



Section 3

Objectives, Considerations and Strategies



3.1 Project Positioning

The Mercer and Gheringhap Street Streetscape Masterplan is positioned to deliver a responsive urban environment within the next 20 years.

- This project envisages a Geelong that:
- Has adapted its microclimate to address current challenges and respond positively to a more varied future climate.
 - Is inclusive of all users, is safe, comfortable, encourages active transport and a range of street uses.
 - Is respectful of, and celebrates, the layers of local history.
 - Challenges the current modus operandi of two of Geelong's major civic streets, and places the pedestrian, the active transport network user and natural systems front and centre, whilst still accommodating the changing needs of vehicles.

A number of key principles are established for the transformation of Mercer and Gheringhap Streets:

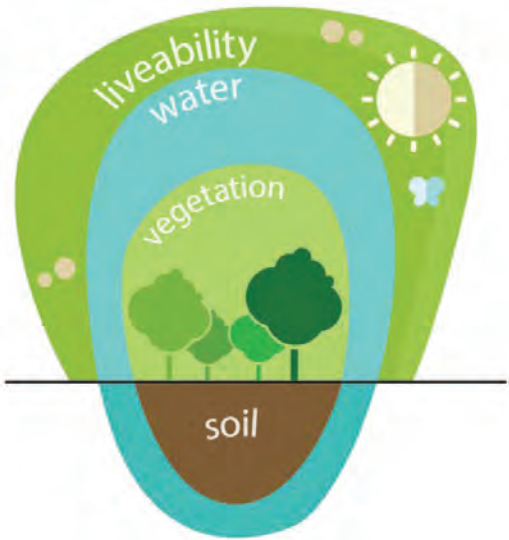
3.1.1 Principle 1 - Street as Place for All Users

Streets strive to balance the needs motorists, cyclists, pedestrians, shoppers and residents, and provide a safe and inviting space at all times.



3.1.4 Principle 4 - Street as Place for Vibrant Ecosystems

Streets enhance urban greening, implement water saving, and create biodiverse urban habitats.



3.1.2 Principle 2 - Street as Place for History and Future

Streets support the aspirations of UNESCO City of Design policies. They incorporate, and celebrate the historical layers, materials and unique elements, as the springboard for its forward-looking, enterprising and adaptive future.



3.1.3 Principle 3 - Street as Place for First Nations and Creative Culture

Streets embrace Wadawurrung Country Culture as a step towards the Healing of Country, implemented through collaborative landscape interpretation, places for creative gatherings and events to occur.



3.2 Sustainability Goals

The Masterplan outlines a series of sustainability goals that underpin the plan for an enduring and livable street environment.

As populations become more urbanised and climates change the role of urban forests in creating microclimates in cities has never been more important.

Urban forests have multiple benefits including shade, and reduction of street temperatures, reduction of stormwater runoff and ecosystem benefits.

Incorporating a number of the City’s strategies to address trees and the future climate, this Masterplan aims to:

- Maximise opportunities to achieve the Urban Forest Strategy targets within project scope.
- Provide optimal conditions to support the growth of trees and allow them to reach full maturity.
- Utilise stormwater run-off to capture, treat and reuse for the ongoing irrigation of these trees.

A number of goals are outlined for the transformation of Mercer and Gheringhap Streets:

3.2.1 Goal 1 - Urban Forest

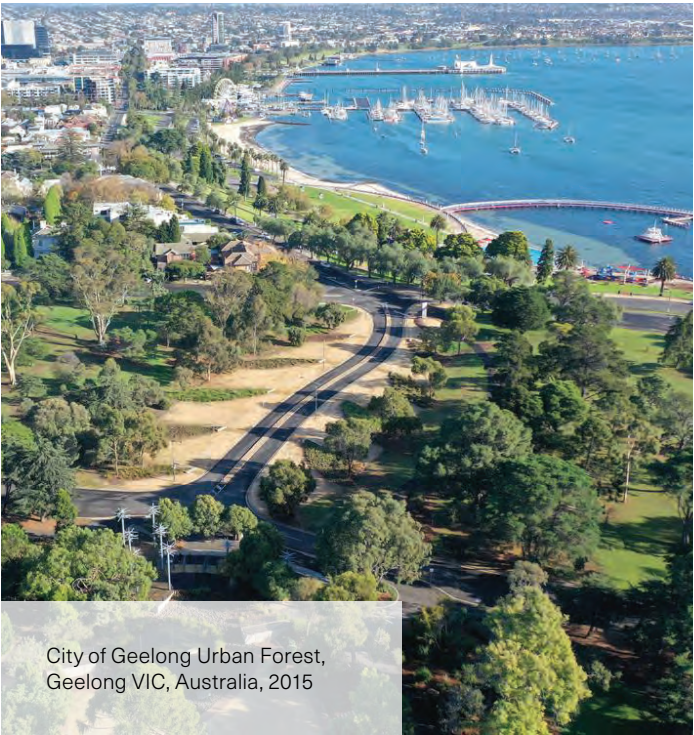
- Maximise tree canopy coverage within project to help council's strategic targets of 25%.
- Maximise diversity of species to achieve targets for biological resilience.
- Increase extent of habitat to encourage fauna diversity.

3.2.2 Goal 2 - Trees in Urban Environment

- Trees first - optimise growing conditions for trees through redesign of streets through adequate soil volumes, innovative technologies, and planning of potentially conflicting infrastructure services.
- Locate trees in proximity to key areas of pedestrian movement and congregation.

3.2.3 Goal 3 - Water / Drainage

- Maximise permeability of street through reduction of sealed surfaces, replacement with permeable paving systems and soft infrastructure.
- Where there is surface run-off, direct towards planting for passive irrigation through infiltration.
- Seek opportunities to partially detain large-event surface run-off within street profile to reduce downstream impacts.



Sustainability Goals

3.2.4 Goal 4 - Services and Infrastructure

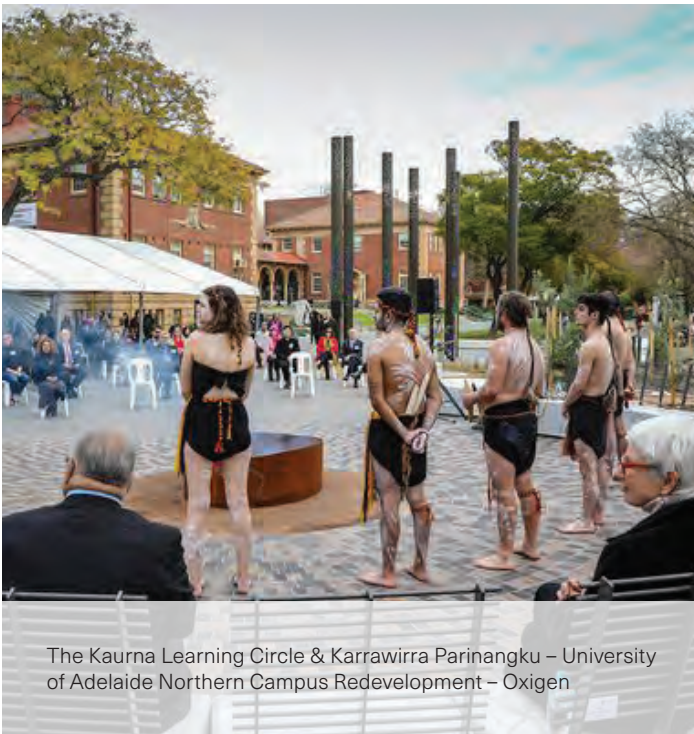
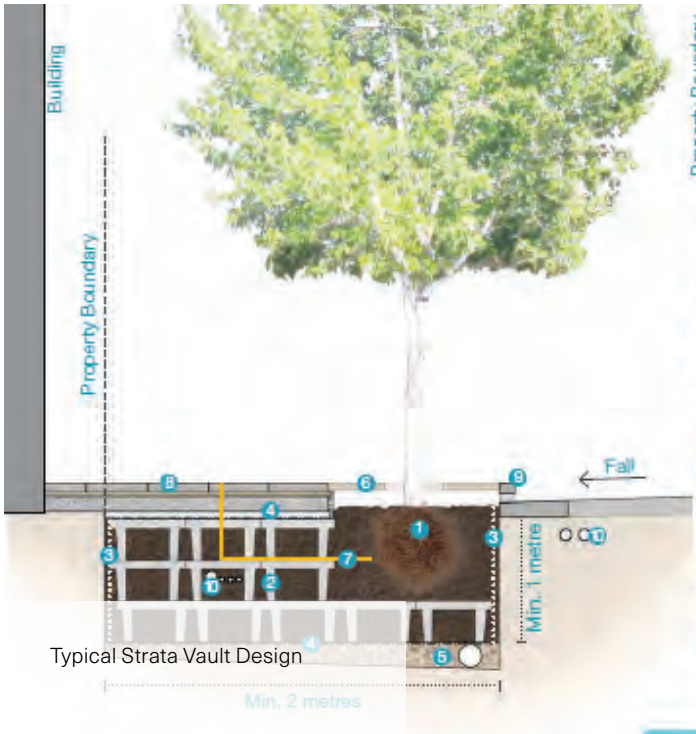
- Work with service authorities to co-locate and strategically position underground services to maximise tree growth.
- Consider sub-surface growing modification - structural growing vaults - to maximise space for roots.

3.2.5 Goal 5 - Transport and Parking

- Reallocate road space and priority in line with Movement and Place classifications, with more priority for active and public transport modes.
- Aim to minimise reduction in parking spaces where possible.
- Consider parking management measures to manage demand, ensure availability of parking and provide access for priority uses (e.g. accessible parking, loading, short term parking for increased turnover).
- Consider staged implementation of long term vision.

3.2.6 Goal 6 - Social and Cultural

- Address needs of all users, especially those who are more vulnerable ie aged, young, families etc.
- Design respectfully of all cultural groups and needs.
- Design to incorporate CPTED principles for safe use 24/7.
- Design for women to help create a sense of belonging and safety.



3.3 Masterplan Objectives

Four key objectives underpin the proposed Masterplan.

3.3.1 Linking Kardinia Park to the Coast

- Creates a linear park within street corridor.
- Create a gateway to the south (Kardinia Park)
- Tell the narratives of place and creates places for people.
- Provides a natural connection that addresses sustainability objectives.
- Includes a diversity of vegetation - from exotic to indigenous.
- Addresses water capture and service needs.

3.3.2 Celebrate the First Nations Narrative

- Tells the narratives of place and integrates culturally appropriate outcomes within the urban realm.
- Provides showcase of indigenous vegetation from country.
- Seamless integration with Indigenous Urban Design guidelines.

3.3.3 Strengthening the Active Transport Narrative

- Strengthen northern intersection of Gheringhap and Mercer Streets especially for pedestrians and cyclists.
- Prioritises pedestrian and cycle movement where possible / feasible. Future-proofed to cater to mobility demands of the future with flexible re-allocation of road space.

3.3.4 Strengthening the Mercer Arrival Narrative

- Enhances the gateway into Geelong from north.
- Celebrates cultural and natural histories of Geelong.
- Prioritises pedestrian and cycle movement where possible / feasible.
- Future-proofed to cater to mobility demands of the future.



Figure 3.1 Strengthening linkage between existing open spaces



Figure 3.2 Celebration of First Nations Narrative



Figure 3.3 Strengthening the active transport narrative



Figure 3.4 Strengthening the Mercer arrival narrative

3.4 Strategic Traffic Changes

Mercer and Gheringhap Streets form two of the major circulation routes of Geelong, but in themselves are only a small part of the overall network.

The DoT undertook an holistic overview through a network-wide traffic model simulation to determine the effects of proposed masterplan changes on traffic flows and congestion throughout Geelong based on projected traffic volumes.

