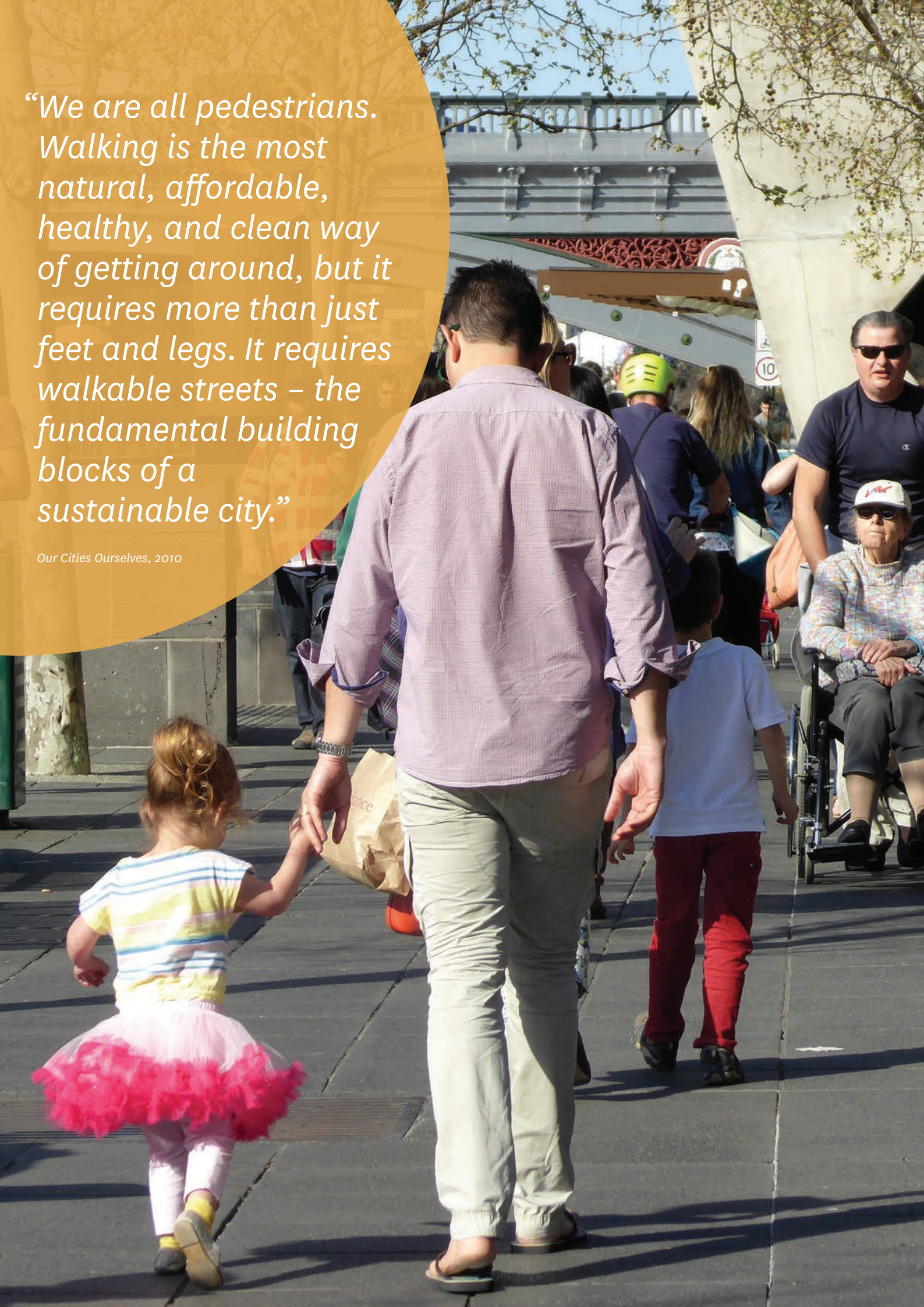


"We are all pedestrians. Walking is the most natural, affordable, healthy, and clean way of getting around, but it requires more than just feet and legs. It requires walkable streets – the fundamental building blocks of a sustainable city."

Our Cities Ourselves, 2010

05

STREETS
Ngā Huanui

Central city road use hierarchy

***An Accessible City* is the transport chapter of the Christchurch Central Recovery Plan (Recovery Plan). Accessible City considers how the different modes of travel should be distributed in the street network to support the economic, social and environmental recovery of the central city.**

The Accessible City central city road use hierarchy illustrates the priority for the various modes of travel across the central city street network and how each mode relates to the others. This Streets & Spaces Design Guide provides the backbone to the structure of the street network in the central city and informs all design decisions about the functionality of the streets.

The way this Design Guide informs the design of the central city street network is illustrated on the following pages.

A brief outline of Accessible City is provided on page 34. For detailed information, visit:
http://ccdu.govt.nz/the-plan

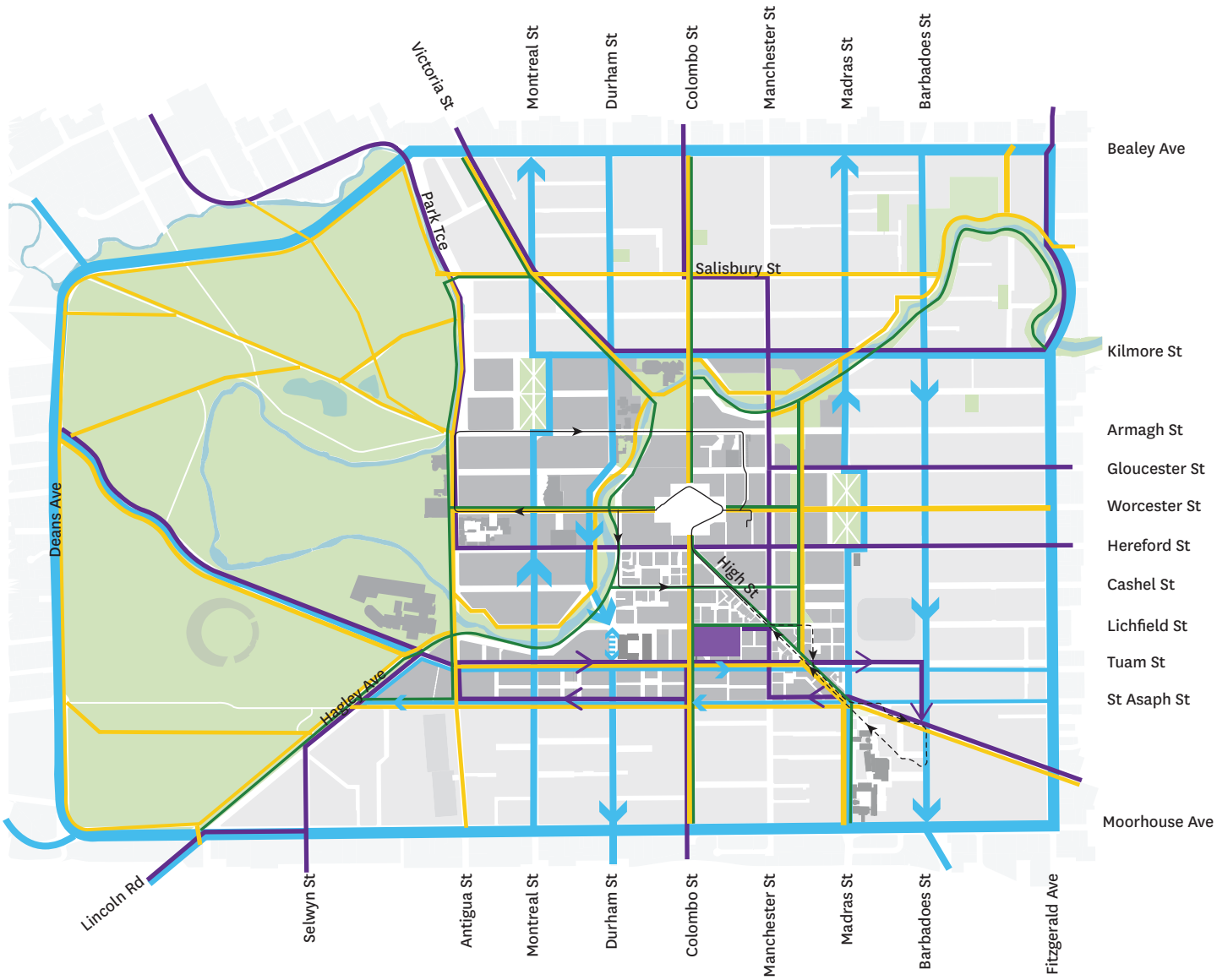


Figure 28 *Accessible City's central city road use hierarchy*

Sharing the street

The street network is the largest component of the entire public realm network in the central city.

Streets carry the lifeblood of the city each day, catering for people using different modes of transport including walking, cycling, public transport and private and service vehicles. These travel modes have different space requirements for their operation, as illustrated in Figure 29. With limited space between buildings, the space within the street needs to be shared efficiently. How each street is used in the central city relates to their specific context and the larger network for navigating the city, as set out in Accessible City's central city road use hierarchy (Figure 28).

While streets are designed to ensure effective and efficient mobility for people using different transport modes, they should also be places where people can enjoy and absorb the city. Streets are the welcome mat for local business, the outdoor dining spot for local cafés and an opportunity to connect with nature and better manage our water. Sharing the street differently by promoting and supporting public transport, walking and cycling will also contribute to minimising greenhouse emissions and clearing our air.

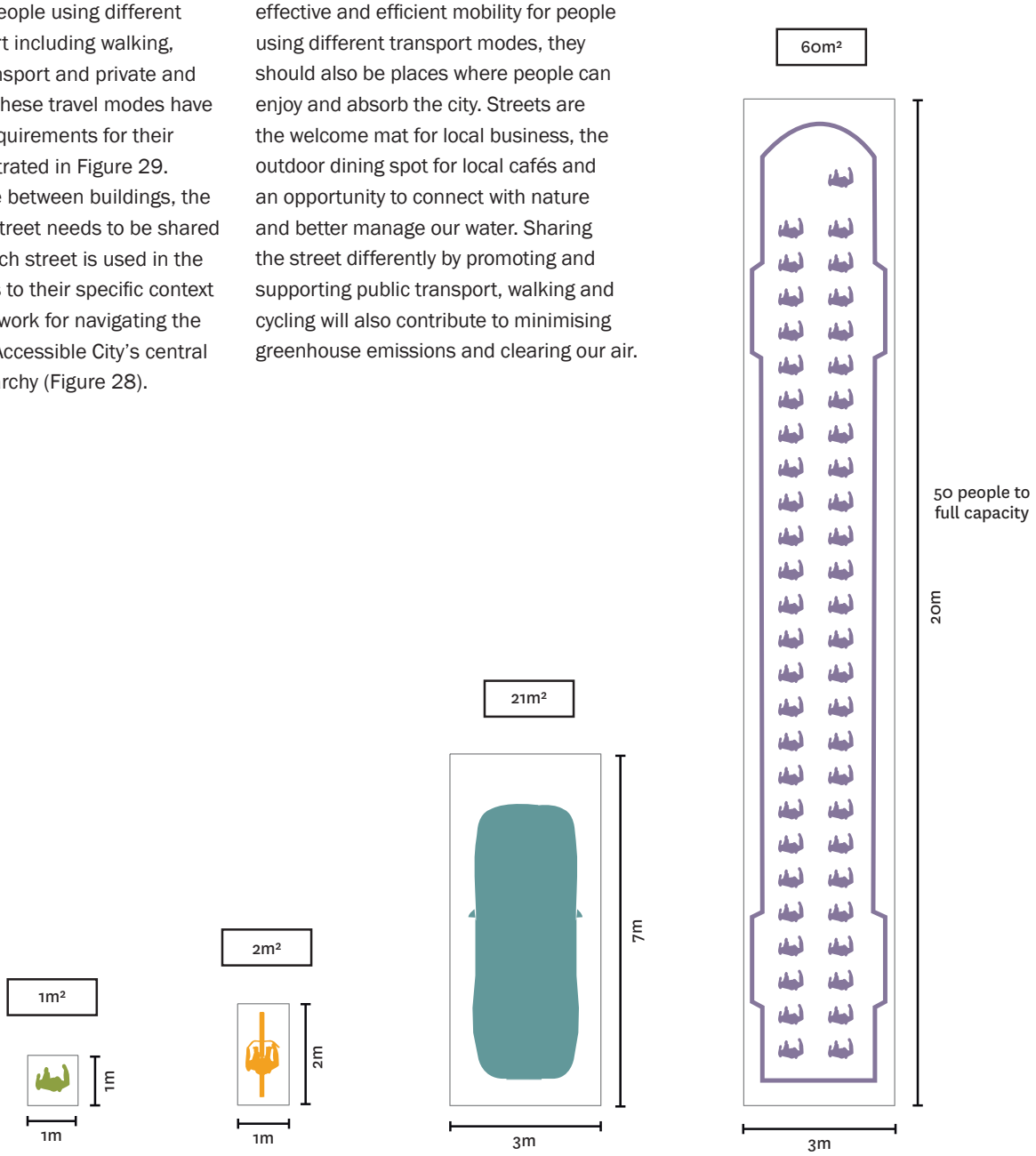


Figure 29 *Spatial area distribution using different modes of transport – ONE PERSON*

484 PEOPLE

14 cars x 4 lanes = 56 cars
56 x 1.5 people per car = 84 people
400 people on footpath [max.capacity]

734 PEOPLE

14 cars x.1.5 people per car (21)
9 parked cars x 1.5 people per car (13.5)
50 people per bus (150)
150 people on cycles
400 people on footpaths

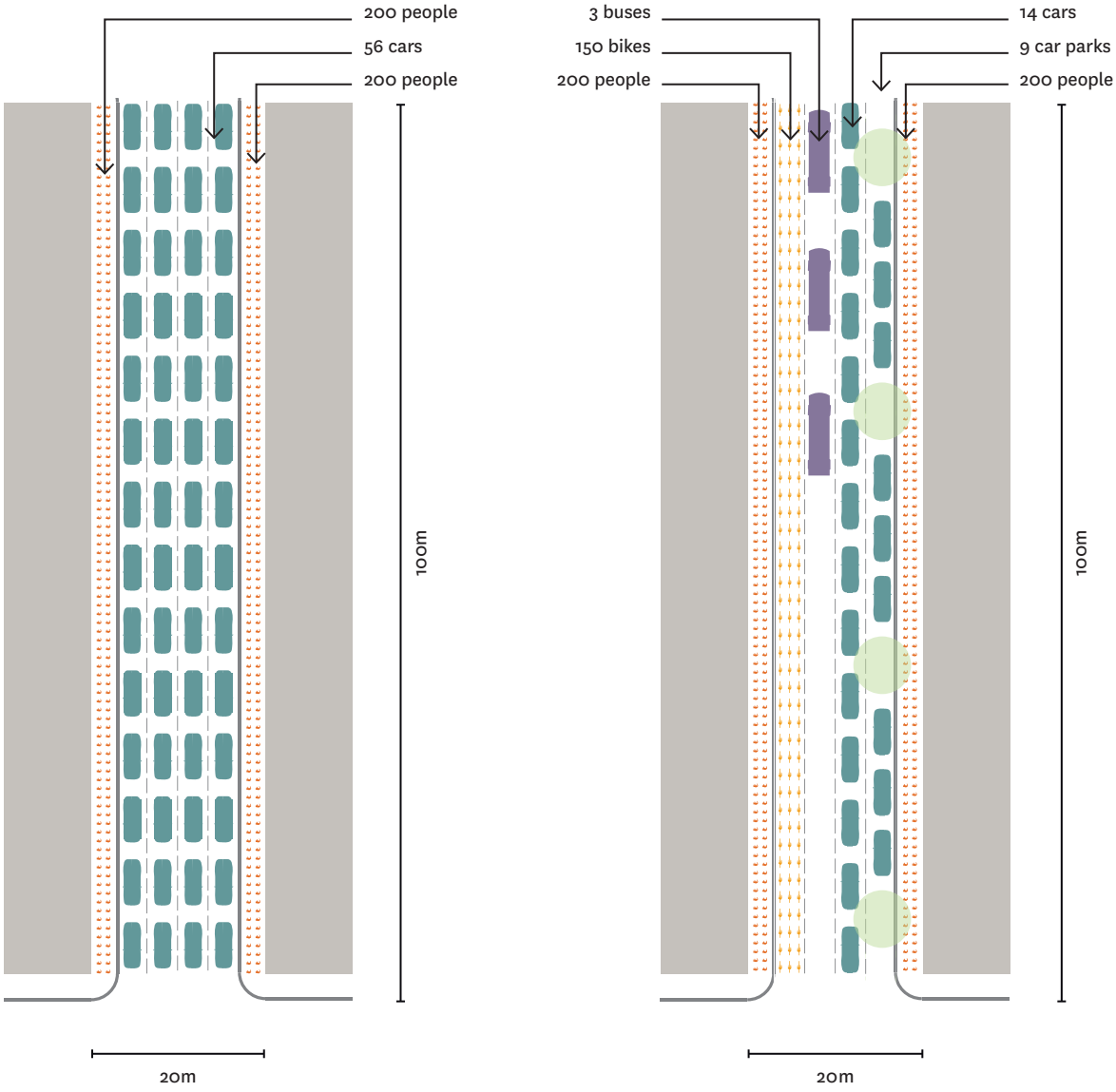


Figure 30 *Spatial area distribution using different modes of transport – ONE STREET, maximum capacity*

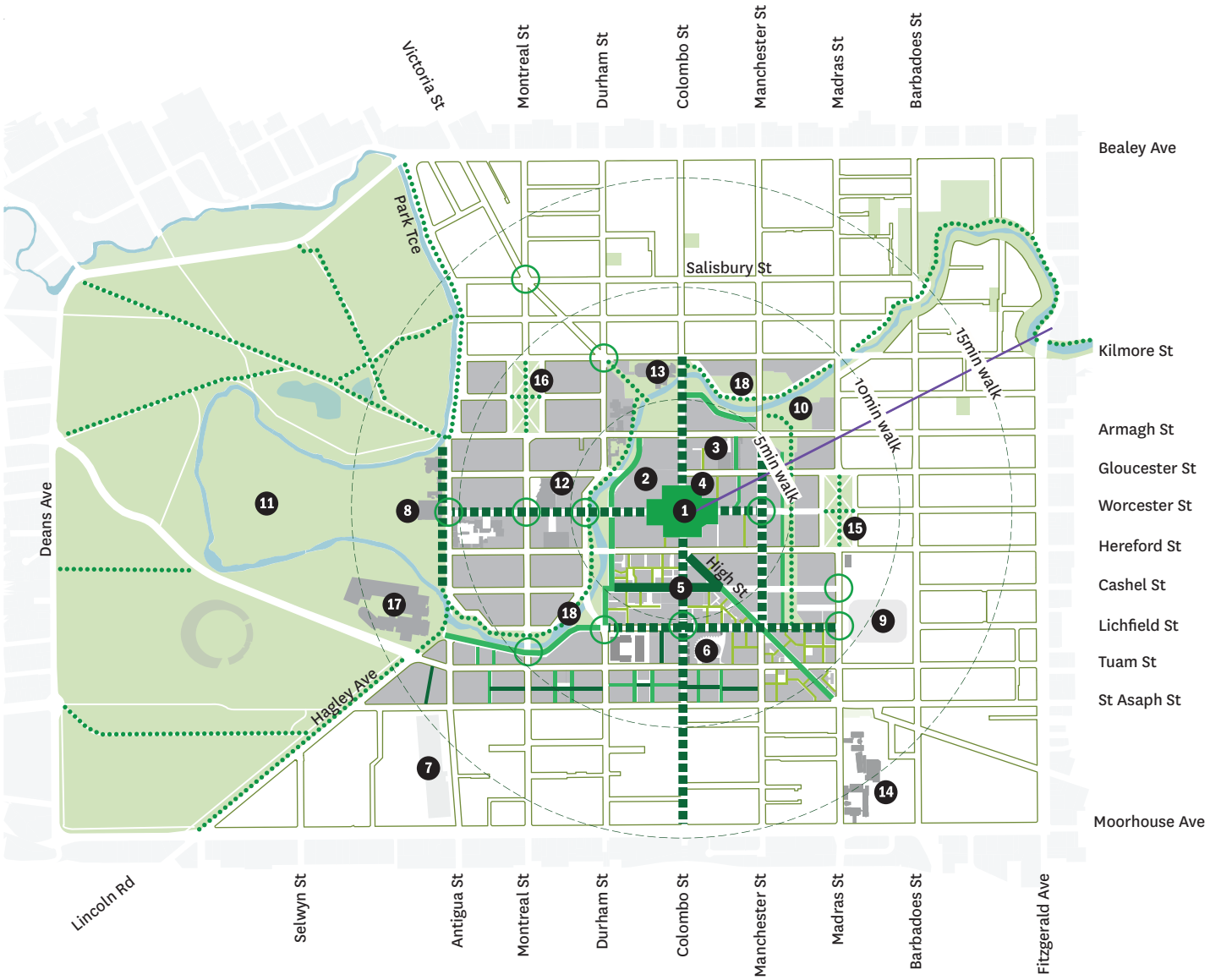
Walking

Attracting more people to work, live and recreate in the central city is essential for the successful recovery of central Christchurch.

A key factor in attracting more people is providing the conditions for a more walkable city centre, accessible by everyone.

Most of the existing and proposed amenities and facilities in the central city are generally located within five to ten minutes' walk within the inner zone. Initiatives to make the most of this convenience and improve the quality of the walking network include:

- reducing vehicular speeds in the inner zone and other designated low-speed streets
- creating a varied range of walking experiences and routes with good access to the river and open spaces
- creating high-quality journeys, in particular when linking key destinations
- introducing more greenery in the street network
- increasing the effective width of standard footpaths where possible, by relocating street elements and trees outside the footpath
- providing widened footpaths along key routes and activity corridors such as retail areas
- providing a range of seating opportunities for people to stop, rest or socialise.



Legend

WALKING

- Pedestrian priority streets
- Wide footpaths
- Park walkway
- Shared street
- Lanes
- Standard footpath
- Key pedestrian crossings
- Inner zone (maximum 30 km/h)

KEY DESTINATIONS

1. Cathedral Square
2. Convention Centre Precinct
3. Performing Arts Precinct
4. Central Library
5. Retail Precinct
6. Bus Interchange
7. Metro Sports Facility
8. Canterbury Museum
9. Stadium Precinct
10. Margaret Mahy Family Playground
11. Hagley Park and Botanic Gardens
12. Art Gallery
13. Town Hall
14. CPIT campus
15. Latimer Square
16. Cramner Square
17. Christchurch Hospital
18. Te Papa Ōtākaro/Avon River Precinct

Figure 31 *Walking network*

Cycling

Increased cycling in the central city is at the core of the travelling mode shift required to create a city that is easy and enjoyable to move around and where congestion is managed.

Improved cycling facilities on a number of key streets are a feature of the central city public realm network, offering a range of options for different levels of confidence.

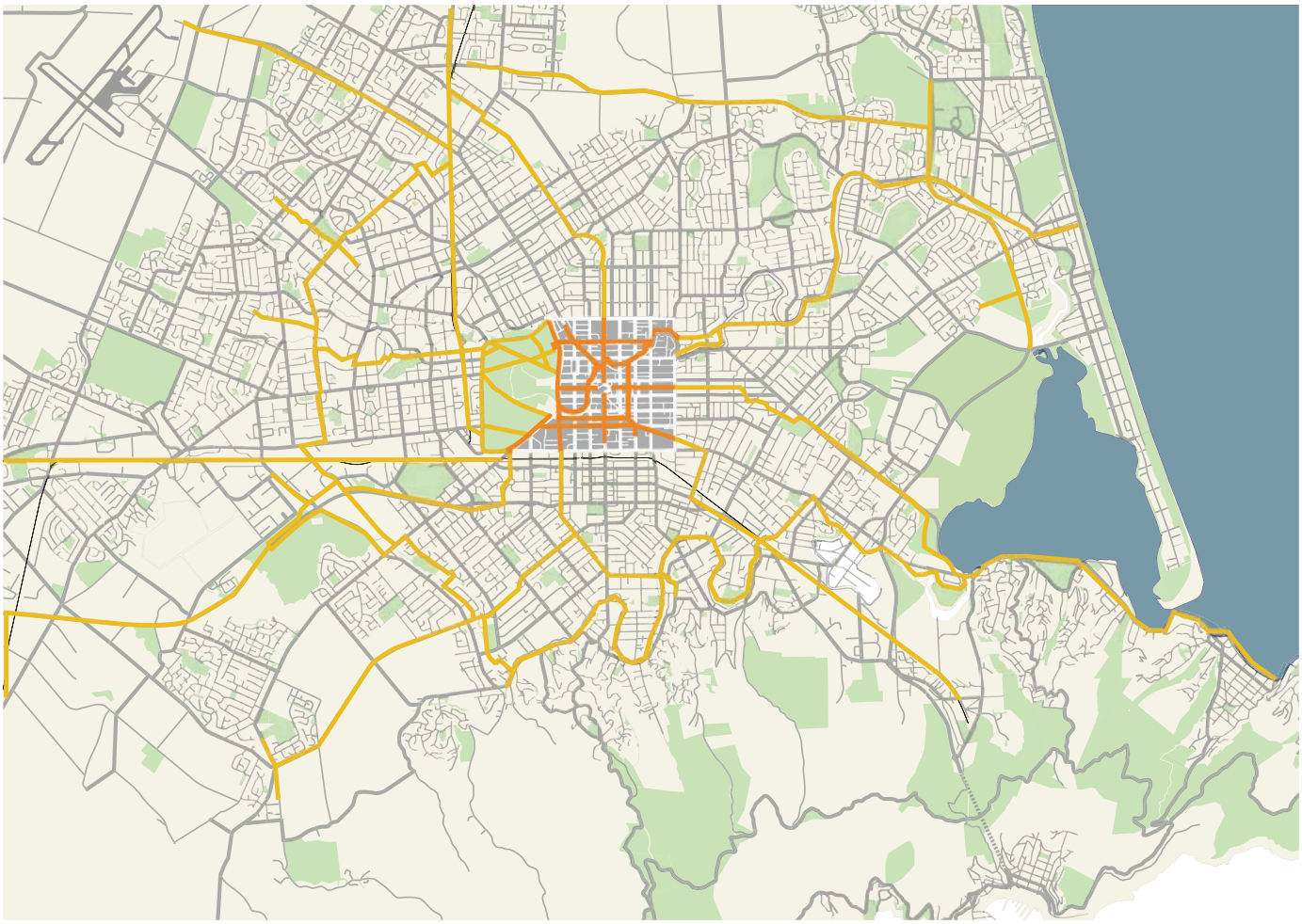
The streets identified in Accessible City as key cycle routes provide continuity to the Major Cycleways network envisaged by Christchurch City Council's Christchurch Major Cycleways programme (see Figure 32). This programme seeks to:

- establish a high-quality cycle network for the city, providing safe and attractive links to popular destinations and key activity centres
- reinforce the city's cycle status
- encourage more people to take up cycling.

