assessment	2
South Geelong Capacity and Change Areas Review	2
Other Background Studies	3
Existing zones/overlays etc	3

POPULATION

Regional Context

Greater Geelong is one of the fastest growing regions in Victoria with stronger population growth than all other regional municipalities combined.

In 2016, the total population of the City of Greater Geelong was estimated to be 239,531 people. It is expected to increase by over 120,469 people to 360,000 by 2036. This is based on an increase of over 52,000 households during the period.



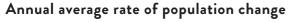
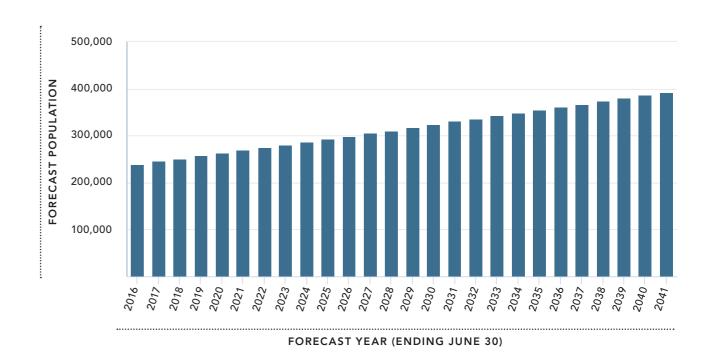




Figure 7. Annual average rate of population change, regional local government areas (Iga), 2018 to 2036 Source: Victoria in Future 2019





Forecast population

Figure 8. Forecast population

Source: Population and household forecasts, 2016 to 2041, prepared by .id, July 2019

Clever and Creative

Representing the voices of more than 16,000 members of our community, Greater Geelong: A Clever and Creative Future is a 30-year vision that guides all levels of government, community organisations, businesses and anyone wanting to make a genuine contribution to the city-region. The clever and creative concept is about developing a consistent approach to how things are done, which is why all proposals to Council will need to demonstrate how they positively contribute to the 30-year vision. The clever and creative concept is also about collaborating to address challenges and opportunities, embracing innovation, and new ways of doing things that applies to everyone. At the heart of the 30-year vision are a series of community aspirations that are focused on the region's economy and employment, the environment, arts and culture, transport connections, tourism, efficient and equitable digital access, and good governance.

The vision recognises that in order for a city-region to be successful, it must be connected, prosperous, creative, sustainable and resilient, and designed for people. The South Geelong UDF can play a leading role in delivering a clever and creative future. The UDF's overall principles will respond to the community aspirations and positively contribute to achieving the measures of success.



Figure 9. Community aspirations from Clever and Creative strategy



A prosperous economy that supports jobs and education opportunities



A leader in developing and adopting technology



Creativity drives culture



A fast, reliable and connected transport network



People feel safe wherever they are



An inclusive, diverse, healthy and socially connected community



Sustainable development that supports population growth and protects the natural environment



Development and implementation of sustainable solutions



A destination that attracts local and international visitors

Plan Melbourne 2017-2050

Plan Melbourne is a metropolitan planning strategy that defines the future shape of the city and state over the next 35 years. It seeks to integrate long-term land use, infrastructure and transport planning, and support jobs and growth, while building on Melbourne's legacy of distinctiveness, liveability and sustainability. It advocates for urban consolidation and decentralisation, calling on Victoria's regional centres to assist Melbourne in housing, employing and educating the growing population.

Settlement Strategy

The City of Greater Geelong Settlement Strategy provides a framework and gives clear direction on where growth and development should occur, to ensure the City can meet the needs of the municipality by 2036 in a sustainable, planned, logical, integrated, efficient and cost-effective way. The Settlement Strategy seeks to increase the role of urban consolidation as part of Geelong's overall housing supply. The strategy seeks to facilitate infill development to increase its housing supply contribution to 50%, by 2047. The rail corridor from North Geelong through to Breakwater provides an opportunity to facilitate increased housing densities. To achieve this, investment in amenity and local facility improvements in and around these areas should occur.



Figure 10. Geelong Waterfront



A Wider Strategic Framework

REVITALISING CENTRE GEELONG ACTION PLAN

As government-led plans to revitalise Central Geelong continue to bring significant opportunities for investment and growth, the City must also plan for the of its inner city urban areas, to create a network of walkable compact neighbourhoods.

The City acknowledges the need to continue to invest in its streets, transforming them into a safe, inclusive, and attractive part of the public realm. Unlocking their potential to become people-oriented 'green' streets is key to building a more sustainable and liveable future for our existing and future communities.

Key



South Geelong UDF study area boundary



The structure of 'urban' Geelong consists of a central city surrounded by established residential neighbourhoods with local activity centres ranging in size from small shopping strips to

specialised retail centres.



Latrobe Terrace, McKillop Street and the railway corridor are significant barriers for people-friendly movement.



A key vision for revitalising Central Geelong is to create a 'City in a Park'. Creating a green people-friendly environment with activated streets which connect public spaces.

Figure 11. Wider strategic framework plan

Housing Diversity Strategy

With almost 85% of Geelong's housing stock consisting of suburban detached 'family homes', increasing housing diversity will be a key factor in addressing housing need in the future. The Housing Diversity Strategy was adopted in 2007 to guide how urban consolidation should occur and provided the basis for the application of the new residential zones that were introduced into the Planning Scheme in 2014. Clause 22.63 of the Greater Geelong Planning Scheme provides the policy that applies to all residential land located in Increased Housing Diversity Areas (IHDA).

The policy divides the established urban area into three categories:

- Key Development Areas Higher density and mixed-use housing.
- Increased Housing Diversity Areas a mix of conventional housing with some medium density housing around activity centres and train stations.
- Incremental Change Areas primarily conventional residential housing.

The housing categories are described as:

Housing definition	Description	Density	
Conventional housing	Single detached dwellings on lots generally ranging between 500 and 1,000 square metres (sqm). The development of an area for conventional housing.	Generally, results in a gross residential density of 10 – 15 dwellings per hectare.	
Medium density housing	The provision of two or more detached or attached dwellings, townhouses or apartments on a site below four stories.	The development of an area for medium density housing generally results in a gross residential density of 20 – 40 dwellings per hectare.	
Higher density housing	Attached townhouses or apartments, usually more than 3 storeys in height.	The development of an area for high density housing generally results in a gross residential density of more than 40 dwellings per hectare.	



Figure 12. Existing Increased Housing Diversity Area

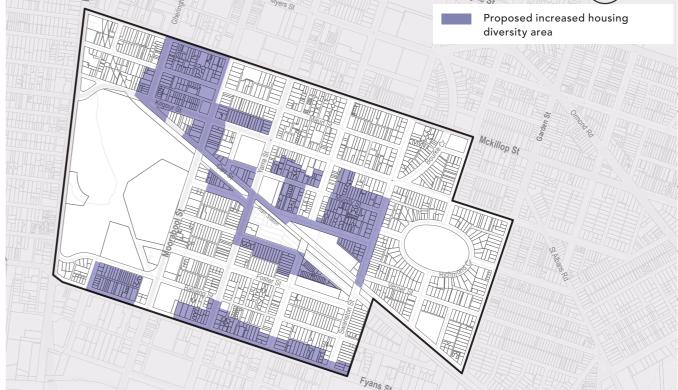


Figure 13. Housing Diversity Areas



Retail Strategy 2020-2036

The City has prepared a Retail Strategy that provides a review of current retailing trends, land use, population growth and makes recommendations for changes to planning policy. The strategy will guide retail development in Greater Geelong until 2036 in order to ensure residents continue to have access to essential retail services.

The Retail Strategy identifies Moorabool/Fyans Precinct, South Geelong as a dispersed restricted retail centre. The retail strategy does not support the growth of this centre beyond current commercial zone land. The land along Moorabool Street is identified as having small land parcels and a lack of car parking making the area unattractive as a modern restricted retail precinct. The area south of Moorabool Street which is not a part of the study area, forms part of a separate urban renewal precinct and is guided by the Fyans-West Fyans Precinct Structure Plan. It is envisaged that over time this broader area will transition to a mixed use, primarily residential precinct.

This strategy seeks to: Increase the supply of social housing across the City area to 13,500 by 2041. Advocate for increased state and federal investment in new social housing.

Social Housing Plan 2020 - 2041

- Increase supply of social housing by contributing City-owned land to new developments.
- Amend the City's Planning Scheme to require the inclusion of social and affordable housing in new developments based on need.
- Continue to revitalise our neighbourhoods of high social housing to increase liveability and wellbeing.

It is council policy to seek a social and affordable housing assessment as part of the rezoning of major sites such as the Barwon Water site or Moorabool Street.



Figure 14. Retail Strategy



Figure 15. Social Housing Plan

Urban Forest Strategy

The City seeks to reach an ambitious target of improving Geelong's tree canopy cover from 14% to 25% over a thirty-year period. The City has enormous potential to develop a healthier and more dynamic urban forest and improve canopy cover in our streetscapes, urban growth areas, open spaces and reserves.

URBAN FOREST STRATEGY WILLS-DEED WILLS-D

Figure 16. Urban Forest Strategy

Environment Strategy 2020-2030

The Strategy was adopted by Council on 8 September 2020 and guides planning, decision-making and actions to strive to improve the health of our local environment, reduce our environmental footprint and protect the lifestyle our community enjoys.

The Strategy defines five key goals to guide our planning and decision making;

- Become a zero-emission, climate-ready city and region
- Create greener community spaces
- Contribute to a circular economy by reducing waste
- Protect, enhance and restore our region's biodiversity
- Achieve better integrate water management through planning and design.

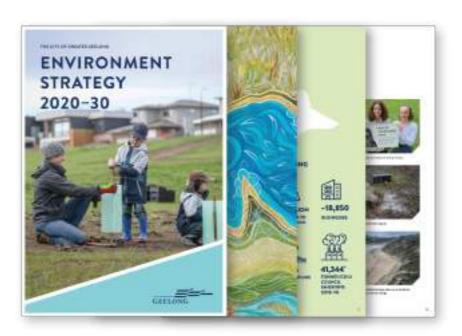


Figure 17. Environment Strategy

STRATEGIC POLICIES AND RELEVANT PROJECTS OTHER RELEVANT PROJECTS

GMHBA Stadium Stage 5 Development

A plan to develop the GMHBA stadium and the directly adjoining park land has been prepared by Kardinia Park Stadium Trust. The plan was approved by the Minister for Planning via amendment C423 to the Greater Geelong Planning Scheme in June 2021. The project will see the construction of the final stage of the GMHBA stadium completed and the development of a new public plaza, cricket hub, and stadium forecourt adjacent to Moorabool Street.



Figure 18. GMHBA Stadium

Better Bikes

A fast, reliable and connected transport network is part of our 30-year community-led vision for a clever and creative city. To reach our goal of half of all journeys to work made by public transport, walking or cycling, we need better bike connections around greater Geelong. It means safer riding, less congestion, cleaner air and healthier residents.

The Council received a \$4.7 million grant from the TAC's Safer Pedestrian and Cyclist Fund to create two cycling connections:

- The southern link will connect Central Geelong with Waurn Ponds via Belmont.
- The western link will connect Central Geelong with Herne Hill via Geelong West.

The southern route connects central Geelong to Waurn Ponds via Moorabool Street. The City has undertaken an extensive consultation process to determine the most appropriate route and functionality for the bicycle lanes. The design of Moorabool Street has adopted the recommendation from the Better Bikes project.

Safer Travel in Local Streets (STILS)

The City of Greater Geelong have undertaken a review of street safety. The review identified that streets in South Geelong had a history of high injury crashes and would benefit from measures to make local streets safer. Feedback received during the community workshops as part of the South Geelong UDF highlighted that residents and visitors to the area want safer local roads for all user groups including pedestrians, cyclists and motorists. the works to up grade the street in South Geelong area now complete.



Figure 19. Better Bike Project seeks to improve cycling routes



Figure 20. Existing street safety messaging

Universal Access Audit

In July 2019 Council engaged Galbraith Scott to undertake a universal access audit of the streets within the study area, between Mckillop and Fyans Streets and between Moorabool and Bellerine Streets.

In undertaking the audit, the principles of universal design were considered. Universal design means design that is suitable for most users to the greatest extent possible, without the need for specialised adaptation. A series of common design elements are referred to as appropriate in the audit findings and these include:

- Ground surfaces
- Pedestrian paths/ walkways
- Tactile ground surface indicators (TGSIs)
- Pedestrian road crossings
- Vehicle crossovers/ loading bays
- Parking

Several recommendations resulted from the audit. In summary the key recommendations are:

- Many streets within the study area do not meet minimum cross falls, or kerb cuts for people within limited mobility or vision impairment.
- There is a lack of TGSIs, or where they have been provided should be reviewed or upgraded.
- The wide streets make crossing difficult and require people to walk significant distances to the nearest safe crossing point. Additional safe crossing points such as pedestrian refuges should be provided in wide key pedestrian streets.
- There is a significant need to upgrade and maintain footpaths to meet Australian Standards.
- Street lighting should up upgrade or improved.
- Access across the railway track needs to be upgraded to be wheelchair accessible.
- The number of disable parking spaces in the area should be increased and meet Australian standard for access.
- The area would benefit from additional and consistent way finding signage.

This UDF recommends changes to several streets within the study area. As these streets are upgraded or changed, the findings from the audit should be incorporated into the final design of the streets. A copy of this report has also been provided to Council's Engineering Department for consideration during any streetscape renewal projects.



Figure 21. Existing pedestrian routes and crossings within the study area

The Geelong Line Upgrade - South Geelong to Waurn Ponds Rail Duplication

The Geelong Line Upgrade is part of the staged upgrade of the Geelong Line and the first step in delivering track duplication from South Geelong to Waurn Ponds to enable more frequent and reliable services for passengers. The Geelong Line Upgrade includes planning and development for the Waurn Ponds Duplication Project, which will duplicate the line between South Geelong and Waurn Ponds to enable more frequent and reliable services for passengers along the line.

Construction on Stage 1 is due to get underway in 2022 and is targeted for completion in 2024. The City is continuing to work with the relevant Rail Authorities in the development of the concept of the South Geelong Station.

Geelong KEY Second platform Pedestrian overpass Additional track 90 new parking spaces Planning and development for Waurn Ponds Duplication Project (Stage 2) Armstrong Creek transit

Commuter Car Parking

The South Geelong Station Precinct experiences a high demand for access and parking, from commuters associated with the station. Pick up and drop offs at the South Geelong Primary School contributes to the high demand as well. The station carpark can be accessed via crossovers provided on Yarra Street and Verner Street where two all movement accesses and a single exit are provided.

There are 753 off-street, at-grade carparking spaces including eight disabled bays and five 10-minute kiss and ride spaces provided for commuter usage. Based on recent surveys undertaken by the Department of Transport these off-street parking areas are highly utilised.

Based on an inventory review by Department of Transport undertaken in 2018, on-street parking in proximity to the station includes:

- Foster St which provides 254 parking spaces with a mixture of unrestricted and 4P restrictions.
- Bellerine St provides 107 parking spaces with a mixture of unrestricted, 2P and 4P restrictions.
- Yarra St provides 67 parking spaces with a mixture of unrestricted, 2P and 4P restrictions.
- Verner St provides 104 parking spaces with a mixture of unrestricted, 1/4P, 1P, 2P and 4P restrictions.
- Lonsdale St provides 138 parking spaces with a mixture of 1/2P, 1P, 2P and 4P restrictions.
- Carr St provides 190 parking spaces which are unrestricted.
- Mundy St provides 123 parking spaces which are unrestricted.

Figure 22. Geelong Rail Upgrades

Geelong Rail Upgrades

corridor planning

A number of background studies were undertaken to help inform the outcomes of the South Geelong Urban Design Framework.

Heritage Assessment

The City of Greater Geelong engaged a heritage consultant to prepare a heritage character study for land within the UDF study boundary.

The objectives of this Heritage Report are:

- Confirm and refresh the historical evolution of the South Geelong Heritage Area (including the buildings and streetscape infrastructure) through historical research.
- Carry out physical analysis of the urban layout, built character, engineering infrastructure and public landscapes within the study area (through fieldwork and aerial imagery).
- Assess the existing conditions of existing heritage areas and identify additional heritage character areas following historical research and physical analysis.
- Provide recommendations on the future management of identified heritage character areas.
- Provide recommendations on new development within existing heritage overlays and heritage character areas, interpretation of historical assets, management of public landscapes and infrastructure that contribute to the heritage significance and character of the study area.

The report make a number of recommendations relating to heritage matters within the Study area. The key recommendations include:

- Consider further assessments of the heritage character areas identified in this report for inclusion as heritage overlays in the Greater Geelong Planning Scheme.
- Consider future assessment of individual properties as identified in the report for inclusion within a heritage overlay.
- Support the continued use of old historic shops and stores.
- Maintain the layout of streets.
- Retain uninterrupted view along Yarra, Swanston and Moorabool Streets.
- Protect existing bluestone kerb and channel.
- Reinstate a pedestrian bridge over the railway line at Bellerine Street.

- Additions to heritage building should continue to by sympathetic to the heritage character of the area, including two storey and modern additions.
- Large new development should occur outside heritage areas or potential heritage character areas identified in this report, not dominate significant heritage building, view lines or landmarks.
- Retain existing vegetation and consider new plantings. Particularly retain the three canary street palm date trees at the South Geelong Train Station.