The outcomes of this model simulation that impact the design of Mercer and Gheringhap Streets include:

Mercer Street

- Mercer Street carries a large volume of traffic north- and south-bound at many times of the day, especially during weekdays.
- Any reduction in capacity of Mercer Street is likely to cause intersection constraint issues in the short term.
- Traffic volumes north- and south-bound on Mercer Street vary, with the afternoon peak requiring two lanes in both directions to avoid excessive congestion.
- Turn lanes into Brougham Street from Mercer Street (both southbound and northbound) required to maintain intersection capacity in the short term.
- Turn lane from Mercer Street into the station precinct retained in the short term.
- Turn lane into the Police compound maintained from Mercer Street in the short term.
- All other turning movements from Mercer Street into adjacent streets can be undertaken from through traffic lane.

It is recommended as part of this masterplan that this traffic assessment be undertaken again prior to final implementation to determine if any additional road reduction and parking optimisation measures are feasible.

Gheringhap Street

- Gheringhap Street is currently operating under capacity at most times of the day on all days.
- Gheringhap Street has already been modified through the Better Bicycles project with minimal impact on congestion and queuing times at intersection.
- Further modifications will not overly impact the traffic volumes and congestion at intersections.
- The removal of turning lanes at the intersection of Gheringhap Street and adjacent streets in the modeling is possible without increasing congestion to concerning levels.
- All traffic movements (through and turning) can therefore occur from a single lane, allowing for further reduction in roadway widths.
- Traffic movements in Block 1 between Smythe Street and Western Beach Road are low enough to permit a shared zone to be considered between the proposed Convention Centre and Deakin University Campus.

It is recommended as part of this masterplan that parking assessment be undertaken again prior to final implementation to determine if any additional parking optimisation measures are feasible.

Other notes

- Increased usage of Brougham Street may require some attention to cross-section (currently vehicles need to utilise bike lane to undertaken perpendicular parking)
- Throttling back capacity forces route change behaviour (active) vs encouraging alternate route choice through signage (passive)

3.5 Masterplan

An enlarged masterplan is provided at the end of this report



Figure 3.5 Mercer and Gheringhap Street Masterplan overview

3.6 Mercer Street Vision

As the key entrance into Geelong, Mercer Street is to be transformed into a tree lined ‘green’ street, an environmental showcase of the future of Geelong.

Mercer Street is conceived in three zones, from Corio-Waurn Ponds Road to Brougham Street, Brougham Street to Railway Terrace and Railway Terrace to Malop Street / Gheringhap Street.

These zones relate to public and private transport movement requirements, and their degree of street life relative to their location near the centre of Geelong.

Ultimately, Mercer Street will provide a dynamic street experience that balances vehicle flow and parking with an increase in public space for active transport, tree planting, pedestrian footpaths and outdoor dining and seating.

Place

Along both sides of the road, sidewalks will be widened to offer protected, areas for outdoor dining, seating, planted areas for WSUD treatment and urban greening at the footpath level.

New separated bicycle lanes will provide an additional physical barrier between the sidewalk life and the roadway.

Traffic

With two lanes proposed in each direction, separated by central median, dynamic traffic mode or operation will provide on-street parking during times that clear ways are not in effect. This will ultimately replace the existing dedicated on-street parking bays while retaining similar parking capacity.

Buses share the roadway to help support the public transport network within inner Geelong. Within the southern block, dedicated bus lanes may be required in lieu of on-street parking.

Separated bike lanes will be wide enough to be able to accommodate other micro-mobility vehicles in the future.

Planting

Building on the established *Corymbia citriodora* trees along the central median on Mercer Street and within the carriageway parking in others, a continuous boulevard treatment using larger native trees is envisaged. This is facilitated through the undergrounding of existing overhead power lines and services infrastructure to allow trees on both sides of the roadway.

The planting will focus on establishing a connected tree canopy along both sides of the street, and where possible, additional planting to the central median to increase tree canopy coverage within the streets for place, visual and microclimate improvements.

Species along Mercer Street will be predominately one species, building upon the existing *Corymbia citriodora* trees, to create a singular gateway experience.

Materials

The material palette builds on the existing character of Mercer St including extending the use of bluestone kerb and prioritising the use of Geelong Eastern / Heritage Mix as the primary paving type. More information can be found in Section 4 - Palettes



- N North Block
- C Central Block
- S South Block

Figure 3.6 Mercer Street block plan

3.7 Mercer Street Character

Three distinct block characters respond to the priorities of each section of Mercer Street.

Connected by a treed boulevard and separated bicycle lanes, the Mercer Street character will change slightly in each block to address the needs of it’s users.

The north block prioritises passive seating and occupation along the edges of the widened sidewalk. These locations will be responsive to the future redevelopment of current land uses.

The central block incorporates wider sidewalks and paved out-stands for seating and potential outdoor dining within planted surrounds where space permits.

In the south block, connections to the adjacent Johnstone Park and Wurriki Nyal Civic precinct are the main focus.

These distinct block characters allow for the modification of paving materials, seating and furniture as well as the ability to stage redevelopment of the blocks over time.

North Block: Brougham Street to Corio/Waurn Ponds Rd

Character:

- Linear Boulevard
- Water expressed through flow, WSUD opportunities
- Native / Dry landscape
- Standard materials and furniture palette.



Dry landscape road planting
Constitution Avenue, Canberra, ACT, Australia, 2016

Central Block: Brougham Street to Railway Terrace

Character:

- Linear Boulevard
- Social gathering
- Diurnal character
- Food and Beverage opportunities
- Water (containment)
- Native / Wet landscape
- Quality materials and furniture palette.



Linear urban forest
Passeig De St Joan Boulevard Barcelona, Spain, 2011

South Block: Railway Terrace to Malop Street

Character:

- Linear Urban Forest at Johnstone Park interface
- Social gathering
- Diurnal character
- Water (containment)
- Indigenous / Wet landscape
- Quality materials and furniture palette.



Social gathering spaces
Sovereign Square, Leeds, UK, 2015



Rain garden WSUD example
Edinburgh Gardens Rain garden Melbourne, VIC, Australia, 2012



Indigenous planting
Constitution Avenue, Canberra, ACT, Australia, 2016



Social gathering spaces
New Academic Street VIC, Australia, 2017

3.8 Mercer Street Approach

The dividing up of Mercer Street into different blocks reflects the opportunity for designing unique places relative to street interfaces and traffic capacity.

With the north block operating as a city access route for traffic until its diversion along Brougham Street, the dynamic parking approach balances the need of addressing peak hour flow and non- peak future resident / business parking needs.

Mercer Street forms part of the public transport network, include provision for bus on shared or dedicated lanes, limiting the extent of on-street parking.

The south block features the recently completed Wurriki Nyal Civic precinct on one side, and Johnstone Park on the other.

While the proposed carriageway widths remain relatively constant, the main functional approach is to:

- Create a continuous avenue tree canopy treatment
- Provide separated bicycle lanes.
- Maintain the central median to support tree planting, carriageway separation and signage / infrastructure provision,
- Allocate remaining available space for sidewalk widening allows for additional planting, WSUD opportunities, outdoor seating and dining opportunities.

Where possible, create consistent street cross section of the different movement, parking, vegetation and infrastructure components in between intersections for a coherent approach when traveling along Mercer Street.

North Block:

Priorities:

- Increased place for planting.
- Temporal road use.
- Street as Urban Forest.
- Enhance boulevard / gateway.
- Improve absorptive capacity.

Actions:

- Underground existing overhead powerlines.
- Design trees at appropriate intervals - parallel parking or paved out-stands between.
- Apply a consistent mid-block road cross section
- Implement parallel parking and clearways throughout.
- Parallel parking removed for turning lane at intersections.

Central Block:

Priorities:

- Increased place for people.
- Temporal road use.
- Street as Urban Forest.
- Improve absorptive capacity.
- Enhance boulevard / gateway.

Actions:

- Implement parallel parking.
- Parallel parking removed for turning lane at intersections.

South Block:

Priorities:

- Increased place for people.
- Retain existing median trees.
- Active transport.
- Improve absorptive capacity.
- Incorporate Active transport.

Actions:

- Underground existing overhead powerlines.
- Trees between every 2nd - 3rd parking bay west side.
- Considerable tree canopy on east side.

3.9 Mercer Street North Sections

3.9.1 Summary

Ultimate change of the street section from a four vehicle lanes/two parking lanes to four vehicle lanes integrating dynamic parking allowing the introduction of larger footpaths, bike lanes and planting.

3.9.2 Existing Condition

- Four vehicle lanes, central median, two on-street parallel parking lanes with scattered trees between parking bays.
- Overhead electrical west side, intermittent street lighting poles both sides.

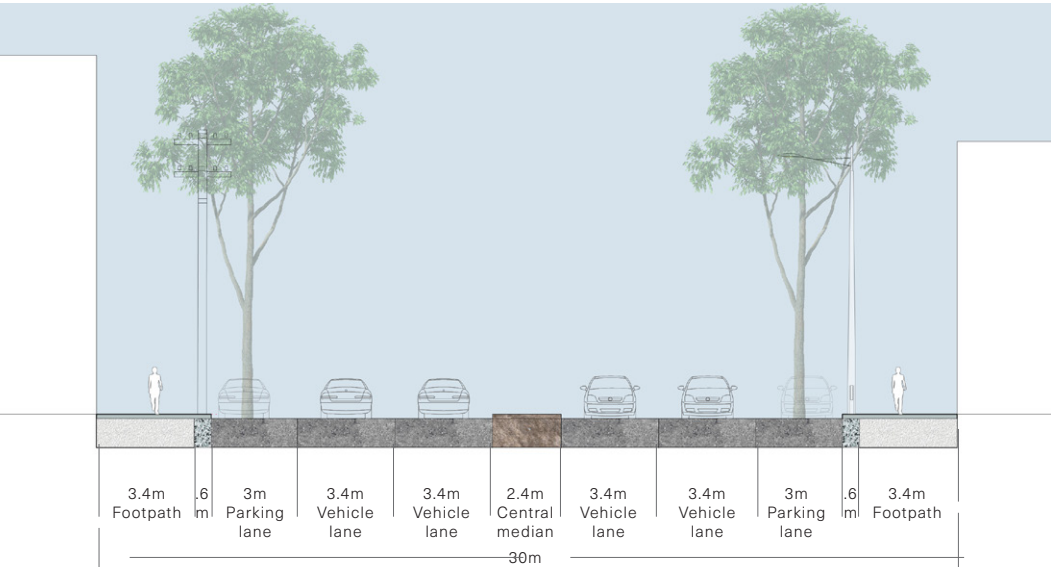


Figure 3.8 Section of Mercer Street north block showing the existing condition

3.9.3 Short Term Proposed Condition

- Four vehicle lanes, central median, parallel parking between trees retained on both sides.
- Lane widths changed in preparation for long term proposal. New central median trees.