The Major Cycleways routes aim to cater for both adults and children (10 years and over), and generally people who are curious about cycling but are afraid to ride or ride very infrequently.

Accessible City sets out to deliver matching facilities within the central city wherever possible.

For detailed information on the Major Cycleways Programme, visit: www.ccc.govt.nz/cityleisure/projectstoimprovechristchurch/transport/cycleways/index.aspx



Legend

- Key cycleways in the central city
- Major cycleways outside the central city

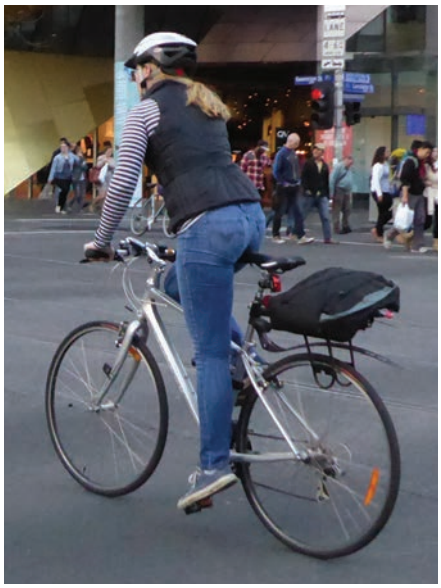
Figure 32 *Proposed cycleways network for greater Christchurch and connections with central city's key cycleways*

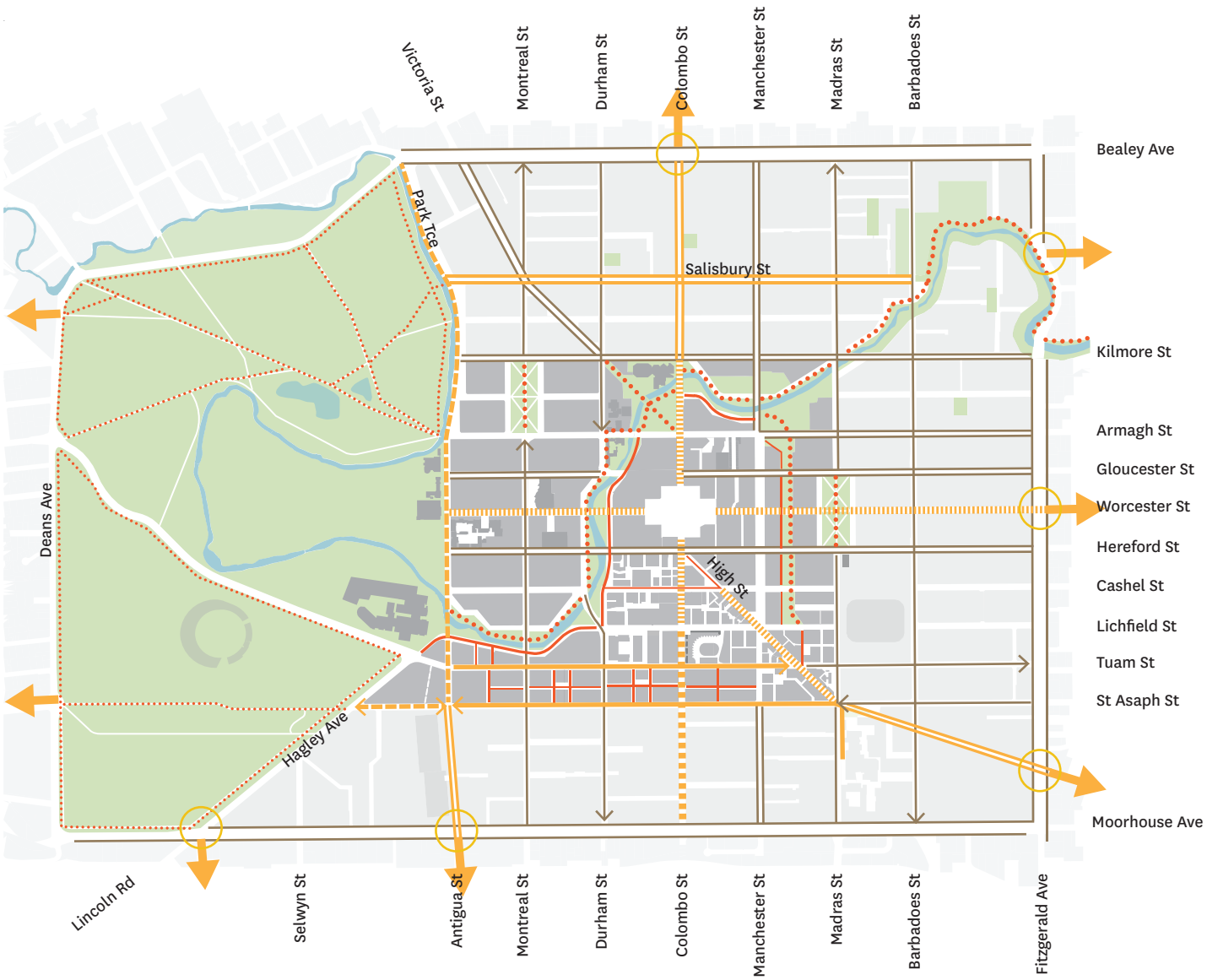
A key aspect of integration is designing safe cycle crossings at entry points to the central city across the avenues.

Cycling

The proposed cycle network in the central city includes:

- continuity with the Major Cycleways routes planned outside the central city
- separated bicycle facilities on most key routes identified in Accessible City where streets are not otherwise slow streets
- shared routes in the slow Core, where key streets are designed as an environment conducive to sharing street space and cycle separation is less important
- on-road cycle lanes wherever possible elsewhere
- intersection treatments at key locations
- on-street bicycle parking facilities at key locations. Specific locations will be determined as part of the detailed streetscape design for each street. Provision of additional public cycling facilities is being investigated in the Christchurch Central Parking Plan
- encouraging the incremental provision of supporting facilities such as shared schemes.





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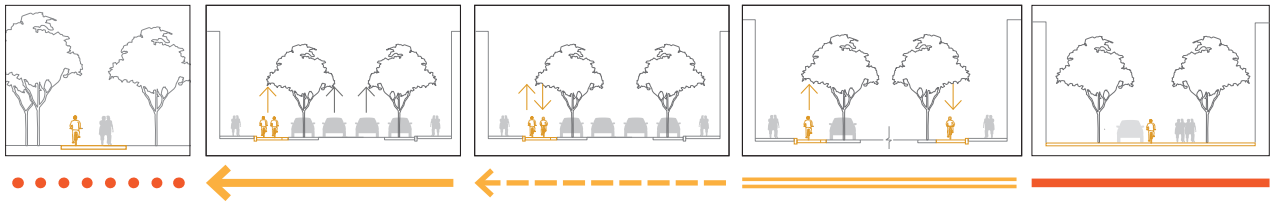


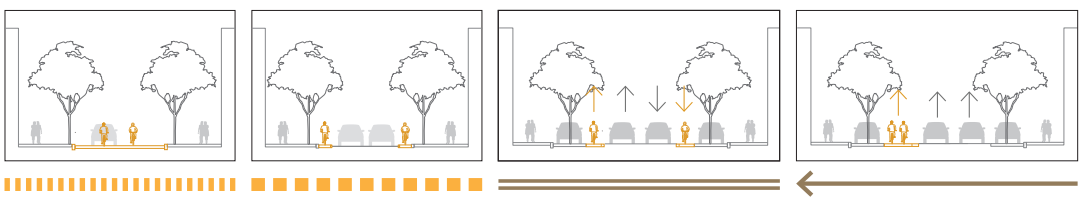
Shared path (pedestrian and cycles)

Separated cycleway/ one-way street

Separated bidirectional cycleway

Separated cycleway/ two-way street

Pedestrian priority and shared streets (max. 10km/h)



Slow street

Separated cycleway/ Copenhagen style

On-road cycle lane/ two-way street

On-road cycle lane/ one-way street

Connections to Major Cycleways network

Key intersection

Figure 33 *Cycle network*

Public transport

Increased bus patronage to access the central city is another key shift in travelling patterns required for a more efficient, sustainable and productive central city.

To support this shift while managing congestion, the number of bus routes entering the city will be reduced while the frequency of buses on those routes will increase. There will be a network of core bus routes coming through the central city from connected suburban interchanges, which is part of Christchurch's city-wide operational plan for bus services.

In addition:

- the bus routes will generally travel around the edge of the Core. Main routes will be provided at expected peak frequencies of six buses per hour and other routes at four buses per hour
- the network will be supported by the new Bus Interchange (an anchor project of the Recovery Plan) on the city block bounded by Lichfield, Colombo and Tuam streets. The Interchange will be supported by high-quality 'super stops' on Manchester Street and on the west end of Tuam Street, near the hospital
- intercity services will operate on street from the same location as the Bus Interchange, sharing its passenger facilities
- allowance of design clearance for double-decker buses is required on all bus routes
- bus pre-emption of traffic signals will be implemented from major super stops and on major bus routes
- opportunities for smart technologies to support the operation of the network are being investigated
- shuttle services linking the different routes within the Core and key destinations will be investigated once the main network is established and the reconstruction of the central city and its anchor projects progresses.

The wider Christchurch bus network is illustrated at www.metroinfo.co.nz/map

Figure 34 *Public transport network*

Trams

Trams provide the central city streets with a special character and an enjoyable way to reach key destinations.

The Christchurch City Tram links major central city destinations including Hagley Park, Cathedral Square, the Canterbury Museum, the Art Gallery and the Retail, Convention Centre and Innovation precincts.

The re-establishment of the tram infrastructure and operation has been planned in stages.

The original loop along New Regent Street, Cathedral Square, Worcester Street, Rolleston Avenue and Armagh Street is complete.

Stage 1 corresponds to the extension of the loop to the Retail Precinct. This stage has been completed and is now in full operation.

Stage 2 corresponds to the extension of the route along High Street to the CPIT campus. Implementation of this stage is subject to further planning and funding approvals.

The tram infrastructure and fittings such as poles and stops contribute to the character of each stage. The loop has a heritage character with many infrastructure elements dating from 1905. Stages 1 and 2 will have a contemporary character and complement the many new buildings along the route.

Legend

- Tram route loop and stage 1
- Tram route stage 2
- Existing tram stop
- Proposed tram stop*
- Inner zone (maximum 30 km/h)

* Subject to approval

KEY DESTINATIONS

1. Cathedral Square
2. Central Library
3. Art Gallery
4. Arts Centre
5. Canterbury Museum
6. Botanic Gardens
7. Hagley Park
8. Cranmer Square
9. Victoria Square
10. Convention Centre Precinct
11. Performing Arts Precinct
12. New Regent Street
13. Te Papa Ōtākaro/Avon River Precinct
14. Retail Precinct
15. Innovation Precinct
16. CPIT campus

Figure 35 *Tram network*

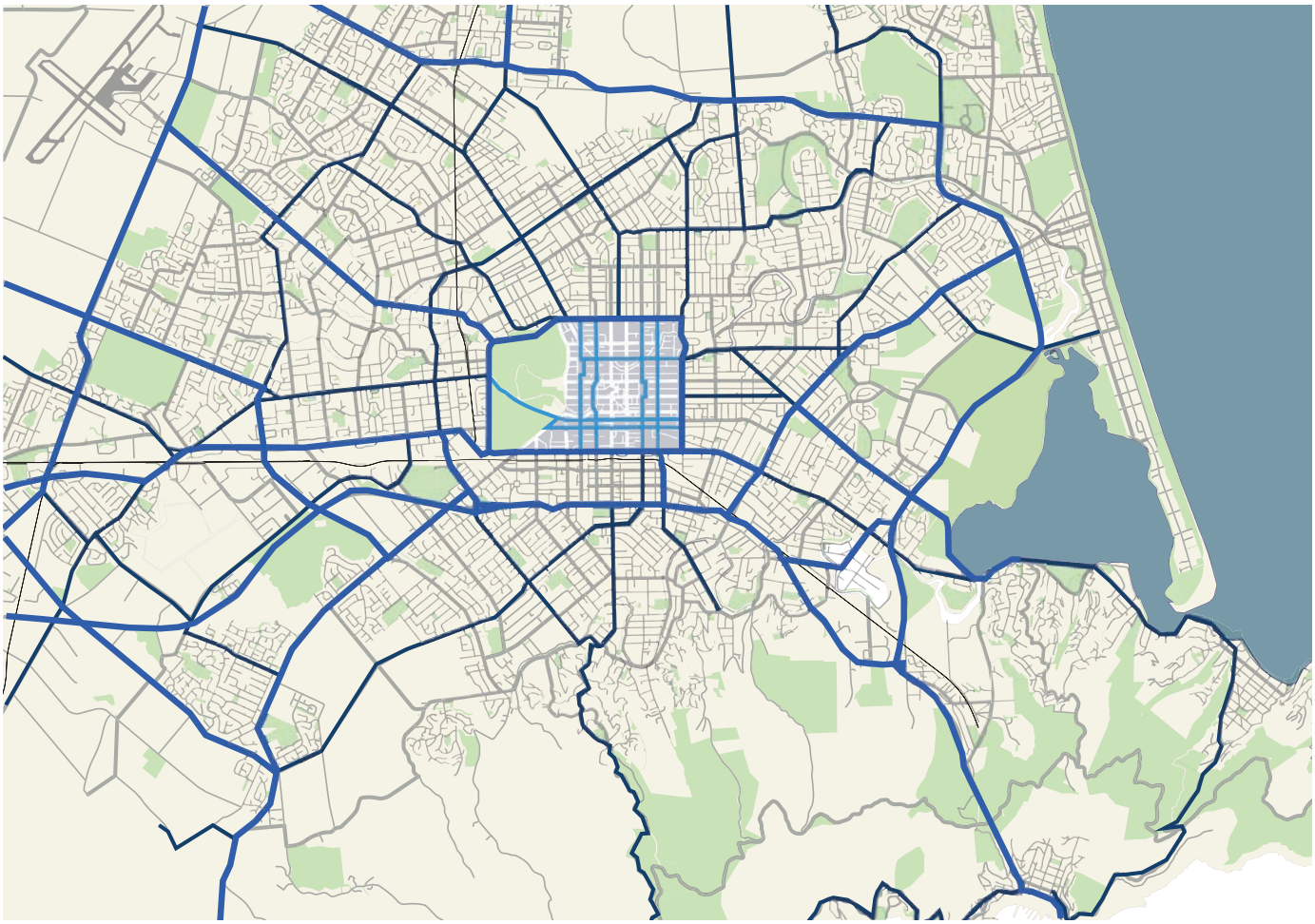
General traffic

The streets identified in Accessible City as preferred vehicle routes are called *main distributor streets*.

These streets are connected to the wider network of arterial roads through the avenues that surround the central city.

The main objectives for vehicle movements in the central city are to:

- reduce conflicts with other modes of travel prioritised in specific streets
- support increasing activity and accessibility by maintaining efficient vehicle access to the central city on key routes for general traffic, servicing and emergency vehicles.



Legend

- Main distributor streets in the central city
- Major arterial roads outside the central city
- Minor arterial roads outside the central city

Figure 36 *Christchurch's major arterial road network*

General traffic

Achieving the objectives for the general traffic network involves:

- redirecting traffic without a destination in the central city to travel around the avenues (Bealey, Fitzgerald, Moorhouse, Deans and Harper) and therefore discouraging through movements. This involves progressively changing some key intersections around the perimeter of the central city
- using the avenues as a ring road for radial access to the city centre
- encouraging vehicles travelling into the central city and the Core to use main distributor streets that lead off the avenues and then to use local distributors with direct access into the Core and key parking facilities
- decreasing speed limits to no more than 30km/h in the inner zone. This speed reduction will support safer streets and a pedestrian- and cycle-friendly central city
- encouraging freight, as far as practicable, to use the avenues for cross-city movements
- encouraging delivery and service vehicles to use main distributor streets for accessing the Core (prioritised outside peak and inter-peak periods) and local streets or lanes to access buildings
- coordinating traffic signals to enable reliable travel times and speed management.

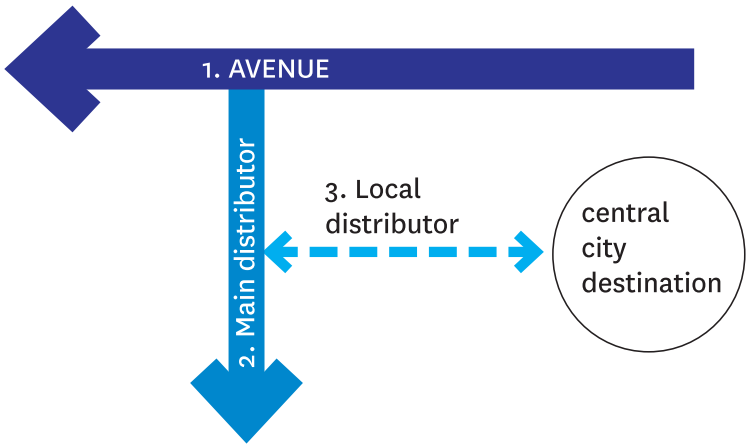


Figure 37 *Design of traffic network in and around the central city*

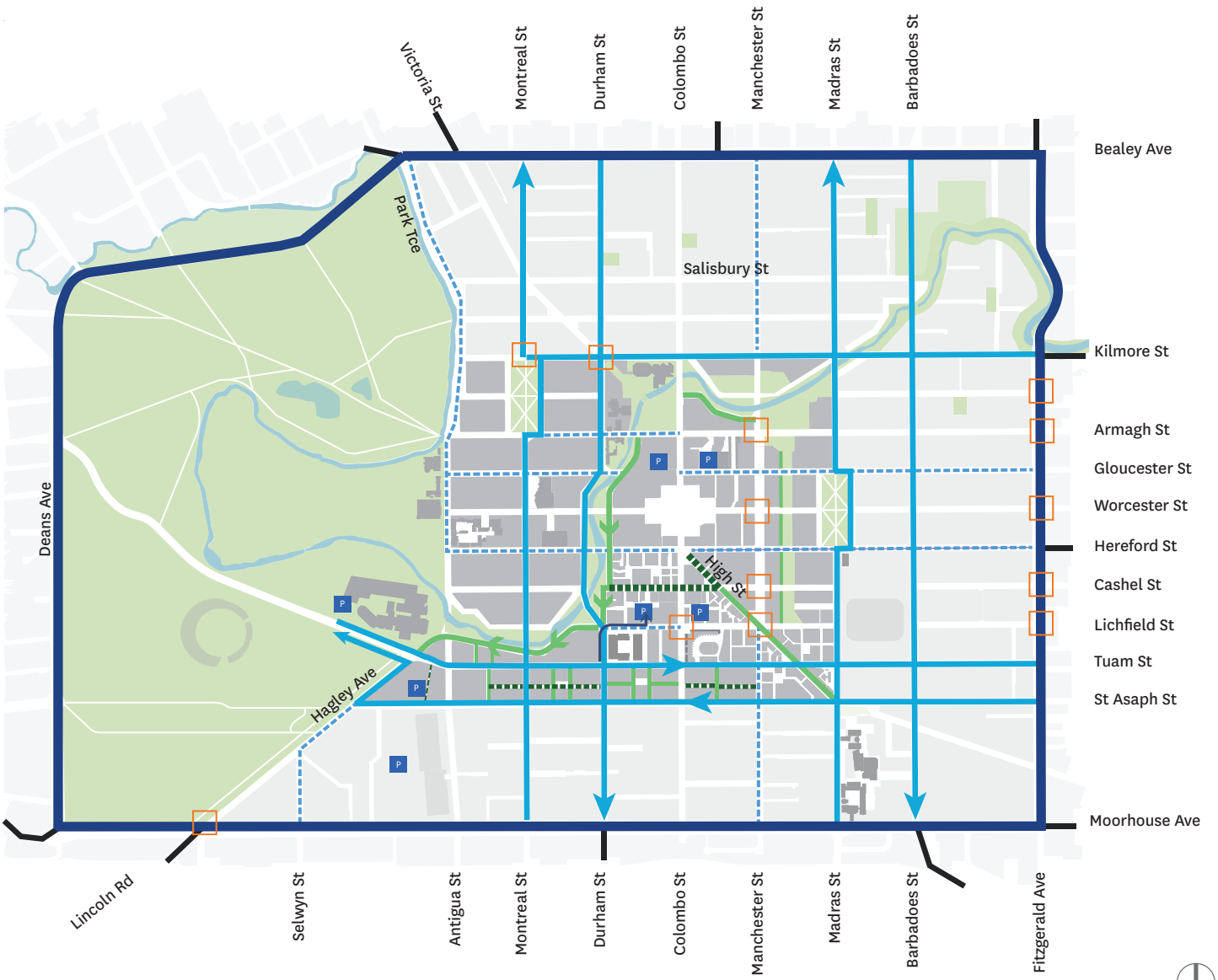


Figure 38 *Central city general traffic network*

Over-dimensional routes

The over-dimensional routes plan identifies streets in and around the central city that can accommodate large loads, such as large prefabricated construction materials or construction machinery.

The over-dimensional routes should be able to accommodate loads that fit within an envelope of 10 metres wide and 6 metres high.

Given the infrequency of this type of load, the over-dimensional envelope can project outside the carriageway and may straddle low street furniture and central medians. However, a clear corridor is required, as illustrated in Figure 40. This requirement has some implications for the selection of street furniture and tree locations and species.

Prior to the Canterbury earthquakes some of the over-dimensional routes used the central city street network on cross-city routes to reach destinations elsewhere. These routes have been reviewed and rationalised to align with Accessible City objectives of redirecting traffic without a destination in the central city and discouraging traffic movements through the city.

Figure 39 illustrates the streets that remain as over-dimensional routes to travel around the central city or to access the city centre from the avenues, mainly from the north and south.

The criteria for selecting these streets as over-dimensional routes included that they:

- coincide, in most cases, with the main distributor streets and the surrounding avenues
- can also take overweight vehicles.

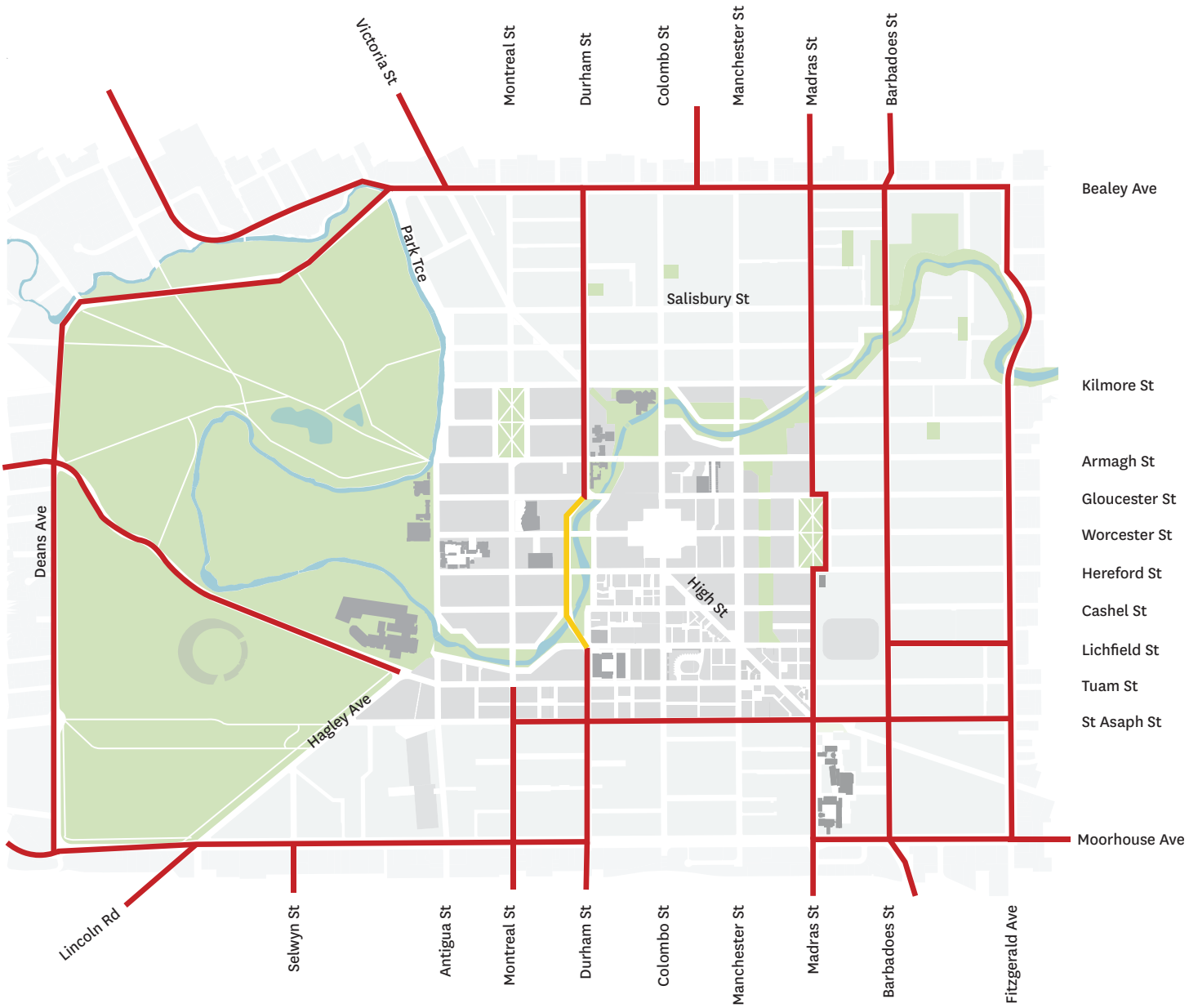


Figure 39 *Central city over-dimensional routes*

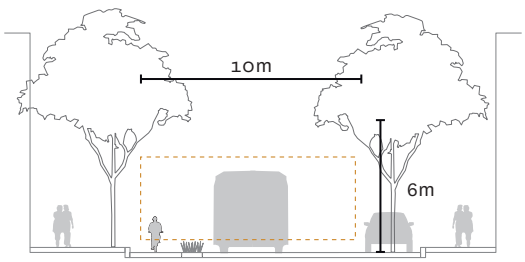


Figure 40 *Over-dimensional envelope*

Street trees

Christchurch has established, and much cherished and admired, tree-lined avenues. Most existing trees are located within Hagley Park or on the banks of Ōtākaro/Avon River, in wide central medians and along some of the street edges.