Figure 23. South Geelong Railway Station (now demolished), c.1983. Source: VLine, South Geelong Railway Station (with permission from Larissa Scanlon, Regional Manager, South West, VLine).

Figure 24. Moorabool Street Railway bridge nearing completion, 1912. Source: *News of the Week*, 12 November 1912, p.14, GRS 2121/3, Geelong Heritage Centre collection.

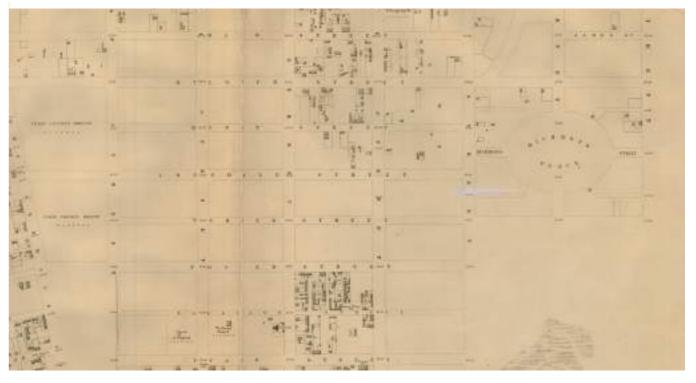


Figure 25. J.H. Taylor, Part of map showing study area, 1855, Source: State Library of Victoria

Further Heritage Assessment

Following from the Consultation period of the Draft UDF, Council undertook a Heritage Assessment of individual properties within the study area. The study has identified a number of significant properties including a combination of Victorian, Federation and Interwar dwellings over the period from the 1850's to the 1920's.

The Study recommends the Heritage Overlay be extended to additional places of significance and be included in the existing Heritage Overlay – Schedule 1641.

- A number of properties are recommended to be included within the Heritage Overlay, including examples of Victorian, Federation and Interwar Bungalow architectural styles from the 1850's-1920's.
- A small number of properties to be removed from the Heritage Overlay which have been identified as having no significance.
- Proposed text alterations to existing Clause 22.32 (HO1641) in the Planning Scheme in relation to the City South Heritage Area.

Implications of a new Heritage Overlay

The purpose of the Heritage Overlay is to conserve and protect areas of significance. Development can occur on these properties, however may be limited to rear extensions or minor improvements and works. There are different levels of significance and a property may be non-significant but included in the Heritage Overlay. If a property is listed as non-significant, complete demolition may be acceptable, however any replacement dwelling will need to be assessed as part of a Planning Application.

A future Planning Scheme Amendment process will review the extent of Heritage Overlay and submissions can also be made throughout this process.

A copy of the Heritage assessment is found as an appendix to this report and details the historical context, analysis and significant features of each property including proposed level of significance. The properties have been classified as either C, including contributory dwellings an D relating to noncontributory places. The map on the following page indicates the areas proposed to be included in the Heritage Overlay and identified as part of the study.

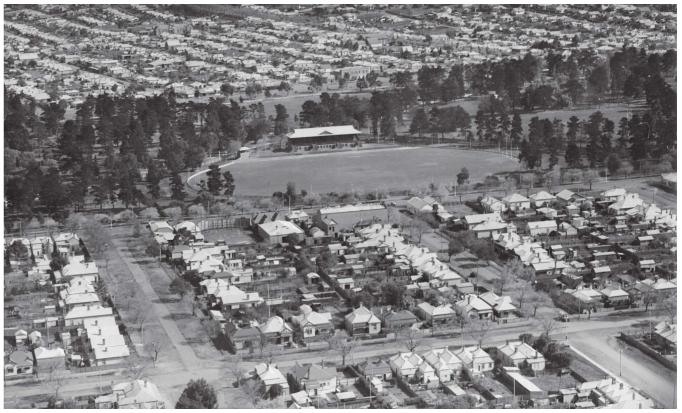
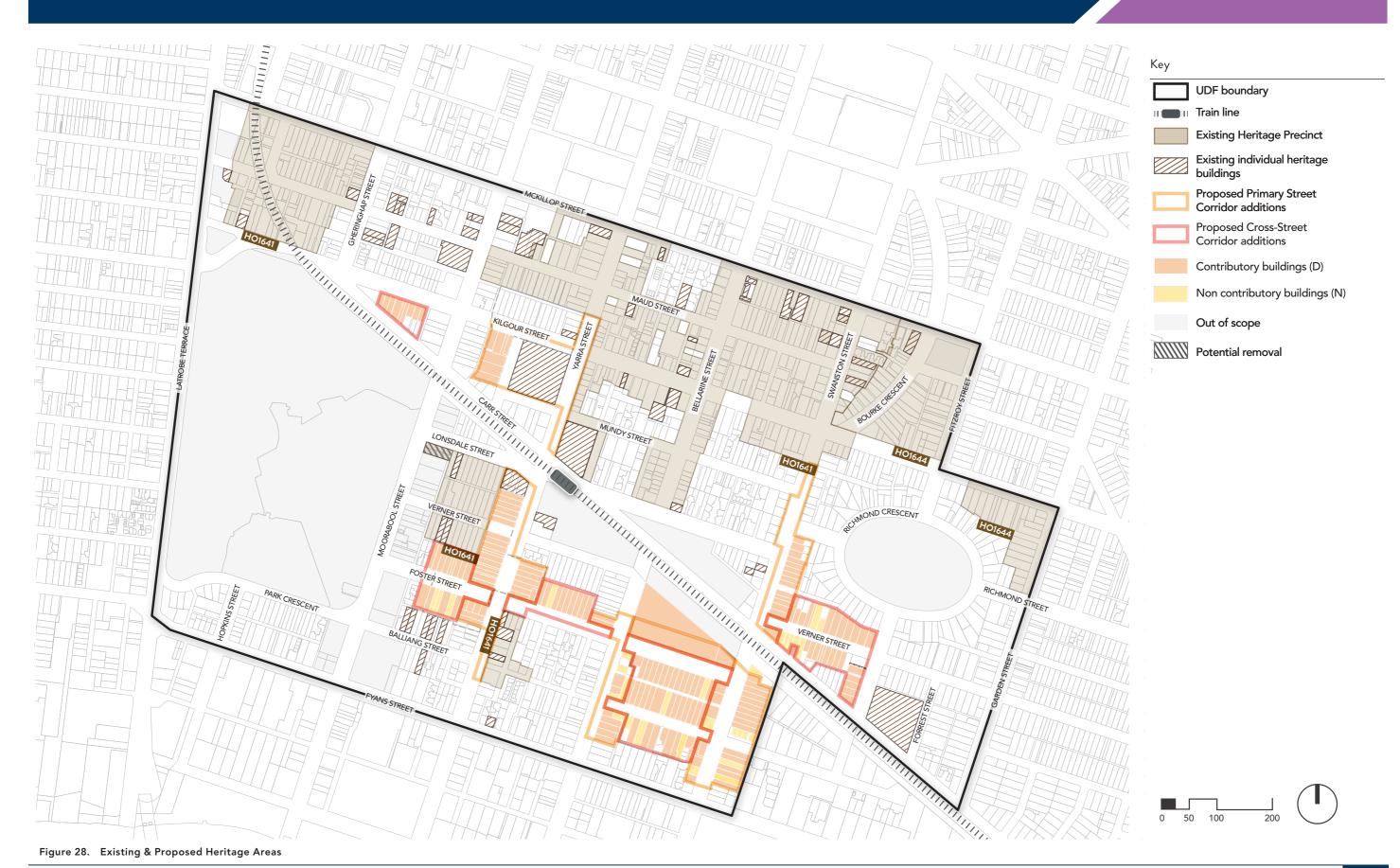


Figure 26. C. Pratt, aerial view looking west showing Kardinia Park, State Library of Victoria



Figure 27. Proposed Revision Report to Heritage Overlays



South Geelong Capacity and Change Areas Review

Following the consultation period, Council undertook a review of development capacity and the potential for change to occur within the study area. As part of the consultation process following the Draft UDF, residents indicated a preference to retain significant heritage values and expressed strong desires to protect the existing neighbourhood character value within the study area.

The Department of Environment, Land, Water and Planning (DELWP) define neighbourhood character as;

A combination of public and private realms. Every property, public space or piece of infrastructure makes a contribution whether great or small. It is the cumulative impact of all these contributions that establishes neighbourhood character.

The study assessed the following key themes within the area regarding;

- Development trajectory
- Development Area
- Lot size
- Building Height
- Setbacks
- Heritage areas
- Materiality
- Roof form

The study examines existing neighbourhood character and the capacity for the area to accommodate change and future development. Following on from this assessment, the residential areas within the study area have been broken down into minimal, incremental and substantial areas of change. The work will inform changes to the Increased Diversity Area and changes to residential zones to reflect the three areas of change.



Figure 29. Existing housing stock within the study area

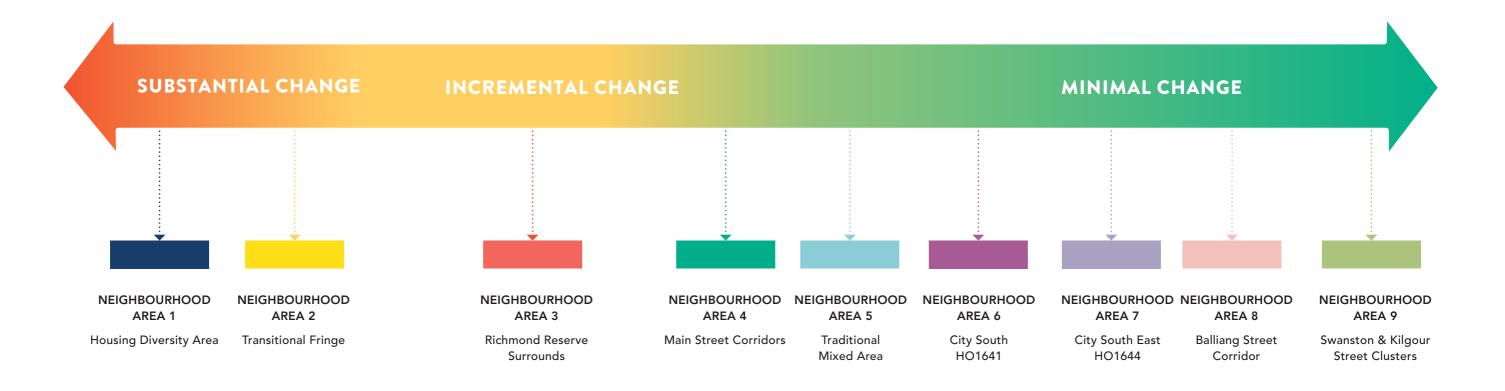
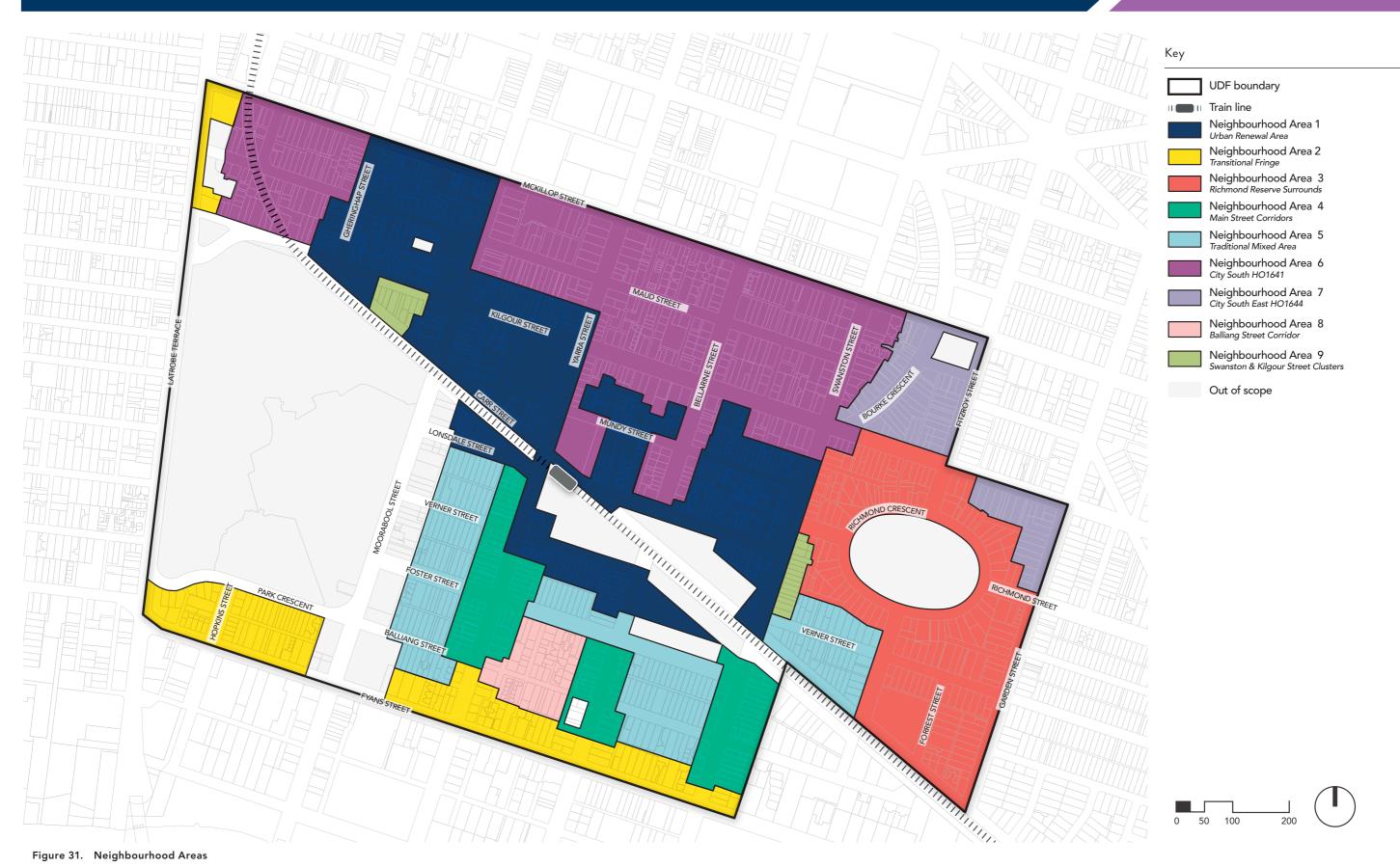


Figure 30. Degree of Change Matrix



Development Feasibility Study - Barwon Water Site

Council engaged a consultant to undertake an independent economic assessment on the development feasibility to deliver development on the Barwon Water site. The report considered the two development scenarios proposed in the draft UDF to determine if the project would be financially viable under current market conditions.

Based on the economic assessment undertaken, currently Geelong has a limited apartment market which current make up 3.4% of total dwellings in Geelong. There is an under-supply of medium and higher density dwellings, with an oversupply of traditional detached dwellings. The low/medium density townhouse market is well established in Geelong with a general demand for unit development evident.

With strong population growth expected to continue across Greater Geelong, an increase uptake of apartments could be likely, but this is not reflected in current market data

The results show that townhouses are feasible in both options and all of the sensitivity tests. There were mixed results for medium density (2-3 storeys) and high density (5-10 storeys) apartment developments, with many of the sites sitting just above or below the break-even/feasibility point. Option 2 had a slightly better feasibility when all of the costs and revenues across tall sites were added together.

The report suggested that affordable housing requirements add a non-trivial cost to developments in the test scenarios. There is a demonstrable need for affordable housing in the Geelong municipality. The benefits of providing this type of housing far outweigh the costs identified in this feasibility analysis. Affordable housing is effective for alleviating poverty, improving labour market functions and the diversity of local communities. This brings benefits in the form of:

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

The report suggests that a longer term view regarding the development of apartments on the Barwon Water site would be appropriate given the limited development capacity of land within South Geelong, and given the sites proximity to the train station.

Social Housing Contributions and Section 173 Agreements

The City engaged a consultant to prepare a report to assist Council to achieve the goals of the Social Housing Plan with a particular focus on progressing implementation of Goal 4. That is, to utilise recent amendments to the Planning & Environment Act 1987 (the Act) to negotiate the inclusion of appropriate and meaningful social and affordable housing contribution in nominated Key Strategic Planning Areas (KSPAs) where infrastructure investment and proposed site rezoning are expected to result in land value uplift.

Social and affordable housing are included in infrastructure systems like transport networks, water cycle management, open space systems, hospital and healthcare systems, schools and other community facilities. These are essential infrastructure that are necessary in supporting health, economic productivity and sustainability of South Geelong as well as the broader Greater Geelong communities.

Social and affordable housing are required within the South Geelong Urban Design Framework (UDF) in bringing about an inclusive, diverse, healthy and socially connected community as part of the City's Clever Creative strategy and Social Housing Plan. There will be alignment of core principles in both strategies for increasing housing diversity and inclusion of social housing as essential infrastructure.

The areas surrounding South Geelong's train station and key development areas in the UDF were strategically identified as an increased housing diversity area (IHDA) and is expected to cater for areas of change in housing type and density. The IHDA policy includes design objectives for delivering housing that positively contributes to the neighbourhood, regardless of whether they involve redevelopment of existing housing stock, new medium or higher density developments, housing needs of a diverse range of future residents. Future delivery of social and affordable housing in South Geelong will be important for these diverse housing needs of the lower and moderate income households.