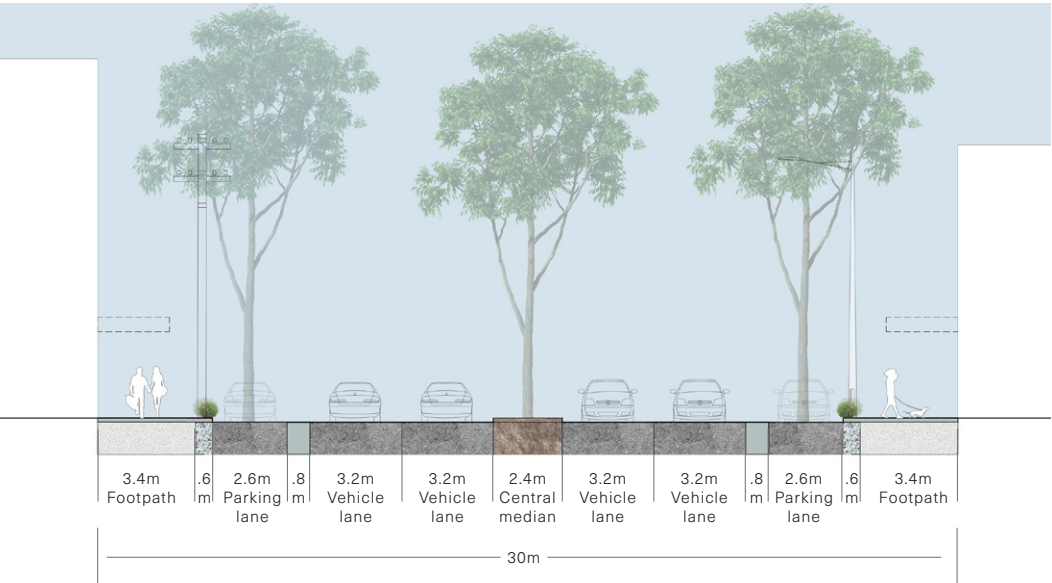


Figure 3.9 Section A-A' of Mercer Street north block showing the short term proposed condition

3.9.4 Long Term Proposed Condition

- Two vehicle lanes each way, with one lane as parallel parking when not operating as clearway during peak times.
- Streetscape upgrade to both sides including lighting and new trees to replace trees within parallel parking bays.
- Separated bike lanes with raised median to traffic.
- Underground electrical to allow new street trees.

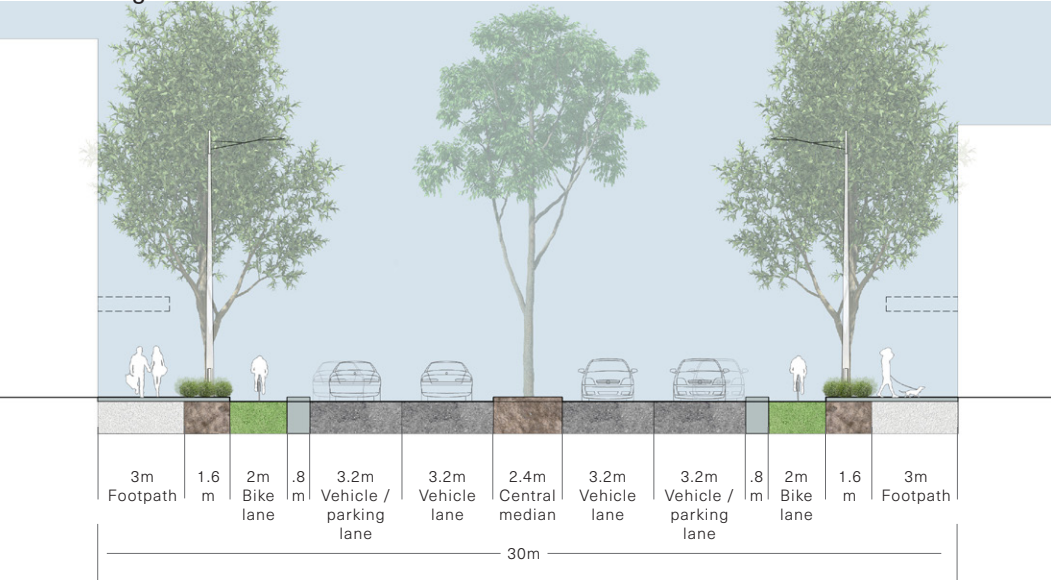


Figure 3.10 Section A-A' of Mercer Street north block showing the long term proposed condition



Figure 3.7 Mercer Street north block location plan

Please note dimensions are indicative and may vary throughout the length of the street.

Footpath _____

Planting beds _____

Parking lane _____

Painted strip as separator _____

Vehicle lane _____

Central median (refer to _____
p.45-47 for planting palette)

Kerb offset (refer to p.49 for _____ material)

Vehicle lane _____

Painted strip as separator _____

Parking lane _____

Planting beds _____

Footpath _____

Lighting (refers to p.51-52 for furniture selection palette)

Seats (refers to p.51-52 for furniture selection palette)

General note – crossovers to be consolidated and minimised with any future development. Locations to ideally allow for maximum tree planting.



Bins (refers to p.51-52 for furniture selection palette)

Drinking fountain (refers to p.51-52 for furniture selection palette)

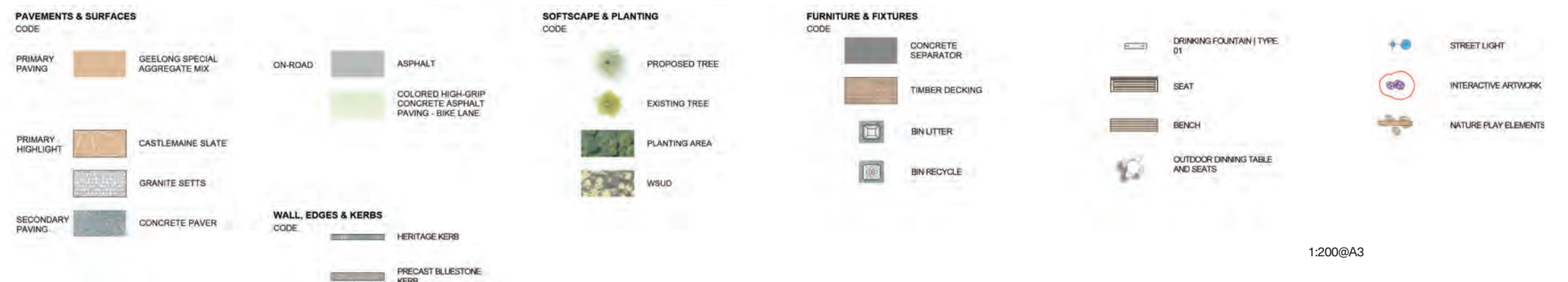


Figure 3.11 Mercer Street illustrative plan

1:200@A3

Number of children	Frequency (Number of families)
0	2
1	3
2	4
3	2
4	1

3.11 Mercer Street North - Long Term Proposed Plan

Please note dimensions are indicative and may vary throughout the length of the street.

Refer to 3.9.4 for sectional information

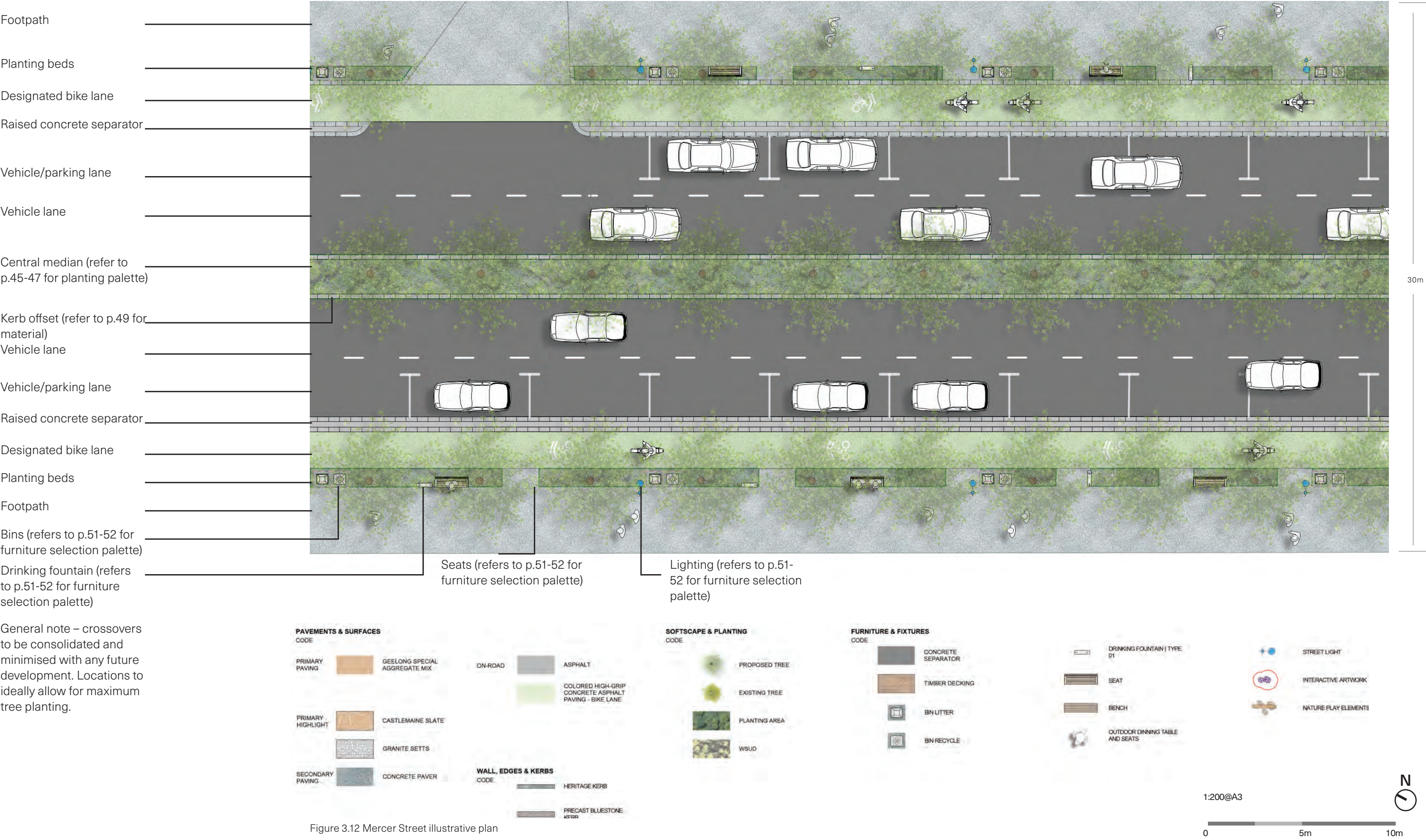


Figure 3.12 Mercer Street illustrative plan

3.12 Mercer Street Central Sections

Please note dimensions are indicative and may vary throughout the length of the street.

3.12.1 Summary

General change of the street section from four vehicle lanes to two vehicle lanes and two parking lanes allowing the introduction of larger footpaths, bike lanes and planting.

3.12.2 Existing Condition

- Four vehicle lanes, one section of on-street parallel parking, on road bike lanes to remaining sections.
- Street light poles either in central median or on west side, overhead electricity east side with occasional pedestrian light poles
- Scattered median trees, occasional trees between parallel parking bays.

3.12.3 Proposed Condition

- Two vehicle lanes each way may be required in this section, pending Department of Transport bus planning process. On-street parking and lane widths may be affected as a result.
- All vehicle lanes to be bus capable.
- Streetscape improvements both sides - separated bike lanes with raised median to traffic, new street trees in footpath planting zone.
- Underground electrical to allow new street trees and service new street lighting.