The reconstruction of the central city provides a one-off opportunity to extend this key feature beyond the city's avenues and through open spaces in a consistent manner.

In addition to providing the economic, environmental and social benefits outlined in Chapter 2, trees:

- contribute to the character of streets and public spaces
- bring formality, structure and a sense of 'procession' to the city
- provide strong, visual cues that orientate people throughout the city
- create an attractive, comfortable and changing environment for people
- increase real estate values and encourage investment
- mitigate the effects of traffic.

Trees are a key element for delivering a 'greener city'. They are integral to the vision, themes, design principles and strategic approach of the Streets & Spaces Design Guide, as outlined in Chapters 1 and 2.

Figure 41 shows the tree species selected for the central city street network. These species have been selected to strengthen the hierarchy and purpose of each street.

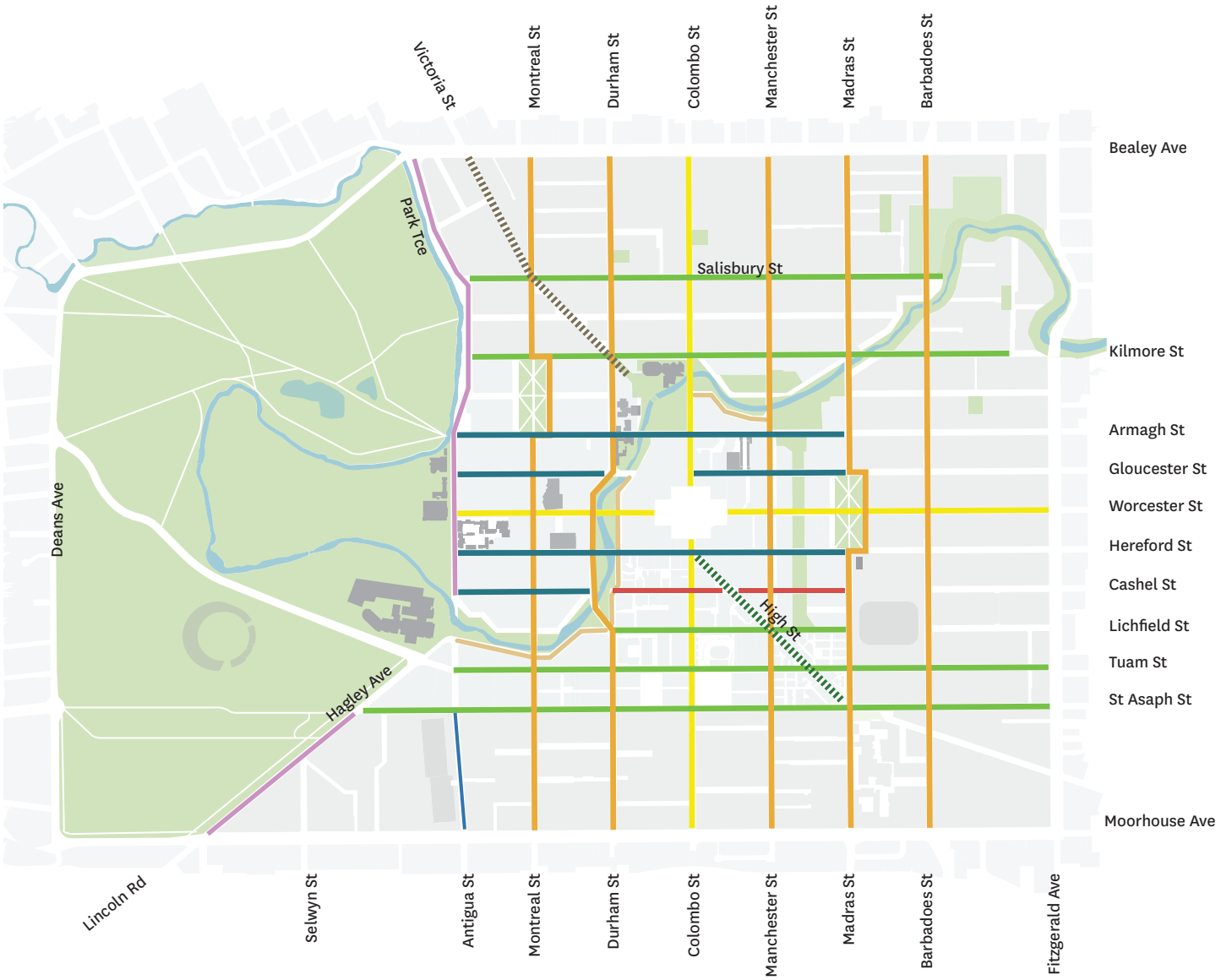
The selection is consistent with the objectives and criteria of the Draft Christchurch City Council Tree Policy. In addition, these species generally are:

- frost and wind hardy
- tolerant of city soils and pollution
- drought tolerant
- of high visual impact, with attractive foliage and/or bark
- fast growing
- not prone to structural issues, such as falling branches or fragile trunks
- effective at mitigating transport-related greenhouse gases and urban heating.

Establishment of tree species is dependent on site-specific water table depth and therefore species may vary if conditions are inadequate. The Technical Guidance book of this Design Guide provides technical specifications for street trees, including tree pits and integrated water management practices.

"The best time to plant a tree was 20 years ago. The second best time is now."

Ancient proverb



Legend

AXIS STREETS

Colombo Street, *Quercus palustris* 'Pin oak'

Worcester Street, *Tilia platyphyllos* 'Broad-leaved lime'

NORTH–SOUTH STREETS

Cambridge Terrace and Montreal, Durham, Madras, Barbadoes and Manchester streets, *Liriodendron tulipifera* 'Tulip tree'

EAST–WEST CENTRAL STREETS (Inner zone)

Armagh, Gloucester, Hereford and Cashel streets, *Corylus colurna* 'Turkish hazel'

EAST–WEST STREETS

Tuam, St Asaph, Salisbury, Kilmore and Lichfield streets, *Tilia platyphyllos*, 'Broad-leaved lime'

ŌTĀKARO/AVON RIVER PROMENADE

Oxford Terrace, *Acer rubrum* 'Red maple' and *Sophora microphylla* 'Kōwhai'

NORTH GATEWAY

Victoria Street, *Acer platanoides* 'Norway maple'

SOUTH GATEWAY

High Street, *Quercus robur fastigiata* 'Upright English oak'

PEDESTRIAN MALL

Cashel Street, *Acer rubrum columnare* 'Upright red maple'

METRO SPORTS FACILITY

Antigua Street, *Liriodendron tulipifera fastigiata* 'Upright tulip tree'

HAGLEY PARK EDGE

Park Terrace, *Quercus robur* 'English oak'
Rolleston Avenue, various existing trees
Hagley Avenue, *Prunus x yedoensis* 'Cherry'

Figure 41 *Proposed street trees*

Street trees

Quercus palustris ‘Pin oak’

Axis street: **Colombo Street**

- Copper red in autumn
- Very hardy

Tilia platyphyllos ‘Broad-leaved lime’

Axis street: **Worcester Street**

East–west streets: **Tuam, St Asaph, Lichfield, Salisbury and Kilmore streets**

- Iconic trees that reflect the grid pattern of the city and have a historical association for Christchurch
- Great for form and scale of streets
- Well-established tress exist on many of these streets
- autumn colours, large leaves

Liriodendron tulipifera ‘Tulip tree’

North–south streets: **Cambridge Terrace and Durham, Montreal, Madras, Barbadoes and Manchester streets**

- Bright yellow in autumn
- Tulip-shaped greenish flowers
- Fragrant
- Fast growing

Sophora microphylla ‘Kōwhai’

Ōtākaro/Avon River Promenade: **Oxford Terrace**

- Yellow flowers
- New Zealand native

Acer platanoides ‘Norway maple’

North gateway: **Victoria Street**

- Yellow (occasionally red/orange) in autumn
- Deciduous, allow light through in winter
- Attractive seed

Quercus robur fastigiata ‘Upright English oak’

South gateway: **High Street**

- Great for form and scale of the street
- Well-established trees exist on High Street

Corylus colurna ‘Turkish hazel’

East–west central streets: **Hereford, Gloucester, Armagh and Cashel streets**

- Yellow in autumn
- Upright juvenile form, turning more rounded as they mature
- Deciduous, allow light through in winter
- Fruit can attract birds
- Well established trees in Cashel Street

Quercus robur ‘English oak’

Hagley Park edge: **Park Terrace**

- Broad spreading
- Iconic tree to Christchurch
- Will tie in to Hagley Park landscape

Acer rubrum columnare ‘Upright red maple’

Cashel Street between Oxford Terrace and Madras Street

- Vibrant red in autumn
- Appropriate form in close proximity to tram lines
- Deciduous, allow light through in winter
- Exist in Cashel Mall already

Liriodendron tulipifera fastigiata ‘Upright tulip tree’

Metro Sports Facility edge: **Antigua Street**

- Lime-coloured leaves – yellow in autumn
- Yellow-green flowers with orange markings

Acer rubrum ‘Red maple’

Ōtākaro/Avon River Promenade: **Oxford Terrace**

- Vibrant red in autumn
- Fast growing
- Tolerant to a wide range of soils

Footpath surfaces

Footpath surfaces are an important element influencing the character of streets and public places.

Figure 42 identifies the preferred surface treatments for specific areas in the central city.

The Technical Guidance book of this Design Guide provides technical specifications, application and details for each footpath treatment.

Figure 42 *Proposed footpath treatments*

Street metrics

Most of the road corridors in the central city are 20.1m wide, which is a chain in the imperial measurement system.

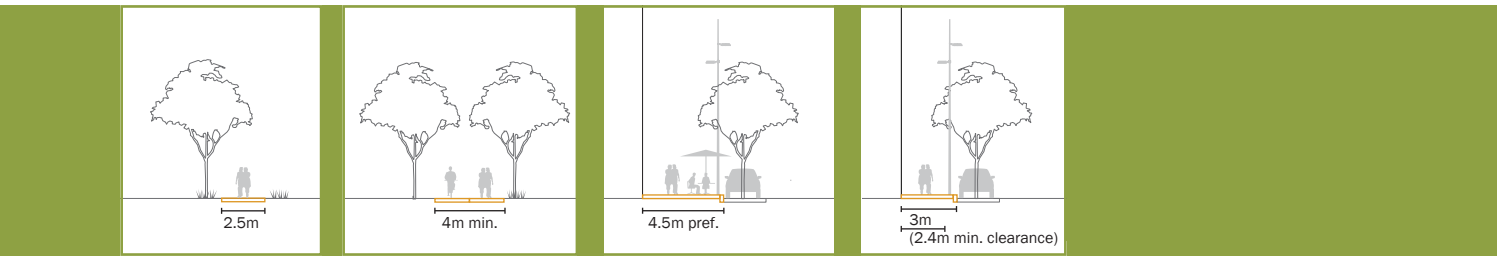
Accommodating all the various travel modes and public realm needs within the existing corridor is often a challenging exercise.

The level of service (width) to be provided for each travel mode should be weighted according to the road use hierarchy of each street. Figure 43 indicates the various provisions for each of the key elements in a street cross-section and the preferred dimensions for each mode or feature in order to deliver a good level of service.

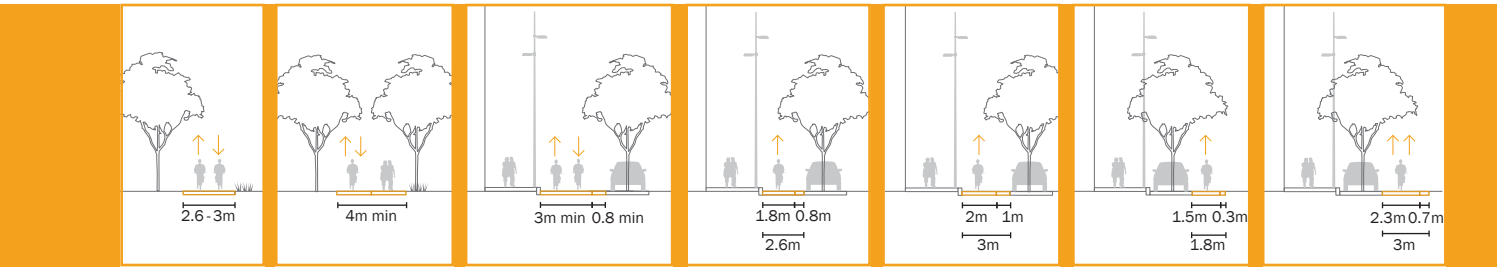
The proposed cross-sections for the central city street network have been developed by cross-referencing the user priority established in Accessible City's central city road user hierarchy (Figure 28, page 81) and the measurements on Figure 43.

These metrics have been used to inform the recommended street cross-sections for groups of streets featuring in the following pages.

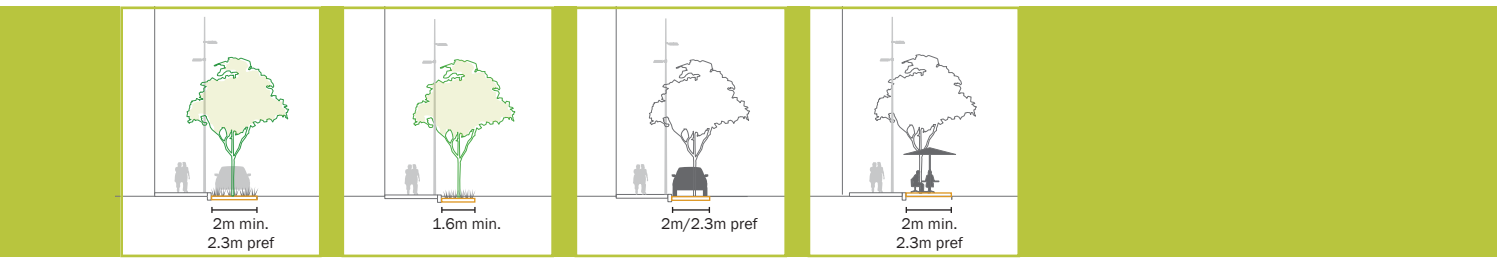
As a general principle, when defining the widths for the various modes of travel within a corridor, a minimum width should not be located beside another minimum width.



park walkway | park shared path | wide footpath | standard footpath

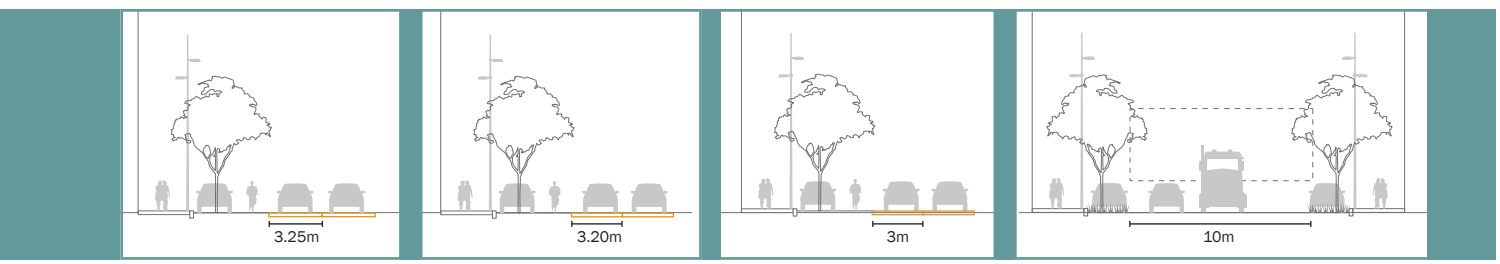


park/ bidirectional bike track | park/shared path | bidirectional separated bike lanes/two-way street | unidirectional separated bike lane/ two-way street | unidirectional separated bike lane/ one-way street | unidirectional on-road bike lane/two-way street | unidirectional on-road bike lane/one-way street



trees and on-street parking | only trees in carriageway (long tree pit) | on-street car parking, taxi ranks and loading bays | footpath extension/ outdoor dining -trading

bus lane | bus bay at super stop | tram



main distributor road | local distributor road | local street | over-dimensional vehicle

Figure 43 *Widths and clearances for street cross-sections*

KEY STREETS

Recommended street cross-sections

For the purpose of this Design Guide, the *street cross-sections* illustrate the functional space allocation for groups of street corridors in the central city that have a similar role or function. These groups of cross-sections are mapped in Figure 44.

The selected cross-sections:

- interpret the Accessible City's central city road user hierarchy for the different travel modes (walking, cycling, public transport, car travel)
- provide a structure for streets that contributes to the delivery of the vision for the public realm network of central Christchurch outlined in Chapter 1
- apply the thinking and technical considerations discussed in Chapter 2
- provide a robust 'canvas' for different street characters to emerge. Each street character will be largely informed by emerging uses along the street corridors and the selection of materials, planting and street elements
- will be used to inform future streetscape design projects for central city streets, ensuring each project conforms to the key design principles of this Streets & Spaces Design Guide.

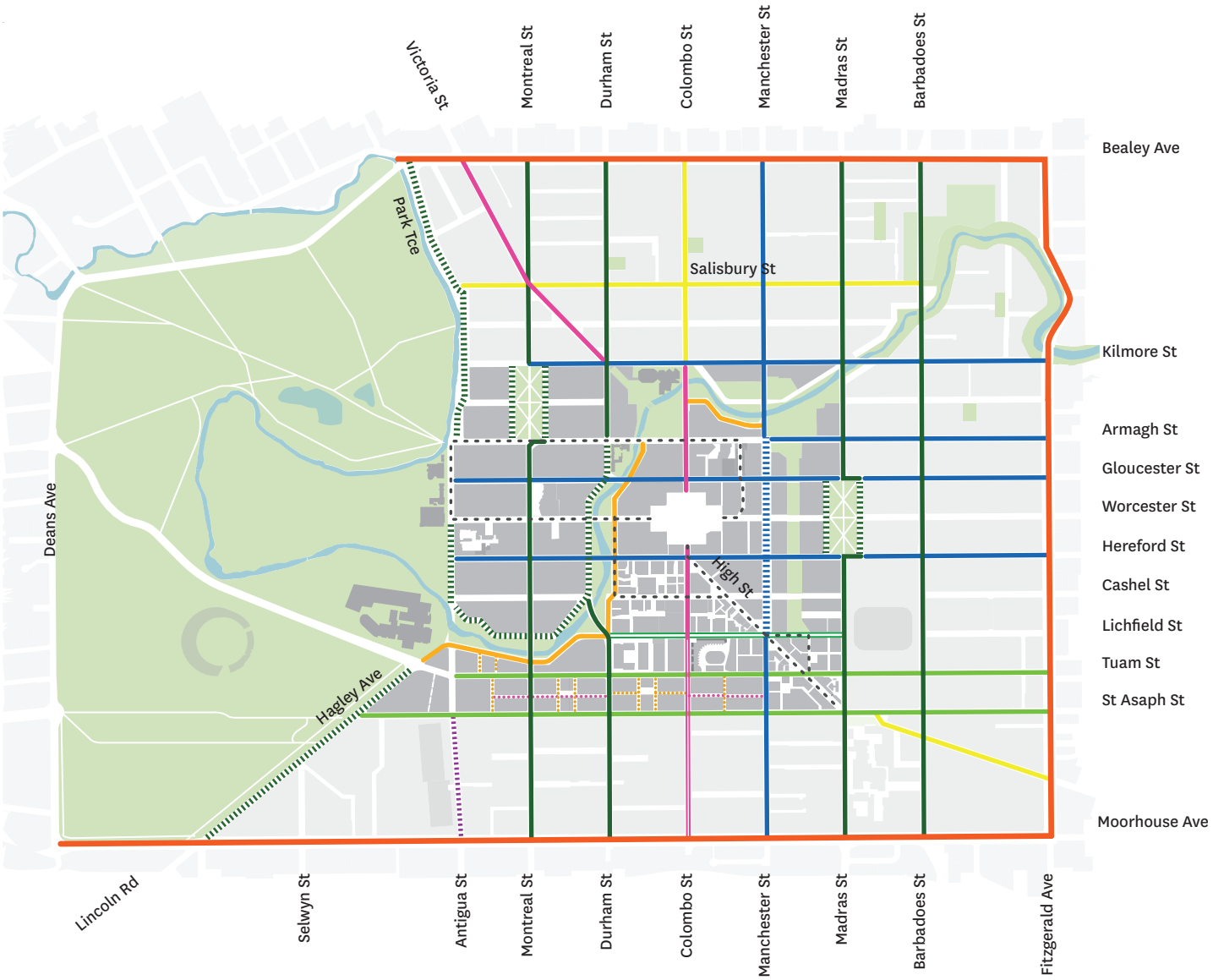
The cross-sections are conceptual in nature and will always require the skilled interpretation of designers at the detailed design stage of projects to respond to specific site conditions.

A correct interpretation of the cross-sections should generally maintain the basic structure proposed for the street. Maintaining the basic structure maximises functionality for the preferred mode(s) of travel and facilitates consistency of treatments across the central city. Consistent treatments are essential for creating a street network that is easy to understand and navigate, a chief objective for the public realm network in the central city.

Significant departures from the concept cross-sections will need to be assessed and approved on a case-by-case basis.

Detailed designs for streetscapes in the central city should be developed to address the design criteria outlined in Chapter 3.

Some streets have not been included in this chapter. These are mainly local streets where little change in functionality or street form is expected in the foreseeable future.



Legend

MAIN STREETS
Colombo Street (30km/h zone) and Victoria Street, pages 110–113

MOVING NORTH AND SOUTH
Montreal, Durham, Madras and Barbadoes streets, pages 114–115

MOVING EAST AND WEST
Tuam and St Asaph streets, pages 116–119

CONNECTING THE CYCLE NETWORK
Colombo Street (north), Salisbury Street and Ferry Road, pages 120–121

MOVING WITHIN THE CITY
Kilmore, Gloucester, Hereford and Manchester streets (outer zone), pages 122–123

PUBLIC TRANSPORT ROUTE
Manchester Street, pages 124–125

ŌTĀKARO/AVON RIVER PROMENADE
Oxford Terrace, pages 126–127

PROVIDING PUBLIC TRANSPORT AND VEHICULAR ACCESS
Lichfield Street (Core), pages 128–129

CONNECTING CYCLES TO THE SOUTH
Antigua Street, pages 130–131

STREETS ADJACENT TO OPEN SPACES
Cambridge and Park terraces, Rolleston and Hagley avenues, Montreal and Madras streets, pages 132–139

TRAM STREETS
Worcester Boulevard, High and Armagh streets, City Mall and Rolleston Avenue, pages 140–145

SOUTH FRAME
The Greenway, pages 146–147
North-south links, pages 148–151

THE AVENUES
Moorhouse, Bealey and Fitzgerald avenues, pages 152–153

Figure 44 *Recommended street cross-sections*

MAIN STREETS

Colombo and Victoria streets

Key features

- Main routes for walking and cycling
- Significant shopping and business streets
- Link major civic destinations
- Pedestrian-friendly 'maximum 30km/h' streets, except the section of Colombo Street north of Kilmore Street (refer to pages 122–123)
- Public transport integrated in some sections
- Two-way streets
- Increased urban amenity through new street trees and some rationalisation of on-street parking

Characteristic tree

Colombo Street: *Quercus palustris* 'Pin oak'

Victoria Street: *Acer platanoides* 'Norway maple'

Context

'Main streets' stand out from other streets in the city grid in terms of their location, uses along their length and lively street activity. The uniqueness of these streets helps people to orientate themselves in the city.

Colombo Street is the grid's main north–south axis which leads into the city's main civic place, Cathedral Square. **Victoria Street** breaks the grid diagonally and is a gateway to the city from the north.

