PUBLIC AND ROUTES **DOCKLANDS HAS A PERMEABLE** WELL-CONNECTED NETWORK OF PUBLIC ROUTES. DOCKLANDS PUBLIC REALM PLAN O4. Public streets & routes

INTRODUCTION

Streets, lanes, arcades, bridges and overpasses are defined as public streets and routes in this Plan. Waterfront promenades and creek corridor are defined as public spaces in this Plan.

The recommended principles and guidelines apply to all publicly accessible routes in Docklands regardless of ownership status. This Plan advocates for the refinement of materials and furniture palettes in the Docklands area to ensure consistency with the central city streetscape qualities.

Streets make up a significant portion of the public realm in Docklands. As well as catering for various forms of movement, streets and routes provide space for incidental cafes, kiosks, seats and canopies that streetscape design policies. contribute to public life. Streets and routes are and should be treated as important public places. Streets contribute to the character of place and can be destinations in themselves.

This section of the Plan includes the following:

Public streets and routes overview

Overview of context and directions that inform the design principles and recommended design guidelines for public streets and routes in Docklands. All background information is summarised and mapped in Appendix 2.

Design principles and guidelines

Recommended design guidelines to achieve comfortable and seamless streets and routes. Design principles and guidelines in Docklands accord with Melbourne's existing These established policies support identifiable and consistent design standards and diverse and active public life.

Design check lists

An illustrative example of design principles applied to a primary street, a summary of street design reference documents and sample of a detailed illustrative street standard from the companion document, Docklands Design and Construction Standards for Public Infrastructure Works (City of Melbourne, 2012).

Note: Images in this document are provided for illustrative purposes only and are subject to change. Base maps require periodic review and revision to accord with current conditions in the built environment and revised proposed development plans and masterplans.

STREETS AND ROUTES OVERVIEW INTRODUCTION

Melbourne's central area (known as the Hoddle Grid) dates back to 1837 and spans an area 2 km in length and 1 km in width. Although grid plans are common to many cities, Melbourne's grid is highly stylised in its scale and formal geometry, giving the city centre a pervasive individual character. The formal grid of primary (30 m width) and little streets (10 m width) is divided by a network of intimate, pedestrian-scaled lanes and arcades.

Several of the 30 m wide east-west city streets (Collins, Bourke, La Trobe and Dudley Streets) extend across the Spencer Street railway lines, linking the central city to Docklands. Laid across these is a less regular array of new secondary streets in Docklands. Generally, these cross-streets occur at more frequent intervals and are 16-18 m in width. As a result, Docklands has a permeable, well-connected network of public routes.

Since the 1980s, a number of initiatives have led to substantial improvements in the quality of street environment and street life in the central city. Physical improvements have included footpath widening, upgrading paving to local bluestone, a lighting strategy, a 'signature' street furniture palette and a cafe furniture standard. Special initiatives to improve street life include the rejuvenation of priority laneways, lunchtime street closures and permanent laneway closures and an active edges policy. The positive effect of these policies is evident in the growing numbers of people enjoying the central city streets as documented in the 'Places for People' studies. This Plan recommends that Melbourne's distinctive and high standard of streetscape design is applied throughout Docklands.



Revitalised Swanston Street, Melbourne.



Bourke Street Mall, Melbourne.



Freeway/arterial roads

Domain tunnel

Primary streets

Possible future connection

Fig 4.01 Inner Melbourne arterial road and street network, 2012.

STREETS AND ROUTES OVERVIEW

Access Docklands: A Plan for the Docklands Transport Network

Access Docklands: A Plan for the Docklands Transport Network (Places Victoria, City of Melbourne with UrbanTrans, 2012) includes comprehensive baseline data and a range of important future strategic directions and actions for Docklands regarding water and land-based movement in Docklands and should be referenced. Access Docklands supports the principles outlined in this Plan and Transport Strategy Planning for Future Growth (City of Melbourne, 2012).