Figure 3.13 Mercer Street central block location plan

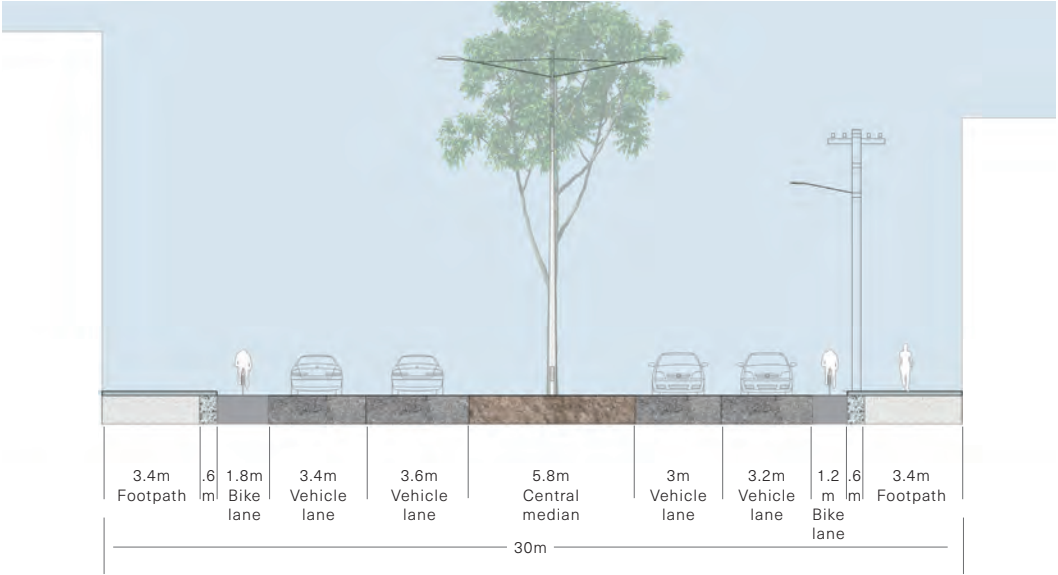


Figure 3.14 Section A-A' of Mercer Street central block showing the existing condition

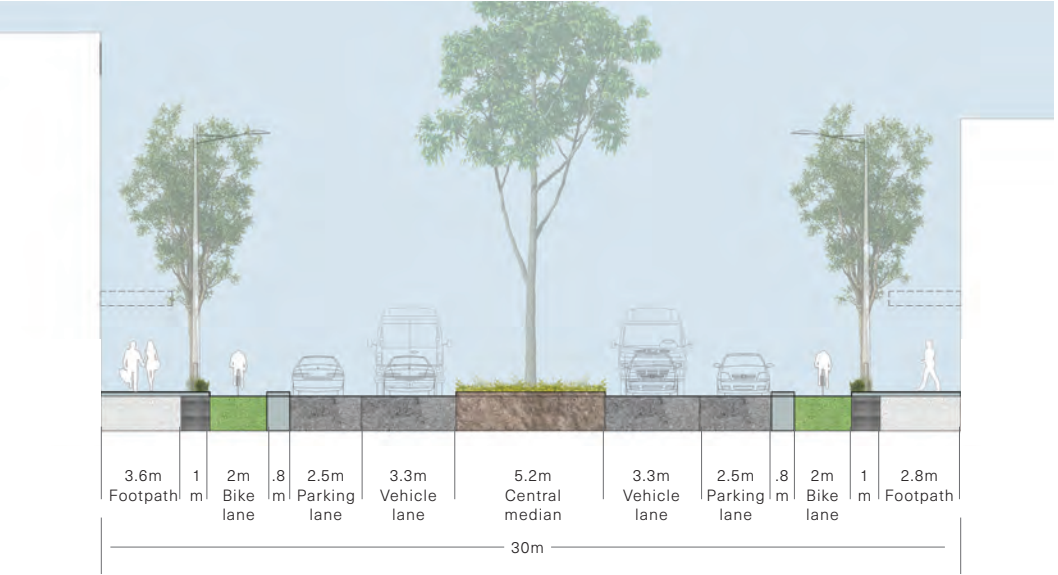


Figure 3.15 Section A-A' of Mercer Street central block showing the proposed condition

3.13 Mercer Street South Sections

Please note dimensions are indicative and may vary throughout the length of the street.

3.13.1 Summary

General change of the street section from a four vehicle lanes to two vehicle and one bus lane as well as a reduction of the southern median planting to allow for bike lanes and car parking.

3.13.2 Existing Condition

- Four vehicle lanes including bus and limited on-street loading area.
- Intermittent on-street bike lanes.
- Partial overhead electrical services on east side (some recently underground-ed), intermittent street light poles central median or either side.
- Central median trees, park trees in Johnstone Park.

3.13.3 Proposed Condition

- Two vehicle lanes and two bus lanes.
- Separated bikes both sides tie in with the Geelong Green Spine project.
- Central median slightly narrowed to still retain existing trees (arborist assessment recommended in future stages of project).
- New street trees on east side where space permits.
- Complete undergrounding of electrical services to allow new street trees and service new street lighting.



Figure 3.64 Mercer Street south block location plan

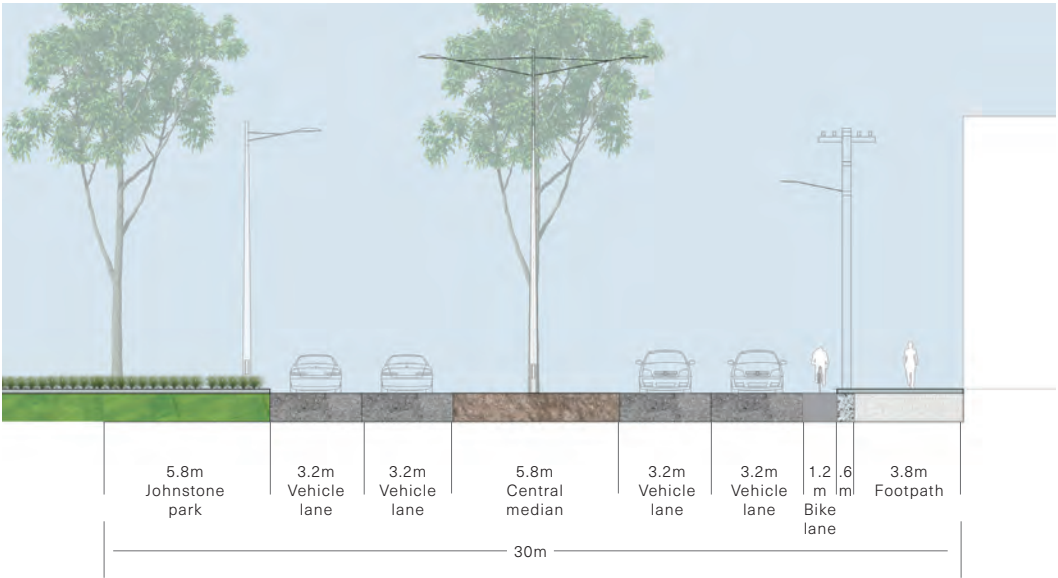


Figure 3.17 Section of Mercer Street south block showing the existing condition

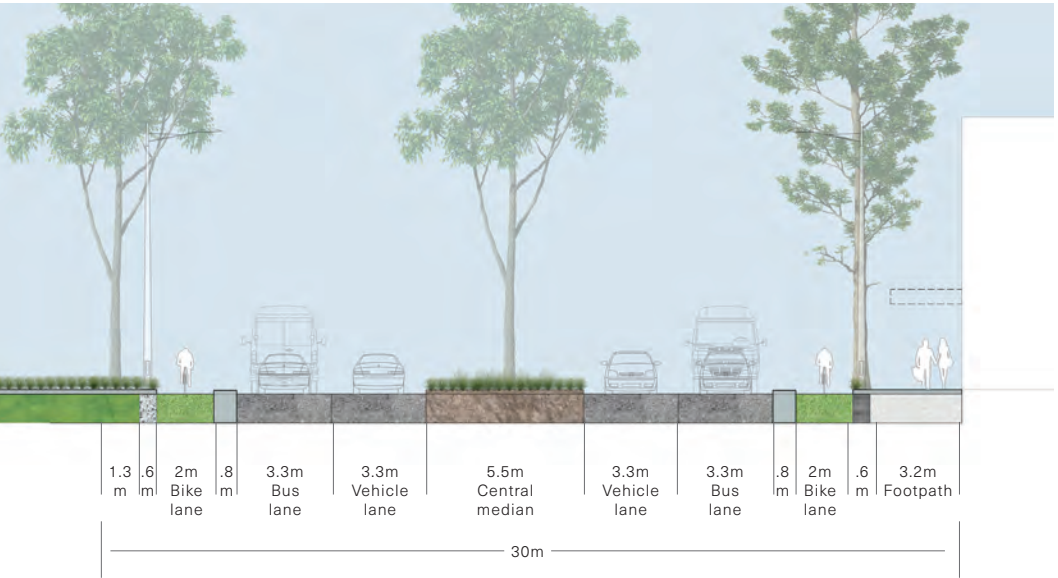


Figure 3.18 Section A-A' of Mercer Street south block showing the proposed condition

3.14 Gheringhap Street Vision

Being a key entrance into Geelong from the south, Gheringhap Street will embrace a strong local landscape narrative and be transformed into a linear park experience for people and active transport users.

Conceived in two spatial zones, from the Waterfront to Mercer / Malop Street, and from Mercer / Malop Street to Kilgour Street, Gheringhap Street will ultimately provide a cultural story expressed through vegetation and water. This will be considered as part of precinct-wide parking management which will include seeking to minimise reduction in parking spaces where possible and using parking management measures to best ensure access for priority uses

With broader views to surrounding mountains, the journey along Gheringhap Street will be akin to a new linear park embracing extensive tree planting, pedestrian footpaths and outdoor gathering opportunities.

Place

The focus of Gheringhap Street will be the linear park on the eastern side of the street. Within this space, a landscape journey will be articulated through a changing expression of water, vegetation and materials.

These will help frame a series of spaces for casual or formal occupation within the linear park, with opportunities for public art and other cultural expression and interpretation interwoven throughout.

The western footpath will not expand other than to capture additional opportunities for planting, with the implementation of the proposed palette linking both sides of the street together.

Traffic

Retaining the two way traffic arrangement, a staged process of parking consolidation and turning lane removal will open up new space in the future for the linear park. This will be undertaken in conjunction with any precinct-wide parking reallocation to ensure minimal disruption.

This staged process will be undertaken over time, with the intent of minimal sacrificial work central to the sustainability objectives of the project.

The existing Building Better Bike Connections cycle lane upgrade will be further enhanced to transform Gheringhap Street into a true Strategic Cycling Corridor.

Planting

Gheringhap Street provides a landscaped journey showcasing the range of plants of Geelong. The intent is to use species more suitable for drier climates on the higher reaches of the Gheringhap Street hill and species more appropriate for wetter environments in the lower areas.

Tree planting will focus on establishing a connected canopy along both sides of the street to increase tree canopy coverage within the streets for place, visual and microclimate improvements. Shrub and groundcovers will complement the approach of dry through to wet.

Species will be selected for their diversity, their future climate resilience, connection to place, habitat value and maintenance requirements.

Materials

The material palette builds on the existing character of Gheringhap Street including extending the use of bluestone kerb and prioritising the use of Geelong Eastern / Heritage Mix as the primary paving type. More information can be found in Section 4 - Palettes.



- 01

Block 1
- 02

Block 2
- 03

Block 3
- 04

Block 4
- 05

Block 5
- 06

Block 6

Figure 3.19 Gheringhap Street block plan

3.15 Gheringhap Street Character

Gheringhap Street is envisaged as a connected series of blocks that gradually transform the character of the street through its relationship with topography, the water and the city.

The landscape story of each part of Gheringhap Street reflects a journey along the street. The elevated parts to the street are expressed through a drier landscape palette where water is a passing element, shedding to lower levels, whilst the lower and depressed parts exhibit a wetter landscape palette and where water is present for a longer duration.

The choice of materials also varies slightly throughout.

The changes between each section are slight, but by the culmination of the journey the expression differs dramatically, much as the character of the surrounding landscape differs too.