As strategic routes into the heart of the city, they have consolidated as major shopping streets with a mix of retail and hospitality at ground level and commercial uses above. They link major civic destinations including Victoria Square, the Convention Centre, Performing Arts and Retail precincts, the Central Library and Cathedral Square. The uses and activities along these main streets will generate significant pedestrian activity.

Colombo Street has three distinctive areas which are represented in different concept cross-sections.

The stretch between Kilmore and Lichfield streets is within the slow inner zone. It has wider footpaths, cycles and vehicles share the road and on-street car parking is provided in selected locations.

The section south of Lichfield Street is within the slow zone, is a bus route and provides an access route to a number of off-street car parking facilities. This section will have separated cycle lanes in a 'Copenhagen' style. Wider footpaths and/or on-street car parking will be provided only where space is available.

The section north of Kilmore Street is a bus route outside the slow inner zone and a key cycling route. The cross-section for this area is illustrated on pages 120–121.

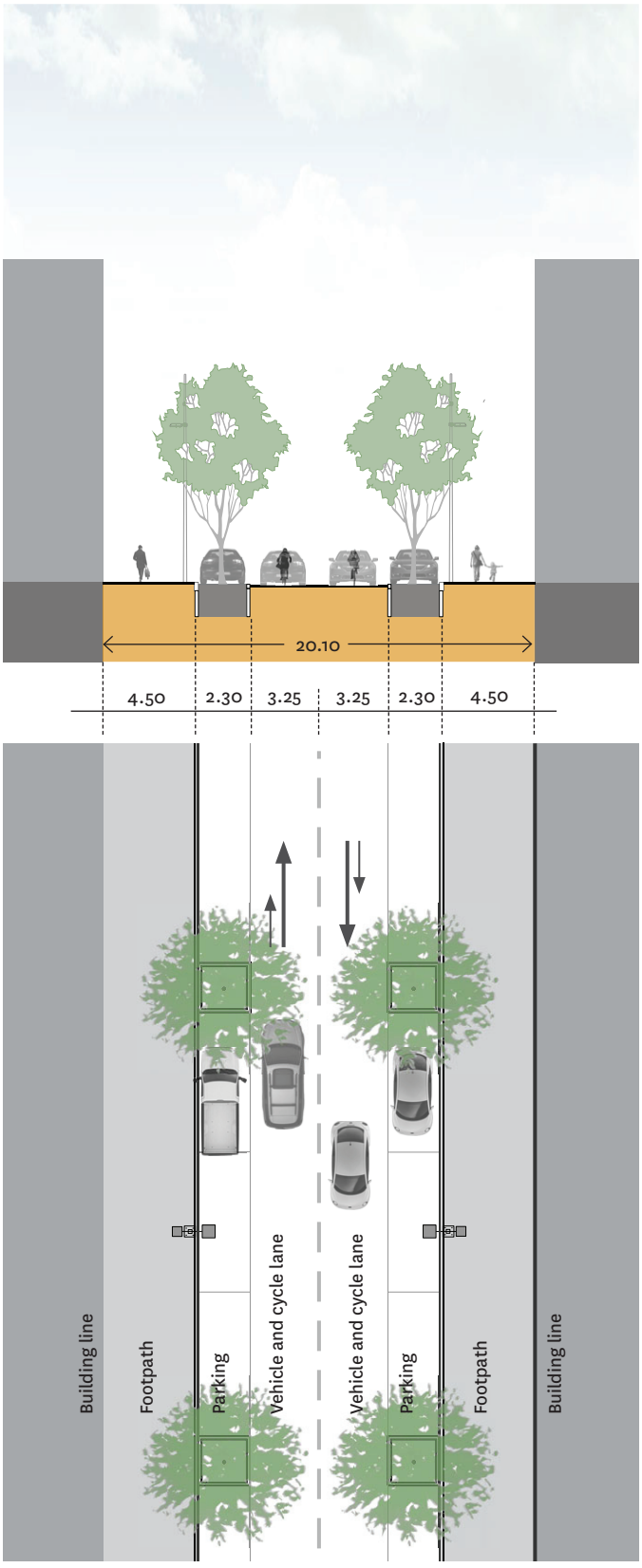


Figure 45 *Colombo Street (inner zone)*

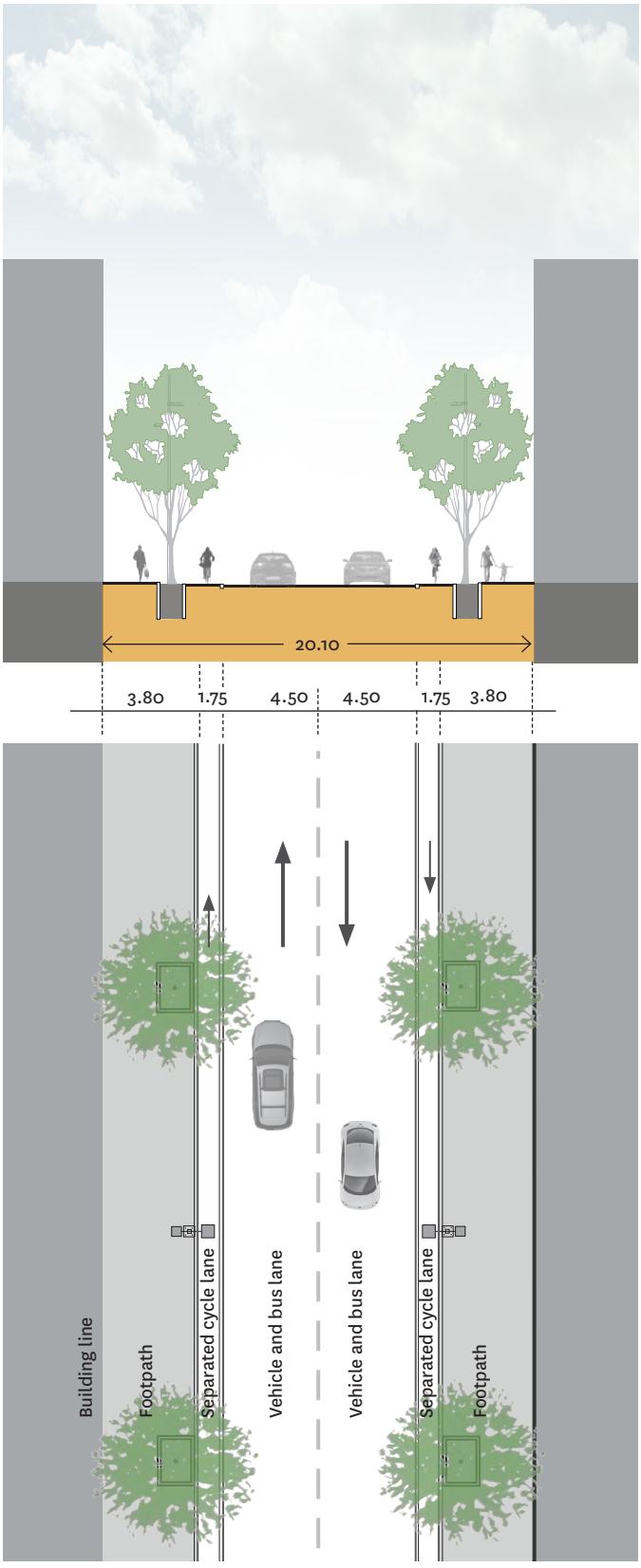


Figure 46 *Colombo Street south of Lichfield Street*

MAIN STREETS

Colombo and Victoria streets

Victoria Street is a street lined by new buildings of contemporary architecture. The street is within the maximum 30km/h zone and is also a bus route. The concept cross-section provides for dedicated on-road cycle lanes and allows flexibility to use the amenity zone for either on-street parking or areas for outdoor dining. These uses could alternate depending on the time of the day and the season.

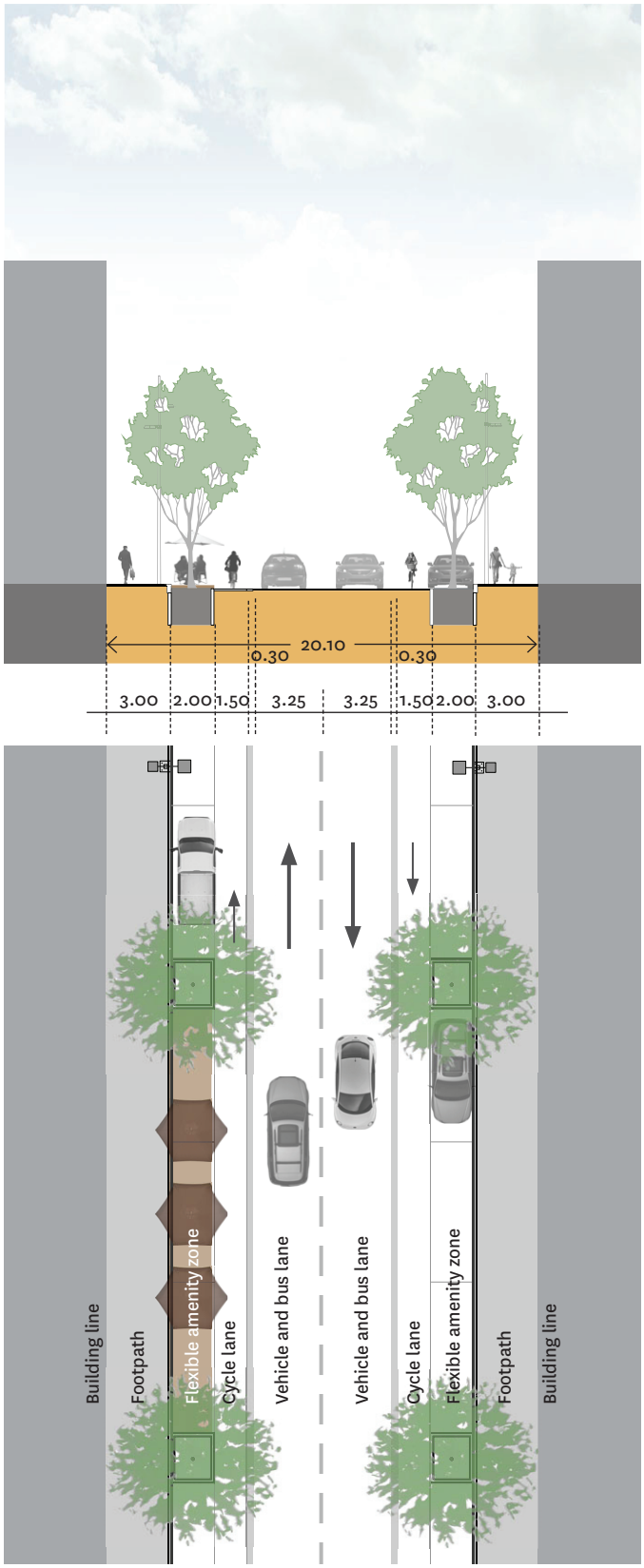
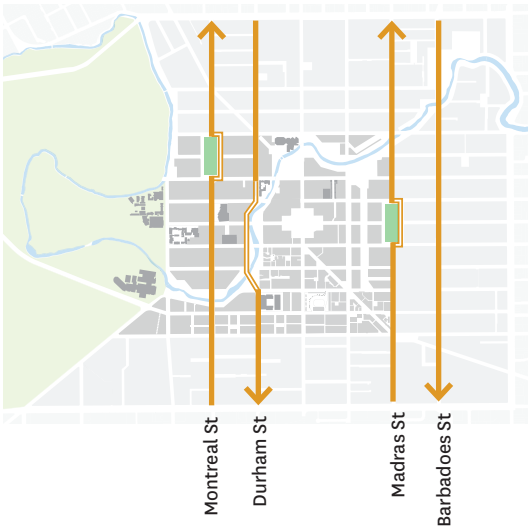


Figure 47 *Victoria Street*

MOVING NORTH AND SOUTH

Montreal, Durham, Madras and Barbadoes streets



Key features

- Main distributor one-way, north–south streets that connect the four avenues to the local network and distribute road users through the central city
- Key routes for moving vehicles
- Preferred routes for freight servicing and deliveries (outside peak hours)
- On-road cycle lanes on the left side of the street (relative to the direction of traffic)
- Increased urban amenity through new street trees and some rationalisation of on-street parking

Characteristic tree

Liriodendron tulipifera 'Tulip tree'

Context

The concept for these streets aims to create efficient, functional and effective access routes, especially for general traffic, while enhancing the urban amenity for all users. These north–south streets are focused on moving people driving from the avenues to the local network. They interface with some of the anchor projects and key public spaces in the central city.

Montreal Street, a north-bound route, crosses the South Frame and Health Precinct and defines the east side of Cranmer Square. The cross-section around Cranmer Square varies to integrate this important public space. This variation is illustrated on pages 138–139.

Durham Street enjoys a varied and changing aspect as it moves south-bound. It fronts the main pedestrian and cycle access route to Victoria Square from the northwest at the intersection with Kilmore Street. It then forms the main address for the Provincial Chambers and becomes Cambridge Terrace as it follows Te Papa Ōtākaro/Avon River Precinct to the south. The concept cross-section for Cambridge Terrace is provided on pages 132–133.

The section between Lichfield and Tuam streets will be a two-way street to enable easy access to the off-street car park facilities in the Retail Precinct. This section also defines the west boundary of the Justice and Emergency Services Precinct and intersects with the new Promenade of Te Papa Ōtākaro/Avon River Precinct. Information on these anchor projects is provided in Chapter 6.

Madras Street is a north-bound street. It defines the east boundary of the East Frame and Innovation Precinct and the west boundary of the future Stadium. This street provides a key address to the new East Frame residential precinct. Madras Street also provides access to the Transitional Cathedral and defines the east boundary of Latimer Square, where the cross-section varies to integrate this public space. This variation is shown on pages 138–139.

Barbadoes Street is a south-bound street. It defines the east boundary of the Stadium Precinct and is the only street in this group that does not enter the slow inner zone (maximum 30km/h).

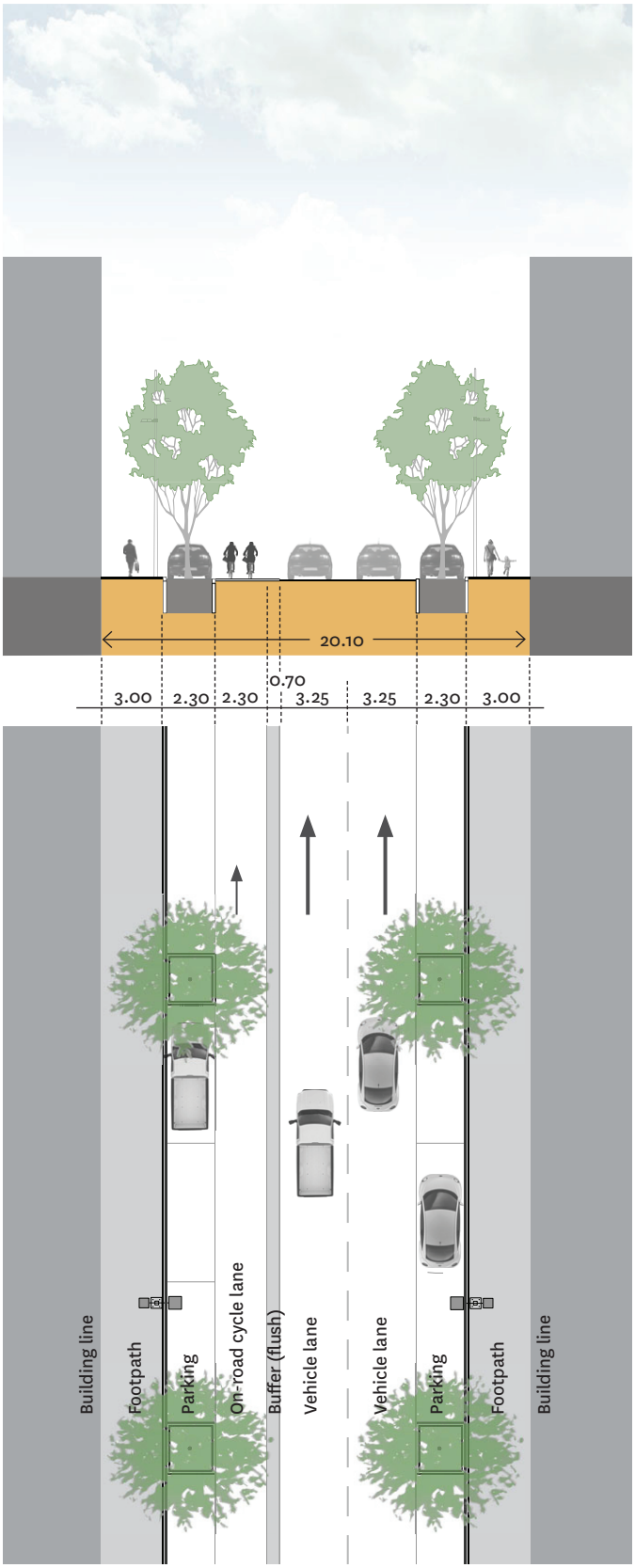
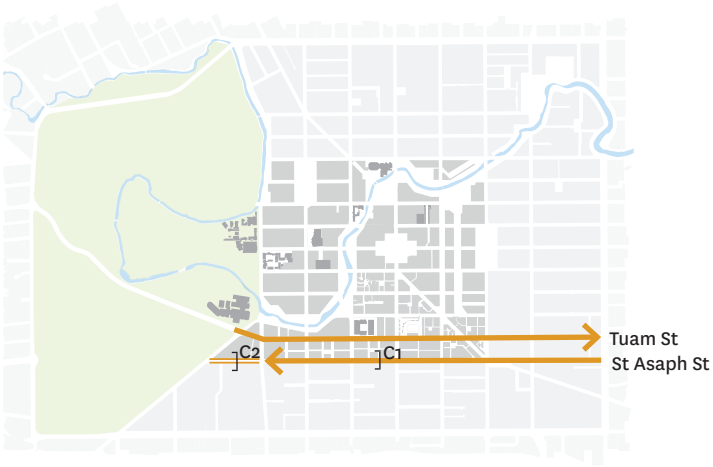


Figure 48 *Montreal, Durham, Madras and Barbadoes streets*

MOVING EAST AND WEST

Tuam and St Asaph streets



Key features

- Main distributor, one-way, east–west streets
- Key public transport routes
- Separated one-way cycle lanes on the left side of the street (relative to the direction of traffic, between Antigua and High streets) connecting with the Major Cycleways network outside the central city
- Key routes for general traffic access to the local network
- Pedestrian- and cycle-friendly 'inner zone' (maximum 30km/h) between Hagley Avenue and Madras Street
- Increased urban amenity through new street trees and some rationalisation of on-street parking

Characteristic tree

Tilia platyphyllos 'Broad-leaved lime'

Context

Tuam and St Asaph streets are planned as one-way streets that will accommodate significant traffic flows, key public transport routes and priority cycle connections. They will link public realm areas in the South Frame, the Metro Sports Facility and the Stadium Precinct, providing a green gateway to Hagley Park from the east.

Both streets are proposed to accommodate separated cycle lanes connecting with the wider cycle network to the west via Hagley Park and the south via High Street and Ferry Road. East of High Street, cycle continuity is provided by on-road cycle lanes.

Tuam Street has an essential role in providing high-quality, attractive and inviting access to the busy western-corridor bus route into the central city. It flows east-bound, connecting Hagley Park, the Health Precinct, the South Frame and the Justice and Emergency Services Precinct. Tuam Street is the primary entrance from the west to the new Bus Interchange and connects through the heart of the Innovation Precinct to the future Stadium's southern boundary. There will be one super stop located between Hagley Avenue and Antigua Street, where provision has been made to allow for buses travelling west-bound through to Riccarton Road.

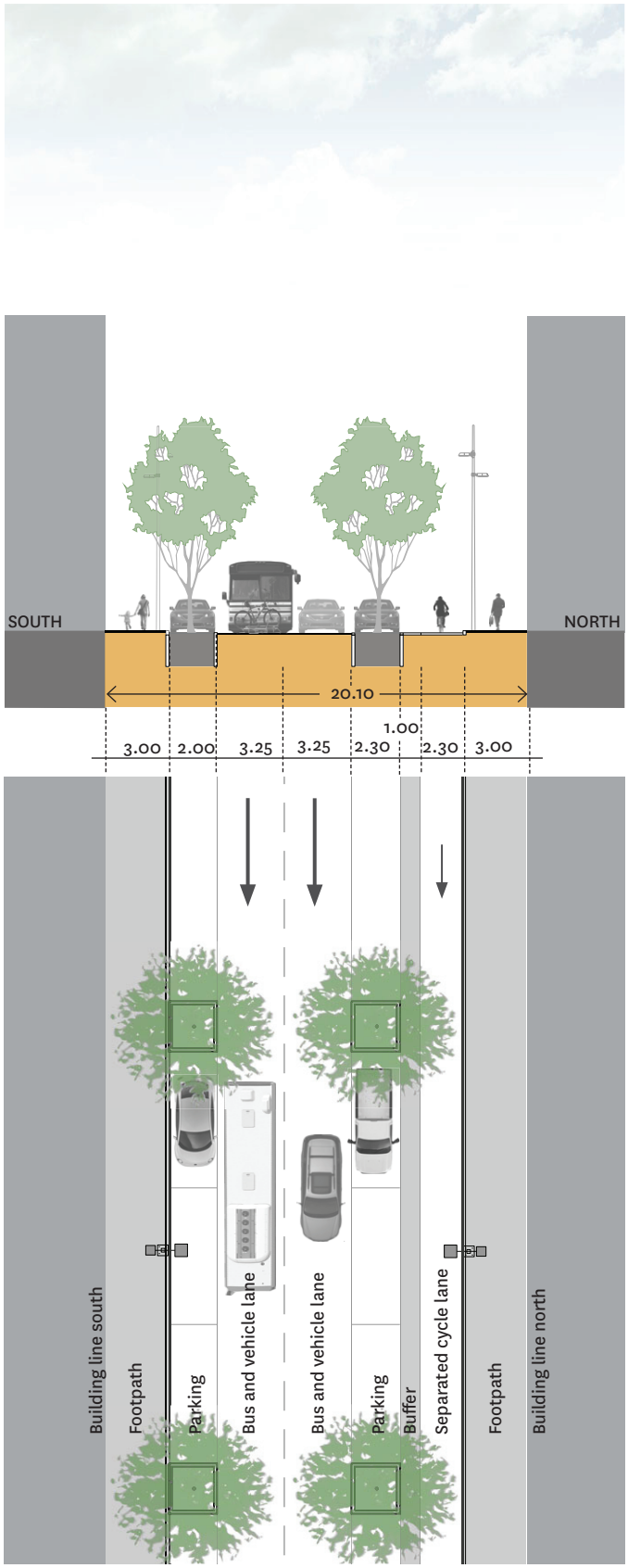
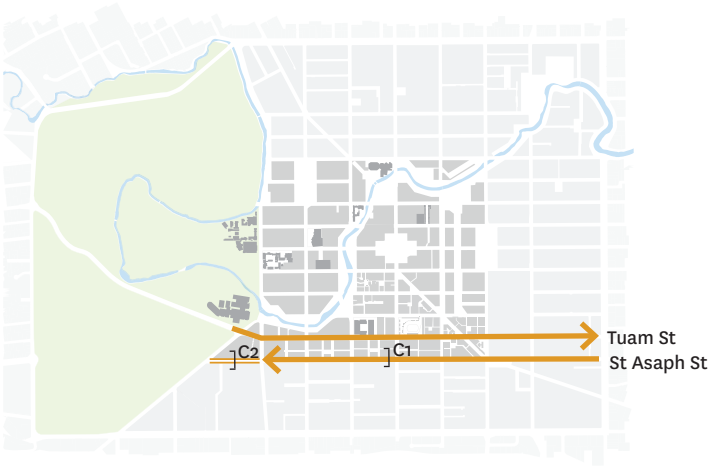


Figure 49 *Tuam Street, west of High Street*

MOVING EAST AND WEST

Tuam and St Asaph streets



St Asaph Street defines the south boundary of the South Frame, including the Health and Innovation precincts. It complements Tuam Street by moving road users westward. It provides the interface between the South Frame and the Health Precinct, and the northern boundary of the Metro Sports Facility. The intersection with High Street creates a key gateway to the city centre and a main access point to the CPIT campus.

Most of St Asaph Street is an over-dimensional route. To address this requirement and provide a separated cycleway, on-street car parking is only provided on the north side of the street. The section of St Asaph Street between Antigua Street and Hagley Avenue has a shared path on the south side of the street. This section provides a key cycle connection to Hagley Park, the Metro Sports Facility and the priority cycle route along Antigua Street.

As part of the South Frame's new public realm network, there will be a series of north–south connections between Tuam and St Asaph streets in the form of shared streets. The connections and interface between these shared streets and Tuam and St Asaph streets provide a great opportunity to maximise the South Frame's public realm asset. Managing the interface between pedestrians, vehicles and cyclists is very important.