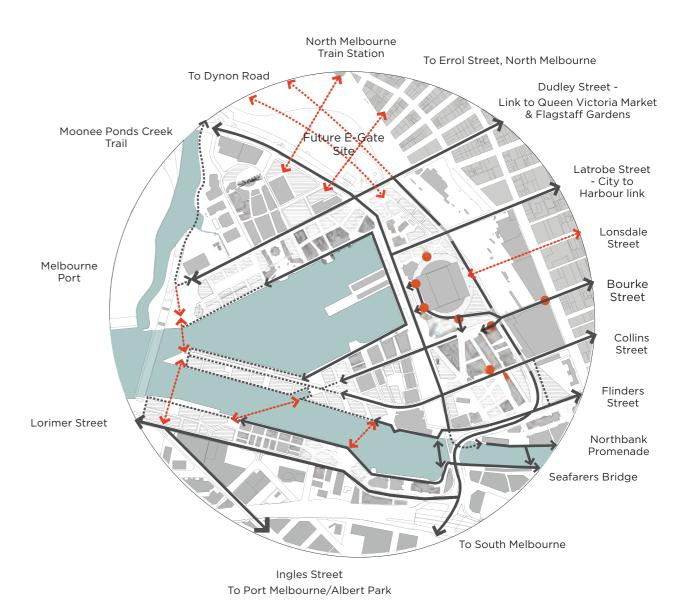
The following is a summary of the main challenges identified in *Access Docklands:* A Plan for the *Docklands Transport Network* (Places Victoria, City of Melbourne with UrbanTrans, 2012).

- Forecast growth in population will place significant demands on transport infrastructure networks.
- Wurundjeri Way is the primary local access road for Docklands, yet it is also a major east-west arterial route carrying significant volumes of traffic.
- Walking, cycling and public transport connections between Docklands and areas to the north, south and west are poor.
- Rail infrastructure, arterial roads and the stadium represent barriers to movement between Docklands and the surrounding areas.
- The Docklands local road network has limited through connections, as much of the precinct is surrounded by water, Melbourne Port land uses, rail infrastructure and arterial roads.
- Sustainable transport and walkability options may be challenged by unfavorable conditions such as full tram capacity at peak times, poor climatic conditions, and unprotected streetscapes.

- Bourke Street pedestrian overpass is a poor gateway to Docklands due to level changes, inadequate shelter, poor signage, inadequate cycling infrastructure and inactive streetscapes.
- Wayfinding and signage at Docklands can be confusing.
- Poor crossings (wait times, competing use, environment) at key parts of walking and cycling networks in Docklands.
- Significant walking distances within the Dockland area can be exacerbated by large staircases, a lack of shelter, passive ground floor uses and lack of interesting street life.

The Access Docklands: A Plan for the Docklands Transport Network (Places Victoria, City of Melbourne with UrbanTrans, 2012) has identified a number of short, medium and long-term recommendations to address these challenges and a short-term action plan.

This Plan provides design guidance to improve the overall quality of public streetscapes to benefit pedestrians and cyclists.



Key future connections

Existing connectionPotential new connection

← Committed connections

Level changes

Fig 4.02 Existing and potential local connections, 2012.

DESIGN PRINCIPLES AND GUIDELINES1. DIVERSITY OF USE

Provide a range of street types to support Docklands different uses and contribute to a functional, vibrant and high quality street network.

The pedestrian experience will be enhanced by providing streets that vary in scale and diversity; from large through to a more intimate human scale. Varying scales can assist legibility and wayfinding by visually reflecting the different roles of different streets. It also adds interest and a variety of experiences. Small streets in particular can assist connectivity and permeability of the urban fabric.

Docklands streets have been arranged into four types:

- arterial roads
- primary streets
- secondary streets
- small streets and pedestrian areas.

Each type of street is understood and described within the context of its role, function, scale, character and the type of public space it contributes to the Docklands public realm. Waterfront promenades are included in the Public Space section of this Plan (page 23).



Arterial road (Footscray Road)



Primary street (La Trobe Street)



Secondary street (Merchant Street)



Small street (Rakaia Way)