Wind mitigation is noted and considered.

Block 1: Western Beach to Brougham Street Character:

- Formal, ceremonial space.
- Opportunity for event road closures.
- Passive occupation.
- Formalised moments of water as spectacle.
- Trees and vegetation to express indigenous coastal / exotic landscape.
- Quality materials and furniture palette.

Block 2: Brougham Street to Mercer Street Character:

- Civic, ceremonial space.
- Express water to link to pre-existing environment.
- Trees and vegetation to express Indigenous / wet landscape.
- Quality materials and furniture palette.



Formal, ceremonial spaces
Precedent: North Terrace, Adelaide, SA, Australia, 2006



Expression of water / wet landscape
Precedent: Broadwater Parklands, Brisbane, Queensland, Australia, 2011



Opportunity for event road closure
Precedent: Darling Harbour, Sydney, NSW, Australia, 2018



Quality furniture palette with indigenous landscape plants
Precedent: Sovereign Square, Leeds City Centre, UK, 2016

Gheringhap Street Character

Block 3: Mercer Street to Ryrie Street Character:

- Creative / cultural zone.
- Celebrate cultural spectacle - spectator focus.
- Consider diurnal character near restaurants and cultural institutions.
- Investigate limited food and beverage opportunities.
- Trees and vegetation to express a native / wet landscape.
- Water expressed in future through contained pools/water sensitive urban design
- Quality materials and furniture palette.



Civic spaces and native planting.
Precedent: North Terrace, Adelaide, SA, Australia, 2006

Block 4: Ryrie Street to Myers Street Character:

- Cultural space, social gathering.
- Investigate limited food and beverage opportunities.
- Trees and vegetation to express a native / dry landscape.
- Water expressed through flowing elements.
- Quality materials and furniture palette.



Native planting.
Precedent: Bunurong Memorial Park, Bangholme, VIC 2019

Block 5: Myers Street to McKillop Street Character:

- Cultural and social gathering spaces.
- Highest point on site. Integrate viewlines and gathering spaces down Gheringhap Street.
- Trees and vegetation to express a indigenous / dry landscape.
- Water expressed through ephemeral, pools.
- Standard materials and furniture palette.



Ephemeral stormwater pond,
Precedent: Whitehorse City Council, Melbourne, VIC, Australia, 2011

Block 6: McKillop Street to Kilgour Street Character:

- Playful / recreation and social gathering.
- Trees and vegetation to express a native / wet landscape.
- Water expressed through flowing bodies.
- Standard materials and furniture palette.



Expressing water through landscape design
Precedent: Park-Snape, Canberra, ACT, 2015



Civic pedestrian area planting and seating
Precedent: Barangaroo South, Sydney, NSW, Australia, 2016



Civic roadside planting and seating
Precedent: Ceremonial Avenue, Canberra



Native planting and shade
Precedent: Macquarie University Courtyard, Sydney, NSW, Australia, 2011



Urban breakout spaces
Precedent: South Boulevard, Copenhagen, Denmark, 2007

3.16 Gheringhap Street Approach

Gheringhap Street is divided into short-term and long-term parking solutions to reflect staged implementation over time.

Blocks 1-2, north of Mercer Street, convey less through-traffic than the rest of Gheringhap Street. As such, there is more provision to establish the final road treatment here from the outset to become a precedent for the remainder of the street.

The existing road geometry entering the Mercer / Malop / Gheringhap Street intersection is also more conducive to an asymmetric road cross section that will form the template for Blocks 3 - 6.

The development of a number of key civic sites within these two blocks allow for a new civic character to be established to support anticipated demand on the public realm - provision for a shared space between the future Convention Centre and the Deakin University Woolstore campus is recommended.

Blocks 3-6 have recently been upgraded to integrate the Building Better Bike Connections project. The treatment of these blocks will take a short-term landscape improvement approach, where opportunities to improve the tree canopy coverage and materials of the streetscape will be implemented now in a manner that does not impact on the longer term approach. Parking numbers will be largely maintained, as will the temporary separation of bicycle lane from parked cars.

The longer term approach involves the transformation into a linear park, with reduction in on street parking allowing the increase of footpath on the eastern side.

The narrowing of the carriageway allows for

- A continuous avenue tree canopy treatment
- The provision of bicycle lanes.
- The remaining available space for footpath widening allows for additional tree and vegetation planting, WSUD opportunities, outdoor seating and dining opportunities.

Short Term Parking Solution

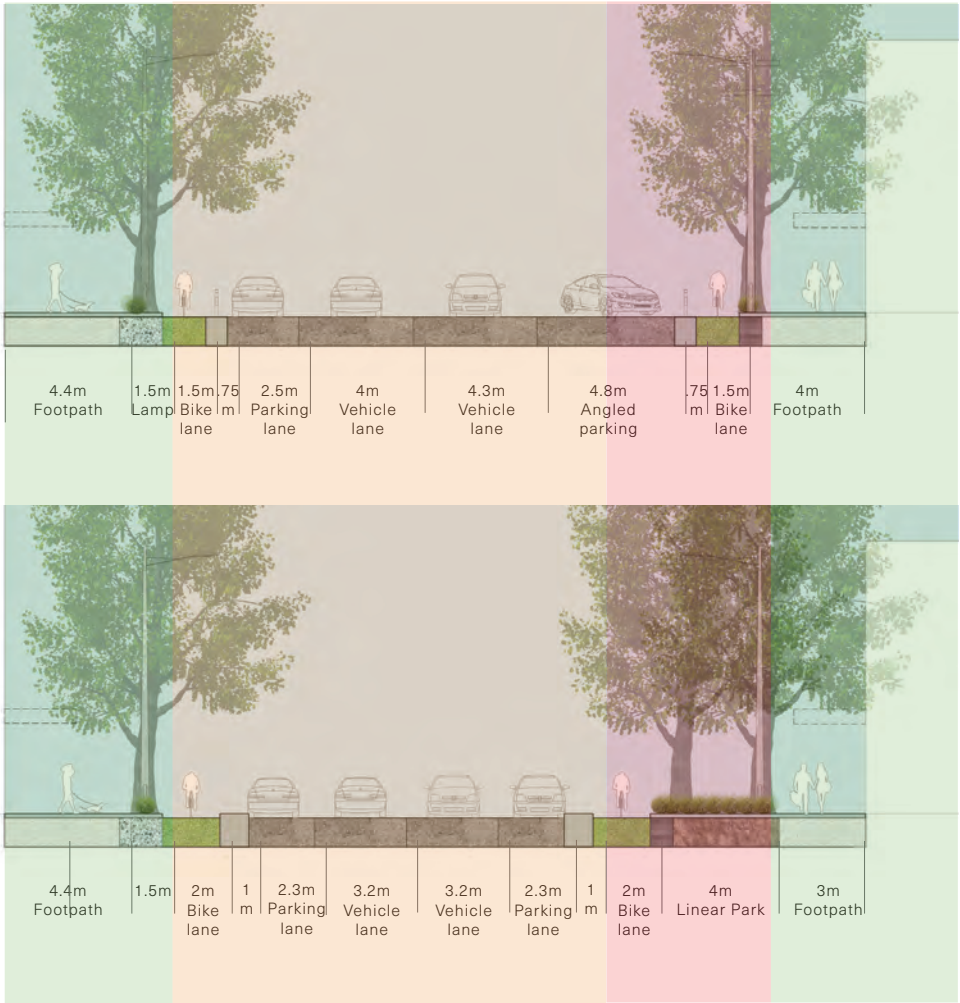
Actions:

- Targeted and strategic improvements to increased place for people with new street furniture palette
- Increase tree planting on west side where opportunities permit

Long Term Parking Solution

Actions:

- Underground existing overhead powerlines
- Create places for range of activities and use of space
- Apply a consistent mid-block road cross section
- Implement parallel parking throughout.
- Parallel parking removed for turning lane at intersections.
- Introduce bicycle lane alongside linear park.
- Relocation of bike lanes.



Minimal to no change Some changes to profile, marking Section that will require large change Minimal to no change

Gheringhap Street Approach

Block 1 Western Beach to Brougham Street

Priorities:

- Increased place for people.
- Enhance active transport.
- Create linear park.

Actions:

- Retain some existing trees within raised bed on east side to offset tree losses on west.
- Incorporate new trees flush with footpath level to create more usable civic / urban space.
- Maximise footpath widths where possible.
- Reconfigure roadway for separated active transport, Implement separated bike lanes.
- Investigate option for shared zone between future Convention Centre and University Campus.
- Consider both short-term and long-term parking approaches using parallel parking.
- Optimise to create as little sacrificial works.
- Aim for a consistent mid-block road cross section.

Block 2 Brougham Street to Malop Street

Priorities:

- Increased place for people.
- Enhance active transport.
- Create linear park.

Actions:

- Continue linear park on east side.
- Reconfigure parking.
- Retain existing older trees whenever possible. When not possible replace with evergreen /indigenous species.
- Consider both short-term and long-term parking approaches
- Implement separated bike lanes.
- Aim for a consistent mid-block road cross section.
- Remove parking for turning lane at intersections.

Block 3-6 Malop Street to Kilgour Street

Priorities:

- Increased place for people.
- Enhance active transport.
- Create future linear park.

Actions:

- Consider both short-term and long-term parking approaches.
- Implement separated bike lanes.
- Optimise to create as little sacrificial works.
- Aim for a consistent mid-block road cross section.
- Remove parking for turning lane at intersections (balance between parking retention and need for turning lanes at intersections to be determined through traffic modeling process).

3.17 Gheringhap Street Block 1 Sections

Please note dimensions are indicative and may vary throughout the length of the street.

3.17.1 Summary

Change of the street section from two lanes and one angled parking to allow for parallel parking and bike lanes.
Linear park on eastern side of street.

3.17.2 Existing Condition

- Two vehicle lanes, mainly angled but some parallel parking
- Street light poles west side, pedestrian light poles east side.
- Trees in raised garden bed east side, in footpath on west side.

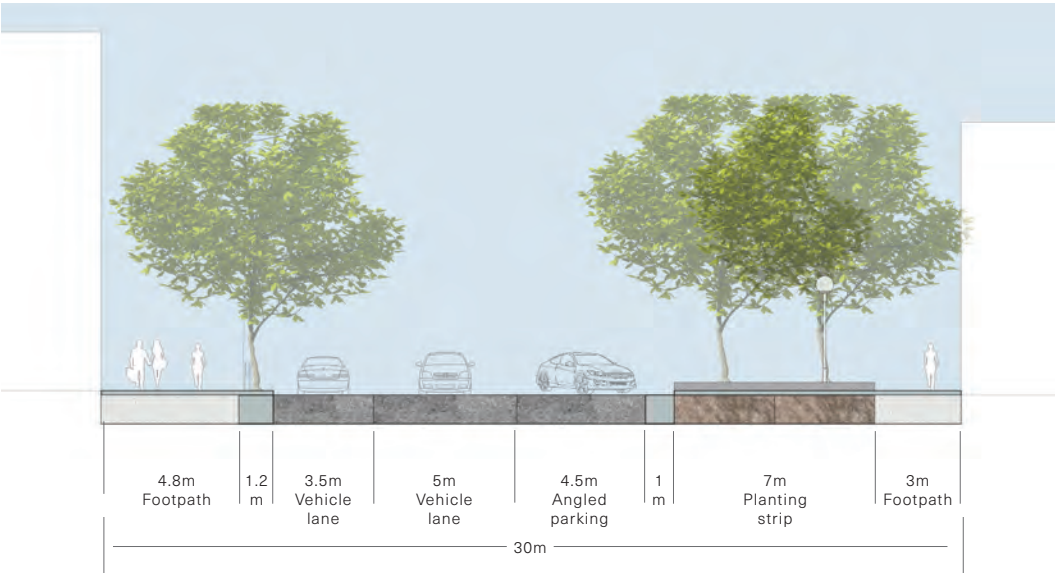


Figure 3.21 Gheringhap Street block 1 showing the existing condition

3.17.3 Proposed Condition - Brougham to Smythe Street

- Two vehicle lanes (shared with bikes) with indented parallel parking to both sides.
- Clusters of existing trees retained in raised beds.