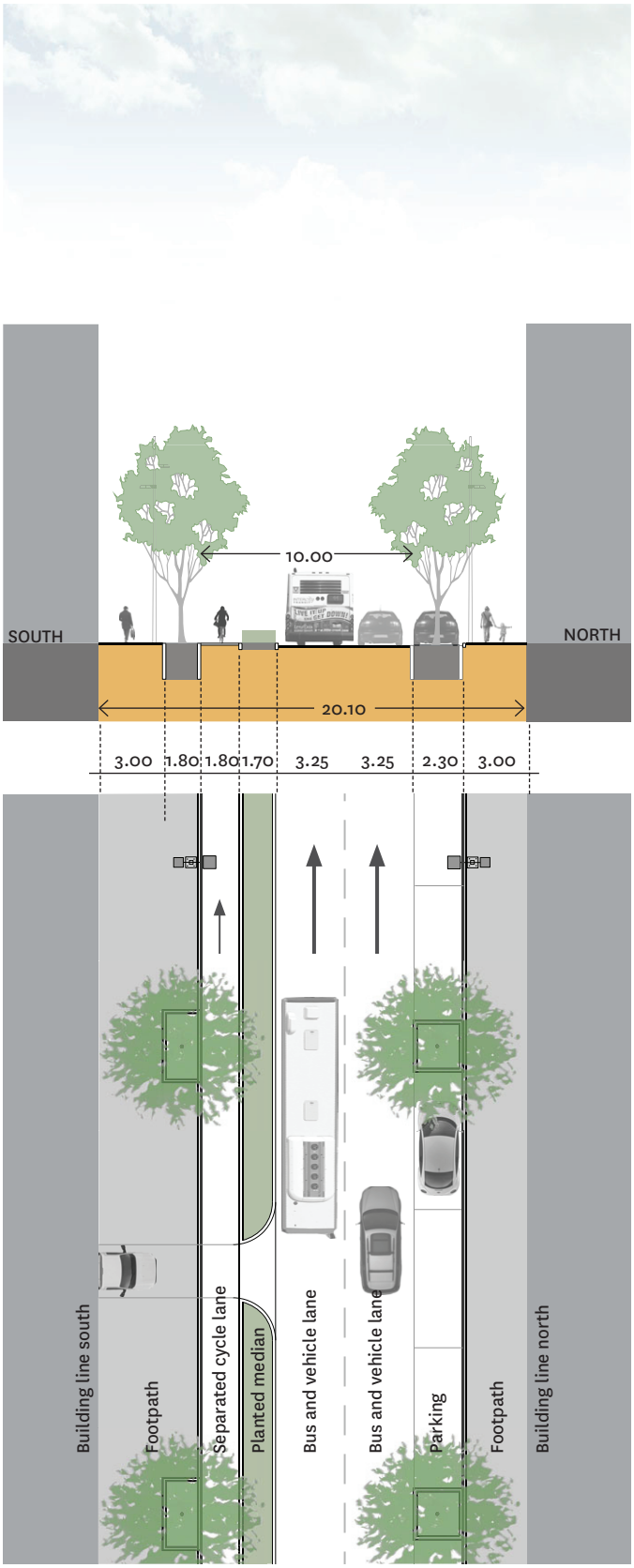


Figure 50 *C1 – St Asaph Street, west of High Street*

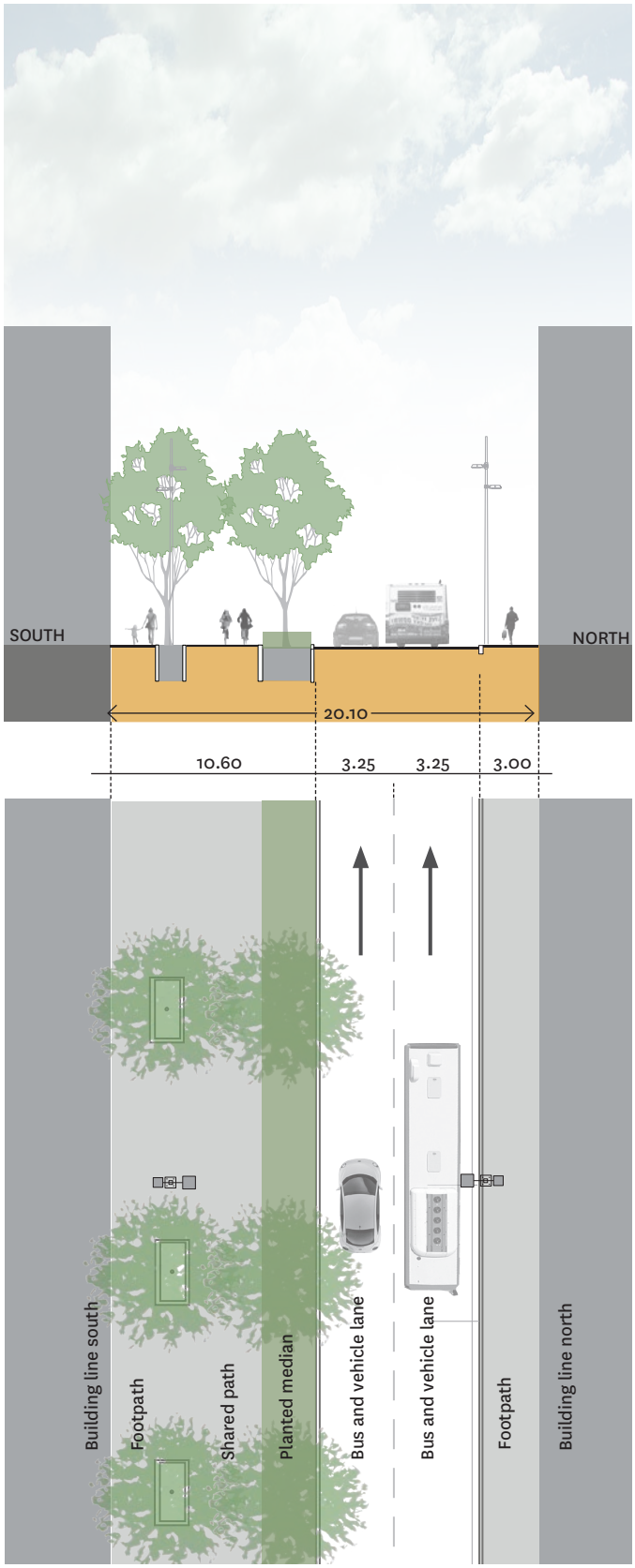


Figure 51 *C2 – St Asaph Street at Metro Sports Facility*

Colombo Street (north), Salisbury Street and Ferry Road

Key features

- Two-way streets
- Cycle priority routes outside the central city low-speed zone, with separated cycle lanes in both directions
- Connect the heart of the city centre with the Major Cycleway network to the north, east and west
- Accommodate public transport routes along Colombo Street, Ferry Road and a small section of Salisbury Street
- Colombo Street is a key pedestrian connection to Cathedral Square
- Increased urban amenity through new street trees and some rationalisation of on-street parking

Characteristic trees

Colombo Street: *Quercus palustris* 'Pin oak'

Salisbury Street: *Tilia platyphyllos* 'Broad-leaved lime'

Ferry Road: Existing underground services impede tree planting

Context

Colombo Street is the primary north–south pedestrian and cycling route through the heart of the city. The uses along this section are mainly small-scale commercial, residential and hospitality, which contrast with the large civic and retail activity to the south of the corridor. The design concept of the cross-section focuses on integrating separated cycle lanes and on increasing the pedestrian amenity for local land uses.

Salisbury Street connects Hagley Park with Te Papa Ōtākaro/Avon River Precinct and is the main east–west cycle connection in the north of the central city. This street provides access to a range of local hospitality, residential and commercial uses.

The junction with Victoria Street is one of the gateways into the city from the north. Salisbury Street will return to a two-way street and the proposed cycle facilities will be introduced at that time. The new separated cycle lanes will integrate with the improved carriageway of those sections of Salisbury Street that have been repaired since the earthquakes.

Ferry Road provides continuity to the High Street gateway corridor to the southwest. It accommodates key cycle and public transport routes and provides access to the CPIT campus.

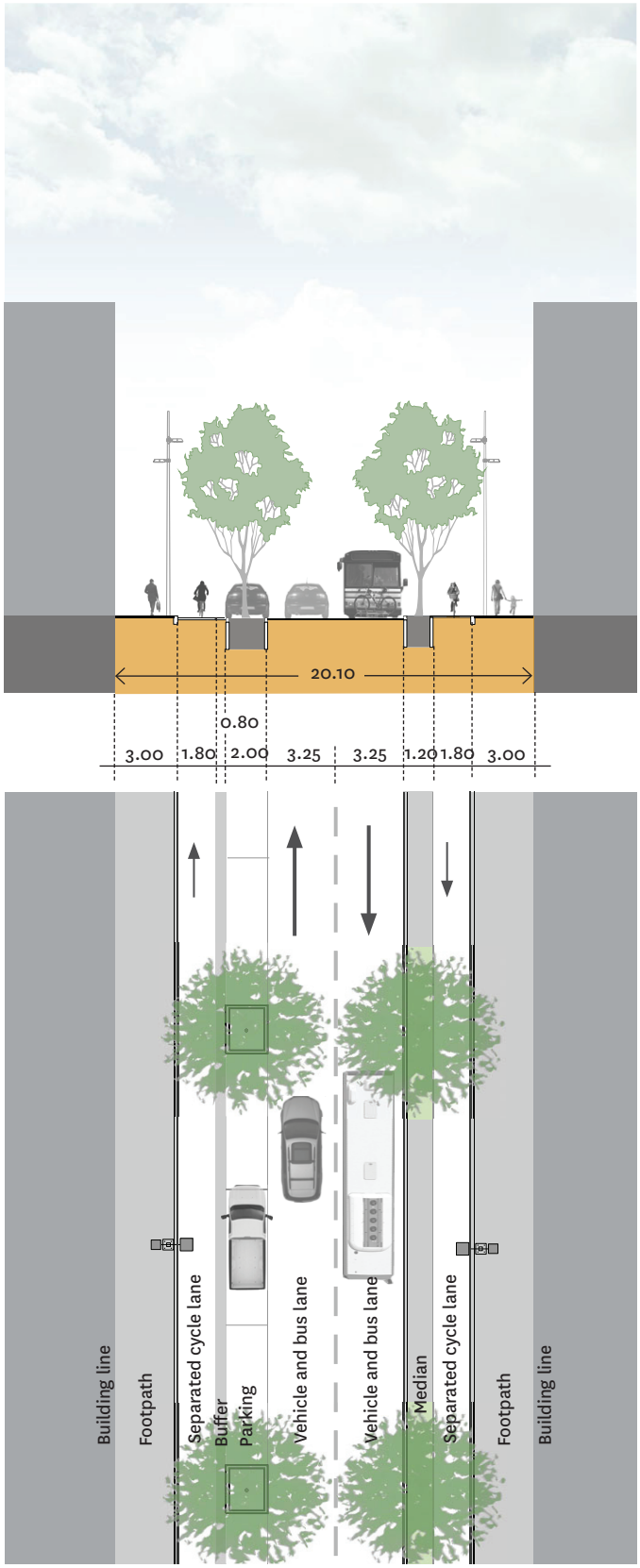


Figure 52 *Colombo Street (north), Salisbury Street and Ferry Road*

MOVING WITHIN THE CITY

Kilmore, Gloucester and Hereford streets and Manchester Street (outer zone)

Key features

- Two-way streets
- Public transport accommodated in some sections
- Include sections of pedestrian-friendly 'inner zone' slow streets (maximum 30km/h)
- Connect many of the city's cultural, event, retail and residential venues and precincts
- On-road cycle lanes
- Provide vehicular access from the north–south main distributor streets into the finer grain of the city Core
- Increased urban amenity through new street trees and some rationalisation of on-street parking
- Kilmore Street will change to a two-way street

Characteristic trees

Kilmore Street: *Tilia platyphyllos* 'Broad-leaved lime'

Gloucester and Hereford streets: *Corylus colurna* 'Turkish hazel'

Manchester Street: *Liriodendron tulipifera* 'Tulip tree'

Context

These streets connect established and new areas in the central city, including the well-known Botanic Gardens, Canterbury Museum and New Regent Street; the new Te Papa Ōtākaro/Avon River, Retail, Convention Centre and Performing Arts precincts; the new Central Library; and the East Frame residential precinct.

With the range of uses, quality of the amenities and the connectivity these streets offer, pedestrian demands on these spaces will be high. Tourists, city workers, visitors and inner city residents alike will use these streets to move around the city. It is important, therefore, that these streets provide an environment that supports people's enjoyment of the public and private spaces in the city.

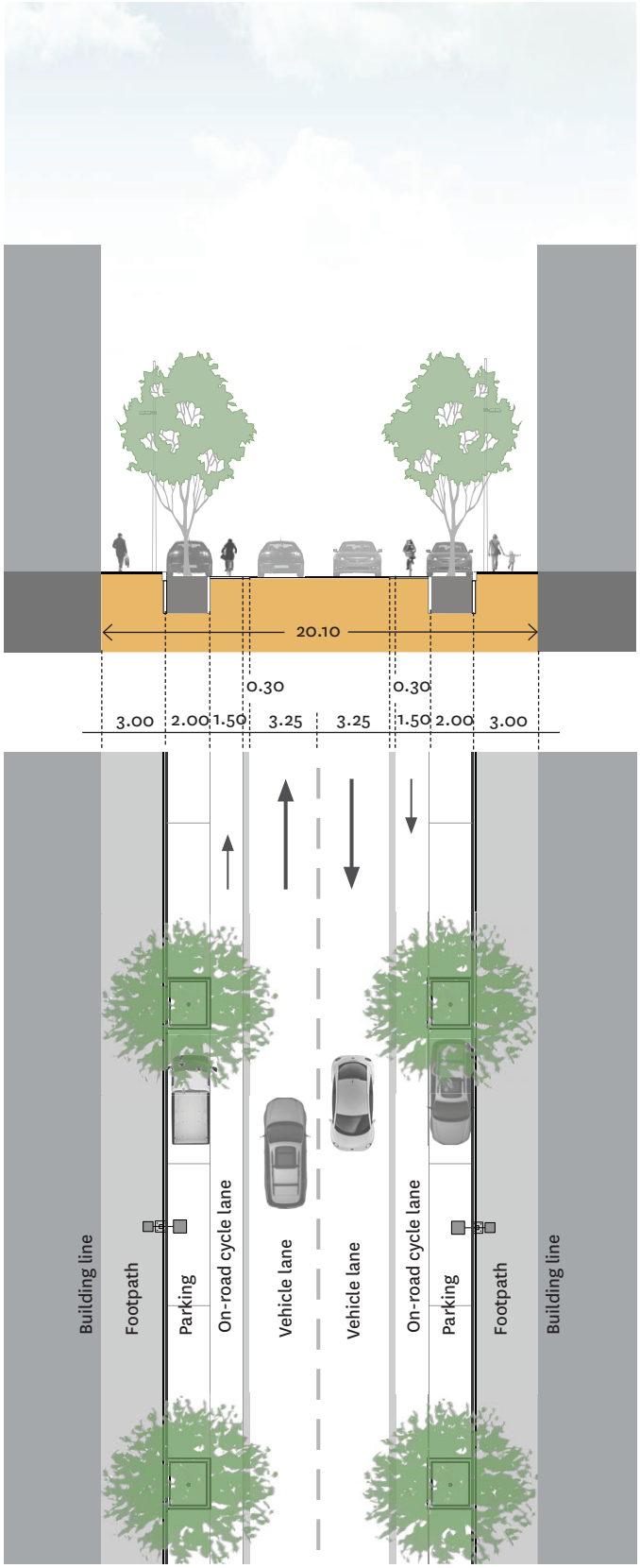
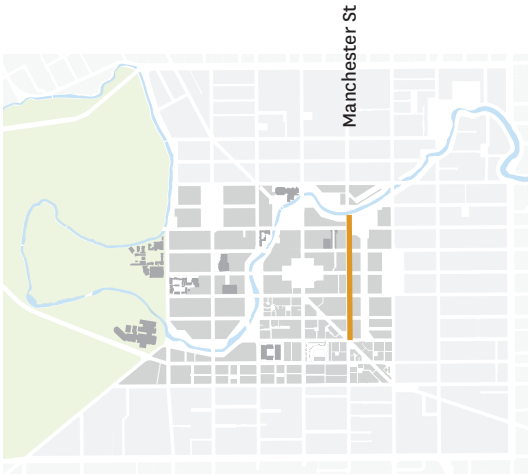


Figure 53 *Kilmore, Gloucester and Hereford streets and Manchester Street (outer zone)*

PUBLIC TRANSPORT ROUTE

Manchester Street



Key features

- Bus priority route into the city with priority bus lanes and a super stop located between Gloucester and Hereford streets
- Tree-lined, two-way street
- Widened road corridor
- Wide footpaths
- Pedestrian-friendly 30km/h 'inner zone' between Kilmore and St Asaph streets

Characteristic tree

Liriodendron tulipifera 'Tulip tree'

Context

Manchester Street is the main north–south public transport corridor in the central city. The section between Armagh and Lichfield streets will be widened to create a distinctive tree-lined street. Buses will have priority lanes and signal pre-emption, and pedestrians will enjoy wide footpaths

Manchester Street is within the slow inner zone and provides a main address to the new East Frame residential precinct.

The concept cross-section for Manchester Street will have slight variations from block to block to integrate specific site conditions and movement requirements. A new bus super stop will be located between Gloucester and Hereford streets, with easy access to Worcester Boulevard, a main east–west pedestrian and cycling route.

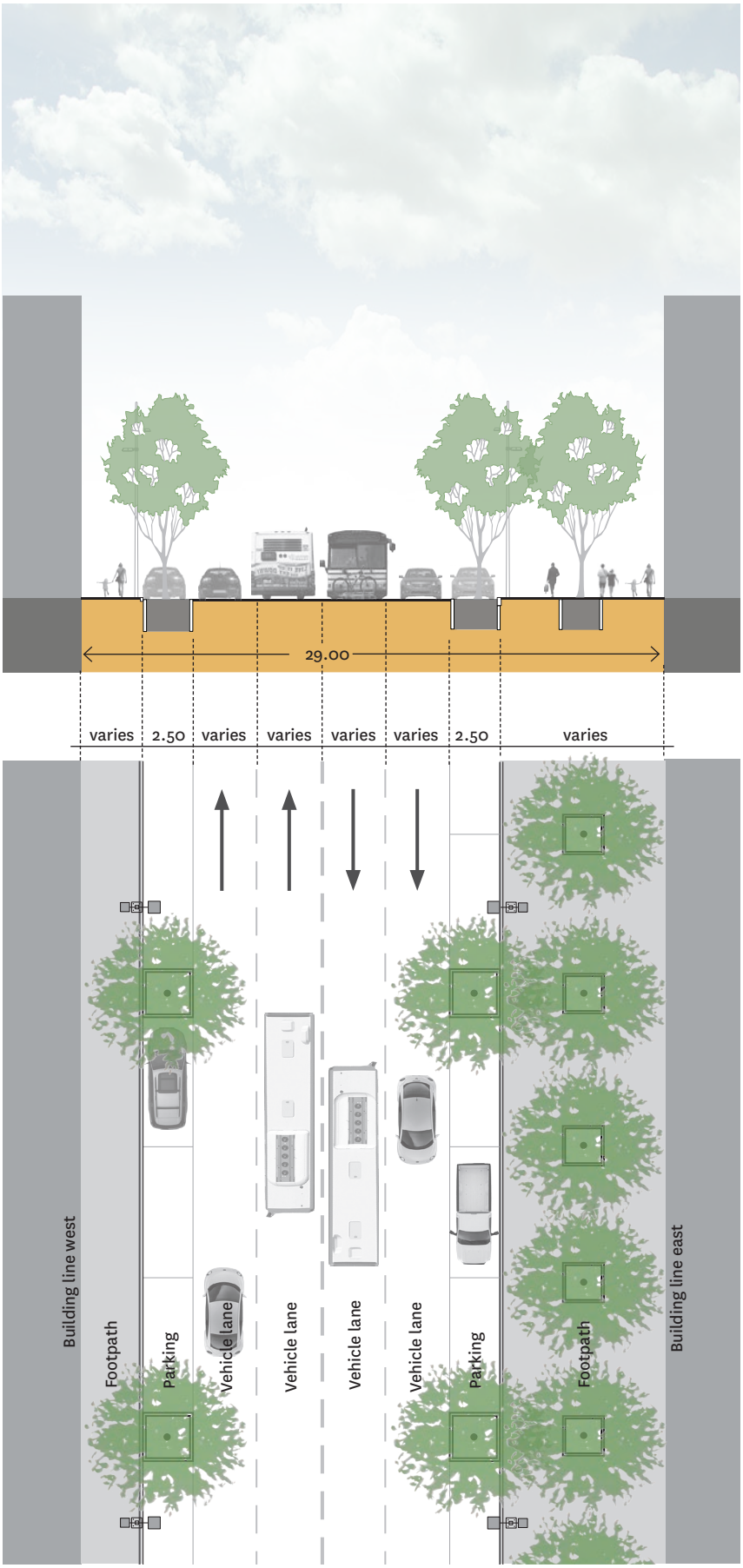


Figure 54 *Manchester Street (inner zone)*

THE ŌTĀKARO/AVON RIVER PROMENADE

Oxford Terrace

Key features

- Provides a new interface between the Ōtākaro/Avon River corridor and the city
- One-way, shared street
- Designed for slow speed (maximum 10km/h) to enable pedestrian and cycling priority
- River-side section of the tram route between Worcester Street and Cashel Mall
- Increased urban amenity through new street trees and rain gardens
- Distinctive pavement treatments and materials
- Access for private and servicing vehicles provided

Characteristic trees

Acer rubrum 'Red maple' and *Sophora microphylla* 'Kōwhai'

Context

The Ōtākaro/Avon River Promenade follows the existing alignment of Oxford Terrace and is one of the main components of the design for Te Papa Ōtākaro/Avon River Precinct. The Promenade will redefine the interface between the city and the east side of the river corridor in the form of a shared street. The design for this street emphasises the amenity of the river and prioritises pedestrians and cyclists while maintaining vehicular access. It will offer an attractive, slow-speed environment to enjoy the river's open space along with the retail, cafés, bars and activities on the urban edge of the corridor.

The Promenade is one of the few streets in the central city that meanders alongside the river, off the grid, and enjoys a significant number of established trees. These features will be strengthened and complemented by the Promenade design, new trees, rain gardens and special pavement treatments. The overall design aims to consolidate Ōtākaro/Avon River as a real asset, attraction and draw-card for the city.

The Promenade will provide a main address to the Convention Centre and Retail precincts and to the Health Precinct in the South Frame. Detailed information on Te Papa Ōtākaro/Avon River Precinct is provided in Chapter 6.

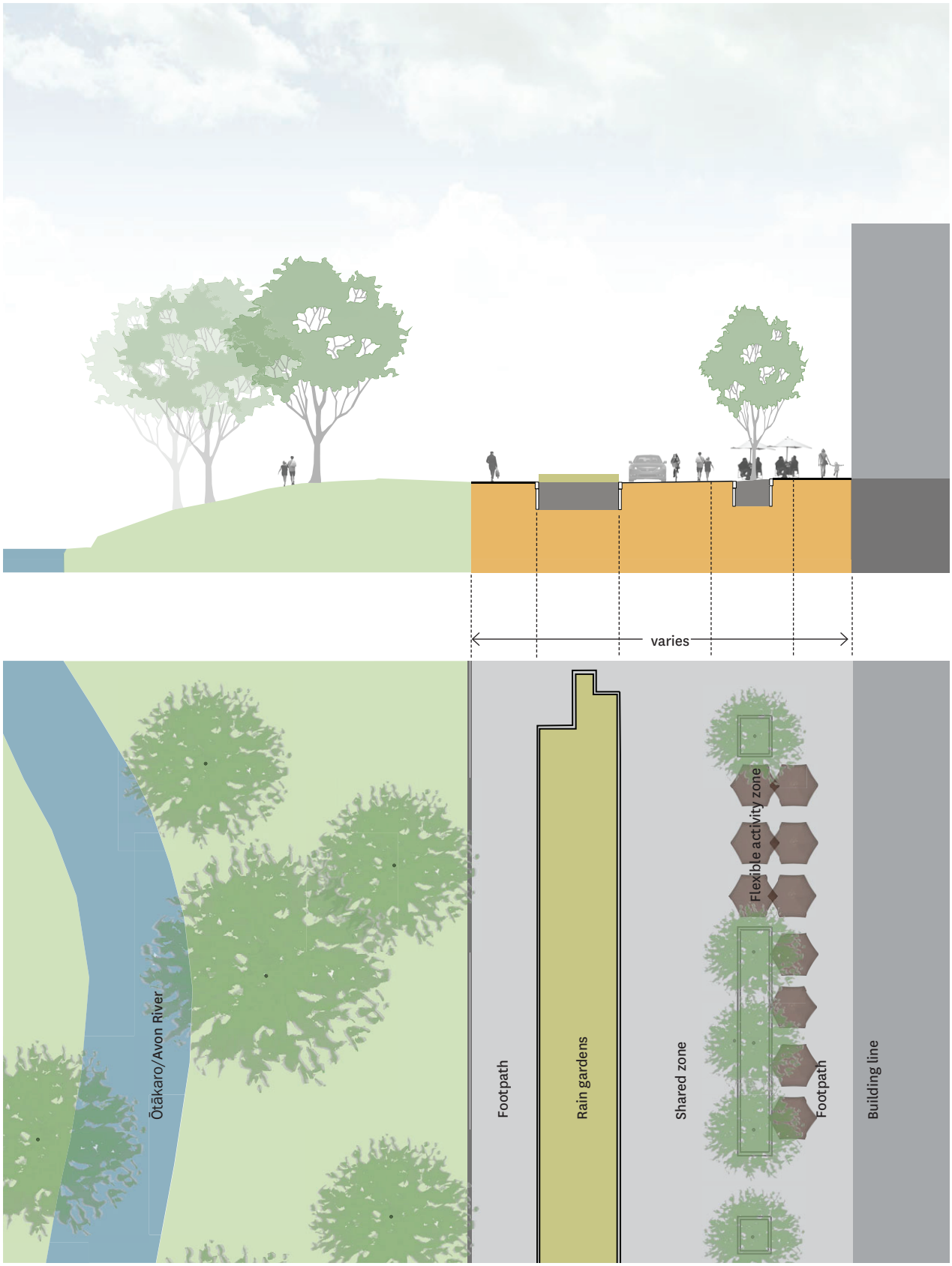


Figure 55 *Oxford Terrace – The Ōtākaro/Avon River Promenade*

PROVIDING PUBLIC TRANSPORT AND VEHICULAR ACCESS

Lichfield Street (Core)

Key features

- Two-way, east–west street within the pedestrian-friendly 'inner zone'
- Main bus access route from Manchester Street into the new Bus Interchange
- Accommodates main entrances and public space in front of the Bus Interchange and the Justice and Emergency Services Precinct
- Key pedestrian connections across and along the street
- Wide footpath on the south side of the street
- A 'Barnes dance' pedestrian crossing at the Colombo Street intersection
- Integrates location for taxi rank and intercity coaches in front of the Bus Interchange
- Vehicle access route to parking facilities servicing the Retail and Justice and Emergency Services precincts
- For safety, there are no designated cycle lanes on this street
- Increased urban amenity through new street trees
- Some on-street parking on selected locations, together with coach stops and taxi ranks adjacent to the Bus Interchange

Characteristic tree

Tilia platyphyllos 'Broad-leaved lime'

Context

Lichfield Street defines significant street frontages for the new Bus Interchange, the Retail, Justice and Emergency Services and Innovation precincts, and the East Frame. The street is bookended to the west by Te Papa Ōtākaro/Avon River Precinct and to the east by the future Stadium.