In 2050, the Geelong community will require approximately 11,000 social housing dwellings which is 14% of total dwellings to be delivered in Geelong. One third of these, or 3,700 units (4.6%), could reasonably be expected to be delivered through planning and development approval process.

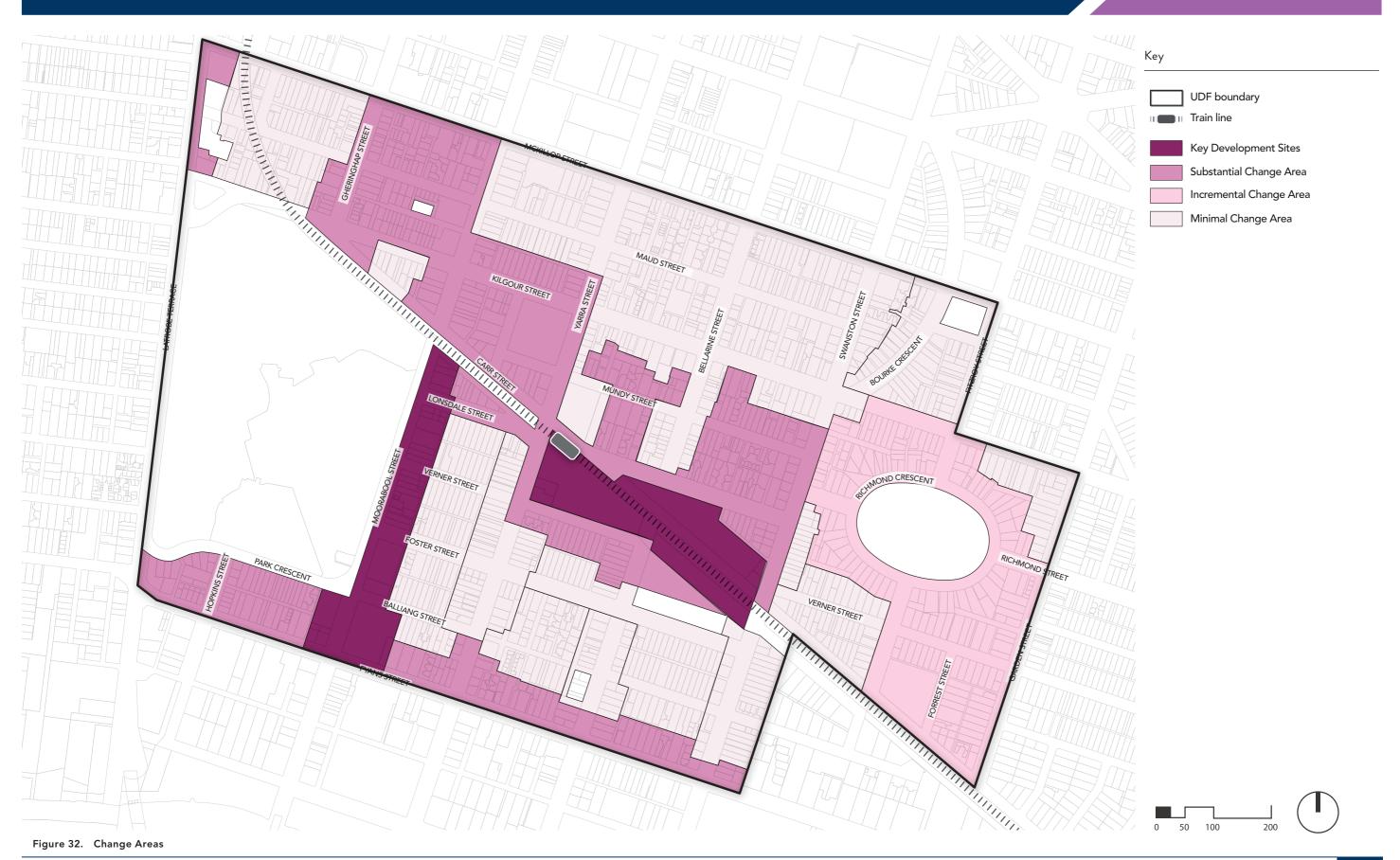
The South Geelong UDF has both state and local policy support as well as strategic justification for introducing a contribution for affordable housing as a requirement that are applicable to all development applications in order to address the severe shortage and need for affordable housing. This requirement would see proponents entering into enforceable agreements as a condition of development approval.

In calculating the requirement for a contribution rate, a reasonable assumption has been made that the Commonwealth Government, the state government, and developers and the planning system each share responsibility for meeting measured existing and future need. As such, each is required to deliver one third of the total social housing infrastructure for healthy, sustainable communities.

In order to address the need, a requirement for social housing floor space, cash or dwelling contribution shall be attributed to each successive unit of development. By attributing the 1/3 (or 4.6%) of social housing need to the total residential and commercial floor space to be delivered, the equivalent contribution can be then negotiated through a Section 173 agreement to either:

- Include social housing units in the project at the rate of 0.022 sq m (GFA) for each square metre of commercially saleable or leasable floorspace (GFA) in the building(s) in question, with these social housing units being delivered at zero consideration to registered community housing provider, or
- Provide a cash-in-lieu payment into the Geelong Affordable Housing Trust at the rate of \$161.87 (indexed annually to movements in unit dwelling prices in Geelong) for each square metre of saleable or leasable floorspace, or
- A combination of these two to reflect the value of partial dwellings to be indicated

In developing the framework, the City has appointed a qualified expert to determine the appropriate level of social housing contributions noted above. Further work will be undertaken as part of the planning scheme amendment process to apply the local policy framework and site-specific planning requirements to give guidance to the implementation of the contributions.



Existing Planning Scheme Controls

Existing Zones

Figure 33 shows the location of the different zones within the study area. Zoning controls are used to guide land use and built form outcomes. The zoning map indicates that much of the study area is located within a residential zone

Commercial 2 Zone - Moorabool Street

- Purpose is to encourage commercial areas for offices, appropriate manufacturing and industries, bulky goods retailing, and associated business and commercial services.
- There is no building height limit for this area.

General Residential Zone - Schedule 4 (Increased Housing Diversity Areas)

- To provide housing at increased densities in buildings up to and including four storey buildings.
- To encourage a diversity of housing types in locations offering good access to services and transport including activity centres and town centres.
- To encourage a scale of development that provides a transition between areas of more intensive use and development and other residential areas.
- A maximum building height limit of 10.5m applies to this area.
- The GRZ4 is located in the same location as the previous RGZ2 (see amendment details below).
- The GRZ4 reflects the same altered schedule as the RGZ2 with regards to increased site coverage, reduced setback and private open space requirements, however does not exempt an application from the garden area requirements.

General Residential Zone 1 - balance of the study area

- To encourage development that respects the neighbourhood character of the area.
- To encourage a diversity of housing types and housing growth particularly in locations offering good access to services and transport.
- A preferred building height limit of 11m applies in this area.

Public Park and Recreation Zone - Kardinia Park, Richmond Oval, Hopetoun Park and George Trickey Reserve

- To recognise areas for public recreation and open space.
- To protect and conserve areas of significance where appropriate.
- To provide for commercial uses where appropriate.

Public Use Zone 1 - Service and Utility - Barwon Water Site

- Purpose is to recognise public land use for public utility and community services and facilities.
- To provide for associated uses that are consistent with the intent of the public land reservation or purpose.

Public Use Zone 4 - Transport - Rail corridor

- Purpose is to recognise public land use for public utility and community services and facilities.
- Purpose is to provide for associated uses that are consistent with the intent of the public land reservation or purpose.

Note: Amendment GC 172 was gazetted by the Minister for Planning on the 23/12/2020 and altered residential zones across Geelong. The amendment was prepared by the Minister to correct height inconsistencies that resulted from the implementation of the reformed residential zones through Amendment VC110 in 2017.

In relation to the South Geelong UDF area, the amendment resulted in the Residential Growth Zone – Schedule 2 (RGZ2) changed to the General Residential Zone Schedule 4 (GRZ4), and the General Residential Zone – Schedule 2 being altered to the Neighbourhood Residential Zone Schedule 8 (NRZ8).

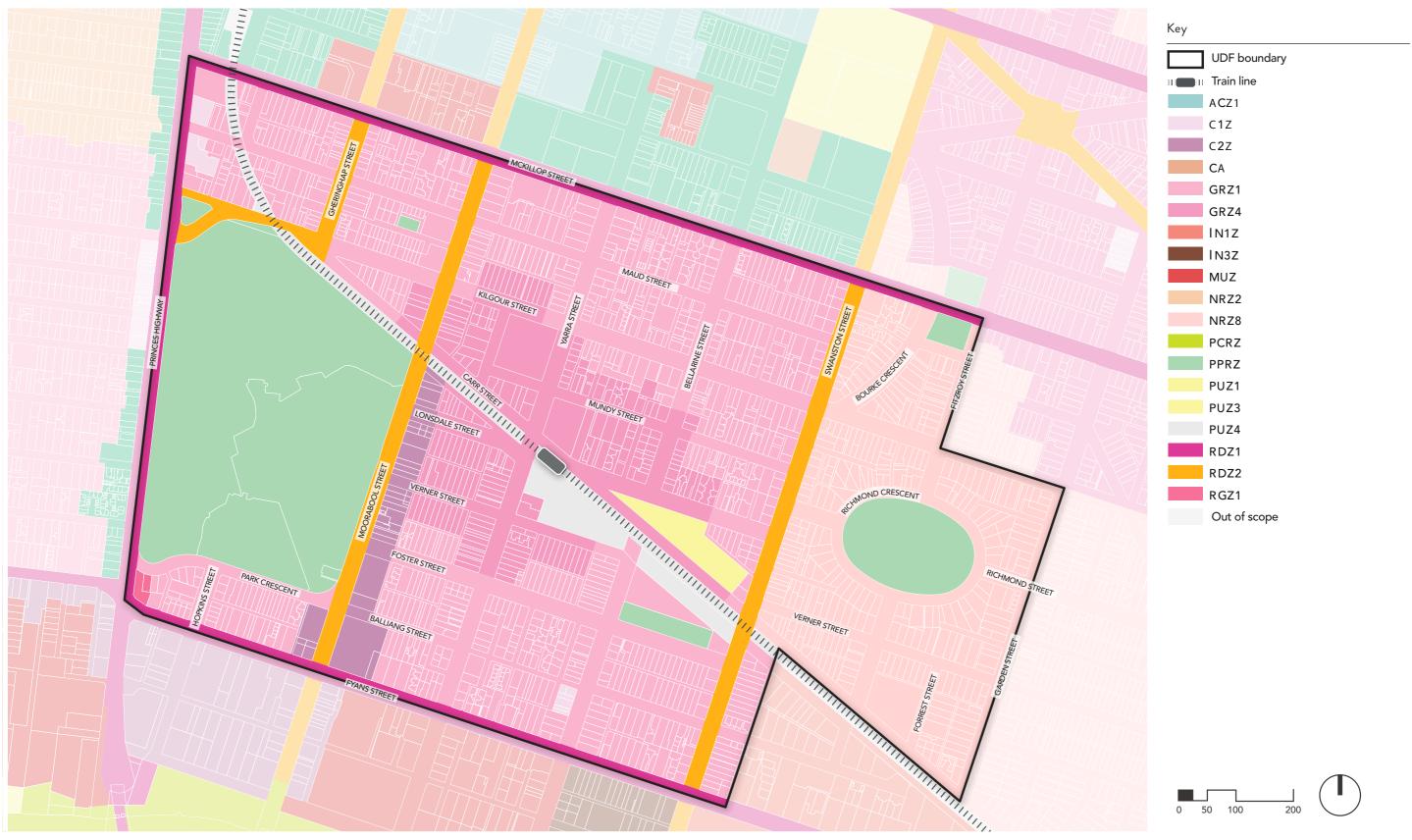


Figure 33. Zones

STRATEGIC POLICIES AND RELEVANT PROJECTS

Overlays

Overlays are additional layers of planning control that determine the type of development that occurs and often reflect the need to address previous uses, specific site constraints, and/or strategic locations and relationships.

There are several heritage overlays within the study area. Figure 35 shows the location of the heritage overlays & indicates that there is a large number of heritage listed properties in the north of the study area toward McKillop Street.

Purpose

- To conserve and enhance heritage places of natural or cultural significance.
- To conserve and enhance those elements which contribute to the significance of heritage places.
- To ensure that development does not adversely affect the significance of heritage places.
- To conserve specified heritage places by allowing a use that would otherwise be prohibited if this will demonstrably assist with the conservation of the significance of the heritage place.

Below are key extracts of each of the Heritage Overlay Areas that relate to the study area:

HO 1641 City South Heritage Area Objectives

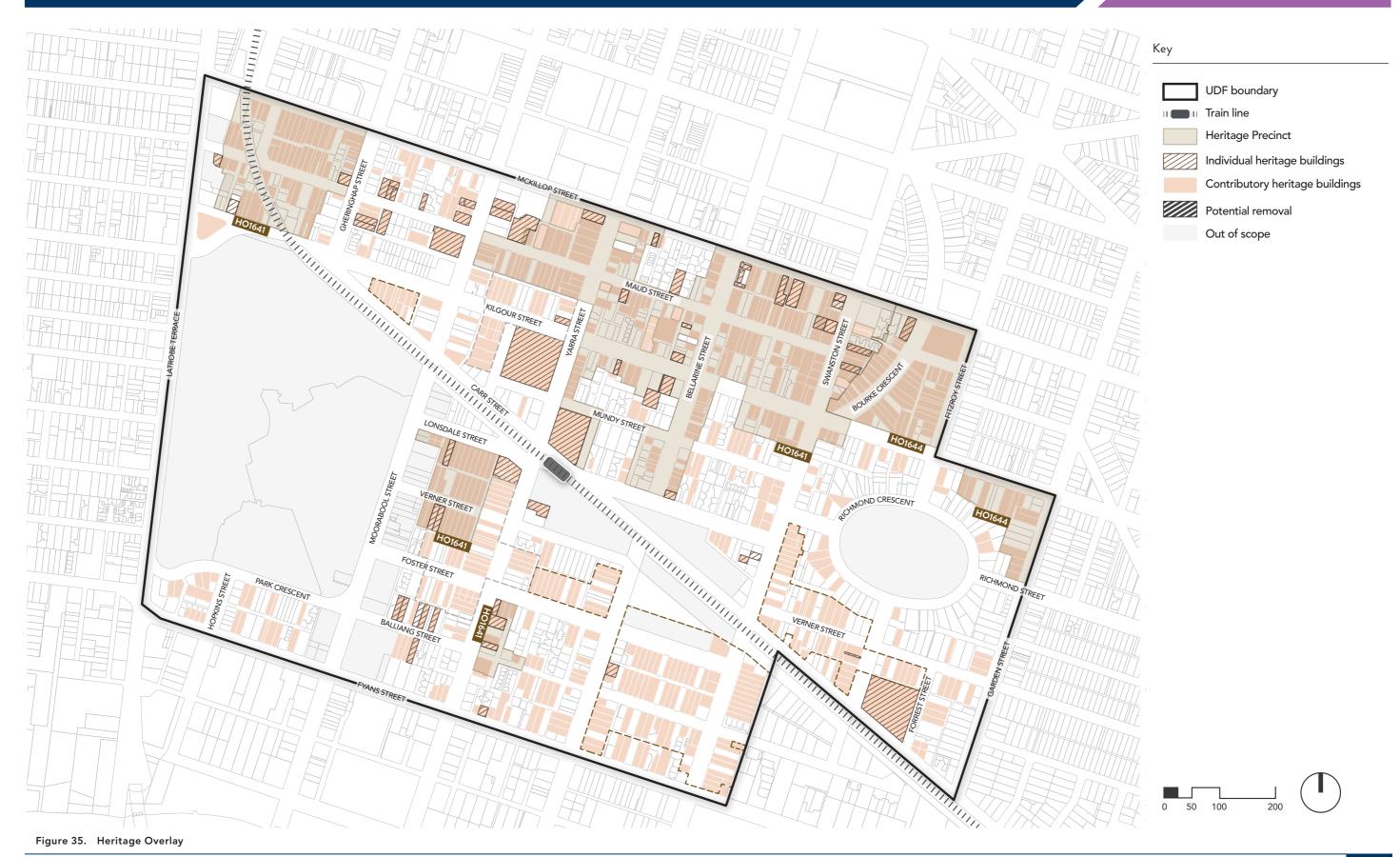
- To retain the wide nature strips, street planting, generous building setbacks and garden settings.
- To maintain the distinctive patterns of form and sighting determined by street width, where major roads have double fronted houses with generous setbacks and separation, and narrower streets have single fronted houses with smaller setbacks, subdivisions and less separation.
- To protect the intact groups of typical examples of Victorian, Edwardian and, to a lesser extent, Californian Bungalow styles predominantly single storey, detached houses.
- To encourage the contemporary interpretation of traditional building design within the area.
- To encourage the use of traditional construction materials in the area.
- To encourage the use of appropriate fence types, designs and locations.
- To encourage the appropriate development, form and scale of garages and/or carports.