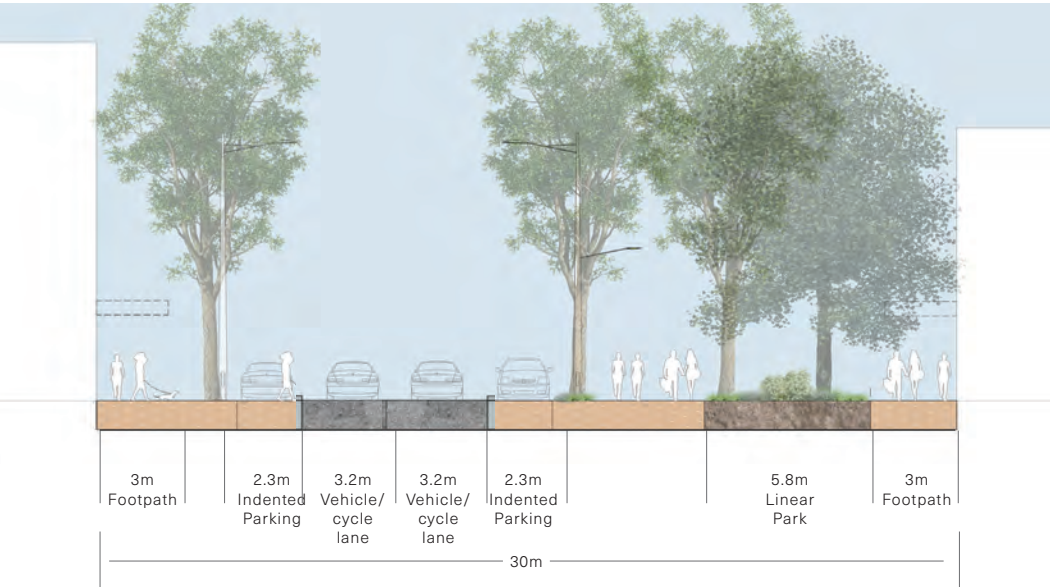


Figure 3.22 Gheringhap Street block 1 section A-A' showing the proposed condition

3.17.4 Proposed Condition - Smythe Street to Western Beach Road
Shared Zone Option - Non-events Mode

- Two shared trafficable lanes.
- Short-term parallel parking both sides.

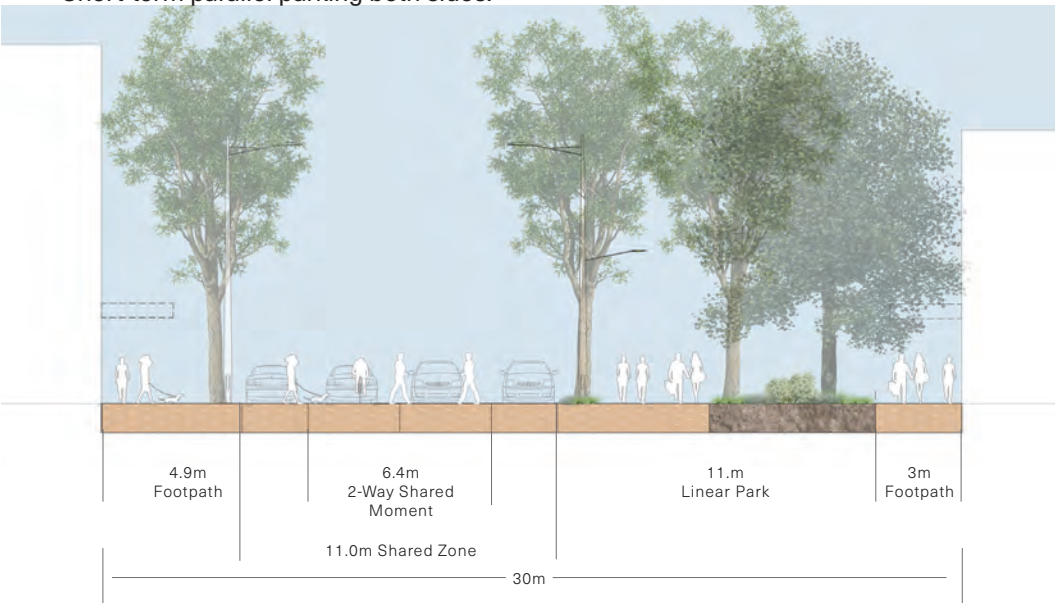


Figure 3.23 Gheringhap Street block 1 showing the proposed condition - non-events mode

3.17.5 Proposed Condition - Smythe Street to Western Beach Road
Shared Zone Option - Events Mode

- Continuous flush shared zone.
- Through-traffic and parking excluded.

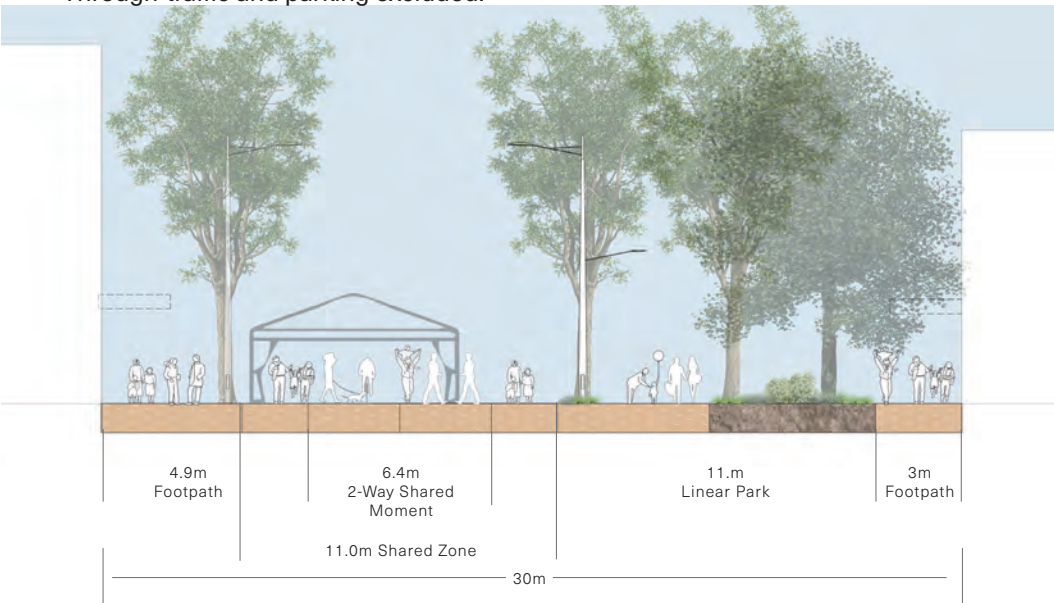


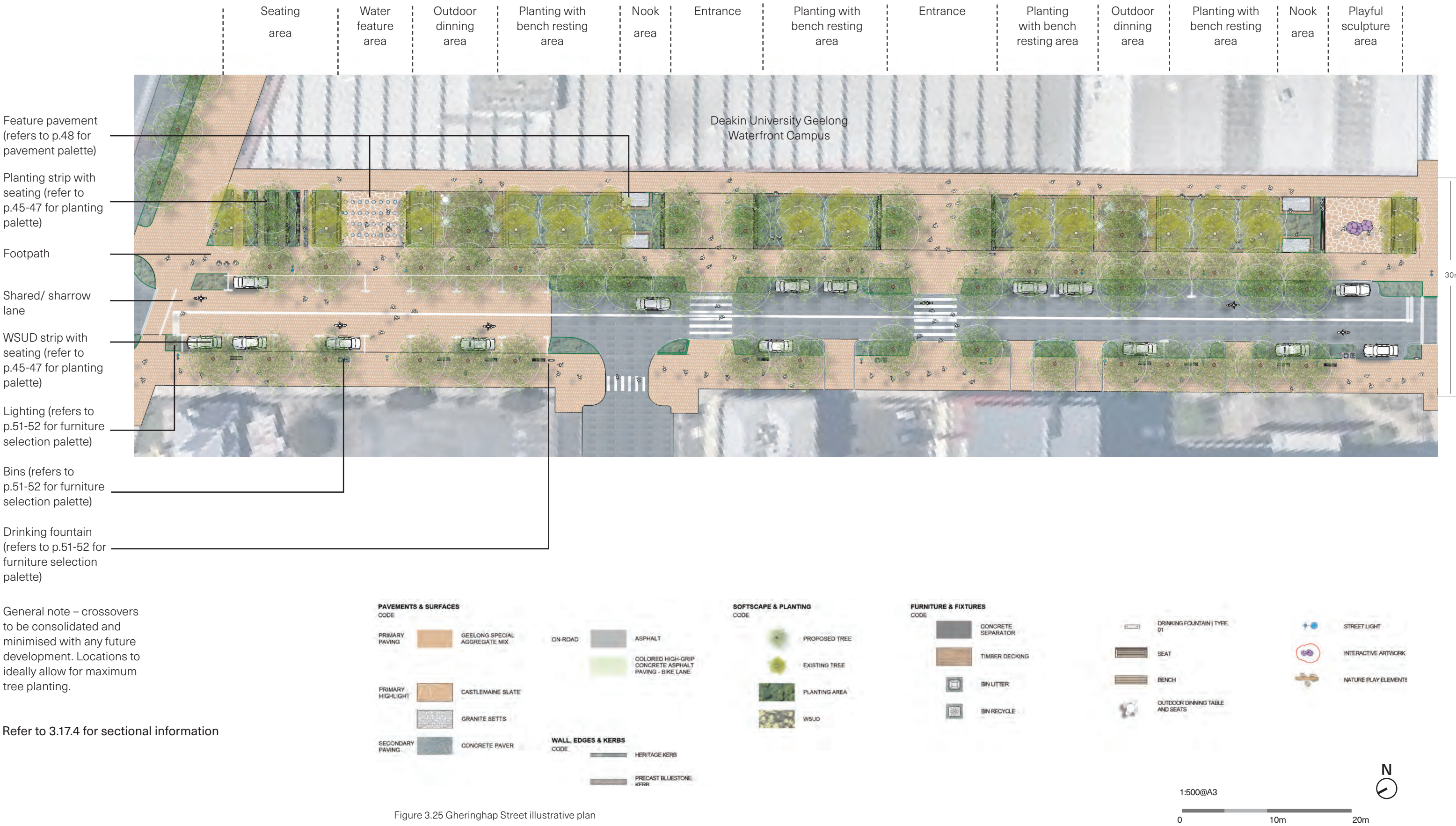
Figure 3.24 Gheringhap Street block 1 showing the proposed condition - events mode



Figure 3.20 Gheringhap Street block 1 location plan

3.18 Gheringhap Street Block 1 - Proposed Shared Zone Option

Please note dimensions are indicative and may vary throughout the length of the street.



3.19 Gheringhap Street Block 2 Sections

Please note dimensions are indicative and may vary throughout the length of the street.

3.19.1 Summary

Change in street section from large vehicle lanes and bus parking to a smaller road width to allow for wider footpaths and bike lanes.