Lichfield Street is a key access route to the new Bus Interchange and to a number of off-street parking buildings servicing the Retail and Justice and Emergency Services precincts. Accordingly, the concept cross-section seeks to provide for vehicular access while ensuring bus movements are unimpeded.

The south side of the street has a widened footpath which provides a congregating space for commuters using the Bus Interchange and visitors to SOL Square and the Justice and Emergency Services Precinct.

A pedestrian priority crossing at the intersection with Colombo Street, along with other secondary crossing points, enables easy pedestrian access to the Retail Precinct to the north of the street.

A taxi rank and the intercity coach pick-up and drop-off points are located in front of the Bus Interchange, making the most of the north-facing frontage.

The section east of Manchester Street provides access to the new East Frame residential precinct and the Innovation Precinct. This section accommodates the tram route and therefore a specific design will need to be prepared to accommodate this feature.

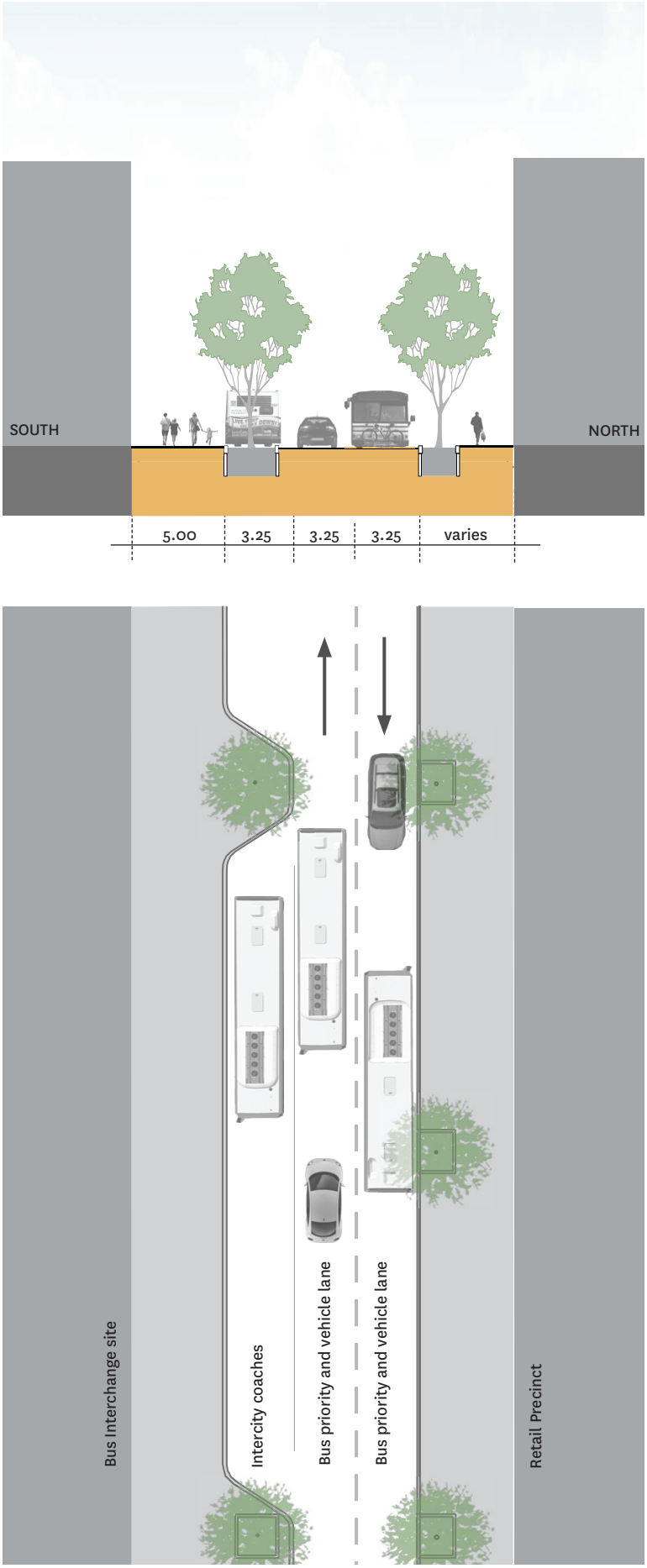
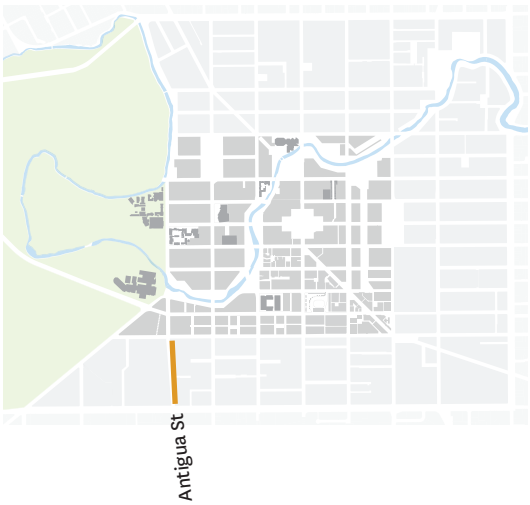


Figure 56 *Lichfield Street at Bus Interchange*

CONNECTING CYCLES TO THE SOUTH

Antigua Street

(between St Asaph Street and Moorhouse Avenue)



Key features

- Two-way street
- Priority cycle street with separated cycle lanes in both directions
- On-street parallel parking integrated with street trees, including provision for coach drop-off for the Metro Sports Facility
- Key frontage for the Metro Sports Facility
- Wide footpath in front of the Metro Sports Facility
- Increased urban amenity through new street trees

Characteristic tree

Liriodendron tulipifera fastigiata 'Upright tulip tree'

Context

Antigua Street will provide a green frontage to the east boundary of the new Metro Sports Facility.

This street is a priority cycleway linking the cycleway along Park Terrace and Ōtākaro/Avon River to the north with the major cycleway south of Moorhouse Avenue.

The Metro Sports Facility building along this frontage is set back from the title boundary, allowing for additional space for pedestrians and street trees. The streetscape concept integrates with the proposed landscaped areas in front of the building.

The streetscape and amenity of the street provide a fitting and attractive address for this world-class facility.

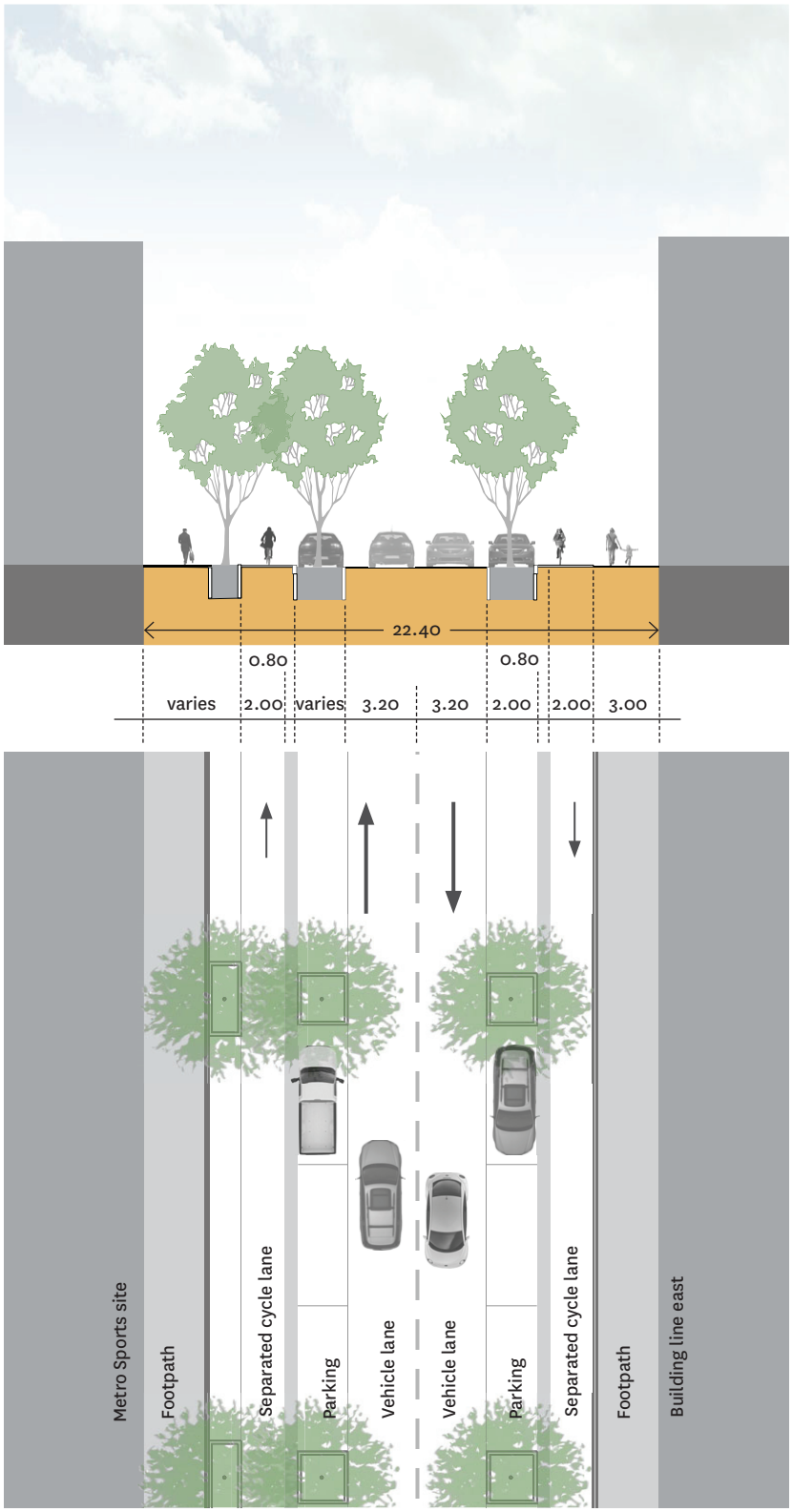
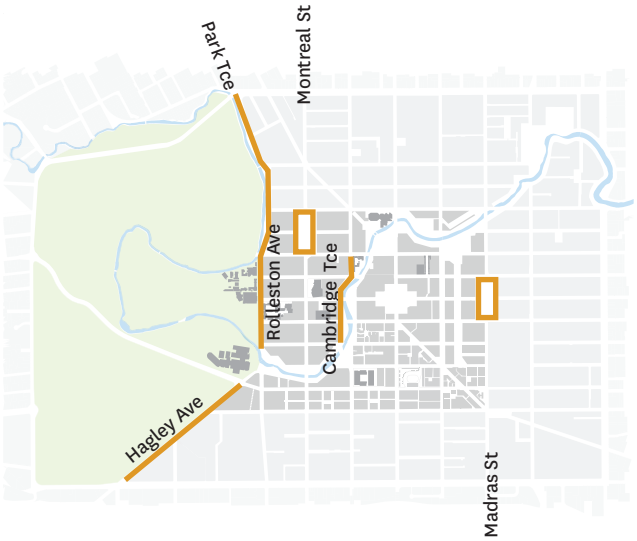


Figure 57 *Antigua Street at Metro Sports Facility*

STREETS ADJACENT TO OPEN SPACES

Cambridge and Park terraces, Rolleston and Hagley avenues, and Montreal and Madras streets



The cross-sections in this group are streets adjacent to or connecting key green public open spaces; however, they differ in their layouts and space allocations.

They provide visual and physical integration between the street network and key green public spaces.

They are major contributors to the delivery of 'a green city', a key theme guiding the Recovery Plan.

Cambridge Terrace interface with Ōtākaro/Avon River

Characteristic tree: *Liriodendron tulipifera* 'Tulip tree'

This one-way, south-bound main distributor street is adjacent to Ōtākaro/Avon River.

Between Cashel and Gloucester streets there is a two-way separated cycleway integrated into the design for Te Papa Ōtākaro/Avon River Precinct. This cycle lane continues to the north (between Gloucester and Armagh streets) as a shared path in front of the Provincial Chambers. No on-road cycle lane is provided along this section.

Street trees and on-street parking are accommodated along the west side of the street.

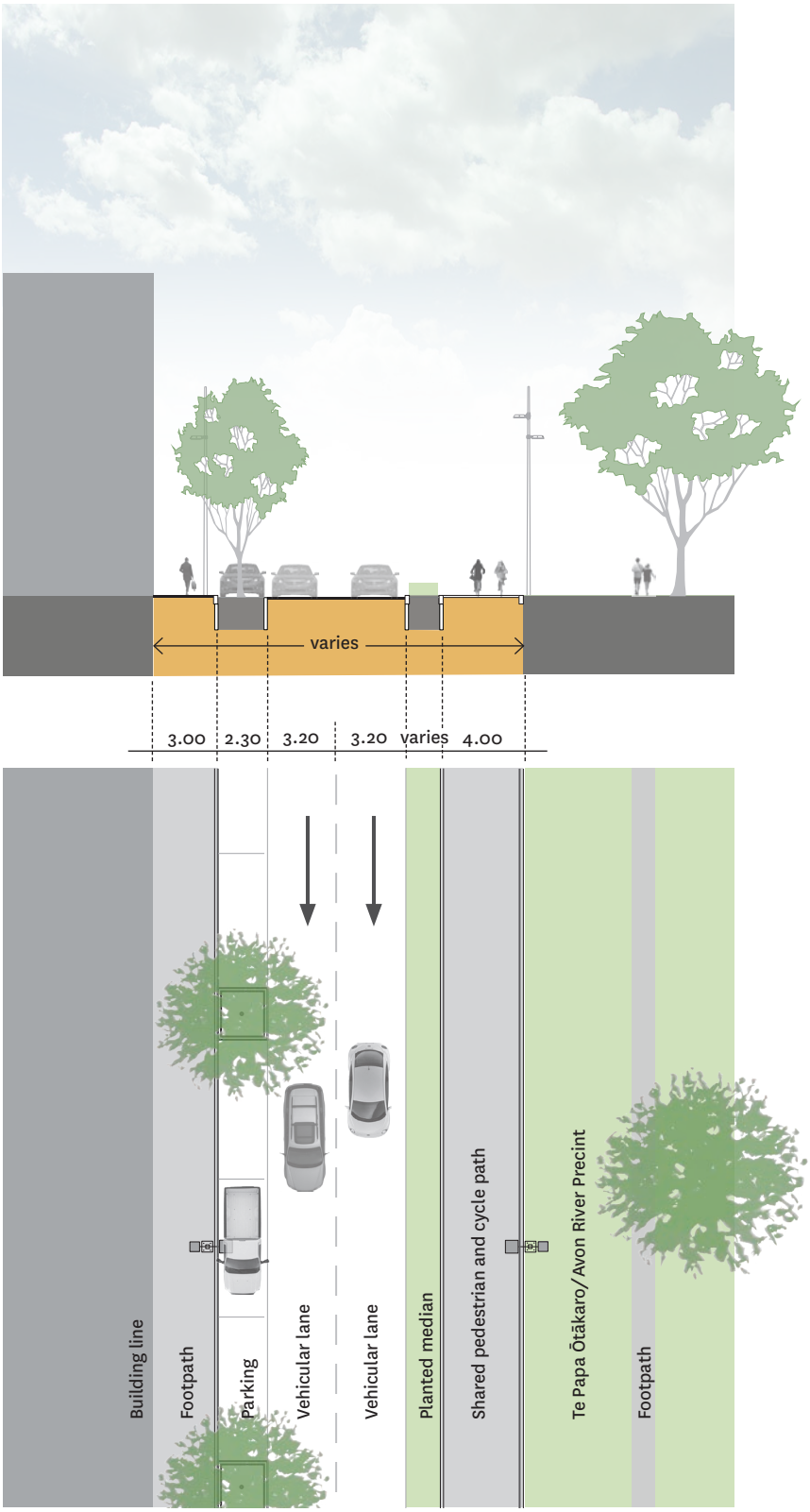
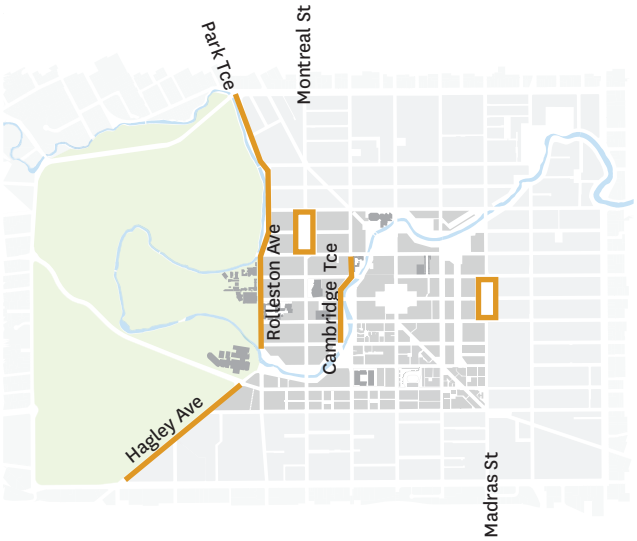


Figure 58 *Cambridge Terrace*

STREETS ADJACENT TO OPEN SPACES

Cambridge and Park terraces, Rolleston and Hagley avenues, and Montreal and Madras streets



Park Terrace and Rolleston and Hagley avenues interface with Hagley Park

These streets define the east boundary of Hagley Park.

Park Terrace

Characteristic tree: *Quercus robur* 'English oak'

- Park Terrace is a two-way local access street.
- This cycle priority street has separated, bidirectional cycle lanes on its west side.
- Street trees are integrated with on-street parking on both sides.
- The footpath is integrated with the park area.

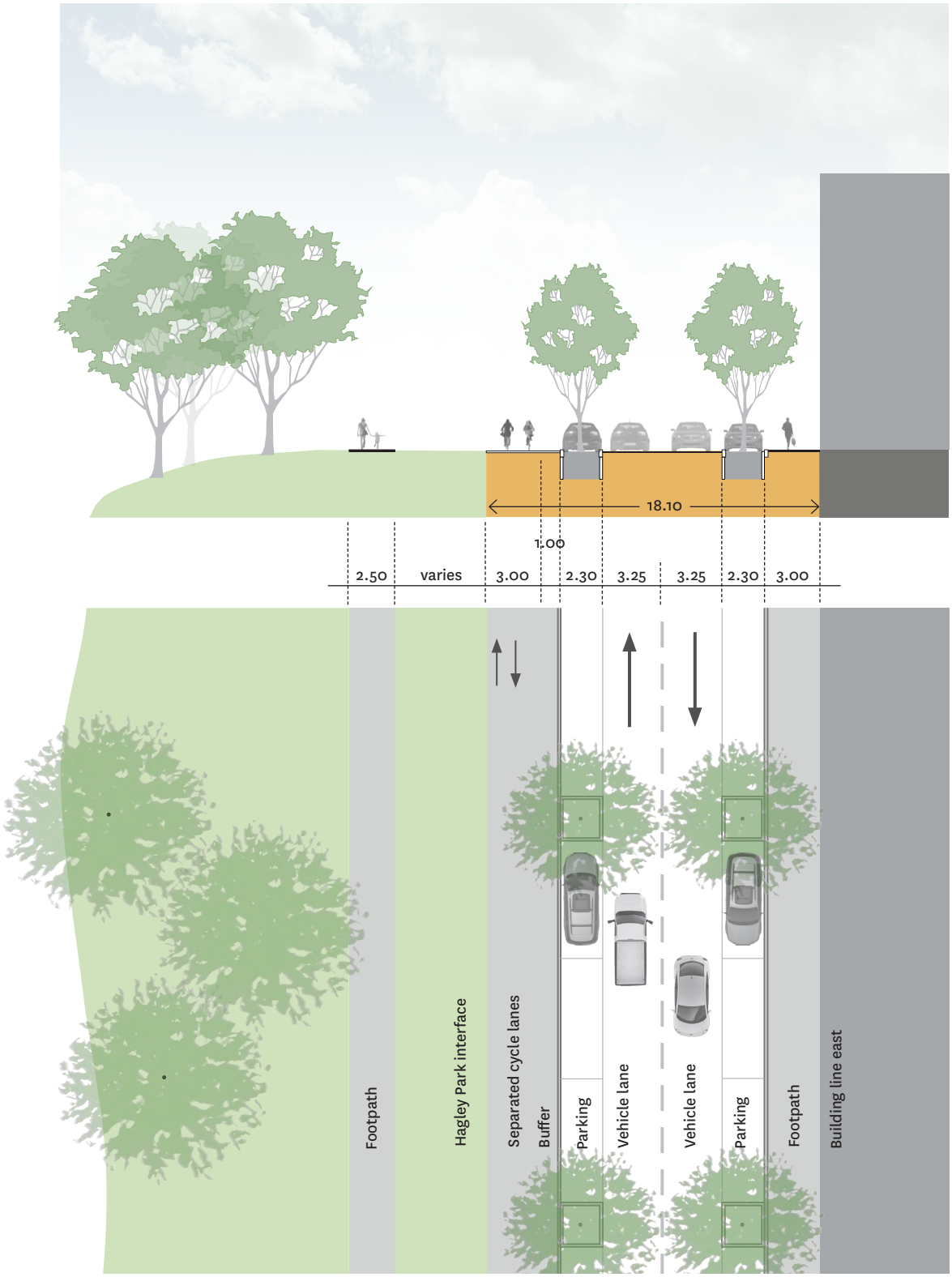
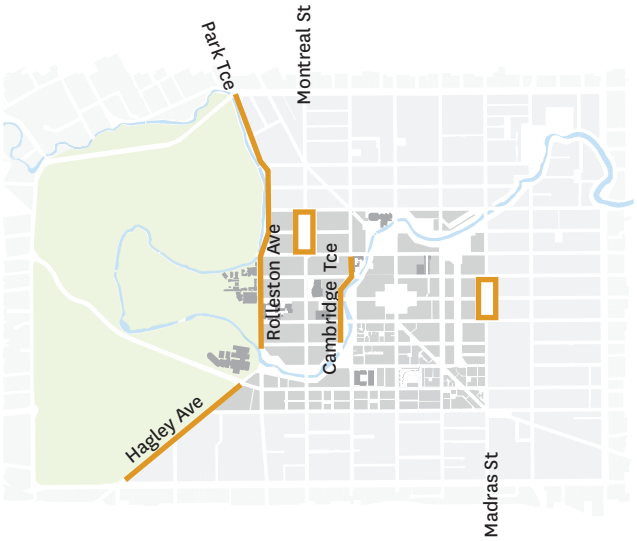


Figure 59 *Park Terrace, north of Armagh Street*

STREETS ADJACENT TO OPEN SPACES

Cambridge and Park terraces, Rolleston and Hagley avenues, and Montreal and Madras streets



Rolleston Avenue

Characteristic tree: to be defined

Rolleston Avenue is the continuation of Park Terrace from Armagh Street to the Ōtākaro/Avon River.

This street requires a tailored design to accommodate the existing tram tracks and space requirements for the operation of tourist coaches. In addition, the design should integrate the space in front of the Canterbury Museum and the Botanic Gardens. The concept design is to be developed.

Hagley Avenue

Characteristic tree: *Prunus x yedoensis* 'Cherryk'

Hagley Avenue has two main sections.

The section between Selwyn Street and Moorhouse Avenue:

- is a one-way, south-bound, local access street
- accommodates on-street car parking, angled on the west side and parallel on the east side
- integrates new street trees with on-street parking on both sides.

The section between Tuam and Selwyn streets is:

- a two-way street
- a key bus route.

A widened shared path for cycling and walking will be provided within Hagley Park, parallel to Hagley Avenue, between Moorhouse Avenue and Tuam Street.