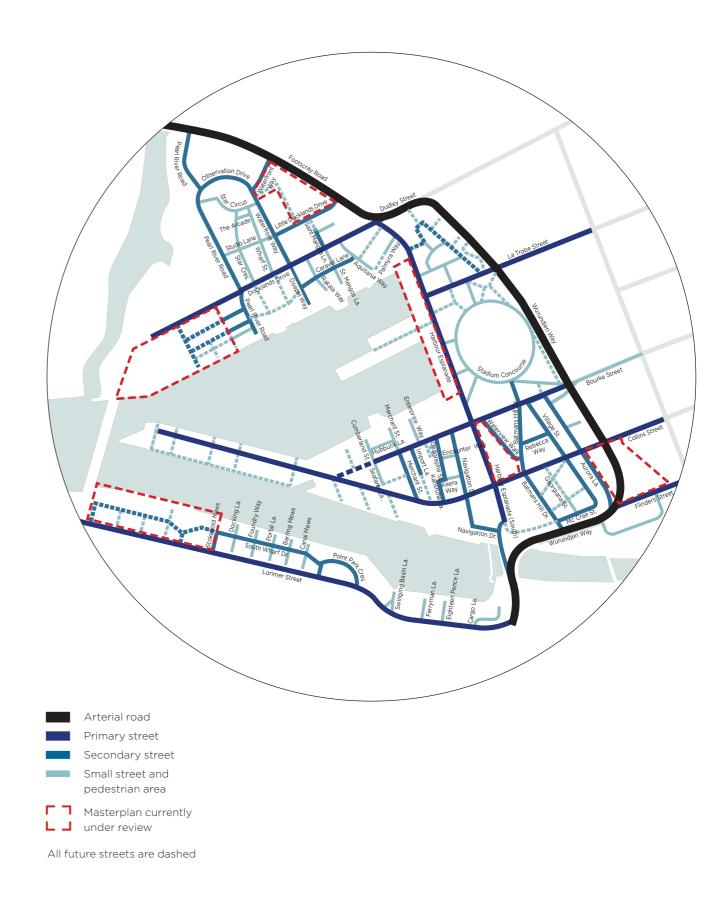


Fig 4.03 Existing and proposed street network.

DESIGN PRINCIPLES AND GUIDELINES1. DIVERSITY OF USE

Arterial roads

1.1 Improve the quality of experience for pedestrians and cyclists including at main pedestrian crossings, on arterial roads.

Docklands is bound by several key arterial roads: Wurundjeri Way, Footscray Road, CityLink and the Westgate Freeway.

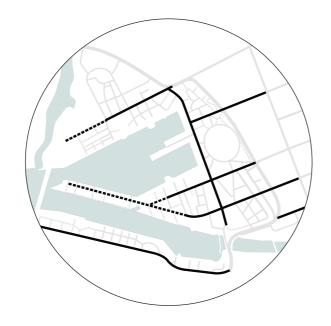
The arterial roads are an integral part of Victoria's strategic transport network. The primary purpose of these roads is to enable efficient freight and commuter movements across the broader road network. These roads are owned and managed by VicRoads. Arterial roads pose significant challenges to pedestrian and cyclist movement and amenity. Upgrades to pedestrian and cycle links at Charles Grimes Bridge, Footscray Road, Harbour Esplanade and around the Docklands stadium are recommended in *Access Docklands: A Plan for the Docklands Transport Network* (Places Victoria, City of Melbourne with UrbanTrans, 2012)



Primary streets

1.2 Ensure the primary east-west street extensions are designed to resemble the original street sections visually, spatially, compositionally and materially to link Docklands to the Central City.

The primary streets in Docklands extend the central city Hoddle Grid. These 30 m wide streets play a significant role in the life and identity of the city. The width allows for multiple transport modes. Typically, they are addressed by a diverse mix of ground floor land uses and include two-way vehicular lanes, tram routes, on-road bicycle lanes, wide footpaths and large street trees. The streets have been prioritised in the city's street hierarchy and have warranted a high quality bluestone paving palette and bespoke furniture, lighting palettes and substantive trees.



Secondary streets

1.3 Design secondary streets primarily as a setting for pedestrian and cyclist movement, shopping, socialising, recreation, art and architecture and ensure they provide links to key public facilities and spaces.

Secondary streets are characterised by mixed use including retail at ground level. These play a significant role in supporting community life and fostering local identity as they provide opportunities for a community focus. They also provide connections to community facilities and key public spaces including the waterfront.



Small streets and pedestrian areas

1.4 Create more small streets, lanes and pedestrian areas as new developments occur, ensuring pedestrian movement and links are prioritised to assist the overall connectivity of the public realm.

Small streets and lanes often contribute to the permeability of an area and provide intimate and human-scale spaces and a diverse pedestrian experience. Small streets can also offer protection from extremes of weather. Typically, small streets carry low numbers of vehicles, mostly for local access, or have partial or full closure to vehicle traffic and/or low speed restrictions in a dedicated shared zone environment.

Pedestrian focused areas linked to the street network, such as the stadium concourse, also supplement the public street system.