3.19.2 Existing Condition

- Two vehicle lanes, two parking lanes mainly angled but some parallel parking.
- Bus layover with some perpendicular parking (not shown).
- Street light poles west side, pedestrian light poles east side and central median.
- Scattered trees in footpath east and west side.

3.19.3 Proposed Condition

- Two vehicle lane with parallel parking to both sides.
- Separated bike lanes both sides.
- Replace angle parking east, lane and kerbside west.
- Some trees replaced to in succession planting to create consistent species selection.
- Significant increase in areas of pedestrian occupation, garden and tree planting through a linear park.



Figure 3.26 Gheringhap Street block 2 location plan

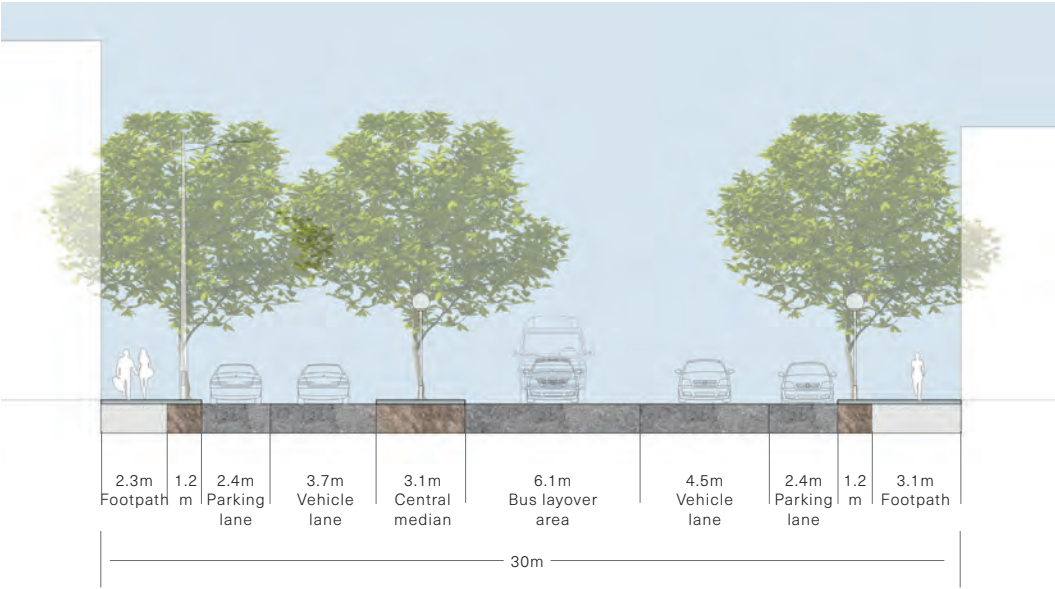


Figure 3.27 Gheringhap Street block 2 section A-A' showing the existing condition

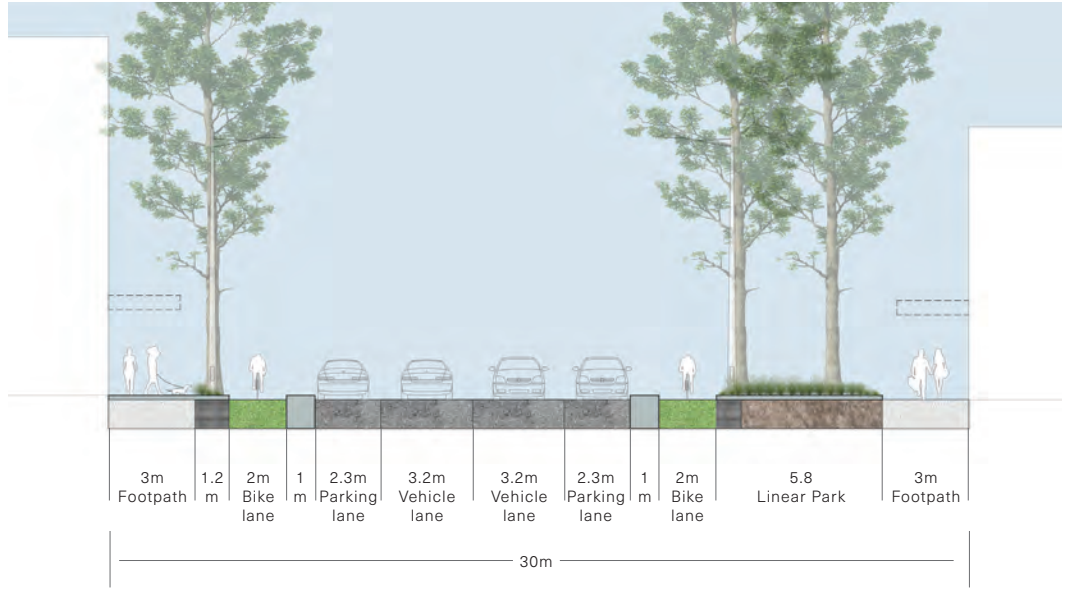


Figure 3.28 Gheringhap Street block 2 section A-A' showing the proposed condition

3.20 Gheringhap Street Block 3-6 Sections

Please note dimensions are indicative and may vary throughout the length of the street.

3.20.1 Summary

General change of the street section from current angled parking to the long term vision of parallel parking to increase available space for a linear green park on the eastern side of the street.

3.20.2 Existing Condition

- Two vehicle lanes, with mainly angled and some parallel parking. Temporary separated bike lanes using bollards, line-marking.
- Scattered trees on either sides of the road (infrequent at times).
- Overhead electrical services on east side in blocks 4 - 6 (south of Ryrie Street), scattered lighting on either side of road.

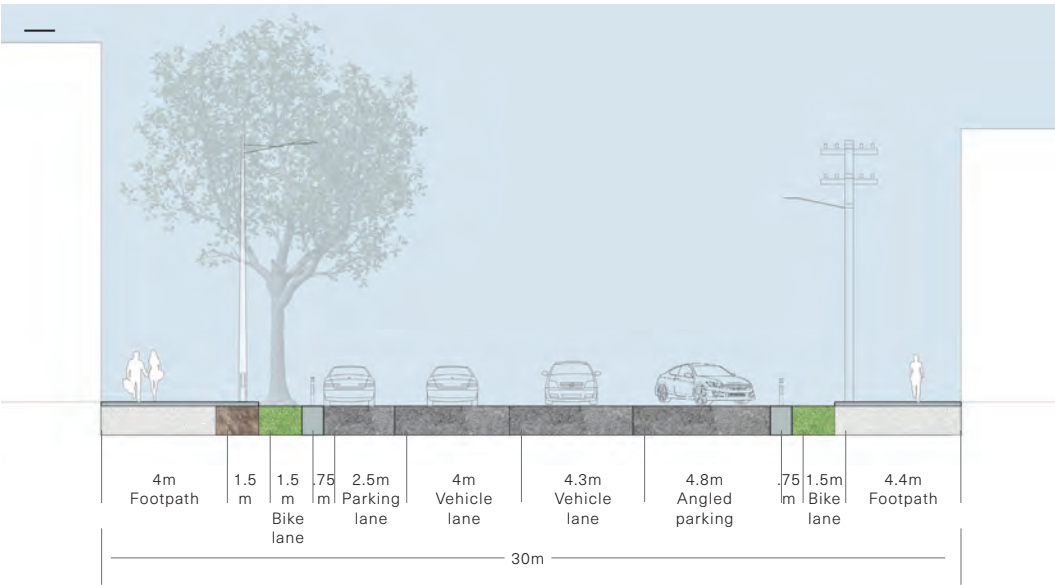


Figure 3.30 Gheringhap Street block 3-6 section A-A' showing the existing condition

Please note the existing parking condition varies between parallel and angled

3.20.3 Short Term Proposed Condition

- Street section remains as is with targeted improvements of widened footpaths, increased greening and opportunities for seating and gathering where possible.
- Temporary separated bike lanes retained.

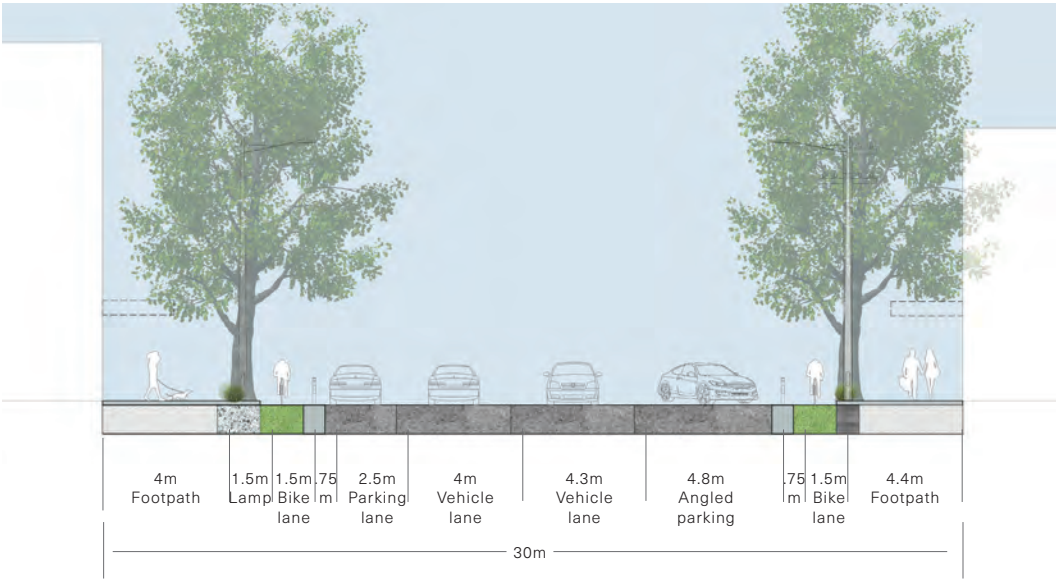


Figure 3.31 Gheringhap Street block 3-6 section A-A' showing the proposed condition

3.20.4 Long Term Proposed Condition

- Two vehicle lanes, with parallel parking to both sides. New permanent separated bike lanes.
- Power undergrounded in remaining blocks to allow better tree canopy.
- Significant increase in areas of occupation, garden and tree planting through a linear park.

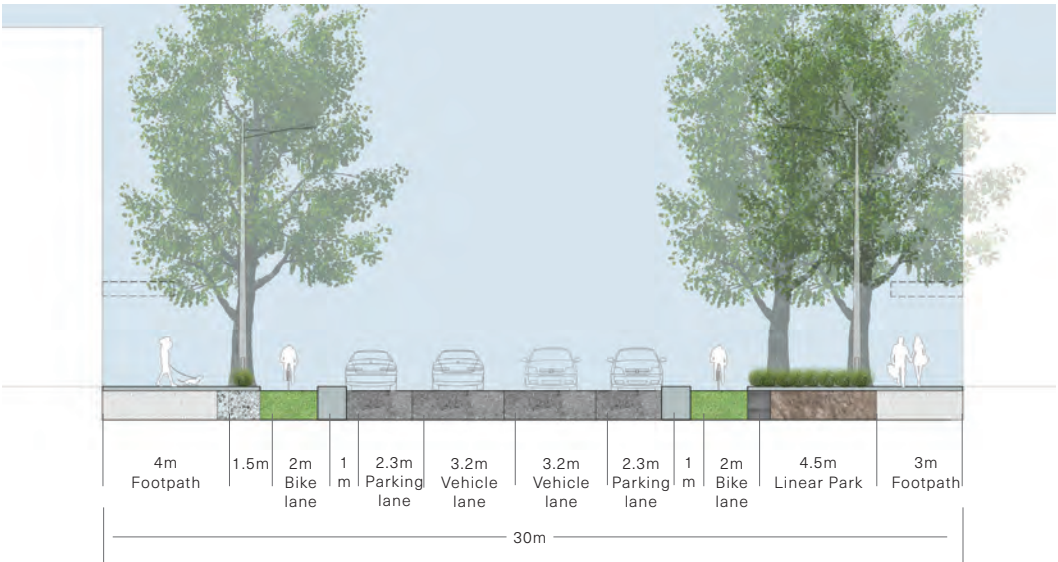


Figure 3.32 Gheringhap Street block 3-6 section A-A' showing the proposed long-term condition



Figure 3.29 Gheringhap Street block 3-6 location plan

3.21 Gheringhap Street Block 3-6 - Long Term Proposed Plan

Please note dimensions are indicative and may vary throughout the length of the street.