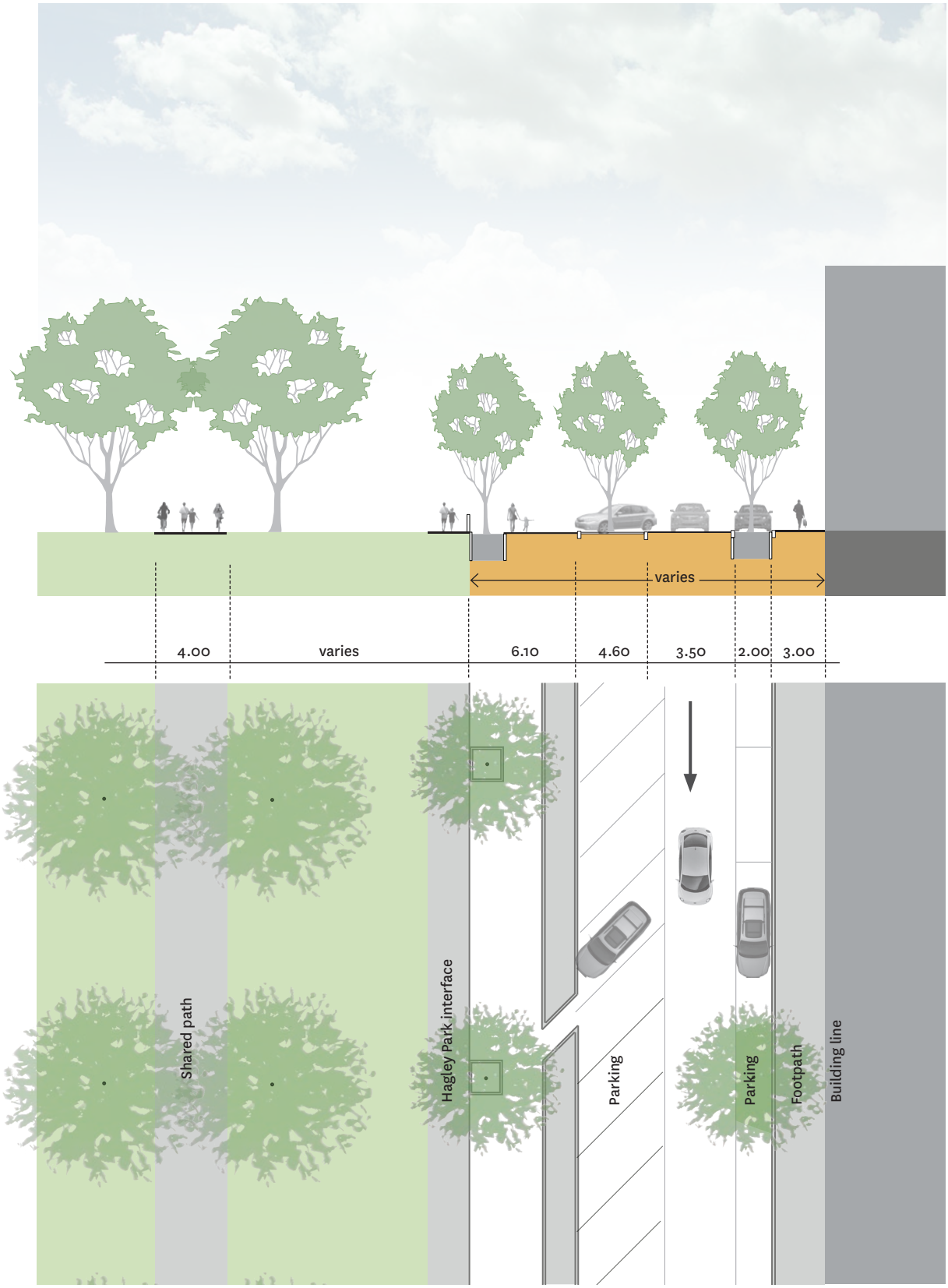
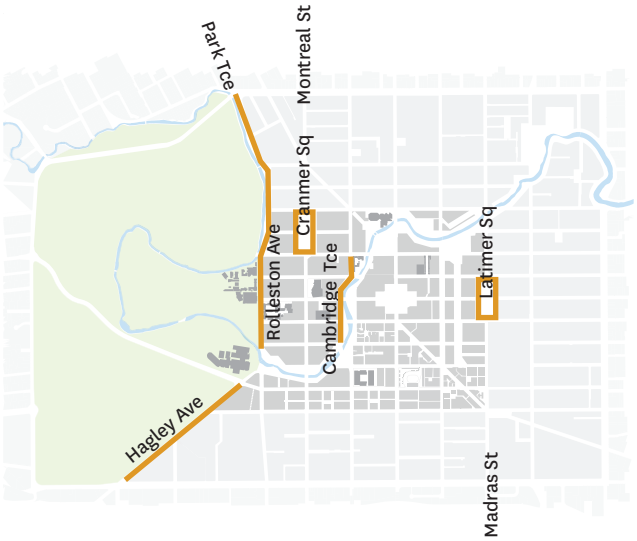


Figure 60 *Hagley Avenue, south of Selwyn Street*

STREETS ADJACENT TO OPEN SPACES

Cambridge and Park terraces, Rolleston and Hagley avenues, and Montreal and Madras streets



Latimer and Cranmer squares

Latimer and Cranmer squares are bounded by main distributor streets to the east and local access streets to the west.

Latimer and Cranmer squares interface with Madras and Montreal streets

Features of this boundary are:

- one-way, north-bound, main distributor streets
- on-street parallel parking to both sides
- new landscaping along the eastern footpath, which extends the visual boundary of the squares
- shared path and landscaped strip to the west side.

West boundary of Latimer and Cranmer squares

Features of this boundary are:

- two-way local access streets
- street trees integrated with on-street parking
- parallel parking along built edge and right-angled parking along park edge
- no designated on-street cycle lane.

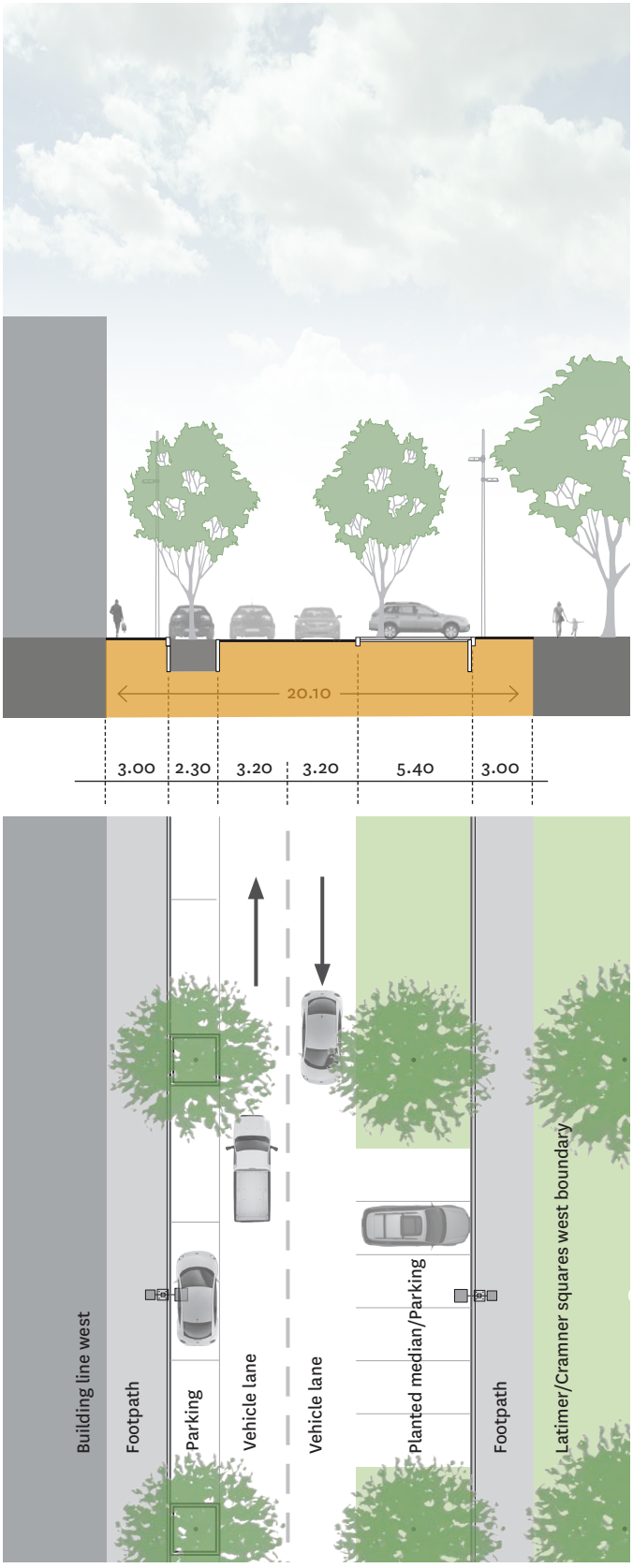


Figure 61 *Latimer and Cranmer squares, west boundary*

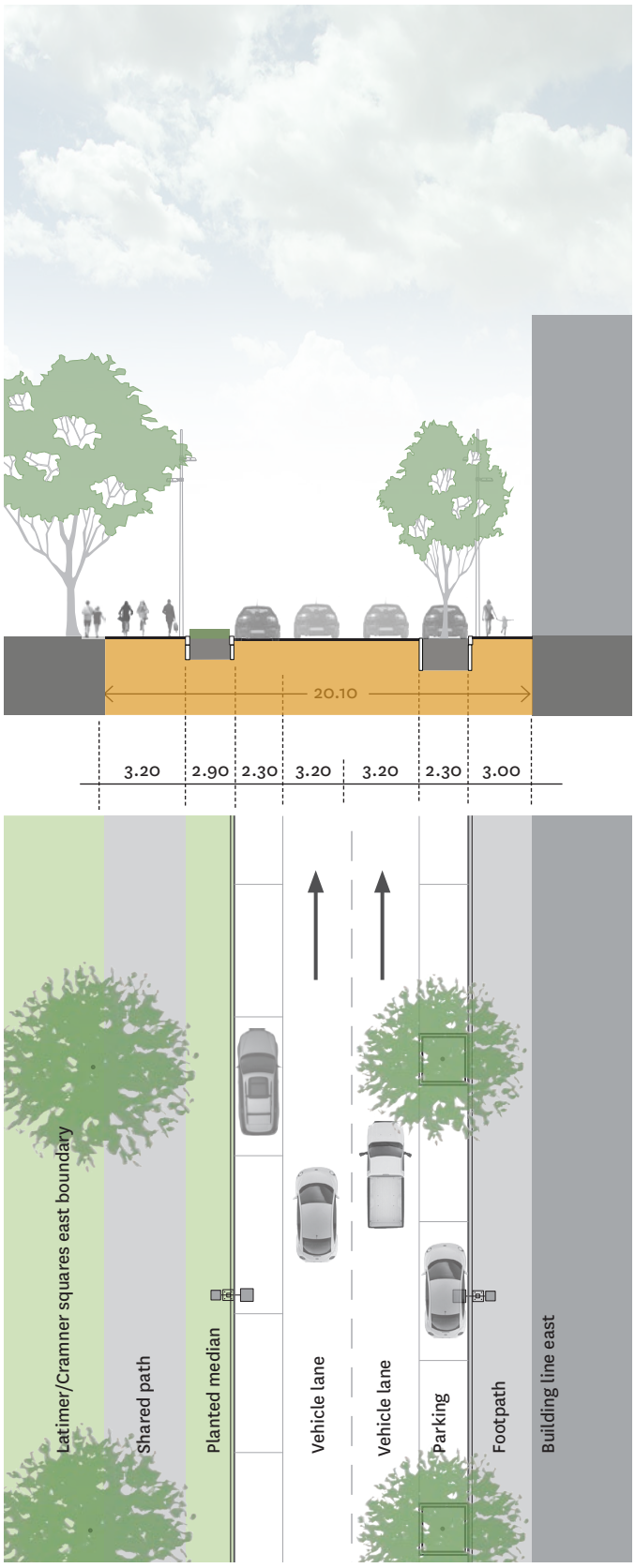


Figure 62 *Latimer and Cranmer squares, east boundary (Montreal and Barbadoes streets)*

TRAM STREETS

Worcester Boulevard (west), High Street, Armagh Street, City Mall, Rolleston Avenue

A standard concept cross-section for central city streets that accommodate a tram route is not applicable because often the alignment of the tram tracks varies within the block and from block to block. These streets therefore require customised designs to integrate the varying tram alignment and respond to specific site conditions. The illustrations in this section show some of the existing configuration of tram streets.

General key features

- Within the pedestrian-friendly, slow (maximum 30km/h) 'inner zone', tram operates at a slower speed of 6km/h
- Tourist routes
- A variety of roles and functions as identified in Accessible City's central city road use hierarchy (Figure 28, page 81)
- Worcester Boulevard, High Street and City Mall are key walking routes; Armagh Street (west) is a local access street

Context

Tram streets differ in their roles in the street network, but all benefit from the character and charm the tram brings to the public realm.

The tram route connects a series of streets, open spaces and anchor projects including the Botanic Gardens, Canterbury Museum, Arts Centre, Ōtākaro/Avon River, Cathedral Square, New Regent Street, and the Performing Arts and Convention Centre precincts.

In general, tram streets should:

- celebrate the trams and related infrastructure as assets for the street and the city
- integrate tram infrastructure to create safe, attractive and functional streets
- accommodate a clear zone of a minimum of 2 metres from the centre of tracks.

City Mall (Cashel Street between Oxford Terrace and High Street)

Characteristic tree: *Acer rubrum columnare* 'Upright red maple'

- City Mall is a pedestrian priority street (refer to page 72 for the characteristics of this type of street).
- As the central spine of the Retail Precinct, it connects a new network of laneways and courtyards.
- It is bookended by Te Papa Ōtākaro/ Avon River Precinct and the Bridge of Remembrance to the west and the future Stadium Precinct to the east.
- Figure 63 shows the existing configuration.

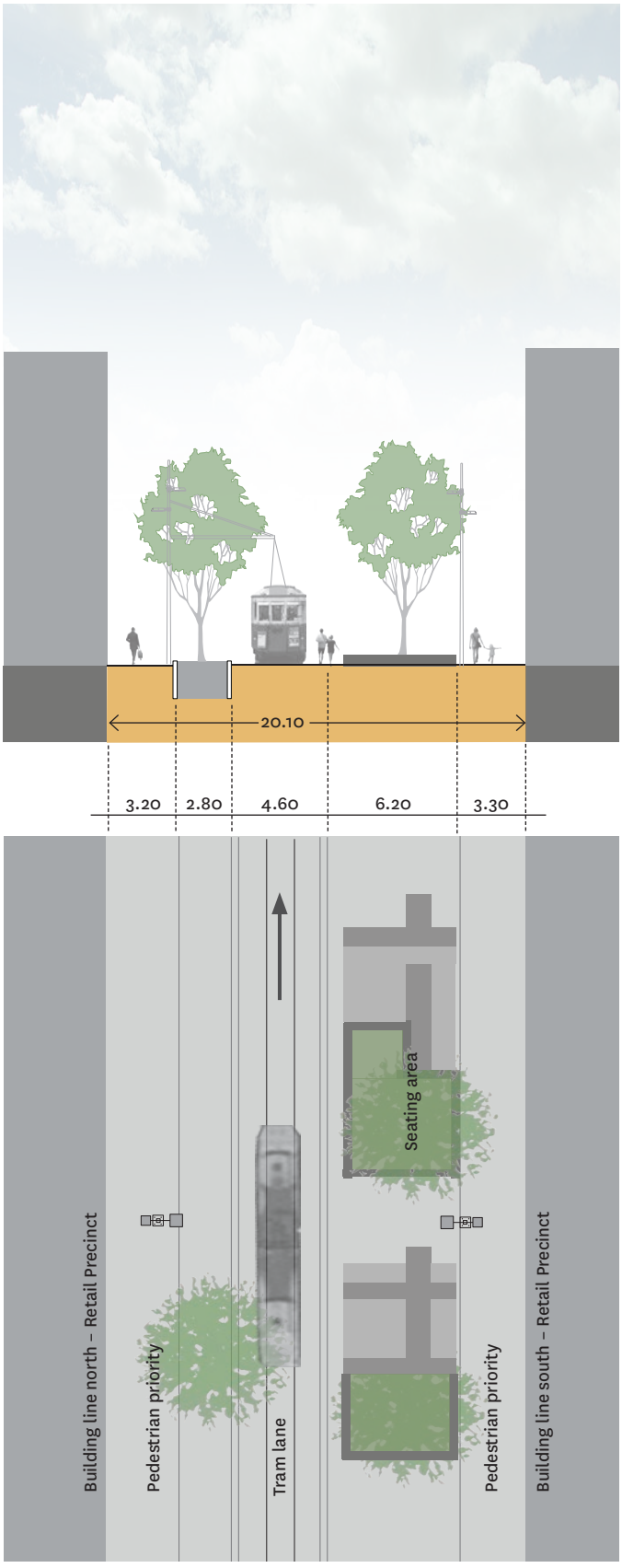


Figure 63 *B1 – Existing cross-section of City Mall*

TRAM STREETS

Worcester Boulevard (west), High Street, Armagh Street, City Mall, Rolleston Avenue

Worcester Boulevard

Characteristic tree: *Tilia platyphyllos* 'Broad-leaved lime'

Worcester Boulevard is the main east–west axis of the city grid. This civic spine links Cathedral Square to Latimer Square; the East Frame to the east of the city; and Te Papa Ōtākaro/Avon River Precinct, Council Civic Offices, the Art Gallery, the Arts Centre and the Canterbury Museum to the west of the city.

- It is a slow street and key pedestrian route.
- It provides a key cycling connection to the Major Cycleways network outside the central city.
- The section west of Cathedral Square is one-way, east-bound. This section is in a relatively good state and changes to its layout are unlikely in the short term. A mechanism to allow cyclists to ride westwards will be investigated.
- Figure 64 shows the existing configuration.

Armagh Street

Characteristic tree: *Corylus colurna* 'Turkish hazel'

- Armagh Street is a local access street.
- It connects the anchor projects of the East Frame and the Performing Arts, Convention Centre and Te Papa Ōtākaro/Avon River precincts.
- It provides a green corridor between the green spaces of the Margaret Mahy Family Playground, Victoria Square, Cranmer Square and Hagley Park.
- Figure 65 shows the potential to provide a wider footpath in the north-facing frontage of the future Performing Arts Precinct.

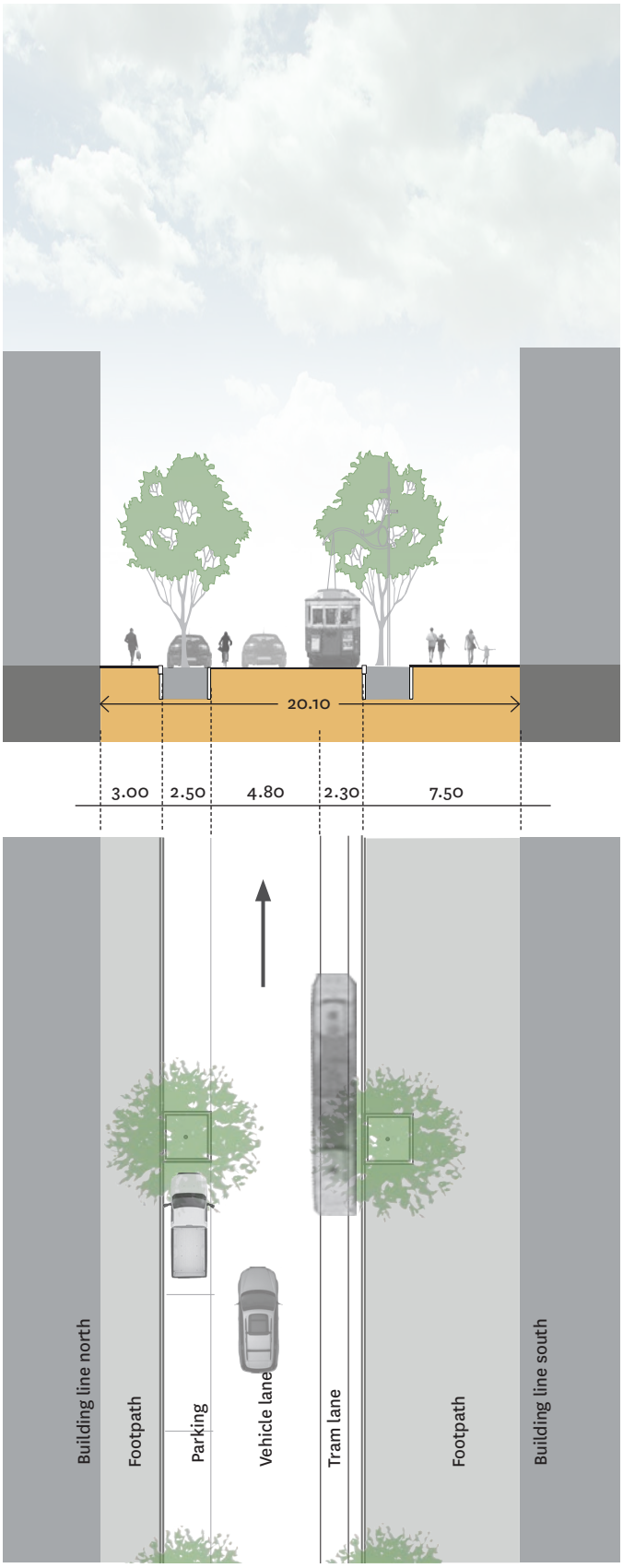


Figure 64 *B2 – Existing cross-section of Worcester Boulevard*

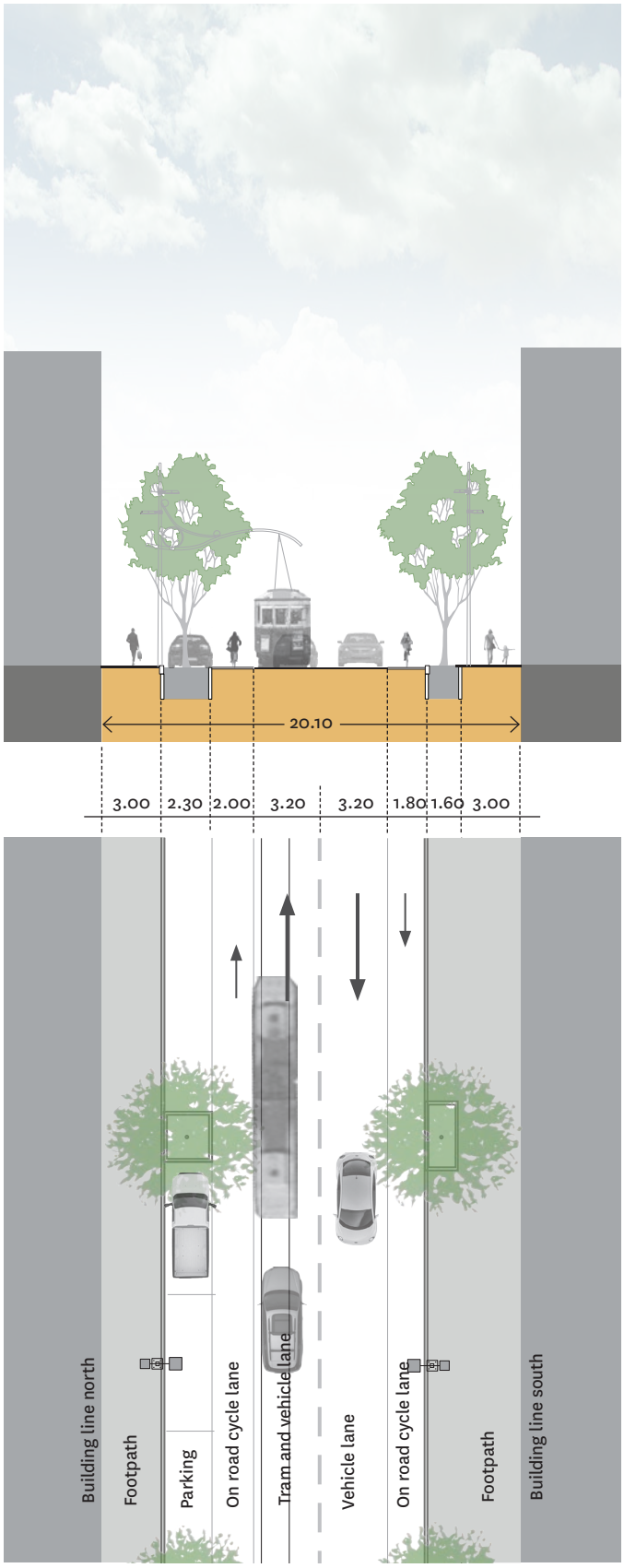


Figure 65 *B3 – Proposed cross-section of Armagh Street, east of Colombo Street*

TRAM STREETS

Worcester Boulevard (west), High Street, Armagh Street, City Mall, Rolleston Avenue

High Street

Characteristic tree: *Quercus robur fastigiata* 'Upright English oak'

- High Street is a key walking and cycling street.
- It is a pedestrian priority street between Hereford and Cashel streets (refer to page 72 for the characteristics of this type of street).
- It is a traditional shopping destination.
- Its diagonal alignment breaks the city grid and provides a civic spine to the Innovation Precinct.
- Originally established to connect the city to the port, it is a gateway street.
- The view to the south frames the Port Hills.
- It is bookended to the south by the CPIT campus.
- Figures 66 and 67 show the existing configuration.