Shared zones are designed to prioritise pedestrians and public life. The palette and landscape treatments create a strong differentiation from traditional vehicle priority streets to remind drivers that they should proceed cautiously and slowly.



DESIGN PRINCIPLES AND GUIDELINES

2. IDENTITY

Ensure the success of the central city streetscapes continues into Docklands providing a seamless network of welcoming public streets and routes that have a distinctly 'Melbourne' essence.



Collins Street in Victoria Harbour with standard materials palette for primary streets, Melbourne.

2.1 Provide a unified approach to the design of each street consistent with the standard materials palette for Melbourne.

A strategic approach to the materials palette for streets has been developed and is outlined below. The implementation of the palette aims to embed a long-lasting, legible and distinctly Melbourne streetscape. A consistent treatment will also ensure that streets in Docklands connect seamlessly with the central city.

The standard materials palette should be used for all new and future modifications to existing streets.

All new streets that are to be transferred to City of Melbourne ownership must use the bluestone palette or bluestone / asphalt palette (City of Melbourne standard).

Bluestone kerbs and channels will be a consistent feature throughout Docklands.

Bluestone palette

City of Melbourne standard

Bluestone has become an important part of Melbourne's identity and provides a consistent foreground to diverse urban movement, activities and built form. As a local stone, bluestone expresses an authentic sense of place. The use of bluestone throughout Docklands will strengthen connections to the established city centre. Sawn bluestone is very durable and its smooth, flat surface improves footpath accessibility.

The bluestone palette refers to the use of bluestone for footpaths, kerbs and channels in accordance with the *Docklands Design and Construction Standards for Public Infrastructure Works* (City of Melbourne, 2012).

The bluestone palette is recommended in the following situations:

- primary streets (Collins Street, Bourke Street, Docklands Drive, La Trobe Street, Harbour Esplanade, Lorimer Street)
- pedestrian-only streets, arcades and lanes (Hubbick Lane)
- shared streets that may be pedestrian-only spaces at certain times of the day or evening
- footpaths abutting promenade and waterfront areas
- special areas such as streets with heritagelisted built form such as Village Street (north) and Aurora Lane.



Bluestone palette for primary street (at corner of Bourke and Village streets).



Bluestone palette suitable for special pedestrian route (Centre Place, Melbourne).

DESIGN PRINCIPLES AND GUIDELINES2. IDENTITY

Bluestone / Asphalt palette

City of Melbourne standard

Areas which are set back from the waterfront and form the inner grain of Docklands are often varied in terms of street types, activities, uses and interfaces. The appropriate use of bluestone and/or asphalt for the palette in this area requires assessment as conditions become clear.

The bluestone / asphalt palette refers to the use of bluestone for kerbs and channels and asphalt for footpaths in accordance with the *Docklands Design and Construction*Standards for Public Infrastructure Works (City of Melbourne, 2012).

The bluestone / asphalt palette is recommended in the following situations:

- secondary streets
- little streets and lanes that are not a focus for pedestrian activity.

Non-standard palette

Some streets and routes in Docklands may warrant a non-standard palette. The design of any non-standard material for streetscapes must be agreed and approved by the future owner (City of Melbourne). The following guidelines are recommended:

- provide a consistent approach to the palette throughout non-standard area
- materials should reflect the type of activities, uses and characteristics which are unique to the area. Consistent choice of paving materials, details and furniture should enhance the existing character of the area
- when a non-standard palette is used, the standards of design, materials and craftsmanship should be at least as high as the standard suite.



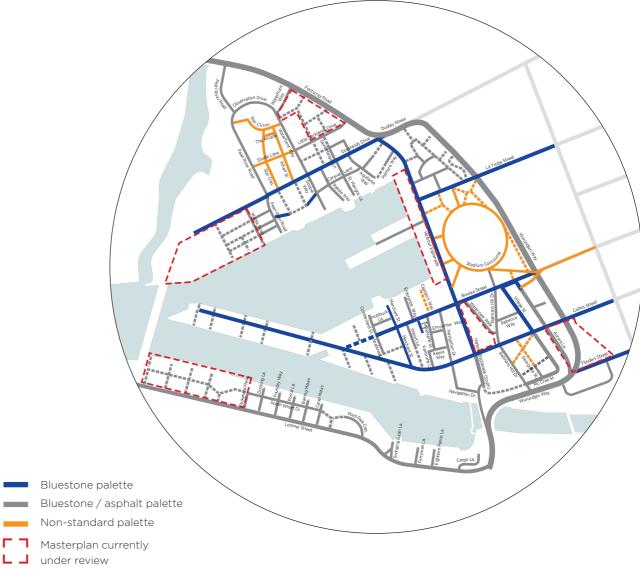
Typical bluestone kerb and channel & asphalt footpath detail, Melbourne.