Figure 34. Austin Hall and Terrace Complex, HO101

HO1644 City South-East Heritage Area Objectives

- To retain the distinctive, original street planning, garden settings, street setback, and wide nature strips.
- To retain and enhance the combination of grand and modest residential buildings.
- To retain characteristics of intact houses of diverse architectural styles including late Victorian, Edwardian and California Bungalow styles.
- To retain the uniformity of scale of the area including single storey height, regular front and side setbacks, side or rear driveways, building separation and subdivision pattern.
- To encourage the contemporary interpretation of traditional building design within the area.
- To encourage the use of traditional construction materials in the area.
- To encourage the use of appropriate fence types, designs and locations.
- To encourage the appropriate development, form and scale of garages and/or carports.



STRATEGIC POLICIES AND RELEVANT PROJECTS

Other Overlays

Below are the overlays that affect the study area:

Environmental Audit Overlay

This overlay is used on sites with potential contamination issues related to previous uses. Its purpose is to ensure potentially contaminated land is suitable for use which could be significantly adversely affected by any contamination.

Design & Development Overlay - Schedule 36

The overlay identifies areas which are affected by specific requirements relating to the design and built form of new development. Schedule applies to the Emergency Medical Service (EMS) Helicopter Flight Path Area (H3 - Rooftop Helipad).

Ensures that the height of new development does not encroach on the flight path airspace areas associated with the Geelong Hospital rooftop helipad.

Ensures that the height of new development avoids creating a hazard to EMS helicopters operating in the vicinity of the Geelong Hospital helipad and to facilitate safe emergency medical service helicopter flight operations.

Triggers a permit requirement to construct a building or to construct or carry out works with a constructed height more than 25.0 metres above ground level.

Landfill Gas and Development near Landfills

The South Geelong Landfill has been mapped on Council's system and use and development applications require consideration when within 500m of this area.

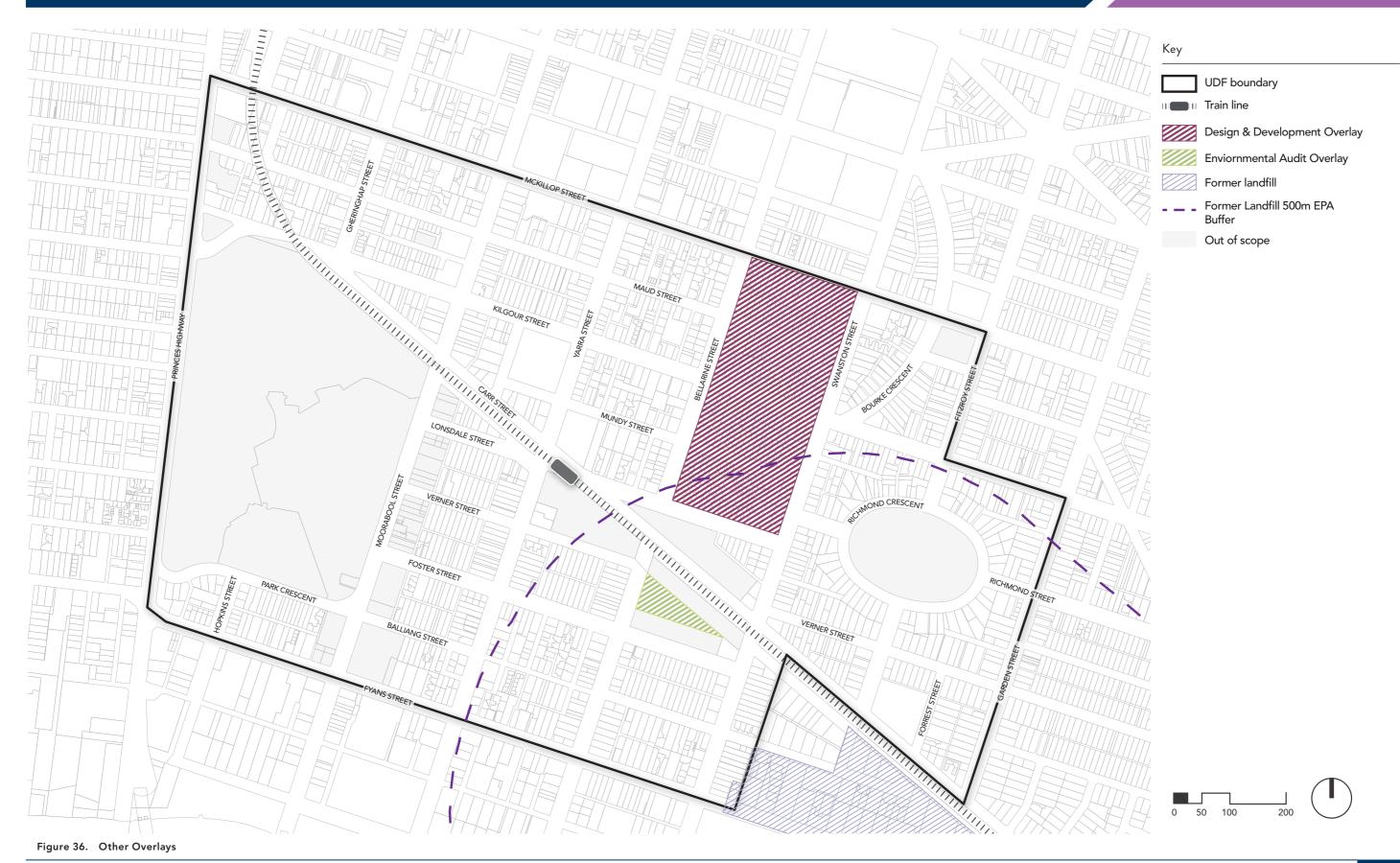
The EPA has adopted the 'Best Practice Environmental Management, Siting, Design and Operation and Rehabilitation of Landfills' and includes buffers and risk mitigation strategies for sensitive land uses such as dwellings.

Landfill buffers are used to manage the risk of:

- Landfill gas from operating and closed landfills.
- Odour impacts from operating landfills.

Development within the landfill buffer requires:

- **01.** A suitably qualified consultant to undertake a site assessment on the potential presence of landfill gas beneath the land where a development is proposed. This may include a desktop/literature based assessment and/or a site-specific intrusive landfill gas investigation.
- **02.** The consultant must also provide details in relation to recommendations for the management or monitoring of identified landfill gas, and must provide an opinion on whether an audit is required under Section 53V of the Environment Act 1970.



VISION AND ANALYSIS

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VISION AND ANALYSIS

Vision and Objectives

This section of the UDF includes general design principles and the associated objectives and strategies to deliver them. They have been informed by the policy, background studies and community consultation outlined in this report.

This part of the UDF is structured to include the broad principles identified within the Draft UDF, filtered down into objectives and strategies that also reflect community issues.

The concept plans for key development areas provide a design response to some of the objectives.

Vision

The existing and identified heritage and neighbourhood character values will be protected within South Geelong with modest development to occur over time.

Opportunities for increased densities will occur within key development areas, including Moorabool Street, The Station Precinct and the Barwon Water site. These areas will present vibrant public spaces, including a combination of mixed uses for residents to enjoy. Development will be of a high standard, incorporating a range of different building forms and materials and include exemplar ESD principles.

Existing infrastructure will be upgraded to include social housing, increased green spaces and improved open space areas, creating an attractive destination for new and existing residents.

The character of Moorabool Street is expected to alter over time to have a residential focus with increased opportunities for active frontages and uses that provide vibrancy.

Improved pedestrian and cycling links will make movement in and around the study area more accessible with increased links provided to the train station.

Key development areas will undergo substantial change and incorporate increased densities whilst identified minimal change areas will protect neighbourhood and character values

Study Area Analysis

Four design principles have been developed with community input, background studies and detailed site analysis. Each design principle has associated objectives and strategies to deliver the overall vision.

The analysis work has incorporated field work, heritage character assessment, policy analysis and community feedback. From this foundation a set of design principles have been formulated to guide the development.

These principles underpin the Vision and proposed improvement actions for the area and provide more refined objectives and strategies which will ultimately be included as part of changes within a Planning Scheme Amendment.

Design Principle 1: Local character and development

Design Principle 2: Movement and Access

Design Principle 3: Activities

Design Principle 4: Environment

Design Principle 1 - Local Character and Development

1.1 Neighbourhood and Heritage Character Context

South Geelong is characterised by a grid layout of wide streets, with the exception of the later east extension providing a dynamic curved streets of Bourke and Richmond Crescent. Punctuating the grid layout is the Geelong to Warrnambool Railway line which extends on a diagonal access from the west end of Kilgour Street to the south end of Garden Street.

South Geelong's gentle sloping topography and regular grid layout provides largely uninterrupted views between the northern and southern parts of the study area.

Council has undertaken a Neighbourhood Character Assessment to identify significant features within the study area related to lot width, architectural styles and capacity for the area to accommodate development. This work has informed three separate areas including minimal, incremental and substantial change areas. Most dwellings within the study area are single storey, detached, hipped/gabled, and constructed of corrugated sheet metal roof cladding and timber weatherboard wall cladding.

Heritage dwellings in the study area largely comprise of a small number of stylistic types: Early Victorian, Victorian, Edwardian/ Federation, interwar and post war. The Heritage assessment completed recommends a number of dwellings to be included within the existing Heritage Overlay – Schedule 1641.

The football stadium and light towers are a major landmark in the southern central part of Geelong and Moorabool Street Precinct. A stage 5 redevelopment of the stadium has recently been approved and highlights the importance the stadium and surrounds has for Geelong.

Other landmarks that contribute to the character of the area include: Austin Homes, South Geelong Primary School, Former South Geelong United Church Complex, Former Jewish Synagogue, Elephant and Castle Hotel, Former Geelong Grammar School, Former Gordon Junior Technical School and Palais Dance Hall along with early hotels, commercial buildings and corner stores.

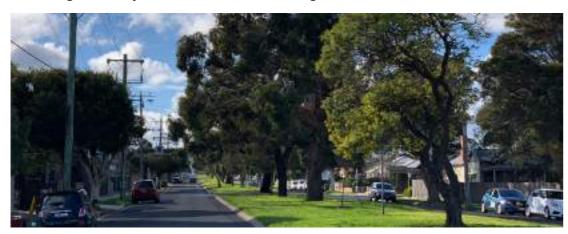


Figure 37. Examples of street trees which provide an important landscape setting contributing to local character

Objective

To protect and enhance local character including landscape setting, building form and scale, heritage elements, key activities and public spaces.

Strategies

- Promote development in each housing area in accordance with the identified character outcomes and expected level of housing change.
- Manage development in each housing area through the application of appropriate zones and overlays.
- Direct mixed use and higher density residential development to the key development areas.
- Ensure mixed use and high density residential development make a positive contribution to the public realm by including high quality public spaces, landscaping and architectural design.
- Promote a mix of high quality housing types and styles in the increased housing diversity areas.
- Ensure development in the incremental change areas respect the existing neighbourhood character through appropriate garden settings and building form and scale.
- To promote a diversity of built form and high quality urban environments whilst respecting identified neighbourhood character and heritage values.
- Protect and enhance the areas of heritage significance by encouraging modest low scale development in keeping with the existing character.





Figure 38. Examples of heritage built form which contributes to local character





Figure 39.
Examples of heritage built form which contributes to local character

1.2 Built Form Context

Appropriate and incremental redevelopment of existing and proposed heritage areas is encouraged, including re-use of existing buildings. The existing heritage built form will be maintained along with proposed new areas, whilst allowing for extensions and improvements that respect the heritage place. Sites redeveloped on the periphery of heritage and neighbourhood character areas will be respectful in their context and allow for a respectful transition between different areas. Sites within the identified key development areas will have increased density and diversity of housing types including different architectural styles, materials and finishes, uses, tenures and adaptable with opportunities to provide affordable housing.

Objective

Promote a diversity of built-form and high quality urban environments whilst respecting identified neighbourhood character and heritage values

Strategies

- Maintain and protect existing heritage-built form identified in heritage areas.
- Apply additional heritage overlay to properties within the study area.
- Support examples of medium density development such as the 'Big Shed' at no. 135 Fitzroy Street, Geelong.
- Alter existing zoning to reflect development opportunities consistent with identified neighbourhood character themes, including minimal, incremental and areas for substantial change.
- Direct significant housing change to key development areas including; Moorabool Street precinct, the Barwon Water Site and Station Precinct.
- Alter the IHDA area to 800 metres around the train station, but not including existing, proposed heritage areas and the minimal change area.
- Revise the IHDA area to be extended to areas nominated for 'substantial change', not including heritage areas and 'minimal change' areas.



Figure 40. Previous view of the Big shed redevelopment at 135 Fitzroy Street

Refer to Figure 41 Built Form Strategy Plan Map

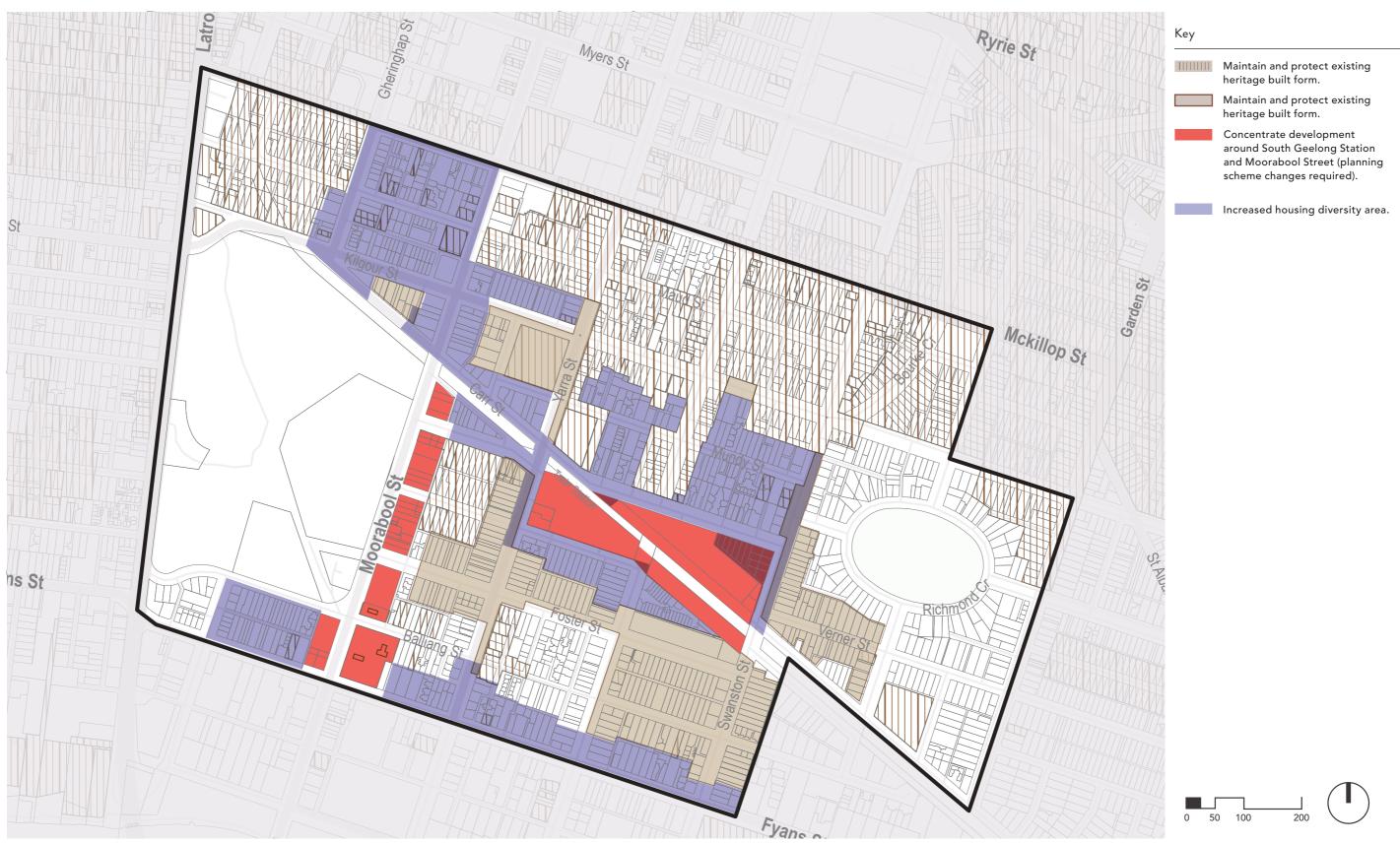


Figure 41. Built form strategy plan

Design Principle 2: Movement and Access Movement and Access Context

Within South Geelong, the roads are characterised by wide expanses of bitumen, which encourage high vehicular speeds and make crossing for pedestrians difficult. This is particularly evident around the train station where it can be difficult for pedestrians to cross the road and access the platform. Angled parking is located along Carr Street and there is existing parking within the train station area with limited landscaping. The consultation processes have identified resident concern with increased densities and associated impacts on existing infrastructure including local roads and traffics. Residents also raised concern with parking in the median strips and the feasibility of this and impacts on the flow of traffic.

Significant challenges and opportunities have been identified by residents during consultation including the need to improve the public realm via reduced vehicular speeds, and creating improved conditions for cyclists and pedestrians to access the station and surrounding road networks.

General support for increased pedestrian and cycling improvements as well as improved street lighting was identified as key opportunities for improvement from residents.