Other tram streets

- **Oxford Terrace:** refer to page 126
- **Lichfield Street:** refer to page 128
- **Rolleston Avenue:** refer to page 136

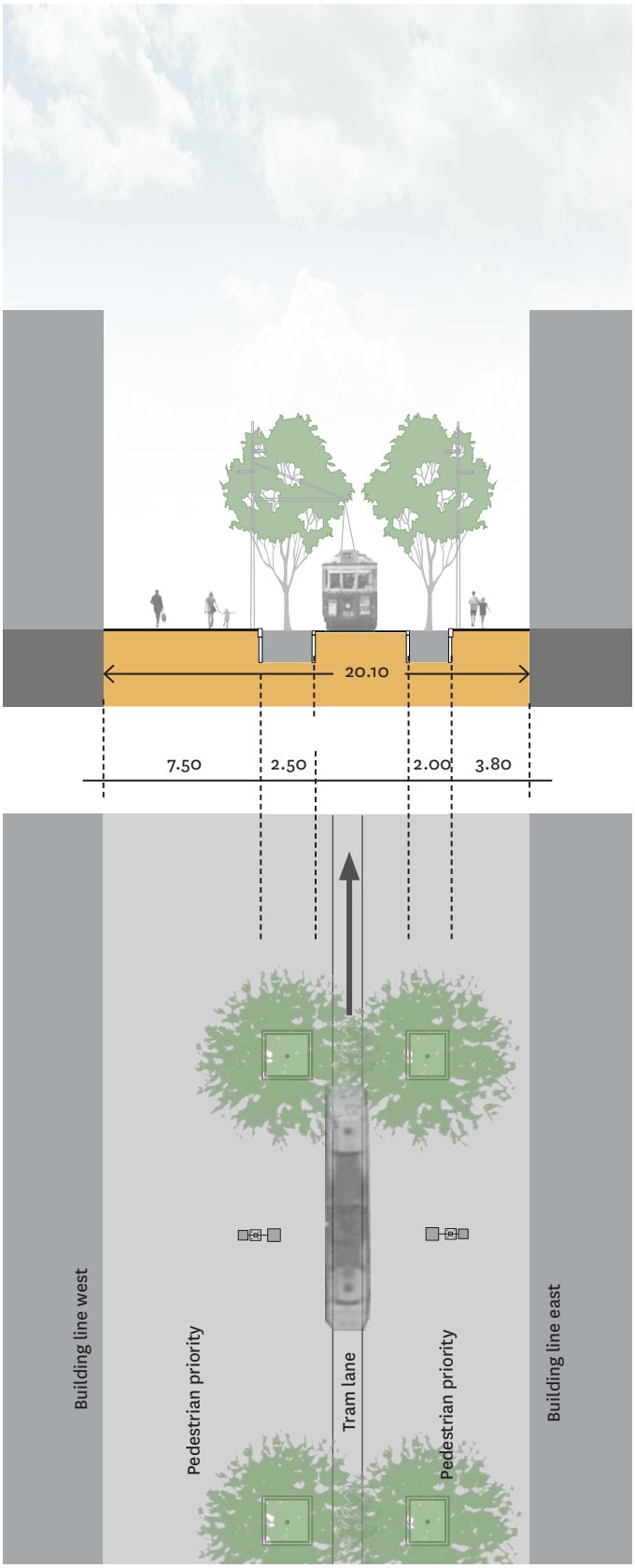


Figure 66 *B4 – Existing cross-section of High Street north of City Mall*

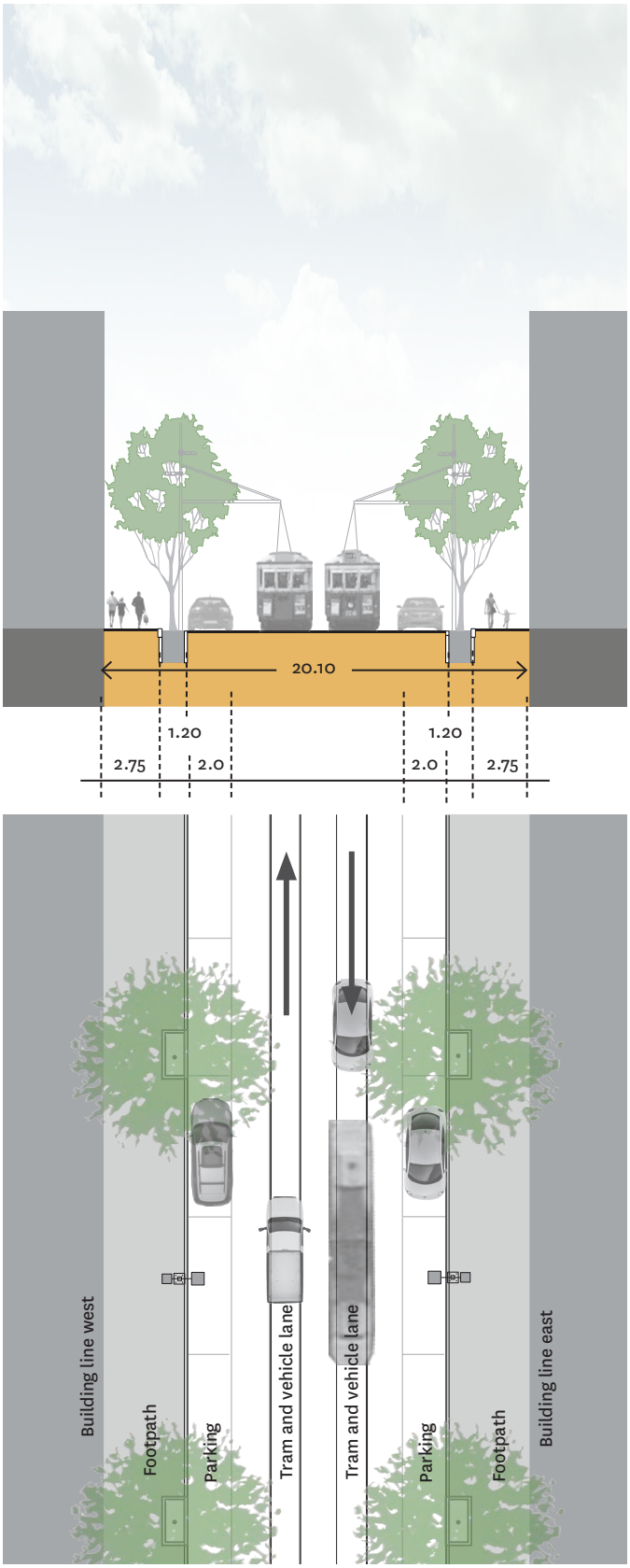


Figure 67 *B5 – Existing cross-section of High Street south of Tuam Street*

SOUTH FRAME

The Greenway

Key features

- New mid-block east–west pedestrian priority or shared streets (refer to page 72 for descriptions of these street types)
- Generously landscaped corridor
- 9 to 11 metres wide

Context

The Greenway is a core component of the new public realm network to be delivered in the South Frame. It will provide an east–west green corridor along the South Frame between the Innovation and Health precincts. The Greenway will provide for onward connections to Hagley Park, Te Papa Ōtākaro/Avon River Precinct and the East Frame.

The layout of the Greenway will vary from block to block to reflect each block's distinctive features. Figure 68 provides an example of how the corridor may be laid out. The elements that will provide cohesiveness to this entire corridor include:

- a design language and material palette of an industrial aesthetic, referencing the South Frame industrial tradition
- use of horizontal and vertical landscaping elements to emphasise the green character of the corridor
- integrated seating and lighting that accentuate the longitudinal nature of the space
- kerb build-outs at intersections with north–south streets to ease crossing
- active building frontages and courtyards fronting the corridor. Guidance on creating high-quality building frontages is provided on pages 54–57.

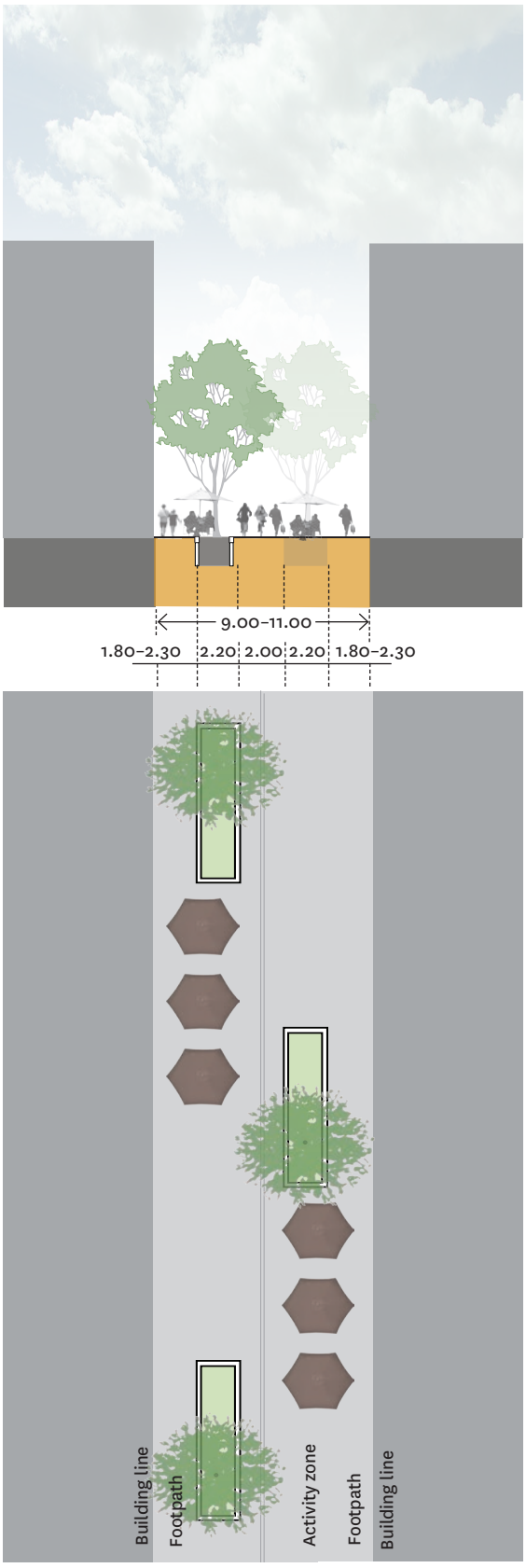


Figure 68 *South Frame – Greenway*

SOUTH FRAME

South Frame shared streets

Key features

- New mid-block north–south shared streets (refer to page 72 for description of this street type)
- Narrow streets, between 6.5 and 12.5 metres wide.
- Provide integrated seating and landscape strips on either side of the street corridor, where possible.

Context

The shared streets in the South Frame are new north–south streets between Tuam and St Asaph streets. They will improve permeability and access to the South Frame blocks and provide access to the Greenway. Design elements common to these streets are:

- continuity to the material palette of industrial aesthetic used in the Greenway
- integrated spill-out zones for cafés and other street activities
- design that gives way to and prioritises the 'east–west' movement along the Greenway
- intersection design that maintains east-bound traffic flow along Tuam and St Asaph streets
- well-defined building corners that contribute to the definition of the street and its character. Visibility and safety at the corners are provided though glazed treatments. Building splays should be avoided.

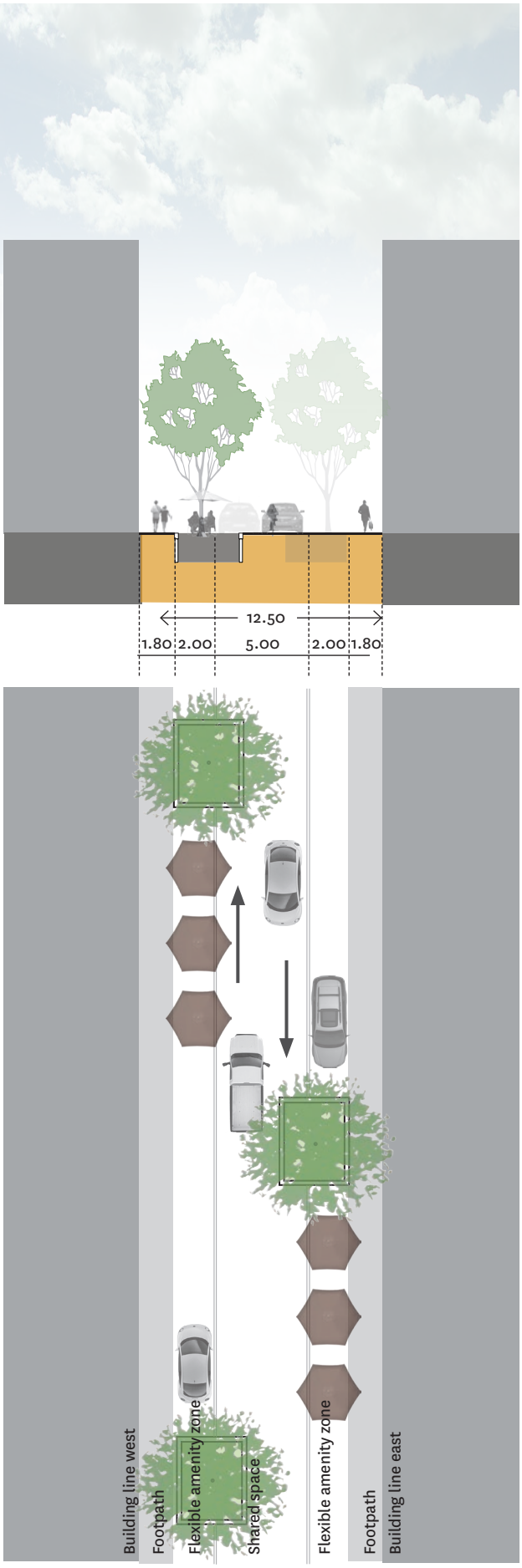


Figure 69 *South Frame two-way shared street (indicative)*

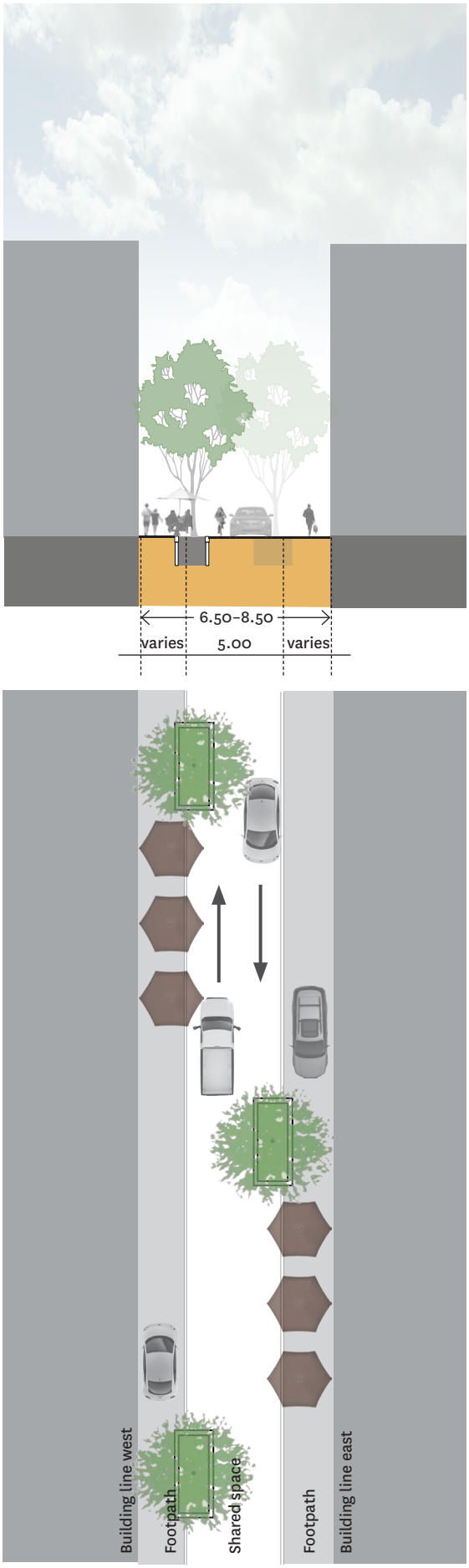


Figure 70 *South Frame two-way shared street (indicative)*

SOUTH FRAME

Innovation Precinct lanes

Key features

- Mid-block connections in the form of a shared street (refer to page 72 for description of this street type)
- Narrow streets, between 6.8 and 7.3 metres wide
- Taller than wide with access to the elements and views to the sky

Context

This group of lanes is an important element defining the character and amenity of the Innovation Precinct. They will reflect the higher density of development anticipated in the area, create opportunities for urban life and improve pedestrian connectivity and access. Vertical greening elements will be encouraged as a distinctive design element. These lanes will complement the emerging network of lanes in the central city, which is illustrated in Figure 27 (page 77).

This guidance should be read in conjuction with the general guidance developed in the *Central City Lanes Report*, which can be accessed at: www.ccc.govt.nz/urbandesignguides

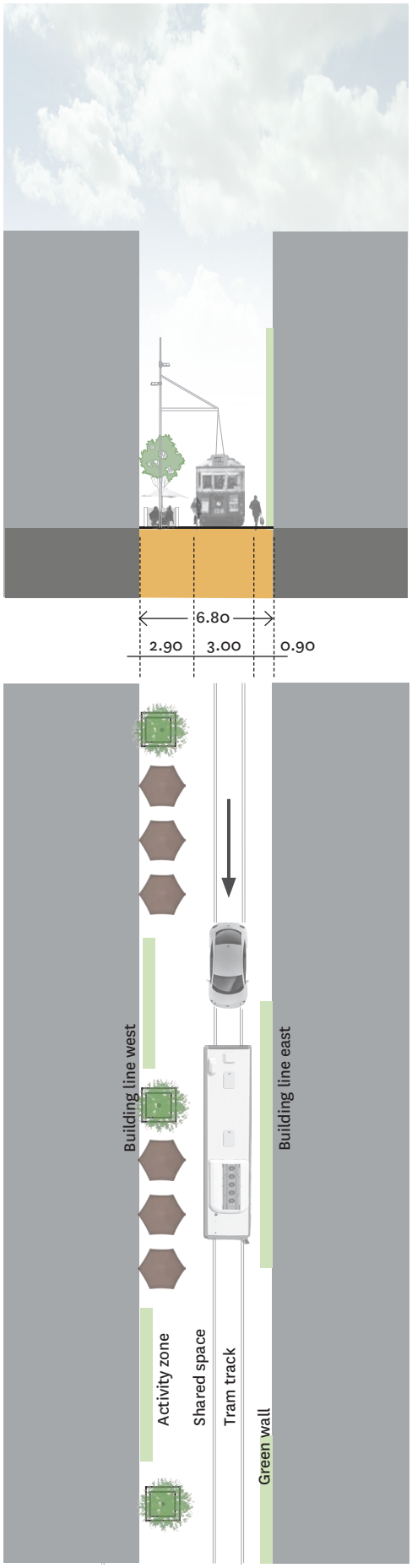


Figure 71 *Poplar Street, one-way lane*

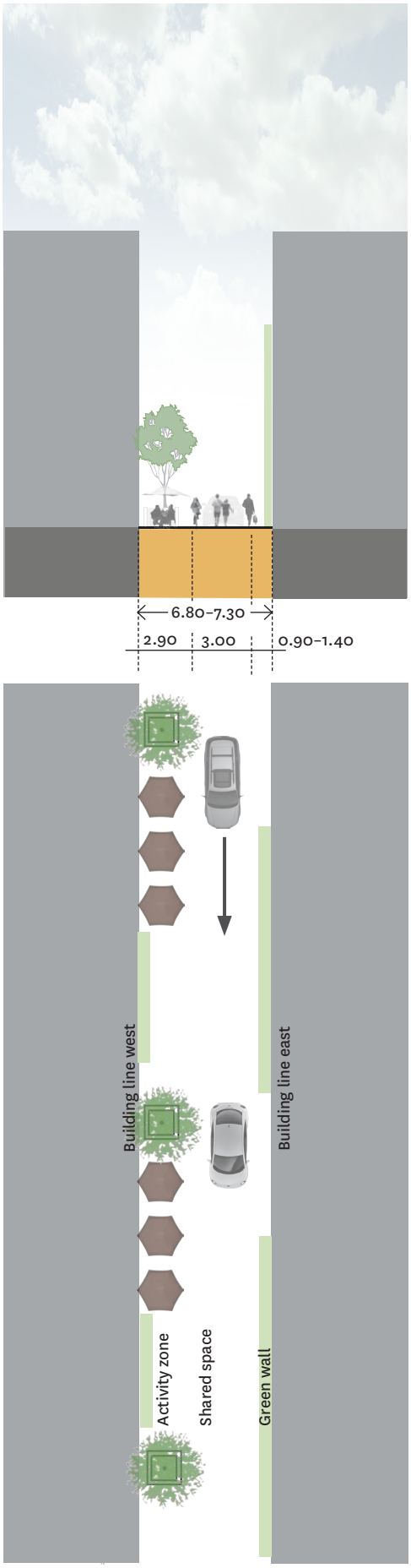


Figure 72 *Innovation Precinct, one-way lane*

THE AVENUES

Moorhouse, Bealey and Fitzgerald avenues

Key features

- Major arterial routes primarily for vehicle movement around the perimeter of the city centre
- Provide key connections to main distributor streets into the central city
- Two-way streets, mostly three lanes each way
- Key routes for moving vehicles
- Typically 40m-wide corridor, boundary to boundary
- Existing layout allows for on-road cycle lanes
- Large-scale trees of varied species

Context

The avenues offer the opportunity to move around the city easily and access central city streets at multiple locations. They have a key role in protecting the pedestrian and cycle amenity of a number of streets in the central city by carrying large traffic volumes that otherwise would go through the city Core. In future, some movement restrictions will be progressively proposed at intersections along the avenues to maximise efficient connections to key distributor streets and manage traffic pressures on other local streets into the central city.

While the avenues should provide for efficient traffic movements, their character and role should not be limited by this important function. As the point of entry to the central city, they also provide the first impression of central Christchurch and should showcase what the city is all about.

Currently these wide streets with significant traffic flows cater well for vehicles, but amenity for pedestrians and cyclists is limited. The avenues present a great opportunity to substantially improve the urban amenity for pedestrians, cyclists and the uses that front them.

These opportunities can be realised through introducing street trees to create a ‘green belt’ around the central city and reviewing the space allocation of the existing carriageways. Opportunities to improve key cycle and pedestrian connections across the avenues will inform future enhancements. This is a significant undertaking that requires careful consideration to effectively resolve all the requirements for these streets. Figure 73 indicatively illustrates the general existing conditions along these streets.

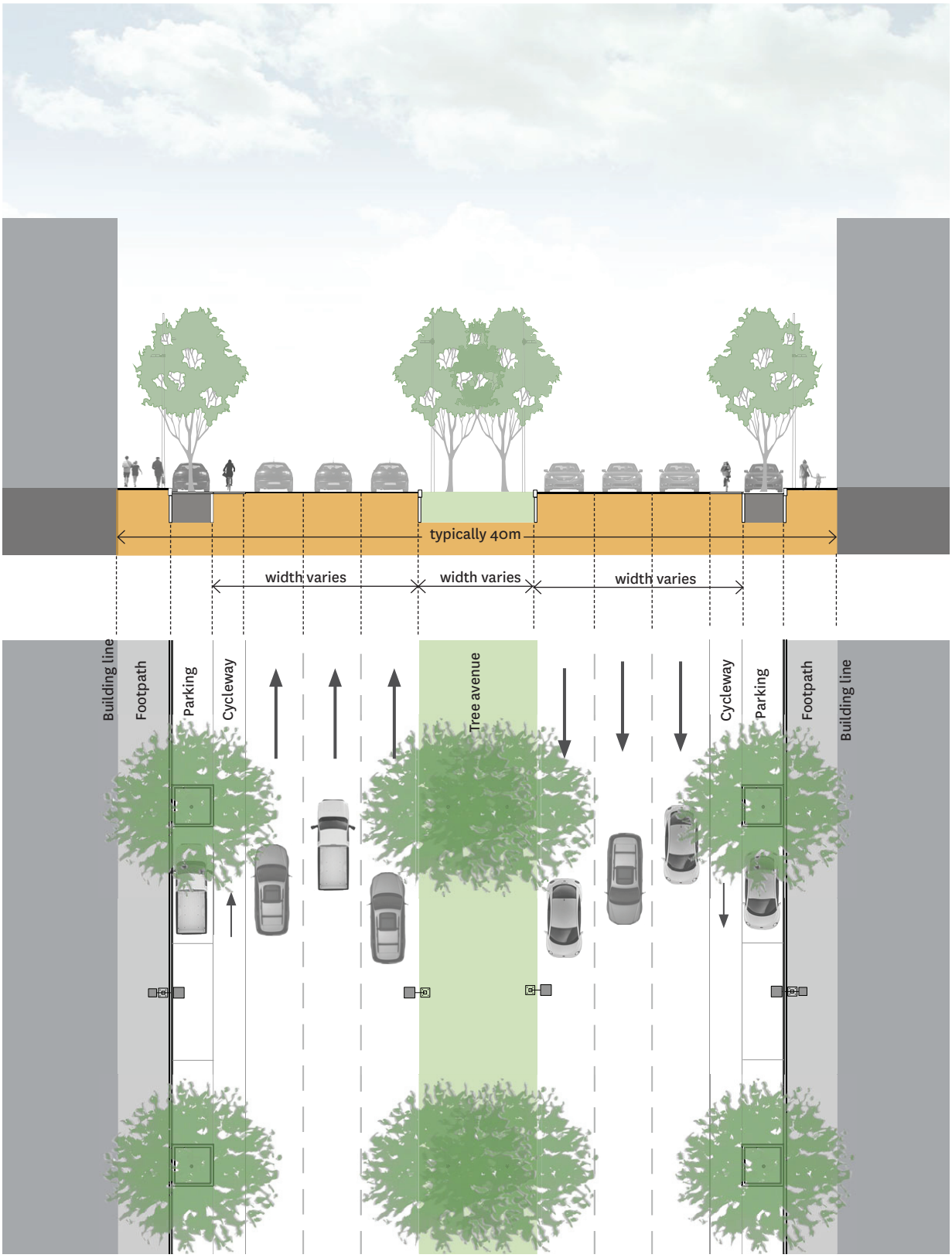


Figure 73 *Moorhouse, Bealey and Fitzgerald avenues – typical existing cross-section*