Non-standard palette (Wharf Street, Harbour Town).

2.2 Ensure the choice and location of materials and street furniture assist the overall composition of streets.

- Maintain consistent materials, layout and geometry regardless of staging of works to protect the street's visual character and support legibility and predictability.
- Minimise clutter and group streetscape elements together to ensure legibility and usability of the street.
- Use the simplest standard applicable to avoid unnecessary maintenance and ensure long-term functionality.
- Use the same materials and details in private and public streets.
- Refer to the Docklands Design and Construction Standards for Public Space and Infrastructure Works (2012) for standard functional and spatial design criteria and approved standard materials and elements.



All future streets are dashed

Fig 4.04 Minimum material palette for existing and proposed streets and routes.

DESIGN PRINCIPLES AND GUIDELINES3. SUSTAINABILITY

Design public streets to contribute to sustainable outcomes and maximise environmental values.

Streets provide significant opportunities to contribute to sustainability outcomes. Their design should encourage walking and cycling, minimise pressure on non-renewable resources and enhance the existing natural environment. Life-cycle analysis to maximise environmental outcomes should be factored into design decision-making.

Streets are important landscape features within the urban environment. They accommodate tree planting and other landscape treatments that provide pedestrian amenity and improve biodiversity and microclimate. Streets can also contribute to sustainability outcomes through integrated functional solutions such as permeable paving and tree pits that filter and harvest storm water run-off.



Water sensitive tree pit collects storm water from Little Collins Street, Melbourne.

3.1 Prioritise walking, cycling and public transport in streets to reduce the dominance of vehicles and minimise greenhouse gas emissions and local air pollution.

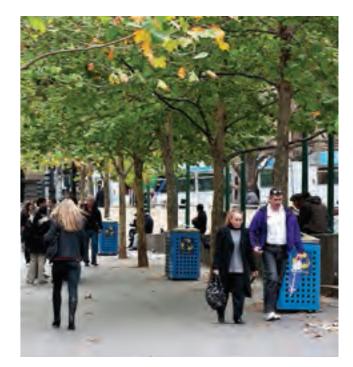
The following recommendations are provided:

- Identify and fill in the missing links in the cycling network (such as Moonee Ponds Creek and North Bank connections).
- Improve crossing times for pedestrians and cyclists at arterial roads (Wurundjeri Way and Footscray Road).
- Improve bicycle and pedestrian access where there is a change in level (for example, the Bourke Street pedestrian overpass).
- Reduce conflicts between pedestrians, cyclists and vehicles by providing designated cycle lanes.
- Provide generous allocations of space which ensure the design of streets prioritise pedestrian and cycle movements.
- Ensure truck turning circles, service vehicle requirements and car park entries do not have an adverse impact on street design.
- Provide greater opportunities for recreational cycling in Docklands.
- Facilitate walking through footpath widening and raised crossings.

3.2 Increase greening in streets.

- Increase tree planting and vegetation to reduce the extent of hard surfaces and improve canopy cover to reduce the heat island effect - aim to achieve 40% canopy cover in all new streets.
- Choose species that will perform well in Docklands and increase diversity in the tree population.
- Choose vegetation that responds to local conditions and encourages diverse birdlife and insect habitats.
- Ensure adequate soil volumes and soil moisture is provided to enable healthy tree growth.
- Use permeable pavements where applicable to enhance street tree growth.
- Encourage Water Sensitive Urban Design for stormwater harvesting in streets.

Refer to the *Urban Forest Strategy* (City of Melbourne, 2012) for more detail on targets.



Effective tree canopy cover, City Square and Swanston Street, Melbourne.



Cycle paths have been prioritised along the recently-modified Harbour Esplanade.

DESIGN PRINCIPLES AND GUIDELINES4. INTERFACES

Ensure all building interfaces with public streets contribute positively to the life of the street.