Central to South Geelong is the train station and at-grade commuter car parking. The car parking is rudimentary in appearance and difficult for pedestrians and cyclists to navigate. The train station predominantly functions as a park and ride station which results in parking pressures around the station and in local streets.

2.1 Safety

Objective

To improve Universal access, pedestrian, cycling circulation and safety

Overall Strategies

- Ensure pedestrian movement within and around South Geelong is safe and enjoyable, promoting a walkable neighbourhood.
- Provide improved circulation and way finding features to ensure cycling and pedestrian are easily directed to destinations within and outside the study area.
- Increase landscaping within car parking areas to soften the visual impact of hard stand areas.
- Investigate where appropriate, parking within central median strips as a way of providing increased car parking.
- Investigate speed reducing and traffic calming measures.
- Provide pedestrian crossings at identified intersections to improve connections to the Train Station.



Figure 42. South Geelong Station

Short term Strategies

- Create a distinctive 'starting point' for the Rail Trail at the Station with good end of trip facilities and cycle infrastructure.
- Provide a pedestrian crossing over the railway line at Bellerine Street as part of a Station renewal project.
- Provide a signalised pedestrian/ cycle crossing across Moorabool Street at the Lonsdale Street intersection.
- Improve pedestrian connections from the Train Station to Kardinia Park via Lonsdale Street.
- Improve pedestrian crossings to Geelong South Primary School, particularly across Yarra Street.
- Improve pedestrian crossing at Yarra and Verner Street intersection.
- Improve pedestrian crossings at roundabouts on Kilgour/ Yarra and Kilgour/ Swanston.
- Improve pedestrian crossing of Swanston Street and Balliang Street intersections.

Long term Strategies

• Improve pedestrian crossings generally throughout South Geelong precinct by providing central medians or extending the footpath/ verge at intersections, as part of a possible suite of public realm streetscape improvements.

Refer to figure 45 - Walkability and Active Transport Strategy Plan Map





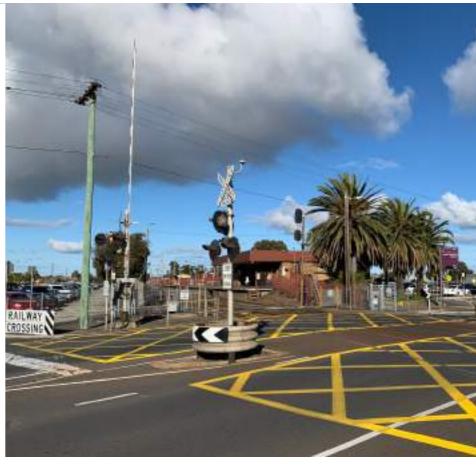


Figure 44. Improve pedestrian connections to the Station



Figure 45. Walkability And Active Transport Strategy Plan

2.2 Vehicular Access and Car Parking

Objective

To provide a safe environment for pedestrians and to minimise the visual impact of car parking area

Strategies

Short Term

- Where possible provide street trees and shade to car parking spaces.
- Provide safe and convenient footpaths connecting parking spaces to the Station building and platforms.

Long Term

- Limit all day car parking in residential streets.
- Slight reduce car parking numbers to accommodate additional planting, walking and cycling, safety improvements and shared car spaces.

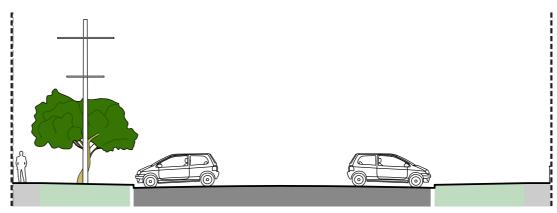
The below table identifies the number of car parking space proposed within the study area over time

On street car parking	Number of car parks
Existing	3420
Short/Medium term proposal	3420 (no change)
Long term proposal for street upgrades (planted medians)	3200 (change of - 6.5%)

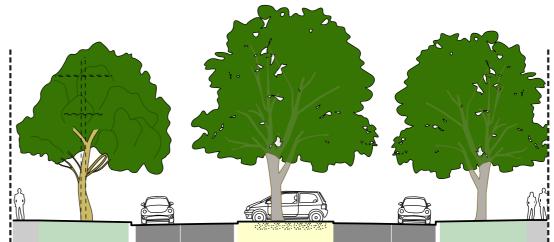
Note: Department of Transport have identified a potential 300 additional car parking spaces at the South Geelong Train Station may be required in the long term. This could be delivered via a multi deck car park on the station site.

Figure 47 shows the Car Parking Strategy Plan map

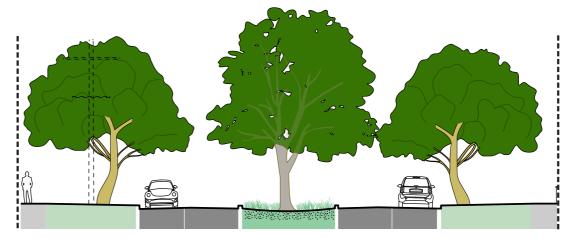
Typical street cross sections



Typical existing street cross section



Typical proposed medium term street



Typical proposed long term street cross section

Figure 46. Typical street cross sections

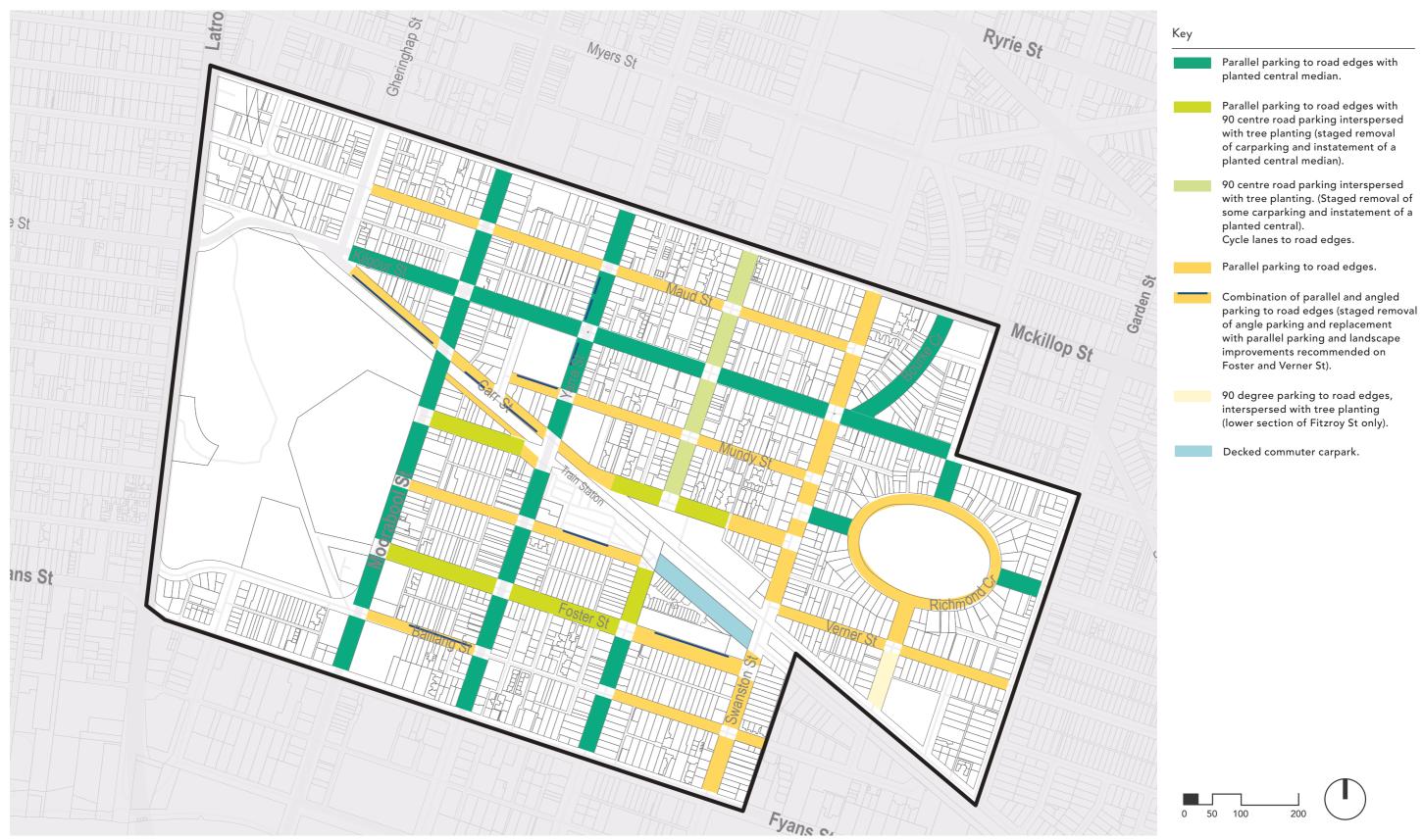


Figure 47. Car Parking Strategy Plan

2.3 Public Realm and Streetscape

Objective

Preserve and enhance the character of leafy streets to contribute to the attractiveness of the space for walking and cycling.

Strategies

Short Term

- Protect and retain healthy street trees.
- Provide new street tree planting in streets to reduce the heat island effect and absorb carbon dioxide.
- Improve soil moisture and water quality by introducing water sensitive urban design solutions where possible.
- Ensure built form adjoining public spaces must activate the space and provide passive surveillance of the space.
- CPTED principles must be achieved including encouraging passive surveillance, effective lighting and management of public areas.
- Provide wayfinding signage, particularly supporting the Rail Trail.

Long Term

 Remove centre road car-parking and introduce vegetated central medians, include a mix of vegetation to enhance urban ecology and biodiversity.

The below table demonstrates the capacity to plant additional trees and reduce the heat island effect within the study area.

Street trees and permeable planted surface	Number/ area
Existing street trees	1400
Proposed street tree planting	470 trees (net gain 134%)
Existing bitumen road pavement	238,000sq m
Existing planted median	13,000sq m
Proposed planted median	16,900sq m (7.1% reduction in road pavement and introduction of permeable planted surface)
Proposed long term planted median	2,500sq m (further 1.1% reduction in road pavement and introduction of permeable planted surface)

Figure 49 Shows the Public Realm and Streetscape Strategy Plan map



Figure 48. Existing streetscape within Study area

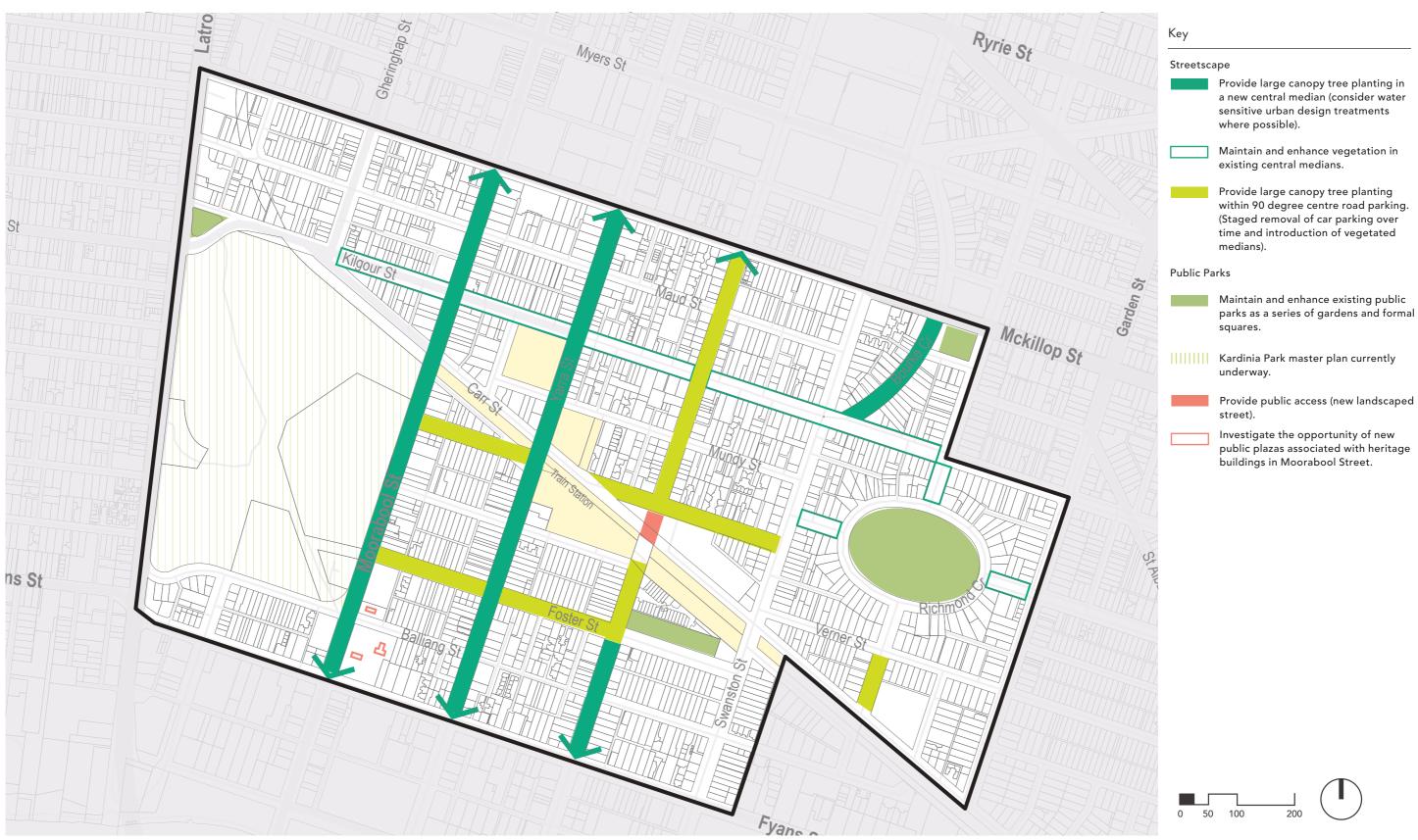


Figure 49. Public Realm and Streetscape Strategy Plan

Design Principle 3: Activities

Activities Context

South Geelong is within walking distance of the Geelong CBD, and includes areas of open space and relevant amenities including the University Hospital, The Bellerine Rail trail and connections to the coast. There are a range of activities available to the community and wider Geelong region, including existing areas of open space, community and commercial uses.

Richmond Park provides an important area for the community to enjoy and for local sport to take place. The oval could be further enhanced with additional community uses and landscaping available.

Kardinia Park is an important focal point and provides open areas for local sports, and the GMHBA stadium attracts AFL games and other functions.

Moorabool Street is an existing commercial precinct and includes a combination of different uses including retail, office, some food and drink premises and other uses. Vehicles dominate this area and the street is typified by large expanses of concrete and pavement treatments with limited trees and landscaping and wide vehicle crossovers with limited public seating or weather protection for people. During engagement, residents indicated support for increased landscaping and increased residential development within this area given GMHBA is opposite the site and there are good connections to the Geelong CBD.

Objective

To ensure uses are appropriately situated to meet the needs of residents and contribute to a vibrant community, whilst respecting existing amenity.

Strategies

- Ensure different land uses, built form, heritage values, landscaping and public realm experience contribute to a vibrant local neighbourhood.
- Support a range of uses in appropriate locations to support existing and future residents, including provision of a small supermarket.
- Provide a limited number of commercial and retail uses a ground level along Moorabool Street
- Encourage higher densities along Moorabool Street and within the Station Precinct which are respectful of their context and provide appropriate transitions in height to existing residential areas.
- Provide opportunities for appropriate urban design outcomes including increased public spaces, creating opportunities for people to linger, and weather protection.