Refer to 3.20.4 for sectional information

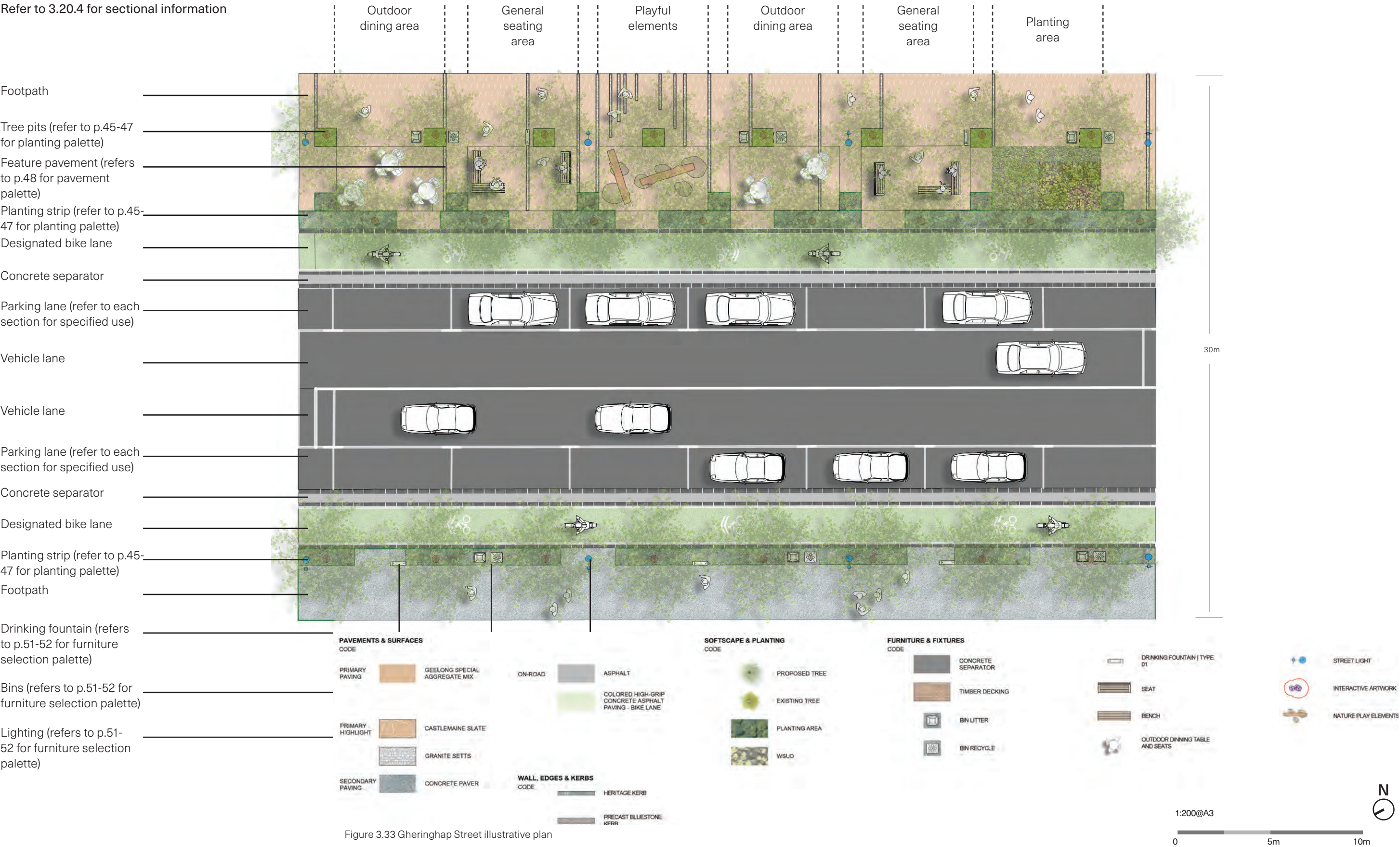


Figure 3.33 Gheringhap Street illustrative plan

3.22 Bayley Street Sections

Please note dimensions are indicative and may vary throughout the length of the street.

3.22.1 Summary

No change to street section dimensions but a change in demarcating as a slow zone and eventually introducing outstands for additional trees along the street.

3.22.2 Existing Condition

- Two vehicle lanes, intermittent parallel parking both sides.
- Street light poles north side, pedestrian light poles south side.
- Trees in parking north side, in footpath south side.

3.22.3 Proposed Condition

- Two vehicle lanes, intermittent parallel parking both sides retained.
- More consistent tree location and spacing to increase greening of the street.
- Consider opportunity for change in surface level and/or materials to further calm traffic and denote a slow zone (not depicted below).



Figure 3.34 Bayley Street location plan

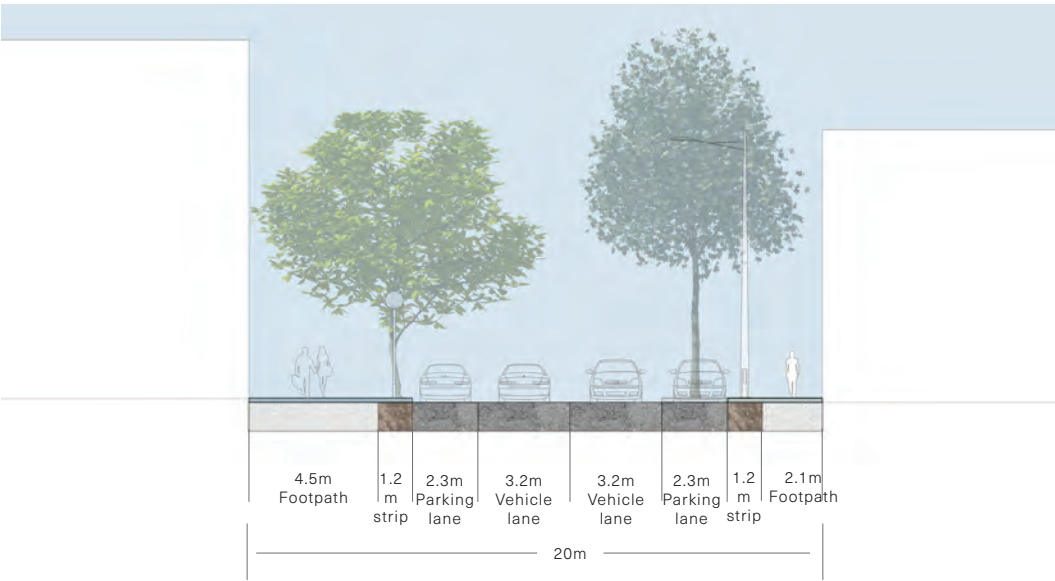


Figure 3.35 Bayley Street section A-A' showing the existing condition

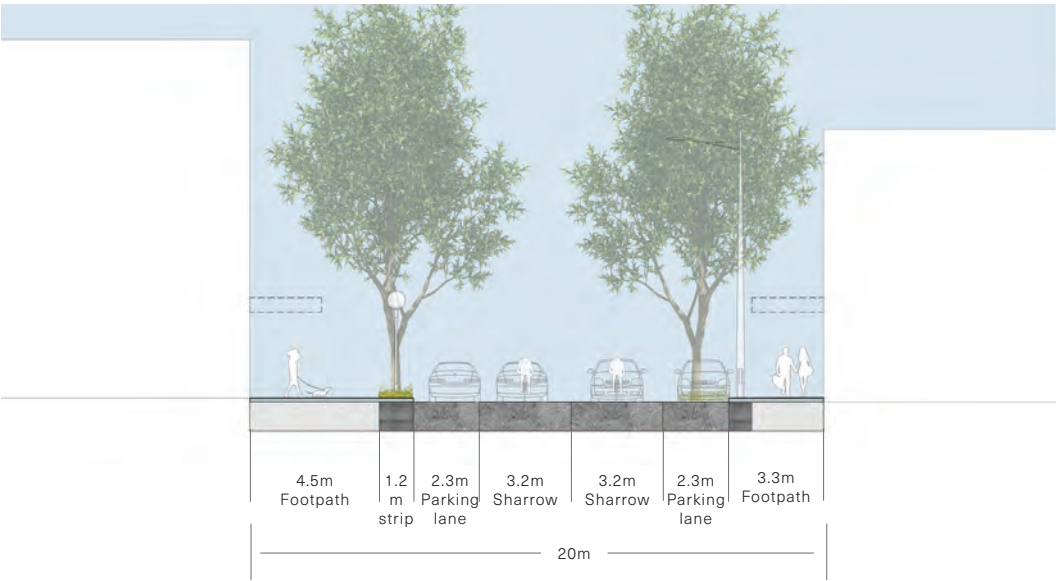


Figure 3.36 Bayley Street section A-A' showing the proposed condition

3.22.4 Proposed Condition

- Intermittent outstands on one/both sides to reduce physical width of road to enhance slow zone feel.
- Additional tree planting where possible in outstands.

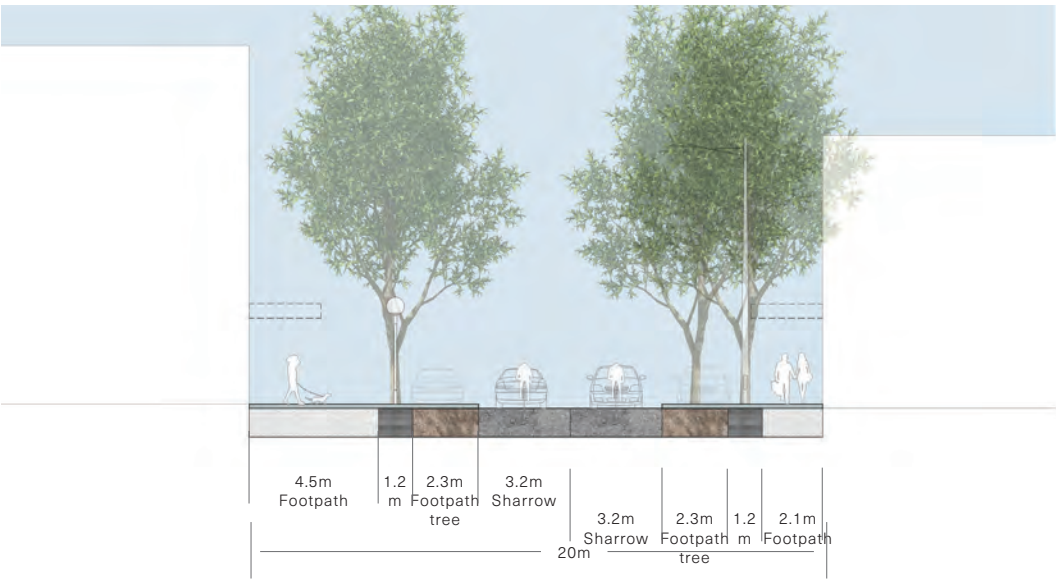


Figure 3.37 (Top) Bayley Street section B-B' showing the proposed long-term condition