4.1 Encourage ground-level tenancies that contribute to the life and character of the street.

- Provide ground-level tenancies with active frontages, such as retail or cafes, to public streets as a minimum to meet the performance guidelines in the Melbourne Planning Scheme of a minimum 80% active street frontage for key areas of public activity and 50% active street frontage for all other areas.
- Ensure streets provide adequate space for uses such as outdoor dining.
- Provide ground-floor edges which accommodate a wide range of uses and provide a fine grain to streets. Fine-grain spaces relate to the scale of our bodies and offer a variety of sensory stimulations that can be appreciated at a pedestrian pace.
- Design external facades (facade depth, colour, fenestrations, vertical or horizontal modulation, detailed articulation, texture and materiality) so they contribute to the human scale of the street and visual interest for pedestrians.

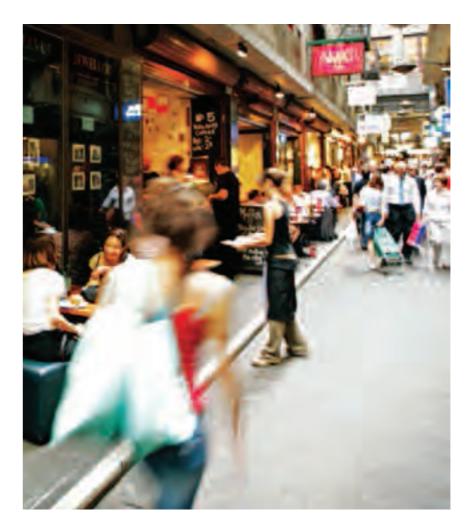
- Consider the macro scale (the appearance of the building from afar) and the micro scale (the sensorial experience materials and detailing provide to the pedestrian) in the building form and facade.
- Avoid large expanses of floor to ceiling glazing as this does not provide adequate variation or interest.
- Avoid the use of opaque, translucent or other non-transparent glazing treatments that restrict visibility between internal and external spaces. Whilst transparency is encouraged, it is also important to make provision in the design of facades for areas that require privacy or uses that will result in unsightly views from the street. In all instances, however, completely blank facades must be avoided.
- Avoid large banks of services with bland facade treatments. Service areas can still provide a positive interface with the street if carefully considered. For example, the green wall on the ANZ building service wall provides a high level of visual interest.

4.2 Encourage passive surveillance opportunities to increase the safety of public streets.

- The types of uses and facade treatments particularly in the lower levels of buildings can have a significant impact on the safety of the street.
- Locate windows and balconies to overlook the street.
- Sleeve car parks, service areas and other non-active uses with active uses to support street safety.

4.3 Reduce and manage parking to encourage walking, cycling and other uses that are conducive to vibrant streets.

- Ensure parking entries don't detract from pedestrian amenity and street interface.
- Minimise the impact of podium car parking on streets by sleeving the car park in active uses and/or animated treatments at first-floor level and above.



Animated and pedestrian-focused lane characterised by small-scale eateries, bespoke retail outlets, residential entry at Centre Place and bluestone palette, Melbourne.



Contemporary lane with concentrated retail focus, varied facade treatments and bluestone palette at Albert Coates Lane, Queen Victoria centre. Melbourne.

DESIGN PRINCIPLES AND GUIDELINES5. AMENITY

Design streets with high standards of amenity, comfort and convenience.

5.1 Where possible, provide canopies along building frontages on streets particularly on key pedestrian routes.

Use of canopies along higher bulidings is important to ameliorate wind, provide shelter from rain and sun and encourage a more human-scale environment to the street.

 Provide canopies or awnings on buildings at an appropriate level (less than 4 m from the ground).

5.2 Establish a continuous and consistent street tree structure.

Street trees make a significant contribution to the amenity and comfort of streets. Providing shade and shelter, trees improve visual amenity by contributing to the character and seasonal variations. The improvements to air quality and temperature offered through street trees improve the health and wellbeing and therefore livability of a street.

• Refer to the *Melbourne Docklands Tree* Strategy and the *Urban Forest Strategy* (City of Melbourne, 2012) for the selection of tree species to suit site specific growing conditions, long term aspirations for street character and amenity and maintenance practicalities.

5.3 Ensure safety, accessibility and visibility for all users including disabled and non-ambulant people.

- Keep things predictable to support access by people with visual impairments, especially along main pedestrian routes through the space; avoid trip hazards.
- Ensure adequate visibility through spaces.
- · Provide even, glare-free lighting.
- Design to disability standards to ensure accessibility to all areas.