Figure 50. Richmond Oval



Figure 51. Moorabool Street

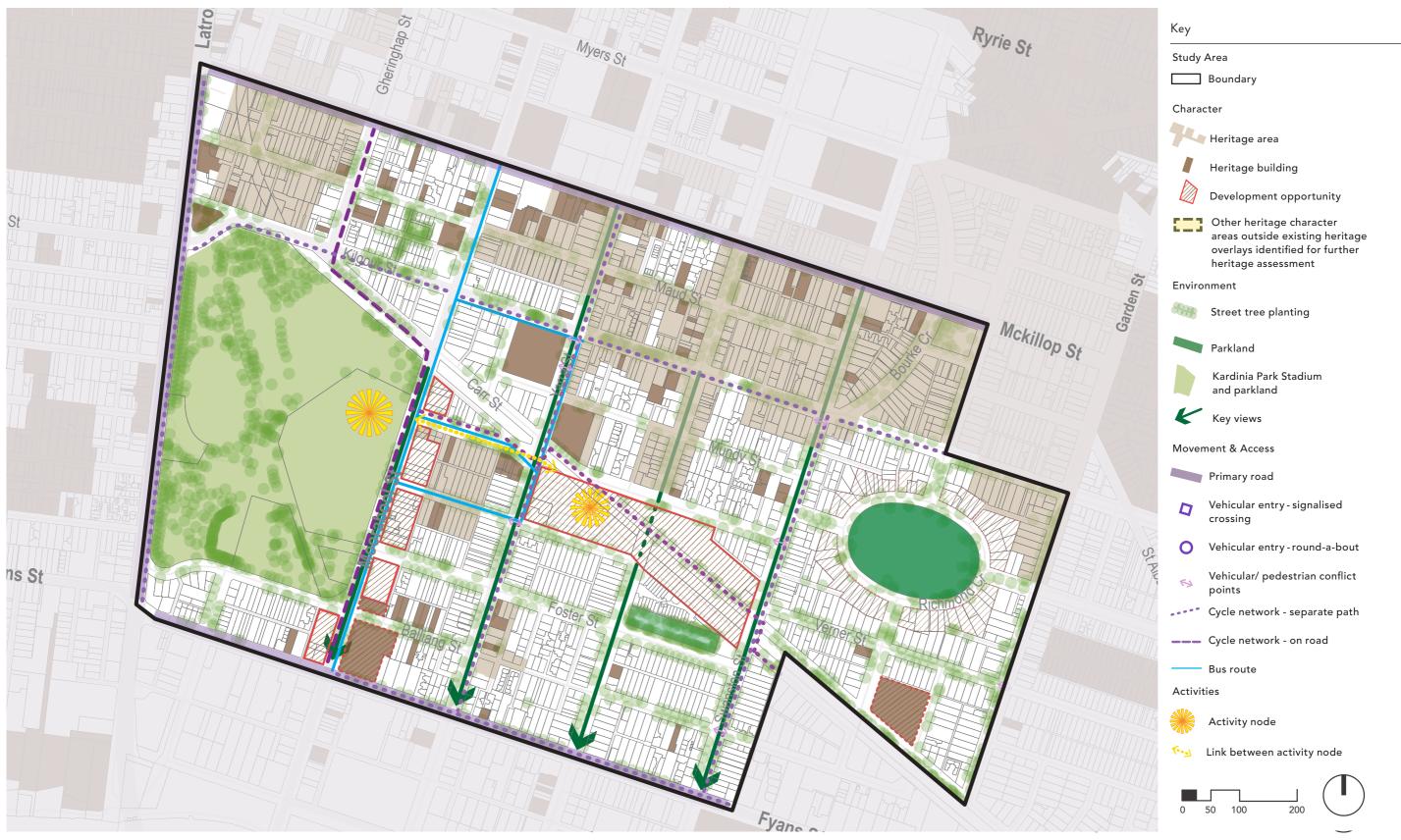


Figure 52. Urban Design Analysis Plan

Design Principle 4: Environment

Environment Context

Residential streets throughout the study area mostly feature Brush Box planting. Road reserves could be improved with increased landscaping, using indigenous vegetation. There is also valuable vegetation within public spaces such as Richmond Park which should be maintained and improved. As part of consultation with residents, there was an overall positive view in relation to increased greenery and street planting.

Objective

To encourage best practice Environmentally Sustainable Design.

Strategies

- Maintain spaces as safe, civilised and healthy urban environments, conducive to walking and cycling as the primary mode of travel
- Ensure that development supports; energy efficient building design, water sensitive urban design in streets and public parks, minimises water use whilst maximising water reuse and supporting schemes such as car sharing.
- Ensure upgrades to streets include best practice storm-water management and Water Sensitive Urban Design Principles in accordance with the Planning Scheme and Council guidelines.
- Support increased street planting and landscaping to improve amenity, increase biodiversity and reduce watering requirements.
- Increased pedestrian and cycling connections to reduce car-based travel for short trips.

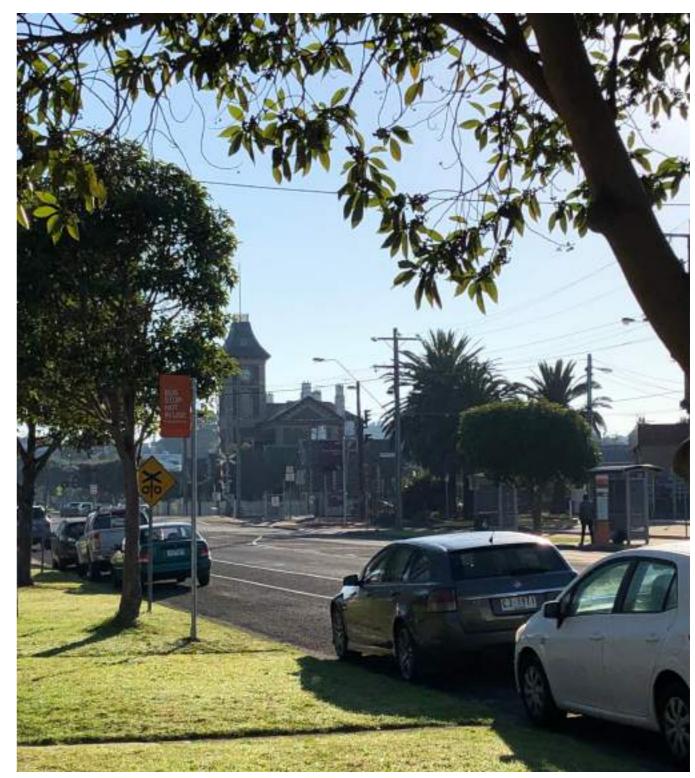


Figure 53. Existing landscaped nature strips and street trees provide amenity and shade

KEY DEVELOPMENT AREAS

Key Development Areas55South Geelong Station Hub55

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

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 Waurn 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 54. Existing Station Precinct, prior to removal of Barwon Water Buildings

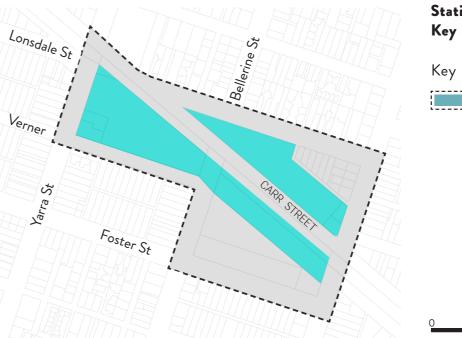
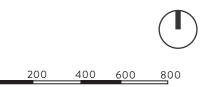


Figure 55. Station Hub Key Development Area

Station Hub Key Development Area





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 Waurn 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.

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 65.
- 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.

Land Use

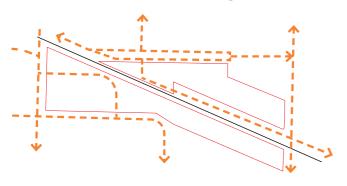
Objectives

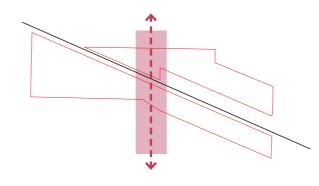
- To support a mix of land uses and actives which meet the needs of the community.
- To increase the supply of social and affordable housing.

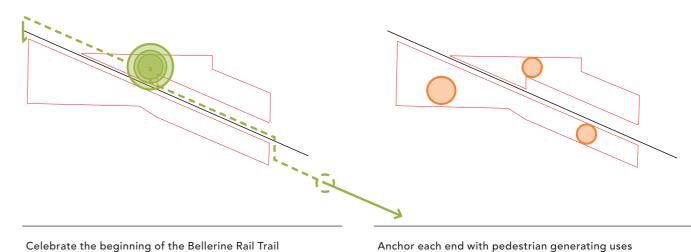
Strategies

- 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

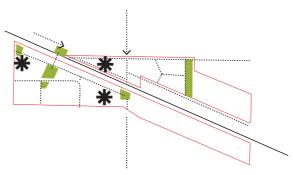




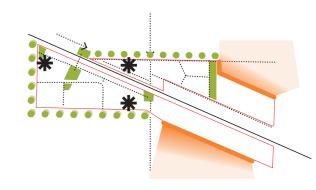


Create a legible and coherent structure of streets

Ensure visual connection across railway line at Bellerine Street



Anchor each end with pedestrian generating uses



Mix of uses scattered across the site to generate foot traffic

Figure 56. Station Hub development area principles diagrams

Local civic or public spaces at the major intersections of foot traffic

Create landmark forms at key points

Integrate the edge conditions to surrounds

Exemplar Built-form and Station Design





Courtyard development, Western Harbour Sweden



Sustainable housing, Copenhagen



Footscray Station Arcade Bridge



Platform design at Middle Gorge Station

Figure 57. 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.







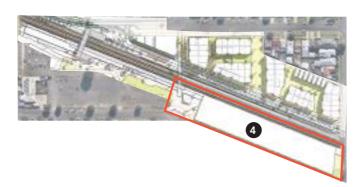




Figure 58. Staging Diagram

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

- South Geelong Station upgrade and Carr St improvements by State Government of Victoria
- Development of Barwon Water site (East) by Barwon Water or private developer
- Development of Barwon Water site (West) including closure of Carr St (West) by Barwon Water or private developer
- Development of multi decked commuter car park by State Government of Victoria
- Development of mixed use transit oriented design with bus interchange.

 Verner Street and Bellerine Street public realm upgrades by State Government of Victoria

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.

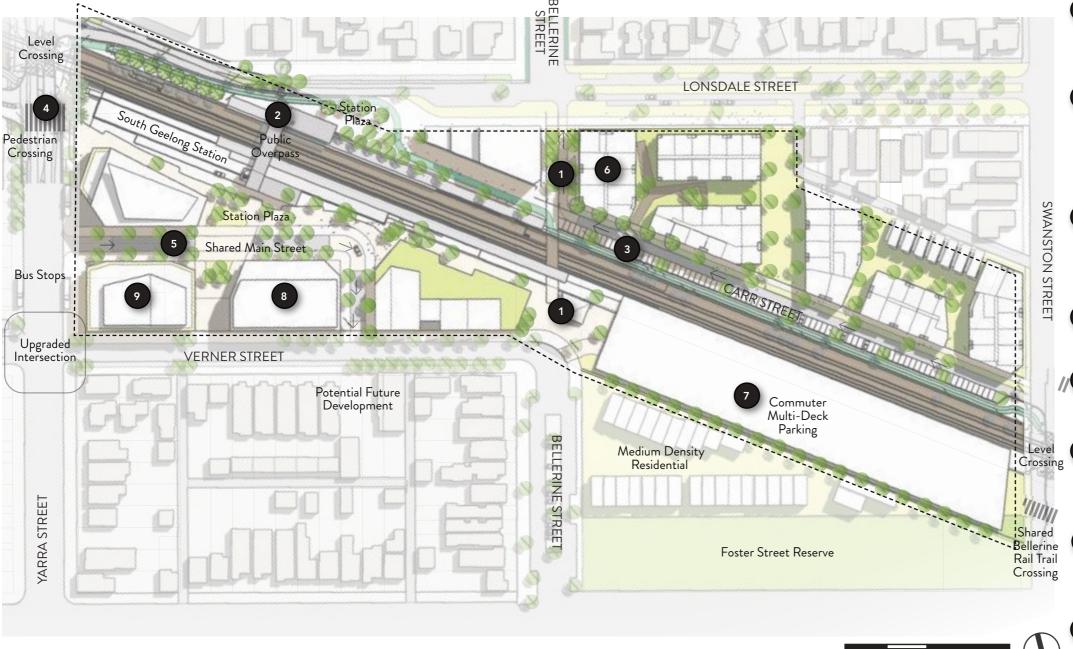


Figure 59. Concept Plan Station Hub Precinct

Station Hub concept plan key

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.

Station redevelopment

Public Plaza Axis

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.

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).

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.

Mini Main Street

This new street will be a slow speed pedestrian priority street with taxi and 'kiss and ride' facilities.

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.

7 Station Carpark Development

Consolidation of the car parking allows opportunity for redevelopment 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.

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



Figure 61. Artist perspective from Station forecourt looking towards Yarra Street

KEY DEVELOPMENT AREA MOORABOOL STREET



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 Waurn 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 62. Key Plan

Key



Moorabool Street re-development area



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.

Higher-scale buildings will contribute to a distinctive boulevard character of 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.



Example of blending heritage and new development, Victoria St, Brunswick



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



Example of green landscaped streets, Dandenong



Example of safe separate cycle path, Dandenong

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, 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 efficiently.

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.







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 areas 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.

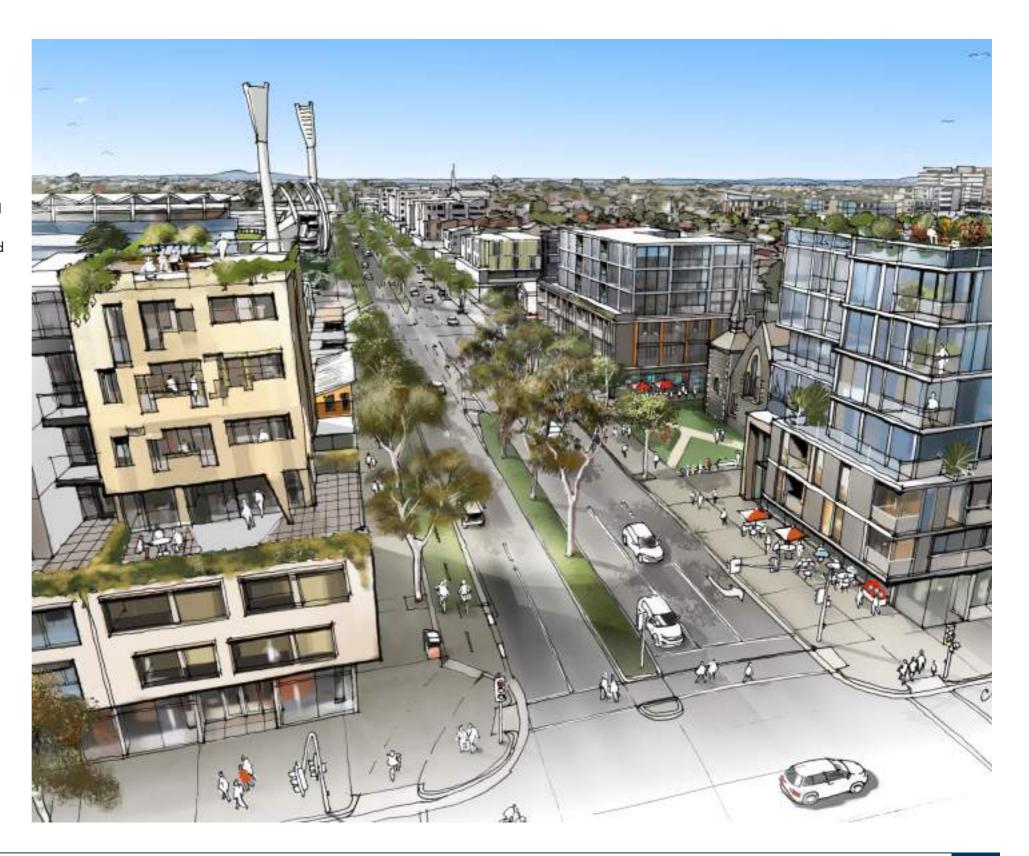


Figure 63. Artist impression Moorabool Street

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

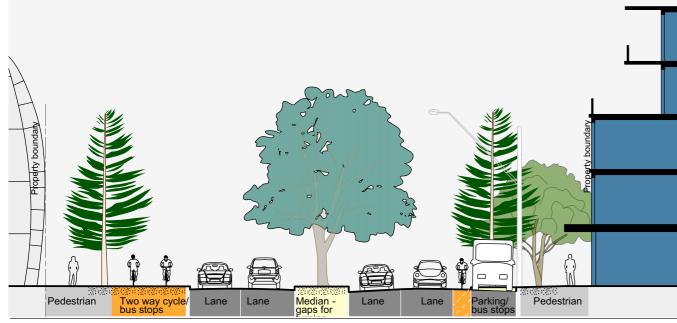


Figure 64. Moorabool Street, proposed typical cross section

- Provide open sightliness 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.

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.

LAND USE AND 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

Building Form and Layout

The Moorabool Street Precinct has four distinct sub precincts, A,B,C D, as shown on Fig. 64. 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.

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.

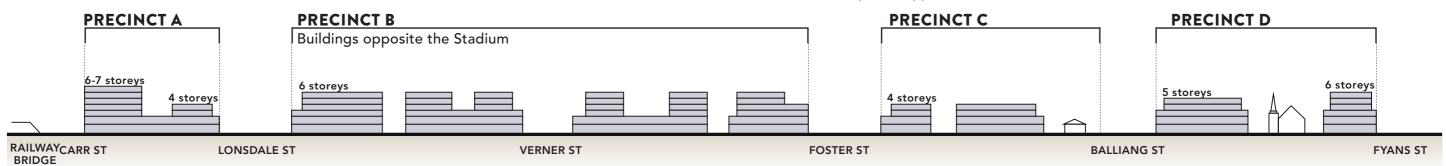
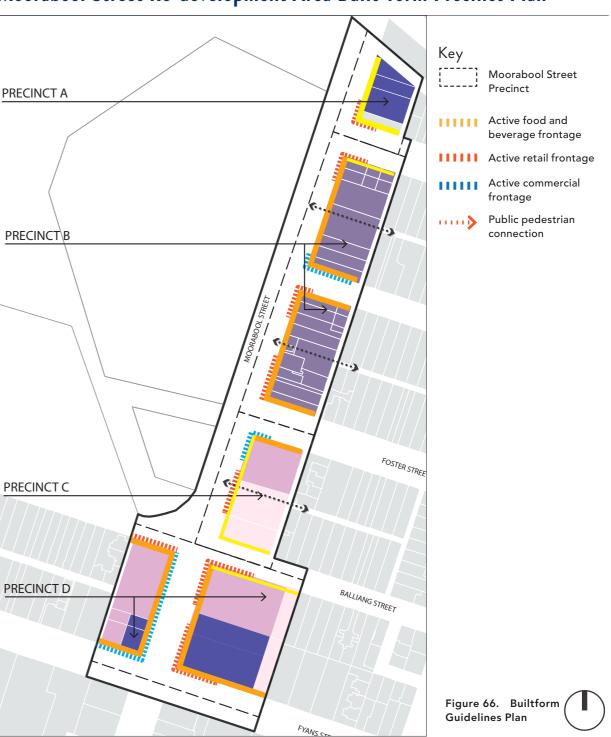


Figure 65. Long Section C-C

- 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.
- 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.

Moorabool Street Re-development Area Built-form Precinct Plan



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)

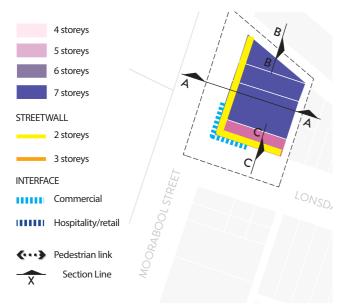


Figure 67. Precinct A building control plan

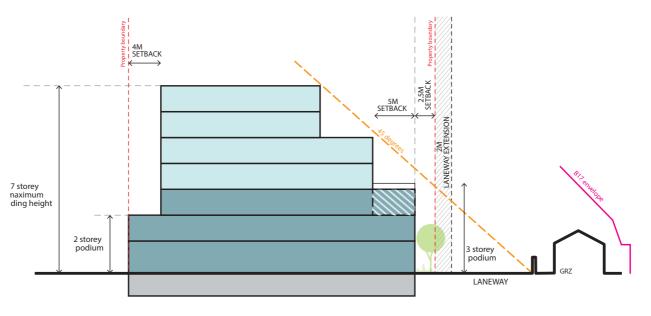


Figure 68. Guideline diagram for properties fronting Moorabool Street (Section A-A)

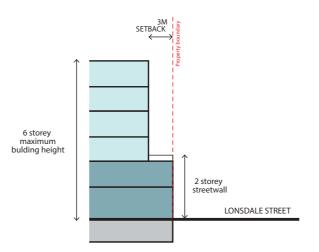


Figure 70. Guideline diagram for properties fronting Lonsdale Street (northern side) (Section C-C)

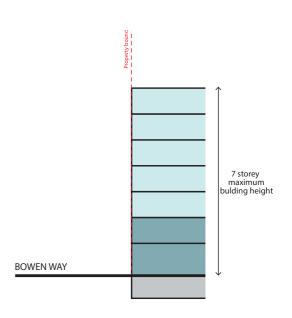


Figure 69. Guideline diagram for properties fronting Bowen Way (Section B-B)

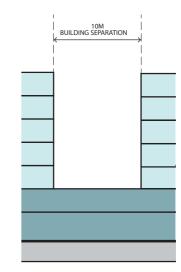


Figure 71. Guideline diagram for upper level well- separated building forms

Precinct B (Between Ionsdale and foster streets)

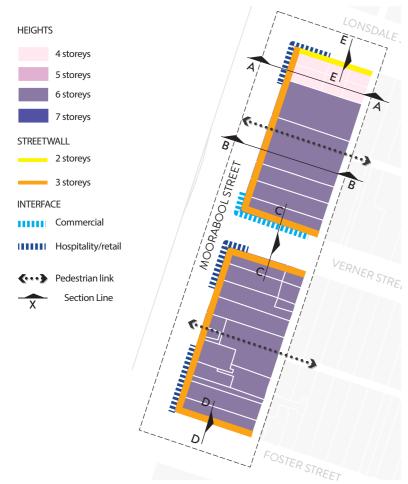


Figure 72. Precinct B building control plan

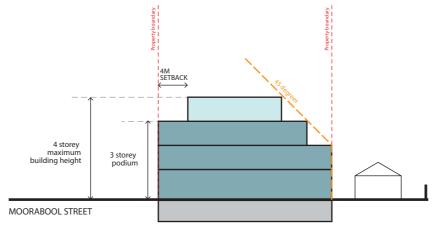


Figure 73. Precinct B Guideline diagram for properties fronting Moorabool Street, and residential interface. (Section A-A)

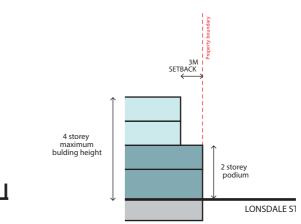


Figure 74. Precinct B Guideline diagram for properties fronting Lonsdale Street. (Section E-E)

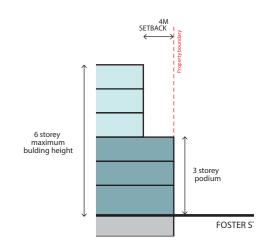


Figure 75. Precinct B Guideline diagram for properties fronting Foster Street. (Section D-D)

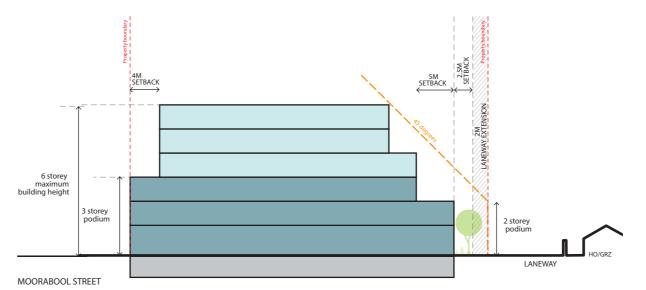


Figure 76. Precinct B Guideline diagram for properties fronting Moorabool Street, and residential interface. (Section B-B)

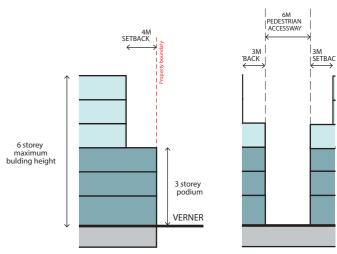
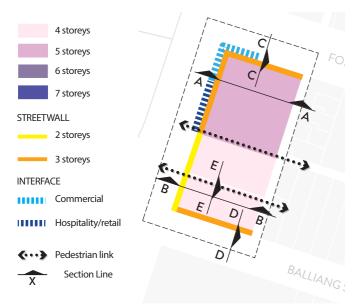


Figure 77. Precinct B
Guideline diagram for
properties fronting Verner
Street (north and south).
(Section C-C)

Figure 78. Precinct B Guideline diagram for pedestrian links

Precinct C (between Foster and Balliang Streets)



5 storey maximum bulding height 3 storey streetwall

MOORABOOL STREET

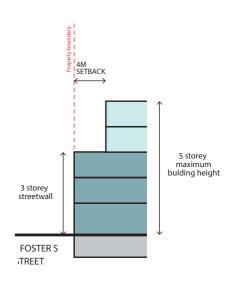
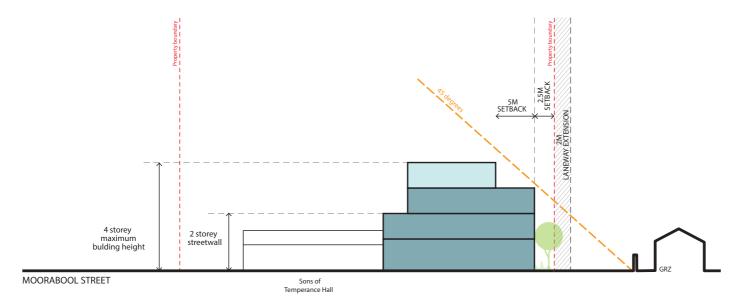


Figure 79. Precinct C building control plan

Figure 80. Guideline diagram for properties fronting Moorabool Street (Section A-A)

Figure 81. Guideline diagram for properties fronting Foster Street (Section C-C)





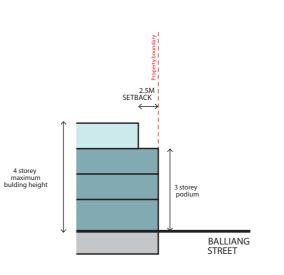


Figure 83. Guideline diagram for properties fronting Balliang Street (Section D-D)

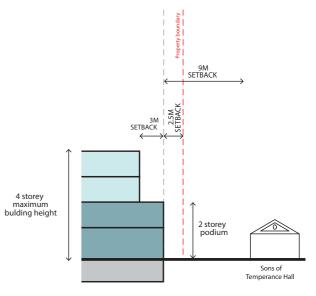


Figure 84. Guideline diagram for properties adjacent to the Sons of Temerance Hall (Section E-E)

Precinct D (Between Fyans and Balliang/ Park Crescent Streets)

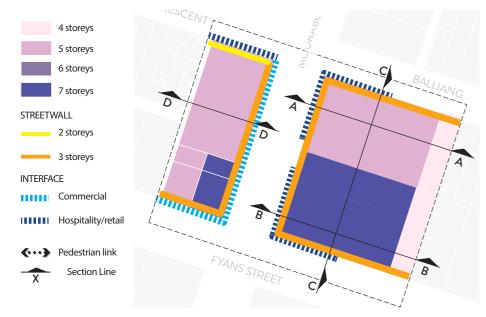


Figure 85. Precinct D building control plan

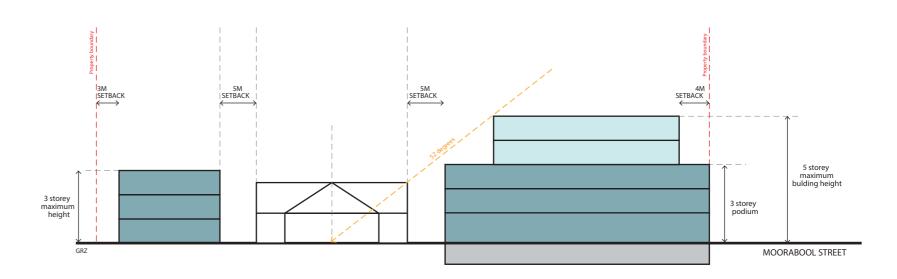


Figure 86. Precinct D Guideline diagram for properties fronting Moorabool Street, and Former South Geelong Methodist Chapel and residential interface. (Section A-A)

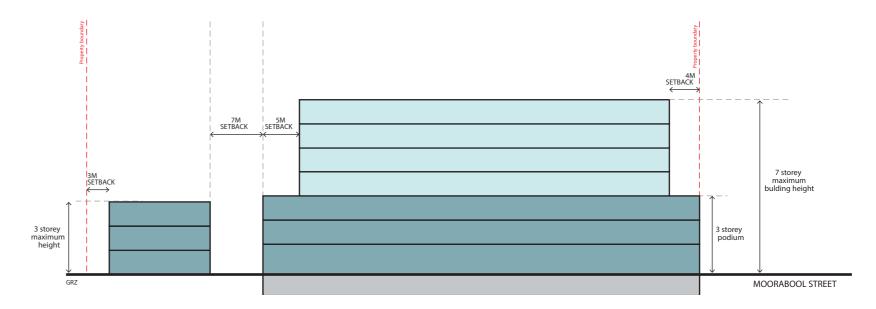


Figure 87. Precinct D Guideline diagram for properties fronting Moorabool Street, and residential interface. (Section B-B)

Precinct D (Between Fyans and Balliang/ Park Crescent Streets)

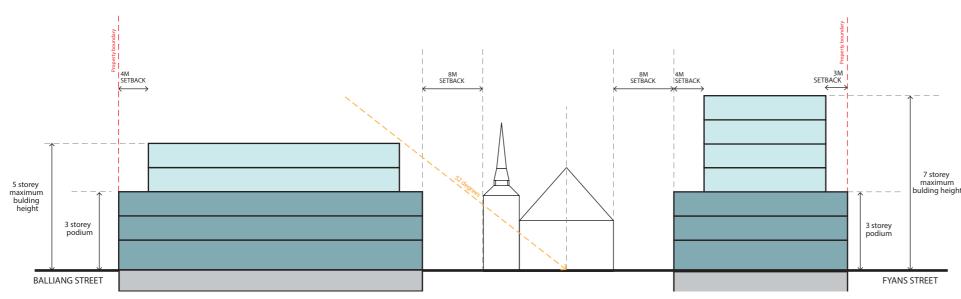


Figure 88. Precinct D Guideline diagram for properties fronting Balliang Street, interface with Former South Geelong Uniting Church and Fyans Street. (Section C -C)

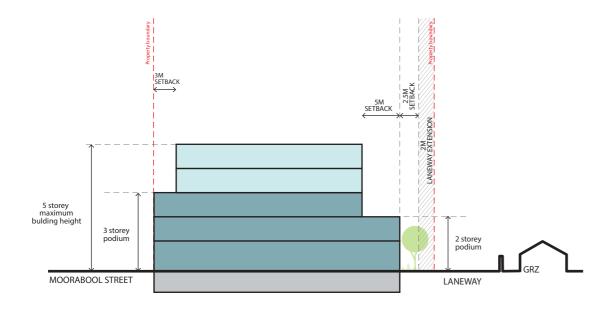


Figure 89. Precinct D Guideline diagram for properties fronting Moorabool Street, and residential interface. (Section D-D)



Figure 90. Artist impression of Moorabool Street precinct looking north from Fyans Street

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.

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 ensure private open space is of adequate size and dimension, to meet the accommodate needs of occupants.

Strategies

- Ensure private open space areas have a northern aspect where practicable.
- Ensure private open space is directly accessible from the living area.

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.

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

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

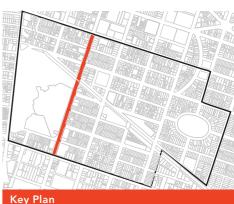
Existing Condition

- 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.





Looking north up Moorabool Street



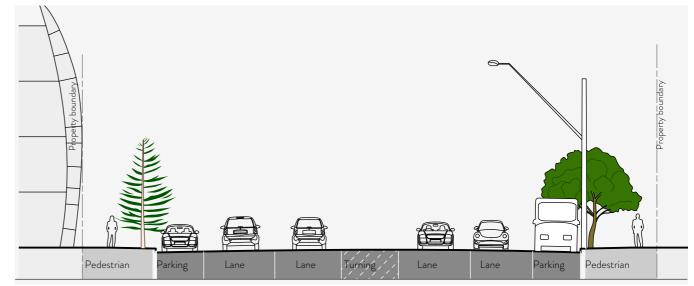


Figure 91. Moorabool Street, existing typical cross section

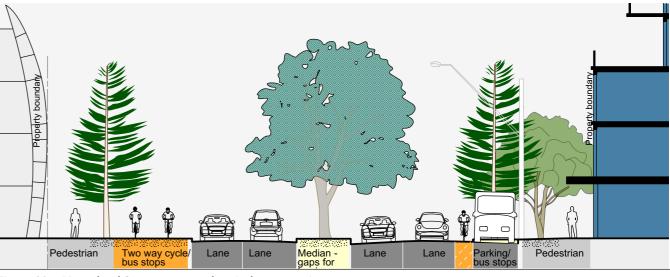


Figure 92. Moorabool Street, proposed typical cross section

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.

- 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

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Yarra Street	92
Bellerine Street	93

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.

At 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.



Example of a central median. Rathdowne Street, Carlton



Example of planted central median, City of Sydney



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



Example of water sensitive urban design, Dandenong



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



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

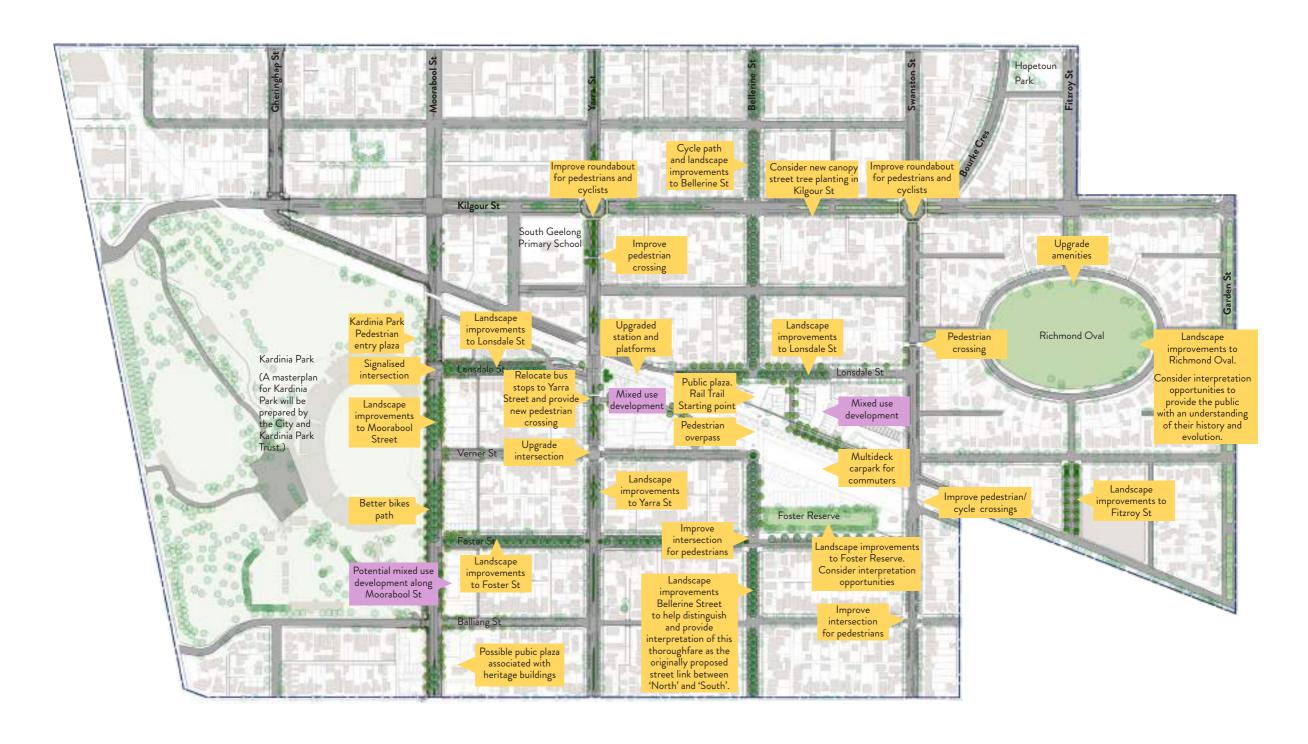
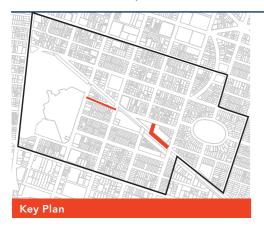


Figure 95. Public Realm Concept Plan Short - medium term scenario



Lonsdale Street (West)

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 •
- Provide parking to support Moorabool Street retail precinct and residents.
- Provide canopy trees.