5.4 Provide amenities that support pedestrian and bicycle use such as compliant seats, bike racks, drinking fountains bins and public toilets.

Refer to the *Docklands Design and Construction Standards for Public Infrastructure Works* for guidance on number and location of street furniture.

5.5 Ensure legibility of the streetscape and provide consistent signage and wayfinding to assist pedestrian movement.

- Design streets to enhance clarity of uses (areas for outdoor dining, pedestrian-only areas, shared zones).
- Minimise clutter to assist the legibility and usability of the street.
- Refer to the Docklands Design and Construction Standards for Public Infrastructure Works for guidance on directional signage for streets and waterways.

5.6 Provide a choice of protected routes

A strategy that has been successfully implemented in many waterfront cities such as Hamburg (Germany), Brighton (UK) and Scarborough (UK) is to provide an alternative protected route(s) in the 'hinterland' to the exposed waterfront promenades which may be used during inclement weather. The plan below shows the locations of Docklands streets in the 'hinterland' near the waterfront where weather protection could be improved. Park Avenue, Caravel Lane, Aquitania Way and Bourke Street (west) already provide protected alternative routes to the waterfront.

Protection from sun, wind and rain is important for providing a comfortable environment in Docklands. Most street trees in Docklands are juvenile and yet to establish a canopy of sufficient size to provide adequate shade or shelter. The staged development exacerbates this condition and in some cases interim

strategies for protection could be considered until street trees have time to grow or awnings provided with buildings.

The water promenades and La Trobe and Collins Street bridge extensions are particularly challenging in terms of amenity due to the exposed location, little protection from built form and challenges to street tree growth in containers.

Routes that require a greater level of protection include:

- Collins Street (Victoria Harbour to Southern Cross Station)
- Bourke Street overpass
- Harbour Esplanade
- new residential frontages onto waterfront promenades (NewQuay West and Yarra's Edge West)
- La Trobe Street.

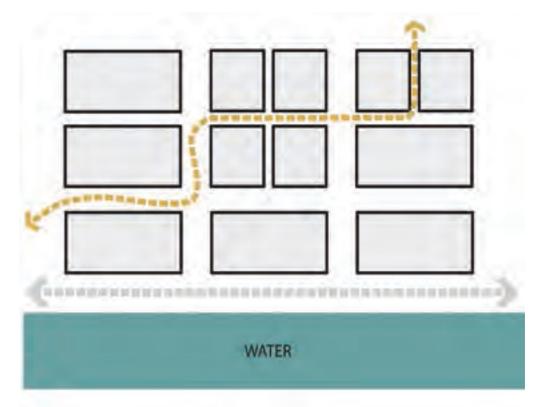


Fig 4.05 Cities such as Brighton (UK) and Scarborough (UK) have intimate and protected routes in the 'hinterland' of the primary waterfront. (see Figure 4.06).

DESIGN PRINCIPLES AND GUIDELINES5. AMENITY

5.7 Ensure streets and routes are open to the sky.

Open air spaces work well in Melbourne most of the year and an 'open to the sky' policy is favoured for streets rather than an enclosed mall-type environment. Overhead bridges are also discouraged where they take public life and activity from the street level. This is not to say that weather protection might not be provided in the form of canopies or glazed atriums to fulfill a particular function.



Fig 4.06 Enhance protected routes that run parallel to the waterfronts and offer a choice of journey.

PRINCIPLES AND GUIDELINES6. COMMUNITY

Create a diversity of street activities and uses to contribute to street life and community.

6.1 Design public streets as a setting for movement, shopping, socialising, recreation, art and architecture rather than just as movement corridors.

The design of streets can play a major role in fostering successful communities. Streets are spaces for people to connect and socialise and streets can be vibrant public spaces.

- Foster a diversity of street uses to attract a rich blend of city users and contribute to street life such as:
- outdoor dining areas
- fruit and flower stands
- buskers
- children's play elements.
- Consider use of shared zones or pedestrian only streets in suitable locations to provide greater opportunities for street life.
- 6.2 Locate community facilities where they enhance streets as local centres or act as connectors between precincts.
- Locate community facilities on Harbour Esplanade as part of the redevelopment so they can serve adjacent existing and future precincts.
- Concentrate community facilities at emerging local centres, in particular:
- Docklands Drive/NewQuay Central
- Merchant Street/Bourke Street.