- 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.

Reduce speed limit to 40 km/hr.

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.

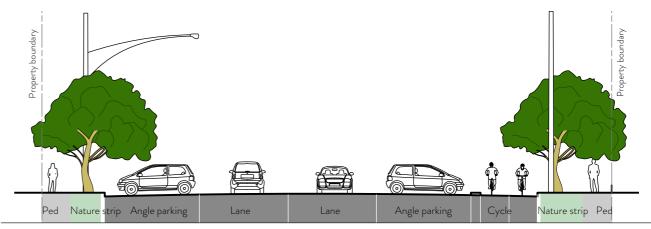


Figure 96. Lonsdale Street (West), existing typical cross section

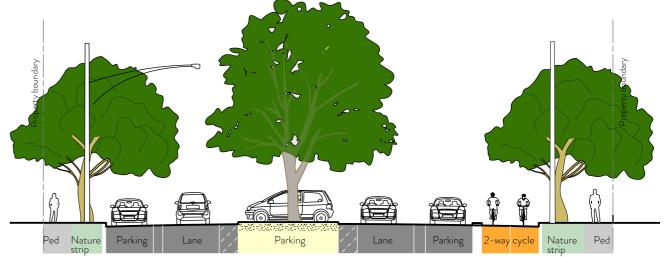


Figure 97. Lonsdale Street (West), proposed typical cross section

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.

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

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.

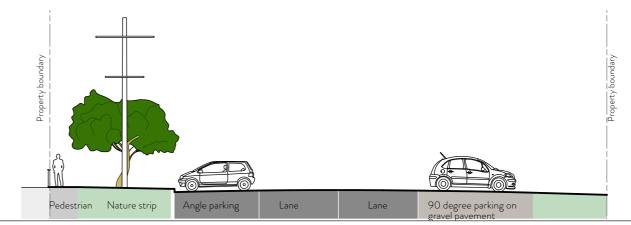


Figure 98. Bellerine Street South (1), existing typical cross section

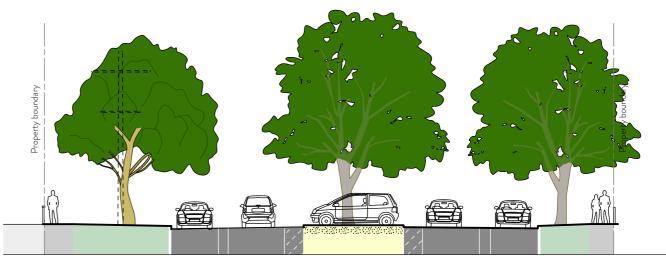


Figure 99. Bellerine Street South (1), proposed typical cross section

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.

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

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.

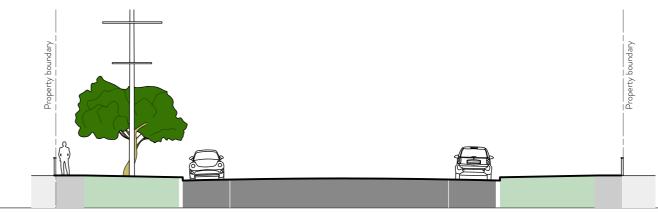


Figure 100. Bellerine Street South (2), existing typical cross section

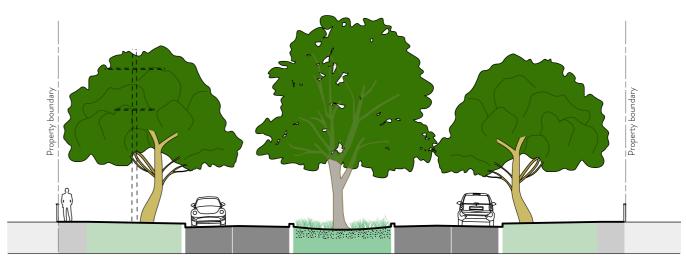


Figure 101. Bellerine Street South (2), proposed typical cross section

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.

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.

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

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.

Lonsdale Street (East)



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.

Ped Nature strip Angle parking Undefined laneways Angle parking Nature strip Ped

Figure 102. Lonsdale Street (East), existing typical cross section

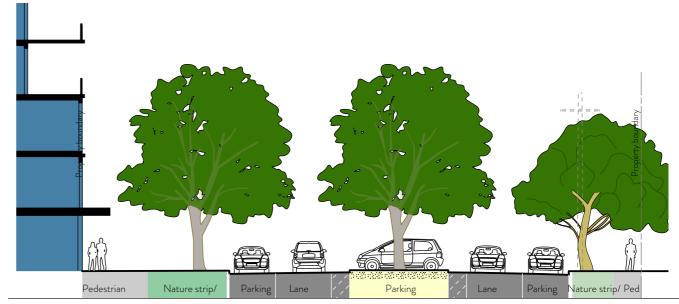


Figure 103. Lonsdale Street (East), proposed typical cross section

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 included 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.

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.

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

Carr Street



Existing Condition:

- Wide asphalt carriageway in good condition.
- Concrete shared path.
- Sparing planting with inadequate scale (bottlebrush) on northern road edge.
- Sparing 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.

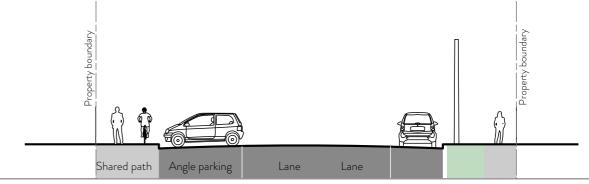


Figure 105. Carr Street, existing typical cross section

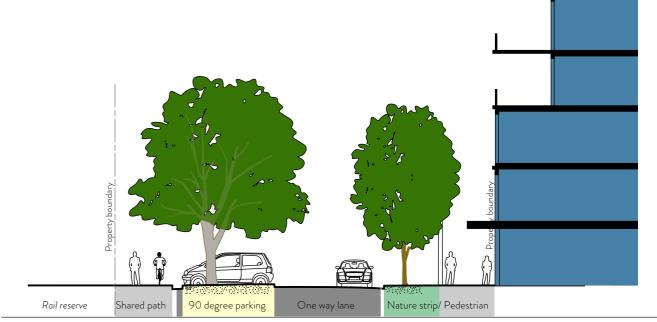


Figure 104. Carr Street, proposed typical cross section

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.

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.

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.

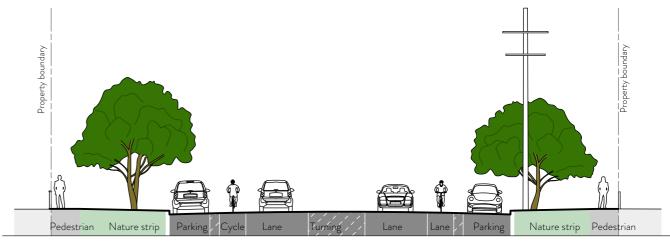


Figure 106. Yarra Street, existing typical cross section

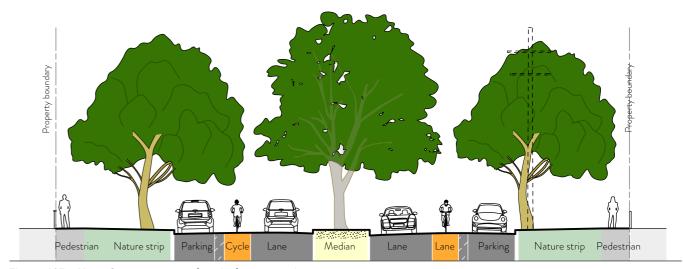


Figure 107. Yarra Street, proposed typical cross section

Materials

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

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

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.

Bellerine Street North Public Realm Vision

- 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.



Figure 108. Bellerine Street north, proposed typical cross section

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.

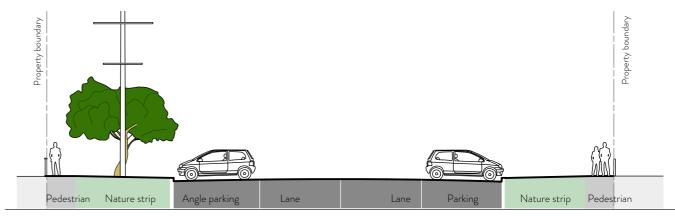
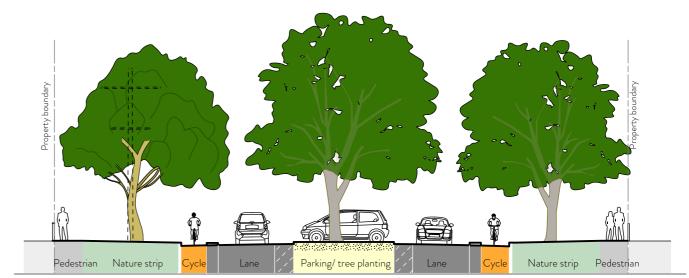


Figure 109. Bellerine Street north, existing typical cross section



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.

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

IMPLEMENTATION



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;

- 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 filtrated 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.

Funding Sources

Proposed timing of actions is subject to resourcing and budget approval processes of the City's relevant units (s) and sourcing from State and Federal Government.

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 timing for any rezoning of land should be dependent on a number of factors including:
 - Developer interest in the area.
 - A detailed understanding of the capacity of the area to accommodate social housing opportunities. This could be done as part of a developer or Council lead proposal.
 - A detailed understanding of what public realm upgrades are required in the area to accommodate the new development, taking into consideration the timing for delivery of the Better Bike Project, GMHBA Stadium Stage 5 Design, future Kardinia Park Master Plan and the Rail Duplication. This will ensure that developers contribute to public realm upgrades in a planned way, as they relate to their specific development.
- A built form overlay, such as a Design and Development Overlay (DDO) to guide the development
 of land should be applied to the precinct. The built form controls should address 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.
- The Planning Policy Framework should be updated to:
 - Amend Clause 21.06-3 Urban Consolidation, to identify Moorabool Street as a Key Development area.
 - Create a new policy direction in Clause 21 to specify the types and location of commercial uses that will be supported within the Moorabool Street precinct.
- A public acquisition overlay should be applied 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 will also be required to undertake public realm upgrades that have been identified in this UDF for Moorabool Street. These works will need to be in association with the GMHBA Stadium Stage 5 Design and future Kardinia Park Master Plan, the Rail Duplication and Council's better Bikes project. These works will be subject to future funding bids through state and local government budget processes.

Moorabool Street - Implementation Timing

Project	Timeframe	Comment
Moorabool Street – Better Bikes	1-3 years	Funding has been provided for the Moorabool Street Better Bike Project.
Moorabool Street Beautification	5+ years	More detail design is required which will take into consideration the Kardinia Park Master Plan and the Rail Duplication Project.
Moorabool Street rezoning	1-5 years	Rezone the Commercial 2 Zone to the Mixed Use Zone
Moorabool Street, new Design and Development Overlay/ Local policy timeframe	1-5 years	To implement design principles within the UDF related to built form outcomes, acoustic measures, and provide guidance in relation to heights and interface with adjoining zones.

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 secured by Section 173 agreements can help provide the public realm and streetscape improvements identified for the precinct.

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

Plan for staging of development by different stakeholders as funds become available.

Amendments are recommended the Greater Geelong Planning Scheme to facilitate implementation of the UDF:

- Amend Clause 21.06-3 Urban Consolidation, to identify the South Geelong Station Hub as a Key Development area.
- Expansion of the South Geelong Station Increased Housing Diversity Area as delineated in Clause 22.63 to an 800 m walking distance of the South Geelong railway station. Expansion of the South Geelong IHDA are to areas identified for substantial change including key development areas, excluding Heritage areas and 'minimal' change locations.
- Support the application of appropriate zoning within the Key Development Area to facilitate the desired mixed use outcome.
- Apply guidelines regarding built form outcomes, land use and other outcomes related to the Barwon Water site in a site based Planning Scheme Amendment or Design and Development Overlay. Development of the Barwon Water site will occur in stages, beginning with the eastern end. The 6 storey development will be developed when the market permits and becomes feasible.
- Ensure future planning controls are informed by the objectives and strategies as set out in this document.
- Activation of the western portion of the Barwon Water site to occur and allowance for a range
 of community uses including the possibility of community gardens, food and drink and medical
 premises etc. Controls for the site to support interim uses to occur as the site develops in stages.

Station Hub - Implementation Timing

Project	Timeframe	Comment
Barwon Water Site rezoning	1-5 years	 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.
Station land redevelopment and multi-deck car park	10 + years	Subject to discussion with RPV/Train Station redevelopment
South Geelong Street Safety upgrades (STilS)	1-3 years	Funding has been granted for this project and the majority of safety upgrades are now complete.
Carr Street Changes and Public Realm	3-5 years	 Subject to Planning Scheme Amendment, detailed design and rezoning Subject to further discussions with the RPV regarding the South Geelong Train Station design.
Beautification of Streets surrounding the station, including Lonsdale Street	5+ years	Subject to when funds become available through council budget bids and State and Federal Government funding opportunities.
Revise the IHDA mapping to include the Barwon Water site and Train Station as a Key Development Area	1-5 years	The Station Hub Precinct has been identified as a Key Development Area where substantial change is encouraged.
Implement DDO in order to control built form outcomes and provide guidance in relation to	1-5 years	To include guidelines around built form outcomes including acoustic measures, materiality, and expected heights to include a maximum of 6 storeys at the western portion of the site
future development.		Requirement to deliver public spaces and infrastructure/improvements to the public realm adjacent to the site.
		 High quality urban design outcomes, transit oriented development, consider reducing car parking requirements if appropriately justified
		 Former contamination will be further assessed as part of a detailed site assessment - preliminary reports indicate further work is required
173 Agreement or Special Control Overlay	5+ years	To capture upgrades to key pedestrian routes/closure of Carr Street
		 Incorporate staging – e.g. – higher density will not become available until market permits
		To incorporate a requirement to provide social and affordable housing within the development.

Existing Residential Zones

- Extend the IHDA to 800 metres walking distance around the station. The IHDA will not include existing and proposed Heritage areas and areas identified for minimal change.
- Retain the use of the General Residential Zone for Minimal and Incremental Change Areas.
- Rezone land in the Substantial Change Area to a Residential Growth Zone.
- Rezone land in the Key Development Areas to a Mixed Use Zone.
- No change to the existing Richmond Terrace area.
 This area will not be included in the IHDA area

Project	Timeframe	Comment	
Introduce Heritage Overlay to areas identified within Heritage Study outlined within this report	1-5 years	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 heritage corner shops to investigate whether 'prohibited' uses can occur	1-5 years	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.	This process is subject to a Planning Scheme Amendment
Re-zone existing GRZ4 zones with new Heritage Overlay to appropriate zone which reflects a 'minimal' change outcome	1-5 years	Retain the General Residential Zone for new Heritage areas, but amended the schedule to better reflect a minimal change outcome.	
Changes to zone Schedules to reflect significant neighborhood character elements as outlined within the Capacity and Change Area review	1-5 years	 Significant neighbourhood character values were identified within the study. 9 different precincts were identified, including some areas which are proposed to have a Heritage Overlay. Zoning schedules will be altered to protect the character elements of the precincts identified in the Capacity and Change Area Review. 	Policy developed for the South Geelong UDF to include significant elements identified as part of the Capacity and Change Area Review.
Expanded IHDA areas to be located on areas of substantial change including key development sites.	1-5 years	 To be expanded within 800m walking distance of the train station, however not located on existing and proposed heritage areas and areas of minimal change. IHDA only extended to areas of low neighbourhood character value and expected to undergo substantial change. 	Rezone Substantial Change Areas to the Residential Growth Zone and Key Development Area to the Mixed Use Zone to better reflect the preferred development outcomes for these locations.

